County Council Meeting
Beaufort County, SC

Council Chambers, Administration Building Beaufort County Government Robert Smalls Complex 100 Ribaut Road, Beaufort

Monday, May 08, 2023
5:00 PM

AGENDA

COUNCIL MEMBERS:

JOSEPH F. PASSIMENT, CHAIRMAN	**LAWRENCE MCELYNN, VICE CHAIR**
DAVID P. BARTHOLOMEW	**PAULA BROWN**
LOGAN CUNNINGHAM	**GERALD DAWSON**
YORK GLOVER	**ALICE HOWARD**
MARK LAWSON	**THOMAS REITZ**
ANNA MARIA TABERNIK	

1. CALL TO ORDER
2. PLEDGE OF ALLEGIANCE AND INVOCATION- Council Member Paula Brown
3. PUBLIC NOTIFICATION OF THIS MEETING HAS BEEN PUBLISHED, POSTED, AND DISTRIBUTED IN COMPLIANCE WITH THE SOUTH CAROLINA FREEDOM OF INFORMATION ACT
4. APPROVAL OF AGENDA
5. APPROVAL OF MINUTES- March 27, 2023
6. ADMINISTRATOR'S REPORT
7. PRESENTATION OF A PROCLAMATION BY COUNCIL MEMBER YORK GLOVER TO THE BEAUFORT COUNTY DETENTION CENTER RECOGNIZING MAY 7TH - MAY 13TH AS CORRECTIONAL OFFICER'S WEEK

CITIZEN COMMENTS

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8. ***CITIZEN COMMENTS PERIOD - 15 MINUTES TOTAL***

Anyone who wishes to speak during the Citizen Comment portion of the meeting will limit their comments to AGENDA ITEMS ONLY and speak no longer than three (3) minutes. Speakers will address Council in a respectful manner appropriate to the decorum of the meeting, refraining from the use of profane, abusive, or obscene language.

COMMITTEE REPORTS

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9. LIASION AND COMMITTEE REPORTS

PUBLIC HEARINGS AND ACTION ITEMS

10. APPROVAL OF CONSENT AGENDA

11. **TIME-SENSITIVE ITEM ORIGINATING FROM THE MAY 8TH FINANCE, ADMINISTRATION, AND ECONOMIC DEVELOPMENT COMMITTEE-** FIRST READING OF AN ORDINANCE (BY TITLE ONLY) TO MAKE APPROPRIATIONS FOR COUNTY GOVERNMENT AND SPECIAL PURPOSE DISTRICTS FOR BEAUFORT COUNTY FOR THE FISCAL YEAR BEGINNING JULY 1, 2023 AND ENDING JUNE 30, 2024; TO LEVY TAXES FOR THE PAYMENT THEREOF; TO ADOPT LAW ENFORCEMENT UNIFORM SERVICE CHARGES/ USER FEE; TO PROVIDE FOR THE EXPENDITURE OF SAID TAXES AND OTHER REVENUES COMING INTO THE COUNTY; TO PROVIDE FOR THE EXPENDITURE OF SAID LAW ENFORCEMENT UNIFORM SERVICE CHARGES/ USER FEE; AND OTHER MATTERS RELATED THERETO.

12. **TIME-SENSITIVE ITEM ORIGINATING FROM THE MAY 8TH FINANCE, ADMINISTRATION, AND ECONOMIC DEVELOPMENT COMMITTEE-** APPROVAL OF A RESOLUTION TO EXPRESS BEAUFORT COUNTY COUNCIL'S SUPPORT FOR THE SOUTH CAROLINA GENERAL ASSEMBLY TO TAKE THE NECESSARY STEPS TO AMEND THE SOUTH CAROLINA CODE OF LAWS TO VEST BUDGET AUTHORITY AND MILLAGE RATE SETTING AUTHORITY FOR THE OPERATION OF THE SCHOOLS IN BEAUFORT COUNTY WITH THE BEAUFORT COUNTY BOARD OF EDUCATION

13. PUBLIC HEARING AND SECOND READING OF AN ORDINANCE AUTHORIZING THE REDEMPTION OF THE OUTSTANDING BEAUFORT COUNTY, SOUTH CAROLINA GENERAL OBLIGATION BONDS, SERIES 2013A, AND OTHER MATTERS RELATED THERETO

Vote at First Reading on April 24, 2023- 10:0

14. PUBLIC HEARING AND THIRD READING OF AN ORDINANCE FOR A ZONING MAP AMENDMENT/REZONING REQUEST FOR 1 ACRE (R600 036 000 0369 0000) AT 3 BENTON LANE FROM T3 EDGE TO T2 RURAL CENTER

(failed at Community Services & Land Use Committee on March 13, 2023 - 3:5)

Vote at First Reading on March 27th, 2023 - 8:3

Vote at Second Reading on April 10, 2023- 6:4:1

15. THIRD READING OF AN ORDINANCE FOR TEXT AMENDMENTS TO THE COMMUNITY DEVELOPMENT CODE (CDC): ARTICLE 3, DIVISION 3.4, SECTION 3.4.50- CULTURAL PROTECTION OVERLAY (CPO); SECTION 3.4.10- PURPOSE; AND DIVISION 3.1, SECTION 3.1.70- LAND USE DEFINITIONS, RECREATION FACILITY: GOLF COURSE, TO UPDATE DEFINITIONS, REGULATIONS, AND STANDARDS IN THE CULTURAL PROTECTION OVERLAY ZONE

Vote at First Reading on April 10, 2023- 10:1

Vote at Public Hearing and Second Reading on April 24, 2023- 8:2

CITIZEN COMMENTS

16. CITIZEN COMMENT PERIOD- 15 MINUTES TOTAL

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17. ADJOURNMENT

CONSENT AGENDA

Items Originating from the Community Services and Land Use Committee

1. THIRD READING OF AN ORDINANCE TO ACCEPT AND TO APPROPRIATE FUNDS RECEIVED FROM THE SOUTH CAROLINA OPIOID RECOVERY FUND ($299,376.00)

   Vote at First Reading on April 10, 2023- 11:0

   Vote at Public Hearing and Second Reading on April 24, 2023- 10:0

2. THIRD READING OF AN ORDINANCE TO ACCEPT AND TO APPROPRIATE FUNDS RECEIVED FROM THE SOUTH CAROLINA OPIOID RECOVERY FUND ($612,733.00)

   Vote at First Reading on April 10, 2023- 11:0

   Vote at Public Hearing and Second Reading on April 24, 2023- 10:0

Items Originating from the Public Facilities and Safety Committee

3. APPROVAL TO AWARD IFB #011223E BEAUFORT COUNTY DIRT ROAD ROCKING CONTRACT #54 TO J.H. HIERS FOR COUNTY OWNED ROADS ($5,291,646.80)

4. APPROVAL TO AWARD THE CONSTRUCTION MANAGEMENT AND INSPECTION FOR THE SC 170 NEAR-TERM IMPROVEMENTS TO HDR ($673,351.48)

END OF CONSENT AGENDA

TO WATCH COMMITTEE OR COUNTY COUNCIL MEETINGS OR FOR A COMPLETE LIST OF AGENDAS AND BACKUP PACKAGES, PLEASE VISIT:
https://beaufortcountysc.gov/council/council-committee-meetings/index.html

County Council Meeting
Beaufort County, SC

Council Chambers, Administration Building Beaufort County Government Robert Smalls Complex 100 Ribaut Road, Beaufort

Monday, March 27, 2023
4:00 PM

MINUTES

Watch the video stream available on the County's website to hear the Council's discussion of a specific topic or the complete meeting. https://beaufortcountysc.new.swagit.com/videos/222849

1. CALL TO ORDER

Chairman Passiment called the meeting to order at 4:00 PM.

PRESENT
Chairman Joseph F. Passiment
Vice-Chairman Lawrence McElynn
Council Member David P. Bartholomew
Council Member Paula Brown
Council Member Logan Cunningham
Council Member Gerald Dawson
Council Member York Glover
Council Member Alice Howard
Council Member Mark Lawson
Council Member Thomas Reitz
Council Member Anna Maria Tabernik

2. PLEDGE OF ALLEGIANCE AND INVOCATION

Chairman Passiment led the Pledge of Allegiance, and Council Member Howard led the Invocation.

3. FOIA

Chairman Passiment noted that public notification of this meeting had been published, posted, and distributed in compliance with the South Carolina Freedom of Information Act.

4. APPROVAL OF AGENDA

Motion: It was moved by Council Member Cunningham, seconded by Vice-Chairman McElynn, to approve the agenda.

The Vote - The motion was approved without objection.

5. ADMINISTRATOR'S REPORT

County Administrator Greenway highlighted three employees, Lori Sexton, Stacey Inman, and Natalie Garvin.

6. **CITIZEN COMMENTS**

Please watch the video stream available on the County's website to view the comments.

https://beaufortcountysc.new.swagit.com/videos/222849?ts=198

1. Michael Karamus

2. Grant McClure

EXECUTIVE SESSION

Motion: It was moved by Council Member Tabernik, seconded by Council Member Brown, to enter into an executive session at 4:10 PM.

The Vote - The motion was approved without objection.

7. PURSUANT TO S. C. CODE §30-4-70(A)(2): RECEIPT OF LEGAL ADVICE WHERE THE LEGAL ADVICE RELATES TO MATTERS COVERED BY THE ATTORNEY-CLIENT PRIVILEGE (POTENTIAL SETTLEMENT OF CLAIMS AGAINST ADDITIONAL OPIOID LITIGATION DEFENDANTS)

The item was discussed in the executive session.

8. PURSUANT TO S. C. CODE §30-4-70(A)(2): RECEIPT OF LEGAL ADVICE WHERE THE LEGAL ADVICE RELATES TO MATTERS COVERED BY THE ATTORNEY-CLIENT PRIVILEGE (MEDIATION OF PENDING LITIGATION)

The item was discussed in the executive session.

9. PURSUANT TO S.C. CODE SEC. 30-4-70 (A) (1) DISCUSSION OF APPOINTMENTS OF PERSONS TO A PUBLIC BODY (GREEN SPACE ADVISORY COMMITTEE)

The item was discussed in the executive session.

10. MATTERS ARISING OUT OF EXECUTIVE SESSION

Motion: It was moved by Vice-Chairman McElynn, seconded by Council Member Cunningham, that Beaufort County participate in settlements with the opioid manufacturer defendants Teva and Allergen, that it participate in the settlements with the retailer defendants Walmart, Walgreens, and CVS (collectively referred to as "new settlements") as presented to us in executive session and further that the County Administrator receive authorization to execute any and all documents which are necessary to participate in such settlements.

The Vote – The motion was approved without objection; Council Member Glover was absent from the vote.

Motion: It was moved by Council Member Cunningham, seconded by Council Member Tabernik, that County Council agree to enter into the 2023 amended South Carolina Opioid Settlement Allocation Agreement as presented in executive session and that the County Administrator receive authorization to execute any and all documents which are necessary to effectuate this agreement.

The Vote – The motion was approved without objection. Council Member Glover was absent from the vote.

Motion: It was moved by Council Member Tabernik, seconded by Council Member Cunningham, that County Council appoint the following persons to the Green Space Advisory Committee: Ms. Alice Hoard to serve as the member from Council County; Senator Tom Davis to serve as the member from Beaufort County's Legislative Delegation; Mr. Mike McShane to serve as the member who is knowledgeable about the geography and conditions of Beaufort County's land; Mr. Timothy L. Evans to represent the northern

geographical region; Ms. Laurel Rhoten to represent the eastern geographical region; Ms. Carmen Avon Manning to represent the western geographic region; and for the southern geographic region, Council further moves that the task force reopen the application period, interview candidates, and update Council on its efforts at the April meeting of the Finance, Administration, and Economic Development Committee.

The Vote – The motion was approved without objection. Council Member Glover was absent from the vote.

11. LIASION AND COMMITTEE REPORTS

Please watch the video stream available on the County's website to view the discussion.

https://beaufortcountysc.new.swagit.com/videos/222849?ts=1105

Council Member Tabernik provided updates from the County Transportation Committee meeting, the School Board meeting, and the Lowcountry Council of Government's orientation meeting for new officials.

Council Member Reitz provided updates on the Airports Board meeting.

Council Member Howard provided updates on the Rural and Critical Lands Board and Technical College of the Lowcountry retreats.

Council Member Lawson discussed consent agenda items originating from the Finance, Administration, and Economic Development Committee.

12. APPROVAL OF CONSENT AGENDA

Motion: It was moved by Vice-Chairman McElynn, seconded by Council Member Lawson, to approve the consent agenda.

The Vote - The motion was approved without objection.

13. TIME-SENSITIVE ITEM ORIGINATING FROM THE MARCH 27TH PUBLIC FACILITIES AND SAFETY COMMITTEE - APPROVAL OF A RESOLUTION RECOGNIZING FAIR HOUSING MONTH

Motion: It was moved by Council Member Howard, seconded by Council Member Brown, to approve a resolution recognizing Fair Housing Month.

The Vote - The motion was approved without objection.

14. FIRST READING OF AN ORDINANCE FOR TEXT AMENDMENTS TO THE COMMUNITY DEVELOPMENT CODE (CDC): SECTIONS 3.1.60 (CONSOLIDATED USE TABLE), 3.2.60 (T2 RURAL CENTER (T2RC) STANDARDS), AND 4.1.220 (RESIDENTIAL STORAGE FACILITY) TO CONDITIONALLY ALLOW THE USAGE OF RESIDENTIAL STORAGE FACILITY IN T2 RURAL CENTER

Motion: It was moved by Council Member Howard, seconded by Council Member Tabernik, to approve the first reading of an ordinance for text amendments to the Community Development Code (CDC): Sections 3.1.60 (Consolidated Use Table), 3.2.60 (T2 Rural Center (T2RC) Standards), and 4.1.220 (Residential Storage Facility) to conditionally allow the usage of residential storage facility in T2 Rural Center.

The Vote - The motion was approved without objection.

15. FIRST READING OF AN ORDINANCE FOR A ZONING MAP AMENDMENT/REZONING REQUEST FOR 1 ACRE (R600 036 000 0369 0000) AT 3 BENTON LANE FROM T3 EDGE TO T2 RURAL CENTER

Please watch the video stream available on the County's website to view the full discussion.

https://beaufortcountysc.new.swagit.com/videos/222849?ts=1576

Motion: It was moved by Council Member Cunningham, seconded by Council Member Bartholomew, to approve the first reading of an ordinance for a zoning map amendment/rezoning request for 1 acre (R600 036 000 0369 0000) at 3 Benton Lane from T3 Edge to T2 Rural Center.

Discussion: Council Member Brown advocated for Council to approve this item and commented on Dr. Campbell's request to build a medical office.

Council Member Cunningham commented on commercial development and rezoning in the area and his support for rezoning this property to meet community needs.

Council Member Lawson commented on spot zoning and the request from residents to slow down development in the area.

Chairman Passiment asked for a definition of spot zoning. County Administrator Greenway commented that spot zoning in South Carolina is zoning a property or a portion of the property contrary to the surrounding area's character. Mr. Greenway suggested that Council instruct staff evaluate the area and bring forward a recommendation on amending the Comprehensive Plan to alleviate concerns about spot zoning.

Vice-Chairman McElynn and County Administrator Greenway discussed whether there would be an impact on property values if the Comprehensive Plan is amended.

Council Member Bartholomew and Director Merchant discussed if T2RC allows for mix-use properties.

Council Member Cunningham and Director Merchant discussed what is allowed under T3 Edge.

Council Member Howard suggested a meeting with the community about the Comprehensive Plan occur before a vote on this item.

Council Member Tabernik commented on the proposed workforce housing above the medical office and confirmed with Director Merchant that a mixed-use property would not be possible.

Motion to Refer: It was moved by Council Member Howard, seconded by Council Member Glover, to refer the item to the Community Services and Land Use Committee for further study and action.

Discussion: The Council and County Administrator Greenway discussed gathering public input on changes to the Comprehensive Plan to allow for commercial development.

The Council and County Administrator Greenway discussed keeping the item on the Council agenda instead of referring it to the Community Services and Land Use Committee.

Council Member Howard and Council Member Glover withdrew their motions to refer the item to the committee.

The Council discussed amending the main motion to allow public input on the area's zoning and a Comprehensive Plan amendment before the second reading.

Motion to Amend: It was moved by Vice-Chairman McElynn, seconded by Council Member Brown, to make an addition to the main motion to instruct staff to process a Comprehensive Plan amendment for the appropriate zoning of this area before the second reading.

The Vote – The motion to amend was approved without objection.

The Vote – Voting Yea: Chairman Passiment, Vice-Chairman McElynn, Council Member Bartholomew, Council Member Brown, Council Member Cunningham, Council Member Dawson, Council Member Lawson, and Council Member Reitz. Voting Nay: Council Member Glover, Council Member Howard, and Council Member Tabernik. The motion, as amended, passed 8:3.

16. FIRST READING OF AN ORDINANCE FOR A ZONING MAP AMENDMENT/REZONING REQUEST FOR 2.81 ACRES (R600 008 000 0625 0000) AT THE INTERSECTION OF OKATIE HIGHWAY (170) AND LOWCOUNTRY DRIVE (462) FROM T2 RURAL (T2R) TO C4 COMMUNITY CENTER MIXED-USE (C4CCMU)

Motion: It was moved by Vice-Chairman McElynn, seconded by Council Member Cunningham, to approve the first reading of an ordinance for a zoning map amendment/rezoning request for 2.81 acres (R600 008 000 0625 0000) at the intersection of Okatie Highway (170) and Lowcountry Drive (462) from T2 Rural (T2R) to C4 Community Center Mixed-Use (C4CCMU).

Discussion: Council Member Bartholomew asked if there were plans for the property.

The Vote – The motion was passed by 10:1. Council Member Glover objected.

17. PUBLIC HEARING AND APPROVAL OF A RESOLUTION AUTHORIZING THE COUNTY ADMINISTRATOR TO ENTER INTO A LEASE AGREEMENT WITH BEAUFORT COUNTY MEMORIAL HOSPITAL, OR ITS DESIGNEE, THE REAL PROPERTY LOCATED AT 114 ELLIOTT STREET

Please watch the video stream available on the County's website to view the full discussion.

https://beaufortcountysc.new.swagit.com/videos/222849?ts=3413

Motion: It was moved by Council Member Howard, seconded by Council Member Glover, to approve the public hearing and a resolution authorizing the County Administrator to enter into a lease agreement with Beaufort County Memorial Hospital, or its designee, the real property located at 114 Elliott Street.

Discussion: Council Member Cunningham asked if the contract includes a restriction on how much can be charged for rent so that Beaufort Memorial Hospital cannot profit from the discounted lease rate. County Attorney Ward replied that Beaufort Memorial Hospital agreed to set a rental rate amount to ensure they would not be making any money but would have funding for small maintenance fees.

Council Member Cunningham and County Attorney Ward discussed the two-year term of the lease agreement.

The Vote - The motion was approved without objection.

Chairman Passiment opened the floor for public comment.

No one came forward.

Chairman Passiment closed the public comment.

18. APPROVAL OF A RESOLUTION TO ACCEPT A GRANT FROM THE SC DEPARTMENT OF AGRICULTURE IN THE AMOUNT OF $50,000 FOR THE COMBINED PROJECTS OF PROJECT PACKET AND PROJECT LAWN

Please watch the video stream available on the County's website to view the full discussion.

https://beaufortcountysc.new.swagit.com/videos/222849?ts=3540

Motion: It was moved by Council Member Dawson, seconded by Council Member Tabernik, to approve a resolution to accept a grant from the SC Department of Agriculture in the amount of $50,000 for the combined projects of Project Packet and Project Lawn.

Discussion: Council Member Tabernik commented on discussions at the committee level, which means that the Council does not have to discuss items before a vote.

Vice-Chairman McElynn commented that meeting packets contain summaries on agenda items that provide an overview of previous actions taken and staff recommendations.

The Vote - The motion was approved without objection.

19. CITIZEN COMMENT

Please watch the video stream available on the County's website to view the comments.

https://beaufortcountysc.new.swagit.com/videos/222849?ts=3626

1. Robert New
2. Paula Galane
3. Tom Donahue
4. Arnold Brown
5. Walter Gay
6. Elaine Scott

20. ADJOURNMENT

Adjourned: at or around 6:05 PM

COUNTY COUNCIL OF BEAUFORT COUNTY

BY: _____
Joseph F. Passiment, Jr., Chairman

ATTEST:

_____
Sarah W. Brock, Clerk to Council
Ratified:

~ Proclamation ~

Whereas, in 1987 Congress passed, and President Ronald Reagan signed, Public Law 99-611, proclaiming the first week of May as "'National Correctional Officers Week": and

Whereas, the operation of correctional and detention facilities represents a crucial component of our Criminal Justice System; and

Whereas, correctional officers play a vital role in protecting the rights of the public to be safeguarded from criminal activity; and

Whereas, correctional personnel are responsible for the safety and dignity of the human beings charged to their care; and

Whereas, correctional personnel work under demanding circumstances and face danger in their daily work lives, often sacrificing personal and family time to provide a necessary, but thankless, unrecognized, and behind the scenes service to the public; and

Whereas, the staff of the Beaufort County Detention Center has continually demonstrated their skill and professionalism in running one of the finest facilities in the State.

Now, therefore, be it resolved, that Beaufort County Council proclaims

May 7th – May 13th National Correctional Officers Week.

Dated this 8th day of May 2023.

DETENTION
BEAUFORT COUNTY
SOUTH CAROLINA

_____

Joseph Passiment, Chairman
Beaufort County Council

ADD-ONS

CITIZEN COMMENTS 1st Portion

County Council
May 8, 2023

CITIZEN COMMENT PERIOD- 15 MINUTES TOTAL

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	FULL NAME (print only)	Agenda Item Number
1.	Christina Gwozdz	#12
2.	Queen Quet	15 CPO
3.	Arnold Brown	15 CPO
4.	Faith Rivers James	15 CPO
5.	Jack Smith	15 CPO
6.	Inez [illegible] Miller	15 CPO
7.	SKIP HOAGLAND	CONSENT (3) 1/3 (4)
8.	Robert Sample	15 CPO
9.	Elvio Tropeano	15-CPO
10.	Kenneth F. Hodges	15-CPD
11.	Earnestine Atkins	15. CPD
13.		
14.		
15		

PUBLIC HEARING COMMENTS REGARDING AGENDA ITEMS:

By signing below, you agree to adhere to the following decorum in speaking:
1) address the Chairman and, in speaking, avoid disrespect to Council and any personalities
2) Confine themselves to questions under the jurisdiction of the council
3) be mindful and respectful of those present and others who may be watching.

TOPICS

#13: PUBLIC HEARING OF AN ORDINANCE AUTHORIZING THE REDEMPTION OF THE OUTSTANDING BEAUFORT COUNTY, SOUTH CAROLINA GENERAL OBLIGATION BONDS, SERIES 2013A, AND OTHER MATTERS RELATED THERETO

#14: PUBLIC HEARING OF AN ORDINANCE FOR A ZONING MAP AMENDMENT/REZONING REQUEST FOR 1 ACRE (R600 036 000 0369 0000) AT 3 BENTON LANE FROM T3 EDGE TO T2 RURAL CENTER

May 8, 2023

	FULL NAME	TOPIC	PHONE # or EMAIL ADDRESS
1.	Felicia Roth	14	
2.	~~Qveen Quet~~	15-CPO	GullGeeCo@aol.com
3.	Arnold L Brown	CPO	131 MLD Drive St Helena
4.	Faith Rivers James	~~15~~-CPO	SC Coastal Conservation League
5.	Jack Smith	CPO	jack.smith@nelsonmullins.com
6.	Inez Miller	CPO	inezmil616@yahoo.com
7.			
8.			
9.			
10.			
11.			
13.			

CITIZEN COMMENTS 2nd Portion

County Council
May 8, 2023

CITIZEN COMMENT PERIOD- 15 MINUTES TOTAL

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	FULL NAME (print only)	Agenda Item Number
1.	Robert Michael New	
2.	[illegible]	
3.	Skip Hoagland	
4.	Lynn Gormley	
5.	~~Elvio Troppano~~	
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Prosperity starts with place.

We have learned, both from research and in practice, is that to ensure the health and prosperity of neighborhoods and the people who live there, we must strategically prioritize and strive for greater racial equity, improved health outcomes, and upward mobility. The Purpose Built Communities model for impact provides the roadmap to get there.

Our holistic approach grew from the knowledge that siloed approaches to poverty do not strengthen the collective neighborhood environment. All fundamental needs of children and families must be addressed—a safe place to live; access to quality jobs; fresh, healthy food; recreation; and high-quality education.



Mixed-Income Housing

The strategy begins by enhancing a community's residential foundation through safe, high-quality housing for all income levels, ensuring a significant portion is dedicated to long-term, permanent affordability to reduce displacement in the neighborhood.

Cradle-to-College Education

Education, beginning at birth, is vital for healthy child development. High-quality, community-serving schools within a comprehensive early learning to grade 12 pathway foster children's development and prepare them for college or their chosen post-graduate path.

Community Wellness

Thriving neighborhoods prioritize wellness through medical care, mental health support, healthy food access, community spaces, arts, culture, and green areas. Tailored facilities and programs promote belonging, honor history, encourage healthy lifestyles, create jobs, and enhance safety for overall well-being.

Economic Vitality

A strong commercial core fosters neighborhood prosperity and residents' economic advancement, offering opportunities for meaningful work and wealth building. A dual-pronged strategy supporting opportunities across income levels ensures abundant local resources and participation in a thriving economy.

Defined Neighborhood

Neighborhoods are the unit of change that can have the greatest impact on people's lives, changing life trajectories for the lowest-income residents, creating greater racial equity, improved health outcomes, and increased upward mobility.

Community Quarterback

The Community Quarterback organization effectively executes this model, collaborating with stakeholders to seamlessly integrate all the vital components that contribute to neighborhood prosperity and growth.

ADD-ONS

Name	City	State	Postal Code	Country
Felicia roth	Bluffton	SC		US
Linda Toomer	Bluffton	SC	29910	US
Laura Mcmeans	Bluffton	SC	29910	US
Lori Nelson	Bluffton	SC	29910	US
Cynthia Taulbee	Bluffton	SC	29909	US
Amy Kelly	Bluffton	SC	29909	US
Jamie Power	Bluffton	SC	29909	US
Anna Barry	Bluffton	SC	29909	US
Richard Barton	Bluffton	SC	29910	US
Pamela Hearn	Savannah	GA	31405	US
Denise Nadeau	Bluffton	SC	29910	US
French Jen	Bluffton	SC	29910	US
Jill Moody	Charlotte	NC	28202	US
Katrina Pannazzo	Bluffton	SC	29909	US
Frances Rogers	Lawrenceville	GA	30044	US
Kathy Isaacs	BLUFFTON	SC	29910	US
Danaidy Nunez	Bluffton	SC	29910	US
Anna Crisp	Bluffton	SC	29910	US
Melissa Cooney	Bluffton	SC	29909	US
Kris Coby	Bluffton	SC	29910	US
Tina D'Angelo	Bluffton	SC	29910	US
Pamela A Brown	Bluffton	SC	29910	US
Jessica Frantz	Bluffton	SC	29910	US
L.P. Braxton	Bluffton	SC	29919	US
Kathryn Hancock	Bluffton	SC	29910	US
Bianca Sampson	Charlotte	NC	28202	US
Hannah Hartberger	Bluffton	SC	29910	US
Connor Mayes	Hilton Head Island	SC	29928	US
Lauren Fernandez	Bluffton	SC	29909	US
Melissa Gee	Bluffton	SC	29910	US
Starrett becker	Bluffton	SC	29910	US
Michael Baumann	Lawrenceville	GA	30044	US
Kimberly Sutton	Bluffton	SC	29909	US
Karen DePace	Bluffton	SC	29909	US
Gayle Bress	Bluffton	SC	29909	US
Gomez McKnight	Bluffton	SC	29909	US
Devin Timmons	Bluffton	SC	29909	US
Katie Gooding	Okatie	SC	29909	US
NIcole BAusman	Bluffton	SC	29909	US
Toney Garcia	Bluffton	SC	29910	US
Betty Bryl	Bluffton	SC	29910	US
Ashley Wilson	Bluffton	SC	29909	US
Matthew Wilson	Bluffton	SC	29909	US
Robyn Sealock	Beaufort	SC	29906	US
Bobby Vickers	Bluffton	SC	29909	US
Matt McAlister	Bluffton	SC	29910	US

Noah Middleton	Bluffton	SC	29910 US
Eric Turner	Jacksonville	FL	32209 US
Marida Bruggeman	Bluffton	SC	29910 US
Christine McElroy	Mt. Pleasant	SC	29464 US
Tracy Gannon	Bluffton	SC	29910 US
Matthew Squillace	Bluffton	SC	29909 US
Cathy Strmac	Bluffton	SC	29910 US
Michael Clancy	Bluffton	SC	29910 US
David Solomon	Okatie	SC	29909 US
Carolyn Davidson	Bluffton	SC	29910 US
Mark Burrell	Bluffton	SC	29909 US
Jannine Mutterer	Bluffton	SC	29910 US
Stephanie Kersten	Bluffton	SC	29910 US
Thomas Crenshaw	Bluffton	SC	29910 US
Sandie Parrott	Bluffton	SC	29910 US
Mary Jane Hardman	Bluffton	SC	29910 US
Lucy Millar	Savannah	GA	31412 US
Jacqueline Griffin	Hanover Park	IL	60133 US
SANDRA SCOTT	Palm coast		32137 US
Mary Ann Nester	Bluffton	SC	29910 US
Michele Wooten	Bluffton	SC	29910 US
Tess wooten	Bluffton	SC	29910 US
Kevin Joyce	Bluffton	SC	29910 US
Michael E Koch	Bluffton	SC	29910 US
Doris Koch	Bluffton	SC	29910 US
Rebecca Capello	Bluffton	SC	29910 US
Pamela Giannone	Bluffton	SC	29910 US
Joanna Olivares	Bluffton	SC	29910 US
Susan Dykes	Bluffton	SC	29910 US
BRIAN Kelly	Bluffton	SC	29910 US
Isabel Miller	Bluffton	SC	29910 US
Carl Ekholm	Bluffton	SC	29910 US
Barbara Marsee	Bluffton	SC	29910 US
Kristen Premer	Bluffton	SC	29910 US
Colleen Lanahan	Bluffton	SC	29910 US
JD Daniels		SC	29926 US
I Ortiz	Bluffton	SC	29909 US
Cathie Boulware	Bluffton	SC	29910 US
Diane Hoyt	Bluffton	SC	29910 US
Christine Smith	Bluffton	SC	29910 US
Carol Riddick	Bluffton	SC	29910 US
Phil Stewart	Bluffton	SC	29910 US
Larry Glicken	Bluffton	SC	29910 US
Mary Mateo	Jacksonville	FL	32209 US
Jeff Lake	Bluffton	SC	29910 US
Russell Trent	Bluffton	SC	29910 US
Karen Hettinger	Bluffton	SC	29910 US

Kathleen Collins Toohey	Bluffton	SC		29910	US
Kerri Anne Fried	Bluffton	SC		29910	US
Harlan Batchelder	Bluffton	SC		29910	US
SCOTT FRIEDEN	Bluffton	SC		29910	US
Michael Shippee	Bluffton	SC		29910	US
Suzanne McNally	Bluffton	SC		29910	US
Kelli Uyesugi	Bluffton	SC		29910	US
Renate Schliesmann	Bluffton	SC		29910	US
TERRY SKOMROCK	Bluffton	SC		29910	US
Donna Brooks	Bluffton	GA		29910	US
Helene Kugit	Bluffton	SC		29910	US
Karen Laborde	Bluffton	SC		29910	US
Esther LaRue	Bluffton	SC		29910	US
Patrick Burke	Bluffton	SC		29909	US
Fred Scandale	Bluffton	SC		29910	US
Tori Ginsberg	Lake Worth			33460	US
suzy colson	Bluffton	SC		29910	US
Milton Perron	Bluffton	SC		29909	US
Carolyn Anderson	Pearl River	NY		10965	US
Thelma Stein	Bluffton	SC		29910	US
Rebecca Berkley	Bluffton	SC		29910	US
Angela Kleinhans	Bluffton	SC		29910	US
Vicki Ponton	Bluffton	SC		29910	US
Nancy Clemens	Bluffton	SC		29909	US
Kris Sowers	Marquette	MI		49855	US
Joshua Curphey	Peterborough		PE7		US
Raniya Forbes	Baltimore			21218	US
juliette cardona	Katy			77494	US
Marizol Quinones	Lancaster			17603	US
Lauren Sinclair					US
Regina Garfola	Miami			33161	US
Joselyn Vasquez	Fort Worth			76155	US
Lamar Fredrickson	Piscataway			8854	US
Turi Kennedy					US
Tony Alexander	Bluffton	SC		29909	US
LisaMarie Albert	Madison			35758	US
Tina Blount	Bluffton	SC		29909	US
Kathleen Steinberg	Charlotte	NC		28202	US
Alfred Jablonski	Bluffton	SC		29910	US
Kip Chandler	Bluffton	SC		29910	US
Bonnie Ridgely	Bluffton	SC		29910	US
Jeffery Stauffer	Bluffton	SC		29909	US
Duncan & Danielle Aspinwall-Winter	Bluffton	SC		29910	US
Robert Doran	Bluffton	SC		29910	US
Lillian Barnes	Okatie	SC		29909	US
Ann Schaeffer	Bluffton	SC		29910	US
Shelly Valentino	Bluffton	SC		29910	US

Susan Richards	Bluffton	SC	29910 US
Terri Springer	Bluffton	SC	29910 US
Christine Strobel	Bluffton	SC	29910 US
Regina Blakeley	Bluffton	SC	29909 US
Angela Jennings	Bluffton	SC	29910 US
kim smith	Bluffton	SC	29910 US
Ginny Drennan	Bluffton	SC	29910 US
Scott Dykes	Bluffton	SC	29910 US
Kathleen Tyminski	Bluffton	SC	29910 US
Joy Coe	Jacksonville	FL	32209 US
Darlene Jackson	Bluffton	SC	29910 US
Jane Olesky	Bluffton	SC	29910 US
Terry J Veitch	Okatie	SC	29909 US
Robert Avitabile	Bluffton	SC	29910 US
Audrey Boyn	Rochester	MN	55901 US
Christopher Benedict	Bluffton	SC	29910 US
James Mason	Bluffton	SC	29910 US
Brent Myers	Bluffton	SC	29910 US
Eugene Loomis	Atlanta	GA	30301 US
Elena McCollum	Bluffton	SC	29910 US
Lewis Leopard	Bluffton	SC	29910 US
Edward Moyd	Hardeeville	SC	29927 US
Jennifer Baranello	Bluffton	SC	29909 US
Elliott Seitzman	Bluffton	SC	29910 US
Dawn Brown	Bluffton	SC	29910 US
Paul Taylor	Bluffton	SC	29910 US
Mary-Iris Taylor	Bluffton	SC	29910 US
Karin brasseler	Bluffton	SC	29910 US
Bradley Kupferberg	Bluffton	SC	29910 US
Barbara Schumann	Raleigh	NC	27609 US
Pam Douglas	Bluffton	SC	29910 US
John Douglas	Bluffton	SC	29910 US
Regina Lindberg	Bluffton	SC	29910 US
Kelley Carlson	Bluffton	SC	29910 US
Chris Lindberg	Bluffton	SC	29910 US
Jim Greenaway	Bluffton	SC	29910 US
Greg Murphy	BLUFFTON	SC	29910 US
Neil Ritter	Bluffton	SC	29910 US
Art Quinn	Bluffton	SC	29909 US
Kevin Toqe	Atascadero	CA	93422 US
Janet Trent	Bluffton	SC	29910 US
Hope Toqe	Bluffton	SC	29910 US
Barbara Hege	Bluffton	SC	29910 US
Steve Baranello	Bluffton	SC	29909 US
Wayne and Colleen Horne	Bluffton	SC	29909 US
Jeff Maultsby	Bluffton	SC	29910 US
Dana Cirrone	Bluffton	SC	29909 US

Constance Dailey	Bluffton	SC	29910 US
Keith Van Hentenryck	Bluffton	SC	29910 US
Mark Hewell	Bluffton	SC	29909 US
Assad Hamad	Cambridge		2140 US
Suzanne Torkar	Carlsbad		92009 US
Mohammad Abuein	Houston	TX	77052 US
Mary Jo Rolfe	Bluffton	SC	29910 US
Susanne Clark	spotswood	NJ	8884 US
Marilyn & Eric Santiago	Bluffton	SC	29909 US
Kenneth Gathercole	Bluffton	SC	29910 US
Nancy Van Voorhis	Bluffton	SC	29910 US
Steve Fredrickson	Bluffton	SC	29910 US
K Heslin	Bluffton	SC	29910 US
Deborah DeBlois	Bluffton	SC	29909 US
Colleen O'Roark	Bluffton	SC	29910 US
Peter Wiley	Bluffton	SC	29910 US
Carla Chandler	Bluffton	SC	29910 US
Chris Ross	Okatie	SC	29909 US
Linda Twigg	Bluffton	SC	29910 US
Elizabeth Lee	Bluffton	SC	29910 US
Johnny Taulbee	Bluffton	SC	29910 US
Diane Merrick	Bluffton	SC	29910 US
Cynthia Faulkner	Bluffton	SC	29910 US
Rebecca Mccunn	Bluffton	SC	29910 US
Ken Laborde	Bluffton	SC	29910 US
Terri Nelson-Bunge	Bluffton	SC	29909 US
Carol Anderson	Beaufort	SC	29902 US
Arely Romero	Houston		77009 US
Landynn Powers	Warner Robins		31093 US
Chloe Gach	Bluffton	SC	29909 US
Melanie Nelson			US
David Salzmann	Bluffton	SC	29910 US
Wayne Binder	Bluffton	SC	29910 US
Sarah Vandervort	Bluffton	SC	29910 US
Harold Garrabrant	Bluffton	SC	29910 US
Helen Gerezgiher	Saint Paul		55105 US
Soukey Hunter	Charlotte		28212 US
Emma Brown	Chesterton		46304 US
Марина Сосновская	Secaucus		7094 US
Niftalem Berhe	Syracuse		13203 US
Kevin Whittle	North Dartmouth		2747 US
I Jardon	Lombard		60148 US
Karen Deal	Miami		33142 US
Kara Milton	Meade		67864 US
Nicole Zolzer	Port Jefferson Statio	NY	11776 US
LISE LEDOUX	Bluffton	SC	29910 US
Rodney Owen	Bluffton	SC	29909 US

Samuel Weatherly	Bluffton	SC	29910 US
Steven Roth	Bluffton	SC	29910 US
Rochelle Roth	Bluffton	SC	29910 US
Nicholas Walker	Bluffton	SC	29909 US
Laura Stager	Bluffton	SC	29910 US
Alvin and Lois Chandler	Bluffton	SC	29909 US
Ashleigh Vargas-Aquino	Bluffton	SC	29910 US
G. Diane Matthews-Marcelin	Carson		90746 US
Andrew Lieb	Phenix City		36870 US
Tonya Hajkowski	Ontario		91761 US
Dul Pam	Boston		2136 US
Jake Triana	Winter Garden		34787 US
Betsy Stephens	Bluffton	SC	29909 US
Jensen Benêt	Peoria		61614 US
Mark Van Allen	Roseville	CA	95678 US
Benita Willett	Evansville	IN	47710 US
Samantha Valencia	Burbank		91505 US
Adina K Harris	Kirkland		98033 US
Samaya Mile	Miami		33145 US
Julien Peng	Buffalo Grove		60089 US
Charles Hansen	Kenosha		53140 US
Kimberly Odle	Daytona Beach		32119 US
Cheryl Burquist	Bluffton	SC	29910 US
Carol Cruchfield	Bluffton	SC	29910 US
Robert Burquist	Savannah	GA	31412 US
George Boccuzzi	Bluffton	SC	29909 US
Michelle Jimenez	Jacksonville	FL	32210 US
Amber Phillips	Bluffton	FL	29910 US
Tuesday Mock	Bluffton	SC	29910 US
tiffany fender	Bluffton	SC	29910 US
Zachery Fender	Bluffton	SC	29910 US
Suzanne Walter	Bluffton	SC	29909 US
Janet Mai	Willowick		44095 US
ImagineTheDev RBLX	Nashville		37212 US
Michael Phillips	Jacksonville	FL	32210 US
Malachai Kern	Philadelphia		19124 US
Norene Jewell	Hickory		15340 US
Eleanor Steger	Dallas		75205 US
Jessica Beacom	Whittier		90602 US
Matthew Risteff	Levittown		11756 US
Wahida Khanam	Hamtramck		48212 US
Katherine Howell	Summerville	SC	29485 US
James Alvarado	Uvalde		78801 US
Jake Chapman	Houston		77006 US
Jocabed Espinoza	Parachute		81635 US
Mckinley Mock	Bluffton	SC	29910 US
Mark Johnson	Bluffton	SC	29910 US

William Mock	pritchardville	SC	29910	US
Susan Carroll	Bluffton	SC	29909	US
ayden mckenzie	Savannah	GA	31401	US
JEANNETTE WALLETT	Lawrenceville	GA	30045	US
Olivia Osher	Okatie	SC	29909	US
Charlie Ann Huskey	Bluffton	SC	29910	US
Pamela Huskey	Talbott	TN	37877	US
Hailey Hill	Crawford	TN	38554	US
Alejandra Cordoba	Wynnewood	PA	19096	US
Danielle Lupo	Trumbull		6611	US
Tanya Crouse	Savannah	GA	31405	US
Sarah Kimbrell	Bluffton	SC	29910	US
Katherine Griffis	Southfield		48075	US
Eric Kimbrell	Bluffton	SC	29909	US
Sara Geiger	Bluffton	SC	29910	US
Peter White	Bluffton	SC	29909	US
Barbara Goldberg	Bluffton	SC	29910	US
Christina Benza	Bluffton	SC	29910	US
Donald Roszak	Bluffton	SC	29910	US
Susan Staples	Bluffton	SC	29910	US
heather leae	Bluffton	SC	29910	US
Victoria Maisano	Bluffton	SC	29910	US
Joycelyn Alves	Bluffton	SC	29910	US
Richard Parrott	Bluffton	SC	29910	US
Justin Camp	Bluffton	SC	29910	US
Amber Dean	Bluffton	SC	29910	US
Sydney Dobson	Summerville	SC	29485	US
Eddie DuPont	Bluffton	SC	29910	US
Brooke Belz	Ridgeland	SC	29936	US
John Belz	Bluffton	SC	29910	US
Jillian Riley	Bluffton	SC	29909	US
Jill Duncan	Bluffton	SC	29910	US
Gwendolyn Hartzog	Bluffton	SC	29910	US
Sarah Bazemore	Bluffton	SC	29910	US
Larry Boysel	Bluffton	SC	29910	US
Dianne Horowitz	Bluffton	SC	29910	US
Hellen Barker	Bluffton	SC	29910	US
Gil Giacobbi	Charlotte	NC	28202	US
Diane Pakler	Bluffton	SC	29909	US
Linds Mailly	Bluffton	SC	29900	US
Sarah Sanders	Bluffton	SC	29909	US
Melissa Rothman	Bluffton	SC	29910	US
Tamara Furet	Aguada			US
Sam King	Panorama City	CA	91402	US
Tim Szczodrowski	Atlanta	GA	30344	US
Angela Crosby	Bluffton	SC	29909	US
Jim Yoshino	Bluffton	SC	29910	US

Jim Hearn	Savannah	GA	31405 US
Lynn Viscuso	Bluffton	SC	29910 US
Traci Murrell	Bluffton	SC	29910 US
Elizabeth Hill	Bluffton	SC	29910 US
Cecilia Umhey	Bluffton	SC	29910 US
Lauren Borack	Bluffton	SC	29910 US
Heather Steinberger	Beaufort	SC	29902 US
Branden Drewer	Charlotte	NC	28202 US
Lisa Laking	Hilton Head Island	SC	29926 US
Toni McQuair	Bluffton	SC	29909 US
Brenda Hobby	Bluffton	SC	29910 US
Chris Rudd	Bluffton	SC	29910 US
Ann Martin	Bluffton	SC	29910 US
Debbie Kirsch	Bluffton	SC	29910 US
john kaupisch	Bluffton	SC	29910 US
Sydney Laymon	Bluffton	SC	29909 US
Stacy Nix	Bluffton	SC	29910 US
Waymon Murphy	Bluffton	SC	29909 US
Katherine Howell-Stewart	Summerville	SC	29485 US
Nicholas DuBois	Bluffton	SC	29909 US
Thomas Trezevant	Bluffton	SC	29910 US
Doreen Lechner	Bluffton	SC	29910 US
Kailey Ramsey	Bluffton	SC	29910 US
Tisha Burt	Beaufort	SC	29906 US
Donald Rocks	Bluffton	SC	29910 US
Frederick Stewart	SUMMERVILLE	SC	29485 US
Lisa Cerone	Bluffton	SC	29910 US
Priscilla Coleman	Bluffton	SC	29910 US
Charlene Wojcik	St. Helena	SC	29920 US
PHILIP MATEO	Bluffton	SC	29910 US
Elizabeth Ganin	Bluffton	SC	29910 US
Jessica Conklin	Bluffton	SC	29910 US
Alec Harvat	Bluffton	SC	29910 US
Jeremiah Tullino	Bluffton	SC	29909 US
geri blumenthal	Bluffton	SC	29910 US
Rebecca Baker	Bluffton	SC	29910 US
Danielle Puckhaber	Bluffton	SC	29909 US
Georgeanne Romano	Bluffton	SC	29910 US
rebekah runyan	hilton head	SC	29928 US
Douglas MacNeille	Hilton Head Island	SC	29926 US
James Paris	Hilton Head Island	SC	29926 US
Bruce Crutchfield	Bluffton	SC	29910 US
Natalie Reis	Bluffton	SC	29910 US
Shannon Greene	Bluffton	SC	29910 US
Josh Standiford	Lake Zurich		60047 US
Yonas Segaw	Atlanta		30302 US
Corey Bazan	Wright City		63390 US

Erik sierra	Chicago			60631	US
Bennett Sheeley					US
Shelby Bautista	Hilton Head Island	SC		29928	US
Linda Croddick	10 Whitepoint Gard	SC		29910	US
Claire Gearhart	Savannah	GA		31405	US
Lisa DiTroia	Greensboro	NC		27407	US
Sharon Kelly	Bluffton	SC		29909	US
MaryLou Sodora	Bluffton	SC		29910	US
Gail Shafer	Bluffton	SC		29910	US
jacob king	Wilmington			28403	US
Andrew McPherson	Holton			66436	US
Afewerki Gitom	Wandsworth		SW12		US
linda mcbride	Scottsdale	AZ		85255	US
Lisa Bon	Eustis			32726	US
Christian Cole	Belleville			48111	US
Carlos Powell	Washington			20068	US
Martha Cousino	Daufuskie Landing	SC		29915	US
Bette McDermott	Bluffton	SC		29910	US
Rhonda Metsker	Bluffton	SC		29910	US
Elizabeth Cavanaugh	Bluffton	SC		29910	US
Maria Bonilla	Bluffton	SC		29909	US
Donna Smith	Bluffton	SC		29910	US
Nancy Dietze	Hilton Head	SC		29926	US
Robin Schmidt	Bluffton	SC		29910	US
Jill Baim	Bluffton	SC		29909	US
Lahbib Hammoudou	Alexandria			22304	US
John Lupton	Beaufort	SC		29902	US
Kate Oresic	Bluffton	SC		29910	US
Pamela Barr	Bluffton	SC		29910	US
Rice David	Bluffton	SC		29909	US
Maryrita Opperman	Bluffton	SC		29909	US
Manuel Saldana	Phoenix	AZ		85035	US
William Crumpton	Savannah	GA		31405	US
Nick Bass	Bluffton	SC		29910	US
Brian DeMatteo	Bluffton	SC		29910	US
Jan Lorion	Bluffton	SC		29910	US
Amy Morrissette	Bluffton	SC		29910	US
Mateo Herrera					US
Shad Farooq	Gainesville			20155	US
Tyler Jackson	Orland			95963	US
Elizabeth Reiff	Chicago			60623	US

Signed On

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ADD-ONS

Good evening Everyone,

My name is Sara' Reynolds Green, my family reside on St, Helena Island for centuries.

We want to first show some lovingkindness by thanking you for your votes to accept the CPO amendment. We see this as a milestone, but the fight continues, we see success when our entire St. Helena Island community and other communities up and down the Gullah Geechee Corridor, and around the world bolster together to ensure that at-risk families are no longer living in poverty, deficient in healthcare, experiencing food insecurities, inadequate education, substandard housing, and lacking economic wealth. We want our families and children to feel confident that their existence, communities, and way of life as Gullah Geechee descendants will be protected along with the natural environment because they are intricately interwoven, and they need to have access to them for their sustenance.

This experience has taught us, to embrace

conflicts, the power that is invoked when we work together as a community, the Gullah Way, the young and the old, the binyahs and the comyahs which means putting differences aside to ensure a fruitful harvest for all the community. in a way that fosters confidence, maturity, partnership, collaboration, and creativity. These critical skills will be increasingly challenging in the days ahead as climate change, sea level rise, land loss, overdevelopment, and racial inequality, continue to exist. By incorporating these critical skills now, our future generation will have the educational and social skills necessary to be able to navigate building partnerships to work collectively with local state, and federal entities to build a community that serves the best interest of all the residents.

Peace & Blessings,

Sara' Reynolds Green

843-473-0477

BEAUFORT COUNTY COUNCIL
AGENDA ITEM SUMMARY

ITEM TITLE:

A recommendation of an ordinance (by title only) to make appropriations for County Government and Special Purpose Districts for Beaufort County for the fiscal year beginning July 1, 2023 and ending June 30, 2024; to levy taxes for the payment thereof; to adopt law enforcement uniform service charges/ user fee; to provide for the expenditure of said taxes and other revenues coming into the county; to provide for the expenditure of said law enforcement uniform service charges/ user fee; and other matters related thereto.

MEETING NAME AND DATE:

Finance, Administration and Economic Development Committee 05/08/2023

PRESENTER INFORMATION:

Hayes Williams Chief Financial Officer; Denise Christmas Finance Director & Whitney Richland Deputy County Administrator

Forty five minutes to one hour.

ITEM BACKGROUND:

This is a presentation of the fiscal year 2024 budget for the General Fund, Capital Improvement Funds, Special Revenue Funds, Capital Project Funds, Debt Service Funds, Internal Service Funds, and Enterprise Funds.

PROJECT / ITEM NARRATIVE:

The presentation and Ordinance will outline the revenues and expenditures for the operations budgeted for Fiscal Year 2024 for the General Fund, Capital Improvement Funds, Special Revenue Funds, Capital Project Funds, Debt Service Funds, Internal Service Funds, and Enterprise Funds.

FISCAL IMPACT:

The Ordinance will outline the Revenues to be collected and the estimated expenditures for the Fiscal Year 2024.

STAFF RECOMMENDATIONS TO COUNCIL:

Staff recommends that Council recommend the Ordinance for approval.

OPTIONS FOR COUNCIL MOTION:

Motion to approve a recommendation of an ordinance (by title only) to make appropriations for County Government and Special Purpose Districts for Beaufort County for the fiscal year beginning July 1, 2023 and ending June 30, 2024; to levy taxes for the payment thereof; to adopt law enforcement uniform service charges/ user fee; to provide for the expenditure of said taxes and other revenues coming into the county; to provide for the expenditure of said law enforcement uniform service charges/ user fee; and other matters related thereto.

Move forward to Council for First Reading/Approval/May 8, 2023.

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
Revenues						
Property taxes						
10000001	41010	CURRENT TAXES	(100,434,000.00)	1.57%	(98,883,996.00)	(82,944,300.65)
10100001	41010	CURRENT TAXES	(780,488.00)	NA	-	(426,388.00)
14010001	41010	CURRENT TAXES	(1,040,651.00)	NA	-	(852,775.00)
14020001	41010	CURRENT TAXES	(1,040,651.00)	NA	-	(852,775.00)
16000001	41010	CURRENT TAXES	(5,723,580.00)	NA	-	(4,903,456.00)
10000001	41020	DELINQUENT TAXES	(2,100,000.00)	42.70%	(1,471,616.00)	(2,170,957.80)
10000001	41030	AUTOMOBILE TAXES	(7,600,000.00)	1.77%	(7,467,534.00)	(7,376,689.62)
10000001	41040	3% & 7% PENALTIES ON TAX	(500,000.00)	11.11%	(450,000.00)	(577,671.14)
10000001	41050	5% PENALTIES ON TAXES	(650,000.00)	30.00%	(500,000.00)	(750,204.97)
Total property taxes			(119,869,370.00)		(108,773,146.00)	(100,855,218.18)
Licenses and permits						
10000001	42010	BUILDING PERMITS	(1,604,000.00)	52.76%	(1,050,000.00)	(1,902,806.85)
10000001	42020	ELECTRICIANS' LICENSES	-	-100.00%	(18,000.00)	-
10000001	42030	MOBILE HOME PERMITS	(20,000.00)	100.00%	(10,000.00)	(20,545.00)
10000001	42040	MARRIAGE LICENSES	(65,000.00)	18.18%	(55,000.00)	(69,250.00)
10000001	42060	SHERIFF COPPER PERMITS	(250.00)	NA	-	(400.00)
10000001	42200	CABLE TV FRANCHISES	(280,000.00)	-37.78%	(450,000.00)	(276,486.66)
10000001	42300	BUSINESS LICENSE	(2,000,000.00)	-13.04%	(2,300,000.00)	(1,685,355.67)
10000001	42310	ALCOHOL BEVERAGE LICENSE	(75,000.00)	0.00%	(75,000.00)	(83,455.00)
Total licenses and permits			(4,044,250.00)		(3,958,000.00)	(4,038,299.18)
Intergovernmental						
10000001	43010	STATE AID TO SUBDIVISIONS	(8,353,438.00)	5.06%	(7,951,200.00)	(7,282,467.11)
10000001	43015	HOMESTEAD EXEMPTION, ETC	(2,025,000.00)	-5.81%	(2,150,000.00)	(2,038,600.31)
10000001	43020	MERCHANTS INVENTORY TAX	(190,000.00)	2.15%	(186,000.00)	(186,308.92)
10000001	43021	MANUFACTURER TAX EXEMPT PROGRM	(250,000.00)	977.59%	(23,200.00)	(72,276.94)
10000001	43022	MOTOR CARRIER PAYMENTS	(240,000.00)	20.00%	(200,000.00)	(241,042.25)
10000001	43040	PAYMENTS IN LIEU OF TAXES	(100,000.00)	0.00%	(100,000.00)	(193,533.82)
10000001	43041	PYMT IN LIEU OF - FEDERAL	(15,000.00)	-11.76%	(17,000.00)	(16,881.45)
10000001	43051	LOCAL ASSESSMENT FEE- UBER	(5,000.00)	-47.37%	(9,500.00)	(6,522.32)
10000001	43200	VETERANS OFFICER STIPEND	(5,923.00)	7.69%	(5,500.00)	(4,211.32)
10000001	43230	VOTER REG/ELEC STIPENDS	(13,500.00)	0.00%	(13,500.00)	(16,500.00)
10000001	43238	VOTER REG. STATE REIMB.	-	-100.00%	(115,000.00)	(130,713.68)
10000001	43250	SALARY SUP'LMTS FR STATE	(45,000.00)	471.07%	(7,880.00)	(17,549.00)
10000001	43290	POLL'TN CNTRL PEN FR STAT	(2,000.00)	-60.00%	(5,000.00)	(1,020.00)
10000001	43400	STATE AID CHILD/CORONER	(34,783.00)	NA	-	-
10000001	43410	FEMA GRANT REVENUES	(200,000.00)	NA	-	(154,755.52)
Total intergovernmental			(11,479,644.00)		(10,783,780.00)	(10,362,382.64)
Charges for services						
10000001	44010	3% COMM ON DOC STAMPS RMC	(450,000.00)	28.57%	(350,000.00)	-
10000001	44020	COUNTY RECORDING FEES-RMC	(5,800,000.00)	65.71%	(3,500,000.00)	(8,544,753.43)
10000001	44030	COUNTY STAMP FEES-RMC	(1,300,000.00)	-74.00%	(5,000,000.00)	-
10000001	44040	COLLECT CO XFER FEES-RMC	(60,000.00)	19.89%	(50,046.00)	-
10000001	44050	COPY AND SERVICE FEES-RMC	-	-100.00%	(8,270.00)	-
10000001	44100	SHERIFF'S FEES	(40,000.00)	-8.88%	(43,900.00)	(38,007.59)
10000001	44110	PROBATE FEES	(550,000.00)	-15.38%	(650,000.00)	(563,141.67)
10000001	44120	PROBATE ADVERTISIING FEES	(30,000.00)	0.00%	(30,000.00)	(30,150.00)
10000001	44130	PROBATE COPY FEES	(30,000.00)	-14.29%	(35,000.00)	(32,611.45)
10000001	44135	SOLICITOR WORTHLESS CHECK FEES	-	-100.00%	(1,600.00)	(200.00)
10000001	44140	MAGISTRATE CIVIL FEES	(38,678.00)	NA	-	(11,312.25)
10000001	4414A	BFT MAGISTRATE CIVIL FEES	(70,000.00)	37.25%	(51,000.00)	(55,372.33)
10000001	4414B	BLF MAGISTRATE CIVIL FEES	(65,000.00)	-7.14%	(70,000.00)	(69,180.59)
10000001	44150	CLERK OF CT FILING FEES	(110,000.00)	-4.90%	(115,663.00)	(100,015.70)
10000001	44160	CLERK OF CT COPY FEES	(17,000.00)	12.15%	(15,158.00)	(17,073.50)
10000001	44170	FAMILY COURT FEES	(235,000.00)	-0.20%	(235,476.00)	(243,408.55)
10000001	44175	FAM CRT COST RECOV'RY FEE	(10,000.00)	-86.43%	(73,700.00)	(58,376.85)
10000001	44180	FAMILY COURT COPY FEES	(3,000.00)	-24.05%	(3,950.00)	(6,027.00)
10000001	44190	MASTER IN EQUITY FEES	(110,000.00)	10.00%	(100,000.00)	(94,182.64)
10000001	44200	TREASURER'S FEES	(18,000.00)	32.35%	(13,600.00)	(15,480.00)
10000001	44205	TREASURER'S MISC FEES	(16,000.00)	966.67%	(1,500.00)	(15,432.64)
10000001	44220	EMERGENCY MEDICAL FEES	(3,700,000.00)	2.78%	(3,600,000.00)	(3,542,849.25)
10000001	44225	EMS - COPY FEES	(10,000.00)	-23.08%	(13,000.00)	(8,818.20)
10000001	44260	D S O FEES	(85,000.00)	4.94%	(81,000.00)	(83,544.16)
10000001	44280	ANIMAL SHELTER FEES	-	NA	-	(922.50)

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10000001	44281	ANIMAL SHELTER ADMIN TICKETS	(10,000.00)	42.86%	(7,000.00)	(10,167.88)
10000001	44300	LIBRARY COPY FEES	(3,000.00)	0.00%	(3,000.00)	(3,020.45)
10000001	44330	PLANNING - VARIOUS SALES	(1,500.00)	NA	-	(1,340.00)
10000001	44360	COPY FEES-ALL OTHERS	(250.00)	-68.75%	(800.00)	(269.25)
10000001	44370	REZONING APPLICATION FEES	(2,000.00)	-20.00%	(2,500.00)	(2,050.00)
10000001	44375	CRB - APPLICATION FEES	(5,000.00)	19.05%	(4,200.00)	(2,750.00)
10000001	44400	ADULT SPORTS FEES	-	NA	-	(3.00)
10000001	44449	ATHL FEES- SPECIAL EVENTS	(100,000.00)	NA	-	-
10000001	44720	TELEPHONE SRVS - OTHERS	-	-100.00%	(5,000.00)	4,893.32
10000001	44735	DETENTION CENTER DAYWATCH	(1,000.00)	-69.70%	(3,300.00)	-
10000001	44736	HHI HOLDING FACILITY (DET CTR)	-	NA	(34,800.00)	-
10000001	44760	PAYROLL SERVICES-OTHERS	(13,356.00)	2.74%	(13,000.00)	(13,356.00)
10000001	44780	CREDIT CARD CONVENIENCE FEES	-	-100.00%	(2,750.00)	(2,573.64)
10000001	44781	CCARD CONVENIENCE FEES - PALS	(1,500.00)	NA	-	(1,711.82)
10000001	44782	CCARD CONVENIENCE FEES - OTHER	(800.00)	-90.36%	(8,300.00)	(47,712.22)
10000600	44400	ADULT SPORTS FEES	(8,000.00)	-13.98%	(9,300.00)	(7,125.00)
10000600	44410	YOUTH SPORTS FEES	(110,000.00)	0.27%	(109,700.00)	-
10000600	44420	AQUATICS CLASS	(12,000.00)	1.69%	(11,800.00)	(5,515.73)
10000600	44430	ATHLETIC/CENTER RENTALS	(11,000.00)	-4.35%	(11,500.00)	(1,790.00)
10000600	44432	RENTALS-AQUATIC	-	NA	-	(4,790.00)
10000600	44440	SPONSORSHIPS	(4,000.00)	0.00%	(4,000.00)	-
10000600	44449	SUMMER CAMP	(20,000.00)	NA	-	(8,748.64)
10000600	44450	AQUATIC ADMISSIONS	(15,000.00)	-48.28%	(29,000.00)	(1,227.00)
10000602	44420	SWIM LESSONS - BATTERY CREEK	-	NA	-	(368.18)
10000602	44421	SWIM LESSONS - BEAUFORT	-	NA	-	(3,599.15)
10000602	44422	SWIM LESSONS - LIND BROWN	-	NA	-	(130.00)
10000602	44423	AQUATIC CLASSES - BATTERY CREE	-	NA	-	(218.30)
10000602	44424	AQUATIC CLASSES - BEAUFORT	-	NA	-	(2,894.83)
10000602	44425	AQUATIC CLASSES - LIND BROWN	-	NA	-	(894.23)
10000602	44426	WATER AEROBICS - BATTERY CREEK	-	NA	-	(5.82)
10000602	44427	WATER AEROBICS - BEAUFORT	-	NA	-	(490.00)
10000602	44432	CREATION STATION FEES	-	NA	-	(380.00)
10000602	44434	CREATION STATION FEES	-	NA	-	(1,113.19)
10000602	44450	POOL ADMISSIONS - BATTERY CREE	-	NA	-	(21,525.83)
10000602	44451	POOL ADMISSIONS - BEAUFORT	-	NA	-	(6,194.78)
10000602	44452	POOL ADMISSIONS - LIND BROWN	-	NA	-	(7,086.17)
10000600	44499	SENIORS-LCOG	(75,000.00)	-73.21%	(280,000.00)	-
10000604	44400	ADULT SPORTS FEES	(45,000.00)	1.12%	(44,500.00)	(24,258.91)
10000604	44404	SPORTS FEES - KICKBALL - ADULT	-	NA	-	(3,320.00)
10000604	44405	SPORTS FEES - PICKLEBALL-ADULT	-	NA	-	(15,509.67)
10000604	44408	SPORTS FEES - VOLLEYBALL-ADULT	-	NA	-	(6,469.14)
10000604	44409	SPORTS FEES - BASEBALL - ADULT	-	NA	-	(1,830.91)
10000604	44410	YOUTH SPORTS FEES	(270,000.00)	9.58%	(246,400.00)	(89,535.87)
10000604	44411	SPORTS FEES - SOCCER - YOUTH	-	NA	-	(87,762.15)
10000604	44412	SPORTS FEES - BASEBALL-YOUTH	-	NA	-	(39,543.93)
10000604	44413	SPORTS FEES - SOFTBALL - YOUTH	-	NA	-	(15,250.68)
10000604	44415	SPORTS FEES - BASKETBALL-YOUTH	-	NA	-	(50,690.09)
10000604	44416	SPORTS FEES - LACROSSE - YOUTH	-	NA	-	(3,735.00)
10000604	44417	SPORTS FEES - CHEERLEADING-YOU	-	NA	-	(1,567.60)
10000604	44418	SPORTS FEES - FOOTBALL F-YOUTH	-	NA	-	(20,662.42)
10000604	44420	Aquatic Class Fees- Bluffton	(500.00)	-92.86%	(7,000.00)	(506.15)
10000604	44423	AQUATIC CLASSES - BLUFFTON	-	NA	-	(130.00)
10000604	44430	ATHLETIC/CENTER RENTALS	(10,000.00)	35.14%	(7,400.00)	(8,242.92)
10000604	44431	RENTALS - CENTERS	(1,000.00)	NA	-	(895.15)
10000604	44432	RENTALS - POOLS	(15,000.00)	-25.00%	(20,000.00)	(11,523.74)
10000604	44440	SPONSORSHIP	(22,000.00)	69.23%	(13,000.00)	(17,858.98)
10000604	44447	CREDIT CARD FEES	-	NA	-	(118.73)
10000604	44449	SUMMER CAMP	(8,000.00)	NA	-	(3,460.20)
10000604	44450	POOL ADMISSIONS - BLUFFTON	(18,000.00)	0.00%	(18,000.00)	(8,176.68)
10000604	44499	SENIORS-LCOG	(280,000.00)	273.33%	(75,000.00)	-
10000605	44408	SPORTS FEES - VOLLEYBALL-ADULT	-	NA	-	(50.00)
10000605	44409	SPORTS FEES - BASEBALL - ADULT	-	NA	-	(1,200.00)
10000605	44410	YOUTH SPORTS FEES	-	NA	-	(41,132.49)
10000605	44411	SPORTS FEES - SOCCER - YOUTH	-	NA	-	(14,365.00)
10000605	44412	SPORTS FEES - BASEBALL-YOUTH	-	NA	-	(13,707.00)
10000605	44413	SPORTS FEES - SOFTBALL - YOUTH	-	NA	-	(2,470.00)
10000605	44415	SPORTS FEES - BASKETBALL-YOUTH	-	NA	-	(15,805.00)
10000605	44418	SPORTS FEES - FOOTBALL F-YOUTH	-	NA	-	(6,315.00)

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10000605	44430	RENTALS	-	NA	-	(16,704.46)
10000605	44431	RENTALS - CENTERS	-	NA	-	(4,830.11)
10000605	44440	SPONSORSHIP	-	NA	-	(6,731.48)
10000605	44442	LATE FEE	-	NA	-	20.00
10000605	44447	CREDIT CARD FEES	-	NA	-	(437.61)
10001102	44510	VIDEO PRODUCTION	(90,000.00)	20.00%	(75,000.00)	(83,874.99)
10001243	44483	PROJECT INCOME	-	NA	-	(6,420.00)
10001301	44483	PROJECT INCOME	-	NA	-	(250.00)
10001330	44483	PROJECT INCOME	-	NA	-	(4,760.00)
Total charges for services			(13,900,584.00)		(15,089,113.00)	(14,315,100.15)
Fines and forfeitures						
10000001	45010	GENERAL SESSIONS FINES	(10,500.00)	10.53%	(9,500.00)	(10,289.94)
10000001	45020	DRUG FINES - GEN SESSIONS	(2,000.00)	-17.29%	(2,418.00)	(1,842.28)
10000001	45030	BONDS ESCREATMENT	-	-100.00%	(3,000.00)	(3,063.72)
10000001	45100	HH MAGISTRATE FINES	(3,500.00)	-53.95%	(7,600.00)	(5,560.80)
10000001	4510A	BEAUFORT MAGISTRATE FINES	(274,000.00)	0.00%	(274,000.00)	(264,286.31)
10000001	4510B	BLUFFTON MAGISTRATE FINES	(265,000.00)	0.00%	(265,000.00)	(284,998.57)
10000001	45200	LIBRARY FINES	(40,000.00)	-5.88%	(42,500.00)	(41,398.33)
			-	-100.00%	(15,000.00)	-
10000001	45400	FORFEITURES	-	-100.00%	(1,000.00)	-
10000001	45600	LATE PENALTIES - BUS LICENSE	(100,000.00)	-33.33%	(150,000.00)	(91,349.62)
Total fines and forfeitures			(695,000.00)		(770,018.00)	(702,789.57)
Interest Income						
10000001	46010	INTEREST ON INVESTMENTS	(600,000.00)	287.10%	(155,000.00)	(201,300.58)
10000001	46100	INTEREST INCOME	(1,000.00)	0.00%	(1,000.00)	(421.36)
10000001	46200	INTEREST INC - OTHER DEPT	-	NA	-	(0.81)
Total interest Income			(601,000.00)		(156,000.00)	(201,722.75)
Miscellaneous						
10000001	47010	MISCELLANEOUS REVENUES	(50,000.00)	0.00%	(50,000.00)	(538,699.92)
10001081	47010	MISCELLANEOUS REVENUES	-	NA	-	(15,083.00)
10000001	47012	CREDIT CARD REBATE	(20,000.00)	100.00%	(10,000.00)	-
10000001	47210	RENTAL CO PROP - OTHERS	(30,000.00)	20.00%	(25,000.00)	(39,071.99)
10000001	47400	SALE OF COUNTY PROPERTY	(200,000.00)	-20.00%	(250,000.00)	(1,228,750.45)
Total miscellaneous			(300,000.00)		(335,000.00)	(1,821,605.36)
Other Financing Sources						
10000001	49100	TRANSFERS IN	(850,000.00)	NA	-	(600,000.00)
10000001	49200	Transfers In	(400,000.00)	-7.78%	(433,750.00)	(1,927,079.04)
10000001	49201	XFER FM ACCOMODATIONS TAX FUND	(91,250.00)	-18.53%	(112,000.00)	-
10000001	49217	XFER FM HOSPITALITY TAX FUND	-	-100.00%	(1,708,000.00)	-
Total other Financing Sources			(1,341,250.00)		(2,253,750.00)	(2,527,079.04)
Total revenues			(152,231,098.00)		(142,118,807.00)	(134,824,196.87)
Expenditures						
County Council						
10001000	50020	SALARIES AND WAGES	538,870.00	-1.78%	548,629.00	497,520.08
10001000	50060	OVERTIME	2,000.00	0.00%	2,000.00	1,603.91
10001000	50100	EMPLOYER FICA	33,534.00	-1.77%	34,139.00	29,911.90
10001000	50110	EMPLOYER MEDICARE	7,843.00	-1.77%	7,984.00	6,994.95
10001000	50120	EMPLOYER SC RETIREMENT	94,765.00	9.63%	86,443.00	75,809.83
10001000	50130	EMPLOYER PO RETIREMENT	6,433.00	14.55%	5,616.00	5,198.54
10001000	51000	ADVERTISING	2,700.00	8.00%	2,500.00	2,545.62
10001000	51010	PRINTING	2,500.00	66.67%	1,500.00	487.27
10001000	51030	POSTAGE	250.00	0.00%	250.00	233.69
10001000	51041	SWU Fees	-	NA	-	171.00
10001000	51043	PROPERTY TAX PAYMENTS	-	NA	-	784.84
10001000	51140	EQUIPMENT RENTALS	750.00	-16.67%	900.00	641.52
10001000	51160	PROFESSIONAL SERVICES	60,000.00	-25.00%	80,000.00	56,071.83
10001000	5116L	LEGAL SERVICES	-	-100.00%	100,000.00	-
10001000	51310	DUES & SUBSCRIPTIONS	55,000.00	10.00%	50,000.00	31,412.25
10001000	51320	TRAINING & CONFERENCES	25,000.00	100.00%	12,500.00	18,433.73
10001000	51323	MILEAGE REIMBURSEMENT	13,500.00	8.00%	12,500.00	11,586.61
10001000	52010	OFFICE SUPPLIES	15,000.00	87.50%	8,000.00	8,625.66
10001000	52612	EQUIPMENT NON-CAPITAL	1,000.00	0.00%	1,000.00	1,859.14

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001000	54400	LAND ACQUISITION	-	NA	-	1,904,590.00
10001000	56000	GENERAL CONTINGENCY	50,000.00	-82.58%	287,050.00	123,775.23
Total County Council			909,145.00		1,241,011.00	2,778,257.60
Auditor						
10001010	50020	SALARIES AND WAGES	967,490.00	-1.52%	982,429.00	865,845.22
10001010	50060	OVERTIME	3,000.00	50.00%	2,000.00	5,356.35
10001010	50100	EMPLOYER FICA	60,170.00	-1.42%	61,035.00	52,753.09
10001010	50110	EMPLOYER MEDICARE	14,072.00	-1.42%	14,274.00	12,337.00
10001010	50120	EMPLOYER SC RETIREMENT	180,123.00	10.49%	163,022.00	137,549.58
10001010	51000	ADVERTISING	1,000.00	0.00%	1,000.00	449.12
10001010	51010	PRINTING	12,000.00	-36.84%	19,000.00	10,020.33
10001010	51030	POSTAGE	32,640.00	0.00%	32,640.00	29,911.70
10001010	51140	EQUIPMENT RENTALS	2,500.00	0.00%	2,500.00	2,365.33
10001010	51160	PROFESSIONAL SERVICES	150,000.00	14900.00%	1,000.00	3,811.50
10001010	51300	GARAGE REPAIRS & MAINTENANCE	-	-100.00%	1,000.00	-
10001010	51310	DUES & SUBSCRIPTIONS	6,500.00	0.00%	6,500.00	3,945.38
10001010	51320	TRAINING & CONFERENCES	20,000.00	233.33%	6,000.00	1,880.70
10001010	52010	OFFICE SUPPLIES	17,500.00	0.00%	17,500.00	19,593.09
10001010	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	5,000.00	4,882.00
Total Auditor			1,466,995.00		1,314,900.00	1,150,700.39
Treasurer						
10001020	50020	SALARIES AND WAGES	943,057.00	-2.48%	967,043.00	790,416.17
10001020	50060	OVERTIME	15,000.00	200.00%	5,000.00	6,238.93
10001020	50100	EMPLOYER FICA	59,400.00	-1.44%	60,267.00	47,350.39
10001020	50110	EMPLOYER MEDICARE	13,892.00	-1.44%	14,095.00	11,073.60
10001020	50120	EMPLOYER SC RETIREMENT	177,815.00	11.04%	160,143.00	119,391.45
10001020	51000	ADVERTISING	12,000.00	50.00%	8,000.00	10,372.05
10001020	51010	PRINTING	86,000.00	13.16%	76,000.00	54,528.63
10001020	51030	POSTAGE	192,000.00	5.49%	182,000.00	163,877.04
10001020	51110	MAINTENANCE CONTRACTS	-	-100.00%	9,000.00	47.12
10001020	51120	EQUIPMENT MAINTENANCE	-	-100.00%	1,000.00	-
10001020	51140	EQUIPMENT RENTALS	3,000.00	0.00%	3,000.00	2,573.05
10001020	51160	PROFESSIONAL SERVICES	65,000.00	30.00%	50,000.00	47,611.68
10001020	51310	DUES & SUBSCRIPTIONS	11,000.00	-8.33%	12,000.00	9,526.03
10001020	51320	TRAINING & CONFERENCES	30,000.00	100.00%	15,000.00	16,094.44
10001020	51540	INSURANCE - OTHER	-	-100.00%	2,000.00	-
10001020	51989	BANK SERVICE FEES	300,000.00	0.00%	300,000.00	270,595.46
10001020	51990	MISC. EXPENDITURES	-	NA	-	59.49
10001020	52010	OFFICE SUPPLIES	25,000.00	-13.79%	29,000.00	16,167.76
10001020	52612	EQUIPMENT NON-CAPITAL	10,000.00	-43.21%	17,610.00	-
10001020	54200	CAPITAL EQUIPMENT	-	-100.00%	7,254.00	-
10001020	57900	CREDIT CARD FEES	350,000.00	-6.67%	375,000.00	230,699.47
Total Treasurer			2,293,164.00		2,293,412.00	1,796,622.76
Clerk to Court						
10001030	50020	SALARIES AND WAGES	606,435.00	-7.01%	652,140.00	537,332.90
10001030	50100	EMPLOYER FICA	37,599.00	-7.01%	40,433.00	31,770.73
10001030	50110	EMPLOYER MEDICARE	8,793.00	-7.01%	9,456.00	7,430.34
10001030	50120	EMPLOYER SC RETIREMENT	112,555.00	4.22%	107,994.00	84,341.99
10001030	51010	PRINTING	7,000.00	73.83%	4,027.00	4,877.23
10001030	51030	POSTAGE	21,000.00	18.50%	17,721.00	17,948.60
10001030	51110	MAINTENANCE CONTRACTS	25,000.00	-29.86%	35,641.00	23,609.49
10001030	51120	EQUIPMENT MAINTENANCE	500.00	0.00%	500.00	-
10001030	51140	EQUIPMENT RENTALS	-	-100.00%	7,500.00	2,545.92
10001030	51160	PROFESSIONAL SERVICES	6,000.00	50.00%	4,000.00	1,855.79
10001030	51310	DUES & SUBSCRIPTIONS	2,500.00	0.00%	2,500.00	1,850.27
10001030	51320	TRAINING & CONFERENCES	1,500.00	0.00%	1,500.00	1,256.14
10001030	51340	JURORS/WITNESS FEES	260,000.00	4.65%	248,444.00	208,384.31
10001030	52010	OFFICE SUPPLIES	8,000.00	19.40%	6,700.00	7,246.82
10001030	52612	EQUIPMENT NON-CAPITAL	500.00	0.00%	500.00	-
10001030	54200	CAPITAL EQUIPMENT	-	NA	-	87,409.02
10001031	50020	SALARIES AND WAGES	396,805.00	-0.55%	398,980.00	369,894.36
10001031	50060	OVERTIME	-	NA	-	69.84
10001031	50100	EMPLOYER FICA	24,602.00	-0.55%	24,737.00	22,271.85
10001031	50110	EMPLOYER MEDICARE	5,754.00	-0.54%	5,785.00	5,209.20
10001031	50120	EMPLOYER SC RETIREMENT	73,647.00	11.47%	66,071.00	59,318.89

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001031	51010	PRINTING	6,200.00	0.00%	6,200.00	1,053.33
10001031	51030	POSTAGE	8,500.00	0.00%	8,500.00	-
10001031	51110	MAINTENANCE CONTRACTS	1,000.00	-90.91%	11,000.00	384.00
10001031	51140	EQUIPMENT RENTALS	15,500.00	0.00%	15,500.00	1,796.85
10001031	51160	PROFESSIONAL SERVICES	6,000.00	1100.00%	500.00	-
10001031	51310	DUES & SUBSCRIPTIONS	500.00	0.00%	500.00	-
10001031	51320	TRAINING & CONFERENCES	1,950.00	0.00%	1,950.00	171.99
10001031	52010	OFFICE SUPPLIES	11,000.00	0.00%	11,000.00	10,109.82
10001031	57910	BANK FEES	250.00	-50.00%	500.00	286.00
Total Clerk to Court			1,649,090.00		1,690,279.00	1,488,425.68
Probate Court						
10001040	50020	SALARIES AND WAGES	1,042,596.00	33.05%	783,640.00	663,404.76
10001040	50100	EMPLOYER FICA	64,641.00	33.04%	48,586.00	39,725.04
10001040	50110	EMPLOYER MEDICARE	15,118.00	33.05%	11,363.00	9,290.73
10001040	50120	EMPLOYER SC RETIREMENT	168,442.00	29.80%	129,771.00	105,515.54
10001040	50130	EMPLOYER PO RETIREMENT	25,063.00	NA	-	-
10001040	51000	ADVERTISING	3,000.00	76.47%	1,700.00	1,380.00
10001040	51001	ADVERTISING - PROBATE	40,000.00	17.13%	34,150.00	36,712.00
10001040	51010	PRINTING	8,000.00	60.00%	5,000.00	3,396.60
10001040	51030	POSTAGE	8,000.00	37.93%	5,800.00	6,814.26
10001040	51110	MAINTENANCE CONTRACTS	8,000.00	42.86%	5,600.00	5,330.00
10001040	51120	EQUIPMENT MAINTENANCE	-	-100.00%	300.00	-
10001040	51140	EQUIPMENT RENTALS	2,500.00	25.00%	2,000.00	1,638.57
10001040	51160	PROFESSIONAL SERVICES	-	-100.00%	10,000.00	-
10001040	51310	DUES & SUBSCRIPTIONS	8,500.00	70.00%	5,000.00	7,908.35
10001040	51320	TRAINING & CONFERENCES	20,000.00	135.29%	8,500.00	8,554.90
10001040	51540	INSURANCE - OTHER	-	-100.00%	700.00	-
10001040	52010	OFFICE SUPPLIES	8,000.00	23.08%	6,500.00	5,479.46
10001040	52612	EQUIPMENT NON-CAPITAL	5,000.00	66.67%	3,000.00	391.14
Total Probate Court			1,426,860.00		1,061,610.00	895,541.35
Coroner						
10001060	50020	SALARIES AND WAGES	685,000.00	3.04%	664,807.00	332,317.24
10001060	50060	OVERTIME	5,000.00	0.00%	5,000.00	1,031.31
10001060	50100	EMPLOYER FICA	42,780.00	3.01%	41,528.00	20,159.85
10001060	50110	EMPLOYER MEDICARE	10,005.00	3.69%	9,649.00	4,715.08
10001060	50120	EMPLOYER SC RETIREMENT	112,128.00	14.47%	97,951.00	40,930.85
10001060	50130	EMPLOYER PO RETIREMENT	18,237.00	21.02%	15,069.00	14,369.17
10001060	51030	POSTAGE	800.00	0.00%	800.00	508.23
10001060	51110	MAINTENANCE CONTRACTS	1,000.00	0.00%	1,000.00	747.39
10001060	51120	EQUIPMENT MAINTENANCE	1,000.00	0.00%	1,000.00	298.38
10001060	51130	REPAIRS TO BUILDINGS	-	-100.00%	4,000.00	877.45
10001060	51140	EQUIPMENT RENTALS	600.00	0.00%	600.00	620.70
10001060	51160	PROFESSIONAL SERVICES	55,000.00	-56.00%	125,000.00	288,426.65
10001060	51300	GARAGE REPAIRS & MAINTENANCE	-	-100.00%	1,000.00	25.00
10001060	51310	DUES & SUBSCRIPTIONS	1,000.00	-82.61%	5,750.00	625.00
10001060	51320	TRAINING & CONFERENCES	3,000.00	-40.00%	5,000.00	1,795.92
10001060	52010	OFFICE SUPPLIES	21,000.00	0.00%	21,000.00	17,717.18
10001060	52050	UNIFORMS	3,500.00	0.00%	3,500.00	2,231.79
10001060	52500	FUELS/LUBRICANTS	-	NA	-	3,020.00
10001060	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	4,500.00	-
10001060	54200	CAPITAL EQUIPMENT	-	NA	-	14,338.00
Total Coroner			960,050.00		1,007,154.00	744,755.19
Legislative Delegation						
10001070	50020	SALARIES AND WAGES	45,235.00	0.00%	45,236.00	41,082.33
10001070	50100	EMPLOYER FICA	2,805.00	0.18%	2,800.00	2,425.76
10001070	50110	EMPLOYER MEDICARE	656.00	-6.29%	700.00	567.26
10001070	50120	EMPLOYER SC RETIREMENT	8,396.00	10.47%	7,600.00	6,545.18
10001070	51000	ADVERTISING	500.00	0.00%	500.00	-
10001070	51010	PRINTING	500.00	0.00%	500.00	-
10001070	51030	POSTAGE	300.00	0.00%	300.00	146.45
10001070	52010	OFFICE SUPPLIES	750.00	0.00%	750.00	977.16
Total Legislative Delegation			59,142.00		58,386.00	51,744.14
Magistrate						
10001081	50020	SALARIES AND WAGES	1,724,465.00	-1.71%	1,754,550.00	1,650,215.41

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001081	50060	OVERTIME	20,000.00	0.00%	20,000.00	12,256.85
10001081	50100	EMPLOYER FICA	108,157.00	-1.70%	110,022.00	99,653.23
10001081	50110	EMPLOYER MEDICARE	25,295.00	-1.69%	25,731.00	23,306.08
10001081	50120	EMPLOYER SC RETIREMENT	136,719.00	-13.00%	157,142.00	140,077.77
10001081	50130	EMPLOYER PO RETIREMENT	214,065.00	17.01%	182,944.00	144,665.64
10001081	51010	PRINTING	7,000.00	-30.00%	10,000.00	6,200.77
10001081	51030	POSTAGE	30,000.00	0.00%	30,000.00	28,880.13
10001081	51110	MAINTENANCE CONTRACTS	45,000.00	-2.17%	46,000.00	47,590.97
10001081	51120	EQUIPMENT MAINTENANCE	-	-100.00%	1,000.00	-
10001081	51140	EQUIPMENT RENTALS	17,000.00	-32.00%	25,000.00	17,197.53
10001081	51310	DUES & SUBSCRIPTIONS	6,000.00	-40.00%	10,000.00	6,070.44
10001081	51320	TRAINING & CONFERENCES	20,000.00	0.00%	20,000.00	15,361.46
10001081	51340	JURORS/WITNESS FEES	25,000.00	0.00%	25,000.00	9,393.20
10001081	52010	OFFICE SUPPLIES	45,000.00	-10.89%	50,500.00	33,901.95
10001081	52020	DATA PROCESSING SUPPLIES	-	NA	-	419.90
10001081	52600	OFFICE FURN & EQUIP. NON-CAPIT	40,000.00	NA	-	180.19
10001081	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	11,000.00	8,662.82
Total Magistrate			2,463,701.00		2,478,889.00	2,244,034.34
Master in Equity						
10001090	50020	SALARIES AND WAGES	331,910.00	3.68%	320,115.00	297,183.70
10001090	50100	EMPLOYER FICA	20,578.00	3.68%	19,847.00	15,892.09
10001090	50110	EMPLOYER MEDICARE	4,813.00	3.68%	4,642.00	4,137.57
10001090	50120	EMPLOYER SC RETIREMENT	61,602.00	16.21%	53,011.00	47,611.73
10001090	51030	POSTAGE	1,000.00	0.00%	1,000.00	220.79
10001090	51140	EQUIPMENT RENTALS	750.00	0.00%	750.00	45.64
10001090	51310	DUES & SUBSCRIPTIONS	700.00	0.00%	700.00	650.74
10001090	51320	TRAINING & CONFERENCES	850.00	0.00%	850.00	528.58
10001090	52010	OFFICE SUPPLIES	2,500.00	0.00%	2,500.00	1,616.07
10001090	52612	EQUIPMENT NON-CAPITAL	13,500.00	0.00%	13,500.00	-
Total Master in Equity			438,203.00		416,915.00	367,886.91
Fourteenth Circuit Solicitor						
10001098	55000	Direct Subsidies	1,700,450.00	0.00%	1,700,450.00	1,887,500.00
Total Fourteenth Circuit Solicitor			1,700,450.00		1,700,450.00	1,887,500.00
County Administrator						
10001100	50020	SALARIES AND WAGES	1,475,875.00	6.63%	1,384,128.00	1,372,004.35
10001100	50060	OVERTIME	500.00	NA	-	290.25
10001100	50100	EMPLOYER FICA	91,535.00	6.66%	85,816.00	77,869.12
10001100	50110	EMPLOYER MEDICARE	21,407.00	6.66%	20,070.00	19,571.94
10001100	50120	EMPLOYER SC RETIREMENT	268,703.00	31.94%	203,656.00	178,228.62
10001100	50130	EMPLOYER PO RETIREMENT	28,120.00	-5.29%	29,692.00	51,775.16
10001100	51010	PRINTING	1,150.00	-23.33%	1,500.00	82.38
10001100	51030	POSTAGE	400.00	-20.00%	500.00	59.82
10001100	51040	LICENSES/PERMITS	3,520.00	0.00%	3,520.00	219.00
10001100	51110	MAINTENANCE CONTRACTS	-	-100.00%	15,000.00	-
10001100	51140	EQUIPMENT RENTALS	720.00	0.00%	720.00	581.04
10001100	51160	PROFESSIONAL SERVICES	112,000.00	45.45%	77,000.00	31,706.00
10001100	51310	DUES & SUBSCRIPTIONS	9,108.00	-17.46%	11,035.00	6,399.21
10001100	51320	TRAINING & CONFERENCES	65,386.00	96.25%	33,317.00	26,338.97
10001100	51323	MILEAGE REIMBURSEMENT	3,000.00	50.00%	2,000.00	-
10001100	52010	OFFICE SUPPLIES	9,150.00	22.00%	7,500.00	5,564.48
10001100	52500	FUELS/LUBRICANTS	-	NA	-	54.84
10001100	52612	Equipment, Non-Capital	5,000.00	92.31%	2,600.00	-
10001100	54200	CAPITAL EQUIPMENT	-	NA	-	7,379.72
10001100	56000	GENERAL CONTINGENCY	100,000.00	0.00%	100,000.00	80,659.09
Total County Administrator			2,195,574.00		1,978,054.00	1,858,783.99
Communications and accountability						
10001101	50020	SALARIES AND WAGES	238,210.00	-9.39%	262,888.00	229,920.27
10001101	50060	OVERTIME	500.00	NA	-	128.22
10001101	50100	EMPLOYER FICA	14,800.00	-9.20%	16,300.00	14,010.91
10001101	50110	EMPLOYER MEDICARE	3,461.00	-9.21%	3,812.00	3,276.52
10001101	50120	EMPLOYER SC RETIREMENT	44,305.00	1.77%	43,534.00	37,432.71
10001101	51000	ADVERTISING	75,000.00	0.00%	75,000.00	288.69
10001101	51010	PRINTING	1,000.00	0.00%	1,000.00	-
10001101	51030	POSTAGE	200.00	0.00%	200.00	-

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001101	51160	PROFESSIONAL SERVICES	60,000.00	100.00%	30,000.00	-
10001101	51300	GARAGE REPAIRS & MAINTENANCE	-	-100.00%	50.00	-
10001101	51310	DUES & SUBSCRIPTIONS	21,500.00	-58.25%	51,500.00	239.99
10001101	51320	TRAINING & CONFERENCES	2,000.00	0.00%	2,000.00	214.92
10001101	52010	OFFICE SUPPLIES	3,000.00	0.00%	3,000.00	2,444.00
10001101	52612	EQUIPMENT NON-CAPITAL	2,000.00	0.00%	2,000.00	-
Total Communications and accountability			465,976.00		491,284.00	287,956.23
Broadcast Services						
10001102	50020	SALARIES AND WAGES	469,540.00	57.25%	298,603.00	275,361.48
10001102	50024	TEMPORARY/SEASONAL SALARIES	-	-100.00%	500.00	-
10001102	50060	OVERTIME	10,000.00	25.00%	8,000.00	7,416.78
10001102	50100	EMPLOYER FICA	29,731.00	56.40%	19,009.00	17,187.67
10001102	50110	EMPLOYER MEDICARE	6,953.00	56.39%	4,446.00	4,019.69
10001102	50120	EMPLOYER SC RETIREMENT	89,003.00	75.30%	50,773.00	45,044.68
10001102	51030	POSTAGE	250.00	0.00%	250.00	156.30
10001102	51120	EQUIPMENT MAINTENANCE	45,885.00	0.00%	45,885.00	1,665.56
10001102	51140	EQUIPMENT RENTALS	3,000.00	0.00%	3,000.00	746.21
10001102	51160	PROFESSIONAL SERVICES	20,000.00	-52.04%	41,700.00	5,050.00
10001102	51300	GARAGE REPAIRS & MAINTENANCE	-	-100.00%	200.00	-
10001102	51310	DUES & SUBSCRIPTIONS	500.00	0.00%	500.00	1,384.14
10001102	51320	TRAINING & CONFERENCES	10,000.00	3233.33%	300.00	157.94
10001102	52010	OFFICE SUPPLIES	15,000.00	275.00%	4,000.00	4,129.86
10001102	52020	DATA PROCESSING SUPPLIES	-	NA	-	8,408.55
10001102	52612	EQUIPMENT NON-CAPITAL	48,200.00	0.00%	48,200.00	5,424.98
Total Broadcast Services			748,062.00		525,366.00	376,153.84
County Attorney						
10001103	50020	SALARIES AND WAGES	591,040.00	4.92%	563,299.00	468,774.97
10001103	50060	OVERTIME	1,000.00	100.00%	500.00	484.97
10001103	50100	EMPLOYER FICA	36,706.00	5.01%	34,956.00	28,103.69
10001103	50110	EMPLOYER MEDICARE	8,585.00	5.02%	8,175.00	6,679.73
10001103	50120	EMPLOYER SC RETIREMENT	109,883.00	17.69%	93,365.00	106,177.38
10001103	51010	PRINTING	100.00	0.00%	100.00	60.30
10001103	51030	POSTAGE	750.00	0.00%	750.00	678.83
10001103	51040	LICENSES/PERMITS	-	-100.00%	500.00	106.00
10001103	51140	EQUIPMENT RENTALS	1,300.00	0.00%	1,300.00	1,158.52
10001103	51160	PROFESSIONAL SERVICES	-	-100.00%	300,000.00	734.70
10001103	51162	LEGAL SERVICES	300,000.00	NA	-	353,854.96
10001103	51170	NON-PROFESSIONAL SERVICES	1,000.00	0.00%	1,000.00	94.00
10001103	51310	DUES & SUBSCRIPTIONS	3,500.00	0.00%	3,500.00	3,642.59
10001103	51320	TRAINING & CONFERENCES	6,000.00	0.00%	6,000.00	3,569.06
10001103	51323	MILEAGE REIMBURSEMENT	1,000.00	0.00%	1,000.00	505.82
10001103	52010	OFFICE SUPPLIES	5,500.00	22.22%	4,500.00	4,802.02
Total County Attorney			1,066,364.00		1,018,945.00	979,427.54
Finance						
10001111	50020	SALARIES AND WAGES	1,150,560.00	-7.51%	1,243,919.00	916,569.94
10001111	50060	OVERTIME	1,000.00	0.00%	1,000.00	2,534.21
10001111	50100	EMPLOYER FICA	71,396.00	-7.50%	77,185.00	55,001.53
10001111	50110	EMPLOYER MEDICARE	16,698.00	-7.50%	18,052.00	12,863.35
10001111	50120	EMPLOYER SC RETIREMENT	213,730.00	3.67%	206,160.00	146,795.08
10001111	51010	PRINTING	4,000.00	-33.33%	6,000.00	2,959.31
10001111	51030	POSTAGE	5,000.00	0.00%	5,000.00	3,636.43
10001111	51110	MAINTENANCE CONTRACTS	-	NA	-	1,069.00
10001111	51140	EQUIPMENT RENTALS	2,200.00	-37.14%	3,500.00	2,068.92
10001111	51160	PROFESSIONAL SERVICES	145,000.00	0.00%	145,000.00	84,312.33
10001111	51310	DUES & SUBSCRIPTIONS	4,000.00	0.00%	4,000.00	2,124.00
10001111	51320	TRAINING & CONFERENCES	12,000.00	0.00%	12,000.00	4,244.77
10001111	52010	OFFICE SUPPLIES	12,000.00	0.00%	12,000.00	12,362.73
10001111	52612	EQUIPMENT NON-CAPITAL	3,000.00	-40.00%	5,000.00	-
Total Finance			1,640,584.00		1,738,816.00	1,246,541.60
Risk Management						
10001115	50020	SALARIES AND WAGES	174,590.00	4.63%	166,859.00	160,564.14
10001115	50060	OVERTIME	-	NA	-	31.88
10001115	50100	EMPLOYER FICA	10,825.00	4.64%	10,345.00	9,799.10
10001115	50110	EMPLOYER MEDICARE	2,532.00	4.67%	2,419.00	2,292.31

BEAUFORT COUNTY GENERAL FUND
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Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001115	50120	EMPLOYER SC RETIREMENT	32,404.00	17.27%	27,632.00	25,677.51
10001115	51010	PRINTING	-	-100.00%	300.00	-
10001115	51030	POSTAGE	100.00	-60.00%	250.00	81.97
10001115	51160	PROFESSIONAL SERVICES	53,000.00	0.00%	53,000.00	17,509.49
10001115	51300	GARAGE REPAIRS & MAINTENANCE	-	NA	-	10.00
10001115	51301	INSURANCE REIMBURSEMENT	-	NA	-	140.53
10001115	51310	DUES & SUBSCRIPTIONS	2,355.00	0.00%	2,355.00	1,385.00
10001115	51320	TRAINING & CONFERENCES	10,000.00	-6.59%	10,705.00	6,586.36
10001115	51500	VEHICLE INSURANCE	500,000.00	0.00%	500,000.00	527,212.39
10001115	51510	BLDG/CONTENTS INSURANCE	585,000.00	8.33%	540,000.00	532,322.35
10001115	51520	MED/PROF LIAB INSURANCE	25,000.00	0.00%	25,000.00	17,664.00
10001115	51540	INSURANCE - OTHER	752,000.00	-34.04%	1,140,000.00	655,836.81
10001115	51580	GROUP BENEFITS - WORKERS COMP	2,100,000.00	0.00%	2,100,000.00	2,109,012.43
10001115	52010	OFFICE SUPPLIES	1,500.00	-50.00%	3,000.00	1,757.65
10001115	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	1,000.00	1,000.00
Total Risk Management			4,249,306.00		4,582,865.00	4,068,883.92
Purchasing						
10001116	50020	SALARIES AND WAGES	202,960.00	7.24%	189,265.00	166,020.96
10001116	50060	OVERTIME	-	NA	-	559.33
10001116	50100	EMPLOYER FICA	12,584.00	7.24%	11,734.00	9,982.29
10001116	50110	EMPLOYER MEDICARE	2,943.00	7.25%	2,744.00	2,334.90
10001116	50120	EMPLOYER SC RETIREMENT	37,669.00	20.19%	31,342.00	26,050.09
10001116	51000	ADVERTISING	4,500.00	4.65%	4,300.00	3,811.19
10001116	51010	PRINTING	700.00	-30.00%	1,000.00	474.61
10001116	51030	POSTAGE	25.00	-96.88%	800.00	8.48
10001116	51110	MAINTENANCE CONTRACTS	7,000.00	16.67%	6,000.00	250.00
10001116	51120	EQUIPMENT MAINTENANCE	-	-100.00%	100.00	-
10001116	51160	PROFESSIONAL SERVICES	3,500.00	16.67%	3,000.00	3,522.95
10001116	51310	DUES & SUBSCRIPTIONS	1,200.00	-20.00%	1,500.00	196.88
10001116	51320	TRAINING & CONFERENCES	7,000.00	30.40%	5,368.00	4,341.09
10001116	52010	OFFICE SUPPLIES	1,000.00	25.00%	800.00	2,547.69
10001116	52600	OFFICE FURN & EQUIP. NON-CAPIT	2,800.00	NA	-	-
Total Purchasing			283,881.00		257,953.00	220,100.46
Assessor						
10001120	50020	SALARIES AND WAGES	1,625,860.00	6.27%	1,530,000.00	1,474,262.50
10001120	50060	OVERTIME	50,000.00	0.00%	50,000.00	13,296.85
10001120	50100	EMPLOYER FICA	103,903.00	9.53%	94,860.00	87,800.80
10001120	50110	EMPLOYER MEDICARE	24,300.00	9.53%	22,185.00	20,533.57
10001120	50120	EMPLOYER SC RETIREMENT	309,184.00	22.03%	253,368.00	235,385.71
10001120	51010	PRINTING	55,000.00	450.00%	10,000.00	4,844.74
10001120	51030	POSTAGE	101,000.00	573.33%	15,000.00	10,011.28
10001120	51040	LICENSES/PERMITS	6,000.00	113.14%	2,815.00	2,561.48
10001120	51140	EQUIPMENT RENTALS	3,500.00	-37.89%	5,635.00	2,933.34
10001120	51160	PROFESSIONAL SERVICES	145,000.00	-27.50%	200,000.00	-
10001120	51295	OTHER VEHICLE OPER COSTS	-	NA	-	17.95
10001120	51300	GARAGE REPAIRS & MAINTENANCE	-	NA	-	70.80
10001120	51310	DUES & SUBSCRIPTIONS	27,000.00	-28.10%	37,551.00	18,911.56
10001120	51320	TRAINING & CONFERENCES	22,000.00	10.00%	20,000.00	4,569.09
10001120	52010	OFFICE SUPPLIES	20,000.00	21.21%	16,500.00	20,191.04
10001120	52050	UNIFORMS	500.00	-66.67%	1,500.00	-
10001120	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	2,000.00	367.40
10001120	54000	VEHICLE PURCHASES	-	NA	-	30.00
Total Assessor			2,493,247.00		2,261,414.00	1,895,788.11
Register of Deeds						
10001122	50020	SALARIES AND WAGES	336,515.00	-5.98%	357,922.00	323,924.80
10001122	50060	OVERTIME	10,000.00	100.00%	5,000.00	4,962.40
10001122	50100	EMPLOYER FICA	21,483.00	-4.52%	22,501.00	19,082.81
10001122	50110	EMPLOYER MEDICARE	5,024.00	-4.52%	5,262.00	4,463.24
10001122	50120	EMPLOYER SC RETIREMENT	64,313.00	7.01%	60,100.00	51,588.10
10001122	51010	PRINTING	1,500.00	0.00%	1,500.00	1,774.65
10001122	51030	POSTAGE	1,800.00	5.88%	1,700.00	1,644.72
10001122	51120	EQUIPMENT MAINTENANCE	6,600.00	15.79%	5,700.00	11,335.69
10001122	51140	EQUIPMENT RENTALS	700.00	-65.00%	2,000.00	560.29
10001122	51310	DUES & SUBSCRIPTIONS	500.00	-50.00%	1,000.00	433.51
10001122	51320	TRAINING & CONFERENCES	3,000.00	0.00%	3,000.00	2,401.07

BEAUFORT COUNTY GENERAL FUND
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Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001122	51540	INSURANCE - OTHER	-	-100.00%	350.00	-
10001122	52010	OFFICE SUPPLIES	11,500.00	0.00%	11,500.00	23,537.97
10001122	54200	CAPITAL EQUIPMENT	-	NA	-	33,352.59
Total Register of Deeds			462,935.00		477,535.00	479,061.84
Community Development						
10001130	50020	SALARIES AND WAGES	734,580.00	-10.62%	821,825.00	687,745.79
10001130	50100	EMPLOYER FICA	45,544.00	-10.62%	50,953.00	41,771.07
10001130	50110	EMPLOYER MEDICARE	10,650.00	-10.62%	11,916.00	9,769.07
10001130	50120	EMPLOYER SC RETIREMENT	136,388.00	0.22%	136,094.00	107,667.20
10001130	51000	ADVERTISING	2,600.00	-25.71%	3,500.00	2,382.35
10001130	51010	PRINTING	2,700.00	-15.63%	3,200.00	2,753.65
10001130	51030	POSTAGE	2,000.00	0.00%	2,000.00	1,632.03
10001130	51110	MAINTENANCE CONTRACTS	-	-100.00%	44,000.00	-
10001130	51140	EQUIPMENT RENTALS	1,000.00	-33.33%	1,500.00	641.52
10001130	51160	PROFESSIONAL SERVICES	72,000.00	0.00%	72,000.00	30,850.72
10001130	51170	NON-PROFESSIONAL SERVICES	-	-100.00%	26,500.00	-
10001130	51300	GARAGE REPAIRS & MAINTENANCE	-	-100.00%	100.00	87.28
10001130	51310	DUES & SUBSCRIPTIONS	3,300.00	-34.76%	5,058.00	2,973.16
10001130	51320	TRAINING & CONFERENCES	10,000.00	4.17%	9,600.00	11,528.76
10001130	52010	OFFICE SUPPLIES	9,000.00	5.88%	8,500.00	10,944.88
10001134	50060	OVERTIME	-	NA	-	325.00
10001134	51140	EQUIPMENT RENTALS	-	-100.00%	2,400.00	1,264.08
10001134	52010	OFFICE SUPPLIES	-	-100.00%	2,600.00	3,195.18
10001130	52612	EQUIPMENT NON-CAPITAL	6,000.00	4.35%	5,750.00	5,023.03
10001130	54200	Equipment, Capital	-	NA	-	9,027.42
Total Community Development			1,035,762.00		1,207,496.00	929,582.19
Voter Registration						
10001143	50011	STIPEND	13,500.00	0.00%	13,500.00	3,375.00
10001143	50020	SALARIES AND WAGES	672,915.00	17.90%	570,766.00	664,561.64
10001143	50022	ELECTION SALARIES	140,000.00	-31.71%	205,000.00	126,881.94
10001143	50060	OVERTIME	60,000.00	33.33%	45,000.00	55,330.55
10001143	50100	EMPLOYER FICA	54,958.00	6.25%	51,725.00	38,139.32
10001143	50110	EMPLOYER MEDICARE	12,853.00	6.25%	12,097.00	8,920.13
10001143	50120	EMPLOYER SC RETIREMENT	164,518.00	19.08%	138,155.00	103,299.48
10001143	50130	EMPLOYER PO RETIREMENT	-	NA	-	204.42
10001143	51000	ADVERTISING	9,000.00	-52.63%	19,000.00	7,308.60
10001143	51010	PRINTING	35,000.00	118.75%	16,000.00	6,023.88
10001143	51030	POSTAGE	60,000.00	-14.62%	70,271.00	9,004.55
10001143	51110	MAINTENANCE CONTRACTS	115,000.00	37.22%	83,810.00	88,829.18
10001143	51120	EQUIPMENT MAINTENANCE	-	-100.00%	3,500.00	394.32
10001143	51140	EQUIPMENT RENTALS	13,000.00	-27.78%	18,000.00	11,110.08
10001143	51160	PROFESSIONAL SERVICES	-	NA	-	802.00
10001143	51170	NON-PROFESSIONAL SERVICES	1,000.00	-75.00%	4,000.00	-
10001143	51310	DUES & SUBSCRIPTIONS	2,000.00	0.00%	2,000.00	711.08
10001143	51320	TRAINING & CONFERENCES	35,000.00	-22.22%	45,000.00	33,298.23
10001143	51990	MISC. EXPENDITURES	-	NA	-	(4,432.17)
10001143	52010	OFFICE SUPPLIES	40,000.00	33.33%	30,000.00	43,576.63
10001143	52500	FUELS/LUBRICANTS	-	NA	-	1,124.23
10001143	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	13,500.00	4,437.10
Total Voter Registration			1,428,744.00		1,341,324.00	1,202,900.19
Management Information Systems						
10001150	50020	SALARIES AND WAGES	1,252,910.00	-1.78%	1,275,605.00	1,056,508.27
10001150	50060	OVERTIME	10,000.00	0.00%	10,000.00	11,185.83
10001150	50100	EMPLOYER FICA	78,300.00	-1.77%	79,708.00	64,275.58
10001150	50110	EMPLOYER MEDICARE	18,312.00	-1.76%	18,641.00	15,031.72
10001150	50120	EMPLOYER SC RETIREMENT	234,396.00	10.10%	212,896.00	168,767.26
10001150	51010	PRINTING	800.00	100.00%	400.00	-
10001150	51030	POSTAGE	2,000.00	-68.00%	6,250.00	1,316.87
10001150	51050	TELEPHONE	715,000.00	30.00%	550,000.00	706,674.05
10001150	51110	MAINTENANCE CONTRACTS	1,705,000.00	-11.39%	1,924,152.00	923,381.42
10001150	51120	EQUIPMENT MAINTENANCE	-	-100.00%	10,000.00	-
10001150	51130	REPAIRS TO BUILDINGS	-	NA	-	64.24
10001150	51140	EQUIPMENT RENTALS	6,000.00	5.26%	5,700.00	6,364.97
10001150	51160	PROFESSIONAL SERVICES	-	-100.00%	50,800.00	53,744.65
10001150	51300	GARAGE REPAIRS & MAINTENANCE	-	-100.00%	1,000.00	30.00

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001150	51310	DUES & SUBSCRIPTIONS	5,000.00	0.00%	5,000.00	1,038.38
10001150	51320	TRAINING & CONFERENCES	5,000.00	-86.67%	37,500.00	1,957.01
10001150	52010	OFFICE SUPPLIES	7,500.00	4.17%	7,200.00	7,456.17
10001150	52020	DATA PROCESSING SUPPLIES	-	NA	-	112.97
10001150	52610	TECHNOLOGY EQUIP (NON-CAP)	-	NA	-	274.71
10001150	52611	DATA PROCESSING EQUIP - REFRES	-	NA	-	1,209.04
10001150	52612	EQUIPMENT NON-CAPITAL	1,600,000.00	4.28%	1,534,336.00	585,016.27
10001150	54110	DATA PROCESSING EQUIPMENT	-	NA	-	299.90
10001150	54140	COMMUNICATIONS EQUIPMENT	-	NA	-	35.47
Total Management Information Systems			5,640,218.00		5,729,188.00	3,604,744.78
Mapping and Application/ GIS						
10001152	50020	SALARIES AND WAGES	656,575.00	-3.92%	683,382.00	619,749.25
10001152	50060	OVERTIME	-	NA	-	73.79
10001152	50100	EMPLOYER FICA	40,708.00	-3.92%	42,370.00	37,351.01
10001152	50110	EMPLOYER MEDICARE	9,520.00	-4.32%	9,950.00	8,735.70
10001152	50120	EMPLOYER SC RETIREMENT	121,860.00	7.68%	113,168.00	96,723.84
10001152	51010	PRINTING	200.00	0.00%	200.00	-
10001152	51030	POSTAGE	200.00	-60.00%	500.00	19.25
10001152	51110	MAINTENANCE CONTRACTS	1,635,287.00	38.69%	1,179,120.00	1,021,627.74
10001152	51120	EQUIPMENT MAINTENANCE	-	-100.00%	250.00	-
10001152	51140	EQUIPMENT RENTALS	-	-100.00%	1,500.00	-
10001152	51160	PROFESSIONAL SERVICES	120,000.00	0.00%	120,000.00	108,714.72
10001152	51310	DUES & SUBSCRIPTIONS	650.00	-56.67%	1,500.00	470.00
10001152	51320	TRAINING & CONFERENCES	10,000.00	33.33%	7,500.00	105.00
10001152	51990	MISC. EXPENDITURES	-	NA	-	(300.00)
10001152	52010	OFFICE SUPPLIES	2,000.00	0.00%	2,000.00	1,011.00
10001152	52612	EQUIPMENT NON-CAPITAL	10,000.00	0.00%	10,000.00	11,733.28
Total Mapping and Application/ GIS			2,607,000.00		2,171,440.00	1,906,014.58
Records Management						
10001154	50020	SALARIES AND WAGES	387,600.00	4.37%	371,387.00	332,957.77
10001154	50060	OVERTIME	-	NA	-	5.82
10001154	50100	EMPLOYER FICA	24,031.00	4.36%	23,026.00	20,214.35
10001154	50110	EMPLOYER MEDICARE	5,620.00	4.36%	5,385.00	4,727.56
10001154	50120	EMPLOYER SC RETIREMENT	71,940.00	16.97%	61,502.00	52,700.77
10001154	51030	POSTAGE	25,000.00	-66.67%	75,000.00	19,037.04
10001154	51110	MAINTENANCE CONTRACTS	42,000.00	-31.15%	61,000.00	42,643.14
10001154	51120	EQUIPMENT MAINTENANCE	-	-100.00%	1,500.00	-
10001154	51140	EQUIPMENT RENTALS	20,000.00	-20.00%	25,000.00	6,254.97
10001154	51160	PROFESSIONAL SERVICES	2,500.00	-70.59%	8,500.00	631.35
10001154	51310	DUES & SUBSCRIPTIONS	625.00	0.00%	625.00	479.99
10001154	51320	TRAINING & CONFERENCES	2,000.00	-50.00%	4,000.00	1,747.79
10001154	52010	OFFICE SUPPLIES	11,000.00	-29.03%	15,500.00	10,045.23
10001154	52050	UNIFORMS	250.00	-13.79%	290.00	-
10001154	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	45,000.00	30,021.21
Total Records Management			592,566.00		697,715.00	521,466.99
Human Resources						
10001160	50020	SALARIES AND WAGES	699,400.00	28.58%	543,934.00	414,408.42
10001160	50060	OVERTIME	-	NA	-	284.04
10001160	50100	EMPLOYER FICA	43,362.00	28.58%	33,724.00	24,641.20
10001160	50110	EMPLOYER MEDICARE	10,141.00	28.58%	7,887.00	5,762.77
10001160	50120	EMPLOYER SC RETIREMENT	129,809.00	44.11%	90,075.00	65,925.10
10001160	50500	EMPLOYEE RECOGNITION AWRD	7,000.00	-30.00%	10,000.00	2,303.22
10001160	51000	ADVERTISING	15,000.00	-25.00%	20,000.00	4,255.37
10001160	51010	PRINTING	2,000.00	0.00%	2,000.00	1,555.81
10001160	51030	POSTAGE	900.00	-25.00%	1,200.00	536.54
10001160	51110	MAINTENANCE CONTRACTS	-	NA	-	1,008.22
10001160	51120	EQUIPMENT MAINTENANCE	-	-100.00%	300.00	-
10001160	51140	EQUIPMENT RENTALS	2,300.00	-8.00%	2,500.00	1,931.53
10001160	51160	PROFESSIONAL SERVICES	130,000.00	-50.00%	260,000.00	131,837.23
10001160	51310	DUES & SUBSCRIPTIONS	2,750.00	-31.25%	4,000.00	2,509.58
10001160	51320	TRAINING & CONFERENCES	10,000.00	33.33%	7,500.00	10,682.41
10001160	52010	OFFICE SUPPLIES	11,000.00	10.00%	10,000.00	10,985.88
10001160	52350	AV/EDUC/TRAINING AIDS	-	NA	-	19,645.20
10001160	54100	OFFICE FURN AND EQUIPMENT	-	NA	-	4,512.54
Total Human Resources			1,063,662.00		993,120.00	702,785.06

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Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
Wellness Department						
10001162	50020	SALARIES AND WAGES	109,685.00	NA	-	-
10001162	50100	Employer FICA	6,800.00	NA	-	-
10001162	50110	Employer Medicare	1,590.00	NA	-	-
10001162	50120	Employer SC Retirement	20,357.00	NA	-	-
10001162	51010	Printing	250.00	NA	-	-
10001162	51030	Postage	150.00	NA	-	-
10001162	51040	Licenses & Permits	2,000.00	NA	-	-
10001162	51160	PROFESSIONAL SERVICES	250,000.00	NA	-	-
10001162	51310	Books & Subscriptions	1,500.00	NA	-	-
10001162	51320	Education & Training	3,500.00	NA	-	-
10001162	51323	MILEAGE REIMBURSEMENT	1,000.00	NA	-	-
10001162	52010	SUPPLIES & MATERIALS	10,000.00	NA	-	-
10001162	52050	Uniforms	300.00	NA	-	-
10001162	52612	Equipment, Non-Capital	5,000.00	NA	-	-
Total Wellness Department			412,132.00		-	-
Subsidies to others						
10001198	55200	LRTA / PALMETTO BREEZE	337,097.00	0.00%	337,097.00	338,928.00
10001198	55202	MILITARY ENHANCEMENT COMMITTEE	100,000.00	0.00%	100,000.00	-
10001198	55203	ISLAND RECREATION	150,000.00	11.11%	135,000.00	135,000.00
10001198	55204	BEAUFORT SOIL AND WATER CONVER	25,000.00	0.00%	25,000.00	25,000.00
10001198	55210	L C O G	140,338.00	0.00%	140,338.00	121,675.00
10001198	55212	LCOG / MPO FUNDING	26,155.00	2.74%	25,457.00	49,117.19
10001198	55215	LCOG / HOME CONSORTIUM	75,000.00	0.00%	75,000.00	56,000.00
10001198	55240	ECONOMIC DEVELOPMENT PARTNR	495,000.00	32.00%	375,000.00	495,000.00
10001198	55250	SMALL BUSINESS DEVELOPMENT CTR	40,000.00	0.00%	40,000.00	35,000.00
10001498	55000	Direct Subsidies	-	-100.00%	81,000.00	81,000.00
10001198	55255	VETERANS AFFAIRS	-	-100.00%	100,000.00	-
Total Subsidies to others			1,388,590.00		1,433,892.00	1,336,720.19
Nondepartmental						
10001199	50020	SALARIES AND WAGES	-	NA	-	1,162,483.59
10001199	50100	EMPLOYER FICA	-	NA	-	67,981.08
10001199	50110	EMPLOYER MEDICARE	-	NA	-	16,580.03
10001199	50120	EMPLOYER SC RETIREMENT	-	NA	-	(213.95)
10001199	50140	EMPLOYER GROUP INSURANCE	12,000,000.00	4.80%	11,450,000.00	9,357,477.09
10001199	50160	EMPLOYER TORT LIAB	-	NA	-	496,197.00
10001199	50170	EMPLOYER UNEMPLOYMENT INS	-	-100.00%	70,000.00	(17,992.43)
10001199	50199	EMPLOYER UNCLASSIFIED	-	NA	-	(43,171.55)
10001199	55000	Direct Subsidies	-	NA	-	237,508.71
10001199	56000	GENERAL CONTINGENCY	300,000.00	NA	-	-
10001199	56010	PAYROLL CONTINGENCY	4,150,000.00	NA	-	-
Total Nondepartmental			16,450,000.00		11,520,000.00	11,276,849.57
Sheriff						
10001200	51030	POSTAGE	-	NA	-	735.42
10001200	51300	GARAGE REPAIRS & MAINTENANCE	-	NA	-	281.31
10001200	51310	DUES & SUBSCRIPTIONS	-	NA	-	2,000.00
10001200	51540	INSURANCE - OTHER	-	NA	-	4,495.46
10001200	52010	OFFICE SUPPLIES	-	NA	-	616.32
10001200	52500	FUELS/LUBRICANTS	-	NA	-	55.10
10001201	50020	SALARIES AND WAGES	18,845,811.00	7.65%	17,506,492.00	6,382,220.46
10001201	50060	OVERTIME	382,652.00	-58.99%	933,047.00	181,606.79
10001201	50080	OVERTIME/TRAINING SCHOOL	45,000.00	-67.08%	136,680.00	4,504.96
10001201	50100	EMPLOYER FICA	1,168,440.00	1.45%	1,151,726.00	394,161.76
10001201	50110	EMPLOYER MEDICARE	273,264.00	1.45%	269,355.00	92,441.32
10001201	50120	EMPLOYER SC RETIREMENT	1,061,514.00	19.46%	888,625.00	271,356.90
10001201	50130	EMPLOYER PO RETIREMENT	2,865,578.00	-0.13%	2,869,378.00	887,381.85
10001201	50500	EMPLOYEE RECOGNITION AWRD	1,350.00	-35.56%	2,095.00	1,203.76
10001201	51000	ADVERTISING	11,000.00	41.84%	7,755.00	8,695.48
10001201	51010	PRINTING	26,000.00	101.16%	12,925.00	6,297.12
10001201	51030	POSTAGE	25,000.00	103.85%	12,264.00	9,610.08
10001201	51040	LICENSES/PERMITS	1,500.00	-92.26%	19,390.00	150.00
10001201	51050	TELEPHONE	255,480.00	2.88%	248,320.00	41,659.85
10001201	51110	MAINTENANCE CONTRACTS	2,420,000.00	12.08%	2,159,163.00	143,891.94
10001201	51120	EQUIPMENT MAINTENANCE	40,000.00	-21.89%	51,211.00	4,778.28

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001201	51121	Equipment Maint (Aviation)	100,000.00	-13.04%	115,000.00	-
10001201	51130	REPAIRS TO BUILDINGS	-	NA	-	3,561.43
10001201	51140	EQUIPMENT RENTALS	18,112.00	-16.86%	21,785.00	9,839.42
10001201	51150	OFFICE SPACE RENTALS	-	-100.00%	29,214.00	-
10001201	51160	PROFESSIONAL SERVICES	105,000.00	98.45%	52,911.00	15,695.55
10001201	51170	NON-PROFESSIONAL SERVICES	109,108.00	19.43%	91,361.00	36,241.27
10001201	51190	MEDICAL/DENTAL SERVICES	-	NA	-	1,800.42
10001201	51295	OTHER VEHICLE OPER COSTS	-	NA	-	(0.05)
10001201	51300	GARAGE REPAIRS & MAINTENANCE	77,322.00	0.00%	77,322.00	22,853.34
10001201	51301	INSURANCE REIMBURSEMENT	-	NA	-	(621.00)
10001201	51310	DUES & SUBSCRIPTIONS	60,000.00	5.19%	57,037.00	24,295.69
10001201	51320	TRAINING & CONFERENCES	112,500.00	7.84%	104,320.00	56,020.63
10001201	5132A	TRAVEL-EXTRADITION	-	NA	-	593.68
10001201	51540	INSURANCE - OTHER	4,000.00	101.51%	1,985.00	7,545.56
10001201	51991	K-9 UNIT	58,450.00	297.94%	14,688.00	-
10001201	51992	SPECIAL RESPONSE	62,838.00	146.26%	25,517.00	-
10001201	52010	OFFICE SUPPLIES	586,866.00	12.33%	522,459.00	144,862.51
10001201	52050	UNIFORMS	456,001.00	19.78%	380,707.00	49,793.97
10001201	5205A	UNIFORMS-WEAPONS	-	NA	-	16,427.60
10001201	52350	AV/EDUC/TRAINING AIDS	-	NA	-	(975.00)
10001201	52500	FUELS/LUBRICANTS	724,000.00	17.86%	614,271.00	190,034.42
10001201	52610	TECHNOLOGY EQUIP (NON-CAP)	892,044.00	NA	-	-
10001201	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	702,809.00	210,546.44
10001201	54000	VEHICLE PURCHASES	-	NA	-	110,982.22
10001201	54140	COMMUNICATIONS EQUIPMENT	-	-100.00%	58,864.00	8,500.00
10001201	54200	CAPITAL EQUIPMENT	-	-100.00%	157,660.00	10,920.00
10001201	54420	RENOVATIONS EXIST BLDGS	-	NA	-	1,129,501.94
10001201	55000	Direct Subsidies	10,000.00	NA	-	-
10001202	50020	SALARIES AND WAGES	-	NA	-	5,338,324.19
10001202	50060	OVERTIME	-	NA	-	336,957.22
10001202	50080	OVERTIME/TRAINING SCHOOL	-	NA	-	110,235.59
10001202	50100	EMPLOYER FICA	-	NA	-	349,412.97
10001202	50110	EMPLOYER MEDICARE	-	NA	-	81,716.94
10001202	50130	EMPLOYER PO RETIREMENT	-	NA	-	1,058,733.68
10001202	51010	PRINTING	-	NA	-	5,285.76
10001202	51050	TELEPHONE	-	NA	-	54,494.33
10001202	51120	EQUIPMENT MAINTENANCE	-	NA	-	20.20
10001202	51140	EQUIPMENT RENTALS	-	NA	-	429.31
10001202	51150	OFFICE SPACE RENTALS	-	NA	-	29,213.99
10001202	51170	NON-PROFESSIONAL SERVICES	-	NA	-	13,850.00
10001202	51300	GARAGE REPAIRS & MAINTENANCE	-	NA	-	242,833.83
10001202	51301	INSURANCE REIMBURSEMENT	-	NA	-	(122,263.88)
10001202	51310	DUES & SUBSCRIPTIONS	-	NA	-	3,704.65
10001202	51320	TRAINING & CONFERENCES	-	NA	-	29,604.63
10001202	5132A	TRAVEL-EXTRADITION	-	NA	-	660.77
10001202	51530	BONDING (ALL)	-	NA	-	100.00
10001202	51540	INSURANCE - OTHER	-	NA	-	730.34
10001202	51991	K-9 UNIT	-	NA	-	25,620.80
10001202	52010	OFFICE SUPPLIES	-	NA	-	21,110.69
10001202	52050	UNIFORMS	-	NA	-	97,779.99
10001202	52500	FUELS/LUBRICANTS	-	NA	-	379,291.51
10001202	52612	EQUIPMENT NON-CAPITAL	-	NA	-	16,884.37
10001202	54000	VEHICLE PURCHASES	-	NA	-	711,506.76
10001202	54110	DATA PROCESSING EQUIPMENT	-	NA	-	2,469.60
10001203	50020	SALARIES AND WAGES	-	NA	-	635,372.20
10001203	50060	OVERTIME	-	NA	-	1,445.87
10001203	50100	EMPLOYER FICA	-	NA	-	38,161.75
10001203	50110	EMPLOYER MEDICARE	-	NA	-	8,925.22
10001203	50130	EMPLOYER PO RETIREMENT	-	NA	-	116,506.99
10001203	51030	POSTAGE	-	NA	-	90.17
10001203	51050	TELEPHONE	-	NA	-	992.82
10001203	51110	MAINTENANCE CONTRACTS	-	NA	-	68,353.38
10001203	51160	PROFESSIONAL SERVICES	-	NA	-	19,254.34
10001203	51170	NON-PROFESSIONAL SERVICES	-	NA	-	1,714.28
10001203	51310	DUES & SUBSCRIPTIONS	-	NA	-	1,295.00
10001203	51320	TRAINING & CONFERENCES	-	NA	-	7,764.16
10001203	52010	OFFICE SUPPLIES	-	NA	-	178,949.20
10001203	52050	UNIFORMS	-	NA	-	8,977.15

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001203	52500	FUELS/LUBRICANTS	-	NA	-	11,275.03
10001203	52612	EQUIPMENT NON-CAPITAL	-	NA	-	16,975.45
10001203	54420	RENOVATIONS EXIST BLDGS	-	NA	-	40,684.53
10001205	50020	SALARIES AND WAGES	-	NA	-	516,040.33
10001205	50060	OVERTIME	-	NA	-	31,065.08
10001205	50080	OVERTIME/TRAINING SCHOOL	-	NA	-	10,977.43
10001205	50100	EMPLOYER FICA	-	NA	-	33,530.22
10001205	50110	EMPLOYER MEDICARE	-	NA	-	7,841.27
10001205	50130	EMPLOYER PO RETIREMENT	-	NA	-	98,867.04
10001205	51030	POSTAGE	-	NA	-	304.91
10001205	51050	TELEPHONE	-	NA	-	7,445.79
10001205	51120	EQUIPMENT MAINTENANCE	-	NA	-	2,110.92
10001205	51170	NON-PROFESSIONAL SERVICES	-	NA	-	6,066.91
10001205	51300	GARAGE REPAIRS & MAINTENANCE	-	NA	-	16,465.42
10001205	51301	INSURANCE REIMBURSEMENT	-	NA	-	(4,601.25)
10001205	51310	DUES & SUBSCRIPTIONS	-	NA	-	4,089.50
10001205	51320	TRAINING & CONFERENCES	-	NA	-	6,374.77
10001205	51991	K-9 UNIT	-	NA	-	1,308.93
10001205	51992	SPECIAL RESPONSE	-	NA	-	24,941.98
10001205	52010	OFFICE SUPPLIES	-	NA	-	10,202.87
10001205	52050	UNIFORMS	-	NA	-	11,509.68
10001205	52500	FUELS/LUBRICANTS	-	NA	-	44,761.58
10001205	52612	EQUIPMENT NON-CAPITAL	-	NA	-	21,836.35
10001210	50020	SALARIES AND WAGES	-	NA	-	556,229.70
10001210	50060	OVERTIME	-	NA	-	8,684.22
10001210	50100	EMPLOYER FICA	-	NA	-	34,379.97
10001210	50110	EMPLOYER MEDICARE	-	NA	-	8,040.42
10001210	50120	EMPLOYER SC RETIREMENT	-	NA	-	24,063.45
10001210	50130	EMPLOYER PO RETIREMENT	-	NA	-	75,703.45
10001210	51010	PRINTING	-	NA	-	630.73
10001210	51050	TELEPHONE	-	NA	-	6,656.92
10001210	51110	MAINTENANCE CONTRACTS	-	NA	-	36,344.50
10001210	51121	Equipment Maint (Aviation)	-	NA	-	71,467.49
10001210	51140	EQUIPMENT RENTALS	-	NA	-	2,526.02
10001210	51170	NON-PROFESSIONAL SERVICES	-	NA	-	160.00
10001210	51310	DUES & SUBSCRIPTIONS	-	NA	-	8,571.40
10001210	51320	TRAINING & CONFERENCES	-	NA	-	5,308.19
10001210	51990	MISC. EXPENDITURES	-	NA	-	45,615.07
10001210	52010	OFFICE SUPPLIES	-	NA	-	16,156.72
10001210	52050	UNIFORMS	-	NA	-	3,332.81
10001210	52500	FUELS/LUBRICANTS	-	NA	-	24,085.22
10001210	55295	BEAUFORT MARINE RESCUE SQ	-	NA	-	15,000.00
10001220	50020	SALARIES AND WAGES	-	NA	-	1,816,834.38
10001220	50060	OVERTIME	-	NA	-	285,887.74
10001220	50100	EMPLOYER FICA	-	NA	-	125,513.23
10001220	50110	EMPLOYER MEDICARE	-	NA	-	29,353.54
10001220	50120	EMPLOYER SC RETIREMENT	-	NA	-	330,170.98
10001220	51000	ADVERTISING	-	NA	-	1,677.00
10001220	51010	PRINTING	-	NA	-	693.95
10001220	51040	LICENSES/PERMITS	-	NA	-	650.00
10001220	51050	TELEPHONE	-	NA	-	72,715.42
10001220	51051	DATA LINES	-	NA	-	71.86
10001220	51110	MAINTENANCE CONTRACTS	-	NA	-	1,741,722.63
10001220	51120	EQUIPMENT MAINTENANCE	-	NA	-	1,567.12
10001220	51140	EQUIPMENT RENTALS	-	NA	-	5,239.73
10001220	51160	PROFESSIONAL SERVICES	-	NA	-	1,875.00
10001220	51170	NON-PROFESSIONAL SERVICES	-	NA	-	1,656.68
10001220	51300	GARAGE REPAIRS & MAINTENANCE	-	NA	-	811.71
10001220	51310	DUES & SUBSCRIPTIONS	-	NA	-	5,592.46
10001220	51320	TRAINING & CONFERENCES	-	NA	-	12,913.91
10001220	52010	OFFICE SUPPLIES	-	NA	-	13,095.55
10001220	52050	UNIFORMS	-	NA	-	2,947.85
10001220	52400	OTHER SUPPLIES	-	NA	-	8,430.00
10001220	52500	FUELS/LUBRICANTS	-	NA	-	1,511.80
10001220	52612	EQUIPMENT NON-CAPITAL	-	NA	-	1,896.09
10001240	50020	SALARIES AND WAGES	-	NA	-	506,914.74
10001240	50060	OVERTIME	-	NA	-	1,937.95
10001240	50100	EMPLOYER FICA	-	NA	-	30,644.22

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001240	50110	EMPLOYER MEDICARE	-	NA	-	7,167.27
10001240	50120	EMPLOYER SC RETIREMENT	-	NA	-	70,732.88
10001240	50130	EMPLOYER PO RETIREMENT	-	NA	-	12,096.10
10001240	51030	POSTAGE	-	NA	-	471.20
10001240	51050	TELEPHONE	-	NA	-	48,433.84
10001240	51120	EQUIPMENT MAINTENANCE	-	NA	-	2,698.88
10001240	51170	NON-PROFESSIONAL SERVICES	-	NA	-	62.60
10001240	51300	GARAGE REPAIRS & MAINTENANCE	-	NA	-	351.81
10001240	51310	DUES & SUBSCRIPTIONS	-	NA	-	9.00
10001240	52010	OFFICE SUPPLIES	-	NA	-	24,244.43
10001240	52050	UNIFORMS	-	NA	-	3,906.59
10001240	52500	FUELS/LUBRICANTS	-	NA	-	17,891.49
10001240	52612	EQUIPMENT NON-CAPITAL	-	NA	-	273,117.95
10001240	54110	DATA PROCESSING EQUIPMENT	-	NA	-	22,257.40
Total Sheriff			30,798,830.00		29,296,336.00	27,711,872.97
Disaster						
10001211	52030	CLEANING/SANI SUPPLIES	-	NA	-	64,136.82
Total Disaster			-		-	64,136.82
EMS						
10001230	50020	SALARIES AND WAGES	5,255,000.00	-15.92%	6,250,000.00	4,553,768.60
10001230	50030	BUILT IN OVERTIME	-	NA	-	36.47
10001230	50060	OVERTIME	3,230,000.00	24.23%	2,600,000.00	2,943,483.47
10001230	50090	PERS'NL COSTS REIMB (CR)	-	NA	-	(1,260.00)
10001230	50100	EMPLOYER FICA	526,070.00	-4.12%	548,700.00	456,726.66
10001230	50110	EMPLOYER MEDICARE	123,033.00	-4.12%	128,325.00	106,836.26
10001230	50120	EMPLOYER SC RETIREMENT	1,574,816.00	7.45%	1,465,560.00	1,204,079.76
10001230	51010	PRINTING	2,500.00	25.00%	2,000.00	1,871.56
10001230	51030	POSTAGE	900.00	-10.00%	1,000.00	633.42
10001230	51040	LICENSES/PERMITS	7,500.00	-47.18%	14,200.00	5,282.42
10001230	51110	MAINTENANCE CONTRACTS	115,000.00	-32.35%	170,000.00	104,307.37
10001230	51120	EQUIPMENT MAINTENANCE	9,000.00	20.00%	7,500.00	8,047.46
10001230	51130	REPAIRS TO BUILDINGS	33,000.00	0.00%	33,000.00	31,853.71
10001230	51140	EQUIPMENT RENTALS	6,500.00	0.00%	6,500.00	6,337.43
10001230	51160	PROFESSIONAL SERVICES	48,000.00	-15.04%	56,500.00	28,096.73
10001230	51170	NON-PROFESSIONAL SERVICES	-	-100.00%	5,200.00	44.88
10001230	51295	OTHER VEHICLE OPER COSTS	-	NA	-	496.78
10001230	51300	GARAGE REPAIRS & MAINTENANCE	7,500.00	0.00%	7,500.00	12,098.19
10001230	51310	DUES & SUBSCRIPTIONS	3,000.00	20.00%	2,500.00	3,701.78
10001230	51320	TRAINING & CONFERENCES	25,000.00	-37.50%	40,000.00	13,326.50
10001230	51370	CONTRACT SERVICES	15,000.00	NA	-	-
10001230	52010	OFFICE SUPPLIES	351,500.00	9.50%	321,000.00	408,096.59
10001230	52050	UNIFORMS	45,000.00	0.00%	45,000.00	55,757.75
10001230	52300	MEDICAL/PHARMACY SUPPLIES	-	NA	-	1,157.07
10001230	52500	FUELS/LUBRICANTS	-	NA	-	96,301.44
10001230	52612	EQUIPMENT NON-CAPITAL	10,000.00	-90.74%	108,000.00	8,071.88
10001230	54000	VEHICLE PURCHASES	-	NA	-	264,103.51
10001230	54200	CAPITAL EQUIPMENT	-	NA	-	280,690.66
10001230	57900	CREDIT CARD FEES	-	-100.00%	500.00	-
Total EMS			11,388,319.00		11,812,985.00	10,593,948.35
Traffic Operations						
10001241	50020	SALARIES AND WAGES	182,530.00	4.62%	174,467.00	146,149.82
10001241	50060	OVERTIME	2,500.00	0.00%	2,500.00	1,583.70
10001241	50100	EMPLOYER FICA	11,472.00	4.56%	10,972.00	8,749.65
10001241	50110	EMPLOYER MEDICARE	2,683.00	3.19%	2,600.00	2,046.47
10001241	50120	EMPLOYER SC RETIREMENT	33,878.00	15.23%	29,400.00	22,313.77
10001241	51010	PRINTING	-	-100.00%	150.00	-
10001241	51030	POSTAGE	250.00	-75.00%	1,000.00	118.37
10001241	51110	MAINTENANCE CONTRACTS	6,000.00	-21.05%	7,600.00	5,679.53
10001241	51120	EQUIPMENT MAINTENANCE	2,500.00	-87.50%	20,000.00	-
10001241	51160	PROFESSIONAL SERVICES	30,000.00	50.00%	20,000.00	-
10001241	51170	NON-PROFESSIONAL SERVICES	17,500.00	250.00%	5,000.00	7,982.50
10001241	51300	GARAGE REPAIRS & MAINTENANCE	-	-100.00%	700.00	9.53
10001241	51301	INSURANCE REIMBURSEMENT	-	NA	-	(11,906.94)
10001241	51310	DUES & SUBSCRIPTIONS	2,500.00	-28.57%	3,500.00	730.93
10001241	51320	TRAINING & CONFERENCES	5,000.00	0.00%	5,000.00	4,832.67

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001241	51990	MISC. EXPENDITURES	-	NA	-	(37,119.28)
10001241	52010	OFFICE SUPPLIES	100,000.00	17.65%	85,000.00	36,720.59
10001241	52050	UNIFORMS	2,000.00	-50.00%	4,000.00	1,559.86
10001241	52612	EQUIPMENT NON-CAPITAL	2,000.00	-60.00%	5,000.00	6,194.26
Total Traffic Operations			400,813.00		376,889.00	195,645.43
Engineering						
10001243	50020	SALARIES AND WAGES	550,010.00	NA	-	165,424.12
10001243	50100	Employer FICA	34,100.00	NA	-	10,136.32
10001243	50110	Employer Medicare	7,975.00	NA	-	2,370.59
10001243	50120	Employer SC Retirement	102,082.00	NA	-	27,371.67
10001243	51010	Printing	100.00	NA	-	43.95
10001243	51150	OFFICE SPACE RENTALS	-	NA	-	1,800.00
10001243	51160	PROFESSIONAL SERVICES	175,000.00	NA	-	36,542.81
10001243	51300	GARAGE REPAIRS & MAINTENANCE	-	NA	-	17.95
10001243	51310	DUES & SUBSCRIPTIONS	1,500.00	NA	-	447.38
10001243	51320	TRAINING & CONFERENCES	6,000.00	NA	-	130.84
10001243	52010	OFFICE SUPPLIES	3,000.00	NA	-	419.49
10001243	52050	UNIFORMS	1,000.00	NA	-	212.05
10001243	52612	EQUIPMENT NON-CAPITAL	3,000.00	NA	-	-
Total Engineering			883,767.00		-	244,917.17
Detention Center						
10001250	50020	SALARIES AND WAGES	3,250,000.00	-12.37%	3,708,970.00	2,891,417.86
10001250	50060	OVERTIME	500,000.00	25.00%	400,000.00	410,069.39
10001250	50100	EMPLOYER FICA	232,500.00	-8.74%	254,757.00	197,952.23
10001250	50110	EMPLOYER MEDICARE	54,375.00	-8.74%	59,581.00	46,295.60
10001250	50120	EMPLOYER SC RETIREMENT	104,400.00	11.29%	93,813.00	40,846.42
10001250	50130	EMPLOYER PO RETIREMENT	677,025.00	-0.67%	681,570.00	554,732.82
10001250	51010	PRINTING	4,200.00	-19.39%	5,210.00	2,227.74
10001250	51030	POSTAGE	350.00	-70.83%	1,200.00	180.20
10001250	51040	LICENSES/PERMITS	-	-100.00%	860.00	-
10001250	51110	MAINTENANCE CONTRACTS	7,000.00	-12.50%	8,000.00	6,603.25
10001250	51120	EQUIPMENT MAINTENANCE	12,000.00	-25.00%	16,000.00	5,226.73
10001250	51130	REPAIRS TO BUILDINGS	10,000.00	-85.29%	68,000.00	31,984.17
10001250	51140	EQUIPMENT RENTALS	5,500.00	0.00%	5,500.00	4,200.80
10001250	51160	PROFESSIONAL SERVICES	1,735,630.00	2.97%	1,685,630.00	1,629,527.89
10001250	51170	NON-PROFESSIONAL SERVICES	2,200.00	-50.00%	4,400.00	2,054.00
10001250	51200	MEALS/CONTRACTED SERVICES	350,000.00	15.32%	303,512.00	278,489.63
10001250	51310	DUES & SUBSCRIPTIONS	1,700.00	-4.76%	1,785.00	1,035.08
10001250	51320	TRAINING & CONFERENCES	18,000.00	-40.00%	30,000.00	5,293.16
10001250	52010	OFFICE SUPPLIES	60,000.00	27.66%	47,000.00	30,720.84
10001250	52030	CLEANING/SANI SUPPLIES	-	NA	-	81.98
10001250	52050	UNIFORMS	45,000.00	-18.18%	55,000.00	30,305.40
10001250	52310	BLANKETS/LINENS	-	NA	-	256.60
10001250	52400	OTHER SUPPLIES	-	NA	-	87.69
10001250	52500	FUELS/LUBRICANTS	-	NA	-	90.91
10001250	52612	EQUIPMENT NON-CAPITAL	4,000.00	-72.64%	14,622.00	107.56
Total Detention Center			7,073,880.00		7,445,410.00	6,169,787.95
Building Codes						
10001260	50020	SALARIES AND WAGES	1,150,248.00	-14.06%	1,338,478.00	1,080,257.18
10001260	50060	OVERTIME	550.00	0.00%	550.00	812.80
10001260	50100	EMPLOYER FICA	71,350.00	-14.06%	83,019.00	65,188.33
10001260	50110	EMPLOYER MEDICARE	16,687.00	-14.06%	19,416.00	15,245.55
10001260	50120	EMPLOYER SC RETIREMENT	201,820.00	-4.67%	211,707.00	163,075.96
10001260	50130	EMPLOYER PO RETIREMENT	13,467.00	15.49%	11,661.00	10,864.05
10001260	51000	ADVERTISING	5,500.00	0.00%	5,500.00	3,189.48
10001260	51010	PRINTING	1,500.00	-70.59%	5,100.00	2,974.15
10001260	51030	POSTAGE	8,000.00	-27.27%	11,000.00	7,069.08
10001260	51110	MAINTENANCE CONTRACTS	-	-100.00%	61,520.00	780.00
10001260	51120	EQUIPMENT MAINTENANCE	-	-100.00%	2,174.00	-
10001260	51140	EQUIPMENT RENTALS	3,000.00	50.00%	2,000.00	2,091.64
10001260	51160	PROFESSIONAL SERVICES	-	-100.00%	26,500.00	25,208.62
10001260	51295	OTHER VEHICLE OPER COSTS	-	NA	-	(143.71)
10001260	51300	GARAGE REPAIRS & MAINTENANCE	-	-100.00%	350.00	-
10001260	51310	DUES & SUBSCRIPTIONS	30,000.00	347.76%	6,700.00	8,529.07
10001260	51320	TRAINING & CONFERENCES	9,000.00	-1.64%	9,150.00	13,415.41

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001260	52010	OFFICE SUPPLIES	10,500.00	31.25%	8,000.00	11,321.39
10001260	52050	UNIFORMS	3,000.00	0.00%	3,000.00	4,133.69
10001260	52500	FUELS/LUBRICANTS	-	NA	-	1,103.64
10001260	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	6,850.00	-
Total Building Codes			1,524,622.00		1,812,675.00	1,415,116.33
Animal Services						
10001270	50020	SALARIES AND WAGES	300,505.00	-5.78%	318,930.00	326,517.77
10001270	50060	OVERTIME	7,000.00	0.00%	7,000.00	21,189.22
10001270	50100	EMPLOYER FICA	19,065.00	-5.66%	20,208.00	21,139.30
10001270	50110	EMPLOYER MEDICARE	4,459.00	-5.65%	4,726.00	4,943.41
10001270	50120	EMPLOYER SC RETIREMENT	59,671.00	10.56%	53,974.00	54,489.68
10001270	51010	PRINTING	2,200.00	10.00%	2,000.00	1,499.65
10001270	51030	POSTAGE	100.00	-83.33%	600.00	23.59
10001270	51040	LICENSES/PERMITS	1,000.00	-75.00%	4,000.00	(555.00)
10001270	51110	MAINTENANCE CONTRACTS	690,000.00	0.00%	690,000.00	504,999.96
10001270	51120	EQUIPMENT MAINTENANCE	500.00	-75.00%	2,000.00	561.51
10001270	51130	REPAIRS TO BUILDINGS	-	-100.00%	15,800.00	2,284.60
10001270	51140	EQUIPMENT RENTALS	700.00	16.67%	600.00	620.70
10001270	51160	PROFESSIONAL SERVICES	140,000.00	40.00%	100,000.00	132,912.62
10001270	51161	ANIMAL RESTITUTIONS (CR)	-	NA	-	(5.00)
10001270	51310	DUES & SUBSCRIPTIONS	-	NA	-	29.98
10001270	51320	TRAINING & CONFERENCES	1,500.00	0.00%	1,500.00	1,014.11
10001270	51952	TABBY HOUSE EXPENSES	-	NA	-	83.19
10001270	52010	OFFICE SUPPLIES	30,000.00	-25.00%	40,000.00	24,863.61
10001270	52301	RECOVERY OF MED/PHARM SUPPLIES	-	NA	-	(500.00)
10001270	52050	UNIFORMS	3,000.00	0.00%	3,000.00	3,578.19
10001270	54000	VEHICLE PURCHASES	-	NA	-	30,342.62
10001270	57900	CREDIT CARD FEES	500.00	-66.67%	1,500.00	4,724.78
Total Animal Services			1,260,200.00		1,265,838.00	1,134,758.49
Public Works						
10001301	50020	SALARIES AND WAGES	1,986,655.00	-15.73%	2,357,542.00	1,858,327.74
10001301	50060	OVERTIME	18,000.00	0.00%	18,000.00	8,181.15
10001301	50100	EMPLOYER FICA	124,289.00	-15.61%	147,284.00	111,463.96
10001301	50110	EMPLOYER MEDICARE	29,068.00	-15.61%	34,445.00	26,068.59
10001301	50120	EMPLOYER SC RETIREMENT	372,064.00	-5.42%	393,390.00	299,972.79
10001301	51010	PRINTING	100.00	-68.75%	320.00	-
10001301	51030	POSTAGE	200.00	-60.00%	500.00	179.07
10001301	51110	MAINTENANCE CONTRACTS	500,000.00	0.00%	500,000.00	204,554.00
10001301	51120	EQUIPMENT MAINTENANCE	7,500.00	-37.50%	12,000.00	9,758.04
10001301	51130	REPAIRS TO BUILDINGS	-	-100.00%	50,000.00	-
10001301	51140	EQUIPMENT RENTALS	5,000.00	-37.50%	8,000.00	3,942.59
10001301	51160	PROFESSIONAL SERVICES	275,000.00	1000.00%	25,000.00	23,258.94
10001301	51170	NON-PROFESSIONAL SERVICES	345,000.00	0.00%	345,000.00	146,814.20
10001301	51300	GARAGE REPAIRS & MAINTENANCE	-	-100.00%	12,500.00	532.85
10001301	51310	DUES & SUBSCRIPTIONS	3,500.00	-36.36%	5,500.00	1,844.42
10001301	51320	TRAINING & CONFERENCES	14,000.00	-44.99%	25,450.00	11,671.11
10001301	52010	OFFICE SUPPLIES	185,000.00	0.00%	185,000.00	201,644.23
10001301	52050	UNIFORMS	45,000.00	-11.76%	51,000.00	27,508.64
10001301	52240	SMALL TOOLS, ETC.	-	NA	-	32.09
10001301	52400	OTHER SUPPLIES	-	NA	-	2.18
10001301	52500	FUELS/LUBRICANTS	10,000.00	0.00%	10,000.00	10,024.15
10001301	52612	EQUIPMENT NON-CAPITAL	35,000.00	40.00%	25,000.00	44,914.30
10001301	54000	VEHICLE PURCHASES	-	NA	-	308,441.01
Total Public Works			3,955,376.00		4,205,931.00	3,299,136.05
Facilities Management						
10001310	50020	SALARIES AND WAGES	1,027,490.00	-27.72%	1,421,472.00	1,038,153.94
10001310	50060	OVERTIME	2,000.00	NA	-	4,585.86
10001310	50100	EMPLOYER FICA	63,828.00	-27.58%	88,132.00	62,961.55
10001310	50110	EMPLOYER MEDICARE	14,928.00	-27.58%	20,612.00	14,723.95
10001310	50120	EMPLOYER SC RETIREMENT	191,073.00	-18.83%	235,396.00	159,559.57
10001310	51010	PRINTING	200.00	-89.19%	1,850.00	194.39
10001310	51030	POSTAGE	200.00	-20.00%	250.00	37.37
10001310	51041	SWU Fees	130,000.00	31.98%	98,500.00	-
10001310	51042	HH POLICE FEES	4,000.00	25.00%	3,200.00	-
10001310	51043	PROPERTY TAX PAYMENTS	-	-100.00%	46,000.00	-

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001310	51060	ELECTRICITY	2,300,000.00	4.88%	2,192,931.00	1,974,071.00
10001310	51070	WATER/SEWER/GARBAGE	200,000.00	-23.40%	261,100.00	184,300.76
10001310	51090	GARBAGE SERVICES	-	NA	-	682.00
10001310	51110	MAINTENANCE CONTRACTS	150,000.00	-0.12%	150,178.00	115,123.26
10001310	51120	EQUIPMENT MAINTENANCE	275,000.00	13.64%	242,000.00	276,432.70
10001310	51130	REPAIRS TO BUILDINGS	2,000,000.00	12.98%	1,770,300.00	940,378.63
10001310	51140	EQUIPMENT RENTALS	5,000.00	-47.37%	9,500.00	1,356.79
10001310	51160	PROFESSIONAL SERVICES	150,000.00	-68.15%	471,000.00	298,878.56
10001310	51170	NON-PROFESSIONAL SERVICES	35,000.00	0.00%	35,000.00	34,929.13
10001310	51300	GARAGE REPAIRS & MAINTENANCE	-	-100.00%	250.00	59.85
10001310	51310	DUES & SUBSCRIPTIONS	1,200.00	-18.64%	1,475.00	272.98
10001310	51320	TRAINING & CONFERENCES	2,500.00	-66.67%	7,500.00	3,315.00
10001310	51990	MISC. EXPENDITURES	-	NA	-	148.79
10001310	52010	OFFICE SUPPLIES	55,000.00	-27.75%	76,120.00	12,845.26
10001310	52020	DATA PROCESSING SUPPLIES	-	NA	-	699.52
10001310	52050	UNIFORMS	15,000.00	-25.00%	20,000.00	13,158.01
10001310	52400	OTHER SUPPLIES	-	NA	-	25.36
10001310	52500	FUELS/LUBRICANTS	-	NA	-	987.71
10001310	52610	TECHNOLOGY EQUIP (NON-CAP)	-	NA	-	498.11
10001310	52612	EQUIPMENT NON-CAPITAL	2,000.00	-90.24%	20,500.00	11,559.18
10001310	54000	VEHICLE PURCHASES	-	NA	-	585.27
10001310	54200	CAPITAL EQUIPMENT	-	NA	-	93,330.94
10001310	54420	RENOVATIONS EXIST BLDGS	-	NA	-	15,600.00
Total Facilities Management			6,624,419.00		7,173,266.00	5,259,455.44
Capital Improvements						
10001330	50020	SALARIES AND WAGES	446,925.00	-27.09%	613,000.00	377,216.17
10001330	50060	OVERTIME	2,500.00	0.00%	2,500.00	-
10001330	50100	EMPLOYER FICA	27,865.00	-26.99%	38,165.00	22,859.30
10001330	50110	EMPLOYER MEDICARE	6,517.00	-26.99%	8,926.00	5,346.24
10001330	50120	EMPLOYER SC RETIREMENT	83,413.00	-18.17%	101,936.00	59,162.09
10001330	51010	PRINTING	200.00	-77.78%	900.00	94.12
10001330	51030	POSTAGE	200.00	-53.49%	430.00	851.27
10001330	51140	EQUIPMENT RENTALS	2,500.00	-58.33%	6,000.00	2,657.32
10001330	51150	OFFICE SPACE RENTALS	-	-100.00%	2,400.00	1,800.00
10001330	51160	PROFESSIONAL SERVICES	400,000.00	81.82%	220,000.00	22,500.00
10001330	51300	GARAGE REPAIRS & MAINTENANCE	-	NA	-	41.90
10001330	51310	DUES & SUBSCRIPTIONS	4,000.00	0.00%	4,000.00	648.99
10001330	51320	TRAINING & CONFERENCES	25,000.00	525.00%	4,000.00	2,950.82
10001330	51990	MISC. EXPENDITURES	-	NA	-	61.45
10001330	52010	OFFICE SUPPLIES	5,000.00	-58.33%	12,000.00	6,159.07
10001330	52050	UNIFORMS	2,500.00	0.00%	2,500.00	954.37
10001330	52600	OFFICE FURN & EQUIP. NON-CAPIT	2,000.00	NA	-	927.01
10001330	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	6,500.00	478.62
10001340	54200	CAPITAL EQUIPMENT	-	NA	-	35,411.00
Total Capital Improvements			1,008,620.00		1,023,257.00	540,119.74
Mosquito Control						
10001400	50020	SALARIES AND WAGES	668,035.00	-13.45%	771,875.00	624,280.29
10001400	50100	EMPLOYER FICA	41,418.00	-13.45%	47,856.00	37,945.16
10001400	50110	EMPLOYER MEDICARE	9,687.00	-13.45%	11,192.00	8,874.66
10001400	50120	EMPLOYER SC RETIREMENT	123,987.00	-3.00%	127,822.00	98,040.79
10001400	51000	ADVERTISING	-	-100.00%	75.00	-
10001400	51010	PRINTING	100.00	-50.00%	200.00	-
10001400	51030	POSTAGE	500.00	0.00%	500.00	304.48
10001400	51040	LICENSES/PERMITS	250.00	-47.37%	475.00	225.00
10001400	51110	MAINTENANCE CONTRACTS	15,500.00	-59.59%	38,360.00	3,673.02
10001400	51120	EQUIPMENT MAINTENANCE	100,000.00	-0.79%	100,800.00	118,170.86
10001400	5112B	RPRS TO EQP - HELICOPTER	-	NA	-	420.34
10001400	51130	REPAIRS TO BUILDINGS	-	NA	-	4,864.13
10001400	51140	EQUIPMENT RENTALS	10,000.00	-27.54%	13,800.00	8,407.45
10001400	51150	OFFICE SPACE RENTALS	-	-100.00%	500.00	-
10001400	51160	PROFESSIONAL SERVICES	5,000.00	-34.21%	7,600.00	3,020.30
10001400	51295	OTHER VEHICLE OPER COSTS	-	NA	-	36.09
10001400	51300	GARAGE REPAIRS & MAINTENANCE	-	NA	-	654.24
10001400	51301	INSURANCE REIMBURSEMENT	-	NA	-	(3,871.37)
10001400	51310	DUES & SUBSCRIPTIONS	9,000.00	542.86%	1,400.00	2,412.59
10001400	51320	TRAINING & CONFERENCES	40,000.00	185.71%	14,000.00	20,046.08

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001400	52010	OFFICE SUPPLIES	675,000.00	13.56%	594,400.00	533,015.82
10001400	52015	LABORATORY SUPPLIES	-	NA	-	772.78
10001400	52016	SHOP SUPPLIES	-	NA	-	152.82
10001400	52050	UNIFORMS	3,500.00	0.00%	3,500.00	3,170.99
10001400	52500	FUELS/LUBRICANTS	50,000.00	-41.18%	85,000.00	44,371.96
10001400	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	800.00	-
10001400	54450	OTHER IMPROVEMENTS	-	NA	-	144.58
Total Mosquito Control			1,751,977.00		1,820,155.00	1,509,133.06
Veteran's Affairs						
10001500	50020	SALARIES AND WAGES	137,385.00	-33.31%	206,000.00	171,819.57
10001500	50100	EMPLOYER FICA	8,518.00	-33.13%	12,738.00	10,516.69
10001500	50110	EMPLOYER MEDICARE	1,992.00	-33.60%	3,000.00	2,459.88
10001500	50120	EMPLOYER SC RETIREMENT	25,500.00	-25.22%	34,100.00	27,249.56
10001500	51010	PRINTING	2,500.00	68.35%	1,485.00	588.05
10001500	51030	POSTAGE	1,000.00	-49.49%	1,980.00	786.82
10001500	51140	EQUIPMENT RENTALS	610.00	-42.23%	1,056.00	560.29
10001500	51295	OTHER VEHICLE OPER COSTS	-	NA	-	478.00
10001500	51310	DUES & SUBSCRIPTIONS	300.00	-50.00%	600.00	314.99
10001500	51320	TRAINING & CONFERENCES	7,000.00	-17.65%	8,500.00	3,497.04
10001500	52010	OFFICE SUPPLIES	3,500.00	-25.01%	4,667.00	2,176.02
10001500	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	350.00	-
Total Veteran's Affairs			188,305.00		274,476.00	220,446.91
Together for Beaufort						
10001598	55600	TOGETHER FOR BEAUFORT	398,000.00	0.00%	398,000.00	395,500.00
Total Together for Beaufort			398,000.00		398,000.00	395,500.00
Parks and recreation						
10000600	51962	SUMMER CAMP	-	NA	-	17,258.71
10000604	51961	SENIOR PROGRAM-LCOG	-	NA	-	62.82
10000604	51962	SUMMER CAMP	-	NA	-	5,819.23
10001600	50020	SALARIES AND WAGES	1,933,335.00	-9.81%	2,143,590.00	1,229,829.13
10001600	50024	TEMPORARY/SEASONAL SALARIES	120,000.00	-20.00%	150,000.00	-
10001600	50060	OVERTIME	30,000.00	42.86%	21,000.00	35,074.81
10001600	50100	EMPLOYER FICA	129,167.00	-9.99%	143,505.00	76,877.94
10001600	50110	EMPLOYER MEDICARE	30,208.00	-9.99%	33,562.00	17,980.31
10001600	50120	EMPLOYER SC RETIREMENT	386,667.00	0.88%	383,296.00	197,418.72
10001600	51000	ADVERTISING	2,000.00	33.33%	1,500.00	325.81
10001600	51030	POSTAGE	30.00	0.00%	30.00	164.77
10001600	51040	LICENSES/PERMITS	625.00	0.00%	625.00	575.00
10001600	51050	TELEPHONE	-	-100.00%	3,000.00	-
10001600	51110	MAINTENANCE CONTRACTS	20,000.00	-53.28%	42,810.00	18,309.74
10001600	51120	EQUIPMENT MAINTENANCE	15,000.00	-48.98%	29,400.00	21,134.54
10001600	51130	REPAIRS TO BUILDINGS	35,000.00	-86.00%	250,000.00	26,684.63
10001600	51140	EQUIPMENT RENTALS	3,500.00	-28.72%	4,910.00	2,780.99
10001600	51150	OFFICE SPACE RENTALS	18,000.00	0.00%	18,000.00	-
10001600	51160	PROFESSIONAL SERVICES	155,000.00	0.00%	155,000.00	464,163.10
10001600	51170	NON-PROFESSIONAL SERVICES	4,500.00	0.00%	4,500.00	4,690.31
10001600	51300	GARAGE REPAIRS & MAINTENANCE	-	-100.00%	1,500.00	42.67
10001600	51310	DUES & SUBSCRIPTIONS	7,000.00	-58.82%	17,000.00	1,918.34
10001600	51320	TRAINING & CONFERENCES	10,000.00	NA	-	9,870.50
10001600	51360	ATHLETIC PROGRAMS	35,000.00	-64.43%	98,400.00	23,337.84
10001600	51960	RECREATION PROGRAMS	11,000.00	-1.79%	11,200.00	10,160.11
10001600	51961	SENIOR PROGRAM-LCOG	450,000.00	NA	-	17,700.40
10001600	51990	MISC. EXPENDITURES	-	NA	-	(3,248.15)
10001600	52010	OFFICE SUPPLIES	86,500.00	0.00%	86,500.00	84,914.31
10001600	52050	UNIFORMS	65,000.00	4.12%	62,425.00	59,602.35
10001600	52500	FUELS/LUBRICANTS	-	NA	-	720.21
10001600	52612	EQUIPMENT NON-CAPITAL	-	NA	-	33.86
10001600	54000	VEHICLE PURCHASES	-	NA	-	128,698.00
10001600	54200	CAPITAL EQUIPMENT	-	NA	-	219,152.55
10001600	54420	RENOVATIONS EXIST BLDGS	-	-100.00%	600,000.00	30,000.00
10001600	57900	CREDIT CARD FEES	-	-100.00%	3,200.00	11,146.34
10001604	50020	SALARIES AND WAGES	854,265.00	-21.09%	1,082,601.00	570,981.05
10001604	50060	OVERTIME	30,000.00	900.00%	3,000.00	26,564.46
10001604	50100	EMPLOYER FICA	54,824.00	-18.55%	67,307.00	35,548.02
10001604	50110	EMPLOYER MEDICARE	12,822.00	-18.54%	15,741.00	8,313.88

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001604	50120	EMPLOYER SC RETIREMENT	164,120.00	-8.71%	179,775.00	93,493.57
10001604	51000	ADVERTISING	2,000.00	300.00%	500.00	473.52
10001604	51040	LICENSES/PERMITS	125.00	0.00%	125.00	175.00
10001604	51110	MAINTENANCE CONTRACTS	16,500.00	7.81%	15,304.00	18,470.70
10001604	51120	EQUIPMENT MAINTENANCE	20,000.00	-33.33%	30,000.00	18,464.24
10001604	51130	REPAIRS TO BUILDINGS	20,000.00	-69.70%	66,000.00	9,476.23
10001604	51160	PROFESSIONAL SERVICES	140,000.00	-33.36%	210,070.00	201,078.50
10001604	51170	NON-PROFESSIONAL SERVICES	2,000.00	0.00%	2,000.00	-
10001604	51310	DUES & SUBSCRIPTIONS	700.00	6.06%	660.00	756.40
10001604	51320	TRAINING & CONFERENCES	3,000.00	-25.00%	4,000.00	1,702.45
10001604	51360	ATHLETIC PROGRAMS	40,000.00	-20.00%	50,000.00	23,137.01
10001604	51369	ATHLETIC PROGRAMS - ATAX	-	NA	-	17,837.29
10001604	51960	RECREATION PROGRAMS	15,000.00	-50.00%	30,000.00	6,663.15
10001604	51961	SENIOR PROGRAM-LCOG	50,000.00	NA	-	6,994.37
10001604	52010	OFFICE SUPPLIES	100,000.00	-33.02%	149,300.00	75,846.00
10001604	52050	UNIFORMS	145,000.00	31.82%	110,000.00	121,292.37
10001604	52500	FUELS/LUBRICANTS	-	NA	-	49.77
10001604	52600	OFFICE FURN & EQUIP. NON-CAPIT	6,000.00	NA	-	-
10001604	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	6,000.00	15,017.10
10001604	54200	CAPITAL EQUIPMENT	-	NA	-	27,227.22
Total Parks and recreation			5,223,888.00		6,287,336.00	3,992,762.19
Passive Parks Department						
10001610	50020	SALARIES AND WAGES	183,245.00	NA	-	-
10001610	50100	EMPLOYER FICA	11,361.00	NA	-	-
10001610	50110	EMPLOYER MEDICARE	2,657.00	NA	-	-
10001610	50120	EMPLOYER SC RETIREMENT	34,010.00	NA	-	-
10001610	51000	ADVERTISING	250.00	NA	-	-
10001610	51010	PRINTING	250.00	NA	-	-
10001610	51030	POSTAGE	250.00	NA	-	-
10001610	51120	EQUIPMENT MAINTENANCE	100.00	NA	-	-
10001610	51130	REPAIRS TO BUILDINGS	50,000.00	NA	-	-
10001610	51310	DUES & SUBSCRIPTIONS	3,000.00	NA	-	-
10001610	51320	TRAINING & CONFERENCES	6,000.00	NA	-	-
10001610	52010	OFFICE SUPPLIES	10,000.00	NA	-	-
10001610	52050	Uniforms	600.00	NA	-	-
10001610	52600	OFFICE FURN & EQUIP. NON-CAPIT	7,500.00	NA	-	-
10001610	52610	TECHNOLOGY EQUIP (NON-CAP)	1,500.00	NA	-	-
Total Passive Parks Department			310,723.00		-	-
Libraries						
10001620	50020	SALARIES AND WAGES	3,278,240.00	2.05%	3,212,411.00	2,825,616.58
10001620	50060	OVERTIME	-	NA	-	18.95
10001620	50100	EMPLOYER FICA	203,251.00	2.05%	199,169.00	169,723.97
10001620	50110	EMPLOYER MEDICARE	47,534.00	2.05%	46,580.00	39,694.75
10001620	50120	EMPLOYER SC RETIREMENT	608,441.00	14.37%	531,975.00	447,495.56
10001620	51010	PRINTING	7,500.00	50.00%	5,000.00	4,840.70
10001620	51030	POSTAGE	11,500.00	8.49%	10,600.00	10,556.86
10001620	51110	MAINTENANCE CONTRACTS	90,000.00	-18.18%	110,000.00	116,033.29
10001620	51120	EQUIPMENT MAINTENANCE	-	-100.00%	300.00	-
10001620	51140	EQUIPMENT RENTALS	6,000.00	-41.46%	10,250.00	1,923.12
10001620	51160	PROFESSIONAL SERVICES	37,500.00	7.14%	35,000.00	37,886.37
10001620	51300	GARAGE REPAIRS & MAINTENANCE	-	-100.00%	150.00	90.70
10001620	51310	DUES & SUBSCRIPTIONS	37,000.00	640.00%	5,000.00	4,097.74
10001620	51320	TRAINING & CONFERENCES	5,000.00	150.00%	2,000.00	-
10001620	51540	INSURANCE - OTHER	-	NA	-	(2,652.62)
10001620	52010	OFFICE SUPPLIES	475,000.00	60.47%	296,000.00	287,234.21
10001620	52050	Uniforms	1,750.00	NA	-	-
10001620	52612	EQUIPMENT NON-CAPITAL	5,000.00	0.00%	5,000.00	3,845.55
10001620	57900	CREDIT CARD FEES	3,000.00	-25.00%	4,000.00	1,658.11
Total Libraries			4,816,716.00		4,473,435.00	3,948,063.84
Fourteenth Circuit Public Defender						
10001999	59651	Fourteenth Circuit Public Defender	1,570,131.00	0.00%	1,570,131.00	1,498,131.00
Total Fourteenth Circuit Public Defender			1,570,131.00		1,570,131.00	1,498,131.00
Human Services						
10001510	55010	FOSTER CARE	-	NA	-	6,000.00

BEAUFORT COUNTY GENERAL FUND
RECOMMENDED BUDGET FISCAL YEAR 2024 GENERAL FUND

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
10001510	55020	EMERGENCY ASSISTANCE	-	NA	-	48,667.00
			-		-	54,667.00
Transfers to other funds						
10001999	59101	Transfer Out AD&D & DSN	2,883,511.00	NA	-	1,567,408.96
10001999	59202	XFER TO DAUFUSKIE FERRY FUND	180,000.00	0.00%	180,000.00	180,000.00
10001999	59261	XFER TO A&D PROGRAMS FUND	-	NA	-	536,337.00
10001999	59271	XFER TO VICTIM ASST PRGM FUND	-	NA	-	10,000.00
10001999	59273	XFER TO SCHL RESC OFFICER FUND	240,730.00	11.10%	216,686.00	200,101.00
10001999	59281	XFER TO COSY PROGRAM FUND	346,767.00	54.05%	225,106.00	225,106.00
10001999	59510	XFER TO GARAGE FUND	3,224,731.00	10.43%	2,920,030.00	2,093,351.30
Total transfers to other funds			6,875,739.00		3,541,822.00	4,812,304.26
Payments to outside entities based on millage						
10100011	55240	ECONOMIC DEVELOPMENT	780,488.00	15.70%	674,563.00	353,960.78
14010011	55110	BEAUFORT MEMORIAL HOSPITAL	1,040,651.00	15.70%	899,418.00	852,775.00
14020011	55130	BEAUFORT JASPER HAMPTON COMP H	1,040,651.00	15.70%	899,418.00	852,775.00
16000011	55140	PAYMENTS TO T C L	2,861,790.00	10.67%	2,585,826.00	2,451,728.00
16000011	55150	PAYMENTS TO USC-B	2,861,790.00	10.67%	2,585,826.00	2,451,728.00
Total payments to outside entities based on millage			8,585,370.00		7,645,051.00	6,962,966.78
Total expenditures			152,231,098.00		142,112,406.00	126,322,099.22
Net (surplus)/ deficit			-		(6,401.00)	(8,502,097.65)

Beaufort County
South Carolina

Beaufort County
Administrator's Proposed Budget

FY2024 Budget Highlights
May 8, 2023

Administration Overview

Administration is responsible for the effective implementation of policies set by County Council that govern daily operations and ensure services are provided continually and efficiently, and through sound fiscal accountability whereby the expense is equitably shared among citizens.

FY2024 Priorities

I. Compensation adjustments to remain competitive (3% additional compensation, some reclassifications, PLT cash-out)
II. State-mandated increase in both ERS and PORS (1% each)
III. State-mandated increase in Magistrate pay ($5,000 each)
IV. Wellness Initiatives for long-term reduction in claims expense
V. Address deferred facilities needs and capital needs
VI. Increase in external entity funding (Higher Education, Indigent Care, Economic Development, Island Recreation)
VII. Expand programming for children and seniors

FY2024 Overview by Fund Type

GENERAL FUND

$152,231,098

INCREASE OF $10.1M OR 7.1%

Revenue budget increases:

- Property taxes $11.0m – based on rollback millage from 44.3 to 42.3
- Building permits $554,000
- Interest on investments $445,000
- State aid to subdivisions (local government fund) $402,238

Revenue budget decreases:

Documentary stamps and deed recording $1.3m
Transfer from hospitality tax fund $1.7m
Business licenses $300,000
Franchise fees $170,000

Expenditure budget increases:

Payroll contingency $4,150,000
(to fund PTO payout and all vacancies in general fund)
Transfers out to DSN and AD&D (haven't had to supplement these departments in a few years) $2.8m
Salaries of elected officials' depts. (collectively) $832,268
Technology equipment/sheriff's office $892,044

Expenditure budget decreases:

Salaries for all departments (less elected officials') $1,254,161
Moving all capital items to the Capital Imp. Fund $823,778
Tort liability insurance (was overbudgeted in the past) $388,000
Professional services (overbudgeted in the past) $321,000

Beaufort County

Subsidies to outside entities

	2021 Awarded	2022 Awarded	2023 Awarded	2024 Requested	County Administrator 2024 Recommended
Technical College of the Lowcountry	$ 2,318,016	$ 2,451,728	$ 2,585,826	$ 2,861,790	$ 2,861,790
University of South Carolina Beaufort	2,318,016	2,451,728	2,585,826	2,861,790	2,861,790
Beaufort Memorial Hospital (millage)	978,066	852,775	899,418	2,000,000	1,040,651
Beaufort Memorial Hospital (ARPA Funded)	-	-	-	500,000	500,000
Beaufort Memorial Hospital (ARPA Funded)	-	-	-	250,000	250,000
Beaufort Jasper Comprehensive Health	919,382	852,775	899,418	1,050,000	1,040,651
Economic Development	508,594	426,388	674,563	780,488	780,488
14th Circuit Solicitor	1,887,500	1,887,500	1,700,450	1,700,450	1,700,450
14th Circuit Defender	1,648,131	1,498,131	1,570,131	1,570,131	1,570,131
Lowcountry Regional Transportation Authority (LRTA)	357,052	338,928	337,097	575,143	337,097
Island Recreation	135,000	135,000	145,000	150,000	150,000
Small Business Development Center	35,000	35,000	40,000	40,000	40,000
Ronald McDonald House	81,000	81,000	81,000	-	-
Military Enhancement Committee	62,000	-	100,000	100,000	100,000
Beaufort Water & Soil Conservation District	25,000	25,000	25,000	25,000	25,000
Beaufort County Economic Development Corporation	375,000	375,000	375,000	375,000	375,000
SouthernCarolina Alliance	120,000	120,000	120,000	120,000	120,000
Lowcountry Council of Governments (LCOG)	121,675	121,675	140,338	140,338	140,338
LCOG MPO Funding	17,386	49,117	25,457	26,155	26,155
LCOG Home Consortium	56,000	56,000	75,000	75,000	75,000
	$ 11,962,818	$ 11,757,745	$ 12,379,524	$ 15,201,285	$ 13,994,541

Capital Improvement Fund
$21,232,455
(SEE NEXT SLIDE FOR DETAIL)

PROJECT	DEPARTMENT	FY2024
DSN Pathway - approved by Council 3/27/2023		$250,000.00
Facility Parking Lot Repair/Rejuvenation	Facilities Management	$1,225,000.00
Aumentum Tax Software Upgrade	IT: Mapping and Applic	$1,840,000.00
Probate Case Management Software	IT: Mapping and Applic	$52,500.00
Vehicles	Sheriff's Office	$360,430.00
Motorola / Spillman Arrest Module	Sheriff's Office	$49,000.00
Mobile Data Computer Replacements-85 units (in operating fund) for	Sheriff's Office	$189,466.00
EMS - ambulances encumbered in FY 23	EMS	$1,203,000.00
EMS Headquarters and EMS 1 Station	EMS	$1,500,000.00
Carpet/Tile Replacement and furnishing replacement	Detention Center	$800,000.00
Vehicles		$47,000.00
Bucket Truck, Dump Truck, Mower Max	Public Works	$688,500.00
Detention Center Stucco Repair	Facilities Management	$496,000.00
Myrtle Park Building HVAC/Energy Management System	Facilities Management	$145,000.00
Burton Wells HVAC/Energy Management System	Facilities Management	$885,000.00
Administration Building Office Renovations	Facilities Management	$800,000.00
New A. Horne Building Phase 2	Facilities Management	$900,000.00
800 Mhz Tower Generator	Facilities Management	$173,500.00
Myrtle Park Generator	Facilities Management	$368,000.00
BIV I, BIV II	Facilities Management	$100,000.00
Spanish Moss Trail Pedestrian Bridge Repair at Battery Creek near TCL	Capital Projects	$460,000.00
FY 2023 Carryforward for Projects approved with Surplus	Various	$2,000,000.00
Vehicles	Mosquito Control	$57,559.00
2 Vans	Parks and Recreation	$192,000.00
Capital Equipment - trailers and mowers and ABI attachment	Parks and Recreation	$407,000.00
Beaufort HS Pool – HVAC, Building Envelope, and Renovation	Parks and Recreation	$644,000.00
Bluffton Center Bldg. Remodel	Parks and Recreation	$211,000.00
Lind Brown Center	Parks and Recreation	$250,000.00
Southside Pickleball	Parks and Recreation	$582,500.00
Scott Center Remodel	Parks and Recreation	$37,000.00
MC Riley Pool – HVAC, Building Envelope, and Renovation	Parks and Recreation	$1,985,000.00
Battery Creek HS Pool – Structural repairs to Roof	Parks and Recreation	$900,000.00
Beaufort HS Pool – Structural repairs to Roof	Parks and Recreation	$900,000.00
Port Royal Center	Parks and Recreation	$84,000.00
Booker T Center	Parks and Recreation	$66,000.00
Buckwalter Generator	Parks and Recreation	$352,000.00
Vehicle	Library	$32,000.00
	TOTAL CIP BUDGET	$21,232,455.00

MILLAGES

	$8,491,382.79	more in revenue than last FY (OPERATIONS)		
	PY MILLAGE	%	NEW MILLAGE	ADD'L REVENUE
GENERAL FUND OPERATING	44.3	0.8219	42.300	$6,979,002.92
HIGHER EDUCATION	2.3	0.0427	2.200	$362,341.01
INDIGENT CARE - BJHCHS	0.4	0.0074	0.400	$63,015.83
INDIGENT CARE - BMH	0.4	0.0074	0.400	$63,015.83
CAPITAL IMP FUND	1.6	0.0297	2.400	$252,063.31
SOLID WASTE	4.6	0.0853	3.700	$724,682.02
ECONOMIC DEVELOPMENT	0.3	0.0056	0.300	$47,261.87
	53.9	1.00	51.700	$8,491,382.79
DEBT SERVICE FUND	**5.6**	***PAYING OFF DEBT**	**3.4**	**-$3,479,813**
PURCHASE OF REAL PROPERTY	5.3		4.4	-$1,198,981

TOTAL REDUCTION IN OVERALL MILLAGE BY BEAUFORT COUNTY COUNCIL = 5.3 MILLS

GARAGE FUND
Budget: $3,224,731

We are estimating a savings of approximately $665,000 by employing our own vehicle maintenance staff versus contracting these services out.

SOLID WASTE FUND
Budget: $11,769,000

This budget decreased by $908,752 over last year's due to an overbudgeted health insurance line item ($472,709 savings); site development ($1,193,815); but an increase in professional services and capital equipment.

Questions?

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
State Accommodations Tax Fund						
Revenues						
20000001	43320	ACCOMMD'TN TX FNDS-STATE	(1,350,000.00)	12.50%	(1,200,000.00)	(1,554,905.96)
20000001	46010	INTEREST ON INVESTMENTS	(5,000.00)	NA	-	(901.00)
20000001	48910	CONT FROM PR YR FUND BAL	(453,750.00)	NA	-	-
Total revenues			(1,808,750.00)		(1,200,000.00)	(1,555,806.96)
Expenditures						
20000011	55000	DIRECT SUBSIDIES	1,320,000.00	72.83%	763,750.00	627,999.00
20000011	55010	OTHER SUBSIDIES	-	NA	-	-
20000011	55240	BFT CHAMBER OF COMMERCE	198,750.00	12.77%	176,250.00	229,485.90
20000011	55280	HHI - BLUFFTON CHAMBER OF COMM	198,750.00	12.77%	176,250.00	229,485.90
20000011	59100	XFER TO GENERAL FUND	91,250.00	8.96%	83,750.00	76,495.30
Total Expenditures			1,808,750.00		1,200,000.00	1,163,466.10
Net (surplus)/ deficit			-		-	(392,340.86)
Local Accommodations Tax						
Revenues						
20010001	42320	ACCOMODATIONS TAX - LOCAL	(2,000,000.00)	42.86%	(1,400,000.00)	(2,186,144.18)
20010001	45600	LATE PENALTIES - BUS LICENSE	(2,000.00)	100.00%	(1,000.00)	(2,616.66)
20010001	46010	INTEREST ON INVESTMENTS	(30,000.00)	100.00%	(15,000.00)	(13,355.00)
20010001	47010	MISCELLANEOUS REVENUES	-	NA	-	-
20010001	48910	CONT FROM PR YR FUND BAL	(3,328,374.28)	-17.01%	(4,010,424.00)	-
Total revenues			(5,360,374.28)		(5,426,424.00)	(2,202,115.84)
Expenditures						
20010011	54124	Beaufort County Public Works	356,688.40	78.34%	200,000.00	-
20010011	54125	PENN CTR ATAX 2019/56	451,250.36	-35.99%	704,928.00	53,461.86
20010011	54126	BC - CAPITAL PROJECTS	355,000.00	-52.98%	755,000.00	-
20010011	54129	Whitehall Bridge-COB	-	-100.00%	234,482.00	151,450.34
20010011	54133	BEAUFORT EXECUTIVE AIRPORT	4,896.00	-93.47%	75,000.00	-
20010011	54162	Beaufort County Daufuskie	250,000.00	0.00%	250,000.00	-
20010011	55010	OTHER SUBSIDIES	2,235,000.00	NA	-	-
20010011	55012	Pat Conroy Literacy Center	114,110.52	-14.84%	134,000.00	2,833.04
20010011	55013	Gullah Museum of HHI	9,875.00	-73.22%	36,875.00	-
20010011	55014	First African Baptist Church	252,600.00	-2.65%	259,480.00	-
20010011	55100	COUNTY WIDE ADVERTISING	350,000.00	0.00%	350,000.00	350,000.00
20010011	55120	RIVER / BEACH ACCESS PROJECTS	27,000.00	-41.30%	46,000.00	43,389.90
20010011	59100	XFER TO GENERAL FUND	400,000.00	NA	-	-
20010021	54124	Beaufort County Public Works	-	-100.00%	32,465.00	32,465.00
20010021	54128	BEAUFORT COUNTY CAPITAL PROJEC	330,000.00	-24.91%	439,465.00	46,785.00
20010021	54129	CITY OF BEAUFORT	-	-100.00%	29,273.00	350,000.00
20010021	55003	COMMUNITY FOUNDATION OF THE LO	223,954.00	-10.94%	251,455.00	133,000.00
Total Expenditures			5,360,374.28		3,798,423.00	1,163,385.14
Net (surplus)/ deficit			-		(1,628,001.00)	(1,038,730.70)

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
Local Hospitality Tax						
Revenues						
20020001	42330	LOCAL HOSPITALITY TAX	(2,800,000.00)	7.69%	(2,600,000.00)	(2,834,499.53)
20020001	45600	LATE PENALTIES - BUS LICENSE	-	NA	-	(11,081.13)
20020001	46010	INTEREST ON INVESTMENTS	(40,000.00)	135.29%	(17,000.00)	(7,071.00)
20020001	48910	CONT FROM PR YR FUND BAL	(3,220,000.00)	4.91%	(3,069,386.00)	-
Total revenues			(6,060,000.00)		(5,686,386.00)	(2,852,651.66)
Expenditures						
20020011	51002	ADVERTISING AIRPORTS	-	-100.00%	30,000.00	-
20020011	54126	SPANISH MOSS TRAIL 2020/10	47,827.63	-36.79%	75,663.00	34,903.16
20020011	54127	CC Haigh Landing	9,815.31	-94.51%	178,643.00	74,343.50
20020011	54151	BEAUFORT COUNTY PARKS & REC	-	-100.00%	200,000.00	-
20020011	54161	Beaufort Co Passive Parks	-	-100.00%	560,478.00	111,892.50
20020011	54450	OTHER IMPROVEMENTS	36,650.00	NA	-	-
20020011	55000	DIRECT SUBSIDIES	3,895,193.03	148.79%	1,565,626.00	134,117.82
20020011	55002	BEAUFORT AREA HOSPITALITY	20,000.00	0.00%	20,000.00	-
20020011	55007	Friends of PR Cypress Wetlands	-	-100.00%	1,375.00	805.60
20020011	55008	HHI St Patrick's Parade	10,000.00	0.00%	10,000.00	-
20020011	55009	Daufuskie Island Foundation	12,600.00	0.00%	12,600.00	-
20020011	55011	Sea Turtle Patrol	-	-100.00%	5,000.00	4,986.39
20020011	55015	Tabernacle Baptist Church	100,000.00	0.00%	100,000.00	150,000.00
20020011	59100	XFER TO GENERAL FUND	-	-100.00%	1,708,000.00	1,500,000.00
20020021	51002	ADVERTISING AIRPORTS	-	NA	-	30,000.00
20020021	51003	ADVERTISING PARKS & REC	47,083.00	NA	-	9,917.12
20020021	54124	Beaufort County Public Works	1,133,417.18	1522.76%	69,845.00	151,866.78
20020021	54133	BEAUFORT EXECUTIVE AIRPORT	-	NA	-	80,000.00
20020021	54151	BEAUFORT COUNTY PARKS & REC	747,413.85	94.26%	384,741.00	763.00
20020021	55002	BEAUFORT AREA HOSPITALITY	-	NA	-	2,460.00
20020021	55004	PORT ROYAL FOUNDATION & MUS	-	NA	-	5,000.00
20020021	55006	COASTAL DISCOVERY MUSEUM	-	-100.00%	747,414.00	2,586.15
Total Expenditures			6,060,000.00		5,669,385.00	2,293,642.02
Net (surplus)/ deficit			-		(17,001.00)	(559,009.64)
Passive Parks Program						
Revenues						
20050001	46010	INTEREST ON INVESTMENTS	(3,000.00)	NA	-	(1,911.00)
20050001	47210	RENTAL CO PROPERTY-OTHERS	(4,800.00)	-60.00%	(12,001.00)	(7,401.00)
20050001	47215	RENTAL CO PROPERTY- EVENTS	(3,000.00)	0.00%	(3,000.00)	(9,050.00)
20050001	47430	TIMBER HARVESTS	-	-100.00%	(276,490.00)	(126,490.00)
20050001	48910	CONT FROM PR YR FUND BAL	(1,253,759.63)	6.32%	(1,179,220.00)	-
20050001	49200	Transfers In	-	NA	-	(1,179,345.77)
Total revenues			(1,264,559.63)		(1,470,711.00)	(1,324,197.77)
Expenditures						
20050011	51170	NON-PROFESSIONAL SERVICES	200,000.00	100.00%	100,000.00	15,259.45
20050011	51270	GROUNDS MAINT SERVICES	50,000.00	900.00%	5,000.00	10,372.26
20050011	52340	SIGNAGE	-	-100.00%	5,000.00	588.18
20050011	54404	Fort Frederick	-	-100.00%	20,000.00	800.00
20050011	54406	New Riverside	1,000,000.00	0.00%	1,000,000.00	-
20050011	54421	Bailey Memorial Park	-	-100.00%	10,000.00	-
20050011	56000	GENERAL CONTINGENCY	14,559.63	NA	-	-
Total Expenditures			1,264,559.63		1,140,000.00	27,019.89
Net (surplus)/ deficit			-		(330,711.00)	(1,297,177.88)

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
Local Admissions Fees						
Revenues						
20100001	42340	LOCAL ADMISSIONS FEES	(2,100,000.00)	5.00%	(2,000,000.00)	(2,457,853.39)
20100001	45600	LATE PENALTIES - BUS LICENSE	-	NA	-	(16.22)
20100001	46010	INTEREST ON INVESTMENTS	(20,000.00)	NA	-	(7,093.00)
Total revenues			(2,120,000.00)		(2,000,000.00)	(2,464,962.61)
Expenditures						
20100011	56000	GENERAL CONTINGENCY	120,000.00	NA	-	-
20100011	59325	XFER TO BLUFN PARKWAY D S FUND	2,000,000.00	0.00%	2,000,000.00	2,000,000.00
Total Expenditures			2,120,000.00		2,000,000.00	2,000,000.00
Net (surplus)/ deficit			-		-	(464,962.61)
Treasurer's Execution Fees						
Revenues						
20110001	44210	TREASURER'S EXECUTION FEE	(1,500,000.00)	0.00%	(1,500,000.00)	(923,775.61)
20110001	46010	INTEREST ON INVESTMENTS	(30,000.00)	0.00%	(30,000.00)	(1,297.00)
20110001	47010	MISCELLANEOUS REVENUES	-	NA	-	(600.00)
20110001	47500	TRUST FUNDS RECEIVED	(10,000.00)	0.00%	(10,000.00)	(163.75)
20110001	47502	BIDDER FEES	-	NA	-	(2,670.00)
20110001	48910	CONT FROM PR YR FUND BAL	-	-100.00%	(505,788.00)	-
Total revenues			(1,540,000.00)		(2,045,788.00)	(928,506.36)
Expenditures						
20110011	50020	SALARIES AND WAGES	1,116,282.00	13.06%	987,314.00	910,183.17
20110011	50060	OVERTIME	14,000.00	-3.31%	14,480.00	6,032.88
20110011	50100	EMPLOYER FICA	69,768.00	12.33%	62,111.00	55,330.01
20110011	50110	EMPLOYER MEDICARE	16,744.00	15.27%	14,526.00	12,940.16
20110011	50120	EMPLOYER SC RETIREMENT	178,605.00	7.66%	165,897.00	139,167.89
20110011	50140	EMPLOYER GROUP INSURANCE	50,000.00	0.00%	50,000.00	55,556.94
20110011	50150	EMPLOYER WORK COMP INS	6,500.00	0.00%	6,500.00	6,500.00
20110011	50160	EMPLOYER TORT LIAB	1,500.00	0.00%	1,500.00	560.49
20110011	51000	ADVERTISING	120,000.00	14.29%	105,000.00	82,757.05
20110011	51010	PRINTING	14,000.00	0.00%	14,000.00	30,103.01
20110011	51030	POSTAGE	70,000.00	2.94%	68,000.00	106,037.09
20110011	51050	TELEPHONE	850.00	0.00%	850.00	529.40
20110011	51110	MAINTENANCE CONTRACTS	-	-100.00%	3,000.00	-
20110011	51160	PROFESSIONAL SERVICES	200,000.00	60.00%	125,000.00	121,927.43
20110011	51162	LEGAL SERVICES	250,000.00	0.00%	250,000.00	46,907.50
20110011	51300	GARAGE REPAIRS & MAINTENANCE	-	-100.00%	500.00	118.37
20110011	51310	DUES & SUBSCRIPTIONS	15,000.00	0.00%	15,000.00	10,287.51
20110011	51320	TRAINING & CONFERENCES	42,000.00	40.00%	30,000.00	19,535.94
20110011	51500	VEHICLE INSURANCE	1,000.00	0.00%	1,000.00	797.10
20110011	51990	MISC. EXPENDITURES	5,000.00	-61.54%	13,000.00	15,664.91
20110011	52010	OFFICE SUPPLIES	7,500.00	0.00%	7,500.00	10,250.67
20110011	52020	DATA PROCESSING SUPPLIES	-	-100.00%	1,000.00	-
20110011	52500	FUELS/LUBRICANTS	-	-100.00%	500.00	-
20110011	52600	OFFICE FURN & EQUIP. NON-CAPIT	-	-100.00%	3,000.00	-
20110011	52610	TECHNOLOGY EQUIP (NON-CAP)	25,000.00	24.32%	20,110.00	10,550.20
20110011	54100	OFFICE FURN AND EQUIPMENT	-	-100.00%	3,000.00	-
20110011	54110	DATA PROCESSING EQUIPMENT	-	-100.00%	2,000.00	-
20110011	57700	TRUST FUNDS DISBURSED	5,000.00	0.00%	5,000.00	250.00
20110011	57900	CREDIT CARD FEES	75,000.00	0.00%	75,000.00	300.00
Total Expenditures			2,283,749.00		2,044,788.00	1,642,287.72
Net (surplus)/ deficit			743,749.00		(1,000.00)	713,781.36

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
Group Health Insurance						
Revenues						
20340001	47040	CONTRIBUTION - EMPLOYER	-	-100.00%	(9,500,000.00)	-
20340001	47050	CONTRIBUTION - EMPLOYEES	(14,857,000.00)	23.81%	(12,000,000.00)	(13,183,401.81)
20340001	48910	CONT FROM PR YR FUND BAL	(1,556,299.00)	NA	-	-
20340001	49200	Transfers In	-	NA	-	(1,531,983.29)
Total revenues			(16,413,299.00)		(21,500,000.00)	(14,715,385.10)
Expenditures						
20340011	51560	GROUP INSURANCE - MEDICAL	13,100,000.00	-2.34%	13,413,855.00	12,134,200.46
20340011	51565	GROUP INSURANCE - VISION/OTHER	800,000.00	0.00%	800,000.00	752,818.42
20340011	51570	GROUP INSURANCE - DENTAL	650,000.00	0.00%	650,000.00	617,744.83
20340011	51580	GROUP BENEFITS - WORKERS COMP	-	-100.00%	2,000,000.00	-
20340011	51590	EMPLOYEE WELLNESS BENEFITS	-	NA	-	7,265.00
20340011	51980	ADMINISTRATIVE FEES	1,863,299.00	NA	-	1,584,673.38
Total Expenditures			16,413,299.00		16,863,855.00	15,096,702.09
Net (surplus)/ deficit			-		(4,636,145.00)	381,316.99
Clerk of Court Incentives						
Revenues						
21000001	43285	FAM CT - TITLE IV-D INCENTIVE	(30,000.00)	-40.00%	(50,000.00)	(70,924.95)
21000001	46010	INTEREST ON INVESTMENTS	(3,000.00)	2900.00%	(100.00)	(1,135.00)
Total revenues			(33,000.00)		(50,100.00)	(72,059.95)
Expenditures						
21000011	51010	PRINTING	200.00	0.00%	200.00	174.10
21000011	51030	POSTAGE	4,800.00	60.00%	3,000.00	2,003.08
21000011	51110	MAINTENANCE CONTRACTS	-	-100.00%	1,300.00	-
21000011	51160	PROFESSIONAL SERVICES	3,000.00	-75.00%	12,000.00	-
21000011	51320	TRAINING & CONFERENCES	5,000.00	0.00%	5,000.00	-
21000011	52010	OFFICE SUPPLIES	5,000.00	-64.54%	14,100.00	-
21000011	52600	OFFICE FURN & EQUIP. NON-CAPIT	15,000.00	3.45%	14,500.00	-
Total Expenditures			33,000.00		50,100.00	2,177.18
Net (surplus)/ deficit			-		-	(69,882.77)
Clerk of Court Unit Cost						
Revenues						
21010001	43280	COC CHILD SUPP UNIT COSTS	(205,207.00)	-17.92%	(250,000.00)	(243,622.27)
21010001	46010	INTEREST ON INVESTMENTS	-	NA	-	(1,134.00)
21010001	48910	CONT FROM PR YR FUND BAL	(13,803.00)	NA	-	-
Total revenues			(219,010.00)		(250,000.00)	(244,756.27)
Expenditures						
21010011	50020	SALARIES AND WAGES	173,528.00	NA	-	0.18
21010011	50100	EMPLOYER FICA	10,759.00	NA	-	-
21010011	50110	EMPLOYER MEDICARE	2,516.00	NA	-	-
21010011	50120	EMPLOYER SC RETIREMENT	32,207.00	NA	-	-
21010011	50140	EMPLOYER GROUP INSURANCE	-	-100.00%	30,000.00	-
21010011	50150	EMPLOYER WORK COMP INS	-	-100.00%	2,500.00	2,500.00
21010011	50160	EMPLOYER TORT LIAB	-	-100.00%	100.00	-
21010011	51010	PRINTING	-	-100.00%	4,000.00	-
21010011	51030	POSTAGE	-	-100.00%	13,000.00	3,472.77
21010011	51110	MAINTENANCE CONTRACTS	-	-100.00%	10,000.00	-
21010011	52010	OFFICE SUPPLIES	-	-100.00%	2,000.00	2,677.57
21010011	59100	XFER TO GENERAL FUND	-	NA	-	600,000.00
Total Expenditures			219,010.00		61,600.00	608,650.52

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
Net (surplus)/ deficit			-		(188,400.00)	363,894.25
Public Defender						
Revenues						
21100001	43220	PUBLIC DEFENDER STIPEND	(1,555,000.00)	26.94%	(1,225,000.00)	(1,347,159.07)
21100001	43225	PUBLIC DEFENDER STATE REIMB	-	NA	-	(21,929.79)
21100001	46010	INTEREST ON INVESTMENTS	(4,200.00)	133.33%	(1,800.00)	(1,575.00)
21100001	47030	CONTRIBUTION - BEAUFORT	(71,147.49)	55.48%	(45,760.00)	(45,759.99)
21100001	47040	CONTRIBUTION - COLLETON	(375,081.00)	31.57%	(285,081.00)	(285,081.01)
21100001	47050	CONTRIBUTION - HAMPTON	(71,250.00)	50.00%	(47,500.00)	(71,250.00)
21100001	47060	CONTRIBUTION - JASPER	(119,000.00)	0.00%	(119,000.00)	(119,000.00)
21100001	47065	CONTRIBUTION - BLUFFTON	(71,147.49)	55.48%	(45,760.00)	(46,007.04)
21100001	47070	CONTRIBUTION - ALLENDALE	(20,000.00)	0.00%	(20,000.00)	(30,000.00)
21100001	47075	CONTRIBUTION - PORT ROYAL	(71,147.49)	55.48%	(45,760.00)	(46,034.04)
21100001	49100	TRANSFERS IN	(1,570,131.00)	0.00%	(1,570,131.00)	(1,498,131.00)
Total revenues			(3,928,104.47)		(3,405,792.00)	(3,511,926.94)
Expenditures						
21100011	50020	SALARIES AND WAGES	2,539,855.00	7.25%	2,368,057.00	2,162,230.42
21100011	50100	EMPLOYER FICA	157,471.00	7.25%	146,820.00	130,099.34
21100011	50110	EMPLOYER MEDICARE	36,828.00	7.25%	34,337.00	30,426.21
21100011	50120	EMPLOYER SC RETIREMENT	392,120.47	-0.01%	392,150.00	341,830.53
21100011	50140	EMPLOYER GROUP INSURANCE	420,000.00	40.00%	300,000.00	422,173.78
21100011	50150	EMPLOYER WORK COMP INS	4,680.00	-53.20%	10,000.00	20,000.00
21100011	50160	EMPLOYER TORT LIAB	4,300.00	186.67%	1,500.00	4,596.62
21100011	51010	PRINTING	1,500.00	0.00%	1,500.00	1,256.57
21100011	51030	POSTAGE	3,000.00	20.00%	2,500.00	3,258.79
21100011	51050	TELEPHONE	32,000.00	6.67%	30,000.00	32,399.88
21100011	51140	EQUIPMENT RENTALS	12,500.00	4.17%	12,000.00	8,586.31
21100011	51160	PROFESSIONAL SERVICES	245,000.00	0.33%	244,202.00	235,472.80
21100011	51295	OTHER VEHICLE OPER COSTS	250.00	-50.00%	500.00	206.36
21100011	51300	GARAGE REPAIRS & MAINTENANCE	1,000.00	-66.67%	3,000.00	-
21100011	51310	DUES & SUBSCRIPTIONS	13,000.00	4.00%	12,500.00	10,381.20
21100011	51320	TRAINING & CONFERENCES	30,000.00	-6.25%	32,000.00	25,857.45
21100011	51500	VEHICLE INSURANCE	9,600.00	37.14%	7,000.00	8,535.40
21100011	52010	OFFICE SUPPLIES	12,500.00	4.17%	12,000.00	12,754.60
21100011	52500	FUELS/LUBRICANTS	9,000.00	28.57%	7,000.00	9,544.46
21100011	52600	OFFICE FURN & EQUIP. NON-CAPIT	2,000.00	0.00%	2,000.00	2,108.31
21100011	54000	VEHICLE PURCHASES	-	NA	-	77,089.91
21100011	54110	DATA PROCESSING EQUIPMENT	1,500.00	NA	-	-
Total Expenditures			3,928,104.47		3,619,066.00	3,538,808.94
Net (surplus)/ deficit			-		213,274.00	26,882.00
E-911						
Revenues						
22010001	43210	STATE E-911 REVENUE	(1,473,012.00)	103.17%	(725,000.00)	(895,899.76)
22010001	44670	E-911 TELEPHONE CHARGES	(255,357.00)	-48.93%	(500,000.00)	(362,473.47)
22010001	44680	E-911 TELEPHONE - PHASE II	-	-100.00%	(700,000.00)	-
22010001	46010	INTEREST ON INVESTMENTS	(20,000.00)	100.00%	(10,000.00)	(10,074.00)
22010001	48910	CONT FROM PR YR FUND BAL	(849,644.00)	-61.14%	(2,186,484.00)	-
Total revenues			(2,598,013.00)		(4,121,484.00)	(1,268,447.23)
Expenditures						
22010011	50020	SALARIES AND WAGES	332,650.00	15.16%	288,866.00	288,193.50
22010011	50060	OVERTIME	23,923.00	47.60%	16,208.00	13,248.29
22010011	50100	EMPLOYER FICA	22,108.00	16.88%	18,915.00	18,035.47
22010011	50110	EMPLOYER MEDICARE	5,170.00	16.86%	4,424.00	4,218.10
22010011	50120	EMPLOYER SC RETIREMENT	66,180.00	23.54%	53,571.00	47,364.63
22010011	50140	EMPLOYER GROUP INSURANCE	55,780.00	1.42%	55,000.00	49,495.82
22010011	50150	EMPLOYER WORK COMP INS	7,860.00	20.92%	6,500.00	3,000.00

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
22010011	50160	EMPLOYER TORT LIAB	160.00	0.00%	160.00	741.33
22010011	50170	EMPLOYER UNEMPLOYMENT INS	82.00	5.13%	78.00	-
22010011	51030	POSTAGE	-	-100.00%	500.00	-
22010011	51050	TELEPHONE	580,000.00	118.87%	265,000.00	287,896.33
22010011	51051	DATA LINES	-	-100.00%	275,000.00	265,153.50
22010011	51110	MAINTENANCE CONTRACTS	650,000.00	0.00%	650,000.00	587,753.04
22010011	51120	EQUIPMENT MAINTENANCE	-	-100.00%	1,000.00	-
22010011	51160	PROFESSIONAL SERVICES	5,400.00	8.00%	5,000.00	5,400.00
22010011	51170	NON-PROFESSIONAL SERVICES	5,000.00	-81.66%	27,260.00	-
22010011	51310	DUES & SUBSCRIPTIONS	4,700.00	-6.00%	5,000.00	301.00
22010011	51320	TRAINING & CONFERENCES	30,000.00	20.00%	25,000.00	6,034.39
22010011	51540	INSURANCE - OTHER	-	-100.00%	500.00	-
22010011	52010	OFFICE SUPPLIES	18,000.00	800.00%	2,000.00	8,703.78
22010011	52020	DATA PROCESSING SUPPLIES	-	-100.00%	16,000.00	-
22010011	52050	UNIFORMS	1,000.00	400.00%	200.00	-
22010011	52600	OFFICE FURN & EQUIP. NON-CAPIT	-	NA	-	27,471.18
22010011	52610	TECHNOLOGY EQUIP (NON-CAP)	-	-100.00%	60,000.00	11,228.74
22010011	54110	DATA PROCESSING EQUIPMENT	30,000.00	NA	-	-
22010011	54112	DATA PROCESSING SOFTWARE	50,000.00	-62.28%	132,560.00	-
22010011	54140	COMMUNICATIONS EQUIPMENT	500,000.00	-75.16%	2,012,742.00	-
22010011	54142	REGIONAL 911	-	NA	-	13,809.40
22010011	55000	DIRECT SUBSIDIES	155,000.00	6.90%	145,000.00	129,716.06
22010011	55020	TOWN OF HH STATE REIMBURSMT	55,000.00	0.00%	55,000.00	-
Total Expenditures			2,598,013.00		4,121,484.00	1,767,764.56
Net (surplus)/ deficit			-		-	499,317.33
Haz Mat Trust						
Revenues						
22020001	42100	HAZARDOUS MATERIALS LICENSES	(45,000.00)	21.62%	(37,000.00)	(50,795.00)
22020001	46010	INTEREST ON INVESTMENTS	(250.00)	-50.00%	(500.00)	(149.00)
Total revenues			(45,250.00)		(37,500.00)	(50,944.00)
Expenditures						
22020011	51030	POSTAGE	2,750.00	633.33%	375.00	-
22020011	51295	OTHER VEHICLE OPER COSTS	-	-100.00%	920.00	1,655.54
22020011	51320	TRAINING & CONFERENCES	8,705.00	0.00%	8,705.00	8,181.09
22020011	52010	OFFICE SUPPLIES	500.00	0.00%	500.00	-
22020011	52350	AV/EDUC/TRAINING AIDS	-	-100.00%	2,000.00	-
22020011	52610	TECHNOLOGY EQUIP (NON-CAP)	8,295.00	NA	-	-
22020011	55000	DIRECT SUBSIDIES	25,000.00	0.00%	25,000.00	67,506.00
22020011	57700	TRUST FUNDS DISBURSED	-	NA	-	50,000.00
Total Expenditures			45,250.00		37,500.00	127,342.63
Net (surplus)/ deficit			-		-	76,398.63
First Responders Grant						
Revenue						
22230001	43760	OTHER FEDERAL GRANTS	(264,087.00)	-15.22%	(311,513.00)	(155,634.96)
Total revenues			(264,087.00)		(311,513.00)	(155,634.96)
Expenditures						
22230011	50110	Employer Medicare	-	NA	-	69.13
22230011	51320	TRAINING & CONFERENCES	-	NA	-	1,662.83
22230011	52610	TECHNOLOGY EQUIP (NON-CAP)	-	NA	-	1,759.58
22231230	50020	SALARIES AND WAGES	167,091.00	-10.75%	187,226.00	74,713.71
22231230	50060	OVERTIME	-	NA	-	70.41
22231230	50100	Employer FICA	10,360.00	NA	-	4,540.55
22231230	50110	Employer Medicare	2,422.00	NA	-	992.78
22231230	50120	Employer SC Retirement	12,364.00	NA	-	8,952.75
22231230	50140	EMPLOYER GROUP INSURANCE	16,850.00	NA	-	18,644.15
22231230	50160	EMPLOYER TORT LIAB	-	NA	-	137.49
22231230	51160	PROFESSIONAL SERVICES	45,000.00	385.18%	9,275.00	26,584.94

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
22231230	51320	TRAINING & CONFERENCES	10,000.00	-23.08%	13,000.00	5,732.51
22231230	52010	OFFICE SUPPLIES	-	NA	-	7,799.13
22231230	52050	UNIFORMS	-	-100.00%	2,100.00	3,975.00
22231230	52400	OTHER SUPPLIES	-	-100.00%	40,000.00	-
Total Expenditures			264,087.00		251,601.00	155,634.96
Net (surplus)/ deficit			-		(59,912.00)	-
Detention Center Alien Assistance						
Revenues						
22420001	43780	FEDERAL GRANT FUNDS	-	-100.00%	(60,200.00)	(7,981.81)
22420001	46010	INTEREST ON INVESTMENTS	(500.00)	NA	-	(353.00)
22420001	48910	CONT FROM PR YR FUND BAL	-	NA	-	-
Total revenues			(500.00)		(60,200.00)	(8,334.81)
Expenditures						
22420011	51160	PROFESSIONAL SERVICES	-	-100.00%	15,000.00	-
22420011	51190	MEDICAL/DENTAL SERVICES	-	-100.00%	20,000.00	-
22420011	52010	OFFICE SUPPLIES	500.00	NA	-	-
22420011	57700	TRUST FUNDS DISBURSED	-	-100.00%	25,200.00	7,981.81
Total Expenditures			500.00		60,200.00	7,981.81
Net (surplus)/ deficit			-		-	(353.00)
Victim's Assistance Program						
Revenues						
22510001	45030	GENERAL SESSIONS-VICTIMS PROGR	(32,519.00)	0.00%	(32,519.00)	(16,954.15)
22510001	45110	MAGISTRATE - VICTIMS PROGRAM	(93,364.00)	-0.07%	(93,426.00)	(90,831.38)
22510001	45130	TRAFFIC EDUCATION PROGRAM	(7,000.00)	NA	-	(3,920.00)
22510001	46010	INTEREST ON INVESTMENTS	(3,000.00)	NA	-	(1,167.00)
22510001	48910	CONT FROM PR YR FUND BAL	-	NA	-	-
22510001	49100	TRANSFERS IN	-	NA	-	(10,000.00)
Total revenues			(135,883.00)		(125,945.00)	(122,872.53)
Expenditures						
22510011	50020	SALARIES AND WAGES	88,503.00	NA	-	5.21
22510011	50060	OVERTIME	1,000.00	NA	-	-
22510011	50080	OVERTIME/TRAINING SCHOOL	-	NA	-	-
22510011	50100	EMPLOYER FICA	5,549.00	NA	-	-
22510011	50110	EMPLOYER MEDICARE	1,298.00	NA	-	-
22510011	50120	EMPLOYER SC RETIREMENT	16,612.00	NA	-	-
22510011	50130	EMPLOYER PO RETIREMENT	-	NA	-	(659.99)
22510011	50140	EMPLOYER GROUP INSURANCE	21,000.00	NA	-	20,657.40
22510011	50150	EMPLOYER WORK COMP INS	1,421.00	NA	-	-
22510011	50160	EMPLOYER TORT LIAB	500.00	NA	-	1,701.00
Total Expenditures			135,883.00		-	21,703.62
Net (surplus)/ deficit			-		(125,945.00)	(101,168.91)
Sheriff's Special Services						
Revenues						
22520001	44700	SHERIFF'S SRVCS-TOWN H H	-	NA	-	(21,647.31)
22520001	44710	SHERIFF'S SRVCS-SECURITY	(122,225.00)	-5.69%	(129,600.00)	(149,627.26)
22520001	48910	CONT FROM PR YR FUND BAL	(200,000.00)	-22.20%	(257,070.00)	-
Total revenues			(322,225.00)		(386,670.00)	(171,274.57)
Expenditures						
22520011	50060	OVERTIME	250,000.00	-16.67%	300,000.00	95,396.01
22520011	50100	EMPLOYER FICA	15,500.00	-16.67%	18,600.00	5,914.29
22520011	50110	EMPLOYER MEDICARE	3,625.00	-16.67%	4,350.00	1,383.20
22520011	50130	EMPLOYER PO RETIREMENT	53,100.00	-16.67%	63,720.00	17,586.83
Total Expenditures			322,225.00		386,670.00	120,280.33
Net (surplus)/ deficit			-		-	(50,994.24)

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
Sheriff School Resource Officers						
Revenues						
22530001	43660	B C S D REVENUES	(626,786.00)	11.18%	(563,771.00)	(527,186.00)
22530001	43665	C E C REVENUES	(93,969.00)	8.98%	(86,226.00)	(73,115.00)
22530001	49100	TRANSFERS IN	(240,730.00)	11.10%	(216,686.00)	(200,101.00)
Total revenues			(961,485.00)		(866,683.00)	(800,402.00)
Expenditures						
22530011	50020	SALARIES AND WAGES	558,260.00	6.81%	522,683.00	495,894.01
22530011	50060	OVERTIME	41,869.00	85.47%	22,575.00	19,658.79
22530011	50080	OVERTIME/TRAINING SCHOOL	6,750.00	575.00%	1,000.00	869.66
22530011	50100	EMPLOYER FICA	37,627.00	11.10%	33,868.00	30,758.75
22530011	50110	EMPLOYER MEDICARE	8,800.00	11.10%	7,921.00	7,193.74
22530011	50130	EMPLOYER PO RETIREMENT	127,467.00	9.86%	116,025.00	95,817.78
22530011	50140	EMPLOYER GROUP INSURANCE	111,560.00	5.84%	105,400.00	152,687.64
22530011	50150	EMPLOYER WORK COMP INS	13,594.00	-0.06%	13,602.00	5,976.00
22530011	50160	EMPLOYER TORT LIAB	12,472.00	0.00%	12,472.00	13,106.66
22530011	50170	EMPLOYER UNEMPLOYMENT INS	136.00	-0.73%	137.00	-
22530011	51300	GARAGE REPAIRS & MAINTENANCE	6,500.00	0.00%	6,500.00	3,822.51
22530011	51301	INSURANCE REIMBURSEMENT	-	NA	-	(3,076.70)
22530011	51310	DUES & SUBSCRIPTIONS	200.00	0.00%	200.00	200.00
22530011	51320	TRAINING & CONFERENCES	12,000.00	140.00%	5,000.00	9,480.88
22530011	51500	VEHICLE INSURANCE	6,250.00	7.76%	5,800.00	5,778.82
22530011	52010	OFFICE SUPPLIES	500.00	NA	-	-
22530011	52020	DATA PROCESSING SUPPLIES	-	NA	-	59.89
22530011	52050	UNIFORMS	5,500.00	0.00%	5,500.00	3,284.97
22530011	52500	FUELS/LUBRICANTS	12,000.00	50.00%	8,000.00	8,740.25
Total Expenditures			961,485.00		866,683.00	850,253.65
Net (surplus)/ deficit			-		-	49,851.65
Sheriff Special Grant						
Revenues						
22540001	48910	CONT FROM PR YR FUND BAL	(8,305.00)	1.08%	(8,216.00)	-
Total revenues			(8,305.00)		(8,216.00)	-
Expenditures						
22540011	51120	EQUIPMENT MAINTENANCE	8,305.00	1.08%	8,216.00	-
Total Expenditures			8,305.00		8,216.00	-
Net (surplus)/ deficit			-		-	-
Sheriff's Alzheimer's Fund						
Revenues						
22550001	46010	INTEREST ON INVESTMENTS	-	NA	-	(8.00)
22550001	47600	DONATIONS	(500.00)	-90.57%	(5,300.00)	(8,850.00)
22550001	48910	CONT FROM PR YR FUND BAL	(9,000.00)	NA	-	-
Total revenues			(9,500.00)		(5,300.00)	(8,858.00)
Expenditures						
22550011	52610	TECHNOLOGY EQUIP (NON-CAP)	9,500.00	79.25%	5,300.00	3,541.67
Total Expenditures			9,500.00		5,300.00	3,541.67
Net (surplus)/ deficit			-		-	(5,316.33)

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
Sheriff Drug Forfeitures						
Revenues						
22560001	45400	DRUG SEIZURE FORFEITURES	(50,000.00)	0.00%	(50,000.00)	(8,425.48)
22560001	46010	INTEREST ON INVESTMENTS	-	NA	-	(435.00)
22560002	45400	DRUG SEIZURE FORFEITURES	(50,000.00)	0.00%	(50,000.00)	-
22560003	45400	FORFEITURES	(25,000.00)	0.00%	(25,000.00)	-
Total revenues			(125,000.00)		(125,000.00)	(8,860.48)
Expenditures						
22560011	57700	TRUST FUNDS DISBURSED	50,000.00	0.00%	50,000.00	5,470.76
22560012	57700	TRUST FUNDS DISBURSED	50,000.00	0.00%	50,000.00	-
22560013	57700	TRUST FUNDS DISBURSED	25,000.00	0.00%	25,000.00	-
Total Expenditures			125,000.00		125,000.00	5,470.76
Net (surplus)/ deficit			-		-	(3,389.72)
Sheriff Drug Restricted						
Revenues						
22570001	45400	DRUG SEIZURE FORFEITURES	(30,000.00)	0.00%	(30,000.00)	(3,642.62)
22570001	46010	INTEREST ON INVESTMENTS	-	NA	-	(518.82)
22570002	45400	DRUG SEIZURE FORFEITURES	(30,000.00)	0.00%	(30,000.00)	(3,776.03)
22570002	46010	INTEREST ON INVESTMENTS	-	NA	-	(1.87)
22570002	48910	CONT FROM PR YR FUND BAL	-	NA	-	-
22570003	45400	DRUG SEIZURE FORFEITURES	(30,000.00)	0.00%	(30,000.00)	-
Total revenues			(90,000.00)		(90,000.00)	(7,939.34)
Expenditures						
22570011	57700	TRUST FUNDS DISBURSED	30,000.00	0.00%	30,000.00	-
22570012	57700	TRUST FUNDS DISBURSED	30,000.00	0.00%	30,000.00	-
22570013	57700	TRUST FUNDS DISBURSED	30,000.00	0.00%	30,000.00	-
Total Expenditures			90,000.00		90,000.00	-
Net (surplus)/ deficit			-		-	(7,939.34)
Sheriff Drug Trust						
Revenues						
22580001	46010	INTEREST ON INVESTMENTS	-	NA	-	(255.00)
22580001	47503	TRUST FUNDS RECEIVED - GEN	(142,593.00)	0.00%	(142,593.00)	(26,575.00)
22580001	47504	TRUST FUNDS RECEIVED - SEX OFF	(25,016.00)	0.00%	(25,016.00)	(8,475.00)
Total revenues			(167,609.00)		(167,609.00)	(35,305.00)
Expenditures						
22580011	56000	GENERAL CONTINGENCY	100,609.00	NA	-	-
22580011	57700	TRUST FUNDS DISBURSED - NARCOT	-	NA	-	12,595.50
22580011	57703	TRUST FUNDS DISBURSED - GEN	67,000.00	17.54%	57,000.00	20,886.72
Total Expenditures			167,609.00		57,000.00	33,482.22
Net (surplus)/ deficit			-		(110,609.00)	(1,822.78)
Sheriff Body Cameras						
Revenues						
22620001	46010	INTEREST ON INVESTMENTS	-	NA	-	(462.00)
22620001	48910	CONT FROM PR YR FUND BAL	(225,000.00)	1.81%	(221,000.00)	-

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
22620001	49100	TRANSFERS IN	-	NA	-	-
Total revenues			(225,000.00)		(221,000.00)	(462.00)
Expenditures						
22620011	51110	MAINTENANCE CONTRACTS	-	NA	-	40,782.30
22620011	51120	EQUIPMENT MAINTENANCE	-	NA	-	379.90
22620011	52610	TECHNOLOGY EQUIP (NON-CAP)	225,000.00	1.81%	221,000.00	11,854.93
Total Expenditures			225,000.00		221,000.00	53,017.13
Net (surplus)/ deficit			-		-	52,555.13
Hilton Head Island Service Fees						
Revenues						
22800001	43680	TOWN OF HILTON HEAD REVENUES	(5,395,324.00)	13.15%	(4,768,201.00)	(4,828,652.17)
22800001	46010	INTEREST ON INVESTMENTS	-	-100.00%	(1,500.00)	(2,919.00)
Total revenues			(5,395,324.00)		(4,769,701.00)	(4,831,571.17)
Expenditures						
22800011	50020	SALARIES AND WAGES	2,815,020.00	0.63%	2,797,501.00	2,692,146.76
22800011	50060	OVERTIME	319,273.00	22.29%	261,088.00	258,517.37
22800011	50080	OVERTIME/TRAINING SCHOOL	104,275.00	87.38%	55,650.00	56,042.76
22800011	50100	EMPLOYER FICA	211,278.00	9.42%	193,083.00	181,660.44
22800011	50110	EMPLOYER MEDICARE	49,412.00	9.43%	45,156.00	42,485.94
22800011	50120	EMPLOYER SC RETIREMENT	24,792.00	-20.29%	31,103.00	25,635.78
22800011	50130	EMPLOYER PO RETIREMENT	659,500.00	5.72%	623,843.00	527,880.51
22800011	50140	EMPLOYER GROUP INSURANCE	566,790.00	2.43%	553,350.00	616,574.32
22800011	50150	EMPLOYER WORK COMP INS	76,333.00	-1.56%	77,545.00	-
22800011	50160	EMPLOYER TORT LIAB INS	60,921.00	0.00%	60,921.00	15,387.12
22800011	50170	EMPLOYER UNEMPLOYMENT INS	779.00	0.00%	779.00	-
22800011	50500	EMPLOYEE RECOGNITION AWRD	-	NA	-	41.42
22800011	51010	PRINTING	675.00	35.00%	500.00	305.53
22800011	51050	TELEPHONE	18,810.00	17.56%	16,000.00	15,493.88
22800011	51060	ELECTRICITY	23,000.00	-25.81%	31,000.00	27,390.36
22800011	51070	WATER/SEWER/GARBAGE	960.00	-20.00%	1,200.00	1,299.34
22800011	51110	MAINTENANCE CONTRACTS	-	-100.00%	5,600.00	5,596.83
22800011	51120	EQUIPMENT MAINTENANCE	3,000.00	-33.33%	4,500.00	4,463.94
22800011	51140	EQUIPMENT RENTALS	725.00	NA	-	-
22800011	51160	PROFESSIONAL SERVICES	-	NA	-	19,690.00
22800011	51170	NON-PROFESSIONAL SERVICES	1,300.00	0.00%	1,300.00	1,285.25
22800011	51295	OTHER VEHICLE OPER COSTS	-	NA	-	80.00
22800011	51300	GARAGE REPAIRS & MAINTENANCE	33,744.00	-25.01%	45,000.00	78,674.43
22800011	51301	INSURANCE REIMBURSEMENT	-	NA	-	(20,721.30)
22800011	51310	DUES & SUBSCRIPTIONS	1,000.00	-69.23%	3,250.00	1,875.39
22800011	51320	TRAINING & CONFERENCES	17,000.00	0.00%	17,000.00	14,780.26
22800011	51500	VEHICLE INSURANCE	36,898.00	0.00%	36,898.00	8,496.51
22800011	51540	INSURANCE - OTHER	230.00	53.33%	150.00	240.74
22800011	51991	K-9 UNIT	520.00	30.00%	400.00	1,876.19
22800011	52010	OFFICE SUPPLIES	18,900.00	5.00%	18,000.00	18,021.83
22800011	52050	UNIFORMS	40,035.00	14.39%	35,000.00	26,338.06
22800011	52400	OTHER SUPPLIES	-	NA	-	450.50
22800011	52500	FUELS/LUBRICANTS	196,500.00	16.96%	168,000.00	177,510.19
22800011	52610	TECHNOLOGY EQUIP (NON-CAP)	17,600.00	NA	-	-
22800011	54000	VEHICLE PURCHASES	96,054.00	NA	-	232,651.20
22800011	54200	CAPITAL EQUIPMENT	-	NA	-	42,955.05
Total Expenditures			5,395,324.00		5,083,817.00	5,075,126.60
Net (surplus)/ deficit			-		314,116.00	243,555.43
Road Impact fees HHI Daufuskie						
Revenues						
23000001	46010	INTEREST ON INVESTMENTS	(9,500.00)	NA	-	(7,644.00)
23000001	47940	ROAD IMPACT FEES	(383,000.00)	26.82%	(301,994.00)	(280,871.60)
23000001	48910	CONT FROM PR YR FUND BAL	(3,588,000.00)	6.74%	(3,361,565.00)	-
Total revenues			(3,980,500.00)		(3,663,559.00)	(288,515.60)

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
Expenditures						
23000011	51160	PROFESSIONAL SERVICES	743,000.00	1.40%	732,712.00	-
23000011	54500	ROAD WIDENING / IMPROVEMENT	3,237,500.00	10.46%	2,930,847.00	-
Total Expenditures			3,980,500.00		3,663,559.00	-
Net (surplus)/ deficit			-		-	(288,515.60)
Road Impact fees Bluffton						
Revenues						
23020001	46010	INTEREST ON INVESTMENTS	(62,000.00)	NA	-	(49,213.00)
23020001	47940	ROAD IMPACT FEES	(4,800,000.00)	58.42%	(3,029,897.00)	(5,358,765.03)
23020001	48910	CONT FROM PR YR FUND BAL	(24,300,000.00)	15.15%	(21,102,724.00)	-
Total revenues			(29,162,000.00)		(24,132,621.00)	(5,407,978.03)
Expenditures						
23020011	51160	PROFESSIONAL SERVICES	5,600,000.00	16.03%	4,826,524.00	393,862.12
23020011	54500	ROAD IMPROVEMENT	22,762,000.00	25.85%	18,086,097.00	-
23020011	59325	XFER TO BLUFN PARKWAY D S FUND	800,000.00	-34.43%	1,220,000.00	1,220,000.00
Total Expenditures			29,162,000.00		24,132,621.00	1,613,862.12
Net (surplus)/ deficit			-		-	(3,794,115.91)
Road Impact fees Beaufort						
Revenues						
23030001	46010	INTEREST ON INVESTMENTS	(40,000.00)	NA	-	(7,365.00)
23030001	47940	ROAD IMPACT FEES	(761,000.00)	66.27%	(457,689.00)	(832,264.48)
23030001	48910	CONT FROM PR YR FUND BAL	(4,657,000.00)	42.88%	(3,259,345.00)	-
Total revenues			(5,458,000.00)		(3,717,034.00)	(839,629.48)
Expenditures						
23030011	51160	PROFESSIONAL SERVICES	1,092,000.00	46.89%	743,407.00	6,468.75
23030011	54500	ROAD WIDENING / IMPROVEMENT	4,366,000.00	46.82%	2,973,627.00	-
Total Expenditures			5,458,000.00		3,717,034.00	6,468.75
Net (surplus)/ deficit			-		-	(833,160.73)
ARPA Grant Funding						
Revenues						
23300001	43780	FEDERAL GRANT FUNDS	(24,747,860.00)	63.64%	(15,123,000.00)	(3,988,309.04)
23300001	46010	INTEREST ON INVESTMENTS	(500,000.00)	150.00%	(200,000.00)	(59,731.64)
Total revenues			(25,247,860.00)		(15,323,000.00)	(4,048,040.68)
Expenditures						
23302000	50020	SALARIES AND WAGES	106,500.00	-46.75%	200,000.00	67,923.34
23302000	50100	Employer FICA	6,603.00	-55.98%	15,000.00	4,144.52
23302000	50110	Employer Medicare	1,545.00	-61.38%	4,000.00	969.29
23302000	50120	Employer SC Retirement	19,862.00	-43.25%	35,000.00	11,263.28
23302000	50140	EMPLOYER GROUP INSURANCE	12,780.00	-36.10%	20,000.00	9,008.30
23302000	51160	PROFESSIONAL SERVICES	-	-100.00%	100,000.00	38,612.50
23302000	55000	Direct Subsidies	1,000,000.00	-50.00%	2,000,000.00	500,000.00
23302000	59101	Transfer Out	500,000.00	150.00%	200,000.00	-
23302010	51160	PROFESSIONAL SERVICES	750,000.00	650.00%	100,000.00	10,000.00
23302010	51162	LEGAL SERVICES	10,000.00	NA	-	-
23302010	52010	SUPPLIES & MATERIALS	-	-100.00%	50,000.00	25,000.00
23302010	54112	DATA PROCESSING SOFTWARE	50,000.00	NA	-	-
23302010	54410	BUILDING ACQUISITION	3,000,000.00	NA	-	-
23302010	54420	RENOVATIONS EXIST BLDGS	2,500,000.00	-16.67%	3,000,000.00	-

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
23302010	54430	SITE DEVELOPMENT	3,500,000.00	NA	-	-
23302010	55000	Direct Subsidies	350,000.00	-90.91%	3,850,000.00	-
23302020	55000	Direct Subsidies	125,000.00	-93.42%	1,900,000.00	105,386.31
23302030	50020	SALARIES AND WAGES	-	-100.00%	100,000.00	-
23302030	50021	SUPPLEMENTAL PAY	380,000.00	NA	-	-
23302030	50100	Employer FICA	23,560.00	236.57%	7,000.00	-
23302030	50110	Employer Medicare	5,510.00	175.50%	2,000.00	-
23302030	50120	Employer SC Retirement	-	-100.00%	20,000.00	-
23302030	50140	EMPLOYER GROUP INSURANCE	-	-100.00%	20,000.00	-
23302040	50020	SALARIES AND WAGES	-	NA	-	2,596,575.00
23302040	50100	Employer FICA	-	NA	-	160,006.50
23302040	50110	Employer Medicare	-	NA	-	37,420.85
23302040	55000	Direct Subsidies	-	NA	-	222,028.00
23302050	51160	PROFESSIONAL SERVICES	250,000.00	NA	-	-
23302050	55000	Direct Subsidies	9,000,000.00	NA	-	-
23302060	51160	PROFESSIONAL SERVICES	250,000.00	NA	-	-
23302060	54000	VEHICLE PURCHASES	25,000.00	NA	-	-
23302060	54200	Equipment, Capital	25,000.00	-96.43%	700,000.00	194,774.23
23302060	54420	RENOVATIONS EXIST BLDGS	140,000.00	-86.00%	1,000,000.00	5,196.92
23302060	59101	Transfer Out	3,216,500.00	60.83%	2,000,000.00	-
Total Expenditures			25,247,860.00		15,323,000.00	3,988,309.04
Net (surplus)/ deficit			-		-	(59,731.64)
County Wide Road Improvements						
Revenues						
23420001	44250	VEHICLE FEE ($10.00)	(4,500,000.00)	79.98%	(2,500,345.00)	(1,989,436.16)
23420001	46010	INTEREST ON INVESTMENTS	(40,000.00)	NA	-	(15,710.00)
23420001	47010	MISCELLANEOUS REVENUES	-	NA	-	(200,000.00)
23420001	48910	CONT FROM PR YR FUND BAL	(3,380,000.00)	-49.68%	(6,717,170.00)	-
Total revenues			(7,920,000.00)		(9,217,515.00)	(2,205,146.16)
Expenditures						
23420011	50020	SALARIES AND WAGES	-	NA	-	118.11
23420011	50100	EMPLOYER FICA	-	NA	-	7.26
23420011	50110	EMPLOYER MEDICARE	-	NA	-	1.70
23420011	50120	EMPLOYER SC RETIREMENT	-	NA	-	19.50
23420011	53000	BOND PRINCIPAL	-	NA	-	333,370.00
23420011	53010	BOND INTEREST	-	NA	-	27,375.56
2342001T	51160	PROFESSIONAL SERVICES	1,584,000.00	-14.08%	1,843,503.00	332,763.10
2342001T	52010	OFFICE SUPPLIES	-	NA	-	40,294.26
2342001T	54500	ROAD IMPROVEMENT	6,336,000.00	7.86%	5,874,013.00	88,718.03
2342001T	54943	DIRT ROAD #51A	-	NA	-	487,291.67
2342001T	54945	DIRT ROAD #52	-	-100.00%	1,500,000.00	987,501.01
2342001T	54949	DIRT ROAD #53	-	NA	-	33,711.68
Total Expenditures			7,920,000.00		9,217,516.00	2,331,171.88
Net (surplus)/ deficit			-		1.00	126,025.72
CTC - State Gas Tax Funds						
Revenues						
23430001	43050	STATE 'C' HWY FUNDS	(2,600,000.00)	6.70%	(2,436,637.00)	(2,807,580.00)
23430001	43261	Non-Recurring C Funds	-	NA	-	(1,158,622.48)
23430001	46010	INTEREST ON INVESTMENTS	(50,000.00)	NA	-	(11,161.00)
23430001	46011	INTEREST - GASTAX (C FUNDS)	(15,000.00)	34.35%	(11,165.00)	(4,015.65)
23430001	48910	CONT FROM PR YR FUND BAL	(11,110,000.00)	26.61%	(8,774,723.00)	-
Total revenues			(13,775,000.00)		(11,222,525.00)	(3,981,379.13)
Expenditures						
23430011	51160	PROFESSIONAL SERVICES	-	-100.00%	2,000.00	866.30
23430011	52010	OFFICE SUPPLIES	2,000.00	NA	-	-
23430011	54500	ROAD IMPROVEMENT	13,773,000.00	49.37%	9,220,525.00	65,793.50
23430011	54944	BC ROAD RESURFACING YR 4	-	NA	-	214,840.87

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
23430011	54946	2020 PAVEMENT CONDITION SURVEY	-	NA	-	159,897.50
23430011	54948	BC ROAD RESURFACING YR 5	-	-100.00%	2,000,000.00	1,053,422.64
Total Expenditures			13,775,000.00		11,222,525.00	1,494,820.81
Net (surplus)/ deficit			-		-	(2,486,558.32)
Grants Fund						
Revenues						
2400GR08	43630	DAODOS SPECIAL GRANTS	(9,000.00)	NA	-	-
2400GR04	43648	A&D CELL PHONE REIMBURSEMENT	-	NA	-	(3,884.53)
2400GR02	43770	STATE GRANT FUNDS	-	-100.00%	(43,712.00)	(79,212.00)
2400GR04	43770	STATE GRANT FUNDS	-	-100.00%	(3,125.00)	-
2400GR01	43780	FEDERAL GRANT FUNDS	(91,002.00)	-22.93%	(118,080.00)	(24,669.92)
2400GR03	43780	FEDERAL GRANT FUNDS	-	-100.00%	(83,442.00)	(13,132.52)
2400GR05	43780	FEDERAL GRANT FUNDS	-	-100.00%	(13,613.00)	(19,004.91)
2400GR06	43780	FEDERAL GRANT FUNDS	(7,693.00)	-19.43%	(9,548.00)	(1,968.75)
Total revenues			(107,695.00)		(271,520.00)	(141,872.63)
Expenditures						
2400GR02	50020	SALARIES AND WAGES	-	NA	-	20,000.00
2400GR03	50020	SALARIES AND WAGES	50,101.00	0.00%	50,101.00	4,490.38
2400GR02	50021	SUPPLEMENTAL PAY	-	-100.00%	5,000.00	1,000.00
2400GR02	50100	Employer FICA	-	NA	-	1,302.00
2400GR03	50100	Employer FICA	3,106.00	0.00%	3,106.00	278.41
2400GR02	50110	Employer Medicare	-	NA	-	304.50
2400GR03	50110	Employer Medicare	726.00	0.00%	726.00	65.11
2400GR03	50120	Employer SC Retirement	9,299.00	12.08%	8,297.00	748.58
2400GR01	50140	EMPLOYER GROUP INSURANCE	-	NA	-	7,191.54
2400GR02	51000	ADVERTISING	-	-100.00%	5,000.00	875.55
2400GR05	51000	ADVERTISING	-	-100.00%	7,885.00	8,557.09
2400GR08	51000	ADVERTISING	2,000.00	NA	-	-
2400GR03	51010	Printing	398.00	0.00%	398.00	178.00
2400GR05	51010	Printing	-	-100.00%	597.00	394.11
2400GR04	51050	TELEPHONE	-	-100.00%	3,125.00	-
2400GR05	51050	TELEPHONE	-	NA	-	40.03
2400GR01	51160	PROFESSIONAL SERVICES	-	-100.00%	12,740.00	6,070.00
2400GR03	51160	PROFESSIONAL SERVICES	10,498.00	36.34%	7,700.00	-
2400GR05	51160	PROFESSIONAL SERVICES	-	NA	-	4,630.00
2400GR02	51310	DUES & SUBSCRIPTIONS	-	-100.00%	15,000.00	4,354.55
2400GR03	51310	DUES & SUBSCRIPTIONS	-	NA	-	55.00
2400GR02	51320	TRAINING & CONFERENCES	-	-100.00%	18,712.00	5,884.80
2400GR03	51320	TRAINING & CONFERENCES	11,649.00	0.00%	11,649.00	-
2400GR05	51320	TRAINING & CONFERENCES	-	-100.00%	1,089.00	181.80
2400GR03	51990	MISC. EXPENDITURES	4,775.00	NA	-	-
2400GR01	52010	OFFICE SUPPLIES	-	-100.00%	101,340.00	2,551.50
2400GR02	52010	OFFICE SUPPLIES	-	NA	-	1,883.43
2400GR03	52010	SUPPLIES & MATERIALS	450.00	-10.00%	500.00	-
2400GR05	52010	SUPPLIES & MATERIALS	-	-100.00%	4,042.00	2,000.00
2400GR06	52010	SUPPLIES & MATERIALS	7,693.00	-19.43%	9,548.00	2,014.00
2400GR08	52010	SUPPLIES & MATERIALS	7,000.00	NA	-	-
2400GR01	52610	TECHNOLOGY EQUIP (NON-CAP)	-	-100.00%	4,000.00	14,658.42
2400GR06	52610	TECHNOLOGY EQUIP (NON-CAP)	-	NA	-	1,854.75
2400GR05	52612	Equipment, Non-Capital	-	NA	-	699.58
Total Expenditures			107,695.00		270,555.00	92,263.13
Net (surplus)/ deficit			-		(965.00)	(49,609.50)

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
Alcohol and Drug						
Revenues						
24030001	43030	STATE MINI BOTTLE FUNDS	(101,429.00)	1.49%	(99,935.00)	(138,393.19)
24040001	43030	STATE MINI BOTTLE FUNDS	(99,935.00)	0.00%	(99,935.00)	(138,393.20)
24050001	43030	STATE MINI BOTTLE FUNDS	(99,935.00)	0.00%	(99,935.00)	(138,393.20)
24070001	43030	STATE MINI BOTTLE FUNDS	(104,355.00)	3.76%	(100,578.00)	(138,393.17)
24030001	43600	DAODOS CONSOL'D CONTRACT	(9,043.00)	0.00%	(9,043.00)	(1,914.00)
24040001	43600	DAODOS CONSOL'D CONTRACT	(205,650.00)	0.00%	(205,650.00)	(287,617.25)
24050001	43600	DAODOS CONSOL'D CONTRACT	(115,800.00)	0.00%	(115,800.00)	(118,126.00)
24070001	43600	DAODOS CONSOL'D CONTRACT	(35,877.00)	36.99%	(26,189.00)	(21,869.00)
24090001	43600	DAODOS FEDERAL BLOCK GRANT	-	NA	-	(23,152.00)
24050001	43605	DAODAS FED BLK - STATE FUNDS	(1,500.00)	0.00%	(1,500.00)	-
24020001	43610	DAODOS BLOCK GRANT	-	NA	-	(6,308.05)
24020001	43620	DAODOS COLAS/MERIT	(14,478.00)	41.10%	(10,261.00)	(10,728.60)
24030001	43620	DAODOS COLAS/MERIT	(2,283.00)	-14.17%	(2,660.00)	(2,781.50)
24040001	43620	DAODOS COLAS/MERIT	(15,202.00)	0.00%	(15,202.00)	(15,894.23)
24050001	43620	DAODOS COLAS/MERIT	(9,316.00)	29.01%	(7,221.00)	(7,549.76)
24070001	43620	DAODOS COLAS/MERIT	(2,711.00)	1.92%	(2,660.00)	(2,781.50)
24120001	43625	DAODAS STATE SPECIAL GRANTS	-	NA	-	(23,740.48)
24040001	43635	STEP UP PROGRAM REVENUES	(2,200.00)	-38.89%	(3,600.00)	(4,031.68)
24090001	43640	DAODAS BRIDGE PROGRAM REIMB	(70,102.00)	1.66%	(68,956.00)	(9,443.00)
24080001	43645	DAODOS MAT MEDICAL REIMBURSEME	(11,270.00)	-60.55%	(28,570.00)	(57,891.53)
24080001	43646	DAODOS MAT PHARMACY REIMBURSEM	(39,950.00)	146.60%	(16,200.00)	-
24120001	43647	DAODAS PEER SUPPORT SPECIALIST	(83,050.00)	0.00%	(83,050.00)	(31,629.00)
24130001	43647	DAODAS PS2 Grant Reimbursement	-	NA	-	(28,276.71)
24030001	43660	B C S D REVENUES	(11,250.00)	0.00%	(11,250.00)	(11,250.00)
24040001	43770	STATE GRANT FUNDS	-	-100.00%	(3,324.00)	-
24040001	43772	SET OFF DEBT	-	NA	-	(27,673.61)
24020001	44600	ALCOHOL/DRUG FEES	(90,000.00)	13.70%	(79,158.00)	(105,104.80)
24030001	44600	ALCOHOL/DRUG FEES	-	NA	-	(11,730.00)
24030011	44600	ALCOHOL/DRUG FEES	-	-100.00%	(6,000.00)	-
24040001	44600	ALCOHOL/DRUG FEES	(25,202.00)	-14.31%	(29,409.00)	(30,553.72)
24070001	44600	ALCOHOL/DRUG FEES	(3,742.00)	4057.78%	(90.00)	(2,105.00)
24090001	44600	ALCOHOL/DRUG FEES	-	NA	-	-
24040001	44601	DRUG SCREENS/MATERIAL FEES	(2,880.00)	392.31%	(585.00)	(1,960.00)
24020001	44602	AEP BOOKS	-	NA	-	(25.00)
24030001	44640	MEDICAID PAYMENTS	-	-100.00%	(1,158.00)	(951.81)
24040001	44640	MEDICAID PAYMENTS	(2,992.00)	67.06%	(1,791.00)	(793.13)
24070001	44640	MEDICAID PAYMENTS	(13,304.00)	221.12%	(4,143.00)	(1,119.20)
24090001	44640	MEDICAID PAYMENTS	(4,787.00)	-72.01%	(17,103.00)	-
24120001	44640	MEDICAID PAYMENTS	(1,000.00)	NA	-	-
24040001	44642	HEALTHY OUTCOMES PROGRAMS	(46,367.00)	-1.94%	(47,286.00)	(47,286.00)
24030001	44645	MCO INSURANCE PAYMENTS	(51,474.00)	209.08%	(16,654.00)	(12,528.83)
24040001	44645	MCO INSURANCE PAYMENTS	(31,400.00)	78.92%	(17,550.00)	(6,864.58)
24070001	44645	MCO INSURANCE PAYMENTS	(6,878.00)	0.00%	(6,878.00)	(1,107.67)
24120001	44645	MCO INSURANCE PAYMENTS	(8,896.00)	NA	-	-
24030001	44646	PRIVATE INSURANCE PAYMENTS	-	-100.00%	(216.00)	(90.00)
24040001	44646	PRIVATE INSURANCE PAYMENTS	(2,500.00)	-54.88%	(5,541.00)	(1,917.80)
24070001	44646	PRIVATE INSURANCE PAYMENTS	(1,566.00)	-78.31%	(7,221.00)	(2,407.80)
24010001	46010	INTEREST ON INVESTMENTS	(1,824.00)	0.00%	(1,824.00)	(3,234.00)
24050001	47010	MISCELLANEOUS REVENUES	-	-100.00%	(1,080.00)	(1,200.70)
24010001	48910	CONT FROM PR YR FUND BAL	(117,062.00)	-69.99%	(390,128.00)	-
24020001	48910	CONT FROM PR YR FUND BAL	-	-100.00%	(202,796.00)	-
24050001	48910	CONT FROM PR YR FUND BAL	(57,778.00)	40.04%	(41,259.00)	-
24120001	48910	CONT FROM PR YR FUND BAL	(26,803.00)	0.00%	(26,803.00)	-
24010001	49100	TRANSFERS IN	(295,843.00)	NA	-	(387,474.00)
24020001	49100	TRANSFERS IN	(184,157.00)	NA	-	(17,425.00)
24050001	49100	TRANSFERS IN	-	NA	-	(75,613.00)
24070001	49100	TRANSFERS IN	-	NA	-	(27,772.00)
24120001	49100	TRANSFERS IN	-	NA	-	(28,053.00)
24090001	49200	Transfers In	(6,733.00)	NA	-	-
24010001	49264	XFER FM OTHER AD FUNDS	-	NA	-	(16,532.09)

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
Total revenues			(2,018,524.00)		(1,916,192.00)	(2,030,079.79)
Expenditures						
24010011	50020	SALARIES AND WAGES	260,049.00	0.00%	260,049.00	205,350.40
24020011	50020	SALARIES AND WAGES	210,996.00	-4.45%	220,833.00	159,791.10
24030011	50020	SALARIES AND WAGES	74,709.00	-10.96%	83,906.00	63,285.03
24040011	50020	SALARIES AND WAGES	243,902.00	7.66%	226,541.00	266,011.16
24050011	50020	SALARIES AND WAGES	203,258.00	0.02%	203,221.00	196,785.96
24070011	50020	SALARIES AND WAGES	100,557.00	16.92%	86,007.00	82,619.95
24090011	50020	SALARIES AND WAGES	57,346.00	0.03%	57,330.00	23,151.83
24120011	50020	SALARIES AND WAGES	72,052.00	9.34%	65,898.00	39,531.57
24010011	50100	EMPLOYER FICA	19,170.00	18.90%	16,123.00	12,535.56
24020011	50100	EMPLOYER FICA	13,083.00	-4.45%	13,692.00	9,495.33
24030011	50100	EMPLOYER FICA	4,632.00	-10.96%	5,202.00	3,875.12
24040011	50100	EMPLOYER FICA	15,122.00	7.66%	14,046.00	15,761.25
24050011	50100	EMPLOYER FICA	12,602.00	0.02%	12,600.00	12,008.69
24070011	50100	EMPLOYER FICA	6,234.00	16.92%	5,332.00	4,921.86
24090011	50100	EMPLOYER FICA	3,555.00	0.03%	3,554.00	1,364.83
24120011	50100	EMPLOYER FICA	4,468.00	9.35%	4,086.00	2,357.62
24010011	50110	EMPLOYER MEDICARE	4,484.00	18.91%	3,771.00	2,932.04
24020011	50110	EMPLOYER MEDICARE	3,062.00	-4.46%	3,205.00	2,220.42
24030011	50110	EMPLOYER MEDICARE	1,084.00	-10.93%	1,217.00	906.49
24040011	50110	EMPLOYER MEDICARE	3,537.00	7.67%	3,285.00	3,686.17
24050011	50110	EMPLOYER MEDICARE	2,948.00	-1.31%	2,987.00	2,808.43
24070011	50110	EMPLOYER MEDICARE	1,458.00	16.92%	1,247.00	1,150.70
24090011	50110	EMPLOYER MEDICARE	831.00	0.00%	831.00	319.01
24120011	50110	EMPLOYER MEDICARE	1,045.00	9.31%	956.00	551.00
24010011	50120	EMPLOYER SC RETIREMENT	48,265.00	12.08%	43,064.00	32,581.97
24020011	50120	EMPLOYER SC RETIREMENT	39,160.00	7.08%	36,570.00	25,696.98
24030011	50120	EMPLOYER SC RETIREMENT	13,866.00	-0.21%	13,895.00	9,950.02
24040011	50120	EMPLOYER SC RETIREMENT	45,268.00	20.67%	37,515.00	42,049.83
24050011	50120	EMPLOYER SC RETIREMENT	37,725.00	12.10%	33,653.00	31,187.72
24070011	50120	EMPLOYER SC RETIREMENT	18,663.00	31.03%	14,243.00	12,260.52
24090011	50120	EMPLOYER SC RETIREMENT	10,643.00	12.10%	9,494.00	3,859.49
24120011	50120	EMPLOYER SC RETIREMENT	13,373.00	22.54%	10,913.00	6,348.67
24010011	50140	EMPLOYER GROUP INSURANCE	29,725.00	18.90%	25,000.00	43,024.60
24020011	50140	EMPLOYER GROUP INSURANCE	6,975.00	-4.45%	7,300.00	50,074.42
24030011	50140	EMPLOYER GROUP INSURANCE	5,431.00	-10.97%	6,100.00	7,191.54
24040011	50140	EMPLOYER GROUP INSURANCE	47,355.00	-5.29%	50,000.00	22,678.85
24050011	50140	EMPLOYER GROUP INSURANCE	16,110.00	151.72%	6,400.00	21,482.62
24070011	50140	EMPLOYER GROUP INSURANCE	34,000.00	0.00%	34,000.00	-
24090011	50140	EMPLOYER GROUP INSURANCE	7,000.00	-44.00%	12,500.00	3,857.24
24120011	50140	EMPLOYER GROUP INSURANCE	21,593.00	-13.63%	25,000.00	-
24010011	50150	EMPLOYER WORK COMP INS	1,769.00	16.38%	1,520.00	1,520.00
24020011	50150	EMPLOYER WORK COMP INS	650.00	-4.41%	680.00	680.00
24030011	50150	EMPLOYER WORK COMP INS	499.00	-10.89%	560.00	560.00
24040011	50150	EMPLOYER WORK COMP INS	1,700.00	-66.00%	5,000.00	5,000.00
24050011	50150	EMPLOYER WORK COMP INS	3,745.00	138.54%	1,570.00	1,570.00
24070011	50150	EMPLOYER WORK COMP INS	201.00	-88.83%	1,800.00	1,800.00
24090011	50150	EMPLOYER WORK COMP INS	197.00	NA	-	-
24120011	50150	EMPLOYER WORK COMP INS	170.00	-93.20%	2,500.00	2,500.00
24010011	50160	EMPLOYER TORT LIAB	190.00	0.00%	190.00	1,531.24
24020011	50160	EMPLOYER TORT LIAB	322.00	138.52%	135.00	790.83
24030011	50160	EMPLOYER TORT LIAB	91.00	30.00%	70.00	675.83
24040011	50160	EMPLOYER TORT LIAB	1,100.00	103.70%	540.00	1,055.49
24050011	50160	EMPLOYER TORT LIAB	275.00	44.74%	190.00	956.49
24070011	50160	EMPLOYER TORT LIAB	254.00	41.11%	180.00	864.83
24120011	50160	EMPLOYER TORT LIAB	184.00	-63.20%	500.00	675.83
24010011	51000	ADVERTISING	100.00	-60.00%	250.00	-
24130011	51000	ADVERTISING	-	NA	-	13,478.56
24010011	51010	PRINTING	500.00	0.00%	500.00	88.28
24020011	51010	PRINTING	87.00	-13.00%	100.00	-
24030011	51010	PRINTING	100.00	0.00%	100.00	-

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
24040011	51010	PRINTING	100.00	0.00%	100.00	-
24050011	51010	PRINTING	250.00	0.00%	250.00	-
24070011	51010	PRINTING	100.00	0.00%	100.00	-
24090011	51010	PRINTING	200.00	NA	-	-
24130011	51010	PRINTING	-	NA	-	2,441.72
24010011	51030	POSTAGE	1,100.00	0.00%	1,100.00	1,077.93
24010011	51050	TELEPHONE	1,861.00	0.00%	1,861.00	1,515.60
24020011	51050	TELEPHONE	-	NA	-	-
24040011	51050	TELEPHONE	901.00	0.00%	901.00	676.55
24050011	51050	TELEPHONE	716.00	0.00%	716.00	645.48
24010011	51110	MAINTENANCE CONTRACTS	2,500.00	-43.43%	4,419.00	6,910.78
24090011	51110	MAINTENANCE CONTRACTS	-	-100.00%	500.00	-
24010011	51140	EQUIPMENT RENTALS	1,500.00	-61.78%	3,925.00	1,814.32
24010011	51160	PROFESSIONAL SERVICES	11,546.00	-7.97%	12,546.00	3,540.50
24020011	51160	PROFESSIONAL SERVICES	2,400.00	0.00%	2,400.00	1,970.00
24030011	51160	PROFESSIONAL SERVICES	5,000.00	316.67%	1,200.00	-
24040011	51160	PROFESSIONAL SERVICES	5,000.00	1600.68%	294.00	319.00
24070011	51160	PROFESSIONAL SERVICES	1,500.00	0.00%	1,500.00	540.75
24080011	51160	PROFESSIONAL SERVICES	-	-100.00%	2,500.00	-
24090011	51160	PROFESSIONAL SERVICES	500.00	NA	-	20.75
24120011	51160	PROFESSIONAL SERVICES	-	NA	-	41.50
24130011	51160	PROFESSIONAL SERVICES	-	NA	-	6,989.22
24080011	51190	MEDICAL/DENTAL SERVICES	11,270.00	0.00%	11,270.00	4,711.45
24010011	51300	GARAGE REPAIRS & MAINTENANCE	1,714.00	71.40%	1,000.00	455.17
24010011	51310	DUES & SUBSCRIPTIONS	12,500.00	NA	-	6,127.87
24020011	51310	DUES & SUBSCRIPTIONS	1,200.00	0.00%	1,200.00	300.00
24030011	51310	DUES & SUBSCRIPTIONS	5,000.00	1566.67%	300.00	-
24040011	51310	DUES & SUBSCRIPTIONS	4,000.00	400.00%	800.00	695.00
24050011	51310	DUES & SUBSCRIPTIONS	2,450.00	246.05%	708.00	382.39
24070011	51310	DUES & SUBSCRIPTIONS	1,275.00	0.00%	1,275.00	-
24090011	51310	DUES & SUBSCRIPTIONS	350.00	0.00%	350.00	-
24010011	51320	TRAINING & CONFERENCES	3,000.00	NA	-	-
24020011	51320	TRAINING & CONFERENCES	2,000.00	NA	-	-
24030011	51320	TRAINING & CONFERENCES	500.00	NA	-	-
24040011	51320	TRAINING & CONFERENCES	1,500.00	NA	-	-
24050011	51320	TRAINING & CONFERENCES	1,500.00	NA	-	40.00
24070011	51320	TRAINING & CONFERENCES	1,000.00	NA	-	-
24090011	51320	TRAINING & CONFERENCES	500.00	0.00%	500.00	-
24120011	51320	TRAINING & CONFERENCES	-	NA	-	12.50
24130011	51320	TRAINING & CONFERENCES	-	NA	-	713.46
24010011	51500	VEHICLE INSURANCE	1,836.00	0.00%	1,836.00	2,440.82
24010011	51520	MED/PROF LIAB INSURANCE	6,570.00	0.00%	6,570.00	8,759.50
24050011	51990	MISC. EXPENDITURES	2,000.00	NA	-	-
24070011	51990	MISC. EXPENDITURES	2,691.00	NA	-	-
24120011	51990	MISC. EXPENDITURES	6,864.00	NA	-	-
24010011	52010	OFFICE SUPPLIES	2,500.00	-30.13%	3,578.00	3,057.05
24020011	52010	OFFICE SUPPLIES	1,200.00	9.09%	1,100.00	496.32
24030011	52010	OFFICE SUPPLIES	1,500.00	34.29%	1,117.00	558.36
24040011	52010	OFFICE SUPPLIES	1,117.00	-53.82%	2,419.00	1,550.67
24050011	52010	OFFICE SUPPLIES	250.00	-92.86%	3,500.00	902.12
24070011	52010	OFFICE SUPPLIES	500.00	-70.15%	1,675.00	837.67
24090011	52010	OFFICE SUPPLIES	500.00	-50.00%	1,000.00	-
24130011	52010	OFFICE SUPPLIES	-	NA	-	2,158.80
24010011	52020	DATA PROCESSING SUPPLIES	-	NA	-	70.58
24080011	52300	MEDICAL/PHARMACY SUPPLIES	39,950.00	33.17%	30,000.00	28,252.06
24020011	52350	AV/EDUC/TRAINING AIDS	7,500.00	50.00%	5,000.00	3,200.00
24030011	52350	AV/EDUC/TRAINING AIDS	500.00	0.00%	500.00	-
24040011	52350	AV/EDUC/TRAINING AIDS	1,000.00	0.00%	1,000.00	-
24050011	52350	AV/EDUC/TRAINING AIDS	500.00	-50.00%	1,000.00	-
24070011	52350	AV/EDUC/TRAINING AIDS	-	-100.00%	400.00	-
24010011	52500	FUELS/LUBRICANTS	1,000.00	-33.33%	1,500.00	1,248.90
24010011	52600	OFFICE FURN & EQUIP. NON-CAPIT	1,000.00	-23.08%	1,300.00	80.56
24010011	52610	TECHNOLOGY EQUIP (NON-CAP)	1,850.00	0.00%	1,850.00	64.19

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
24030011	56000	GENERAL CONTINGENCY	62,567.00	NA	-	-
24040011	56000	GENERAL CONTINGENCY	62,726.00	NA	-	-
24010001	59101	Transfer Out	-	NA	-	317.83
Total Expenditures			2,018,524.00		1,795,011.00	1,555,350.74
Net (surplus)/ deficit AD&D			-		(121,181.00)	(474,729.05)
Department of Special Needs						
Revenues						
24420001	43530	SCDSN REVENUE	(1,910,563.00)	6.47%	(1,794,471.00)	(1,658,024.27)
24430001	43530	SCDSN REVENUE	(82,454.00)	59.44%	(51,715.00)	(86,522.05)
24440001	43530	SCDSN REVENUE	(207,628.00)	31.41%	(158,000.00)	(196,186.41)
24450001	43530	SCDSN REVENUE	(15,000.00)	-51.36%	(30,841.00)	(27,458.68)
24480001	43530	SCDSN REVENUE	-	-100.00%	(132,264.00)	(117,913.28)
24500001	43530	SCDSN REVENUE	(367,920.00)	3.75%	(354,609.00)	(312,739.51)
24510001	43530	SCDSN REVENUE	-	NA	-	(109,441.46)
24550001	43530	SCDSN REVENUE	(30,875.00)	5.06%	(29,389.00)	(18,701.17)
24500001	43531	LITTLE CAPERS	(349,984.00)	-1.30%	(354,609.00)	(305,154.16)
24500001	43532	PEYTON	(367,920.00)	3.75%	(354,609.00)	(253,141.98)
24500001	43533	FRASER	(406,004.00)	19.40%	(340,049.00)	(283,860.77)
24500001	43534	CHLOE	(384,783.00)	0.27%	(383,729.00)	(320,791.82)
24500001	43535	LAKES CROSSING	(337,713.00)	3.76%	(325,489.00)	(265,074.42)
24500001	43536	PINECREST	(352,816.00)	3.75%	(340,049.00)	(283,860.78)
24500001	43537	CENTER	(367,920.00)	-0.34%	(369,169.00)	(317,951.83)
24500001	43538	WADDELL	(352,816.00)	3.75%	(340,049.00)	(283,859.25)
24500001	43539	DEANNE	(352,816.00)	3.75%	(340,049.00)	(283,110.12)
24500001	43540	BOSTICK	(337,713.00)	3.76%	(325,489.00)	(266,815.72)
24480001	43560	SCDHHS CONTRACT	(450,000.00)	20.00%	(375,000.00)	(357,295.50)
24500001	44650	RESIDENTIAL FEES	(392,172.00)	5.53%	(371,624.00)	(370,215.15)
24410001	46010	INTEREST ON INVESTMENTS	-	NA	-	(5,678.00)
24410001	47010	MISCELLANEOUS REVENUES	(3,351.00)	11.70%	(3,000.00)	(64,749.85)
24420001	47620	CLIENT CONTRACT REVENUE	(50,000.00)	0.00%	(50,000.00)	(34,795.00)
24490001	47620	CLIENT CONTRACT REVENUE	(22,773.00)	0.10%	(22,751.00)	-
24410001	48910	CONT FROM PR YR FUND BAL	-	-100.00%	(786,080.00)	-
24420001	48910	CONT FROM PR YR FUND BAL	(84,855.00)	-69.14%	(274,927.00)	-
24430001	48910	CONT FROM PR YR FUND BAL	-	-100.00%	(31,423.00)	-
24440001	48910	CONT FROM PR YR FUND BAL	-	-100.00%	(139,143.00)	-
24480001	48910	CONT FROM PR YR FUND BAL	-	-100.00%	(268,773.00)	-
24500001	48910	CONT FROM PR YR FUND BAL	-	-100.00%	(1,118,012.00)	-
24410001	49100	TRANSFERS IN	(832,944.00)	NA	-	-
24420001	49100	TRANSFERS IN	(264,316.00)	NA	-	-
24440001	49100	TRANSFERS IN	(163,999.00)	NA	-	-
24480001	49100	TRANSFERS IN	(298,117.00)	NA	-	-
24500001	49100	TRANSFERS IN	(922,257.00)	NA	-	-
24410001	49200	Transfers In	-	NA	-	(238,067.87)
24440001	49241	XFER FM BCDSN ADMIN FUND	-	NA	-	(103,486.00)
24480001	49241	XFER FM BCDSN ADMIN FUND	-	NA	-	(356,744.48)
24550001	49243	XFER FM DSN SUPER LIVING FUND	-	NA	-	(144.74)
Total revenues			(9,709,709.00)		(9,465,312.00)	(6,921,784.27)

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
Expenditures						
24410011	50020	SALARIES AND WAGES	324,005.00	3.02%	314,514.00	456,733.18
24420011	50020	SALARIES AND WAGES	1,100,126.00	1.48%	1,084,093.00	888,030.13
24420013	50020	SALARIES AND WAGES	78,591.00	0.00%	78,591.00	101,008.89
24430011	50020	SALARIES AND WAGES	49,923.00	3.43%	48,269.00	39,487.56
24440011	50020	SALARIES AND WAGES	253,262.00	37.08%	184,760.00	196,658.40
24480011	50020	SALARIES AND WAGES	473,988.00	-6.87%	508,951.00	527,176.81
24490011	50020	SALARIES AND WAGES	10,151.00	0.00%	10,151.00	6,956.81
24500011	50020	SALARIES AND WAGES	215,521.00	-17.71%	261,912.00	167,667.72
24500012	50020	SALARIES AND WAGES	226,539.00	-7.87%	245,896.00	156,831.45
24500013	50020	SALARIES AND WAGES	265,317.00	-3.39%	274,638.00	251,209.31
24500014	50020	SALARIES AND WAGES	267,972.00	-8.89%	294,108.00	243,879.69
24500015	50020	SALARIES AND WAGES	269,088.00	-7.32%	290,332.00	200,592.91
24500016	50020	SALARIES AND WAGES	239,936.00	10.28%	217,567.00	150,898.68
24500017	50020	SALARIES AND WAGES	279,556.00	22.89%	227,482.00	223,817.30
24500018	50020	SALARIES AND WAGES	255,574.00	-10.54%	285,673.00	283,011.77
24500019	50020	SALARIES AND WAGES	176,288.00	-3.30%	182,297.00	207,583.55
24500020	50020	SALARIES AND WAGES	267,217.00	-3.35%	276,479.00	170,563.81
24500021	50020	SALARIES AND WAGES	226,540.00	-7.87%	245,896.00	147,688.98
24550011	50020	SALARIES AND WAGES	4,189.00	3.03%	4,066.00	462.88
24410011	50060	OVERTIME	5,000.00	0.00%	5,000.00	2,440.06
24420011	50060	OVERTIME	60,000.00	20.00%	50,000.00	48,772.78
24430011	50060	OVERTIME	1,000.00	0.00%	1,000.00	3,731.64
24440011	50060	OVERTIME	1,000.00	-60.00%	2,500.00	1,761.70
24480011	50060	OVERTIME	5,000.00	0.00%	5,000.00	5,156.15
24490011	50060	OVERTIME	1,000.00	0.00%	1,000.00	1,528.46
24500011	50060	OVERTIME	50,000.00	66.67%	30,000.00	64,323.66
24500012	50060	OVERTIME	50,000.00	66.67%	30,000.00	54,747.35
24500013	50060	OVERTIME	50,000.00	66.67%	30,000.00	32,956.08
24500014	50060	OVERTIME	50,000.00	66.67%	30,000.00	36,675.82
24500015	50060	OVERTIME	50,000.00	66.67%	30,000.00	52,580.80
24500016	50060	OVERTIME	50,000.00	66.67%	30,000.00	39,660.38
24500017	50060	OVERTIME	50,000.00	66.67%	30,000.00	37,979.38
24500018	50060	OVERTIME	50,000.00	66.67%	30,000.00	50,343.47
24500019	50060	OVERTIME	50,000.00	66.67%	30,000.00	35,166.63
24500020	50060	OVERTIME	50,000.00	66.67%	30,000.00	80,477.82
24500021	50060	OVERTIME	50,000.00	66.67%	30,000.00	47,522.14
24410011	50100	EMPLOYER FICA	20,398.00	2.97%	19,810.00	27,990.11
24420011	50100	EMPLOYER FICA	71,928.00	2.30%	70,314.00	56,481.58
24420013	50100	EMPLOYER FICA	4,873.00	0.00%	4,873.00	6,262.54
24430011	50100	EMPLOYER FICA	3,157.00	3.34%	3,055.00	2,637.04
24440011	50100	EMPLOYER FICA	15,764.00	35.78%	11,610.00	11,716.54
24480011	50100	EMPLOYER FICA	29,697.00	-6.80%	31,865.00	32,149.67
24490011	50100	EMPLOYER FICA	691.00	0.00%	691.00	526.08
24500011	50100	EMPLOYER FICA	16,462.00	-9.04%	18,099.00	13,960.42
24500012	50100	EMPLOYER FICA	17,145.00	0.23%	17,106.00	12,861.79
24500013	50100	EMPLOYER FICA	19,549.00	3.50%	18,888.00	16,981.96
24500014	50100	EMPLOYER FICA	19,714.00	-1.90%	20,095.00	16,913.13
24500015	50100	EMPLOYER FICA	19,783.00	-0.39%	19,861.00	15,374.45
24500016	50100	EMPLOYER FICA	17,976.00	17.12%	15,349.00	11,434.45
24500017	50100	EMPLOYER FICA	20,432.00	27.99%	15,964.00	15,835.62
24500018	50100	EMPLOYER FICA	18,945.00	-3.20%	19,572.00	19,961.38
24500019	50100	EMPLOYER FICA	14,030.00	6.59%	13,162.00	14,583.34
24500020	50100	EMPLOYER FICA	19,667.00	3.50%	19,002.00	15,167.59
24500021	50100	EMPLOYER FICA	17,145.00	0.23%	17,106.00	11,870.70
24550011	50100	EMPLOYER FICA	260.00	3.17%	252.00	27.59
24410011	50110	EMPLOYER MEDICARE	4,771.00	2.98%	4,633.00	6,545.61
24420011	50110	EMPLOYER MEDICARE	16,822.00	2.30%	16,444.00	13,209.18
24420013	50110	EMPLOYER MEDICARE	1,140.00	0.00%	1,140.00	1,464.76
24430011	50110	EMPLOYER MEDICARE	738.00	3.36%	714.00	616.27
24440011	50110	EMPLOYER MEDICARE	3,687.00	35.80%	2,715.00	2,739.81
24480011	50110	EMPLOYER MEDICARE	6,945.00	-6.80%	7,452.00	7,519.20

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
24490011	50110	EMPLOYER MEDICARE	147.00	-9.26%	162.00	123.03
24500011	50110	EMPLOYER MEDICARE	3,850.00	-9.05%	4,233.00	3,265.43
24500012	50110	EMPLOYER MEDICARE	4,010.00	0.25%	4,000.00	3,008.09
24500013	50110	EMPLOYER MEDICARE	4,572.00	4.74%	4,365.00	3,971.53
24500014	50110	EMPLOYER MEDICARE	4,611.00	-1.89%	4,700.00	3,955.51
24500015	50110	EMPLOYER MEDICARE	4,626.00	-0.41%	4,645.00	3,596.04
24500016	50110	EMPLOYER MEDICARE	4,204.00	17.10%	3,590.00	2,674.65
24500017	50110	EMPLOYER MEDICARE	4,778.00	27.99%	3,733.00	3,703.52
24500018	50110	EMPLOYER MEDICARE	4,430.00	-3.21%	4,577.00	4,667.82
24500019	50110	EMPLOYER MEDICARE	3,281.00	6.60%	3,078.00	3,410.91
24500020	50110	EMPLOYER MEDICARE	4,599.00	3.49%	4,444.00	3,547.18
24500021	50110	EMPLOYER MEDICARE	4,009.00	0.23%	4,000.00	2,775.90
24550011	50110	EMPLOYER MEDICARE	61.00	3.39%	59.00	6.45
24410011	50120	EMPLOYER SC RETIREMENT	61,063.00	15.40%	52,912.00	73,227.08
24420011	50120	EMPLOYER SC RETIREMENT	215,319.00	14.65%	187,806.00	149,789.60
24420013	50120	EMPLOYER SC RETIREMENT	14,586.00	NA	-	(2.86)
24430011	50120	EMPLOYER SC RETIREMENT	9,451.00	15.84%	8,159.00	6,919.70
24440011	50120	EMPLOYER SC RETIREMENT	47,191.00	52.18%	31,010.00	30,191.47
24480011	50120	EMPLOYER SC RETIREMENT	88,900.00	4.45%	85,110.00	84,458.10
24490011	50120	EMPLOYER SC RETIREMENT	2,070.00	12.07%	1,847.00	1,419.28
24500011	50120	EMPLOYER SC RETIREMENT	49,280.00	1.94%	48,341.00	36,636.63
24500012	50120	EMPLOYER SC RETIREMENT	51,325.00	12.34%	45,688.00	33,439.35
24500013	50120	EMPLOYER SC RETIREMENT	58,523.00	16.01%	50,448.00	45,045.10
24500014	50120	EMPLOYER SC RETIREMENT	59,016.00	9.96%	53,672.00	44,254.31
24500015	50120	EMPLOYER SC RETIREMENT	59,223.00	11.64%	53,047.00	40,022.52
24500016	50120	EMPLOYER SC RETIREMENT	53,812.00	31.26%	40,997.00	30,264.29
24500017	50120	EMPLOYER SC RETIREMENT	61,165.00	43.45%	42,639.00	41,670.82
24500018	50120	EMPLOYER SC RETIREMENT	56,715.00	8.49%	52,275.00	52,915.19
24500019	50120	EMPLOYER SC RETIREMENT	42,000.00	19.47%	35,156.00	38,417.52
24500020	50120	EMPLOYER SC RETIREMENT	58,875.00	16.00%	50,753.00	39,540.99
24500021	50120	EMPLOYER SC RETIREMENT	51,325.00	12.34%	45,688.00	31,892.04
24550011	50120	EMPLOYER SC RETIREMENT	778.00	15.60%	673.00	77.07
24410011	50140	EMPLOYER GROUP INSURANCE	78,742.00	46.37%	53,795.00	85,301.82
24420011	50140	EMPLOYER GROUP INSURANCE	238,763.00	-15.19%	281,537.00	195,003.01
24430011	50140	EMPLOYER GROUP INSURANCE	6,202.00	-46.68%	11,632.00	7,191.54
24440011	50140	EMPLOYER GROUP INSURANCE	37,092.00	-21.33%	47,148.00	39,786.51
24480011	50140	EMPLOYER GROUP INSURANCE	105,046.00	18.44%	88,688.00	132,814.16
24500011	50140	EMPLOYER GROUP INSURANCE	27,500.00	-58.49%	66,257.00	25,858.00
24500012	50140	EMPLOYER GROUP INSURANCE	28,647.00	-57.10%	66,776.00	33,880.95
24500013	50140	EMPLOYER GROUP INSURANCE	57,053.00	-14.56%	66,776.00	75,603.59
24500014	50140	EMPLOYER GROUP INSURANCE	43,136.00	-44.10%	77,161.00	42,053.08
24500015	50140	EMPLOYER GROUP INSURANCE	24,175.00	-68.67%	77,161.00	16,514.49
24500016	50140	EMPLOYER GROUP INSURANCE	33,822.00	-40.02%	56,391.00	30,285.71
24500017	50140	EMPLOYER GROUP INSURANCE	51,445.00	-33.33%	77,161.00	51,445.01
24500018	50140	EMPLOYER GROUP INSURANCE	74,016.00	-3.43%	76,641.00	81,952.25
24500019	50140	EMPLOYER GROUP INSURANCE	41,134.00	-27.06%	56,391.00	48,431.66
24500020	50140	EMPLOYER GROUP INSURANCE	41,590.00	-37.23%	66,257.00	41,521.84
24500021	50140	EMPLOYER GROUP INSURANCE	29,042.00	-48.50%	56,391.00	41,257.60
24550011	50140	EMPLOYER GROUP INSURANCE	-	-100.00%	624.00	-
24410011	50150	EMPLOYER WORK COMP INS	3,700.00	-26.00%	5,000.00	5,000.00
24420011	50150	EMPLOYER WORK COMP INS	17,381.00	-13.10%	20,000.00	20,000.00
24430011	50150	EMPLOYER WORK COMP INS	839.00	4.88%	800.00	800.00
24440011	50150	EMPLOYER WORK COMP INS	3,294.00	-45.10%	6,000.00	6,000.00
24480011	50150	EMPLOYER WORK COMP INS	8,143.00	35.72%	6,000.00	6,000.00
24500011	50150	EMPLOYER WORK COMP INS	3,500.00	-30.00%	5,000.00	5,000.00
24500012	50150	EMPLOYER WORK COMP INS	2,710.00	-45.80%	5,000.00	5,000.00
24500013	50150	EMPLOYER WORK COMP INS	4,083.00	-18.34%	5,000.00	5,000.00
24500014	50150	EMPLOYER WORK COMP INS	4,905.00	-1.90%	5,000.00	5,000.00
24500015	50150	EMPLOYER WORK COMP INS	3,319.00	-33.62%	5,000.00	5,000.00
24500016	50150	EMPLOYER WORK COMP INS	3,051.00	-38.98%	5,000.00	5,000.00
24500017	50150	EMPLOYER WORK COMP INS	4,114.00	-17.72%	5,000.00	5,000.00
24500018	50150	EMPLOYER WORK COMP INS	3,837.00	-23.26%	5,000.00	5,000.00
24500019	50150	EMPLOYER WORK COMP INS	2,464.00	-50.72%	5,000.00	5,000.00

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Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
24500020	50150	EMPLOYER WORK COMP INS	3,792.00	-24.16%	5,000.00	5,000.00
24500021	50150	EMPLOYER WORK COMP INS	2,845.00	-43.10%	5,000.00	5,000.00
24550011	50150	EMPLOYER WORK COMP INS	66.00	-67.00%	200.00	200.00
24410011	50160	EMPLOYER TORT LIAB	2,000.00	25.00%	1,600.00	2,698.83
24420011	50160	EMPLOYER TORT LIAB	10,000.00	66.67%	6,000.00	7,439.53
24420013	50160	EMPLOYER TORT LIAB	15,000.00	0.00%	15,000.00	33,381.00
24430011	50160	EMPLOYER TORT LIAB	300.00	0.00%	300.00	675.83
24440011	50160	EMPLOYER TORT LIAB	1,423.00	-5.13%	1,500.00	1,009.67
24480011	50160	EMPLOYER TORT LIAB	3,000.00	-53.13%	6,401.00	1,961.32
24500011	50160	EMPLOYER TORT LIAB	1,000.00	0.00%	1,000.00	1,154.49
24500012	50160	EMPLOYER TORT LIAB	1,000.00	0.00%	1,000.00	1,101.33
24500013	50160	EMPLOYER TORT LIAB	1,000.00	0.00%	1,000.00	1,101.33
24500014	50160	EMPLOYER TORT LIAB	1,000.00	0.00%	1,000.00	1,390.99
24500015	50160	EMPLOYER TORT LIAB	1,000.00	0.00%	1,000.00	1,291.99
24500016	50160	EMPLOYER TORT LIAB	1,000.00	0.00%	1,000.00	1,147.16
24500017	50160	EMPLOYER TORT LIAB	1,000.00	0.00%	1,000.00	1,246.16
24500018	50160	EMPLOYER TORT LIAB	1,000.00	0.00%	1,000.00	1,337.83
24500019	50160	EMPLOYER TORT LIAB	1,000.00	0.00%	1,000.00	1,147.16
24500020	50160	EMPLOYER TORT LIAB	1,000.00	0.00%	1,000.00	1,101.33
24500021	50160	EMPLOYER TORT LIAB	1,000.00	0.00%	1,000.00	767.49
24550011	50160	EMPLOYER TORT LIAB	20.00	0.00%	20.00	-
24410011	50170	EMPLOYER UNEMPLOYMENT INS	500.00	0.00%	500.00	-
24420011	50170	EMPLOYER UNEMPLOYMENT INS	500.00	66.67%	300.00	-
24430011	50170	EMPLOYER UNEMPLOYMENT INS	-	-100.00%	20.00	-
24440011	50170	EMPLOYER UNEMPLOYMENT INS	100.00	0.00%	100.00	-
24480011	50170	EMPLOYER UNEMPLOYMENT INS	-	-100.00%	70.00	-
24500011	50170	EMPLOYER UNEMPLOYMENT INS	75.00	0.00%	75.00	-
24500012	50170	EMPLOYER UNEMPLOYMENT INS	75.00	0.00%	75.00	-
24500013	50170	EMPLOYER UNEMPLOYMENT INS	75.00	0.00%	75.00	-
24500014	50170	EMPLOYER UNEMPLOYMENT INS	75.00	0.00%	75.00	-
24500015	50170	EMPLOYER UNEMPLOYMENT INS	75.00	0.00%	75.00	-
24500016	50170	EMPLOYER UNEMPLOYMENT INS	75.00	0.00%	75.00	-
24500017	50170	EMPLOYER UNEMPLOYMENT INS	75.00	0.00%	75.00	-
24500018	50170	EMPLOYER UNEMPLOYMENT INS	75.00	0.00%	75.00	-
24500019	50170	EMPLOYER UNEMPLOYMENT INS	75.00	0.00%	75.00	-
24500020	50170	EMPLOYER UNEMPLOYMENT INS	75.00	0.00%	75.00	-
24500021	50170	EMPLOYER UNEMPLOYMENT INS	75.00	0.00%	75.00	-
24550011	50170	EMPLOYER UNEMPLOYMENT INS	20.00	0.00%	20.00	-
24410011	51000	ADVERTISING	2,000.00	33.33%	1,500.00	-
24410011	51010	PRINTING	1,000.00	0.00%	1,000.00	909.31
24480011	51010	PRINTING	2,000.00	0.00%	2,000.00	-
24410011	51030	POSTAGE	3,500.00	0.00%	3,500.00	2,172.86
24480011	51030	POSTAGE	500.00	0.00%	500.00	120.11
24410011	51041	SWU Fees	1,300.00	8.33%	1,200.00	1,158.86
24500011	51041	SWU Fees	100.00	0.00%	100.00	100.00
24500012	51041	SWU Fees	100.00	0.00%	100.00	100.00
24500013	51041	SWU Fees	100.00	0.00%	100.00	100.00
24500014	51041	SWU Fees	150.00	50.00%	100.00	135.00
24500015	51041	SWU Fees	100.00	0.00%	100.00	100.00
24500016	51041	SWU Fees	250.00	150.00%	100.00	115.00
24500017	51041	SWU Fees	150.00	50.00%	100.00	115.00
24500018	51041	SWU Fees	150.00	50.00%	100.00	-
24500019	51041	SWU Fees	150.00	50.00%	100.00	135.00
24500020	51041	SWU Fees	150.00	50.00%	100.00	-
24500021	51041	SWU Fees	150.00	50.00%	100.00	-
24410011	51043	PROPERTY TAX PAYMENTS	150.00	0.00%	150.00	135.67
24500011	51043	PROPERTY TAX PAYMENTS	-	-100.00%	50.00	3.00
24500012	51043	PROPERTY TAX PAYMENTS	-	-100.00%	50.00	3.00
24500013	51043	PROPERTY TAX PAYMENTS	-	-100.00%	50.00	3.00
24500014	51043	PROPERTY TAX PAYMENTS	-	-100.00%	50.00	11.26
24500015	51043	PROPERTY TAX PAYMENTS	-	-100.00%	50.00	3.00
24500016	51043	PROPERTY TAX PAYMENTS	-	-100.00%	50.00	106.89
24500017	51043	PROPERTY TAX PAYMENTS	-	-100.00%	50.00	29.64

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24500018	51043	PROPERTY TAX PAYMENTS	-	-100.00%	50.00	-
24500019	51043	PROPERTY TAX PAYMENTS	-	-100.00%	50.00	11.26
24500020	51043	PROPERTY TAX PAYMENTS	-	-100.00%	50.00	-
24500021	51043	PROPERTY TAX PAYMENTS	-	-100.00%	50.00	-
24410011	51050	TELEPHONE	2,000.00	-28.57%	2,800.00	2,064.70
24420011	51050	TELEPHONE	5,000.00	-44.44%	9,000.00	7,242.48
24430011	51050	TELEPHONE	944.00	-5.60%	1,000.00	856.38
24440011	51050	TELEPHONE	2,500.00	-10.71%	2,800.00	2,627.87
24480011	51050	TELEPHONE	6,500.00	0.00%	6,500.00	7,248.67
24500011	51050	TELEPHONE	1,700.00	0.00%	1,700.00	1,774.27
24500012	51050	TELEPHONE	2,700.00	58.82%	1,700.00	3,628.14
24500013	51050	TELEPHONE	1,700.00	0.00%	1,700.00	1,642.99
24500014	51050	TELEPHONE	1,700.00	0.00%	1,700.00	2,294.99
24500015	51050	TELEPHONE	1,700.00	0.00%	1,700.00	1,681.44
24500016	51050	TELEPHONE	1,700.00	0.00%	1,700.00	1,583.06
24500017	51050	TELEPHONE	1,700.00	0.00%	1,700.00	1,569.47
24500018	51050	TELEPHONE	1,700.00	0.00%	1,700.00	1,720.60
24500019	51050	TELEPHONE	1,700.00	0.00%	1,700.00	1,642.86
24500020	51050	TELEPHONE	1,700.00	0.00%	1,700.00	1,667.10
24500021	51050	TELEPHONE	1,700.00	0.00%	1,700.00	906.86
24410011	51060	ELECTRICITY	50,000.00	0.00%	50,000.00	33,106.25
24500011	51060	ELECTRICITY	6,000.00	0.00%	6,000.00	4,355.03
24500012	51060	ELECTRICITY	6,500.00	8.33%	6,000.00	4,836.84
24500013	51060	ELECTRICITY	6,000.00	0.00%	6,000.00	4,346.54
24500014	51060	ELECTRICITY	6,000.00	0.00%	6,000.00	3,464.28
24500015	51060	ELECTRICITY	6,000.00	0.00%	6,000.00	3,999.96
24500016	51060	ELECTRICITY	6,000.00	0.00%	6,000.00	4,308.26
24500017	51060	ELECTRICITY	6,000.00	0.00%	6,000.00	5,478.26
24500018	51060	ELECTRICITY	6,000.00	0.00%	6,000.00	3,564.88
24500019	51060	ELECTRICITY	6,000.00	0.00%	6,000.00	3,393.33
24500020	51060	ELECTRICITY	6,000.00	0.00%	6,000.00	3,922.82
24500021	51060	ELECTRICITY	6,000.00	0.00%	6,000.00	2,599.30
24410011	51070	WATER/SEWER/GARBAGE	3,600.00	0.00%	3,600.00	3,131.68
24500011	51070	WATER/SEWER/GARBAGE	2,100.00	0.00%	2,100.00	1,925.25
24500012	51070	WATER/SEWER/GARBAGE	1,000.00	-52.38%	2,100.00	904.51
24500013	51070	WATER/SEWER/GARBAGE	2,100.00	0.00%	2,100.00	1,773.92
24500014	51070	WATER/SEWER/GARBAGE	2,500.00	0.00%	2,500.00	2,590.94
24500015	51070	WATER/SEWER/GARBAGE	2,100.00	0.00%	2,100.00	1,616.55
24500016	51070	WATER/SEWER/GARBAGE	2,500.00	0.00%	2,500.00	2,022.04
24500017	51070	WATER/SEWER/GARBAGE	2,000.00	-4.76%	2,100.00	1,630.34
24500018	51070	WATER/SEWER/GARBAGE	2,100.00	0.00%	2,100.00	1,419.15
24500019	51070	WATER/SEWER/GARBAGE	2,100.00	0.00%	2,100.00	1,857.63
24500020	51070	WATER/SEWER/GARBAGE	2,100.00	0.00%	2,100.00	2,363.78
24500021	51070	WATER/SEWER/GARBAGE	2,100.00	0.00%	2,100.00	1,492.31
24410011	51090	GARBAGE SERVICES	3,566.00	0.00%	3,566.00	-
24420011	51090	GARBAGE SERVICES	50.00	-90.00%	500.00	38.33
24500011	51090	GARBAGE SERVICES	2,300.00	-8.00%	2,500.00	1,516.65
24500012	51090	GARBAGE SERVICES	2,300.00	-8.00%	2,500.00	1,535.85
24500013	51090	GARBAGE SERVICES	2,300.00	-8.00%	2,500.00	1,354.53
24500015	51090	GARBAGE SERVICES	2,300.00	-8.00%	2,500.00	1,497.03
24410011	51110	MAINTENANCE CONTRACTS	3,000.00	30.43%	2,300.00	2,370.10
24410011	51120	EQUIPMENT MAINTENANCE	1,000.00	0.00%	1,000.00	-
24420011	51120	EQUIPMENT MAINTENANCE	500.00	-50.00%	1,000.00	-
24500011	51120	EQUIPMENT MAINTENANCE	500.00	0.00%	500.00	233.80
24500012	51120	EQUIPMENT MAINTENANCE	500.00	0.00%	500.00	336.00
24500013	51120	EQUIPMENT MAINTENANCE	500.00	0.00%	500.00	198.00
24500014	51120	EQUIPMENT MAINTENANCE	500.00	0.00%	500.00	258.00
24500015	51120	EQUIPMENT MAINTENANCE	500.00	0.00%	500.00	421.94
24500016	51120	EQUIPMENT MAINTENANCE	500.00	0.00%	500.00	505.00
24500017	51120	EQUIPMENT MAINTENANCE	1,000.00	0.00%	1,000.00	270.00
24500018	51120	EQUIPMENT MAINTENANCE	500.00	0.00%	500.00	-
24500019	51120	EQUIPMENT MAINTENANCE	500.00	0.00%	500.00	159.00
24500020	51120	EQUIPMENT MAINTENANCE	500.00	0.00%	500.00	232.24

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24500021	51120	EQUIPMENT MAINTENANCE	500.00	0.00%	500.00	-
24410011	51130	REPAIRS TO BUILDINGS	2,000.00	0.00%	2,000.00	1,681.37
24420011	51130	REPAIRS TO BUILDINGS	1,000.00	0.00%	1,000.00	-
24500016	51130	REPAIRS TO BUILDINGS	5,600.00	NA	-	-
24410011	51140	EQUIPMENT RENTALS	7,000.00	40.00%	5,000.00	5,431.78
24420011	51140	EQUIPMENT RENTALS	600.00	0.00%	600.00	516.00
24410011	51160	PROFESSIONAL SERVICES	70,000.00	-2.78%	72,000.00	40,923.36
24420011	51160	PROFESSIONAL SERVICES	10,000.00	100.00%	5,000.00	27,465.81
24430011	51160	PROFESSIONAL SERVICES	1,800.00	NA	-	-
24440011	51160	PROFESSIONAL SERVICES	1,000.00	0.00%	1,000.00	40.00
24480011	51160	PROFESSIONAL SERVICES	5,000.00	-50.00%	10,000.00	7,503.93
24490011	51160	PROFESSIONAL SERVICES	500.00	0.00%	500.00	41.50
24500011	51160	PROFESSIONAL SERVICES	200.00	0.00%	200.00	105.00
24500012	51160	PROFESSIONAL SERVICES	2,200.00	1000.00%	200.00	114.37
24500013	51160	PROFESSIONAL SERVICES	7,400.00	3600.00%	200.00	112.50
24500014	51160	PROFESSIONAL SERVICES	3,800.00	1800.00%	200.00	106.87
24500015	51160	PROFESSIONAL SERVICES	2,000.00	900.00%	200.00	105.00
24500016	51160	PROFESSIONAL SERVICES	-	-100.00%	200.00	108.75
24500017	51160	PROFESSIONAL SERVICES	9,200.00	4500.00%	200.00	200.62
24500018	51160	PROFESSIONAL SERVICES	7,400.00	3600.00%	200.00	2,630.62
24500019	51160	PROFESSIONAL SERVICES	5,000.00	2400.00%	200.00	108.75
24500020	51160	PROFESSIONAL SERVICES	5,600.00	2700.00%	200.00	103.12
24500021	51160	PROFESSIONAL SERVICES	3,800.00	1800.00%	200.00	105.00
24430011	51170	NON-PROFESSIONAL SERVICES	500.00	0.00%	500.00	-
24450011	51170	NON-PROFESSIONAL SERVICES	15,000.00	-51.36%	30,841.00	25,977.17
24550011	51170	NON-PROFESSIONAL SERVICES	8,731.00	-2.17%	8,925.00	-
24510011	51190	MEDICAL/DENTAL SERVICES	-	NA	-	41,760.00
24410011	51210	CLEANING SERVICES	20,000.00	1.52%	19,700.00	15,282.00
24410011	51220	CONTRACTUAL SERVICES	1,000.00	0.00%	1,000.00	-
24490011	51220	CONTRACTUAL SERVICES	6,000.00	0.00%	6,000.00	1,427.00
24500011	51220	CONTRACTUAL SERVICES	5,000.00	0.00%	5,000.00	4,763.90
24500012	51220	CONTRACTUAL SERVICES	5,000.00	0.00%	5,000.00	3,795.02
24500013	51220	CONTRACTUAL SERVICES	5,000.00	0.00%	5,000.00	6,142.97
24500014	51220	CONTRACTUAL SERVICES	6,000.00	0.00%	6,000.00	5,750.35
24500015	51220	CONTRACTUAL SERVICES	5,000.00	0.00%	5,000.00	5,760.60
24500016	51220	CONTRACTUAL SERVICES	8,000.00	0.00%	8,000.00	6,134.78
24500017	51220	CONTRACTUAL SERVICES	8,184.00	0.00%	8,184.00	6,382.27
24500018	51220	CONTRACTUAL SERVICES	6,000.00	0.00%	6,000.00	5,449.77
24500019	51220	CONTRACTUAL SERVICES	5,000.00	0.00%	5,000.00	5,158.55
24500020	51220	CONTRACTUAL SERVICES	7,500.00	0.00%	7,500.00	5,236.34
24500021	51220	CONTRACTUAL SERVICES	7,500.00	0.00%	7,500.00	4,302.99
24550011	51220	CONTRACTUAL SERVICES	16,750.00	11.67%	15,000.00	12,300.00
24420011	51230	TRANSPORTATION SERVICES	-	-100.00%	10,000.00	141,570.00
24410011	51270	GROUNDS MAINT SERVICES	15,000.00	0.00%	15,000.00	9,100.00
24500011	51270	GROUNDS MAINT SERVICES	4,500.00	0.00%	4,500.00	2,825.00
24500012	51270	GROUNDS MAINT SERVICES	4,500.00	0.00%	4,500.00	2,825.00
24500013	51270	GROUNDS MAINT SERVICES	4,500.00	0.00%	4,500.00	3,225.00
24500014	51270	GROUNDS MAINT SERVICES	4,500.00	0.00%	4,500.00	2,192.63
24500015	51270	GROUNDS MAINT SERVICES	4,500.00	0.00%	4,500.00	2,825.00
24500016	51270	GROUNDS MAINT SERVICES	4,500.00	0.00%	4,500.00	1,920.00
24500017	51270	GROUNDS MAINT SERVICES	4,500.00	0.00%	4,500.00	2,720.00
24500018	51270	GROUNDS MAINT SERVICES	4,500.00	0.00%	4,500.00	2,192.63
24500019	51270	GROUNDS MAINT SERVICES	4,500.00	0.00%	4,500.00	2,192.63
24500020	51270	GROUNDS MAINT SERVICES	4,500.00	0.00%	4,500.00	2,192.63
24500021	51270	GROUNDS MAINT SERVICES	4,500.00	0.00%	4,500.00	2,192.63
24410011	51295	OTHER VEHICLE OPER COSTS	2,500.00	0.00%	2,500.00	36.10
24420011	51295	OTHER VEHICLE OPER COSTS	500.00	-50.00%	1,000.00	-
24430011	51295	OTHER VEHICLE OPER COSTS	100.00	0.00%	100.00	-
24500011	51295	OTHER VEHICLE OPER COSTS	100.00	-33.33%	150.00	100.00
24500012	51295	OTHER VEHICLE OPER COSTS	100.00	-33.33%	150.00	-
24500013	51295	OTHER VEHICLE OPER COSTS	100.00	-33.33%	150.00	-
24500014	51295	OTHER VEHICLE OPER COSTS	100.00	-33.33%	150.00	-
24500015	51295	OTHER VEHICLE OPER COSTS	100.00	-33.33%	150.00	17.95

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24500016	51295	OTHER VEHICLE OPER COSTS	-	-100.00%	150.00	100.00
24500017	51295	OTHER VEHICLE OPER COSTS	100.00	-33.33%	150.00	17.95
24500018	51295	OTHER VEHICLE OPER COSTS	100.00	-33.33%	150.00	30.95
24500019	51295	OTHER VEHICLE OPER COSTS	100.00	-33.33%	150.00	-
24500020	51295	OTHER VEHICLE OPER COSTS	100.00	-33.33%	150.00	100.00
24500021	51295	OTHER VEHICLE OPER COSTS	100.00	-33.33%	150.00	100.00
24410011	51300	GARAGE REPAIRS & MAINTENANCE	10,000.00	0.00%	10,000.00	6,448.47
24420011	51300	GARAGE REPAIRS & MAINTENANCE	15,000.00	25.00%	12,000.00	16,138.85
24500011	51300	GARAGE REPAIRS & MAINTENANCE	1,500.00	-40.00%	2,500.00	1,077.66
24500012	51300	GARAGE REPAIRS & MAINTENANCE	2,500.00	0.00%	2,500.00	3,908.29
24500013	51300	GARAGE REPAIRS & MAINTENANCE	2,500.00	0.00%	2,500.00	926.21
24500014	51300	GARAGE REPAIRS & MAINTENANCE	2,500.00	0.00%	2,500.00	-
24500015	51300	GARAGE REPAIRS & MAINTENANCE	2,500.00	0.00%	2,500.00	1,419.64
24500016	51300	GARAGE REPAIRS & MAINTENANCE	2,500.00	0.00%	2,500.00	3,059.02
24500017	51300	GARAGE REPAIRS & MAINTENANCE	2,500.00	0.00%	2,500.00	418.12
24500018	51300	GARAGE REPAIRS & MAINTENANCE	2,500.00	0.00%	2,500.00	1,318.47
24500019	51300	GARAGE REPAIRS & MAINTENANCE	2,500.00	0.00%	2,500.00	1,109.70
24500020	51300	GARAGE REPAIRS & MAINTENANCE	2,500.00	0.00%	2,500.00	385.77
24500021	51300	GARAGE REPAIRS & MAINTENANCE	2,500.00	0.00%	2,500.00	2,554.75
24410011	51310	DUES & SUBSCRIPTIONS	3,000.00	20.00%	2,500.00	2,711.00
24420011	51310	DUES & SUBSCRIPTIONS	200.00	0.00%	200.00	-
24500011	51310	DUES & SUBSCRIPTIONS	-	-100.00%	20.00	-
24500012	51310	DUES & SUBSCRIPTIONS	-	-100.00%	20.00	-
24500013	51310	DUES & SUBSCRIPTIONS	20.00	0.00%	20.00	-
24500014	51310	DUES & SUBSCRIPTIONS	20.00	0.00%	20.00	-
24500015	51310	DUES & SUBSCRIPTIONS	-	-100.00%	20.00	-
24500016	51310	DUES & SUBSCRIPTIONS	-	-100.00%	20.00	-
24500017	51310	DUES & SUBSCRIPTIONS	-	-100.00%	20.00	-
24500018	51310	DUES & SUBSCRIPTIONS	20.00	0.00%	20.00	-
24500019	51310	DUES & SUBSCRIPTIONS	20.00	0.00%	20.00	-
24500020	51310	DUES & SUBSCRIPTIONS	20.00	0.00%	20.00	-
24500021	51310	DUES & SUBSCRIPTIONS	20.00	0.00%	20.00	-
24410011	51320	TRAINING & CONFERENCES	5,000.00	0.00%	5,000.00	863.26
24420011	51320	TRAINING & CONFERENCES	4,000.00	33.33%	3,000.00	2,942.11
24430011	51320	TRAINING & CONFERENCES	2,500.00	150.00%	1,000.00	-
24440011	51320	TRAINING & CONFERENCES	2,000.00	0.00%	2,000.00	1,712.02
24480011	51320	TRAINING & CONFERENCES	5,398.00	-10.03%	6,000.00	1,994.63
24490011	51320	TRAINING & CONFERENCES	500.00	-16.67%	600.00	-
24500011	51320	TRAINING & CONFERENCES	600.00	0.00%	600.00	9.09
24500012	51320	TRAINING & CONFERENCES	600.00	0.00%	600.00	-
24500013	51320	TRAINING & CONFERENCES	600.00	0.00%	600.00	-
24500014	51320	TRAINING & CONFERENCES	600.00	0.00%	600.00	2,965.45
24500015	51320	TRAINING & CONFERENCES	600.00	0.00%	600.00	-
24500016	51320	TRAINING & CONFERENCES	600.00	0.00%	600.00	121.32
24500017	51320	TRAINING & CONFERENCES	600.00	0.00%	600.00	479.58
24500018	51320	TRAINING & CONFERENCES	600.00	0.00%	600.00	6,978.52
24500019	51320	TRAINING & CONFERENCES	600.00	0.00%	600.00	-
24500020	51320	TRAINING & CONFERENCES	600.00	0.00%	600.00	126.20
24500021	51320	TRAINING & CONFERENCES	600.00	0.00%	600.00	-
24410011	51500	VEHICLE INSURANCE	12,000.00	0.00%	12,000.00	12,475.62
24420011	51500	VEHICLE INSURANCE	18,000.00	-10.00%	20,000.00	17,964.29
24500011	51500	VEHICLE INSURANCE	1,600.00	0.00%	1,600.00	1,401.95
24500012	51500	VEHICLE INSURANCE	1,600.00	0.00%	1,600.00	792.04
24500013	51500	VEHICLE INSURANCE	1,600.00	0.00%	1,600.00	830.28
24500014	51500	VEHICLE INSURANCE	1,600.00	0.00%	1,600.00	801.20
24500015	51500	VEHICLE INSURANCE	1,600.00	0.00%	1,600.00	827.86
24500016	51500	VEHICLE INSURANCE	1,600.00	0.00%	1,600.00	792.04
24500017	51500	VEHICLE INSURANCE	1,600.00	0.00%	1,600.00	854.86
24500018	51500	VEHICLE INSURANCE	1,600.00	0.00%	1,600.00	206.86
24500019	51500	VEHICLE INSURANCE	1,600.00	0.00%	1,600.00	827.86
24500020	51500	VEHICLE INSURANCE	1,600.00	0.00%	1,600.00	839.28
24500021	51500	VEHICLE INSURANCE	1,600.00	0.00%	1,600.00	-
24410011	51510	BLDG/CONTENTS INSURANCE	8,000.00	0.00%	8,000.00	7,596.02

BEAUFORT COUNTY
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Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
24500011	51510	BLDG/CONTENTS INSURANCE	1,300.00	0.00%	1,300.00	1,271.50
24500012	51510	BLDG/CONTENTS INSURANCE	1,300.00	0.00%	1,300.00	1,548.02
24500013	51510	BLDG/CONTENTS INSURANCE	1,300.00	0.00%	1,300.00	1,260.36
24500014	51510	BLDG/CONTENTS INSURANCE	1,300.00	0.00%	1,300.00	1,200.43
24500015	51510	BLDG/CONTENTS INSURANCE	1,300.00	0.00%	1,300.00	1,548.02
24500016	51510	BLDG/CONTENTS INSURANCE	1,300.00	0.00%	1,300.00	1,295.10
24500017	51510	BLDG/CONTENTS INSURANCE	1,300.00	0.00%	1,300.00	1,390.28
24500018	51510	BLDG/CONTENTS INSURANCE	1,300.00	0.00%	1,300.00	923.99
24500019	51510	BLDG/CONTENTS INSURANCE	1,300.00	0.00%	1,300.00	1,116.09
24500020	51510	BLDG/CONTENTS INSURANCE	1,300.00	0.00%	1,300.00	1,776.02
24500021	51510	BLDG/CONTENTS INSURANCE	1,300.00	0.00%	1,300.00	1,428.15
24410011	51520	MED/PROF LIAB INSURANCE	5,000.00	NA	-	1,547.50
24500011	51520	MED/PROF LIAB INSURANCE	250.00	0.00%	250.00	301.00
24500012	51520	MED/PROF LIAB INSURANCE	250.00	0.00%	250.00	301.00
24500013	51520	MED/PROF LIAB INSURANCE	250.00	0.00%	250.00	301.00
24500014	51520	MED/PROF LIAB INSURANCE	250.00	0.00%	250.00	301.00
24500015	51520	MED/PROF LIAB INSURANCE	250.00	0.00%	250.00	301.00
24500016	51520	MED/PROF LIAB INSURANCE	250.00	0.00%	250.00	301.00
24500017	51520	MED/PROF LIAB INSURANCE	250.00	0.00%	250.00	301.00
24500018	51520	MED/PROF LIAB INSURANCE	250.00	0.00%	250.00	301.00
24500019	51520	MED/PROF LIAB INSURANCE	250.00	0.00%	250.00	301.00
24500020	51520	MED/PROF LIAB INSURANCE	250.00	0.00%	250.00	301.00
24500021	51520	MED/PROF LIAB INSURANCE	250.00	0.00%	250.00	301.00
24410011	52010	OFFICE SUPPLIES	9,000.00	0.00%	9,000.00	8,137.36
24420011	52010	OFFICE SUPPLIES	40,000.00	300.00%	10,000.00	1,612.66
24430011	52010	OFFICE SUPPLIES	2,000.00	0.00%	2,000.00	31.97
24440011	52010	OFFICE SUPPLIES	1,814.00	-9.30%	2,000.00	205.78
24480011	52010	OFFICE SUPPLIES	4,000.00	0.00%	4,000.00	1,077.59
24490011	52010	OFFICE SUPPLIES	200.00	NA	-	-
24500011	52010	OFFICE SUPPLIES	1,000.00	0.00%	1,000.00	254.49
24500012	52010	OFFICE SUPPLIES	1,000.00	0.00%	1,000.00	418.94
24500013	52010	OFFICE SUPPLIES	1,000.00	0.00%	1,000.00	254.47
24500014	52010	OFFICE SUPPLIES	1,000.00	0.00%	1,000.00	335.77
24500015	52010	OFFICE SUPPLIES	1,000.00	0.00%	1,000.00	254.45
24500016	52010	OFFICE SUPPLIES	1,000.00	0.00%	1,000.00	355.49
24500017	52010	OFFICE SUPPLIES	1,000.00	0.00%	1,000.00	391.31
24500018	52010	OFFICE SUPPLIES	1,000.00	0.00%	1,000.00	314.75
24500019	52010	OFFICE SUPPLIES	1,000.00	0.00%	1,000.00	417.23
24500020	52010	OFFICE SUPPLIES	1,000.00	0.00%	1,000.00	254.38
24500021	52010	OFFICE SUPPLIES	1,000.00	0.00%	1,000.00	284.38
24410011	52020	DATA PROCESSING SUPPLIES	-	NA	-	672.06
24440011	52020	DATA PROCESSING SUPPLIES	-	NA	-	639.27
24480011	52020	DATA PROCESSING SUPPLIES	-	NA	-	893.55
24500012	52020	DATA PROCESSING SUPPLIES	-	NA	-	228.37
24500013	52020	DATA PROCESSING SUPPLIES	-	NA	-	121.68
24500017	52020	DATA PROCESSING SUPPLIES	-	NA	-	154.28
24410011	52030	CLEANING/SANI SUPPLIES	-	NA	-	103.84
24420011	52030	CLEANING/SANI SUPPLIES	-	-100.00%	12,000.00	15,008.32
24500011	52030	CLEANING/SANI SUPPLIES	3,500.00	40.00%	2,500.00	2,307.68
24500012	52030	CLEANING/SANI SUPPLIES	3,500.00	40.00%	2,500.00	2,483.40
24500013	52030	CLEANING/SANI SUPPLIES	3,500.00	40.00%	2,500.00	2,484.07
24500014	52030	CLEANING/SANI SUPPLIES	3,500.00	40.00%	2,500.00	2,682.73
24500015	52030	CLEANING/SANI SUPPLIES	3,500.00	40.00%	2,500.00	3,233.36
24500016	52030	CLEANING/SANI SUPPLIES	3,500.00	40.00%	2,500.00	3,222.39
24500017	52030	CLEANING/SANI SUPPLIES	3,500.00	40.00%	2,500.00	2,744.20
24500018	52030	CLEANING/SANI SUPPLIES	3,500.00	40.00%	2,500.00	3,355.05
24500019	52030	CLEANING/SANI SUPPLIES	3,500.00	40.00%	2,500.00	1,672.69
24500020	52030	CLEANING/SANI SUPPLIES	3,500.00	40.00%	2,500.00	3,823.49
24500021	52030	CLEANING/SANI SUPPLIES	3,500.00	40.00%	2,500.00	3,633.77
24420011	52040	FOOD SUPPLIES	2,500.00	-16.67%	3,000.00	2,089.37
24490011	52040	FOOD SUPPLIES	500.00	0.00%	500.00	-
24500011	52040	FOOD SUPPLIES	11,000.00	4.76%	10,500.00	9,581.57
24500012	52040	FOOD SUPPLIES	11,000.00	4.76%	10,500.00	9,726.23

BEAUFORT COUNTY
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Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
24500013	52040	FOOD SUPPLIES	11,000.00	4.76%	10,500.00	9,292.93
24500014	52040	FOOD SUPPLIES	11,000.00	4.76%	10,500.00	12,482.64
24500015	52040	FOOD SUPPLIES	11,000.00	4.76%	10,500.00	10,212.83
24500016	52040	FOOD SUPPLIES	11,000.00	4.76%	10,500.00	11,209.48
24500017	52040	FOOD SUPPLIES	11,000.00	0.00%	11,000.00	11,081.49
24500018	52040	FOOD SUPPLIES	11,000.00	-8.33%	12,000.00	10,653.07
24500019	52040	FOOD SUPPLIES	11,000.00	4.76%	10,500.00	7,979.61
24500020	52040	FOOD SUPPLIES	11,000.00	4.76%	10,500.00	10,619.03
24500021	52040	FOOD SUPPLIES	11,000.00	4.76%	10,500.00	13,306.10
24500011	52270	CLIENT PERSONAL NEEDS	2,000.00	0.00%	2,000.00	-
24500012	52270	CLIENT PERSONAL NEEDS	2,000.00	0.00%	2,000.00	-
24500013	52270	CLIENT PERSONAL NEEDS	2,000.00	0.00%	2,000.00	196.96
24500014	52270	CLIENT PERSONAL NEEDS	2,000.00	0.00%	2,000.00	642.48
24500015	52270	CLIENT PERSONAL NEEDS	2,000.00	0.00%	2,000.00	368.14
24500016	52270	CLIENT PERSONAL NEEDS	1,800.00	-10.00%	2,000.00	297.92
24500017	52270	CLIENT PERSONAL NEEDS	2,000.00	0.00%	2,000.00	229.25
24500018	52270	CLIENT PERSONAL NEEDS	2,000.00	0.00%	2,000.00	530.76
24500019	52270	CLIENT PERSONAL NEEDS	2,000.00	0.00%	2,000.00	362.65
24500020	52270	CLIENT PERSONAL NEEDS	2,000.00	0.00%	2,000.00	228.57
24500021	52270	CLIENT PERSONAL NEEDS	2,000.00	0.00%	2,000.00	267.12
24500011	52280	HOUSEHOLD SUPPLIES	2,000.00	0.00%	2,000.00	880.36
24500012	52280	HOUSEHOLD SUPPLIES	2,000.00	0.00%	2,000.00	544.16
24500013	52280	HOUSEHOLD SUPPLIES	2,000.00	0.00%	2,000.00	1,150.98
24500014	52280	HOUSEHOLD SUPPLIES	2,000.00	0.00%	2,000.00	313.35
24500015	52280	HOUSEHOLD SUPPLIES	2,000.00	0.00%	2,000.00	663.51
24500016	52280	HOUSEHOLD SUPPLIES	2,000.00	0.00%	2,000.00	1,038.47
24500017	52280	HOUSEHOLD SUPPLIES	2,000.00	0.00%	2,000.00	1,241.87
24500018	52280	HOUSEHOLD SUPPLIES	2,000.00	0.00%	2,000.00	1,609.05
24500019	52280	HOUSEHOLD SUPPLIES	2,000.00	0.00%	2,000.00	730.19
24500020	52280	HOUSEHOLD SUPPLIES	2,000.00	0.00%	2,000.00	928.03
24500021	52280	HOUSEHOLD SUPPLIES	2,000.00	0.00%	2,000.00	935.97
24410011	52300	MEDICAL/PHARMACY SUPPLIES	2,500.00	0.00%	2,500.00	1,317.06
24420011	52300	MEDICAL/PHARMACY SUPPLIES	-	NA	-	310.83
24430011	52300	MEDICAL/PHARMACY SUPPLIES	-	NA	-	56.94
24490011	52300	MEDICAL/PHARMACY SUPPLIES	100.00	0.00%	100.00	-
24500011	52300	MEDICAL/PHARMACY SUPPLIES	-	NA	-	66.57
24500012	52300	MEDICAL/PHARMACY SUPPLIES	-	NA	-	27.64
24500013	52300	MEDICAL/PHARMACY SUPPLIES	-	NA	-	39.15
24500014	52300	MEDICAL/PHARMACY SUPPLIES	-	NA	-	73.91
24500015	52300	MEDICAL/PHARMACY SUPPLIES	-	NA	-	86.84
24500016	52300	MEDICAL/PHARMACY SUPPLIES	-	NA	-	121.75
24500017	52300	MEDICAL/PHARMACY SUPPLIES	-	NA	-	109.63
24500018	52300	MEDICAL/PHARMACY SUPPLIES	-	NA	-	342.61
24500020	52300	MEDICAL/PHARMACY SUPPLIES	-	NA	-	49.01
24500021	52300	MEDICAL/PHARMACY SUPPLIES	-	NA	-	76.32
24500016	52310	BLANKETS/LINENS	-	NA	-	12.27
24500018	52310	BLANKETS/LINENS	-	NA	-	71.40
24410011	52350	AV/EDUC/TRAINING AIDS	3,000.00	0.00%	3,000.00	3,498.74
24420011	52350	AV/EDUC/TRAINING AIDS	-	NA	-	2,953.05
24480011	52350	AV/EDUC/TRAINING AIDS	-	-100.00%	3,500.00	1,796.61
24500016	52350	AV/EDUC/TRAINING AIDS	-	NA	-	45.08
24410011	52500	FUELS/LUBRICANTS	2,000.00	300.00%	500.00	2,168.33
24420011	52500	FUELS/LUBRICANTS	50,000.00	0.00%	50,000.00	40,130.92
24430011	52500	FUELS/LUBRICANTS	3,000.00	50.00%	2,000.00	1,924.04
24440011	52500	FUELS/LUBRICANTS	1,500.00	-25.00%	2,000.00	793.80
24480011	52500	FUELS/LUBRICANTS	4,000.00	0.00%	4,000.00	2,795.44
24490011	52500	FUELS/LUBRICANTS	914.00	-8.60%	1,000.00	-
24500011	52500	FUELS/LUBRICANTS	3,500.00	40.00%	2,500.00	2,593.97
24500012	52500	FUELS/LUBRICANTS	3,500.00	40.00%	2,500.00	3,715.78
24500013	52500	FUELS/LUBRICANTS	3,500.00	40.00%	2,500.00	3,873.68
24500014	52500	FUELS/LUBRICANTS	3,500.00	40.00%	2,500.00	6,208.43
24500015	52500	FUELS/LUBRICANTS	3,500.00	40.00%	2,500.00	2,823.10
24500016	52500	FUELS/LUBRICANTS	3,500.00	40.00%	2,500.00	2,776.84

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Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
24500017	52500	FUELS/LUBRICANTS	3,500.00	40.00%	2,500.00	3,974.11
24500018	52500	FUELS/LUBRICANTS	3,500.00	40.00%	2,500.00	3,610.74
24500019	52500	FUELS/LUBRICANTS	3,500.00	-38.42%	5,684.00	3,344.97
24500020	52500	FUELS/LUBRICANTS	3,500.00	40.00%	2,500.00	2,970.72
24500021	52500	FUELS/LUBRICANTS	3,500.00	40.00%	2,500.00	2,266.00
24410011	52600	OFFICE FURN & EQUIP. NON-CAPIT	-	NA	-	86.76
24420011	52600	OFFICE FURN & EQUIP. NON-CAPIT	7,500.00	-25.00%	10,000.00	-
24480011	52600	OFFICE FURN & EQUIP. NON-CAPIT	-	NA	-	353.08
24500011	52600	OFFICE FURN & EQUIP. NON-CAPIT	3,500.00	9.92%	3,184.00	77.82
24500012	52600	OFFICE FURN & EQUIP. NON-CAPIT	3,500.00	9.92%	3,184.00	1,388.17
24500013	52600	OFFICE FURN & EQUIP. NON-CAPIT	3,500.00	9.92%	3,184.00	4,944.42
24500014	52600	OFFICE FURN & EQUIP. NON-CAPIT	5,000.00	16.71%	4,284.00	5,361.09
24500015	52600	OFFICE FURN & EQUIP. NON-CAPIT	3,500.00	9.92%	3,184.00	2,249.84
24500016	52600	OFFICE FURN & EQUIP. NON-CAPIT	3,500.00	53.24%	2,284.00	623.31
24500017	52600	OFFICE FURN & EQUIP. NON-CAPIT	6,000.00	200.00%	2,000.00	2,187.00
24500018	52600	OFFICE FURN & EQUIP. NON-CAPIT	3,500.00	9.92%	3,184.00	77.81
24500019	52600	OFFICE FURN & EQUIP. NON-CAPIT	3,500.00	40.00%	2,500.00	660.79
24500020	52600	OFFICE FURN & EQUIP. NON-CAPIT	3,500.00	9.92%	3,184.00	951.93
24500021	52600	OFFICE FURN & EQUIP. NON-CAPIT	3,500.00	9.92%	3,184.00	1,059.77
24410011	52610	TECHNOLOGY EQUIP (NON-CAP)	3,000.00	0.00%	3,000.00	-
24430011	52610	TECHNOLOGY EQUIP (NON-CAP)	-	-100.00%	2,589.00	-
24500013	52610	TECHNOLOGY EQUIP (NON-CAP)	-	NA	-	115.44
24500014	52610	TECHNOLOGY EQUIP (NON-CAP)	-	NA	-	15.09
24410011	54000	VEHICLE PURCHASES	35,000.00	-7.89%	38,000.00	-
24420011	54000	VEHICLE PURCHASES	205,000.00	49.64%	137,000.00	-
24420011	54100	OFFICE FURN AND EQUIPMENT	-	NA	-	1,990.31
24410011	54420	RENOVATIONS EXIST BLDGS	50,000.00	0.00%	50,000.00	-
24420011	54420	RENOVATIONS EXIST BLDGS	20,000.00	11.11%	18,000.00	-
24500012	54420	RENOVATIONS EXIST BLDGS	7,500.00	-37.50%	12,000.00	-
24500013	54420	RENOVATIONS EXIST BLDGS	7,500.00	-37.50%	12,000.00	-
24500015	54420	RENOVATIONS EXIST BLDGS	7,500.00	-37.50%	12,000.00	-
24500017	54420	RENOVATIONS EXIST BLDGS	7,500.00	NA	-	-
24500019	54420	RENOVATIONS EXIST BLDGS	7,500.00	NA	-	-
24500020	54420	RENOVATIONS EXIST BLDGS	5,000.00	NA	-	-
24420011	59100	XFER TO GENERAL FUND	84,855.00	NA	-	-
Total Expenditures			9,709,709.00		9,465,562.00	8,290,031.12
Net (surplus)/ deficit DSN			-		250.00	1,368,246.85
Collaborative Organization of Services for Youth (COSY)						
Revenues						
25030001	43770	STATE GRANT FUNDS	(207,232.00)	0.00%	(207,232.00)	(55,458.80)
25030001	44610	UNIVERSAL STAFFING - COSY	-	NA	-	(4,000.00)
25030001	44630	FAMILIES FIRST CONTRACT	(56,000.00)	0.00%	(56,000.00)	(51,800.00)
25030001	46010	INTEREST ON INVESTMENTS	-	NA	-	(130.00)
25030001	47010	MISCELLANEOUS REVENUES	(5,000.00)	0.00%	(5,000.00)	-
25030001	47120	COASTAL COMMUNITY FOUNDATION	(15,000.00)	50.00%	(10,000.00)	(5,000.00)
25030001	49100	TRANSFERS IN	(346,767.00)	54.05%	(225,106.00)	(225,106.00)
Total revenues			(629,999.00)		(503,338.00)	(341,494.80)
Expenditures						
25030011	50020	SALARIES AND WAGES	336,165.00	6.41%	315,916.00	261,977.62
25030011	50100	EMPLOYER FICA	20,842.00	6.41%	19,587.00	15,486.74
25030011	50110	EMPLOYER MEDICARE	4,874.00	6.40%	4,581.00	3,622.20
25030011	50120	EMPLOYER SC RETIREMENT	62,392.00	19.26%	52,316.00	42,169.94
25030011	50140	EMPLOYER GROUP INSURANCE	55,500.00	NA	-	55,012.03
25030011	50150	EMPLOYER WORK COMP INS	4,800.00	NA	-	-
25030011	50160	EMPLOYER TORT LIAB	1,925.00	150.65%	768.00	1,577.08
25030011	51000	ADVERTISING	-	-100.00%	100.00	19.25
25030011	51010	PRINTING	-	-100.00%	100.00	95.43
25030011	51030	POSTAGE	-	-100.00%	50.00	-
25030011	51050	TELEPHONE	3,000.00	0.00%	3,000.00	2,998.18
25030011	51140	EQUIPMENT RENTALS	-	NA	-	674.36

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
25030011	51150	OFFICE SPACE RENTALS	-	NA	-	18,990.48
25030011	51160	PROFESSIONAL SERVICES	32,485.00	441.42%	6,000.00	20,968.75
25030011	51170	NON-PROFESSIONAL SERVICES	1,000.00	0.00%	1,000.00	28,964.50
25030011	51310	DUES & SUBSCRIPTIONS	100.00	-93.33%	1,500.00	100.00
25030011	51320	TRAINING & CONFERENCES	1,500.00	-16.67%	1,800.00	1,289.66
25030011	52010	OFFICE SUPPLIES	800.00	-50.00%	1,600.00	312.35
25030011	52020	DATA PROCESSING SUPPLIES	-	NA	-	4,990.03
25030011	52600	OFFICE FURN & EQUIP. NON-CAPIT	1,000.00	NA	-	-
25030011	52612	Equipment, Non-Capital	-	-100.00%	2,000.00	-
25030011	55005	SC DEPT OF HEALTH (COSY)	103,616.00	0.00%	103,616.00	-
Total Expenditures			629,999.00		513,934.00	459,248.60
Net (surplus)/ deficit			-		10,596.00	117,753.80
Grants						
Revenues						
25450001	43780	FEDERAL GRANT FUNDS	(404,616.00)	-19.08%	(500,000.00)	(538,191.88)
25460001	43790	DAUFUSKIE FERRY GRANT	(80,000.00)	0.00%	(80,000.00)	(80,000.00)
25460001	44790	RIDERSHIP FEES	(20,000.00)	-43.18%	(35,200.00)	(57,194.50)
25440001	46010	INTEREST ON INVESTMENTS	-	NA	-	(112.00)
25460001	47210	RENTAL CO PROPERTY	(97,000.00)	NA	-	(7,500.00)
25460001	47280	RENTAL INCOME - UTILITIES	-	NA	-	(113.40)
25460001	49100	TRANSFERS IN	(180,000.00)	0.00%	(180,000.00)	(180,000.00)
Total revenues			(781,616.00)		(795,200.00)	(863,111.78)
Expenditures						
25460011	51070	WATER/SEWER/GARBAGE	2,000.00	-37.50%	3,200.00	957.97
25440012	51160	PROFESSIONAL SERVICES	-	NA	-	15,500.00
25450011	55210	L C O G	404,616.00	-19.08%	500,000.00	538,191.88
25460011	55540	DAUFUSKIE FERRY TRANSP'T	375,000.00	28.42%	292,000.00	274,585.84
Total Expenditures			781,616.00		795,200.00	829,235.69
Net (surplus)/ deficit			-		-	(33,876.09)
Library Impact Fees HHI/ Daufuskie						
Revenues						
26000001	47950	LIBRARY IMPACT FEES	(180,000.00)	22.77%	(146,614.00)	(111,028.29)
26000001	48910	CONT FROM PR YR FUND BAL	(835,000.00)	10.28%	(757,177.00)	-
26000001	46010	INTEREST ON INVESTMENTS	(3,000.00)	NA	-	(1,702.00)
Total revenues			(1,018,000.00)		(903,791.00)	(112,730.29)
Expenditures						
26000011	51160	PROFESSIONAL SERVICES	203,600.00	307.20%	50,000.00	-
26000011	54420	RENOVATIONS EXIST BLDGS	814,400.00	-4.61%	853,791.00	-
Total Expenditures			1,018,000.00		903,791.00	-
Net (surplus)/ deficit			-		-	(112,730.29)
Library Impact Fees Bluffton						
Revenues						
26020001	46010	INTEREST ON INVESTMENTS	(14,000.00)	NA	-	(7,974.00)
26020001	47950	LIBRARY IMPACT FEES	(730,000.00)	65.89%	(440,040.00)	(886,670.48)
26020001	48910	CONT FROM PR YR FUND BAL	(4,370,000.00)	26.39%	(3,457,668.00)	-
Total revenues			(5,114,000.00)		(3,897,708.00)	(894,644.48)
Expenditures						

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
26020011	51160	PROFESSIONAL SERVICES	874,000.00	-65.04%	2,500,000.00	1,393.45
26020011	54420	RENOVATIONS EXIST BLDGS	4,240,000.00	203.35%	1,397,708.00	351,220.59
Total Expenditures			5,114,000.00		3,897,708.00	352,614.04
Net (surplus)/ deficit			-		-	(542,030.44)
Library Impact Fees Burton						
Revenues						
26030001	46010	INTEREST ON INVESTMENTS	(2,000.00)	NA	-	(1,537.00)
26030001	47950	LIBRARY IMPACT FEES	(41,000.00)	-3.43%	(42,458.00)	(42,581.00)
26030001	48910	CONT FROM PR YR FUND BAL	(715,000.00)	NA	-	-
Total revenues			(758,000.00)		(42,458.00)	(44,118.00)
Expenditures						
26030011	51160	PROFESSIONAL SERVICES	151,600.00	NA	-	-
26030011	54420	RENOVATIONS EXIST BLDGS	606,400.00	NA	-	-
Total Expenditures			758,000.00		-	-
Net (surplus)/ deficit			-		(42,458.00)	(44,118.00)
Library Impact Fees LISH						
Revenues						
26040001	46010	INTEREST ON INVESTMENTS	(2,000.00)	NA	-	(1,253.00)
26040001	47950	LIBRARY IMPACT FEES	(116,000.00)	57.11%	(73,832.00)	(123,932.00)
26040001	48910	CONT FROM PR YR FUND BAL	(675,000.00)	45.04%	(465,398.00)	-
Total revenues			(793,000.00)		(539,230.00)	(125,185.00)
Expenditures						
26040011	51160	PROFESSIONAL SERVICES	158,600.00	217.20%	50,000.00	-
26040011	54200	CAPITAL EQUIPMENT	-	-100.00%	489,230.00	-
26040011	54420	RENOVATIONS EXIST BLDGS	634,400.00	NA	-	-
Total Expenditures			793,000.00		539,230.00	-
Net (surplus)/ deficit			-		-	(125,185.00)
Library Impact Fees Sheldon						
Revenues						
26060001	46010	INTEREST ON INVESTMENTS	(200.00)	NA	-	(122.00)
26060001	47950	LIBRARY IMPACT FEES	(11,000.00)	24.32%	(8,848.00)	(10,507.00)
26060001	48910	CONT FROM PR YR FUND BAL	(61,000.00)	28.38%	(47,515.00)	-
Total revenues			(72,200.00)		(56,363.00)	(10,629.00)
Expenditures						
26060011	51160	PROFESSIONAL SERVICES	14,440.00	-3.73%	15,000.00	-
26060011	54200	CAPITAL EQUIPMENT	-	-100.00%	41,363.00	-
26060011	54420	RENOVATIONS EXIST BLDGS	57,760.00	NA	-	-
Total Expenditures			72,200.00		56,363.00	-
Net (surplus)/ deficit			-		-	(10,629.00)
State Aid Library						
Revenues						
26290001	43260	STATE AID TO LIBRARIES	(233,750.00)	NA	-	(329,495.22)
26290001	46010	INTEREST ON INVESTMENTS	-	NA	-	(404.00)
Total revenues			(233,750.00)		-	(329,899.22)
Expenditures						

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
26290011	52060	LIBRARY MATERIALS	233,750.00	NA	-	329,481.78
Total Expenditures			233,750.00		-	329,481.78
Net (surplus)/ deficit			-		-	(417.44)
PALS Impact Fees Bluffton						
Revenues						
26520001	46010	INTEREST ON INVESTMENTS	(40,000.00)	NA	-	(18,877.00)
26520001	47930	PALS IMPACT FEES	(1,800,000.00)	63.25%	(1,102,597.00)	(2,203,391.60)
26520001	48910	CONT FROM PR YR FUND BAL	(10,250,000.00)	32.42%	(7,740,234.00)	-
Total revenues			(12,090,000.00)		(8,842,831.00)	(2,222,268.60)
Expenditures						
26520011	51160	PROFESSIONAL SERVICES	-	-100.00%	1,768,566.00	-
26520011	53000	BOND PRINCIPAL	243,000.00	5.02%	231,390.00	222,391.50
26520011	53010	BOND INTEREST	103,000.00	-9.92%	114,343.00	123,239.28
26520011	54420	RENOVATIONS EXIST BLDGS	11,744,000.00	88.55%	6,228,532.00	-
26520011	54454	BRACE	-	-100.00%	500,000.00	126,137.60
Total Expenditures			12,090,000.00		8,842,831.00	471,768.38
Net (surplus)/ deficit			-		-	(1,750,500.22)
PALS Impact Fees Burton						
Revenues						
26530001	46010	INTEREST ON INVESTMENTS	(500.00)	NA	-	(161.00)
26530001	47930	PALS IMPACT FEES	(38,000.00)	269.65%	(10,280.00)	(36,958.33)
26530001	48910	CONT FROM PR YR FUND BAL	(131,000.00)	96.12%	(66,796.00)	-
Total revenues			(169,500.00)		(77,076.00)	(37,119.33)
Expenditures						
26530011	51160	PROFESSIONAL SERVICES	33,900.00	NA	-	-
26530011	54420	RENOVATIONS EXIST BLDGS	135,600.00	75.93%	77,076.00	-
Total Expenditures			169,500.00		77,076.00	-
Net (surplus)/ deficit			-		-	(37,119.33)
PALS Impact Fees Lady's Island						
Revenues						
26540001	46010	INTEREST ON INVESTMENTS	(1,500.00)	NA	-	(795.00)
26540001	47930	PALS IMPACT FEES	(56,000.00)	52.77%	(36,657.00)	(57,341.00)
26540001	48910	CONT FROM PR YR FUND BAL	(408,000.00)	17.75%	(346,506.00)	-
Total revenues			(465,500.00)		(383,163.00)	(58,136.00)
Expenditures						
26540011	51160	PROFESSIONAL SERVICES	93,100.00	NA	-	-
26540011	54420	RENOVATIONS EXIST BLDGS	-	-100.00%	383,163.00	-
26540011	54450	OTHER IMPROVEMENTS	372,400.00	NA	-	-
Total Expenditures			465,500.00		383,163.00	-
Net (surplus)/ deficit			-		-	(58,136.00)
PALS Impact Fees St. Helena						
Revenues						
26550001	46010	INTEREST ON INVESTMENTS	(1,000.00)	NA	-	(421.00)
26550001	47930	PALS IMPACT FEES	(67,000.00)	66.75%	(40,180.00)	(75,382.00)
26550001	48910	CONT FROM PR YR FUND BAL	(256,000.00)	41.36%	(181,095.00)	-
Total revenues			(324,000.00)		(221,275.00)	(75,803.00)

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 SPECIAL REVENUE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
Expenditures						
26550011	51160	PROFESSIONAL SERVICES	51,200.00	NA	-	-
26550011	54200	CAPITAL EQUIPMENT	-	-100.00%	221,275.00	-
26550011	54420	RENOVATIONS EXIST BLDGS	272,800.00	NA	-	-
Total Expenditures			324,000.00		221,275.00	-
Net (surplus)/ deficit			-		-	(75,803.00)
PALS Special Capital Program						
Revenues						
26620001	44420	ATHL FEES - SPECIAL PURPOSE	(18,000.00)	0.00%	(18,000.00)	(952.00)
26620001	44442	LATE FEES/SCHOLARSHIP	-	NA	-	(182.33)
26620001	44454	CENTER ADMISSIONS - BLUFFTON	(22,000.00)	0.00%	(22,000.00)	(60,899.61)
26620001	44455	CENTER ADMISSIONS - BURTON WEL	(2,000.00)	0.00%	(2,000.00)	(6,728.19)
26620001	46010	INTEREST ON INVESTMENTS	-	NA	-	(745.00)
26620001	48910	CONT FROM PR YR FUND BAL	(400,000.00)	31.15%	(305,000.00)	-
Total revenues			(442,000.00)		(347,000.00)	(69,507.13)
Expenditures						
26620011	54150	RECREATION EQUIPMENT	442,000.00	44.92%	305,000.00	26,898.45
Total Expenditures			442,000.00		305,000.00	26,898.45
Net (surplus)/ deficit			-		(42,000.00)	(42,608.68)
PALS PARD Grant						
Revenues						
26700001	43500	P A L S P A R D FUNDS	-	-100.00%	(125,760.00)	-
26700001	48910	CONT FROM PR YR FUND BAL	(41,357.00)	NA	-	-
Total revenues			(41,357.00)		(125,760.00)	-
Expenditures						
26700011	54200	Equipment, Capital	41,357.00	NA	-	-
26700011	54420	RENOVATIONS EXIST BLDGS	-	-100.00%	125,760.00	-
Total Expenditures			41,357.00		125,760.00	-
Net (surplus)/ deficit			-		-	-
DNA LAB Grant						
Revenues						
27010001	46010	INTEREST ON INVESTMENTS	-	NA	-	(327.00)
27010001	48910	CONT FROM PR YR FUND BAL	(30,000.00)	-82.96%	(176,014.00)	-
Total revenues			(30,000.00)		(176,014.00)	(327.00)
Expenditures						
27010011	51110	MAINTENANCE CONTRACTS	-	NA	-	2,970.00
27010011	52010	OFFICE SUPPLIES	-	NA	-	18,121.19
27010011	52610	TECHNOLOGY EQUIP (NON-CAP)	30,000.00	-82.96%	176,014.00	1,111.34
27010011	52612	EQUIPMENT NON-CAPITAL	-	NA	-	29,392.69
Total Expenditures			30,000.00		176,014.00	51,595.22
Net (surplus)/ deficit			-		-	51,268.22

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 CAPITAL IMPROVEMENT FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent Change PY Budget	2023 Original Budget	2022 Actuals
CAPITAL IMPROVEMENT FUND						
Revenues						
10400001	41010	CURRENT TAXES	(4,700,000.00)	30.64%	(3,597,670.00)	(3,000,000.00)
10400001	41020	DELINQUENT TAXES	(1,590,000.00)	NA	-	(1,600,000.00)
10400001	44020	RMC-COUNTY RECORDING FEES	-	NA	-	(415,000.00)
10400001	44220	EMERGENCY MEDICAL FEES	-	NA	-	(1,000,000.00)
10400001	48910	CONT FROM PR YR FUND BAL	(14,942,455.00)	66.03%	(9,000,000.00)	-
10400001	49100	TRANSFERS IN	-	NA	-	(264,473.62)
10401000	49100	TRANSFERS IN	-	NA	-	(1,300,000.00)
Total revenues			(21,232,455.00)		(12,597,670.00)	(7,579,473.62)
Expenditures						
10401000	54420	RENOVATIONS EXIST BLDGS	250,000.00		-	-
10401000	54500	ROAD IMPROVEMENT	1,225,000.00		-	-
10401020	54110	SOFTWARE ACQ/UPGRADES	1,840,000.00		-	-
10401040	54110	DATA PROCESSING EQUIPMENT	52,500.00		-	-
10401130	54000	VEHICLE PURCHASES	-		50,000.00	-
10401201	54000	VEHICLE PURCHASES	360,430.00		-	-
10401201	54112	DATA PROCESSING SOFTWARE	49,000.00		-	-
10401201	54200	Equipment, Capital	189,466.00		-	-
10401230	54000	VEHICLE PURCHASES	1,203,000.00		913,480.00	72,207.58
10401230	54200	CAPITAL EQUIPMENT	-		-	242,607.58
10401230	54420	RENOVATIONS EXIST BLDGS	1,500,000.00		1,500,000.00	-
10401250	54300	Building	800,000.00		-	-
10401260	54000	VEHICLE PURCHASES	47,000.00		-	-
10401270	54000	VEHICLE PURCHASES	-		205,000.00	-
10401301	54000	VEHICLE PURCHASES	688,500.00		184,000.00	-
10401301	54200	CAPITAL EQUIPMENT	-		217,022.00	-
10401301	54450	OTHER IMPROVEMENTS	-		2,400,000.00	-
10401310	51160	PROFESSIONAL SERVICES	-		250,000.00	-
10401310	54000	VEHICLE PURCHASES	-		80,000.00	-
10401310	54200	CAPITAL EQUIPMENT	-		83,027.00	-
10401310	54300	Building	641,500.00		-	-
10401310	54420	RENOVATIONS EXIST BLDGS	3,686,000.00		250,000.00	-
10401330	54420	RENOVATIONS EXIST BLDGS	2,000,000.00		-	-
10401400	54000	VEHICLE PURCHASES	57,559.00		-	-
10401400	54200	Equipment, Capital	-		100,000.00	-
10401400	54450	OTHER IMPROVEMENTS	-		400,000.00	-
10401600	54000	VEHICLE PURCHASES	192,000.00		248,000.00	-
10401600	54200	Equipment, Capital	407,000.00		243,000.00	-
10401600	54436	OTHER IMPROV - SPECIAL PROJECT	5,659,500.00		5,000,000.00	558,204.25
10401604	54200	Equipment, Capital	352,000.00		152,000.00	-
10401620	54000	VEHICLE PURCHASES	32,000.00		76,000.00	-
Total Expenditures			21,232,455.00		12,351,529.00	873,019.41
Net (surplus)/ deficit			-		(246,141.00)	(6,706,454.21)

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 CAPITAL FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
2017 GO BONDS						
Revenues						
40080001	46010	INTEREST ON INVESTMENTS	-	-100.00%	(600.00)	(356.00)
40080011	54114	DP EQUIPMENT - TYLER ENERGOV	-	NA	-	29,316.25
40090001	46010	INTEREST ON INVESTMENTS	-	-100.00%	(300.00)	(282.00)
40100001	46010	INTEREST ON INVESTMENTS	(40,000.00)	300.00%	(10,000.00)	(20,714.00)
40100001	47040	CONTRIBUTION - BLUFFTON FD	-	NA	-	(294,694.83)
40100001	48910	CONT FROM PR YR FUND BAL	(8,302,207.40)	-3.32%	(8,587,543.00)	-
Total revenues			(8,342,207.40)		(8,598,443.00)	(286,730.58)
Expenditures						
40100011	54114	DP EQUIPMENT - TYLER ENERGOV	-		-	86,090.73
40100011	54140	BCSO-EMRG MGMT COMM AND EQUIP	217,227.60	-27.50%	299,605.00	130,324.15
40100011	54410	Construction EMS/ Fire Station	50,115.52	NA	-	635,765.92
40100011	54420	RENOV EXIST BLDGS - VOTERS REG	-	-100.00%	39,527.00	-
40100011	54450	OTHERIMPR - PINCK RES/HAIG BL	681,896.00	0.00%	681,896.00	-
40100011	54500	RDIMPR-WINDMILL/JENKINS ISL	7,051,069.22	0.00%	7,051,069.00	-
40100011	56000	GENERAL CONTINGENCY	341,899.06	-28.74%	479,759.00	-
Total Expenditures			8,342,207.40		8,551,856.00	852,180.80
Net (surplus)/ deficit			-		(46,587.00)	565,450.22
2019A GO BONDS						
Revenues						
40110001	46010	INTEREST ON INVESTMENTS	(40,000.00)	471.43%	(7,000.00)	(16,001.00)
40110001	48910	CONT FROM PR YR FUND BAL	(3,642,861.67)	-43.04%	(6,395,057.00)	-
Total revenues			(3,682,861.67)		(6,402,057.00)	(16,001.00)
Expenditures						
40110011	54422	RENOVATIONS - ADMIN BUILDING	2,542,292.50	-53.76%	5,497,490.00	61,670.73
40110011	54424	RENOVATIONS - DETENTION CENTER	163,439.39	NA	-	272,405.79
40110011	54425	RENOVATIONS - A HORNE BUILDING	-	NA	-	3,724.50
40110011	54431	OTHER IMPROV - VOTER REG PH II	250,000.00	0.00%	250,000.00	-
40110011	54436	OTHER IMPROV - PAR POOLS (3)	264,930.00	0.95%	262,430.00	181,034.82
40110011	56000	GENERAL CONTINGENCY	462,199.78	20.01%	385,137.00	-
Total Expenditures			3,682,861.67		6,395,057.00	518,835.84
Net (surplus)/ deficit			-		(7,000.00)	502,834.84
2020 GO BONDS						
Revenues						
40120001	46010	INTEREST ON INVESTMENTS	(30,000.00)	NA	-	(14,787.00)
40120011	48910	CONT FROM PR YR FUND BAL	(3,787,735.75)	-14.83%	(4,447,148.00)	-
Total revenues			(3,817,735.75)		(4,447,148.00)	(14,787.00)
Expenditures						
40120011	54200	Equipment, Capital	-	-100.00%	1,194,825.00	-
40120011	54211	TECHNOLOGY EQUIPMENT	786,182.26	NA	-	837,309.10
40120011	54212	IT ARTHUR HORNE BUILDING	477,574.19	-0.80%	481,443.00	135,671.76
40120011	54213	COURTHOUSE EQUIPMENT	-	-100.00%	19,867.00	74,641.99
40120011	54214	MATERIAL RECOVERY FACILITY MUR	1,847,050.00	-1.10%	1,867,500.00	6,200.00
40120011	54424	RENOVATIONS - DETENTION CENTER	268,317.62	898.39%	26,875.00	1,231,508.88
40120011	54425	RENOVATIONS - A HORNE BUILDING	172,961.20	-73.45%	651,435.00	1,117,684.37
40120011	56000	GENERAL CONTINGENCY	265,650.48	29.46%	205,203.00	-
Total Expenditures			3,817,735.75		4,447,148.00	3,403,016.10
Net (surplus)/ deficit			-		-	3,388,229.10

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 CAPITAL FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
REAL PROPERTY PROGRAM						
Revenues						
45000001	46010	INTEREST ON INVESTMENTS	(15,000.00)	0.00%	(15,000.00)	(37,463.00)
45000001	48910	CONT FROM PR YR FUND BAL	(14,299,263.53)	-7.33%	(15,429,685.00)	-
Total revenues			(14,314,263.53)		(15,444,685.00)	(37,463.00)
Expenditures						
45000011	51160	PROFESSIONAL SERVICES	200,000.00	0.00%	200,000.00	247,265.83
45000011	51162	LEGAL SERVICES	-	NA	-	(29.60)
45000011	54400	LAND ACQUISITION	14,114,263.53	-7.32%	15,229,685.00	4,132,583.07
45000011	54405	FT. FREMONT	-	NA	-	62,510.57
Total Expenditures			14,314,263.53		15,429,685.00	4,442,329.87
Net (surplus)/ deficit			-		(15,000.00)	4,404,866.87
RURAL AND CRITICAL PASSIVE PARKS						
Revenues						
45020001	46010	INTEREST ON INVESTMENTS	(6,000.00)	20.00%	(5,000.00)	(10,681.00)
45020001	48910	CONT FROM PR YR FUND BAL	(2,866,127.38)	-36.66%	(4,524,750.00)	-
Total revenues			(2,872,127.38)		(4,529,750.00)	(10,681.00)
Expenditures						
45020011	54404	FORT FREDERICK PARK	50,000.00	0.00%	50,000.00	-
45020011	54405	FORT FREMONT PRESERVE	-	-100.00%	250,000.00	37,532.08
45020011	54417	WHITEHALL PARK	950,000.00	-32.14%	1,400,000.00	129,821.23
45020011	54421	BAILEY MEMORIAL PARK	660,000.00	65.00%	400,000.00	-
45020011	54429	FORD SHELL RING	218,500.00	1.16%	216,000.00	18,100.63
45020011	54432	JENKINS CREEK	-	-100.00%	200,000.00	-
45020011	54438	OKATIE MARSH/OLSEN	-	-100.00%	75,000.00	-
45020011	54439	OKATIE RIVER PARK	883,650.00	-14.46%	1,033,000.00	11,863.00
45020011	54445	STATION CREEK	-	-100.00%	285,000.00	-
45020011	54449	PINEVIEW PARK	83,000.00	-86.97%	636,750.00	13,250.00
45020011	56000	GENERAL CONTINGENCY	26,977.38	NA	-	-
Total Expenditures			2,872,127.38		4,545,750.00	210,566.94
Net (surplus)/ deficit			-		16,000.00	199,885.94
2006 SALES TAX REFERENDUM						
Revenues						
47010001	46010	INTEREST ON INVESTMENTS	-	-100.00%	(500.00)	(5,224.00)
47010001	48910	CONT FROM PR YR FUND BAL	(2,300,000.00)	-0.03%	(2,300,713.00)	-
Total revenues			(2,300,000.00)		(2,301,213.00)	(5,224.00)
Expenditures						
47010011	50020	SALARIES AND WAGES	-	NA	-	0.50
47010018	54500	ROAD IMP - SC 802 LADYS ISL DR	-	-100.00%	2,300,713.00	-
47010015	54500	ROAD IMPROVEMENT	2,300,000.00	NA	-	-
Total Expenditures			2,300,000.00		2,300,713.00	0.50
Net (surplus)/ deficit			-		(500.00)	(5,223.50)
2018 SALES TAX REFERENDUM						
Revenues						
47050001	43011	LOCAL OPTION SALES TAX	-		-	(45,364,176.39)
47050001	46010	INTEREST ON INVESTMENTS	(400,000.00)	400.00%	(80,000.00)	(286,133.00)
47050001	48910	CONT FROM PR YR FUND BAL	(127,825,000.00)	-1.67%	(129,996,292.00)	-
Total revenues			(128,225,000.00)		(130,076,292.00)	(45,650,309.39)
Expenditures						
47050011	50020	SALARIES AND WAGES	-	NA	-	58.88
47050011	50100	EMPLOYER FICA	-	NA	-	3.63
47050011	50110	EMPLOYER MEDICARE	-	NA	-	0.85
47050011	50120	EMPLOYER SC RETIREMENT	-	NA	-	9.75
47050011	51160	PROFESSIONAL SERVICES	1,586,537.87	NA	-	495,396.49
47050011	54500	HHI US278 CORRIDOR TRAFFIC IMP	84,139,198.97	-35.28%	129,996,292.00	4,556,000.00
47050011	54505	LADY'S ISLAND CORRIDOR TRAFFIC	21,195,380.70	NA	-	934,673.94
47050011	54510	SIDEWALKS/MULTIUSE PATHWAYS	21,303,882.46	NA	-	412,537.82
Total Expenditures			128,225,000.00		129,996,292.00	6,398,681.36
Net (surplus)/ deficit			-		(80,000.00)	(39,251,628.03)

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 CAPITAL FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
GREENSPACE SALES TAX REFERENDUM						
Revenues						
47060001	43011	LOCAL OPTION SALES TAX	(45,068,153.00)	NA	-	-
			(45,068,153.00)		-	-
47060011	50020	SALARIES AND WAGES	54,000.00	NA	-	-
47060011	50100	EMPLOYER FICA	3,348.00	NA	-	-
47060011	50110	EMPLOYER MEDICARE	783.00	NA	-	-
47060011	50120	EMPLOYER SC RETIREMENT	10,022.00	NA	-	-
47060011	54400	LAND ACQUISITION	45,000,000.00	NA	-	-
Total Expenditures			45,068,153.00		-	-
Net (surplus)/ deficit			-		-	-
MCIP BLUFFTON FUNDING OF CULINARY ARTS INSTITUTE						
Revenues						
48000001	41010	CURRENT TAXES	(500,000.00)	NA	-	(477,670.37)
48000001	46010	INTEREST ON INVESTMENTS	-	NA	-	(346.00)
48000001	48910	CONT FROM PR YR FUND BAL	(50,000.00)	NA	-	-
Total revenues			(550,000.00)		-	(478,016.37)
Expenditures						
48000011	55502	TCL - PMT FOR CULINARY ART INS	550,000.00	NA	-	550,000.00
Total Expenditures			550,000.00		-	550,000.00
Net (surplus)/ deficit			-		-	71,983.63

BEAUFORT COUNTY
RECOMMENDED BUDGET FISCAL YEAR 2024 DEBT SERVICE FUNDS

Org	Object	Account Description	County Admin 2024 Recommended Budget	Percent change from PY Budget	2023 Original Budget	2022 Actuals
Purchase of Real Property						
Revenues						
20030001	41010	CURRENT TAXES	(10,617,600.00)	-3.32%	(10,981,776.00)	(10,121,952.98)
20030001	41020	DELINQUENT TAXES	(267,000.00)	-9.99%	(296,643.00)	(375,049.00)
20030001	41030	AUTOMOBILE TAXES	(671,000.00)	12.61%	(595,864.00)	(690,309.73)
20030001	41040	3% & 7% PENALTIES ON TAX	(43,000.00)	0.00%	(43,000.00)	(56,165.51)
20030001	43015	HOMESTEAD EXEMPTION, ETC	(205,000.00)	-4.65%	(215,000.00)	(200,456.06)
20030001	43022	MOTOR CARRIER PAYMENTS	(20,000.00)	NA	-	(23,063.06)
20030001	43041	PYMT IN LIEU OF - FEDERAL	(1,400.00)	NA	-	(729.75)
20030001	46010	INTEREST ON INVESTMENTS	(75,000.00)	NA	-	(7,224.00)
Total revenues			(11,900,000.00)		(12,132,283.00)	(11,474,950.09)
Expenditures						
20030011	51041	SWU Fees	-	NA	-	21,314.70
20030011	51043	PROPERTY TAX PAYMENTS	-	NA	-	2,494.57
20030011	53000	BOND PRINCIPAL	9,100,000.00	20.50%	7,551,809.00	7,353,262.00
20030011	53010	BOND INTEREST	2,800,000.00	-8.40%	3,056,888.00	3,242,551.46
Total Expenditures			11,900,000.00		10,608,697.00	10,619,622.73
Net (surplus)/ deficit			-		(1,523,586.00)	(855,327.36)
Debt service fund						
Revenues						
30000001	41010	CURRENT TAXES	(7,931,154.00)	-31.17%	(11,522,091.00)	(10,697,133.46)
30000001	41020	DELINQUENT TAXES	(286,000.00)	-24.29%	(377,755.00)	(393,727.20)
30000001	41030	AUTOMOBILE TAXES	(726,000.00)	4.91%	(692,000.00)	(759,220.60)
30000001	41040	3% & 7% PENALTIES ON TAX	(46,346.00)	-7.31%	(50,000.00)	(59,595.29)
30000001	43015	HOMESTEAD EXEMPTION, ETC	(210,000.00)	0.96%	(208,000.00)	(211,802.63)
30000001	43020	MERCHANTS INVENTORY TAX	(38,000.00)	0.00%	(38,000.00)	(38,899.64)
30000001	43022	MOTOR CARRIER PAYMENTS	(25,000.00)	38.89%	(18,000.00)	(24,915.63)
30000001	43040	PAYMENTS IN LIEU OF TAXES	(500.00)	NA	-	-
30000001	43041	PYMT IN LIEU OF - FEDERAL	(1,000.00)	NA	-	(771.06)
30000001	46010	INTEREST ON INVESTMENTS	(200,000.00)	300.00%	(50,000.00)	(30,401.00)
30000001	46200	INTEREST - TCL	(8,000.00)	-92.23%	(103,000.00)	(12,974.91)
30000001	46300	INTEREST INCOME	(240,000.00)	207.69%	(78,000.00)	(254,681.10)
Total revenues			(9,712,000.00)		(13,136,846.00)	(12,484,122.52)
Expenditures						
30000011	53000	BOND PRINCIPAL	7,345,000.00	-14.42%	8,582,466.00	9,048,785.50
30000011	53010	BOND INTEREST	2,354,000.00	-16.14%	2,807,187.00	3,376,663.53
30000011	53020	BOND FEES	13,000.00	NA	-	12,398.76
Total Expenditures			9,712,000.00			
Net (surplus)/ deficit			-	-	(13,136,846.00)	(12,484,122.52)

BEAUFORT COUNTY
ENTERPRISE AND INTERNAL SERVICE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent Change PY Budget	2023 Original Budget	2022 Actuals
Garage fund - internal service fund						
Revenues						
50000001	4480A	FUEL SALES-OTHERS	-	-100.00%	(910,024.00)	-
50000001	4481A	GARAGE CONTRACT-OTHERS	-	-100.00%	(105,000.00)	-
50000001	44825	ADMINISTRATIVE FEE - OUTSIDE A	-	-100.00%	(35,000.00)	-
50000001	49100	TRANSFERS IN	(3,224,731.00)	10.43%	(2,920,030.00)	(2,093,351.30)
Total revenues			(3,224,731.00)		(3,970,054.00)	(2,093,351.30)
Expenditures						
50000011	50020	SALARIES AND WAGES	676,348.00	-551.04%	103,888.00	69,311.88
50000011	50060	OVERTIME	1,000.00	0.00%	1,000.00	1,026.84
50000011	50100	EMPLOYER FICA	43,090.00	569.00%	6,441.00	4,311.30
50000011	50110	EMPLOYER MEDICARE	10,078.00	569.19%	1,506.00	1,008.10
50000011	50120	EMPLOYER SC RETIREMENT	125,715.00	630.73%	17,204.00	11,915.53
50000011	50140	EMPLOYER GROUP INSURANCE	125,000.00	NA	-	12,152.19
50000011	50160	EMPLOYER TORT LIAB	1,500.00	NA	-	256.95
50000011	51010	PRINTING	1,000.00	NA	-	-
50000011	51040	LICENSES/PERMITS	5,000.00	100.00%	2,500.00	500.00
50000011	51050	TELEPHONE	2,000.00	25.00%	1,600.00	449.77
50000011	51060	ELECTRICITY	3,500.00	0.00%	3,500.00	-
50000011	51110	MAINTENANCE CONTRACTS	800,000.00	-45.41%	1,465,415.00	1,194,728.07
50000011	51120	EQUIPMENT MAINTENANCE	15,000.00	25.00%	12,000.00	-
50000011	51140	EQUIPMENT RENTALS	1,000.00	100.00%	500.00	281.30
50000011	51160	PROFESSIONAL SERVICES	1,000.00	400.00%	200.00	67.75
50000011	51165	WASTE DISPOSAL	10,000.00	NA	-	-
50000011	51220	CONTRACTUAL SERVICES	-	-100.00%	100,000.00	208,467.94
50000011	51295	OTHER VEHICLE OPER COSTS	10,000.00	NA	-	-
50000011	51300	GARAGE REPAIRS & MAINTENANCE	5,000.00	NA	-	-
50000011	51310	DUES & SUBSCRIPTIONS	10,000.00	0.00%	10,000.00	-
50000011	51320	TRAINING & CONFERENCES	10,000.00	233.33%	3,000.00	1,039.28
50000011	51500	VEHICLE INSURANCE	5,000.00	66.67%	3,000.00	2,039.24
50000011	51510	BLDG/CONTENTS INSURANCE	3,500.00	250.00%	1,000.00	583.62
50000011	51540	INSURANCE - OTHER	1,000.00	NA	-	-
50000011	52010	OFFICE SUPPLIES	5,000.00	100.00%	2,500.00	301.53
50000011	52050	UNIFORMS	10,000.00	1150.00%	800.00	338.07
50000011	52240	SMALL TOOLS, ETC.	15,000.00	NA	-	604.17
50000011	52400	OTHER SUPPLIES	400,000.00	NA	-	-
50000011	52500	FUELS/LUBRICANTS	750,000.00	-57.14%	1,750,000.00	661,113.47
50000011	52590	FUEL - OUTSIDE AGENCY PURCHASE	150,000.00	-66.67%	450,000.00	26,741.24
50000011	52600	OFFICE FURN & EQUIP. NON-CAPIT	20,000.00	NA	-	-
50000011	54200	CAPITAL EQUIPMENT	-	NA	-	5,336.49
50000011	56100	ADMIN'S CONTINGENCY	-	-100.00%	25,000.00	-
50000011	58500	DEPRECIATION EXPENSE	9,000.00	0.00%	9,000.00	8,767.48
Total Expenditures			3,224,731.00		3,970,054.00	2,211,342.21
Net (surplus)/ deficit			-		-	117,990.91

BEAUFORT COUNTY
ENTERPRISE AND INTERNAL SERVICE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent Change PY Budget	2023 Original Budget	2022 Actuals
Solid Waste and Recycling Fund - Enterprise Fund						
Revenues						
50100011	41010	CURRENT TAXES	(9,600,000.00)	-7.19%	(10,343,302.00)	(9,911,562.00)
50100011	44230	WASTE DISPOSAL FEES	(9,000.00)	6.51%	(8,450.00)	(8,479.50)
50100011	46010	INTEREST ON INVESTMENTS	(10,000.00)	NA	-	(3,264.00)
50100011	47410	SALE OF RECYCLABLES	(400,000.00)	22.70%	(326,000.00)	(428,894.36)
50100011	49200	Transfers In	(1,750,000.00)	NA	-	-
Total revenues			(11,769,000.00)		(10,677,752.00)	(10,352,199.86)
Expenditures						
50100011	50020	SALARIES AND WAGES	1,752,226.00	-6.79%	1,879,907.00	1,521,682.65
50100011	50060	OVERTIME	2,000.00	25.00%	1,600.00	1,089.21
50100011	50100	EMPLOYER FICA	108,671.00	-6.76%	116,554.00	90,233.10
50100011	50110	EMPLOYER MEDICARE	25,415.00	-6.76%	27,259.00	21,102.42
50100011	50120	EMPLOYER SC RETIREMENT	325,204.00	4.46%	311,313.00	235,531.28
50100011	50140	EMPLOYER GROUP INSURANCE	202,291.00	-70.03%	675,000.00	128,522.23
50100011	50150	EMPLOYER WORK COMP INS	47,555.00	NA	-	-
50100011	50160	EMPLOYER TORT LIAB	6,065.00	NA	-	3,032.84
50100011	50198	EMPLOYER PENSION EXP GASB 68	-	NA	-	2,431,506.00
50100011	51000	ADVERTISING	10,000.00	-33.33%	15,000.00	3,471.62
50100011	51010	PRINTING	3,500.00	0.00%	3,500.00	1,604.92
50100011	51030	POSTAGE	2,000.00	0.00%	2,000.00	5,051.77
50100011	51050	TELEPHONE	15,000.00	0.00%	15,000.00	11,689.04
50100011	51060	ELECTRICITY	19,000.00	0.00%	19,000.00	16,228.35
50100011	51070	WATER/SEWER/GARBAGE	22,000.00	0.00%	22,000.00	15,202.10
50100011	51110	MAINTENANCE CONTRACTS	40,000.00	33.33%	30,000.00	30,507.42
50100011	51120	EQUIPMENT MAINTENANCE	25,000.00	0.00%	25,000.00	11,466.09
50100011	51140	EQUIPMENT RENTALS	1,500.00	-75.00%	6,000.00	250.14
50100011	51160	PROFESSIONAL SERVICES	1,025,000.00	95.24%	525,000.00	273,419.38
50100011	51162	LEGAL SERVICES	6,000.00	NA	-	-
50100011	51164	EWASTE HAULING SERVICES	95,000.00	0.00%	95,000.00	15,919.50
50100011	51165	SOLID WASTE HAULING	1,830,000.00	0.00%	1,830,000.00	1,411,766.97
50100011	51166	SOLID WASTE DISPOSAL	3,653,000.00	0.00%	3,653,000.00	3,443,554.24
50100011	51167	RECYCLING SERVICES	940,000.00	0.00%	940,000.00	663,300.13
50100011	5116B	DAUFUSKIE SW DISPOSAL SERVICES	18,000.00	0.00%	18,000.00	17,088.68
50100011	51300	GARAGE REPAIRS & MAINTENANCE	35,000.00	48.94%	23,500.00	40,035.24
50100011	51301	INSURANCE REIMBURSEMENT	-	NA	-	(5,076.35)
50100011	51310	DUES & SUBSCRIPTIONS	1,000.00	0.00%	1,000.00	816.00
50100011	51320	TRAINING & CONFERENCES	6,500.00	0.00%	6,500.00	4,143.94
50100011	51500	VEHICLE INSURANCE	8,000.00	NA	-	3,938.06
50100011	51540	INSURANCE - OTHER	700.00	NA	-	352.20
50100011	52010	OFFICE SUPPLIES	35,000.00	-39.66%	58,000.00	20,592.91
50100011	52050	UNIFORMS	35,000.00	0.00%	35,000.00	24,341.46
50100011	52400	OTHER SUPPLIES	-	NA	-	37.97
50100011	52500	FUELS/LUBRICANTS	62,000.00	-8.82%	68,000.00	61,867.04
50100011	52612	EQUIPMENT NON-CAPITAL	5,000.00	0.00%	5,000.00	3,200.38
50100011	54200	CAPITAL EQUIPMENT	242,620.00	NA	-	6,449.56
50100011	54430	SITE DEVELOPMENT	1,041,825.00	NA	-	-
50100011	56010	PAYROLL CONTINGENCY	121,928.00	NA	-	-
50100011	58500	DEPRECIATION EXPENSE	-	-100.00%	34,979.00	141,606.00
Total Expenditures			11,769,000.00		10,442,112.00	10,655,524.49
Net (surplus)/ deficit			-		(235,640.00)	303,324.63

BEAUFORT COUNTY
ENTERPRISE AND INTERNAL SERVICE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent Change PY Budget	2023 Original Budget	2022 Actuals
Storm Water Fund - Enterprise Fund						
Revenues						
50260001	43780	FEDERAL GRANT FUNDS	-	NA	-	(142,936.61)
50250001	44240	STORMWATER UTILITY FEE	(6,178,114.00)	4.42%	(5,916,418.00)	(5,934,665.78)
50250001	44390	PROJECT INCOME -OUTSIDE AGENCY	-	NA	-	(65.00)
50250001	44430	RENTALS	-	-100.00%	(1,000.00)	-
50250001	44433	PROJECT INCOME - BEAUFORT	-	-100.00%	(2,000.00)	(1,197.50)
50250001	44435	PROJECT INCOME - BLUFFTON	-	NA	-	(5,608.90)
50250001	44436	CWI- CITY OF BEAUFORT	(62,400.00)	-5.71%	(66,178.00)	(65,009.03)
50250001	44437	CWI- TOWN OF PORT ROYAL	(22,900.00)	-9.12%	(25,197.00)	(21,482.54)
50250001	44438	CWI- TOWN OF BLUFFTON	(449,000.00)	-2.94%	(462,613.00)	(443,825.89)
50250001	44439	CWI- TOWN OF HILTON HEAD	(261,000.00)	7.16%	(243,570.00)	(246,472.02)
50250001	44483	PROJECT INCOME	(122,000.00)	NA	-	-
50250001	46010	INTEREST ON INVESTMENTS	(100,000.00)	566.67%	(15,000.00)	(42,293.00)
50250001	47010	MISCELLANEOUS REVENUES	(20,000.00)	17.92%	(16,960.00)	(20,667.00)
50250001	47400	SALE OF COUNTY PROPERTY	-	NA	-	(21,111.00)
50250001	48910	CONT FROM PR YR FUND BAL	(3,685,270.00)	910.01%	(364,874.00)	-
50260001	48910	CONT FROM PR YR FUND BAL	-	-100.00%	(1,250,000.00)	-
50260001	49011	INTRA XFER OPERATING	-	NA	-	(987,085.80)
Total revenues			(10,900,684.00)		(8,363,810.00)	(7,932,420.07)
Expenditures						
50250011	50020	SALARIES AND WAGES	1,166,794.00	-25.23%	1,560,604.00	1,080,126.76
50250012	50020	SALARIES AND WAGES	177,680.00	3.01%	172,492.00	159,196.91
50250013	50020	SALARIES AND WAGES	315,286.00	-18.58%	387,225.00	289,060.81
50250011	50060	OVERTIME	10,000.00	33.33%	7,500.00	2,820.82
50250012	50060	OVERTIME	7,500.00	0.00%	7,500.00	5,127.98
50250013	50060	OVERTIME	4,000.00	0.00%	4,000.00	1,074.79
50250011	50100	EMPLOYER FICA	72,775.00	-25.15%	97,222.00	65,054.95
50250012	50100	EMPLOYER FICA	11,476.00	2.83%	11,160.00	9,888.51
50250013	50100	EMPLOYER FICA	19,714.00	-18.73%	24,256.00	17,547.00
50250011	50110	EMPLOYER MEDICARE	17,020.00	-25.15%	22,738.00	15,214.59
50250012	50110	EMPLOYER MEDICARE	2,684.00	2.84%	2,610.00	2,312.36
50250013	50110	EMPLOYER MEDICARE	4,610.00	-18.74%	5,673.00	4,103.91
50250011	50120	EMPLOYER SC RETIREMENT	212,105.00	-16.59%	254,300.00	166,136.17
50250012	50120	EMPLOYER SC RETIREMENT	34,369.00	15.31%	29,807.00	25,740.46
50250013	50120	EMPLOYER SC RETIREMENT	59,259.00	-8.53%	64,787.00	46,211.23
50250011	50130	EMPLOYER PO RETIREMENT	7,219.00	15.54%	6,248.00	5,861.04
50250011	50140	EMPLOYER GROUP INSURANCE	374,000.00	0.00%	374,000.00	238,982.77
50250012	50140	EMPLOYER GROUP INSURANCE	23,375.00	0.00%	23,375.00	28,037.61
50250013	50140	EMPLOYER GROUP INSURANCE	70,125.00	0.00%	70,125.00	60,337.97
50250011	50150	EMPLOYER WORK COMP INS	95,000.00	68.55%	56,362.00	54,000.00
50250012	50150	EMPLOYER WORK COMP INS	1,873.00	6.42%	1,760.00	3,403.00
50250013	50150	EMPLOYER WORK COMP INS	39,028.00	249.06%	11,181.00	33,558.00
50250011	50160	EMPLOYER TORT LIAB	14,800.00	0.00%	14,800.00	17,089.46
50250012	50160	EMPLOYER TORT LIAB	545.00	-6.84%	585.00	631.67
50250013	50160	EMPLOYER TORT LIAB	2,602.00	0.00%	2,602.00	2,764.16
50250011	50198	EMPLOYER PENSION EXP GASB 68	450,000.00	NA	-	(476,830.00)
50250011	51000	ADVERTISING	1,000.00	900.00%	100.00	-
50250012	51000	ADVERTISING	200.00	-60.00%	500.00	-
50250013	51000	ADVERTISING	250.00	150.00%	100.00	-
50250011	51010	PRINTING	150.00	0.00%	150.00	-
50250012	51010	PRINTING	200.00	-73.33%	750.00	-
50250013	51010	PRINTING	200.00	0.00%	200.00	166.41
50250011	51030	POSTAGE	250.00	0.00%	250.00	109.41
50250012	51030	POSTAGE	50.00	0.00%	50.00	8.25
50250013	51030	POSTAGE	100.00	0.00%	100.00	32.74
50250011	51050	TELEPHONE	14,338.00	-10.14%	15,956.00	9,784.35
50250012	51050	TELEPHONE	1,844.00	-19.48%	2,290.00	1,736.59
50250013	51050	TELEPHONE	7,859.00	-10.26%	8,758.00	5,402.77
50250011	51070	WATER/SEWER/GARBAGE	1,280.00	0.00%	1,280.00	547.26

BEAUFORT COUNTY
ENTERPRISE AND INTERNAL SERVICE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent Change PY Budget	2023 Original Budget	2022 Actuals
50250011	51110	MAINTENANCE CONTRACTS	3,297.00	0.00%	3,297.00	-
50250012	51110	MAINTENANCE CONTRACTS	313.00	0.00%	313.00	-
50250013	51110	MAINTENANCE CONTRACTS	2,500.00	-49.81%	4,981.00	3,052.40
50250011	51120	EQUIPMENT MAINTENANCE	4,000.00	0.00%	4,000.00	1,412.52
50250012	51120	EQUIPMENT MAINTENANCE	200.00	0.00%	200.00	-
50250013	51120	EQUIPMENT MAINTENANCE	2,000.00	0.00%	2,000.00	979.90
50250011	51140	EQUIPMENT RENTALS	10,000.00	0.00%	10,000.00	2,668.59
50250012	51140	EQUIPMENT RENTALS	-	-100.00%	960.00	733.94
50250013	51140	EQUIPMENT RENTALS	500.00	-96.89%	16,100.00	468.32
50250012	51150	OFFICE SPACE RENTALS	960.00	NA	-	-
50250011	51160	PROFESSIONAL SERVICES	270,000.00	157.14%	105,000.00	15,808.59
50250012	51160	PROFESSIONAL SERVICES	17,500.00	-74.07%	67,500.00	14,649.28
50250013	51160	PROFESSIONAL SERVICES	626,000.00	2.29%	612,000.00	575,808.53
50260017	51160	PROFESSIONAL SERVICES	-	NA	-	5,262.80
50260020	51160	PROFESSIONAL SERVICES	-	NA	-	1,500.00
50260021	51160	PROFESSIONAL SERVICES	-	NA	-	10,387.56
50260024	51160	PROFESSIONAL SERVICES	-	NA	-	26,784.00
50260028	51160	PROFESSIONAL SERVICES	-	-100.00%	50,000.00	-
50260030	51160	PROFESSIONAL SERVICES	-	-100.00%	800,000.00	6,500.00
50260032	51160	PROFESSIONAL SERVICES	-	-100.00%	400,000.00	-
50250011	51162	LEGAL SERVICES	25,000.00	NA	-	-
50250011	51166	SOLID WASTE DISPOSAL	20,000.00	0.00%	20,000.00	11,933.65
50250011	51170	NON-PROFESSIONAL SERVICES	130,000.00	-87.83%	1,068,000.00	277,536.13
50250012	51170	NON-PROFESSIONAL SERVICES	-	NA	-	-
50250013	51170	NON-PROFESSIONAL SERVICES	15,300.00	5000.00%	300.00	7,912.50
50260017	51170	NON-PROFESSIONAL SERVICES	-	NA	-	303,404.85
50260024	51170	NON-PROFESSIONAL SERVICES	-	NA	-	590,893.63
50260028	51170	NON-PROFESSIONAL SERVICES	-	NA	-	339,844.50
50250011	51220	CONTRACTUAL SRVCS	120,000.00	NA	-	-
50250011	51230	TRANSPORTATION SERVICES	1,500.00	0.00%	1,500.00	-
50250011	51300	GARAGE REPAIRS & MAINTENANCE	200,000.00	11.42%	179,500.00	118,086.37
50250012	51300	GARAGE REPAIRS & MAINTENANCE	1,248.00	-44.48%	2,248.00	878.28
50250013	51300	GARAGE REPAIRS & MAINTENANCE	7,100.00	29.09%	5,500.00	5,827.94
50250011	51301	INSURANCE REIMBURSEMENT	-	NA	-	(982.61)
50250011	51310	DUES & SUBSCRIPTIONS	1,665.00	0.00%	1,665.00	673.22
50250012	51310	DUES & SUBSCRIPTIONS	1,240.00	-1.98%	1,265.00	1,265.00
50250013	51310	DUES & SUBSCRIPTIONS	1,175.00	34.29%	875.00	815.00
50250011	51320	TRAINING & CONFERENCES	26,525.00	121.99%	11,949.00	3,010.88
50250012	51320	TRAINING & CONFERENCES	9,245.00	13.57%	8,140.00	5,966.04
50250013	51320	TRAINING & CONFERENCES	16,999.00	67.51%	10,148.00	7,493.86
50250011	51500	VEHICLE INSURANCE	27,924.00	0.00%	27,924.00	27,622.34
50250012	51500	VEHICLE INSURANCE	980.00	-38.75%	1,600.00	1,569.93
50250013	51500	VEHICLE INSURANCE	4,500.00	-11.56%	5,088.00	5,684.86
50250011	51540	INSURANCE - OTHER	25,477.00	2.56%	24,840.00	22,843.02
50250013	51540	INSURANCE - OTHER	100.00	-95.83%	2,398.00	743.29
50250011	51990	MISC. EXPENDITURES	-	NA	-	10.00
50250012	51990	MISC. EXPENDITURES	-	NA	-	20.00
50250011	52010	Supplies	301,800.00	120.61%	136,800.00	113,350.64
50250012	52010	OFFICE SUPPLIES	2,200.00	0.00%	2,200.00	961.98
50250013	52010	OFFICE SUPPLIES	2,000.00	-39.39%	3,300.00	5,003.14
50250011	52050	UNIFORMS	23,620.00	0.00%	23,620.00	21,546.99
50250012	52050	UNIFORMS	1,177.00	20.47%	977.00	220.34
50250013	52050	UNIFORMS	5,500.00	26.61%	4,344.00	2,839.24
50250011	52370	PIPE SUPPLIES	-	-100.00%	65,000.00	36,355.16
50250011	52500	FUELS/LUBRICANTS	160,000.00	60.00%	100,000.00	142,180.97
50250012	52500	FUELS/LUBRICANTS	1,000.00	0.00%	1,000.00	301.05
50250013	52500	FUELS/LUBRICANTS	9,600.00	9.09%	8,800.00	12,104.79
50250011	52600	OFFICE FURN & EQUIP. NON-CAPIT	14,300.00	NA	-	-
50250012	52600	OFFICE FURN & EQUIP. NON-CAPIT	800.00	NA	-	-
50250011	52610	TECHNOLOGY EQUIP (NON-CAP)	2,400.00	NA	-	-
50250012	52610	TECHNOLOGY EQUIP (NON-CAP)	500.00	NA	-	-
50250011	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	16,730.00	15,107.33

BEAUFORT COUNTY
ENTERPRISE AND INTERNAL SERVICE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent Change PY Budget	2023 Original Budget	2022 Actuals
50250012	52612	EQUIPMENT NON-CAPITAL	-	-100.00%	1,900.00	107.86
50250013	52612	EQUIPMENT NON-CAPITAL	3,500.00	66.67%	2,100.00	4,094.44
50250011	53000	BOND PRINCIPAL	58,824.00	NA	-	-
50250011	53010	BOND INTEREST	182,386.00	NA	-	-
50250011	53110	INTEREST EXPENSE	-	-100.00%	277,991.00	188,230.77
50250011	54000	VEHICLE PURCHASES	644,000.00	NA	-	386,944.36
50250011	54200	CAPITAL EQUIPMENT	531,207.00	108.32%	255,000.00	70,117.61
50250011	54400	LAND ACQUISITION	-	NA	-	525.30
50250011	54450	OTHER IMPROVEMENTS	2,912,000.00	NA	-	-
50250011	56000	GENERAL CONTINGENCY	150,000.00	NA	-	-
50250011	56010	PAYROLL CONTINGENCY	349,340.00	NA	-	-
50250011	58500	DEPRECIATION EXPENSE	385,000.00	-3.14%	397,481.00	419,051.18
50250013	58500	DEPRECIATION EXPENSE	14,722.00	-38.35%	23,880.00	-
50250011	59100	XFER TO GENERAL FUND	350,000.00	0.00%	350,000.00	350,000.00
50250011	59526	INTRA XFER TO SW CAPITAL FUND	-	NA	-	987,085.80
Total Expenditures			10,900,684.00		8,363,810.00	7,030,438.77
Net (surplus)/ deficit			-		-	(901,981.30)

BEAUFORT COUNTY
ENTERPRISE AND INTERNAL SERVICE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent Change PY Budget	2023 Original Budget	2022 Actuals
Beaufort Executive Airport - Enterprise Fund						
Revenues						
51020001	43730	FAA GRANT REVENUES	(26,917.00)	-40.18%	(45,000.00)	(239,815.00)
51020001	43740	SCAC GRANT REVENUES	(116,757.00)	NA	-	(118,999.18)
51000001	44785	PROCESSING FEE	-	NA	-	(50.00)
51000001	44801	FUEL AVGAS	(410,695.00)	-15.84%	(488,000.00)	(278,593.07)
51000001	44802	FUEL JET	(450,000.00)	0.00%	(450,000.00)	(450,256.51)
51000001	44810	OIL SALES TO OTHERS	(4,500.00)	0.00%	(4,500.00)	(3,136.46)
51000001	44840	RAMP FEES	(30,000.00)	100.00%	(15,000.00)	(17,455.85)
51000001	44850	PARKING FEES	(3,500.00)	NA	-	(572.61)
51000001	44870	TIE DOWN FEES	(28,000.00)	14.29%	(24,500.00)	(30,358.72)
51000001	44881	MERCHANDISE SALES	(10,000.00)	0.00%	(10,000.00)	(7,225.13)
51000001	47010	MISCELLANEOUS REVENUES	(2,000.00)	NA	-	(35,264.77)
51000001	47011	MISC REVENUE - TAXABLE	-	NA	-	(2,283.68)
51000001	47012	MISC REVENUE - NONTAXABLE	(2,500.00)	0.00%	(2,500.00)	(4,174.00)
51000001	47132	RENTAL CARS - COMMISSION	(2,500.00)	66.67%	(1,500.00)	(34.08)
51000001	47180	FLIGHT TRAINING COMMISSIONS	(7,500.00)	-25.00%	(10,000.00)	(7,594.68)
51000001	47190	OPERATING AGREEMENTS (3%)	(2,000.00)	100.00%	(1,000.00)	(3,486.91)
51000001	47200	RENTAL COUNTY PROP - LIAP	(31,500.00)	9.22%	(28,840.00)	(14,420.00)
51000001	47210	HANGAR RENTALS	(140,000.00)	0.00%	(140,000.00)	(75,558.57)
51000001	47220	RENTAL OFFICE	(7,500.00)	25.00%	(6,000.00)	(7,663.33)
51000001	49100	TRANSFERS IN	(1,466,500.00)	NA	-	-
51020001	49200	Transfers In	-	NA	-	(617,941.00)
Total revenues			(2,742,369.00)		(1,226,840.00)	(1,914,883.55)
Expenditures						
51000011	50020	SALARIES AND WAGES	196,501.00	-13.24%	226,498.00	157,155.55
51000011	50060	OVERTIME	-	-100.00%	1,000.00	207.56
51000011	50100	EMPLOYER FICA	9,840.00	-30.24%	14,105.00	9,561.35
51000011	50110	EMPLOYER MEDICARE	2,849.00	-13.67%	3,300.00	2,236.24
51000011	50120	EMPLOYER SC RETIREMENT	36,470.00	-3.26%	37,700.00	25,175.02
51000011	50140	EMPLOYER GROUP INSURANCE	18,000.00	163.74%	6,825.00	22,678.85
51000011	50150	EMPLOYER WORK COMP INS	6,700.00	31.37%	5,100.00	5,100.00
51000011	50160	EMPLOYER TORT LIAB	1,500.00	0.00%	1,500.00	1,947.74
51000011	50198	EMPLOYER PENSION EXP GASB 68	-	NA	-	28,324.00
51000011	51000	ADVERTISING	2,500.00	0.00%	2,500.00	90.00
51000011	51030	POSTAGE	50.00	-50.00%	100.00	40.34
51000011	51040	LICENSES/PERMITS	5,500.00	10.00%	5,000.00	5,175.00
51000011	51041	SWU Fees	18,535.00	NA	-	17,499.50
51000011	51043	PROPERTY TAX PAYMENTS	-	NA	-	14,311.38
51000011	51050	TELEPHONE	2,000.00	-41.18%	3,400.00	3,011.27
51000011	51060	ELECTRICITY	18,000.00	63.64%	11,000.00	14,841.48
51000011	51070	WATER/SEWER/GARBAGE	600.00	-80.00%	3,000.00	319.68
51000011	51110	MAINTENANCE CONTRACTS	9,000.00	0.00%	9,000.00	6,884.96
51000011	51120	EQUIPMENT MAINTENANCE	1,000.00	100.00%	500.00	94.68
51000011	51130	REPAIRS TO BUILDINGS	15,000.00	0.00%	15,000.00	19,808.41
51000011	51140	EQUIPMENT RENTALS	17,500.00	-2.78%	18,000.00	12,230.70
51000011	51160	PROFESSIONAL SERVICES	1,000.00	53.85%	650.00	449.27
51000011	51170	NON-PROFESSIONAL SERVICES	34,100.00	0.00%	34,100.00	27,032.40
51000011	51300	GARAGE REPAIRS & MAINTENANCE	5,000.00	150.00%	2,000.00	3,426.32
51000011	51310	DUES & SUBSCRIPTIONS	3,000.00	66.67%	1,800.00	2,515.00
51000011	51320	TRAINING & CONFERENCES	1,200.00	-20.00%	1,500.00	978.22
51000011	51500	VEHICLE INSURANCE	750.00	-11.76%	850.00	1,395.41
51000011	51510	BLDG/CONTENTS INSURANCE	15,000.00	-9.09%	16,500.00	15,415.50
51000011	51540	INSURANCE - OTHER	12,600.00	-30.77%	18,200.00	12,558.43
51000011	51990	MISC. EXPENDITURES	-	-100.00%	20,000.00	-
51000011	51999	CREDIT CARD FEES	2,500.00	-89.13%	23,000.00	2,983.39
51000011	52010	OFFICE SUPPLIES	3,500.00	105.88%	1,700.00	3,044.26
51000011	52011	RETAIL SUPPLIES	-	-100.00%	750.00	912.38
51000011	52030	CLEANING/SANI SUPPLIES	-	NA	-	246.09
51000011	52050	UNIFORMS	500.00	-50.00%	1,000.00	843.70

BEAUFORT COUNTY
ENTERPRISE AND INTERNAL SERVICE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent Change PY Budget	2023 Original Budget	2022 Actuals
51000011	52500	FUELS/LUBRICANTS	5,000.00	66.67%	3,000.00	4,507.93
51000011	52700	HANGAR MAINTENANCE	-	NA	-	6,974.68
51020011	54132	TAXIWAY EXT, APR EXP, HELIPAD	-	NA	-	23,417.38
51020011	54140	GRNT14 RWY 7/25 LTNG/REHAB TAX	-	NA	-	238,975.26
51000011	54430	SITE DEVELOPMENT	1,466,500.00	NA	-	-
51020011	54431	OTHER IMPROV - SPECIAL PROJECT	-	NA	-	77,336.09
51020011	54980	CAPITAL PROJECTS-POTENTIALGRNT	-	NA	-	3,000.00
51020011	57130	GRANT EXPENDITURES	143,674.00	NA	-	36,284.00
51000011	58000	PURCHASES-FUELS/LUBES	5,000.00	-99.26%	675,000.00	559,913.52
51000011	58030	PURCHASES-CONCESSIONS	7,500.00	0.00%	7,500.00	6,407.37
51000011	58100	JET FUEL	280,000.00	NA	-	-
51000011	58200	AVIATION GAS	340,000.00	NA	-	-
51000011	58500	DEPRECIATION EXPENSE	54,000.00	-0.02%	54,010.00	101,039.92
Total Expenditures			2,742,369.00		1,225,088.00	1,476,350.23
Net (surplus)/ deficit			-		(1,752.00)	(438,533.32)

BEAUFORT COUNTY
ENTERPRISE AND INTERNAL SERVICE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent Change PY Budget	2023 Original Budget	2022 Actuals
Hilton Head Island Airport - Enterprise Fund						
Revenues						
54000001	43680	TOWN OF HHI REVENUES (ATAX)	(160,000.00)	0.00%	(160,000.00)	(148,300.00)
54020001	43730	FAA GRANT REVENUES	(23,732,204.00)	353.60%	(5,231,912.00)	(4,011,187.70)
54020001	43740	SCAC GRANT REVENUES	(250,000.00)	0.00%	(250,000.00)	(153,742.29)
54000001	43780	FEDERAL GRANT FUNDS	(52,730.00)	5.46%	(50,000.00)	(52,730.00)
54000001	44840	LANDING FEES	(280,000.00)	-20.00%	(350,000.00)	(299,911.57)
54010001	44845	PASSENGER FACILITIES CHARGES	-	-100.00%	(600,000.00)	(549,910.65)
54000001	44850	PARKING FEES	(186,718.00)	24.48%	(150,000.00)	(180,968.01)
54000001	44860	TAXI/LIMO FEES	(25,000.00)	150.00%	(10,000.00)	(5,000.00)
54000001	44890	FIREFIGHTING FEES-OTHERS	(350,000.00)	-41.67%	(600,000.00)	(617,167.50)
54000001	44895	SECURITY FEES (AIRLINES)	(216,000.00)	-42.40%	(375,000.00)	(356,458.95)
54000001	44896	SECURITY REVENUE (BADGES)	(12,000.00)	0.00%	(12,000.00)	(12,113.40)
54000001	46010	INTEREST ON INVESTMENTS	-	NA	-	(508.00)
54000001	47010	MISCELLANEOUS REVENUES	(69,358.00)	15.60%	(60,000.00)	(54,173.91)
54000001	47100	FBO - GROUND LEASE	(70,000.00)	2.19%	(68,500.00)	(70,222.92)
54000001	47105	FBO - CONCESSIONS	(25,000.00)	0.00%	(25,000.00)	(51,997.95)
54000001	47110	FBO - FUEL FLOW	(680,000.00)	27.10%	(535,000.00)	(745,250.72)
54000001	47120	RENT -AIRLINE /COMMON	(460,000.00)	-29.23%	(650,000.00)	(663,249.34)
54000001	47121	RENT -AIRLINE / ASSIGNED SPACE	(188,000.00)	0.00%	(188,000.00)	(187,840.20)
54000001	47130	RENTAL CARS - COUNTER	(18,800.00)	0.00%	(18,800.00)	(17,959.63)
54000001	47131	RENTAL CARS -READY SPACES	(26,025.00)	0.10%	(26,000.00)	(24,054.71)
54000001	47132	RENTAL CARS - COMMISSION	(800,000.00)	-38.46%	(1,300,000.00)	(1,257,491.75)
54000001	47140	RENT -SNACK BAR/GIFT SHOP	(20,000.00)	0.00%	(20,000.00)	(17,279.51)
54000001	47150	RENT -ADVERTISING SPACE	(30,000.00)	50.00%	(20,000.00)	(37,733.13)
54000001	47180	FLIGHT TRAINING COMMISSIONS	(6,000.00)	NA	-	(7,024.60)
54000001	47190	OPERATING AGREEMENTS (3%)	(45,000.00)	60.71%	(28,000.00)	(37,655.77)
54000001	47210	RENTAL TSA	(19,500.00)	0.00%	(19,500.00)	(12,919.95)
54000001	47220	HANGAR RENTAL	(116,500.00)	-4.51%	(122,000.00)	(115,302.60)
54000001	47225	RENTAL CO PROPERTY - AIRPORT	(60,200.00)	NA	-	-
54000001	47230	HANGAR RENTAL - 60 X 52	(49,500.00)	0.00%	(49,500.00)	(49,619.30)
54000001	47240	HANGAR RENTAL - 80 X 80	(33,800.00)	0.00%	(33,800.00)	(34,033.32)
Total revenues			(27,982,335.00)		(10,953,012.00)	(9,771,807.38)
Expenditures						
54000011	50020	SALARIES AND WAGES	980,313.00	0.84%	972,190.00	825,214.63
54000011	50060	OVERTIME	40,000.00	0.00%	40,000.00	124,053.30
54000011	50100	EMPLOYER FICA	60,779.00	-5.82%	64,534.00	57,816.51
54000011	50110	EMPLOYER MEDICARE	15,400.00	2.03%	15,093.00	13,521.88
54000011	50120	EMPLOYER SC RETIREMENT	119,503.00	-20.20%	149,754.00	78,879.25
54000011	50130	EMPLOYER PO RETIREMENT	79,955.00	114.56%	37,264.00	84,420.95
54000011	50140	EMPLOYER GROUP INSURANCE	132,000.00	5.60%	125,000.00	134,558.82
54000011	50150	EMPLOYER WORK COMP INS	32,000.00	966.67%	3,000.00	3,000.00
54000011	50160	EMPLOYER TORT LIAB	-	-100.00%	3,500.00	4,449.82
54000011	50198	EMPLOYER PENSION EXP GASB 68	51,150.00	-57.38%	120,000.00	51,149.30
54000011	51000	ADVERTISING	290,000.00	0.00%	290,000.00	208,613.14
54000011	51010	PRINTING	500.00	0.00%	500.00	-
54000011	51030	POSTAGE	500.00	0.00%	500.00	17.51
54000011	51040	LICENSES/PERMITS	2,000.00	0.00%	2,000.00	1,295.67
54000011	51041	SWU Fees	-	NA	-	5,936.40
54000011	51042	HH POLICE FEES	-	NA	-	9,125.00
54000011	51043	PROPERTY TAX PAYMENTS	-	NA	-	774.55
54000011	51046	FEES AND DUES	33,000.00	NA	-	-
54000011	51050	TELEPHONE	18,000.00	20.00%	15,000.00	16,157.62
54000011	51060	ELECTRICITY	135,000.00	0.00%	135,000.00	117,288.81
54000011	51070	WATER/SEWER/GARBAGE	16,500.00	0.00%	16,500.00	14,815.61
54000011	51110	MAINTENANCE CONTRACTS	180,000.00	0.00%	180,000.00	208,507.29
54000011	51120	EQUIPMENT MAINTENANCE	10,000.00	0.00%	10,000.00	438.55
54000011	51130	REPAIRS TO BUILDINGS	75,000.00	0.00%	75,000.00	43,456.03
54000011	51140	EQUIPMENT RENTALS	2,000.00	0.00%	2,000.00	5,723.45
54000011	51160	PROFESSIONAL SERVICES	650,000.00	83.10%	355,000.00	284,278.91

BEAUFORT COUNTY
ENTERPRISE AND INTERNAL SERVICE FUNDS

Organization	Object	Account Description	County Admin 2024 Recommended Budget	Percent Change PY Budget	2023 Original Budget	2022 Actuals
54020047	51160	PROFESSIONAL SERVICES	527,532.00	-0.38%	529,532.00	6,710.04
54000011	51170	NON-PROFESSIONAL SERVICES	275,000.00	-31.25%	400,000.00	400,579.92
54000011	51220	CONTRACTUAL SERVICES	-	NA	-	30,000.00
54000011	51300	GARAGE REPAIRS & MAINTENANCE	15,000.00	0.00%	15,000.00	21,150.85
54000011	51310	DUES & SUBSCRIPTIONS	5,000.00	143.90%	2,050.00	1,826.22
54000011	51320	TRAINING & CONFERENCES	16,500.00	200.00%	5,500.00	5,616.93
54000011	51340	AIRPORT DIRECTOR BIZ DEVELOP	-	-100.00%	5,000.00	28,625.61
54000011	51500	VEHICLE INSURANCE	7,500.00	0.00%	7,500.00	7,065.27
54000011	51510	BLDG/CONTENTS INSURANCE	45,000.00	0.00%	45,000.00	43,917.08
54000011	51540	INSURANCE - OTHER	27,000.00	-1.82%	27,500.00	22,769.13
54000011	51545	INSURANCE - PREPAID	-	-100.00%	50,000.00	-
54000011	51990	MISC. EXPENDITURES	5,000.00	-84.85%	33,000.00	(488.39)
54000011	52010	OFFICE SUPPLIES	20,000.00	-63.64%	55,000.00	18,291.11
54000011	52050	UNIFORMS	6,500.00	85.71%	3,500.00	1,948.18
54000011	52330	FACILITY MAINT SUPPLIES	-	NA	-	241.41
54000011	52500	FUELS/LUBRICANTS	20,000.00	233.33%	6,000.00	11,138.99
54000011	52610	TECHNOLOGY EQUIP (NON-CAP)	2,500.00	25.00%	2,000.00	14,612.00
54000011	53110	INTEREST	56,000.00	-25.33%	75,000.00	66,450.33
54000011	54200	CAPITAL EQUIPMENT	260,000.00	48.57%	175,000.00	20,776.00
54020047	54200	CAPITAL EQUIPMENT	-	-100.00%	699,380.00	-
54020011	54345	FAA HXD GRANT 45	7,595,552.00	354.82%	1,670,000.00	156,783.90
54020011	54346	FAA HXD GRANT 46	1,073,473.00	-57.06%	2,500,000.00	3,390,135.35
54020011	54350	FAA HXD GRANT 48	23,689.00	NA	-	-
54020011	54360	FAA HXD GRANT 49	890,251.00	NA	-	-
54020011	54370	FAA HXD GRANT 50	11,626,638.00	NA	-	-
54020011	54371	FAA HXD GRANT 51	1,900,312.00	NA	-	-
54020011	54372	FAA HXD GRANT 52	94,757.00	NA	-	-
54020011	54400	FAA HXD AIP 40 EMAS - RWY3 EXT	-	NA	-	13,679.00
54020011	54410	FAA HXD GRANT 41	-	NA	-	9,687.00
54000011	54420	RENOVATIONS EXIST BLDGS	-	-100.00%	250,000.00	125,938.22
54020011	54420	FAA HXD AIP GRANT 42	-	NA	-	447.00
54020011	54980	CAPITAL PROJECTS-POTENTIALGRNT	-	-100.00%	972,222.00	-
54020011	54981	CAPITAL PROJECTS - TERMINAL	-	NA	-	351,885.57
54020011	54983	CAPITAL PROJECTS - HUNTER RD	-	NA	-	369,481.59
54020011	57130	GRANT EXPENDITURES	250,000.00	NA	-	-
54000011	57999	LOCAL GRANT MATCH	10,531.00	NA	-	-
54000011	58500	DEPRECIATION EXPENSE	305,000.00	-44.04%	545,000.00	303,272.27
54020011	59101	Transfer Out	-	NA	-	617,941.00
Total Expenditures			27,982,335.00		10,685,019.00	8,333,974.58
Net (surplus)/ deficit			-		(267,993.00)	(1,437,832.80)

BEAUFORT COUNTY COUNCIL
AGENDA ITEM SUMMARY

ITEM TITLE:
A RESOLUTION TO EXPRESS BEAUFORT COUNTY COUNCIL'S SUPPORT FOR THE SOUTH CAROLINA GENERAL ASSEMBLY TO TAKE THE NECESSARY STEPS TO AMEND THE SOUTH CAROLINA CODE OF LAWS TO VEST BUDGET AUTHORITY AND MILLAGE RATE SETTING AUTHORITY FOR THE OPERATION OF THE SCHOOLS IN BEAUFORT COUNTY WITH THE BEAUFORT COUNTY BOARD OF EDUCATION
MEETING NAME AND DATE:
Finance, Administration, Economic Development Committee May 8, 2023
PRESENTER INFORMATION:
County Administrator and Legal Department (5 minutes)
ITEM BACKGROUND:
PROJECT / ITEM NARRATIVE:
The Beaufort County Board of Education desires limited fiscal authority so that they may set the Beaufort County School District's annual operations budget and the millage rate required to support said budget. This would require that the South Carolina General Assembly amend the current South Carolina Code of Laws to vest the authority to approve the budget and set the millage rate in the Beaufort County Board of Education.
FISCAL IMPACT:
No fiscal impact.
STAFF RECOMMENDATIONS TO COUNCIL:
Staff recommends support of the Beaufort County Board of Education's desire to obtain limited fiscal authority
OPTIONS FOR COUNCIL MOTION:
Move forward to Council for Approval/Adoption or to not Approve on May 22, 2023

RESOLUTION 2023 /____

A RESOLUTION TO EXPRESS BEAUFORT COUNTY COUNCIL'S SUPPORT FOR THE SOUTH CAROLINA GENERAL ASSEMBLY TO TAKE THE NECESSARY STEPS TO AMEND THE SOUTH CAROLINA CODE OF LAWS TO VEST BUDGET AUTHORITY AND MILLAGE RATE SETTING AUTHORITY FOR THE OPERATION OF THE SCHOOLS IN BEAUFORT COUNTY WITH THE BEAUFORT COUNTY BOARD OF EDUCATION

WHEREAS, the South Carolina General Assembly enacted Section 13 of Act 994 of 1968 wherein they required the County Board of Education to certify to the County Council on or before March first of each year the proposed budget for the operations of the schools in the County for the next fiscal year, with the anticipated revenue from all sources and the recommended property tax levy, if any, necessary to provide the funds to meet the budget; and

WHEREAS, Section 13 of Act 994 of 1968 requires County Council to prepare and pass a budget for the operation of the County for the ensuing year which shall include the county school system; and

WHEREAS, Section 13 of Act 994 of 1968 requires that if any such certified county school budget provided to County Council would result in an increase in the tax millage over that levied for the preceding year, the budget shall first receive written approval of a majority of the legislative delegation residing in Beaufort County prior to becoming effective; and

WHEREAS, Section 4-9-70 of the South Carolina Code of Laws, Annotated provides that the powers granted to County Councils in Chapter 9 shall not be construed to devolve any additional powers upon County Councils with regard to public school education, and all school districts, boards of trustees, and county boards of education shall continue to perform their statutory functions in matters related thereto as prescribed in the general law of the State; and

WHEREAS, Section 4-9-70 of the South Carolina Code of Laws, Annotated further provides that except as otherwise provided for in this section, the County Council shall determine by ordinance the method of establishing the school tax millage, except in those cases where the boards of trustees of the districts or the county board of education established such millage at the time one of the alternate forms of government provided for in this chapter becomes effective; and

WHEREAS, South Carolina has 27 School Districts which have limited Fiscal Authority in that there is no overseeing body and in which the school board votes for the budget and any millage rate increases; and

WHEREAS, the Beaufort County School District is one of 25 School Districts in South Carolina which have no authority to approve the millage rate necessary to fund the school operations; and

WHEREAS, Beaufort County Board of Education would like to achieve limited Fiscal Authority wherein they, as a separate political body, approve their budget and set the millage rate required to fund the budget for the operation of the schools for the ensuing year and then submit the approved budget to Beaufort County Council for its information on or before May 30 of each year; and

WHEREAS, Beaufort County Council supports the Beaufort County Board of Education’s desire for limited Fiscal Authority which would authorize the Board of Education to approve their own budget and to set the millage rate required to fund the budget for the operation of schools for the ensuing year and to then submit the budget and millage rate to Beaufort County Council for its information on or before May 30 of each year.

NOW, THEREFORE, BE IT RESOLVED on this ____ day of _____, 2023, that Beaufort County urges the General Assembly to amend the South Carolina Code of Laws to reflect the following changes:

> Notwithstanding any other provision of law, budget authority and millage rate setting authority for the operation of schools in Beaufort County is hereby vested in the Beaufort County Board of Education. The Beaufort County Board of Education shall submit the budget it has approved with the operating millage reasonably calculated to fund the budget it has approved to the Beaufort County Council for its information on or before May 30 of each year for the succeeding budget year. By June 30 of each year the Beaufort County Board of Education shall approve and certify a final school operating budget and school millage approved by the Beaufort County Board of Education. To the extent the provisions of this section relating to increases in school millages conflict with the provisions of the South Carolina Code of Laws, Annotated, Section 6-1-320, relating to the millage rate increase limitation, the provisions of Section 6-1-320 control.

Done this ____ day of _____, 2023.

COUNTY COUNCIL OF BEAUFORT COUNTY

By: _____

Joseph Passiment, Chairman

ATTEST:

_____

Sarah W. Brock, JD, Clerk to Council

BEAUFORT COUNTY COUNCIL
AGENDA ITEM SUMMARY

ITEM TITLE:

A RECOMMENDATION OF AN ORDINANCE AUTHORIZING THE REDEMPTION OF THE OUTSTANDING BEAUFORT COUNTY, SOUTH CAROLINA GENERAL OBLIGATION BONDS, SERIES 2013A, AND OTHER MATTERS RELATED THERETO.

MEETING NAME AND DATE:

Finance Committee 03/17/2023

PRESENTER INFORMATION:

Hayes Williams, Chief Financial Officer

10 Minutes

ITEM BACKGROUND:

On May 10, 2013, Beaufort County, South Carolina (the "County") issued general obligation bonds in the original principal amount of $7,580,000 (the "Series 2013A Bonds") for the purpose of defraying the cost of constructing capital improvements in the County.

PROJECT / ITEM NARRATIVE:

The bonds currently bear interest rates between 3 and 4%. The bonds are callable on May 1, 2023. Administration recommends redeeming the bonds with Fund Balance in the Debt Service Fund.

FISCAL IMPACT:

Redemption will be from the fund balance in the Debt Service Fund. The redemption amount will be approximately $4.5 million. The redemption will save Beaufort County approximately $870k in interest over the next ten years.

STAFF RECOMMENDATIONS TO COUNCIL:

Staff recommends approval of the Ordinance.

OPTIONS FOR COUNCIL MOTION:

Approve or deny the Ordinance.

Forward to County Council meeting on April 24, 2023.

AN ORDINANCE

AUTHORIZING THE REDEMPTION OF THE OUTSTANDING BEAUFORT COUNTY, SOUTH CAROLINA GENERAL OBLIGATION BONDS, SERIES 2013A, AND OTHER MATTERS RELATED THERETO.

WHEREAS, on May 10, 2013, Beaufort County, South Carolina (the "County") issued general obligation bonds in the original principal amount of $7,580,000 (the "Series 2013A Bonds") for the purpose of defraying the cost of constructing capital improvements in the County; and

WHEREAS, as of May 1, 2023, the outstanding principal balance of the Series 2013A Bonds is $4,190,000; and

WHEREAS, such outstanding Series 2013A Bonds may be redeemed by the County on or after May 1, 2023 at a redemption price of par with no prepayment premium; and

WHEREAS, the County Council as the governing body of the County has determined, in consultation with the financial advisor and bond counsel for the County, that it is in the best interests of the County to use a portion of the County's fund balances or other legally available funds of the County to redeem the outstanding Series 2013A Bonds so that the interest that would be otherwise be owed by the County on the Series 2013A Bonds for the next ten years will be eliminated; and

NOW, THEREFORE, BE IT ORDAINED by the County Council of Beaufort County, South Carolina, as follows:

SECTION 1. The County hereby determines that the outstanding Series 2013A Bonds shall be redeemed by the County using a portion of the County's fund balances or other legally available funds of the County.

SECTION 2. The County Administrator, the Deputy County Administrator and the Chief Financial Officer of the County are each individually authorized to take all of necessary action to accomplish the redemption of the Series 2013A Bonds.

SECTION 3. All orders, ordinances and resolutions and parts thereof in conflict herewith are to the extent of such conflict hereby repealed, and this Ordinance shall take effect and be in full force from and after its third reading.

BEAUFORT COUNTY, SOUTH CAROLINA

(SEAL)

_____
Chairman of County Council

ATTEST:

_____
Clerk to County Council

First Reading: _____, 2023 Votes___
Second Reading: _____, 2023 Votes___
Public Hearing: _____, 2023
Third Reading: _____, 2023 Votes___

BEAUFORT COUNTY COUNCIL
AGENDA ITEM SUMMARY

ITEM TITLE:

Zoning Map Amendment/Rezoning Request for 1 acre (R600 036 000 0369 0000) at 3 Benton Lane from T3 Edge to T2 Rural Center

MEETING NAME AND DATE:

Community Services and Land Use Committee Meeting, February 13, 2023

PRESENTER INFORMATION:

Robert Merchant, AICP, Director, Beaufort County Planning and Zoning

(10 minutes needed for item discussion)

ITEM BACKGROUND:

This rezoning application went before the Beaufort County Planning Commission at their February 6, 2023 meeting. At that time the Commission voted 5 for and 1 against to recommend denial of the proposed amendment to County Council.

PROJECT / ITEM NARRATIVE:

The applicant seeks to change the zoning of a 1-acre lot at 3 Benton Lane from T3 Edge (T3E) to T2 Rural Center (T2RC) (see attached map) to accommodate the usage of Medical Service: Clinic/Office. In 2011, the County held a charrette for the Pritchardville community during the creation of the Community Development Code. At that time, the community decided to limit commercial development to a smaller node at the intersection of Gibbet Road and May River Road. In 2014, the Community Development Code was adopted, and 3 Benton Lane was zoned T3E because of its placement outside of the small commercial district that was identified in the charrette. The undeveloped property is surrounded by T3E parcels with the exception of a spot-zoned T2RC parcel.

FISCAL IMPACT:

Not applicable

STAFF RECOMMENDATIONS TO COUNCIL:

The proposed zoning change from T3E to T2RC constitutes as "spot zoning" and cannot be supported by Planning staff. Staff also has concerns about further introducing traffic and disturbance to the surrounding residential area if more intense uses (such as Medical Service: Clinic/Office, General Retail, Bar/Nightclub, Gas Station, and Restaurant) are permitted on the property under the T2RC zoning district.

OPTIONS FOR COUNCIL MOTION:

To approve or deny the zoning amendment for 3 Benton Lane from T3 Edge to T2 Rural Center.

ORDINANCE 2023/_____

AN ORDINANCE TO AMEND THE ZONING MAP OF BEAUFORT COUNTY TO CHANGE PARCEL ID NUMBER R600 036 000 0369 0000 FROM T3 EDGE TO T2 RURAL CENTER

WHEREAS, parcel ID number R600 036 000 0369 0000 is currently zoned as T3 Edge; and

WHEREAS, the owner of the parcel has requested to change the zoning from T3 Edge to T2 Rural Center**;** and

WHEREAS, the Beaufort County Planning Commission considered the request on February 6, voting to recommend that County Council deny the request; and

WHEREAS, County Council now wishes to amend the zoning map to change the parcel's zoning from T3 Edge to T2 Rural Center.

NOW, THEREFORE be it ordained by County Council in a meeting duly assembled as follows:

1. The zoning map of the County is hereby amended to reflect the zoning of Parcel ID Number R600 036 000 0369 00000 as T2 Rural Center.
2. Staff is directed to make the changes to the zoning map and to report to all persons necessary or helpful that the zoning has so changed.

Ordained this ___ day of _____, 2023

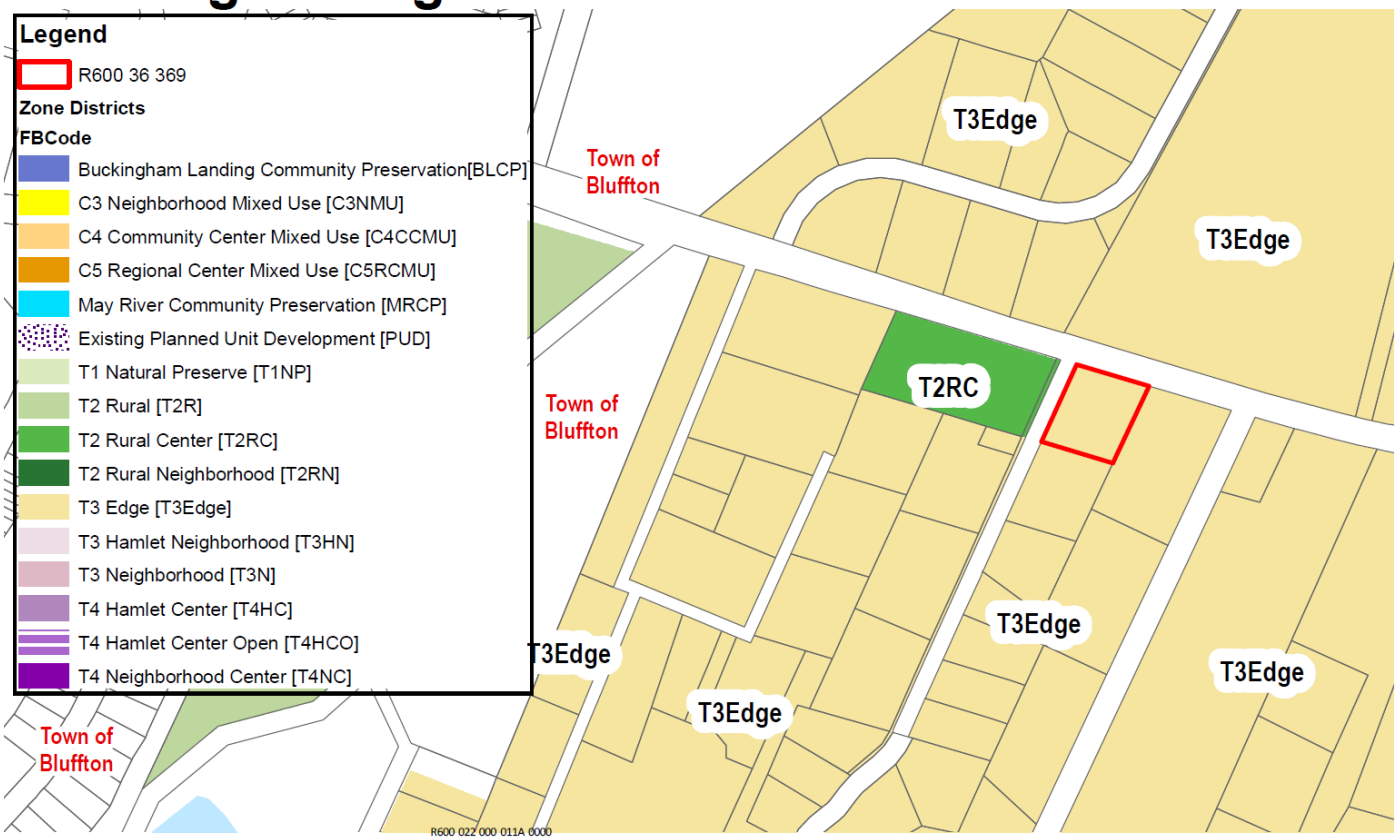
_____

Joseph Passiment, Chairman

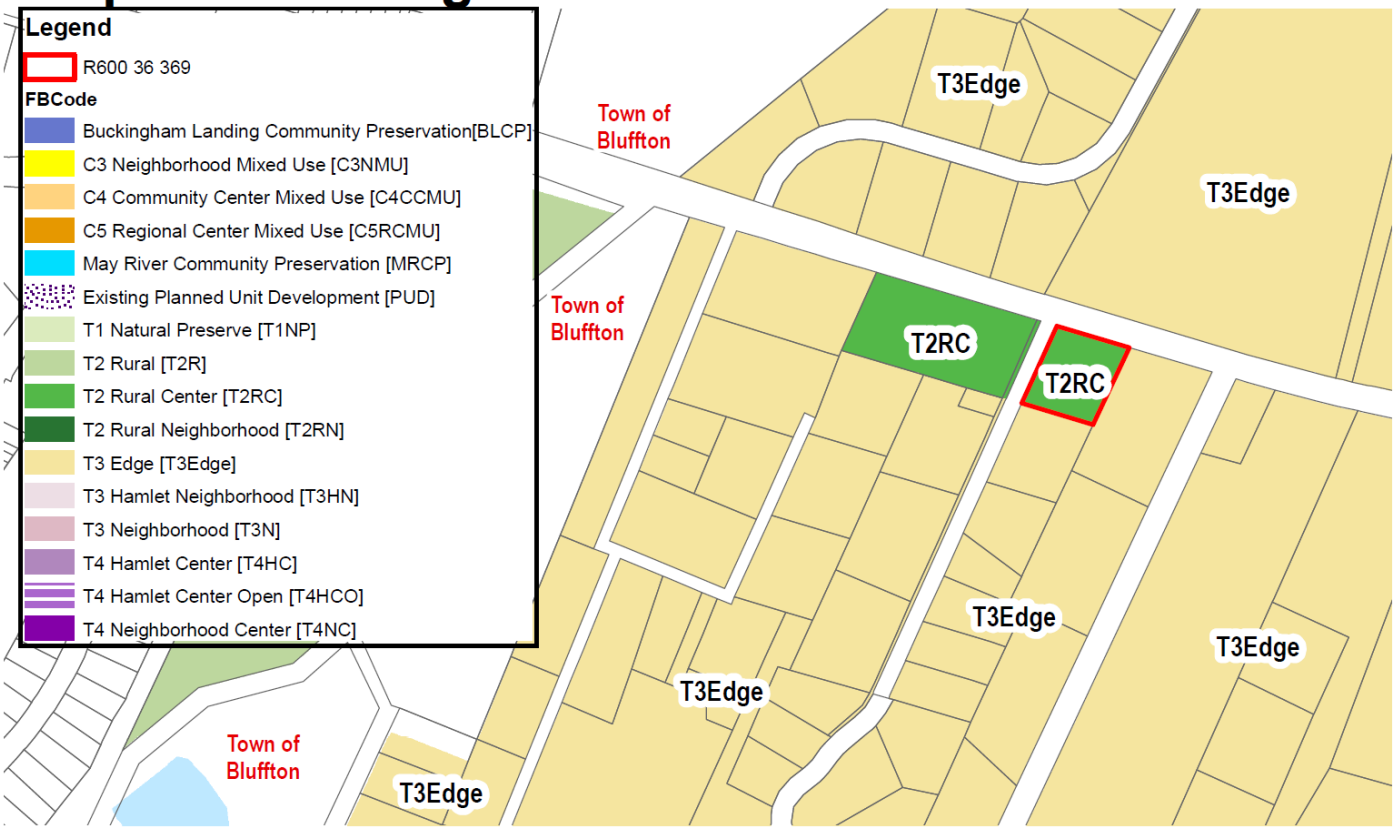
_____

Sarah Brock, Clerk to Council

Existing Zoning



Proposed Zoning



MEMORANDUM

TO: Alice Howard, Chair, Community Facilities and Land Use Committee

FROM: Kristen Forbus, Beaufort County Planning and Zoning Department

DATE: January 5, 2023

SUBJECT: Zoning Map Amendment/Rezoning Request for 1 acre at 3 Benton Lane (R600 036 000 0369 0000) from T3 Edge to T2 Rural Center

STAFF REPORT:

A. BACKGROUND:

Case No.	CDPA-000023-2022
Owner/Applicant:	Michael Kronimus
Property Location:	3 Benton Lane
District/Map/Parcel:	R600 036 000 0369 0000
Property Size:	1 acre
Current Future Land Use Designation:	Neighborhood Mixed Use
Current Zoning District:	T3 Edge
Proposed Zoning District:	T2 Rural Center

B. SUMMARY OF REQUEST: The applicant is seeking to change the zoning of an undeveloped 1-acre lot at 3 Benton Lane from T3 Edge (T3E) to T2 Rural Center (T2RC) (see attached map). The applicant is proposing a rezoning to accommodate the usage of Medical Service: Clinic/Office. The current zoning of T3E allows primarily for residential uses on large single-family lots. In 2011, the County held a charrette for the Pritchardville community during the creation of the Community Development Code. At that time, the community decided to limit commercial development to a smaller area around the intersection of Gibbet Rd and May River Rd. In 2014, the Community Development Code was adopted, and 3 Benton Lane was zoned T3E because of its placement outside of the small commercial district that was identified in the charrette. Rezoning this parcel to the less restrictive zoning district of T2RC would allow small commercial uses such as a Medical Service: Clinic/Office to trickle outside of the established small commercial district.

On April 12, 2021, County Council approved the rezoning to T2 Rural Center of a 2-acre parcel located directly west of this parcel. The applicant is justifying this zoning amendment in part because it matches the zoning of this neighboring property (see attached map).

C. EXISTING ZONING: The lot is currently zoned T3 Edge, which reinforces established, rural residential areas that are typically at the transition between more walkable areas and Natural Preserves and Waterways. Under this zoning, only agriculture, residential, and light recreation uses are permitted.

D. PROPOSED ZONING: The T2 Rural Center district allows for very modest concentrations of activity within rural areas that are in the immediate vicinity of Rural Crossroads or other rural intersections with existing concentrations of non-residential uses. These consist of service and limited commercial uses that may cluster on more closely spaced buildings of residential character. This zoning allows for agriculture, residential, retail/restaurants, offices/services, recreation, schools, infrastructure, and light industrial uses which would allow Medical Service: Clinic/Office.

E. COMPREHENSIVE PLAN FUTURE LAND USE MAP: This 1-acre lot is designated Neighborhood/Mixed-Use on the Future Land Use Map. The Comprehensive Plan states that future development in neighborhood/mixed-use areas should have moderate-density residential zoning, in Pritchardville's case, T3E zoning, as the primary use with some supporting retail establishments. New development is encouraged to be pedestrian-friendly, have a mix of housing types, a mix of land uses and interconnected streets. The maximum gross residential density in rural areas is two dwelling unit per acre with some denser pockets of development.

F. TRAFFIC IMPACTS: According to Section 6.3.20.D of the CDC, *"An application for a rezoning shall include a TIA where the particular project or zoning district may result in a development that generates 50 trips during the peak hour or will change the level of service of the affected street."* The applicant does not require a TIA. However, the parcel has existing access on Benton Lane and will unlikely have direct access from May River Rd due to access management requirements on minor arterial roads. Therefore, a business will most likely have to utilize the existing curb cut off Benton Ln which currently serves only residential development. Furthermore, the adjacent parcel that is zoned T2RC will also require a curb cut once it is developed thus contributing to the traffic impact on the mainly residential area. The curb cut for that parcel is to be determined.

G. SCHOOL CAPACITY IMPACTS: The School District will not be affected by the proposed rezoning.

H. ZONING MAP AMENDMENT REVIEW STANDARDS: In determining whether to adopt or deny a proposed Zone Map Amendment, the County Council shall weigh the relevance of and consider whether and the extent to which the proposed amendment:

1. **Is consistent with and furthers the goals, and policies of the Comprehensive Plan and the purposes of this Development Code;**

   The Land Use chapter of the 2040 Comprehensive Plan indicates this area as Neighborhood/Mixed-Use on the Future Land Use Map. The Comprehensive Plan states that future development in neighborhood/mixed-use areas should have moderate-density residential as the primary use, with some supporting retail establishments. The "supporting retail establishments" area already exists ¼ mile down the May River Rd along the Gibbet Rd intersection- providing a mix of service, retail, and light industrial uses.

2. **Is not in conflict with any provision of this Development Code, or the Code of Ordinances;**

The proposed rezoning constitutes as "spot zoning" as it is amidst other T3E parcels and is adjacent to a recently spot zoned T2RC parcel that was formerly recommended denial by the commission. It is also in conflict with the Community Development Code's intent of maintaining and containing Pritchardville's existing commercial district.

3. **Addresses a demonstrated community need;**

   N/A

4. **Is required by changed conditions;**

   N/A

5. **Is compatible with existing and proposed uses surrounding the land subject to the application, and is the appropriate zone and uses for the land;**

   Existing uses on the surrounding lands are primarily low density residential. The proposed zoning change would allow for a broader mix intense commercial, service, and light industrial uses. This does not follow the appropriate usage that the Community Development Code has stated.

6. **Would not adversely affect nearby lands;**

   As stated in F and 5, there is potential for adverse impacts on the existing rural properties in the adjacent area. The possibility of a curb cut and some light traffic for an office/commercial building off Benton Ln (a residential no-through road) arises.

7. **Would result in a logical and orderly development pattern**;
   See 5 and 6 above.

8. **Would not result in adverse impacts on the natural environment – including, but not limited to, water, air, noise, stormwater management, wildlife, vegetation, wetlands, and the natural functioning of the environment:**

   Any development on the site would be required to adhere to the natural resource protection, tree protection, wetland protection, and stormwater standards in the Community Development Code and the Stormwater BMP Manual.

9. **Would result in development that is adequately served by public facilities (e.g.. streets, potable water, sewerage, stormwater management, solid waste collection and disposal, schools, parks, police, and fire and emergency medical facilities):**

   Water and sewer are not available to service the property currently. The applicant has proposed potable water distribution to be provided by BJWSA, wastewater collection to initially be handled through septic systems as permitted by SDHEC and then wastewater service through BJWSA, electric to be provided by SCE&G, and telecommunications to be provided by Hargray Communications. EMS and Fire facilities are located within a mile of the site.

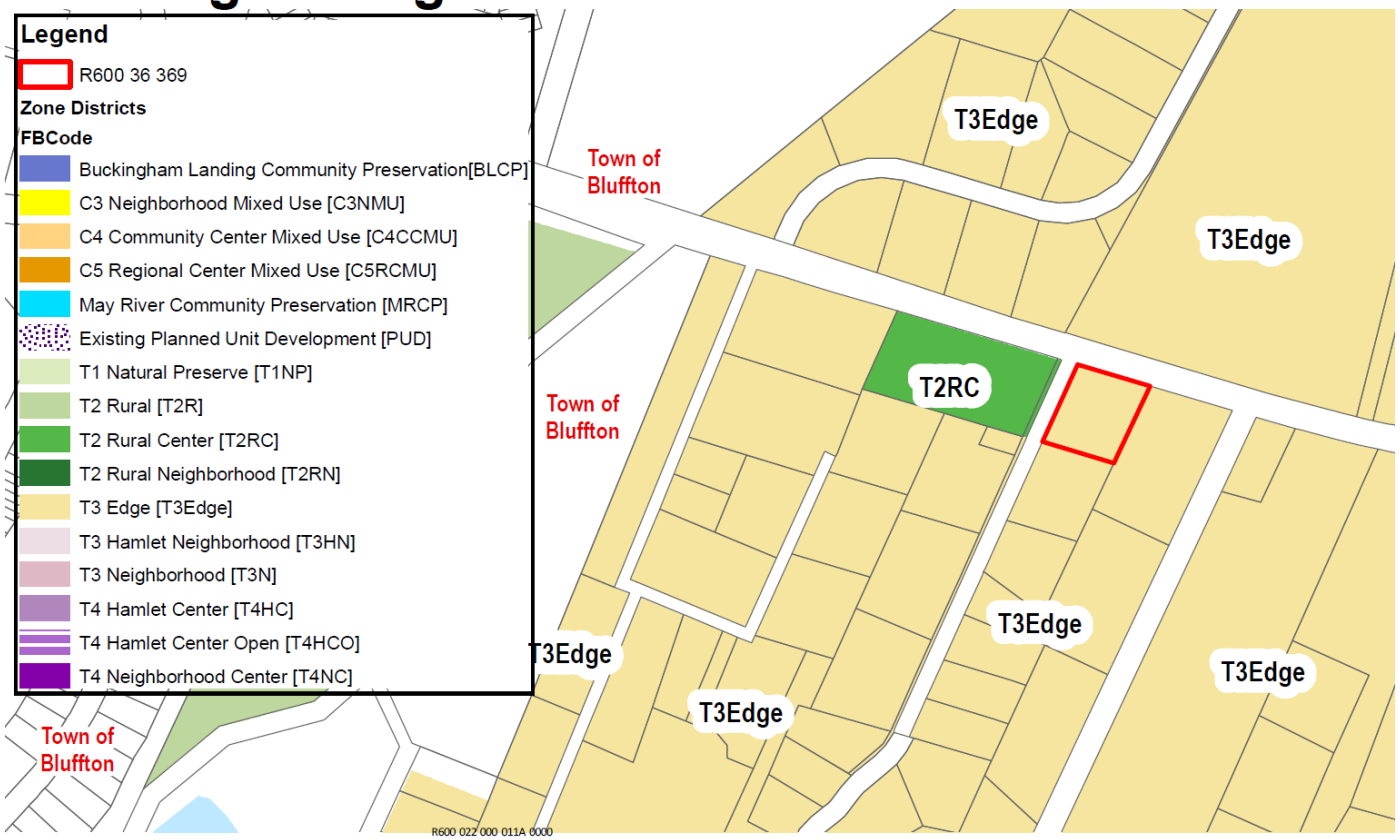
I. STAFF RECOMMENDATION: The proposed zoning change from T2RC to T3E is inconsistent with the intended character of the surrounding areas of the Pritchardville Rural Crossroad. Staff also has concerns about expanding on an existing T2RC parcel that was spot zoned two years ago. This parcel has been vacant as the need for T2RC zoning appears to be low. Furthering this zoning may open the surrounding rural areas along May River Rd from SC 170 intersection to the Gibbet Rd intersection to similar up zonings that were not intended per the 2040 Comprehensive Plan nor the Community Development Code. Therefore, staff recommends denial for the rezoning of 3 Benton Ln.

J. PLANNING COMMISSION RECOMMENDATION: At their February 6, 2023 meeting, the Planning Commission recommended to deny the proposed rezoning.

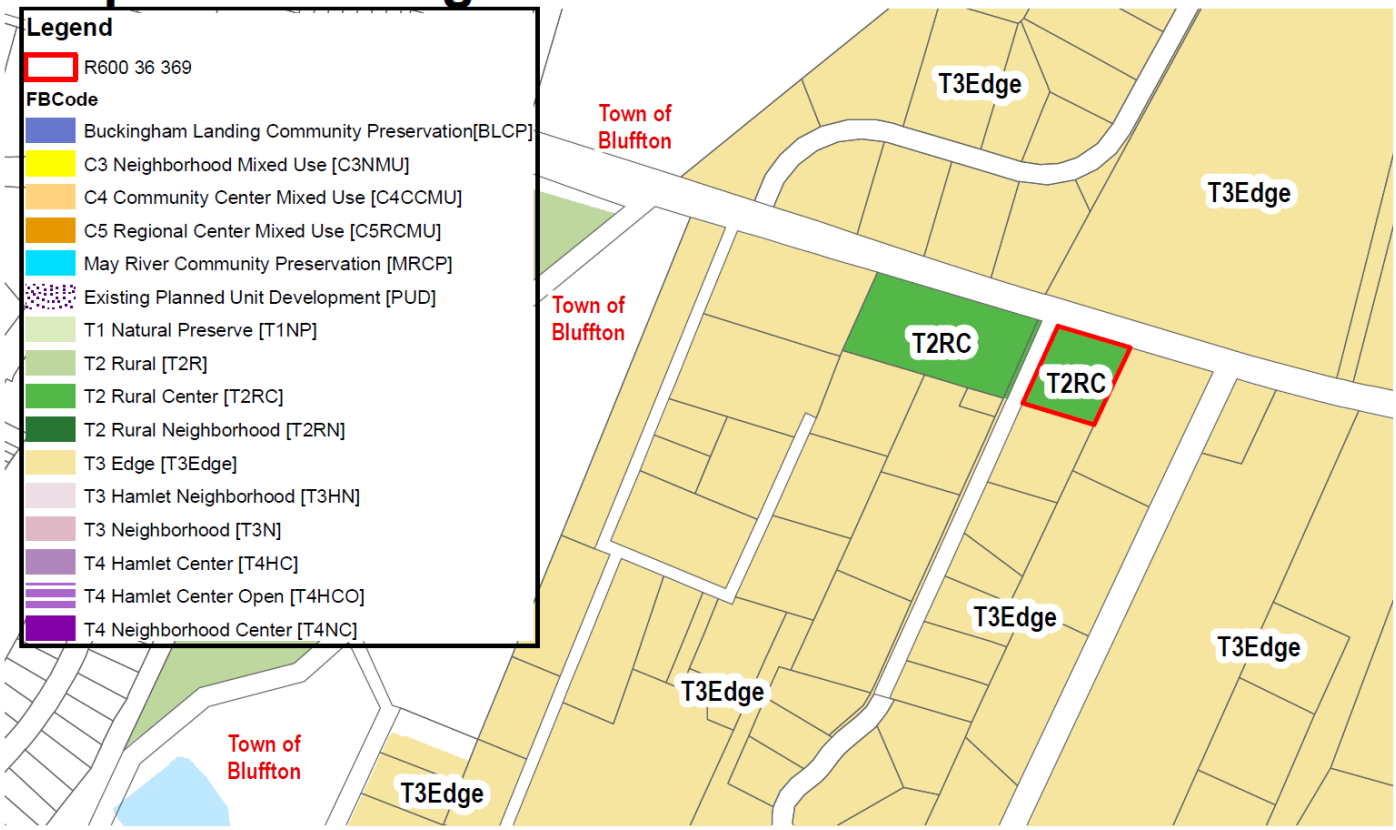
K. ATTACHMENTS

- Zoning Map (existing and proposed)

Existing Zoning



Proposed Zoning



BEAUFORT COUNTY COUNCIL
AGENDA ITEM SUMMARY

ITEM TITLE:

Text Amendment to the Community Development Code (CDC) Section 3.1.70 Land Use Definitions, Section 3.4.10 Overlay Zones Purpose, and Section 3.4.50 - Cultural Protection Overlay (CPO) Zone Standards to strengthen the Cultural Protection Overlay District

MEETING NAME AND DATE:

Community Services and Land Use Committee – April 10, 2023

PRESENTER INFORMATION:

Robert Merchant, AICP, Director, Planning and Zoning

10 minutes needed for presentation.

ITEM BACKGROUND:

A staff initiated text amendment to Section 3.4.50 Cultural Protection Overlay was brought before the Planning Commission at their January 5, 2023 meeting where they recommended denial of the proposed amendment. At the January 9, 2023 meeting of the Community Services and Land Use Committee, the Committee recommended the following regarding the proposed amendment:

> *"Postpone this matter until April 10 and refer the matter to the Cultural Protection Overlay District Committee to study the existing ordinance with our [the County's] legal department and with other outside entities of the Committee's choosing to suggest revisions that can be added to reinforce the Overlay's purpose and to improve the protection it provides to St. Helena and the surrounding islands."*

The CPO Committee met 4 times (January 17, January 31, February 21, and March 21). Representatives from the Planning and Zoning and Legal Departments worked closely with the CPO Committee during this time to prepare the proposed amendments that are being brought forward.

PROJECT / ITEM NARRATIVE:

The proposed amendments include the following;

- *A recommended change to the definition of "Recreation Facility: Golf Course" in the Land Use Definitions in Section 3.1.70.*
- *A recommended amendment to Section 3.4.10 which is the purpose statement for Overlay Zones that is more closely aligned with the SC Local Government Comprehensive Planning Enabling Act of 1994.*
- *Amendments to Section 3.4.50 to strengthen the purpose statement and definitions in the Cultural Protection Overlay District.*

FISCAL IMPACT:

No Fiscal Impact

STAFF RECOMMENDATIONS TO COUNCIL:

Staff recommends approval.

OPTIONS FOR COUNCIL MOTION:

To approve or deny the Text Amendment to the Community Development Code (CDC) Section 3.1.70 Land Use Definitions, Section 3.4.10 Overlay Zones Purpose, and Section 3.4.50 - Cultural Protection Overlay (CPO) Zone.

ORDINANCE 2023/ _____

TEXT AMENDMENTS TO THE COMMUNITY DEVELOPMENT CODE ("CDC"): ARTICLE 3, DIVISION 3.1, SECTION 3.1.70 LAND USE DEFINITIONS, DIVISION 3.4, SECTIONS 3.4.10 - OVERLAY ZONES PURPOSE AND 3.4.50 - CULTURAL PROTECTION OVERLAY (CPO) ZONE STANDARDS TO UPDATE LAND USE DEFINITIONS, RECREATION FACILITY: GOLF COURSE; TO UPDATE DEFINITIONS, REGULATIONS, AND STANDARDS IN THE CULTURAL PROTECTION OVERLY ZONE.

WHEREAS, County Council is authorized to enact ordinances for the implementation and enforcement of powers granted to it pursuant to Sections 4-9-30(9) and (17) of the South Carolina Cod of Laws as amended and to exercise such powers as are necessary to promote the health, safety, and welfare of Beaufort County; and

WHEREAS, among the powers granted to County Council, and which County Council has heretofore exercised, are: (i) the power pursuant to Section 6-29-710(A) of the South Carolina Code of Laws as amended to adopt zoning ordinances for the purpose of guiding development in accordance with existing and future needs and promoting the public health, safety, morals, convenience, order, appearance, prosperity, and general welfare of Beaufort County; (ii) the power pursuant to Section 6-29-720(A) of the South Carolina Code of Laws as ammended to create zoning districts of such number, shape, and size as it determines to be best suited to carry out the purposes of Chapter 29 to Title 6 of the Code of Laws; and (iii) the power pursuant to 6-9-720(C) to utilize certain zoning and planning techniques including overlay zones which are defined as "a zone which imposes a set of requirements . . . when there is a special public interest in a particular geographic area that does not coincide with the underlying zone boundaries"; and

WHEREAS, in this regard, and incident to the adoption of this ordinance, Beaufort County Council, as the governing body of Beaufort County, South Carolina, makes the following legislative findings:

1. St. Helena Island is home to one of the largest Gullah/Geechee communities on the southeast coast. The Gullah/Geechee people are descendants of enslaved people brought from West Africa and indigenous Americans from the Sea Islands.

2. On April 26, 1999, County Council Adopted Ordinance No. 1999/12. This ordinance codified Beaufort County's Zoning & Development Standards. As part of this ordinance, County Council adopted Appendix C, the Cultural Protection Overlay (CPO) District. As set forth in the Appendix, the District was established to provide opportunities to protect the natural and cultural resources which are found on St. Helena Island, to prevent rural gentrification, the displacement of residents, and to protect St. Helena and the Gullah culture from encroaching development pressures.

3. After County Council adopted the CPO District in 1999, the U.S. Department of the Interior's National Park Service conducted its own research into Gullah Culture. After exhaustive research the National Park Service issued *Low Country Gullah Culture:*

Special Resource Study and Final Environmental Impact Statement (July 2005). This report in its entirety is included in County Council's legislative findings.

4. In the nearly two-and-a-half decades since County Council's adoption of the CPO District, Beaufort County experienced unprecedented population growth and a marked increase in development of all kinds, residential and commercial.

5. On November 8, 2021, County Council adopted the 2040 Comprehensive Plan. The Plan recognizes the need for a balanced approach to development.

    a. It recognizes challenges to the County's natural environment. Specifically, it notes "there are still many challenges ahead. Development has not slowed and the County will continually need to reevaluate and update its policies and regulations to make sure that its water quality and resource protection goals are met."

    b. It recognizes challenges to the County's historic, cultural, and scenic resources. It stresses a commitment to "protecting culturally significant communities and resources through sensitive place-based planning and community engagement."

    c. It recognizes challenges to St. Helena. It devotes an entire "Spotlight" section to the island. The Plan provides that "Beaufort County's Gullah/Geechee community makes evident that the region's cultural resources are not just the historic sites, waterways, sacred grounds, farmlands, open spaces, hunting grounds, and the land on which traditional events have occurred. The most important cultural resource is the people themselves." The Plan further observes that "[t]he primary threat to the long-term viability of Beaufort County's Gullah/Geechee communities is land development. Implementing land use policies that concentrate growth in urban areas and protect rural land from suburban development are the most important actions the County can take to protect its unique Gullah/Geechee heritage." As both a strategy and an action, the Plan calls for County Council to "[r]eevaluate the CPO District by assessing whether additional land use restrictions are necessary to meet the intent of the district."

6. On January 5, 2023, the Beaufort County Planning Commission considered text amendments to Article 3, Division 3.4, Section 3.4.50.D, Use Limitations as set forth in the Cultural Protection Overlay (CPO) Zone Standards. The Commission's meeting lasted several hours. The Commission received letters from state, local and regional leaders expressing opposition to the proposed amendments. Dozens of community members attended the meeting. With rare exception, community members, the majority of whom were from St. Helena, spoke against the proposed amendments. The Commission voted unanimously against the proposed amendments. It recommended County Council deny the proposed text amendments.

7. On January 9, 2023, County Council's Community Services and Land Use Committee considered the amendments to Article 3, Division 3.4, Section 3.4.50.D which the Planning Commission considered just days before, which the Commission rejected, and which it recommended County Council deny. The Committee voted to postpone consideration of the proposed amendments until its meeting of April 10, 2023, to refer the matter to the Cultural Protection Overlay District Committee to review the proposed amendments and to suggest revisions that might be added to reinforce the Overlay's purpose to improve the protection it provides to St. Helena and the surrounding islands.

8. The Cultural Protection Overlay District Committee received the referral from the Community Services and Land Use Committee. It met four times: January 17th, January 31st, February 21st, and March 21st. It reviewed and evaluated the language of Section 3.4.50 in its entirety – subparts A through D. During the course of its work the Committee received letters from several sources including attorneys who are associated with organizations which are devoted to cultural, historic, and land preservation on a local, regional, and national level. Its meetings were well attended by members of the public, by the residents of St. Helena, and by members of state and local preservation organizations. The information which was received from the community and from these organizations demonstrated unequivocally that there is special public interest in a particular geographic area of the county (St. Helena) that does not coincide with the underlying zone boundaries. During the meeting of March 21, 2023, the CPO District Committee voted unanimously to recommend (i) that County Council deny the text amendments which were proposed to Article 3, Division 3.4, Section 3.4.50.D which the Community Services and Land Use Committee received on January 9th and further (ii) that County Council adopt, instead, the amendments to Article 3, Division 3.4, Section 3.4.50 as set forth in Exhibit "A".

Beaufort County Council finds, based on the above recitals and the legislative history which has been provided to the Clerk of Council which constitutes part of this record, that (i) it is appropriate to accept the recommendations of the Cultural Protection Overlay District Committee to amend Article 3, Division 3.4, Section 3.4.50 as set forth in Exhibit "A" and (ii) it is appropriate to amend other provisions of Article 3, Divisions 3.1 and 3.4 of the Community Development Code as recommended by the Planning and Zoning Department which are also set forth in Exhibit "A".

NOW, THEREFORE Be It Ordained by County Council in a meeting duly assembled that Article 3, Division 3.1, Section 3.1.70 (Land Use Definitions), and Division 3.4, Sections 3.4.10 (Overlay Zones Purpose) and 3.4.50 (Cultural Protection Overlay Zone Standard) of the Community Development Code ("CDC") are hereby amended as set forth in Exhibit "A". Deletions in the existing code are stricken through. Additions are highlighted and underlined.

Adopted this ___ day of _____ 2023.

COUNTY COUNCIL OF BEAUFORT COUNTY

By: _____
Joseph Passiment, Chairman

ATTEST:

_____
Sarah W. Brock, JD, Clerk to Council

EXHIBIT "A"

Section 3.1.70 Land Use Definitions

RECREATION, EDUCATION, SAFETY, PUBLIC ASSEMBLY (continued)	
Land Use Type	**Definition**
7. Recreation Facility: Commercial Indoor	An establishment providing indoor amusement and entertainment services, often for a fee or admission charge, including, but not limited to : bowling alleys, coin-operated amusement arcades, movie theaters, electronic game arcades (video games, pinball, etc.), indoor ice skating and roller skating rinks, pool and billiard rooms as primary uses. Does not include adult-oriented businesses. May include bars and restaurants as accessory uses. Any establishment with four or more electronic games or amusement devices (e.g., pool or billiard tables, pinball machines, etc.) or a premise where 50 percent or more of the floor area is occupied by electronic games or amusement devices is considered an indoor recreation facility; three or fewer machines or devices are not considered a use separate from the primary use of the site.
8. Recreation Facility: Commercial Outdoor	A facility for outdoor recreational activities where a fee is often charged for use. Examples include, but are not limited to, amusement and theme parks; go-cart tracks; golf driving ranges; miniature golf courses; marinas; watercraft rentals; and water parks. May also include commercial facilities customarily associated with the above outdoor commercial recreational uses, including bars and restaurants, video game arcades, etc. Marinas may include marine-related retail (bait and tackle, boat supplies), fuel sales, minor boat repair, and boat storage. This use does not include golf courses or campgrounds.
9. Recreation Facility: Community-Based	A community recreation center that may include one or more of the following: gymnasium; indoor swimming pool; indoor tennis, racquetball, and/or handball courts, and other indoor sports activities. This use includes all not-for-profit organizations chartered to provide community-based recreation services. Does not include commercial health/fitness facilities, which are included under "General Offices and Services."
10. Recreation Facility: Golf Course	~~This use consists of regulation and par-3 golf courses having nine or more holes, and accessory facilities and uses, including driving ranges, clubhouses with bar and restaurant; locker and shower facilities; "pro shops" for on-site sales of golfing equipment and clothing; and golf cart storage facilities.~~ An area of land with improvements to the grounds on which the sport of golf is played. It typically consists of a series of holes, each consisting of a tee box, a fairway, the rough and other hazards, and/or a green with a cylindrical hole in the ground, known as a cup. Golf course accessory uses may include a clubhouse, restrooms, driving range, and shelters.
11. Recreation Facility: Campground	Form of lodging where guests bring tents, travel trailers, campers, or other similar forms of shelter to experience natural environments. Campgrounds rent two (2) or more pads or spaces to guests. May also include accessory uses such as a camp store, shower/bathroom facilities, and recreational facilities.
12. Ecotourism	Organized, educational and mainly outdoor recreation with or without lodging that invites participants to learn about and promote ecological preservation, conservation, and sustainability. This use shall include at least two of the following characteristics: 1. Located near or within a wilderness setting, park, or protected area; 2. Interpretive educational program with or without guides; 3. Outdoor activities; or 4. Cultural experiences.
13. School: Public or Private	A public or private academic educational institution, including elementary (kindergarten through 6th grade), middle and junior high schools (7th and 8th grades), secondary and high schools (9th through 12th grades), and facilities that provide any combination of those levels. May also include any of these schools that also provide room and board.
14. School: Specialized Training/Studios	Small-scale facilities that provide individual and group instruction, education and/or training, including tutoring and vocational training in limited subjects, including, but not limited to: the arts, dance, photography, martial arts training, gymnastics instruction, production studios for individual musicians, painters, sculptors, photographers, and other artists, business and vocational schools, and driver education schools.

15.	School: College or University	A facility for post-secondary education that grants associates, bachelors, masters, or doctoral degrees, and may include research functions. Includes professional schools (law, medicine, etc.) and technical colleges.

Division 3.4: Overlay Zones

Sections:

3.4.10 Purpose
3.4.20 Applicability
3.4.30 MCAS Airport Overlay (MCAS-AO) Zone Standards
3.4.40 Beaufort County Airport Overlay (BC-AO) Zone Standards
3.4.50 Cultural Protection Overlay (CP) Zone Standards
3.4.60 Commercial Fishing Village Overlay (CFV) Zone Standards
3.4.70 Transfer Development Rights Overlay (TDR) Zone Standards
3.4.80 Place Type Overlay (PTO) Zone Standards

3.4.10 Purpose

This Division provides regulatory standards governing land use and building form within special overlay zones. Overlay Zones impose a set of requirements or relax a set of requirements imposed by the underlying zoning district when there is a special public interest in a particular geographic area that does not coincide with the underlying zone boundaries. These zones are typically applied to certain areas of the County here extreme environmental, physical or cultural constraints need increased planning guidelines and consideration.

3.4.20 Applicability

The requirements of this Division shall apply to all proposed development within the overlay zones, and shall be considered in combination with the standards for specific uses in Article 4 (Specific to Use), if applicable, and the development standards in Article 5 (Supplemental to Zones). If there is a conflict between any standards, the provisions of Article 4 (Specific to Use) control over Article 3 (Specific to Zones) and Article 5 (Supplemental to Zones).

3.4.50 - Cultural Protection Overlay (CPO) Zone Standards

A. Purpose. ~~The Cultural Protection Overlay (CPO) zone is established to provide for the long term protection of the culturally significant resources found on St. Helena Island. The CPO zone acknowledges St. Helena's historic cultural landscape and its importance as a center of Beaufort County's most notable concentration of Gullah culture~~. The Cultural Protection Overlay (CPO) District is established to preserve the rural character and to protect the cultural, natural, and historic resources on St. Helena Island.

St. Helena Island's most important cultural resource is the people themselves. While the Island's population is very diverse with residents who have been there for generations along with newcomers, St. Helena Island is home to one of the largest Gullah/Geechee communities on the southeast coast. The Gullah/Geechee people are descendants of enslaved people brought from West Africa and indigenous Americans from the Sea Islands. The historic isolation of the County's Sea Islands was crucial to the survival of this culture. This isolation created a unique culture with African roots that are clearly visible in the Gullah/Geechee people's distinctive arts, crafts, foodways, music, and language. While isolation was critical to the development of the Gullah/Geechee culture, the land and land ownership is critical to the survival of this culture into the present day. Shortly after the Civil War, many freedmen in the Sea Islands were successful in acquiring lands that were formerly located on plantations. Gullah/Geechee landowners were able to develop a self-sustaining economy based on small-scale cash crops, subsistence agriculture, and truck farming supplemented with fishing and harvesting shrimp and oysters. This land ownership remains to this day and has been critical in facilitating a stable and self-supporting community.

Beaufort County is undergoing extraordinary growth and development. Preserving the character of rural spaces in the unincorporated areas of the County promotes the health, safety, and welfare of the County's citizens. Large scale development, rapid growth, and otherwise incompatible development in rural areas can adversely affect the character of rural areas. St. Helena Island is one of Beaufort County's remaining rural spaces. It is a living, working landscape of forested lands, Gullah/Geechee family compounds, marsh vistas, family farms – large and small, and small tight-knit rural communities centered around places of worship, connected by two-lane canopy covered roads. The island is home to many historic structures, and sacred burial grounds including graveyards and cemeteries. It is one of the communities that participated in the *National Park Service's Low Country Gullah Culture: Special Resource Study & Final Environmental Impact Statement* which was published in 2005. (The study is incorporated into this Purpose statement.) As noted in the study, to talk about St. Helena is to talk about "life ways and traditions of a living culture in the Low Country and Sea Islands, a semi-tropical area filled with palmetto trees and live oaks draped with Spanish moss…" (*Low Country Gullah Culture: Special Resource Study & Final Environmental Impact Statement* p. 1) The study notes that "[t]he Gullah/Geechee story represents a crucial component of local, regional, and national history. Preserving … Gullah/Geechee culture and its associated sites is significant to people of all racial, regional, and ethnic backgrounds and is vital to [preserving and] telling the story of the American heritage." (p.2). It is home to Penn Center, the nation's first trade, agricultural, and normal school for freedmen. The historical significance of the Penn Center area has been

formally recognized with a National Historic Landmark designation and comprises two of the four sites in Reconstruction Era National Park.

Beaufort County's 2040 Comprehensive Plan places great value in preserving the rural character of St. Helena and in continuing the natural, cultural, and historic qualities of St. Helena Island. The Comprehensive Plan identifies land development as the primary threat to the Island's rural qualities and its existing culture. It is important to note that the Comprehensive Plan supports steady incremental growth that enhances the Island's existing character and provides services and economic opportunities to the rural community. However, large-scale, rapid, and/or suburban growth, such as gated, master planned communities, golf courses and resort destinations, conflicts with the Island's character and presents the greatest threat to the character and stability of the Island community. Rapid suburban growth would not only change the character of the area and threaten the natural, cultural and historic qualities of St. Helena, it would likely bring with it disproportionate and unsustainable short and long-term demands for urban services and infrastructure and eventually lead to urbanization or suburbanization of the Island, the loss of natural qualities which have sustained generations of islanders and which has resulted in the culture and history of the Island. Therefore, the Cultural Protection Overlay District is designed to complement the underlying zoning districts on St. Helena Island by limiting large-scale development such as large master planned communities and resort destinations, that would substantially alter the rural character and natural landscape, would generate high traffic volume, and/or would otherwise be incompatible with the culture of St. Helena Island.

B. District Boundaries. The boundaries of the CPO zone on St. Helena Island are depicted on the Beaufort County Official Zoning Map. Where the CPO zone is applied, the permitted uses shall be limited to the base zoning, except where additional limitations are established within the CPO zone.

C. Site Design. Design features that restrict access to water and other culturally significant locations, and franchise design are prohibited.

D. Use Limitations. ~~The following specific uses are deemed to be incompatible with the CPO zone; and therefore, are prohibited:~~ Based upon the Purpose statement above, and in particular the National Park Service's Low Country Gullah Culture: Special Resource Study & Final Environmental Impact Statement, Beaufort County finds that golf courses, resorts, fences, beachfront development, boat landings, marinas, and the coastal population explosion are all encroaching upon and in some cases overtaking Gullah/Geechee Culture, it is the public policy of Beaufort County to protect St. Helena Island's rural, historic, and cultural heritage by prohibiting the following uses which are deemed to be incompatible with the Cultural Protection Overlay District:

Restricted Access (Gated Communities) ~~An intentionally designed, secured bounded area with designated and landscaped perimeters, usually walled or fenced, that are designed to prevent access by non-residents.~~ A residential neighborhood where accessibility is controlled by means of a gate, guard, barrier, or other similar improvement for the purposes of controlling the movement of traffic and people into

and out of the neighborhood and usually include common areas, amenities such as swimming pools, clubhouses, restaurants which are open only to residents, property owners, members and guests.

Resort This use includes lodging that serves as a destination point for visitors and designed with some combination of recreation uses or natural areas. Typical types of activities and facilities include marinas, beaches, pools, tennis, golf, equestrian, restaurants, shops, and the like. This restriction does not apply to ecotourism or its associated lodging.

Golf Course ~~This use includes regulation and par three golf courses having nine or more holes.~~ An area of land with improvements to the grounds on which the sport of golf is played. It typically consists of a series of holes, each consisting of a tee box, a fairway, the rough and other hazards, and/or a green with a cylindrical hole in the ground, known as a cup. Golf course accessory uses may include a clubhouse, restrooms, driving range, and shelters.

BEAUFORT COUNTY, SOUTH CAROLINA
COMMUNITY DEVELOPMENT CODE, CULTURAL PROTECTION OVERLAY ZONE STANDARDS
INDEX TO LEGISLATIVE DOCUMENTATION
(April 20, 2023)

1. U.S. Supreme Court Case
    a. *Penn Central Transp. Co. v. New York City*, 483 U.S. 104 (1978)
2. South Carolina Supreme Court Cases
    a. *Ani Creation, Inc. d/b/a Rasta, et al. v. City of Myrtle Beach Bd. Of Zoning Appeals,* Op. No. 28151 (S.C. Sup. Ct. filed April 19, 2023) (Howard Adv. Sh. No. 15 at 52)
    b. *Braden's Folly, LLC v. City of Folly Beach,* Op. No. 28148 (S.C. Sup. Ct. filed April 5, 2023)(Howard Ad. Sh. No. 14 at 33)
    c. *Harkins v Greenville Cty.*, 340 S.C. 606, 533 S.E.2d. 886 (2000)
3. South Carolina Court of Appeals Case
    a. *Harbit v. City of Charleston*, 382 S.C. 383, 675 S.E.2d 776 (2009)
4. *Saving Our Land: A Legal Manual on Land Use and Retention*, Penn Center, Inc. (1986) Beaufort County Archives
5. National Park Service, U.S. Dep't of the Interior, *Low Country Gullah Culture: Special Resource Study and Final Environmental Impact Statement* (July 2005)
6. 1997 Beaufort County Comprehensive Plan, 1997

7. 2007 Northern Beaufort County Regional Plan, 2007

8. 2010 Beaufort County Comprehensive Plan, 2010

9. 2040 Beaufort County Comprehensive Plan, 2021

10. Southern Watershed Rural Area Preservation Program, Final Report. 30 September 2001

11. Beaufort County, South Carolina Population 2023, World Population Review

12. Larson, Lucas & Kacen Bayless & Lana Ferguson. "2020 Census: 4 Things to know about how Beaufort County grew in the last 10 years". *The Island Packet*, 12 August 2021

13. Gullah Geechee Cultural Heritage Corridor Commission, *Strategic Plan to Promote Preservation of Gullah Geechee Land Ownership in the Gullah Geechee Cultural Heritage Corridor*, 2020

14. Jebaily, Carolyn. "Protection of Gullah-Geechee culture, ACE Basin crucial for St. Helena's future". *The Island News*, 20 April 2023

15. Opinion. "We cannot allow the land of the treasured Gullah people to become 'gwine wit de tide'". *The Island Packet*, 9 April 2023

16. Puckett, Karl. "18-hole golf course blocked on St. Helena, but how about 3 with 6 holes? 450 say no way." *The Island Packet*, 1 April 2023

17. Brown, DeNeen, & Rita Harper. "White Gold From Black Hands: The Gullah Geechee Fight For A Legacy After Slavery." *The Guardian*, 30 March, 2023

18. McCombs, Mike. "Rally to 'protect St. Helena' set for Thursday". *The Island News*, 29 March 2023

19. Editorial Staff. Strengthen Charleston County's urban growth boundary to protect rural areas". *Post and Courier*, 21 March 2023

20. Editorial Staff. "Protect Wadmalaw Island's agricultural zoning". *Post and Courier,* 18 March 2023

21. Douglas, Blake. "Hilton Head residents unite against Jonesville development, town working on district plan". *The Island Packet*, 9 January 2023

22. Leslie Lenhart, letter to Queen Quet & Daryl Orage, 31 January 2023. TS

23. Amy Armstrong, letter to Queen Quet, Marquetta L. Goodwine, 21 March 2023. TS

24. William J. Cook, letter to St. Helena Cultural Property Overlay District Committee, 21 March 2023. TS

25. Andrew Gowder, letter to Kristin Williams, 5 April 2023. TS

26. Amy Armstrong, letter to Honorable Alice Howard, 9 April 2023. TS

Penn Central Transportation Co. v. New York City, 438 U.S. 104 (1978)

Justia Opinion Summary and Annotations

Annotation

Primary Holding
A city does not need to pay compensation to a property owner under the Takings Clause of the Fifth Amendment when it designates their property as a landmark and limits its development.

Facts
As provided under the Landmark Preservation Law in New York, the Landmark Preservation Commission had the authority to designate certain buildings and properties as landmarks of historic or scenic value. Once it had applied a landmark designation to a property, the owner could appeal the decision through administrative and judicial proceedings. The owner also retained the right to transfer development rights to other properties under its control.

The railroad company Penn Central sought to build a multistory office building above Grand Central Terminal, which the Commission had designated as a historic landmark. Appeals against that designation failed, Penn Central was prevented from constructing

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Majority

- William Joseph Brennan, Jr. (Author)
- Potter Stewart
- Byron Raymond White
- Thurgood Marshall
- Harry Andrew Blackmun
- Lewis Franklin Powell, Jr.

Brennan pointed out that Penn Central still could develop the rest of the parcel on which Grand Central Terminal stood, since the law only burdened its ability to use the air space above the Terminal. He was not concerned by the fact that the law burdened certain property owners more than others, since this is often true of laws that promote the public good. Brennan stated that the government interference with private property should be evaluated both qualitatively (the type of interference) and quantitatively (the extent of the interference). He found that the restrictions under the law had a substantial relationship to the government's legitimate interest in preserving historical landmarks for the general welfare and that Penn Central had plenty of alternative ways to develop this property and others.

Dissent

- William Hubbs Rehnquist (Author)
- Warren Earl Burger
- John Paul Stevens

Observing that fewer than 0.1 percent of the buildings in New York City were affected by the law, Rehnquist argued that the takings principle should prohibit laws that impose substantial burdens on a very small group in exchange for a small benefit to a very large group.

Case Commentary

The Court's reasoning showed that, in evaluating whether a taking requires compensation, a key inquiry consists of evaluating the economic impact of the regulation and whether it has undermined the investment-backed expectations of a private property owner. Although Penn Central lost the case, it eventually s at it wanted because the terminal later

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Syllabus Case

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U.S. Supreme Court

Penn Central Transportation Co. v. New York City, 438 U.S. 104 (1978)

Penn Central Transportation Co. v. New York City

No. 77-444

Argued April 17, 1978

Decided June 26, 1978

438 U.S. 104

Syllabus

Under New York City's Landmarks Preservation Law (Landmarks Law), which was enacted to protect historic landmarks and neighborhoods from precipitate decisions to destroy or fundamentally alter their character, the Landmarks Preservation Commission (Commission) may designate a building to be a "landmark" on a particular "landmark site" or may designate an area to be a "historic district." The Board of Estimate may thereafter modify or disapprove the designation, and the owner may seek judicial review of the final designation decision. The owner of the designated landmark must keep the building's exterior "in good repair," and, before exterior alterations are made, must secure Commission approval. Under two ordinances, owners of landmark sites may transfer development rights from a landmark parcel to proximate lots. Under the Landmarks Law, the Grand Central Terminal (Terminal), which is owned by the Penn Central Transportation Co. and its affiliates (Penn Central) was designated a "landmark" and the block it occupies a "landmark site." Appellant Penn Central, though opposing the designation before the Commission, did not seek judicial review of the final designation decision. Thereafter appellant Penn Central entered into a lease with appellant UGP Properties, whereby UGP was to construct a multistory office building over the Terminal. After the Commission had rejected appellants' plans for the building as destructive of the Terminal's historic and aesthetic feature judicial review thereafter being sought.

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Item 15.

was reversed on appeal, the New York Court of Appeals ultimately concluding that there was no "taking," since the Land...arks Law had not transferred control of the property to the city, but only restricted appellants' ...oitation of it; and that there was no denial of due process because (1) the same use of the Terminal was permitted as before; (2) the appellants had not shown that they could not earn a reasonable return on their investment in the Terminal itself; (3) even if the Terminal proper could never operate at a reasonable profit, some of the income from Penn Central's extensive real estate holdings in the area must realistically be imputed to the Terminal; and (4) the development rights above the Terminal, which were made transferable to numerous sites in the vicinity, provided significant compensation for loss of rights above the Terminal itself.

Oral Argument - April 17, 1978.

Opinion Announced - June 26, 1978.

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Held: The application of the Landmarks Law to the Terminal property does not constitute a "taking" of appellants' property within the meaning of the Fifth Amendment as made applicable to the States by the Fourteenth Amendment. Pp. 438 U. S. 123-138.

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(a) In a wide variety of contexts, the government may execute laws or programs that adversely affect recognized economic values without its action constituting a "taking," and

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PENN CENTRAL TRANSPORTATION COMPANY et al., Appellants, v. CITY OF NEW YORK et al.

Supreme Court

438 U.S. 104

98 S.Ct. 2646

57 L.Ed.2d 631

PENN CENTRAL TRANSPORTATION COMPANY et al., Appellants,
v.
CITY OF NEW YORK et al.

No. 77-444.

Argued April 17, 1978.

Decided June 26, 1978.

Rehearing Denied Oct. 2, 1978.

See 439 U.S. 883, 99 S.Ct. 226.

Syllabus

Under New York City's Landmarks Preservation Law (Landmarks Law), which was enacted to protect historic landmarks and neighborhoods from precipitate decisions to destroy or fundamentally alter their character, the Landmarks Preservation Commission (Commission) may designate a building to be a "landmark" on a particular "landmark site" or may designate an area to be a "historic district." The Board of Estimate may thereafter modify or disapprove the designation, and the owner may seek judicial review of the final designation decision. The owner of the

designated landmark must keep the building's exterior "in good repair" and before exterior alterations are made must secure Commission approval. Under two ordinances owners of landmark sites may transfer development rights from a landmark parcel to proximate lots. Under the Landmarks Law, the Grand Central Terminal (Terminal), which is owned by the Penn Central Transportation Co. and its affiliates (Penn Central) was designated a "landmark" and the block it occupies a "landmark site." Appellant Penn Central, though opposing the designation before the Commission, did not seek judicial review of the final designation decision. Thereafter appellant Penn Central entered into a lease with appellant UGP Properties, whereby UGP was to construct a multistory office building over the Terminal. After the Commission had rejected appellants' plans for the building as destructive of the Terminal's historic and aesthetic features, with no judicial review thereafter being sought, appellants brought suit in state court claiming that the application of the Landmarks Law had "taken" their property without just compensation in violation of the Fifth and Fourteenth Amendments and arbitrarily deprived them of their property without due process of law in violation of the Fourteenth Amendment. The trial court's grant of relief was reversed on appeal, the New York Court of Appeals ultimately concluding that there was no "taking" since the Landmarks Law had not transferred control of the property to the city, but only restricted appellants' exploitation of it; and that there was no denial of due process because (1) the same use of the Terminal was permitted as before; (2) the appellants had not shown that they could not earn a reasonable return on their investment in the Terminal itself; (3) even if the Terminal proper could never operate at a reasonable profit, some of the income from Penn Central's extensive real estate holdings in the area must realistically be imputed to the Terminal; and (4) the development rights above the Terminal, which were made transferable to numerous sites in the vicinity, provided significant compensation for loss of rights above the Terminal itself. *Held:* The application of the Landmarks Law to the Terminal property does not constitute a "taking" of appellants' property within the meaning of the Fifth Amendment as made applicable to the States by the Fourteenth Amendment. Pp. 2559-2666.

(a) In a wide variety of contexts the government may execute laws or programs that adversely affect recognized economic values without its action constituting a "taking," and in instances such as zoning laws where a state tribunal has reasonably concluded that "the health, safety, morals, or general welfare" would be promoted by prohibiting particular contemplated uses of land, this Court has upheld land-use regulations that destroyed or adversely affected real property interests. In many instances use restrictions that served a substantial public purpose have been upheld against "taking" challenges, *e. g., Goldblatt v. Hempstead*, 369 U.S. 590, 82 S.Ct. 987, 8 L.Ed.2d 130; *Hadacheck v. Sebastian*, 239 U.S. 394, 36 S.Ct. 143, 60 L.Ed. 348, though a state statute that substantially

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furthers important public policies may so frustrate distinct investment-backed expectations as to constitute a "taking," *e. g., Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 43 S.Ct. 158, 67 L.Ed. 322, and government acquisitions of resources to permit uniquely public functions constitute "takings," *e. g., United States v. Causby*, 328 U.S. 256, 66 S.Ct. 1062, 90 L.Ed. 1206. Pp. 123-128.

(b) In deciding whether particular governmental action has effected a "taking," the character of the action and nature and extent of the interference with property rights (here the city tax block designated as the "landmark site") are focused upon, rather than discrete segments thereof. Consequently, appellants cannot establish a "taking" simply by showing that they have been denied the ability to exploit the super-jacent airspace, irrespective of the remainder of appellants' parcel. Pp. 130-131.

(c) Though diminution in property value alone, as may result from a zoning law, cannot establish a "taking," as appellants concede, they urge that the regulation of individual landmarks is different because it applies only to selected properties. But it does not follow that landmark laws, which embody a comprehensive plan to preserve structures of historic or aesthetic interest, are discriminatory, like "reverse spot" zoning. Nor can it be successfully contended that designation of a landmark involves only a matter of taste and therefore will inevitably lead to arbitrary results, for judicial review is available and there is no reason to believe it will be less effective than would be so in the case of zoning or any other context. Pp. 131-133.

(d) That the Landmarks Law affects some landowners more severely than others does not itself result in "taking," for that is often the case with general welfare and zoning legislation. Nor, contrary to appellants' contention, are they solely burdened and unbenefited by the Landmarks Law, which has been extensively applied and was enacted on the basis of the legislative judgment that the preservation of landmarks benefits the citizenry both economically and by improving the overall quality of city life. Pp. 133-135.

(e) The Landmarks Law no more effects an appropriation of the airspace above the Terminal for governmental uses than would a zoning law appropriate property; it simply prohibits appellants or others from occupying certain features of that space while allowing appellants gainfully to use the remainder of the parcel. *United States v. Causby, supra*, distinguished. P. 135.

(f) The Landmarks Law, which does not interfere with the Terminal's present uses or prevent Penn Central from realizing a "reasonable return" on its investment, does not impose the drastic limitation on appellants' ability to use the air rights above the Terminal that appellants claim, for on this record there is no showing that a smaller, harmonizing structure would not be authorized. Moreover, the pre-

existing air rights are made transferable to other parcels in the vicinity of the Terminal, thus mitigating whatever financial burdens appellants have incurred. Pp. 135-137.

42 N.Y.2d 324, 397 N.Y.S.2d 914, 366 N.E.2d 1271, affirmed

Daniel M. Gribbon, Washington, D. C., for appellants.

Leonard J. Koerner, New York City, for appellees.

Patricia M. Wald, Washington, D. C., for the U. S., as amicus curiae, by special leave of Court.

Mr. Justice BRENNAN delivered the opinion of the Court.

1

The question presented is whether a city may, as part of a comprehensive program to preserve historic landmarks and historic districts, place restrictions on the development of individual historic landmarks—in addition to those imposed by applicable zoning ordinances—without effecting a "taking" requiring the payment of "just compensation." Specifically, we must decide whether the application of New York City's Landmarks Preservation Law to the parcel of land occupied by Grand Central Terminal has "taken" its owners' property in violation of the Fifth and Fourteenth Amendments.

2

* A.

3

Over the past 50 years, all 50 States and over 500 municipalities have enacted laws to encourage or require the preservation of buildings and areas with historic or aesthetic importance.[1] These nationwide legislative efforts have been precipitated by two concerns. The first is recognition that, in recent years, large numbers of historic structures, landmarks, and areas have been destroyed[2] without adequate consideration of either the values represented therein or the possibility of preserving the destroyed properties for use in economically productive ways.[3] The second is a widely shared belief that structures with special historic, cultural, or architectural significance enhance the quality of life for all. Not only do these buildings and their workmanship represent the lessons of the past and embody precious features of our heritage, they serve as examples of quality for today. "[H]istoric conservation is but one aspect of the much larger problem, basically an environmental one, of enhancing—or perhaps developing for the first time—the quality of life for people."[4]

4

New York City, responding to similar concerns and acting pursuant to a New York State enabling Act,[5] adopted its Landmarks Preservation Law in 1965. See N.Y.C. Admin. Code, ch. 8-A, § 205-1.0 *et seq*. (1976). The city acted from the conviction that "the standing of [New York City] as a world-wide tourist center and world capital of business, culture and government" would be threatened if legislation were not enacted to protect historic landmarks and neighborhoods from pr cipitate decisions to destroy or fundamentally alter their character. § 205-1.0(a). The city believed that comprehensive measures to safeguard desirable features of the existing urban fabric would benefit its citizens in a variety of ways: *e. g.*, fostering "civic pride in the beauty and noble accomplishments of the past"; protecting and enhancing "the city's attractions to tourists and visitors"; "support[ing] and stimul[ating] business and industry"; "strengthen[ing] the economy of the city"; and promoting "the use of historic districts, landmarks, interior landmarks and scenic landmarks for the education, pleasure and welfare of the people of the city." § 205-1.0(b).

5

The New York City law is typical of many urban landmark laws in that its primary method of achieving its goals is not by acquisitions of historic properties,[6] but rather by involving public entities in land-use decisions affecting these properties and providing services, standards, controls, and incentives that will encourage preservation by private owners and users.[7] While the law does place special restrictions on landmark properties as a necessary feature to the attainment of its larger objectives, the major theme of the law is to ensure the owners of any such properties both a "reasonable return" on their investments and maximum latitude to use their parcels for purposes not inconsistent with the preservation goals.

6

The operation of the law can be briefly summarized. The primary responsibility for administering the law is vested in the Landmarks Preservation Commission (Commission), a broad based, 11-member agency[8] assisted by a technical staff. The Commission first performs the function, critical to any landmark preservation effort, of identifying properties and areas that have "a special character or special historical or aesthetic interest or value as part of the development, heritage or cultural characteristics of the city, state or nation." § 207-1.0(n); see § 207-1.0(h). If the Commission determines, after giving all interested parties an opportunity to be heard, that a building or area satisfies the ordinance's criteria, it will designate a building to be a "landmark," § 207-1.0(n),[9] situated on a particular "landmark site," § 207-1.0(*o*),[10] or will designate an area to be a "historic district," § 207-1.0(h).[11] After the Commission makes a designation, New York City's Board of Estimate, after considering the relationship of the designated property "to the master plan, the zoning resolution, projected public improvements and any plans for the renewal of the area involved," § 207-2.0(g)(1), may modify or disapprove

the designation, and the owner may seek judicial review of the final designation decision. Thus far, 31 historic districts and over 400 individual landmarks have been finally designated,[12] and the process is a continuing one.

7

Final designation as a landmark results in restrictions upon the property owner's options concerning use of the landmark site. First, the law imposes a duty upon the owner to keep the exterior features of the building "in good repair" to assure that the law's objectives not be defeated by the landmark's falling into a state of irremediable disrepair. See § 207-10.0(a). Second, the Commission must approve in advance any proposal to alter the exterior architectural features of the landmark or to construct any exterior improvement on the landmark site, thus ensuring that decisions concerning construction on the landmark site are made with due consideration of both the public interest in the maintenance of the structure and the landowner's interest in use of the property. See §§ 207-4.0 to 207-9.0.

8

In the event an owner wishes to alter a landmark site, three separate procedures are available through which administrative approval may be obtained. First, the owner may apply to the Commission for a "certificate of no effect on protected architectural features": that is, for an order approving the improvement or alteration on the ground that it will not change or affect any architectural feature of the landmark and will be in harmony therewith. See § 207-5.0. Denial of the certificate is subject to judicial review.

9

Second, the owner may apply to the Commission for a certificate of "appropriateness." See § 207-6.0. Such certificates will be granted if the Commission concludes—focusing upon aesthetic, historical, and architectural values —that the proposed construction on the landmark site would not unduly hinder the protection, enhancement, perpetuation, and use of the landmark. Again, denial of the c rtificate is subject to judicial review. Moreover, the owner who is denied either a certificate of no exterior effect or a certificate of appropriateness may submit an alternative or modified plan for approval. The final procedure seeking a certificate of appropriateness on the ground of "insufficient return," see § 207-8.0—provides special mechanisms, which vary depending on whether or not the landmark enjoys a tax exemption,[13] to ensure that designation does not cause economic hardship.

10

Although the designation of a landmark and landmark site restricts the owner's control over the parcel, designation also enhances the economic position of the landmark owner in one significant respect. Under New York City's zoning laws, owners of real property who have not developed their property to the full extent permitted by the applicable zoning laws are allowed to transfer development rights

to contiguous parcels on the same city block. See New York City, Zoning Resolution Art. I, ch. 2, § 12-10 (1978) (definition of "zoning lot"). A 1968 ordinance gave the owners of landmark sites additional opportunities to transfer development rights to other parcels. Subject to a restriction that the floor area of the transferee lot may not be increased by more than 20% above its authorized level, the ordinance permitted transfers from a landmark parcel to property across the street or across a street inte section. In 1969, the law governing the conditions under which transfers from landmark parcels could occur was liberalized, see New York City Zoning Resolutions 74-79 to 74-793, apparently to ensure that the Landmarks Law would not unduly restrict the development options of the owners of Grand Central Terminal. See Marcus, Air Rights Transfers in New York City, 36 Law & Contemp. Prob. 372, 375 (1971). The class of recipient lots was expanded to include lots "across a street and opposite to another lot or lots which except for the intervention of streets or street intersections f[or]m a series extending to the lot occupied by the landmark building[, provided that] all lots [are] in the same ownership." New York City Zoning Resolution 74-79 (emphasis deleted).[14] In addition, the 1969 amendment permits, in highly commercialized areas like midtown Manhattan, the transfer of all unused development rights to a single parcel. *Ibid*.

B

11

This case involves the application of New York City's Landmarks Preservation Law to Grand Central Terminal (Terminal). The Terminal, which is owned by the Penn Central Transportation Co. and its affiliates (Penn Central), is one of New York City's most famous buildings. Opened in 1913, it is regarded not only as providing an ingenious engineering solution to the problems presented by urban railroad stations, but also as a magnificent example of the French beaux-arts style.

12

The Terminal is located in midtown Manhattan. Its south facade faces 42d Street and that street's intersection with Park Avenue. At street level, the Terminal is bounded on the west by Vanderbilt Avenue, on the east by the Commodore Hotel, and on the north by the Pan-American Building. Although a 20-story office tower, to have been located above the Terminal, was part of the original design, the planned tower was never constructed.[15] The Terminal itself is an eight-story structure which Penn Central uses as a railroad station and in which it rents space not needed for railroad purposes to a variety of commercial interests. The Terminal is one of a number of properties owned by appellant Penn Central in this area of midtown Manhattan. The others include the Barclay, Biltmore, Commodore, Roosevelt, and Waldorf-Astoria Hotels, the Pan-American Building and other office

buildings along Park Avenue, and the Yale Club. At least eight of these are eligible to be recipients of development rights afforded the Terminal by virtue of landmark designation.

13

On August 2, 1967, following a public hearing, the Commission designated the Terminal a "landmark" and designated the "city tax block" it occupies a "landmark site."[16] The Board of Estimate confirmed this action on September 21, 1967. Although appellant Penn Central had opposed the designation before the Commission, it did not seek judicial review of the final designation decision.

14

On January 22, 1968, appellant Penn Central, to increase its income, entered into a renewable 50-year lease and sublease agreement with appellant UGP Properties, Inc. (UGP), a wholly owned subsidiary of Union General Properties, Ltd., a United Kingdom corporation. Under the terms of the agreement, UGP was to construct a multistory office building above the Terminal. UGP promised to pay Penn Central $1 million annually during construction and at least $3 million annually thereafter. The rentals would be offset in part by a loss of some $700,000 to $1 million in net rentals presently received from concessionaires displaced by the new building.

15

Appellants UGP and Penn Central then applied to the Commission for permission to construct an office building atop the Terminal. Two separate plans, both designed by architect Marcel Breuer and both apparently satisfying the terms of the applicable zoning ordinance, were submitted to the Commission for approval. The first, Breuer I, provided for the construction of a 55-story office building, to be cantilevered above the existing facade and to rest on the roof of the Terminal. The second, Breuer II Revised,[17] called for tearing down a portion of the Terminal that included the 42d Street facade, stripping off some of the remaining features of the Terminal's facade, and constructing a 53-story office building. The Commission denied a certificate of no exterior effect on September 20, 1968. Appellants then applied for a certificate of "appropriateness" as to both proposals. After four days of hearings at which over 80 witnesses testified, the Commission denied this application as to both proposals.

16

The Commission's reasons for rejecting certificates respecting Breuer II Revised are summarized in the following statement: "To protect a Landmark, one does not tear it down. To perpetuate its architectural features, one does not strip them off." Record 2255. Breuer I, which would have preserved the existing vertical facades of the present structure, received more sympathetic consideration. The Commission first focused on the effect that the proposed tower would have on one desirable feature created by the present structure and its surroundings: the dramatic view of

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the Terminal from Park Avenue South. Although appellants had contended that the Pan-American Building had already destroyed the silhouette of the south facade and that one additional tower could do no further damage and might even provide a better background for the facade, the Commission disagreed, stating that it found the majestic approach from the south to be still unique in the city and that a 55-story tower atop the Terminal would be far more detrimental to its south facade than the Pan-American Building 375 feet away. Moreover, the Commission found that from closer vantage points the Pan Am Building and the other towers were largely cut off from view, which would not be the case of the mass on top of the Terminal planned under Breuer I. In conclusion, the Commission stated:

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"[We have] no fixed rule against making additions to designated buildings—it all depends on how they are done . . . . But to balance a 55-story office tower above a flamboyant Beaux-Arts facade seems nothing more than an aesthetic joke. Quite simply, the tower would overwhelm the Terminal by its sheer mass. The 'addition' would be four times as high as the existing structure and would reduce the Landmark itself to the status of a curi sity.

18

"Landmarks cannot be divorced from their settings particularly when the setting is a dramatic and integral part of the original concept. The Terminal, in its setting, is a great example of urban design. Such examples are not so plentiful in New York City that we can afford to lose any of the few we have. And we must preserve them in a meaningful way—with alterations and additions of such character, scale, materials and mass as will protect, enhance and perpetuate the original design rather than overwhelm it." *Id.*, at 2251.[18]

19

Appellants did not seek judicial review of the denial of either certificate. Because the Terminal site enjoyed a tax exemption,[19] remained suitable for its present and future uses, and was not the subject of a contract of sale, there were no further administrative remedies available to appellants as to the Breuer I and Breuer II Revised plans. See n. 13, *supra*. Further, appellants did not avail themselves of the opportunity to develop and submit other plans for the Commission's consideration and approval. Instead, appellants filed suit in New York Supreme Court, Trial Term, claiming, *inter alia*, that the application of the Landmarks Preservation Law had "taken" their property without just compensation in violation of the Fifth and Fourteenth Amendments and arbitrarily deprived them of their property without due process of law in violation of the Fourteenth Amendment. Appellants sought a declaratory judgment, injunctive relief barring the city from using the Landmarks Law to impede the construction of any structure that might otherwise lawfully be constructed on the Terminal site, and damages for the "temporary taking" that

occurred between August 2, 1967, the designation date, and the date when the restrictions arising from the Landmarks Law would be lifted. The trial court granted the injunctive and declaratory relief, but severed the question of damages for a "temporary taking."[20]

20

Appellees appealed, and the New York Supreme Court, Appellate Division, reversed. 50 A.D.2d 265, 377 N.Y.S.2d 20 (1975). The Appellate Division held that the restrictions on the development of the Terminal site were necessary to promote the legitimate public purpose of protecting landmarks and therefore that appellants could sustain their constitutional claims only by proof that the regulation deprived them of all reasonable beneficial use of the property. The Appellate Division held that the evidence appellants introduced at trial—"Statements of Revenues and Co ts," purporting to show a net operating loss for the years 1969 and 1971, which were prepared for the instant litigation—had not satisfied their burden.[21] First, the court rejected the claim that these statements showed that the Terminal was operating at a loss, for in the court's view, appellants had improperly attributed some railroad operating expenses and taxes to their real estate operations and compounded that error by failing to impute any rental value to the vast space in the Terminal devoted to railroad purposes. Further, the Appellate Division concluded that appellants had failed to establish either that they were unable to increase the Terminal's commercial income by transforming vacant or underutilized space to revenue-producing use, or that the unused development rights over the Terminal could not have been profitably transferred to one or more nearby sites.[22] The Appellate Division concluded that all appellants had succeeded in showing was that they had been deprived of the property's most profitable use, and that this showing did not establish that appellants had been unconstitutionally deprived of their property.

21

The New York Court of Appeals affirmed. 42 N.Y.2d 324, 397 N.Y.S.2d 914, 366 N.E.2d 1271 (1977). That court summarily rejected any claim that the Landmarks Law had "taken" property without "just compensation," *id.*, at 329, 397 N.Y.S.2d, at 917, 366 N.E.2d, at 1274, indicating that there could be no "taking" since the law had not transferred control of the property to the city, but only restricted appellants' exploitation of it. In that circumstance, the Court of Appeals held that appellants' attack on the law could prevail only if the law deprived appellants of their property in violation of the Due Process Clause of the Fourteenth Amendment. Whether or not there was a denial of substantive due process turned on whether the restrictions deprived Penn Central of a "reasonable return" on the "privately created and privately managed ingredient" of the Terminal. *Id.*, at 328, 397 N.Y.S.2d, at 916, 366 N.E.2d, at 1273.[23] The Court of Appeals concluded that the Landmarks Law had not effected a denial of due process because: (1) the landmark

regulation permitted the same use as had been made of the Terminal for more than half a century; (2) the appellants had failed to show that they could not earn a reasonable return on their investment in the Terminal itself; (3) even if the Terminal proper could never operate at a reasonable profit some of the income from Penn Central's extensive real estate holdings in the area, which include hotels and office buildings, must realistically be imputed to the Terminal; and (4) the development rights above the Terminal, which had been made transferable to numerous sites in the vicinity of the Terminal, one or two of which were suitable for the construction of office buildings, were valuable to appellants and provided "significant, perhaps 'fair,' compensation for the loss of rights above the terminal itself." *Id.*, at 333-336, 397 N.Y.S.2d, at 922, 366 N.E.2d, at 1276-1278.

22

Observing that its affirmance was "[o]n the present record," and that its analysis had not been fully developed by counsel at any level of the New York judicial system, the Court of Appeals directed that counsel "should be entitled to present . . . any additional submissions which, in the light of [the court's] opinion, may usefully develop further the factors discussed." *Id.*, at 337, 397 N.Y.S.2d, at 922, 366 N.E.2d, at 1279. Appellants chose not to avail themselves of this opportunity and filed a notice of appeal in this Court. We noted probable jurisdiction. 434 U.S. 983 (1977). We affirm.

II

23

The issues presented by appellants are (1) whether the restrictions imposed by New York City's law upon appellants' exploitation of the Terminal site effect a "taking" of appellants' property for a public use within the meaning of the Fifth Amendment, which of course is made applicable to the States through the Fourteenth Amendment, see *Chicago, B. & Q. R. Co. v. Chicago*, 166 U.S. 226, 239, 17 S.Ct. 581, 585, 41 L.Ed. 979 (1897), and, (2), if so, whether the transferable development rights afforded appellants constitute "just compensation" within the meaning of the Fifth Amendment.[24] We need only address the question whether a "taking" has occurred.[25]

24

* Before considering appellants' specific contentions, it will be useful to review the factors that have shaped the jurisprudence of the Fifth Amendment injunction "nor shall private property be taken for public use, without just compensation." The question of what constitutes a "taking" for purposes of the Fifth Amendment has proved to be a problem of considerable difficulty. While this Court has recognized that the "Fifth Amendment's guarantee . . . [is] designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole," *Armstrong v. United States*, 364 U.S.

40, 49, 80 S.Ct. 1563, 1569, 4 L.Ed.2d 1554 (1960), this Court, quite simply, has been unable to develop any "set formula" for determining when "justice and fairness" require that economic injuries caused by public action be compensated by the government, rather than remain disproportionately concentrated on a few persons. See *Goldblatt v. Hempstead*, 369 U.S. 590, 594, 82 S.Ct. 987, 990, 8 L.Ed.2d 130 (1962). Indeed, we have frequently observed that whether a particular restriction will be rendered invalid by the government's failure to pay for any losses proximately caused by it depends largely "upon the particular circumstances [in that] case." *United States v. Central Eureka Mining Co.*, 357 U.S. 155, 168, 78 S.Ct. 1097, 1104, 2 L.Ed.2d 1228 (1958); see *United States v. Caltex, Inc.*, 344 U.S. 149, 156, 73 S.Ct. 200, 203, 97 L.Ed. 157 (1952).

25

In engaging in these essentially ad hoc, factual inquiries, the Court's decisions have identified several factors that have particular significance. The economic impact of the regulation on the claimant and, particularly, the extent to which the regulation has interfered with distinct investment-backed expectations are, of course, relevant considerations. See *Goldblatt v. Hempstead, supra,* 369 U.S., at 594, 82 S.Ct., at 990. So, too, is the character of the governmental action. A "taking" may more readily be found when the interference with property can be characterized as a physical invasion by government, see, *e. g., United States v. Causby,* 328 U.S. 256, 66 S.Ct. 1062, 90 L.Ed. 1206 (1946), than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good.

26

"Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law," *Pennsylvania Coal Co. v. Mahon,* 260 U.S. 393, 413, 43 S.Ct. 158, 159, 67 L.Ed. 322 (1922), and this Court has accordingly recognized, in a wide variety of contexts, that government may execute laws or programs that adversely affect recognized economic values. Exercises of the taxing power are one obvious example. A second are the decisions in which this Court has dismissed "taking" challenges on the ground that, while the challenged government action caused economic harm, it did not interfere with interests that were sufficiently bound up with the reasonable expectations of the claimant to constitute "property" for Fifth Amendment purposes. See, *e. g., United States v. Willow River Power Co.,* 324 U.S. 499, 65 S.Ct. 761, 89 L.Ed. 1101 (1945) (interest in high-water level of river for runoff for tailwaters to maintain power head is not property); *United States v. Chandler-Dunbar Water Power Co.,* 229 U.S. 53, 33 S.Ct. 667, 57 L.Ed. 1063 (1913) (no property interest can exist in navigable waters); see also *Demorest v.*

City Bank Co., 321 U.S. 36, 64 S.Ct. 384, 88 L.Ed. 526 (1944); *Muhlker v. Harlem R. Co.,* 197 U.S. 544, 25 S.Ct. 522, 49 L.Ed. 872 (1905); Sax, Takings and the Police Power, 74 Yale L.J. 36, 61-62 (1964).

27

More importantly for the present case, in instances in which a state tribunal reasonably concluded that "the health, safety, morals, or general welfare" would be promoted by prohibiting particular contemplated uses of land, this Court has upheld land-use regulations that destroyed or adversely affected recognized real property interests. See *Nectow v. Cambridge,* 277 U.S. 183, 188, 48 S.Ct. 447, 448, 72 L.Ed. 842 (1928). Zoning laws are, of course, the classic example, see *Euclid v. Ambler Realty Co.,* 272 U.S. 365, 47 S.Ct. 114, 71 L.Ed. 303 (1926) (prohibition of industrial use); *Gorieb v. Fox,* 274 U.S. 603, 608, 47 S.Ct. 675, 677, 71 L.Ed. 1228 (1927) (requirement that portions of parcels be left unbuilt); *Welch v. Swasey,* 214 U.S. 91, 29 S.Ct. 567, 53 L.Ed. 923 (1909) (height restriction), which have been viewed as permissible governmental action even when prohibiting the most beneficial use of the property. See *Goldblatt v. Hempstead, supra,* 369 U.S., at 592-593, 82 S.Ct., at 988-989, and cases cited; see also *Eastlake v. Forest City Enterprises, Inc.,* 426 U.S. 668, 674, n. 8, 96 S.Ct. 2358, 2362 n. 8, 49 L.Ed.2d 132 (1976).

28

Zoning laws generally do not affect existing uses of real property, but "taking" challenges have also been held to be without merit in a wide variety of situations when the challenged governmental actions prohibited a beneficial use to which individual parcels had previously been devoted and thus caused substantial individualized harm. *Miller v. Schoene,* 276 U.S. 272, 48 S.Ct. 246, 72 L.Ed. 568 (1928), is illustrative. In that case, a state entomologist, acting pursuant to a state statute, ordered the claimants to cut down a large number of ornamental red cedar trees because they produced cedar rust fatal to apple trees cultivated nearby. Although the statute provided for recovery of any expense incurred in removing the cedars, and permitted claimants to use the felled trees, it did not provide compensation for the value of the standing trees or for the resulting decrease in market value of the properties as a whole. A unanimous Court held that this latter omission did not render the statute invalid. The Court held that the State might properly make "a choice between the preservation of one class of property and that of the other" and since the apple industry was important in the State involved, concluded that the State had not exceeded "its constitutional powers by deciding upon the destruction of one class of property [without compensation] in order to save another which, in the judgment of the legislature, is of greater value to the public." *Id.,* at 279, 48 S.Ct., at 247.

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Again, *Hadacheck v. Sebastian,* 239 U.S. 394, 36 S.Ct. 143, 60 L.Ed. 348 (1915), upheld a law prohibiting the claimant from continuing his otherwise lawful business of operating a brickyard in a particular physical community on the ground that the legislature had reasonably concluded that the presence of the brickyard was inconsistent with neighboring uses. See also *United States v. Central Eureka Mining Co., supra* (Government order closing gold mines so that skilled miners would be available for other mining work held not a taking); *Atchison, T. & S. F. R. Co. v. Public Utilities Comm'n,* 346 U.S. 346, 74 S.Ct. 92, 98 L.Ed. 51 (1953) (railroad may be required to share cost of constructing railroad grade improvement); *Walls v. Midland Carbon Co.,* 254 U.S. 300, 41 S.Ct. 118, 65 L.Ed. 276 (1920) (law prohibiting manufacture of carbon black upheld); *Reinman v. Little Rock,* 237 U.S. 171, 35 S.Ct. 511, 59 L.Ed. 900 (1915) (law prohibiting livery stable upheld); *Mugler v. Kansas,* 123 U.S. 623, 8 S.Ct. 273, 31 L.Ed. 205 (1887) (law prohibiting liquor business upheld).

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Goldblatt v. Hempstead, supra, is a recent example. There, a 1958 city safety ordinance banned any excavations below the water table and effectively prohibited the claimant from continuing a sand and gravel mining business that had been operated on the particular parcel since 1927. The ourt upheld the ordinance against a "taking" challenge, although the ordinance prohibited the present and presumably most beneficial use of the property and had, like the regulations in *Miller* and *Hadacheck,* severely affected a particular owner. The Court assumed that the ordinance did not prevent the owner's reasonable use of the property since the owner made no showing of an adverse effect on the value of the land. Because the restriction served a substantial public purpose, the Court thus held no taking had occurred. It is, of course, implicit in *Goldblatt* that a use restriction on real property may constitute a "taking" if not reasonably necessary to the effectuation of a substantial public purpose, see *Nectow v. Cambridge, supra;* cf. *Moore v. East Cleveland,* 431 U.S. 494, 513-514, 97 S.Ct. 1932, 1943, 52 L.Ed.2d 531 (1977) (STEVENS, J., concurring), or perhaps if it has an unduly harsh impact upon the owner's use of the property.

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Pennsylvania Coal Co. v. Mahon, 260 U.S. 393, 43 S.Ct. 158, 67 L.Ed. 322 (1922), is the leading case for the proposition that a state statute that substantially furthers important public policies may so frustrate distinct investment-backed expectations as to amount to a "taking." There the claimant had sold the surface rights to particular parcels of property, but expressly reserved the right to remove the coal thereunder. A Pennsylvania statute, enacted after the transactions, forbade any mining of coal that caused the subsidence of any house, unless the house was the property of the owner of the underlying coal and was more than 150 feet from the improved property of another. Because the statute made it

commercially impracticable to mine the coal, *id.*, at 414, 43 S.Ct., at 159, and thus had nearly the same effect as the complete destruction of rights claimant had reserved from the owners of the surface land, see *id.*, at 414-415, 43 S.Ct., at 159-160, the Court held that the statute was invalid as effecting a "taking" without just compensation. See also *Armstrong v. United States,* 364 U.S. 40, 80 S.Ct. 1563, 4 L.Ed.2d 1554 (1960) (Government's complete destruction of a materialman's lien in certain property held a "taking"); *Hudson Water Co. v. McCarter,* 209 U.S. 349, 355, 28 S.Ct. 529, 531, 52 L.Ed. 828 (1908) (if height restriction makes property wholly useless "the rights of property . . . prevail over the other public interest" and compensation is required). See generally Michelman, Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law, 80 Harv.L.Rev. 1165, 1229-1234 (1967).

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Finally, government actions that may be characterized as acquisitions of resources to permit or facilitate uniquely public functions have often been held to constitute "takings." *United States v. Causby,* 328 U.S. 256, 66 S.Ct. 1062, 90 L.Ed. 1206 (1946), is illustrative. In holding that direct overflights above the claimant's land, that destroyed the present use of the land as a chicken farm, constituted a "taking," *Causby* emphasized that Government had not "merely destroyed property [but was] using a part of it for the flight of its planes." *Id.,* 328 U.S., at 262-263, n. 7, 66 S.Ct., at 1066. See also *Griggs v. Allegheny County,* 369 U.S. 84, 82 S.Ct. 531, 7 L.Ed.2d 585 (1962) (overflights held a taking); *Portsmouth Co. v. United States,* 260 U.S. 327, 43 S.Ct. 135, 67 L.Ed. 287 (1922) (United States military installations' repeated firing of guns over claimant's land is a taking); *United States v. Cress,* 243 U.S. 316, 37 S.Ct. 380, 61 L.Ed. 746 (1917) (repeated floodings of land caused by water project is taking); but see *YMCA v. United States,* 395 U.S. 85, 89 S.Ct. 1511, 23 L.Ed.2d 117 (1969) (damage caused to building when federal officers who were seeking to protect building were attacked by rioters held not a taking). See generally Michelman, *supra*, at 1226-1229; Sax, Takings and the Police Power, 74 Yale L. . 36 (1964).

B

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In contending that the New York City law has "taken" their property in violation of the Fifth and Fourteenth Amendments, appellants make a series of arguments, which, while tailored to the facts of this case, essentially urge that any substantial restriction imposed pursuant to a landmark law must be accompanied by just compensation if it is to be constitutional. Before considering these, we emphasize what is not in dispute. Because this Court has recognized, in a number of settings, that States and cities may enact land-use restrictions or controls to enhance the quality of life by preserving the character and desirable aesthetic features of a city,

see *New Orleans v. Dukes,* 427 U.S. 297, 96 S.Ct. 2513, 49 L.Ed.2d 511 (1976); *Young v. American Mini Theatres, Inc.,* 427 U.S. 50, 96 S.Ct. 2440, 49 L.Ed.2d 310 (1976); *Village of Belle Terre v. Boraas,* 416 U.S. 1, 9-10, 94 S.Ct. 1536, 39 L.Ed.2d 797 (1974); *Berman v. Parker,* 348 U.S. 26, 33, 75 S.Ct. 98, 102, 99 L.Ed. 27 (1954); *Welch v. Swasey,* 214 U.S., at 108, 29 S.Ct., at 571, appellants do not contest that New York City's objective of preserving structures and areas with special historic, architectural, or cultural significance is an entirely permissible governmental goal. They also do not dispute that the restrictions imposed on its parcel are appropriate means of securing the purposes of the New York City law. Finally, appellants do not challenge any of the specific factual premises of the decision below. They accept for present purposes both that the parcel of land occupied by Grand Central Terminal must, in its present state, be regarded as capable of earning a reasonable return,[26] and that the transferable development rights afforded appellants by virtue of the Terminal's designation as a landmark are valuable, even if not as valuable as the rights to construct above the Terminal. In appellants' view none of these factors derogate from their claim that New York City's law has effected a "taking." They first observe that the airspace above the Terminal is a valuable property interest, citing *United States v. Causby, supra.* They urge that the Landmarks Law has deprived them of any gainful use of their "air rights" above the Terminal and that, irrespective of the value of the remainder of their parcel, the city has "taken" their right to this superadjacent airspace, thus entitling them to "just compensation" measured by the fair market value of these air rights.

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Apart from our own disagreement with appellants' characterization of the effect of the New York City law, see *infra*, at 134-135, the submission that appellants may establish a "taking" simply by showing that they have been denied the ability to exploit a property interest that they heretofore had believed was available for development is quite simply untenable. Were this the rule, this Court would have erred not only in upholding laws restricting the development of air rights, see *Welch v. Swasey, supra,* but also in approving those prohibiting both the subjacent, see *Goldblatt v. Hempstead,* 369 U.S. 590, 82 S.Ct. 987, 8 L.Ed.2d 130 (1962), and the lateral, see *Gorieb v. Fox,* 274 U.S. 603, 47 S.Ct. 675, 71 L.Ed. 1228 (1927), development of particular parcels.[27] "Taking" jurisprudence does not divide a single parcel into discrete segments and ttempt to determine whether rights in a particular segment have been entirely abrogated. In deciding whether a particular governmental action has effected a taking, this Court focuses rather both on the character of the action and on the nature and extent of the interference with rights in the parcel as a whole—here, the city tax block designated as the "landmark site."

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Secondly, appellants, focusing on the character and impact of the New York City law, argue that it effects a "taking" because its operation has significantly diminished the value of the Terminal site. Appellants concede that the decisions sustaining other land-use regulations, which, like the New York City law, are reasonably related to the promotion of the general welfare, uniformly reject the proposition that diminution in property value, standing alone, can establish a "taking," see *Euclid v. Ambler Realty Co.*, 272 U.S. 365, 47 S.Ct. 114, 71 L.Ed. 303 (1926) (75% diminution in value caused by zoning law); *Hadacheck v. Sebastian*, 239 U.S. 394, 36 S.Ct. 143, 60 L.Ed. 348 (1915) (871/2% diminution in value); cf. *Eastlake v. Forest City Enterprises, Inc.*, 426 U.S., at 674 n. 8, 96 S.Ct., at 2362 n. 8, and that the "taking" issue in these contexts is resolved by focusing on the uses the regulations permit. See also *Goldblatt v. Hempstead, supra.* Appellants, moreover, also do not dispute that a showing of diminution in property value would not establish a taking if the restriction had been imposed as a result of historic-district legislation, see generally *Maher v. New Orleans*, 516 F.2d 1051 (CA5 1975), but appellants argue that New York City's regulation of individual landmarks is fundamentally different from zoning or from historic-district legislation because the controls imposed by New York City's law apply only to individuals who own selected properties.

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Stated baldly, appellants' position appears to be that the only means of ensuring that selected owners are not singled out to endure financial hardship for no reason is to hold that any restriction imposed on individual landmarks pursuant to the New York City scheme is a "taking" requiring the payment of "just compensation." Agreement with this argument would, of course, invalidate not just New York City's law, but all comparable landmark legislation in the Nation. We find no merit in it.

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It is true, as appellants emphasize, that both historic-district legislation and zoning laws regulate all properties within given physical communities whereas landmark laws apply only to selected parcels. But, contrary to appellants' suggestions, landmark laws are not like discriminatory, or "reverse spot," zoning: that is, a land-use decision which arbitrarily singles out a particular parcel for different, less favorable treatment than the neighboring ones. See 2 A. Rathkopf, The Law of Zoning and Planning 26-4, and n. 6 (4th ed. 1978). In contrast to discriminatory zoning, which is the antithesis of land-use control as part of some comprehensive plan, the New York City law embodies a comprehensive plan to preserve structures of historic or aesthetic interest wherever they might be found in the city,[28] and as noted, over 400 landmarks and 31 historic districts have been designated pursuant to this plan.

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Equally without merit is the related argument that the decision to designate a structure as a landmark "is inevitably arbitrary or at least subjective, because it is basically a matter of taste," Reply Brief for Appellants 22, thus unavoidably singling out individual landowners for disparate and unfair treatment. The argument has a particularly hollow ring in this case. For appellants not only did not seek judicial review of either the designation or of the denials of the certificates of appropriateness and of no exterior effect, but do not even now suggest that the Commission's decisions concerning the Terminal were in any sense arbitrary or unprincipled. But, in any event, a landmark owner has a right to judicial review of any Commission decision, and, quite simply, there is no basis whatsoever for a conclusion that courts will have any greater difficulty identifying arbitrary or discriminatory action in the context of landmark regulation than in the context of classic zoning or indeed in any other context.[29]

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Next, appellants observe that New York City's law differs from zoning laws and historic-district ordinances in that the Landmarks Law does not impose identical or similar restrictions on all structures located in particular physical communities. It follows, they argue, that New York City's law is inherently incapable of producing the fair and equitable distribution of benefits and burdens of governmental action which is characteristic of zoning laws and historic-district legislation and which they maintain is a constitutional requirement if "just compensation" is not to be afforded. It is, of course, true that the Landmarks Law has a more severe impact on some landowners than on others, but that in itself does not mean that the law effects a "taking." Legislation designed to promote the general welfare commonly burdens some more than others. The owners of the brickyard in *Hadacheck*, of the cedar trees in *Miller v. Schoene*, and of the gravel and sand mine in *Goldblatt v. Hempstead*, were uniquely burdened by the legislation sustained in those cases.[30] Similarly, zoning laws often affect some property owners more severely than others but have not been held to be invalid on that account. For example, the property owner in *Euclid* who wished to use its property for industrial purposes was affected far more severely by the ordinance than its neighbors who wished to use their land for residences.

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In any event, appellants' repeated suggestions that they are solely burdened and unbenefited is factually inaccurate. This contention overlooks the fact that the New York City law applies to vast numbers of structures in the city in addition to the Terminal—all the structures contained in the 31 historic districts and over 400 individual landmarks, many of which are close to the Terminal.[31] Unless we are to reject the judgment of the New York City Council that the preservation of landmarks benefits all New York citizens and all structures, both economically and by improving the quality of life in the city as a whole—which we are unwilling to do

—we cannot conclude that the owners of the Terminal have in no sense been benefited by the Landmarks Law. Doubtless appellants believe they are more burdened than benefited by the law, but that must have been true, too, of the property owners in *Miller, Hadacheck, Euclid*, and *Goldblatt*.[32]

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Appellants' final broad-based attack would have us treat the law as an instance, like that in *United States v. Causby*, in which government, acting in an enterprise capacity, has appropriated part of their property for some strictly governmental purpose. Apart from the fact that *Causby* was a case of invasion of airspace that destroyed the use of the farm beneath and this New York City law has in nowise impaired the present use of the Terminal, the Landmarks Law neither exploits appellants' parcel for city purposes nor facilitates nor arises from any entrepreneurial operations of the city. The situation is not remotely like that in *Causby* where the airspace above the property was in the flight pattern for military aircraft. The Landmarks Law's effect is simply to prohibit appellants or anyone else from occupying portions of the airspace above the Terminal, while permitting appellants to use the remainder of the parcel in a gainful fashion. This is no more an appropriation of property by government for its own uses than is a zoning law prohibiting, for "aesthetic" reasons, two or more adult theaters within a specified area, see *Young v. American Mini Theatres, Inc.*, 427 U.S. 50, 96 S.Ct. 2440, 49 L.Ed.2d 310 (1976), or a safety regulat on prohibiting excavations below a certain level. See *Goldblatt v. Hempstead*.

C

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Rejection of appellants' broad arguments is not, however, the end of our inquiry, for all we thus far have established is that the New York City law is not rendered invalid by its failure to provide "just compensation" whenever a landmark owner is restricted in the exploitation of property interests, such as air rights, to a greater extent than provided for under applicable zoning laws. We now must consider whether the interference with appellants' property is of such a magnitude that "there must be an exercise of eminent domain and compensation to sustain [it]." *Pennsylvania Coal Co. v. Mahon*, 260 U.S., at 413, 43 S.Ct., at 159. That inquiry may be narrowed to the question of the severity of the impact of the law on appellants' parcel, and its resolution in turn requires a careful assessment of the impact of the regulation on the Terminal site.

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Unlike the governmental acts in *Goldblatt, Miller, Causby, Griggs*, and *Hadacheck*, the New York City law does not interfere in any way with the present uses of the Terminal. Its designation as a landmark not only permits but contemplates that appellants may continue to use the property precisely as it has been used for the

past 65 years: as a railroad terminal containing office space and concessions. So the law does not interfere with what must be regarded as Penn Central's primary expectation concerning the use of the parcel. More importantly, on this record, we must regard the New York City law as permitting Penn Central not only to profit from the Terminal but also to obtain a "reasonable return" on its investment.

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Appellants, moreover, exaggerate the effect of the law on their ability to make use of the air rights above the Terminal in two respects.[33] First, it simply cannot be maintained, on this record, that appellants have been prohibited from occupying *any* portion of the airspace above the Terminal. While the Commission's actions in denying applications to construct an office building in excess of 50 stories above the Terminal may indicate that it will refuse to issue a certificate of appropriateness for any comparably sized structure, nothing the Commission has said or done suggests an intention to prohibit *any* construction above the Terminal. The Commission's report emphasized that whether any construction would be allowed depended upon whether the proposed addition "would harmonize in scale, material and character with [the Terminal]." Record 2251. Since appellants have not sought approval for the construction of a smaller structure, we do not know that appellants will be denied any use of any portion of the airspace above the Terminal.[34]

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Second, to the extent appellants have been denied the right to build above the Terminal, it is not literally accurate to say that they have been denied *all* use of even those pre-existing air rights. Their ability to use these rights has not been abrogated; they are made transferable to at least eight parcels in the vicinity of the Terminal, one or two of which have been found suitable for the construction of new office buildings. Although appellants and others have argued that New York City's transferable development-rights program is far from ideal,[35] the New York courts here supportably found that, at least in the case of the Terminal, the rights afforded are valuable. While these rights may well not have constituted "just compensation" if a "taking" had occurred, the rights nevertheless undo btedly mitigate whatever financial burdens the law has imposed on appellants and, for that reason, are to be taken into account in considering the impact of regulation. Cf. *Goldblatt v. Hempstead*, 369 U.S., at 594 n. 3, 82 S.Ct., at 990 n. 3.

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On this record, we conclude that the application of New York City's Landmarks Law has not effected a "taking" of appellants' property. The restrictions imposed are substantially related to the promotion of the general welfare and not only permit

reasonable beneficial use of the landmark site but also afford appellants opportunities further to enhance not only the Terminal site proper but also other properties.[36]

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Affirmed.

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Mr. Justice REHNQUIST, with whom THE CHIEF JUSTICE and Mr. Justice STEVENS join, dissenting.

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Of the over one million buildings and structures in the city of New York, appellees have singled out 400 for designation as official landmarks.[1] The owner of a building might initially be pleased that his property has been chosen by a distinguished committee of architects, historians, and city planners for such a singular distinction. But he may well discover, as appellant Penn Central Transportation Co. did here, that the landmark designation imposes upon him a substantial cost, with little or no offsetting benefit except for the honor of the designation. The question in this case is whether the cost associated with the city of New York's desire to preserve a limited number of "landmarks" within its borders must be borne by all of its taxpayers or whether it can instead be imposed entirely on the owners of the individual properties.

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Only in the most superficial sense of the word can this case be said to involve "zoning."[2] Typical zoning restrictions may, it is true, so limit the prospective uses of a piece of property as to diminish the value of that property in the abstract because it may not be used for the forbidden purposes. But any such abstract decrease in value will more than likely be at least partially offset by an increase in value which flows from similar restrictions as to use on neighboring properties. All property owners in a designated area are placed under the same restrictions, not only for the benefit of the municipality as a whole but also for the common benefit of one another. In the words of Mr. Justice Holmes, speaking for the Court in *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 415, 43 S.Ct. 158, 160, 67 L.Ed. 322 (1922), there is "an average recipro ity of advantage."

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Where a relatively few individual buildings, all separated from one another, are singled out and treated differently from surrounding buildings, no such reciprocity exists. The cost to the property owner which results from the imposition of restrictions applicable only to his property and not that of his neighbors may be substantial—in this case, several million dollars with no comparable reciprocal benefits. And the cost associated with landmark legislation is likely to be of a completely different order of magnitude than that which results from the imposition

of normal zoning restrictions. Unlike the regime affected by the latter, the landowner is not simply prohibited from using his property for certain purposes, while allowed to use it for all other purposes. Under the historic-landmark preservation scheme adopted by New York, the property owner is under an affirmative duty to *preserve* his property *as a landmark* at his own expense. To suggest that because traditional zoning results in some limitation of use of the property zoned, the New York City landmark preservation scheme should likewise be upheld, represents the ultimate in treating as alike things which are different. The rubric of "zoning" has not yet sufficed to avoid the well-established proposition that the Fifth Amendment bars the "Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole." *Armstrong v. United States*, 364 U.S. 40, 49, 80 S.Ct. 1563, 1569, 4 L.Ed.2d 1554 (1960). See discussion *infra*, at pp. 147-150.

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In August 1967, Grand Central Terminal was designated a landmark over the objections of its owner Penn Central. Immediately upon this designation, Penn Central, like all owners of a landmark site, was placed under an affirmative duty, backed by criminal fines and penalties, to keep "exterior portions" of the landmark "in good repair." Even more burdensome, however, were the strict limitations that were thereupon imposed on Penn Central's use of its property. At the time Grand Central was designated a landmark, Penn Central was in a precarious financial condition. In an effort to increase its sources of revenue, Penn Central had entered into a lease agreement with appellant UGP Properties, Inc., under which UGP would construct and operate a multistory office building cantilevered above the Terminal building. During the period of construction, UGP would pay Penn Central $1 million per year. Upon completion, UGP would rent the building for 50 years, with an option for another 25 years, at a guaranteed *minimum* rental of $3 million per year. The record is clear that the p oposed office building was in full compliance with all New York zoning laws and height limitations. Under the Landmarks Preservation Law, however, appellants could not construct the proposed office building unless appellee Landmarks Preservation Commission issued either a "Certificate of No Exterior Effect" or a "Certificate of Appropriateness." Although appellants' architectural plan would have preserved the facade of the Terminal, the Landmarks Preservation Commission has refused to approve the construction.

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* The Fifth Amendment provides in part: "nor shall private property be taken for public use, without just compensation."[3] In a very literal sense, the actions of appellees violated this constitutional prohibition. Before the city of New York declared Grand Central Terminal to be a landmark, Penn Central could have used its "air rights" over the Terminal to build a multistory office building, at an apparent value of several million dollars per year. Today, the Terminal cannot be modified in

any form, including the erection of additional stories, without the permission of the Landmark Preservation Commission, a permission which appellants, despite good-faith attempts, have so far been unable to obtain. Because the Taking Clause of the Fifth Amendment has not always been read literally, however, the constitutionality of appellees' actions requires a closer scrutiny of this Court's interpretation of the three key words in the Taking Clause—"property," "taken," and "just compensation."[4]

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Appellees do not dispute that valuable property rights have been destroyed. And the Court has frequently emphasized that the term "property" as used in the Taking Clause includes the entire "group of rights inhering in the citizen's [ownership]." *United States v. General Motors Corp.*, 323 U.S. 373, 65 S.Ct. 357, 89 L.Ed. 311 (1945). The term is not used in the

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"vulgar and untechnical sense of the physical thing with respect to which the citizen exercises rights recognized by law. [Instead, it] . . . denote[s] the *group of rights* inhering in the citizen's relation to the physical THING, *AS* THE RIGHT TO POSSESS, USE AND DISPOSE OF IT. . . . the constitutional provision is addressed to *every sort of interest* the citizen may possess." *Id.*, at 377-378, 65 S.Ct., at 359 (emphasis added).

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While neighboring landowners are free to use their land and "air rights" in any way consistent with the broad boundaries of New York zoning, Penn Central, absent the permission of appellees, must forever maintain its property in its present state.[5] The property has been thus subjected to a nonconsensual servitude not borne by any neighboring or similar properties.[6]

B

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Appellees have thus destroyed—in a literal sense, "taken" substantial property rights of Penn Central. While the term "taken" might have been narrowly interpreted to include only physical seizures of property rights, "the construction of the phrase has not been so narrow. The courts have held that the deprivation of the former owner rather than the accretion of a right or interest to the sovereign constitutes the taking." *Id.*, at 378, 65 S.Ct., at 359. See also *United States v. Lynah*, 188 U.S. 445, 469, 23 S.Ct. 349, 47 L.Ed. 539 (1903);[7] *Dugan v. Rank*, 372 U.S. 609, 625, 83 S.Ct. 999, 1009, 10 L.Ed.2d 15 (1963). Because "not every destruction or injury to property by governmental action has been held to be a 'taking' in the constitutional sense," *Armstrong v. United States*, 364 U.S., at 48,

80 S.Ct., at 1568, however, this does not end our inquiry. But an examination of the two exceptions where the destruction of property does *not* constitute a taking demonstrates that a compensable taking has occurred here.

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* As early as 1887, the Court recognized that the government can prevent a property owner from using his property to injure others without having to compensate the owner for the value of the forbidden use.

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"A prohibition simply upon the use of property for purposes that are declared, by valid legislation, to be *injurious to the health, morals, or safety of the community*, cannot, in any just sense, be deemed a taking or an appropriation of property for the public benefit. Such legislation does not disturb the owner in the control or use of his property for lawful purposes, nor restrict his right to dispose of it, but is only a declaration by the State that its use by any one, for certain forbidden purposes, is prejudicial to the public interests. . . . The power which the States have of prohibiting such use by individuals of their property as will be prejudicial to the health, the morals, or the safety of the public, is not—and, consistently with the existence and safety of organized society, cannot be burdened with the condition that the State must compensate such individual owners for pecuniary losses they may sustain, *by reason of their not being permitted, by a noxious use of* their property, to inflict injury upon the community." *Mugler v. Kansas*, 123 U.S. 623, 668-669, 8 S.Ct. 273, 301, 31 L.Ed. 205.

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Thus, there is no "taking" where a city prohibits the operation of a brickyard within a residential area, see *Hadacheck v. Sebastian*, 239 U.S. 394, 36 S.Ct. 143, 60 L.E . 348 (1915), or forbids excavation for sand and gravel below the water line, see *Goldblatt v. Hempstead*, 369 U.S. 590, 82 S.Ct. 987, 8 L.Ed.2d 130 (1962). Nor is it relevant, where the government is merely prohibiting a noxious use of property, that the government would seem to be singling out a particular property owner. *Hadacheck, supra*, at 413, 36 S.Ct., at 146.[8]

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The nuisance exception to the taking guarantee is not coterminous with the police power itself. The question is whether the forbidden use is dangerous to the safety, health, or welfare of others. Thus, in *Curtin v. Benson*, 222 U.S. 78, 32 S.Ct. 31, 56 L.Ed. 102 (1911), the Court held that the Government, in prohibiting the owner of property within the boundaries of Yosemite National Park from grazing cattle on his property, had taken the owner's property. The Court assumed that the Government could constitutionally require the owner to fence his land or take other action to prevent his cattle from straying onto others' land without compensating him.

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"Such laws might be considered as strictly regulations of the use of property, of so using it that no injury could result to others. They would have the effect of making the owner of land herd his cattle on his own land and of making him responsible for a neglect of it." *Id.*, at 86, 32 S.Ct., at 33.

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The prohibition in question, however, was "not a prevention of a misuse or illegal use but the prevention of a legal and essential use, an attribute of its ownership." *Ibid.*

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Appellees are not prohibiting a nuisance. The record is clear that the proposed addition to the Grand Central Terminal would be in full compliance with zoning, height limitations, and other health and safety requirements. Instead, appellees are seeking to preserve what they believe to be an outstanding example of beaux-arts architecture. Penn Central is prevented from further developing its property basically because too good a job was done in designing and building it. The city of New York, because of its unadorned admiration for the design, has decided that the owners of the building must preserve it unchanged for the benefit of sightseeing New Yorkers and tourists.

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Unlike land-use regulations, appellees' actions do not merely *prohibit* Penn Central from using its property in a narrow set of noxious ways. Instead, appellees have placed an *affirmative* duty on Penn Central to maintain the Terminal in its present state and in "good repair." Appellants are not free to use their property as they see fit within broad outer boundaries but must strictly adhere to their past use except where appellees conclude that alternative uses would not detract from the landmark. While Penn Central may continue to use the Terminal as it is presently designed, appellees otherwise "exercise complete dominion and control over the surface of the land," *United States v. Causby*, 328 U.S. 256, 262, 66 S.Ct. 1062, 1066, 90 L.Ed. 1206 (1946), and must compensate the owner for his loss. *Ibid.* "Property is taken in the constitutional sense when inroads are made upon an owner's use of it to an extent that, as between private parties, a servitude has been acquired." *United States v. Dickinson*, 331 U.S. 745, 748, 67 S.Ct. 1382, 1385, 91 L.Ed. 1789 (1947). See also *Dugan v. Rank, supra*, 372 U.S., at 625, 83 S.Ct., at 1009.[9]

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Even where the government prohibits a noninjurious use, the Court has ruled that a taking does not take place if the prohibition applies over a broad cross section of land and thereby "secure[s] an average reciprocity of advantage." *Pennsylvania Coal Co. v. Mahon*, 260 U.S., at 415, 43 S.Ct., at 160.[10] It is for this reason that zoning does not constitute a "taking." While zoning at times reduces *individual* property values, the burden is shared relatively evenly and it is reasonable to conclude that on the whole an individual who is harmed by one aspect of the zoning will be benefited by another.

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Here, however, a multimillion dollar loss has been imposed on appellants; it is uniquely felt and is not offset by any benefits flowing from the preservation of some 400 other "landmarks" in New York City. Appellees have imposed a substantial cost on less than one one-tenth of one percent of the buildings in New York City for the general benefit of all its people. It is exactly this imposition of general costs on a few individuals at which the "taking" protection is directed. The Fifth Amendment

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"prevents the public from loading upon one individual more than his just share of the burdens of government, and says that when he surrenders to the public something more and different from that which is exacted from other members of the public, a full and just equivalent shall be returned to him." *Monongahela Navigation Co. v. United States*, 148 U.S. 312, 325, 13 S.Ct. 622, 626, 37 L.Ed. 463 (1893).

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Less than 20 years ago, this Court reiterated that the

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"Fifth Amendment's guarantee that private property shall not be taken for a public use without just compensation was designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole." *Armstrong v. United States*, 364 U.S., at 49, 80 S.Ct., at 1569.

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Cf. *Nashville, C. & St. L. R. Co. v. Walters*, 294 U.S. 405, 428-430, 55 S.Ct. 486, 494-495, 79 L.Ed. 949 (1935).[11]

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As Mr. Justice Holmes pointed out in *Pennsylvania Coal Co. v. Mahon*, "the question at bottom" in an eminent domain case "is upon whom the loss of the changes desired should fall." 260 U.S., at 416, 43 S.Ct., at 160. The benefits that appellees believe will flow from preservation of the Grand Central Terminal will accrue to all

the citizens of New York City. There is no reason to believe that appellants will enjoy a substantially greater share of these benefits. If the cost of preserving Grand Central Terminal were spread evenly across the entire population of the city of New York, the burden per person would be in cents per year a minor cost appellees would surely concede for the benefit accrued. Instead, however, appellees would impose the entire cost of several million dollars per year on Penn Central. But it is precisely this sort of discrimination that the Fifth Amendment prohibits.[12]

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Appellees in response would argue that a taking only occurs where a property owner is denied *all* reasonable value of his property.[13] The Court has frequently held that, even where a destruction of property rights would not *otherwise* constitute a taking, the inability of the owner to make a reasonable return on his property requires compensation under the Fifth Amendment. See, *e. g., United States v. Lynah*, 188 U.S., at 470, 23 S.Ct., at 357. But the converse is not true. A taking does not become a noncompensable exercise of police power simply because the government in its grace allows the owner to make some "reasonable" use of his property. "[I]t is the character of the invasion, not the amount of damage resulting from it, so long as the damage is substantial, that determines the question whether it is a taking." *United States v. Cress*, 243 U.S. 316, 328, 37 S.Ct. 380, 385, 61 L.Ed. 746 (1917); *United States v. Causby*, 328 U.S., at 266, 66 S.Ct., at 1068. See also *Goldblatt v. Hempstead*, 369 U.S., at 594, 82 S.Ct., at 990.

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Appellees, apparently recognizing that the constraints imposed on a landmark site constitute a taking for Fifth Amendment purposes, do not leave the property owner empty-handed. As the Court notes, *ante*, at 113-114, the property owner may theoretically "transfer" his previous right to develop the landmark property to adjacent properties if they are under his control. ppellees have coined this system "Transfer Development Rights," or TDR's.

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Of all the terms used in the Taking Clause, "just compensation" has the strictest meaning. The Fifth Amendment does not allow simply an approximate compensation but requires "a full and perfect equivalent for the property taken." *Monongahela Navigation Co. v. United States*, 148 U.S., at 326, 13 S.Ct., at 626.

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"[I]f the adjective 'just' had been omitted, and the provision was simply that property should not be taken without compensation, the natural import of the language would be that the compensation should be the equivalent of the property.

And this is made emphatic by the adjective 'just.' There can, in view of the combination of those two words, be no doubt that the compensation must be a full and perfect equivalent for the property taken." *Ibid.*

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See also *United States v. Lynah, supra*, 188 U.S., at 465, 23 S.Ct., at 355; *United States v. Pewee Coal Co.*, 341 U.S. 114, 117, 71 S.Ct. 670, 671, 95 L.Ed. 809 (1951). And the determination of whether a "full and perfect equivalent" has been awarded is a "judicial function." *United States v. New River Collieries Co.*, 262 U.S. 341, 343-344, 43 S.Ct. 565, 566-567, 67 L.Ed. 1014 (1923). The fact that *appellees* may believe that TDR's provide full compensation is irrelevant.

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"The legislature may determine what private property is needed for public purposes —that is a question of a political and legislative character; but when the taking has been ordered, then the question of compensation is judicial. It does not rest with the public, taking the property, through Congress or the legislature, its representative, to say what compensation shall be paid, or even what shall be the rule of compensation. The Constitution has declared that just compensation shall be paid, and the ascertainment of that is a judicial inquiry." *Monongahela Navigation Co. v. United States, supra*, 148 U.S., at 327, 13 S.Ct., at 626.

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Appellees contend that, even if they have "taken" appellants' property, TDR's constitute "just compensation." Appellants, of course, argue that TDR's are highly imperfect compensation. Because the lower courts held that there was no "taking," they did not have to reach the question of whether or not just compensation has already been awarded. The New York Court of Appeals' discussion of TDR's gives some support to appellants:

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"The many defects in New York City's program for development rights transfers have been detailed elsewhere . . . . The area to which transfer is permitted is severely limited [and] complex procedures are required to obtain a transfer permit." 42 N.Y.2d 324, 334-335, 397 N.Y.S.2d 914, 920, 366 N.E.2d 1271, 1277 (1977).

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And in other cases the Court of Appeals has noted that TDR's have an "uncertain and contingent market value" and do "not adequately preserve" the value lost when a building is declared to be a landmark. *French Investing Co. v. City of New York*, 39 N.Y.2d 587, 591, 385 N.Y.S.2d 5, 7, 350 N.E.2d 381, 383, appeal dismissed 429 U.S. 990, 97 S.Ct. 515, 50 L.Ed.2d 602 (1976). On the other hand, there is evidence in the record that Penn Central has been offered substantial

amounts for its TDR's. Because the record on appeal is relatively slim, I would remand to the Court of Appeals for a determination of whether TDR's constitute a "full and perfect equivalent for the property taken."[14]

II

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Over 50 years ago, Mr. Justice Holmes, speaking for the Court, warned that the courts were "in danger of forgetting that a strong public desire to improve the public condition is not enough to warrant achieving the desire by a shorter cut than the constitutional way of paying for the change." *Pennsylvania Coal Co. v. Mahon*, 260 U.S., at 416, 43 S.Ct., at 160. The Court's opinion in this case demonstrates that the danger thus foreseen has not abated. The city of New York is in a precarious financial state, and some may believe that the costs of landmark preservation will be more easily borne by corporations such as Penn Central than the overburdened individual taxpayers of New York. But these concerns do not allow us to ignore past precedents construing the Eminent Domain Clause to the end that the desire to improve the public condition is, indeed, achieved by a shorter cut than the constitutional way of paying for the change.

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See National Trust for Historic Preservation, A Guide to State Historic Preservation Programs (1976); National Trust for Historic Preservation, Directory of Landmark and Historic District Commissions (1976). In addition to these state and municipal legislative efforts, Congress has determined that "the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people," National Historic Preservation Act of 1966, 80 Stat. 915, 16 U.S.C. § 470(b) (1976 ed.), and has enacted a series of measures designed to encourage preservation of sites and structures of historic, architectural, or cultural significance. See generally Gray, The Response of Federal Legislation to Historic Preservation, 36 Law & Contemp. Prob. 314 (1971).

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Over one-half of the buildings listed in the Historic American Buildings Survey, begun by the Federal Government in 1933, have been destroyed. See Costonis, The Chicago Plan: Incentive Zoning and the Preservation of Urban Landmarks, 85 Harv.L.Rev. 574, 574 n. 1 (1972), citing Huxtable, Bank's Building Plan Sets Off Debate on "Progress," N.Y. Times, Jan. 17, 1971, section 8, p. 1, col. 2.

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See, *e. g.*, N.Y.C. Admin. Code, § 205-1.0(a) (1976).

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Gilbert, Introduction, Precedents for the Future, 36 Law & Contemp. Prob. 311, 312 (1971), quoting address by Robert Stipe, 1971 Conference on Preservation Law, Washington, D. C., May 1, 1971 (unpublished text, pp. 6-7).

5

See N.Y.Gen.Mun.Law § 96-a (McKinney 1977). It declares that it is the public policy of the State of New York to preserve structures and areas with special historical or aesthetic interest or value and authorizes local governments to impose reasonable restrictions to perpetuate such structures and areas.

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The consensus is that widespread public ownership of historic properties in urban settings is neither feasible nor wise. Public ownership reduces the tax base, burdens the public budget with costs of acquisitions and maintenance, and results in the preservation of public buildings as museums and similar facilities, rather than as economically productive features of the urban scene. See Wilson & Winkler, The Response of State Legislation to Historic Preservation, 36 Law & Contemp. Prob. 329, 330-331, 339-340 (1971).

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See Costonis, *supra* n.2, at 580-581; Wilson & Winkler, *supra* n.6; Rankin, Operation and Interpretation of the New York City Landmark Preservation Law, 36 Law & Contemp. Prob. 366 (1971).

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The ordinance creating the Co mission requires that it include at least three architects, one historian qualified in the field, one city planner or landscape architect, one realtor, and at least one resident of each of the city's five boroughs. N.Y.C. Charter § 534 (1976). In addition to the ordinance's requirements concerning the composition of the Commission, there is, according to a former chairman, a "prudent tradition" that the Commission include one or two lawyers, preferably with experience in municipal government, and several laymen with no specialized qualifications other than concern for the good of the city. Goldstone, Aesthetics in Historic Districts, 36 Law & Contemp. Prob. 379, 384-385 (1971).

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" 'Landmark.' Any improvement, any part of which is thirty years old or older, which has a special character or special historical or aesthetic interest or value as part of the development, heritage or cultural characteristics of the city, state or nation and which has been designated as a landmark pursuant to the provisions of this chapter." § 207-1.0(n).

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" 'Landmark site.' An improvement parcel or part thereof on which is situated a landmark and any abutting improvement parcel or part thereof used as and constituting part of the premises on which the landmark is situated, and which has been designated as a landmark site pursuant to the provisions of this chapter." § 207-1.0(*o*).

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" 'Historic district.' Any area which: (1) contains improvements which: (a) have a special character or special historical or aesthetic interest or value; and (b) represent one or more periods or styles of architecture typical of one or more eras in the history of the city; and (c) cause such area, by reason of such factors, to constitute a distinct section of the city; and (2) has been designated as a historic district pursuant to the provisions of this chapter." § 207-1.0(h). The Act also provides for the designation of a "scenic landmark," see § 207-1.0(w), and an "interior landmark." See § 207-1.0(m).

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See Landmarks Preservation Commission of the City of New York, Landmarks and Historic Districts (1977). Although appellants are correct in noting that some of the designated landmarks are publicly owned, the vast majority are, like Grand Central Terminal, privately owned structures.

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If the owner of a non-tax-exempt parcel has been denied certificates of appropriateness for a proposed alteration and shows that he is not earning

a reasonable return on the property in its present state, the Commission and other city agencies must assume the burden of developing a plan that will enable the landmark owner to earn a reasonable return on the landmark site. The plan may include, but need not be limited to, partial or complete tax exemption, remission of taxes, and authorizations for alterations, construction, or reconstruction appropriate for and not inconsistent with the purposes of the law. § 207-8.0(c). The owner is free to accept or reject a plan devised by the Commission and approved by the other city agencies. If he accepts the plan, he proceeds to operate the property pursuant to the plan. If he rejects the plan, the Commission may recommend that the city proceed by eminent domain to acquire a protective interest in the landmark, but if the city does not do so within a specified time period, the Commission must issue a notice allowing the property owner to proceed with the alteration or improvement as originally proposed in his application for a certificate of appropriateness.

Tax-exempt structures are treated somewhat differently. They become eligible for special treatment only if four preconditions are satisfied: (1) the owner previously entered into an agreement to sell the parcel that was contingent upon the issuance of a certificate of approval; (2) the property, as it exists at the time of the request,

is not capable of earning a reasonable return; (3) the structure is no longer suitable to its past or present purposes; and (4) the prospective buyer intends to alter the landmark structure. In the event the owner demonstrates that the property in its present state is not earning a reasonable return, the Commission must either find another buyer for it or allow the sale and construction to proceed.

But this is not the only remedy available for owners of tax-exempt landmarks. As the case at bar illustrates, see *infra*, at 121, if an owner files suit and establishes that he is incapable of earning a "reasonable return" on the site in its present state, he can be afforded judicial relief. Similarly, where a landmark owner who enjoys a tax exemption has demonstrated that the landmark structure, as restricted, is totally inadequate for the owner's "legitimate needs," the law has been held invalid as applied to that parcel. See *Lutheran Church v. City of New York*, 35 N.Y.2d 121, 359 N.Y.S.2d 7, 316 N.E.2d 305 (1974).

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To obtain approval for a proposed transfer, the landmark owner must follow the following procedure. First, he must obtain the permission of the Commission which will examine the plans for the development of the transferee lot to determine whether the planned construction would be compatible with the landmark. Second, he must obtain the approbation of New York City's Planning Commission which will focus on the effects of the transfer on occupants of the buildings in the vicinity of the transferee lot and whether the landmark owner will preserve the landmark. Finally, the matter goes to the Board of Estimate, which has final authority to grant or deny the application. See also Costonis, *supra* n.2, at 585-586 (1972).

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The Terminal's present foundation includes columns, which were built into it for the express purpose of supporting the proposed 20-story tower.

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The Commission's report stated:

"Grand Central Station, one of the great buildings of America, evokes a spirit that is unique in this City. It combines distinguished architecture with a brilliant engineering solution, wedded t one of the most fabulous railroad terminals of our time. Monumental in scale, this great building functions as well today as it did when built. In style, it represents the best of the French Beaux Arts." Record 2240.

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Appellants also submitted a plan, denominated Breuer II, to the Commission. However, because appellants learned that Breuer II would have violated existing easements, they substituted Breuer II Revised for Breuer II, and the Commission evaluated the appropriateness only of Breuer II Revised.

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In discussing Breuer I, the Commission also referred to a number of instances in which it had approved additions to landmarks: "The office and reception wing added to Gracie Mansion and the school and church house added to the 12th Street side of the First Presbyterian Church are examples that harmonize in scale, material and character with the structures they adjoin. The new Watch Tower Bible and Tract Society building on Brooklyn Heights, though completely modern in idiom, respects the qualities of its surroundings and will enhance the Brooklyn Heights Historic District, as Butterfield House enhances West 12th Street, and Breuer's own Whitney Museum its Madison Avenue locale." Record 2251.

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See N.Y. Real Prop. Tax Law § 489-aa *et seq.* (McKinney Supp. 1977).

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Although that court suggested that any regulation of private property to protect landmark values was unconstitutional if "just compensation" were not afforded, it also appeared to rely upon its findings: first, that the cost to Penn Central of operating the Terminal building itself, exclusive of purely railroad operations, exceeded the revenues received from concessionaires and tenants in the Terminal; and second, that the special transferable development rights afforded Penn Central as an owner of a landmark site did not "provide compensation to plaintiffs or minimize the harm suffered by plaintiffs due to the designation of the Terminal as a landmark."

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These statements appear to have reflected the costs of maintaining the exterior architectural features of the Terminal in "good repair" as required by the law. As would have been apparent in any case therefore, the existence of the duty to keep up the property was here—and will presumably always be—factored into the inquiry concerning the constitutionality of the landmark restrictions.

The Appellate Division also rejected the claim that an agreement of Penn Central with the Metropolitan Transit Authority and the Connecticut Transit Authority provided a basis for invalidating the application of the Landmarks Law.

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The record reflected that Penn Central had given serious consideration to transferring some of those rights to either the Biltmore Hotel or the Roosevelt Hotel.

23

The Court of Appeals suggested that in calculating the value of the property upon which appellants were e titled to earn a reasonable return, the "publicly created" components of the value of the property—*i. e.*, those elements of its value attributable to the "efforts of organized society" or to the "social complex" in which

the Terminal is located—had to be excluded. However, since the record upon which the Court of Appeals decided the case did not, as that court recognized, contain a basis for segregating the privately created from the publicly created elements of the value of the Terminal site and since the judgment of the Court of Appeals in any event rests upon bases that support our affirmance see *infra*, this page, we have no occasion to address the question whether it is permissible or feasible to separate out the "social increments" of the value of property. See Costonis, The Disparity Issue: A Context for the *Grand Central Terminal* Decision, 91 Harv.L.Rev. 402, 416-417 (1977).

24

Our statement of the issues is a distillation of four questions presented in the jurisdictional statement:

"Does the social and cultural desirability of preserving historical landmarks through government regulation derogate from the constitutional

requirement that just compensation be paid for private property taken for public use?

"Is Penn Central entitled to no compensation for that large but unmeasurable portion of the value of its rights to construct an office building over the Grand Central Terminal that is said to have been created by the efforts of 'society as an organized entity'?

"Does a finding that Penn Central has failed to establish that there is no possibility, without exercising its development rights, of earning a reasonable return on all of its remaining properties that benefit in any way from the operations of the Grand Central Terminal warrant the conclusion that no compensation need be paid for the taking of those rights?

"Does the possibility accorded to Penn Central, under the landmark-preservation regulation, of realizing some value at some time by transferring the Terminal development rights to other buildings, under a procedure that is conceded to be defective, severely limited, procedurally complex and speculative, and that requires ultimate discretionary approval by governmental authorities, meet the constitutional requirements of just compensation as applied to landmarks?" Jurisdictional Statement 3-4.

The first and fourth questions assume that there has been a taking and raise the problem whether, under the circumstances of this case, the transferable development rights constitute "just compensation." The second and third questions, on the other hand, are directed to the issue whether a taking has occurred.

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- As is implicit in our opinion, we do not embrace the pr position that a "taking" can never occur unless government has transferred physical control over a portion of a parcel.

26

Both the Jurisdictional Statement 7-8, n. 7, and Brief for Appellants 8 n. 7 state that appellants are not seeking review of the New York courts' determination that Penn Central could earn a "reasonable return" on its investment in the Terminal. Although appellants suggest in their reply brief that the factual conclusions of the New York courts cannot be sustained unless we accept the rationale of the New York Court of Appeals, see Reply Brief for Appellants 12 n. 15, it is apparent that the findings concerning Penn Central's ability to profit from the Terminal depend in no way on the Court of Appeals' rationale.

27

These cases dispose of any contention that might be based on *Pennsylvania Coal Co. v. Mahon,* 260 U.S. 393, 43 S.Ct. 158, 67 L.Ed. 322 (1922), that full use of air rights is so bound up with the investment-backed expectations of appellants that governmental deprivation of these rights invariably—*i. e.,* irrespective of the impact of the restriction on the value of the parcel as a whole constitutes a "taking." Similarly, *Welch, Goldblatt,* and *Gorieb* illustrate the fallacy of appellants' related contention that a "taking" must be found to have occurred whenever the land-use restriction may be characterized as imposing a "servitude" on the claimant's parcel.

28

A though the New York Court of Appeals contrasted the New York City Landmarks Law with both zoning and historic-district legislation and stated at one point that landmark laws do not "further a general community plan," 42 N.Y.2d 324, 330, 397 N.Y.S.2d 914, 918, 366 N.E.2d 1271, 1274 (1977), it also emphasized that the implementation of the objectives of the Landmarks Law constitutes an "acceptable reason for singling out one particular parcel for different and less favorable treatment." *Ibid.*, 397 N.Y.S.2d, at 918, 366 N.E.2d, at 1275. Therefore, we do not understand the New York Court of Appeals to disagree with our characterization of the law.

29

When a property owner challenges the application of a zoning ordinance to his property, the judicial inquiry focuses upon whether the challenged restriction can reasonably be deemed to promote the objectives of the community land-use plan, and will include consideration of the treatment of similar parcels. See generally *Nectow v. Cambridge*, 277 U.S. 183, 48 S.Ct. 447, 72 L.Ed. 842 (1928). When a property owner challenges a landmark designation or restriction as arbitrary or discriminatory, a similar inquiry presumably will occur.

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- Appellants attempt to distinguish these cases on the ground that, in each, government was prohibiting a "noxious" use of land and that in the present case, in contrast, appellants' proposed construction above the Terminal would be beneficial. We observe that the uses in issue in *Hadacheck, Miller*, and *Goldblatt* were p rfectly lawful in themselves. They involved no "blameworthiness, . . . moral wrongdoing or conscious act of dangerous risk-taking which induce[d society] to shift the cost to a pa[rt]icular individual." Sax, Takings and the Police Power, 74 Yale L.J. 36, 50 (1964). These cases are better understood as resting not on any supposed "noxious" quality of the prohibited uses but rather on the ground that the restrictions were reasonably related to the implementation of a policy—not unlike historic preservation—expected to produce a widespread public benefit and applicable to all similarly situated property.

Nor, correlatively, can it be asserted that the destruction or fundamental alteration of a historic landmark is not harmful. The suggestion that the beneficial quality of appellants' proposed construction is established by the fact that the construction would have been consistent with applicable zoning laws ignores the development in sensibilities and ideals reflected in landmark legislation like New York City's. Cf. *West Bros. Brick Co. v. Alexandria*, 169 Va. 271, 282-283, 192 S.E. 881, 885-886, *appeal dismissed for want of a substantial federal question*, 302 U.S. 658, 58 S.Ct. 369, 82 L.Ed. 508 (1937).

31

There are some 53 designated landmarks and 5 historic districts or scenic landmarks in Manhattan between 14th and 59th Streets. See Landmarks Preservation Commission, Landmarks and Historic Districts (1977).

32

It is, of course, true that the fact the duties imposed by zoning and historic-district legislation apply throughout particular physical communities provides assurances against arbitrariness, but the applicability of the Landmarks Law to a large number of parcels in the city, in our view, provides comparable, if not identical, assurances.

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Appellants, of course, argue at length that the transferable development rights, while valuable, do not constitute "just compensation." Brief for Appellants 36-43.

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Counsel for appellants admitted at oral argument that the Commission has not suggested that it would not, for example, approve a 20-story office tower along the lines of that which was part of the original plan for the Terminal. See Tr. of Oral Arg. 19.

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See Costonis, *supra* n. 2, at 585-589.

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We emphasize that our holding today is on the present record, which in turn is based on Penn Central's present ability to use the Terminal for its intended purposes and in a gainful fashion. The city conceded at oral argument that if appellants can demonstrate at some point in the future that circumstances have so changed that the Terminal ceases to be "economically viable," appellants may obtain relief. See Tr. of Oral Arg. 42-43.

1

A large percentage of the designated landmarks are public structures (such as the Brooklyn Bridge, City Hall, the Statute of Liberty and the Municipal Asphalt Plant) and thus do not raise Fifth Amendment taking questions. See Landmarks Preservation Commission of the City of New York, Landmarks and Historic Districts (1977 and Jan. 10, 1978, Supplement). Although the Court refers to the New York ordinance as a *comprehensive* program to preserve *historic* landmarks, *ante*, at 107, the ordinance is not limited to historic buildings and gives little guidance to the Landmarks Preservation Commission in its selection of landmark sites. Section 207-1.0(n) of the Landmarks Preservation Law, as set forth in N.Y.C. Admin. Code, ch. 8-A (1976), requires only that the selected landmark be at least 30 years old and possess "a special character or special historical or aesthetic interest or value as part of the development, heritage or cultural characteristics of the city, state or nation."

2

Even the New York Court of Appeals conceded that "[t]his is not a zoning case. . . . Zoning restrictions operate to advance a comprehensive community plan for the common good. Each property owner in the zone is both benefited and restricted from exploitation, presumably without discrimination, except for permitted continuing nonconforming uses. The restrictions may be designed to maintain the general character of the area, or to assure orderly development, objectives inuring to the benefit of all, which property owners acting individually would find difficult or impossible to achieve . . . .

"Nor does this case involve landmark regulation of a historic district. . . . [In historic districting, as in traditional zoning,] owners although burdened by the restrictions also benefit, to some extent, from the furtherance of a general community plan.

* * * * *

"Restrictions on alteration of individual landmarks are not designed to further a general community plan. Landmark restrictions are designed to prevent alteration or demolition of a single piece of property. To this extent, such restrictions

resemble 'discriminatory' zoning restrictions, properly condemned . . . ." 42 N.Y.2d 324, 329-330, 397 N.Y.S.2d 914, 917-918, 366 N.E.2d 1271, 1274 (1977).

3

The guarantee that private property shall not be taken for public use without just compensation is applicable to the States through the Fourteenth Amendment. Although the state "legislature may prescribe a form of procedure to be observed in the taking of private property for public use, . . . it is not due process of law if provision be not made for compensation." *Chicago, B. & Q. R. Co. v. Chicago*, 166 U.S. 226, 236, 17 S.Ct. 581, 584, 41 L.Ed. 979 (1897).

4

The Court's opinion touches base with, or at least attempts to touch base with, most of the major eminent domain cases decided by this Court. Its use of them, however, is anything but meticulous. In citing to *United States v. Caltex, Inc.*, 344 U.S. 149, 156, 73 S.Ct. 200, 97 L.Ed. 157 (1952), for example, *ante*, at 124, the only language remotely applicable to eminent domain is stated in terms of "the destruction of respondents' terminals by a trained team of engineers in the face of their impending seizure by the enemy." 344 U.S., at 156, 73 S.Ct., at 203.

5

In particular, Penn Central cannot increase the height of the Terminal. This Court has previously held that the "air rights" over an area of land are "property" for urposes of the Fifth Amendment. See *United States v. Causby*, 328 U.S. 256, 66 S.Ct. 1062, 90 L.Ed. 1206 (1946) ("air rights" taken by low-flying airplanes); *Griggs v. Allegheny County*, 369 U.S. 84, 82 S.Ct. 531, 7 L.Ed.2d 585 (1962) (same); *Portsmouth Harbor Land & Hotel Co. v. United States*, 260 U.S. 327, 43 S.Ct. 135, 67 L.Ed. 287 (1922) (firing of projectiles over summer resort can constitute taking). See also *Butler v. Frontier Telephone Co.*, 186 N.Y. 486, 79 N.E. 716 (1906) (stringing of telephone wire across property constitutes a taking).

6

It is, of course, irrelevant that appellees interfered with or destroyed property rights that Penn Central had not yet physically used. The Fifth Amendment must be applied with "reference to the uses for which the property is suitable, having regard to the existing business or wants of the community, *or such as may be reasonably expected in the immediate future*." *Boom Co. v. Patterson*, 98 U.S. 403, 408, 25 L.Ed. 206 (1879) (emphasis added).

7

"Such a construction would pervert the constitutional provision into a restriction upon the rights of the citizen, as those rights stood at the common law, instead of the government, and make it an authority for invasion of private right under the pretext of the public good, which had no warrant in the laws or practices of our ancestors." 188 U.S., at 470, 23 S.Ct., at 357.

8

Each of the cases cited by the Court for the proposition that legislation which severely affects some landowners but not others does not effect a "taking" involved noxious uses of property. See *Hadacheck; Miller v. Schoene*, 276 U.S. 272, 48 S.Ct. 246, 72 L.Ed. 568 (1928); *Goldblatt*. See *ante*, at 125-127, 133.

9

In *Monongahela Navigation Co. v. United States*, 148 U.S. 312, 13 S.Ct. 622, 37 L.Ed. 463 (1893), the Monongahela company had expended large sums of money in improving the Monongahela River by means of locks and dams. When the United States condemned this property for its own use, the Court held that full compensation had to be awarded. "Suppose, in the improvement of a navigable stream, it was deemed essential to construct a canal with locks, in order to pass around rapids or falls. Of the power of Congress to condemn whatever land may be necessary for such canal, there can be no question; and of the equal necessity of paying full compensation for all private property taken there can be as little doubt." *Id.*, at 337, 13 S.Ct., at 630. Under the Court's rationale, however, where the Government wishes to preserve a pre-existing canal system for public use, it need not condemn the property but need merely order that it be preserved in its present form and be kept "in good repair."

10

Appellants concede that the preservation of buildings of historical or aesthetic importance is a permissible objective of state action. Brief for Appellants 12. *Cf. Berman v. Parker*, 348 U.S. 26, 75 S.Ct. 98, 99 L.Ed. 27 (1954); *United States v. Gettysburg Electric R. Co.*, 160 U.S. 668, 16 S.Ct. 427, 40 L.Ed. 576 (1896).

For the reasons noted in the text, historic *zoning*, as has been undertaken by cities, such as New Orleans, may well not require compensation under the Fifth Amendment.

11

"It is true that the police power embraces regulations designed to promote public convenience or the general welfare, and not merely those in the interest of public health, safety and morals. . . . But when particular individuals are singled out to bear the cost of advancing the public convenience, that imposition must bear some reasonable relation to the evils to be eradicated or the advantages to be secured. . . . While moneys raised by general taxation may constitutionally be applied to purposes from which the individual taxed may receive no benefit, and indeed, suffer serious detriment, . . . so-called assessments for public improvements laid upon particular property o ners are ordinarily constitutional only if based on benefits received by them." 294 U.S., at 429-430, 55 S.Ct., at 494-495.

12

The fact that the Landmarks Preservation Commission may have allowed additions to a relatively few landmarks is of no comfort to appellants. *Ante*, at 118 n. 18. Nor is it of any comfort that the Commission refuses to allow appellants to construct any additional stories because of their belief that such construction would not be aesthetic. *Ante*, at 117-118.

13

Difficult conceptual and legal problems are posed by a rule that a taking only occurs where the property owner is denied all reasonable return on his property. Not only must the Court define "reasonable return" for a variety of types of property (farmlands, residential properties, commercial and industrial areas), but the Court must define the particular property unit that should be examined. For example, in this case, if appellees are viewed as having restricted Penn Central's use of its "air rights," *all* return has been denied. See *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 43 S.Ct. 158, 67 L.Ed. 322 (1922). The Court does little to resolve these questions in its opinion. Thus, at one point, the Court implies that the question is whether the restrictions have "an unduly harsh impact upon the owner's use of the property," *ante*, at 127; at another point, the question is phrased as whether Penn Central can obtain "a 'reasonable return' on its investment," *ante*, at 136; and, at yet another point, the question becomes whether the landmark is "economically viable," *ante*, at 138 n. 36.

14

The Court suggests, *ante*, at 131, that if appellees are held to have "taken" property sights of landmark owners, not only the New York City Landmarks Preservation Law, but "all comparable landmark legislation in the Nation" must fall. This assumes, of course, that TDR's are not "just compensation" for the property rights destroyed. It also ignores the fact that many States and cities in the Nation have chosen to preserve landmarks by purchasing or condemning restrictive easements over the facade of the landmarks and are apparently quite satisfied with the results. See, *e. g.*, Ore.Rev.Stat. §§ 271.710, 271.720 (1977); Md.Ann.Code, Art. 41, § 181A (1978); Va.Code §§ 10-145.1 and 10-138(e) (1978); Richmond, Va., City Code §§ 21-23 *et seq.* (1975). The British National Trust has effectively used restrictive easements to preserve landmarks since 1937. See National Trust Act, 1937, 1 Edw. 8 and 1 Geo. 6 ch. lvii, §§ 4 and 8. Other States and cities have found that tax incentives are also an effective means of encouraging the private preservation of landmark sites. See, *e. g.*, Conn.Gen.Stat. § 12-127a (1977); Ill.Rev.Stat., ch. 24, § 11-48.2-6 (1976); Va.Code § 10-139 (1978). The New York City Landmarks Preservation Law departs drastically from these traditional, and constitutional, means of preserving landmarks.

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THE STATE OF SOUTH CAROLINA
In The Supreme Court

Ani Creation, Inc. d/b/a Rasta: Ani Creation, Inc. d/b/a Wacky T's; Blue Smoke, LLC d/b/a Doctor Vape: Blue Smoke, LLC d/b/a Blue Smoke Vape Shop; ABNME, LLC d/b/a Best for Less; Koretzky, LLC d/b/a Grasshopper; Red Hot Shoppe, Inc.; E.T. Sportswear, Inc, d/b/a Pacific Beachwear; Myrtle Beach General Store, LLC; I Am It, Inc. d/b/a T-Shirt King; and Blue Bay Retail, Inc. d/b/a Surf's Up, Appellants,

v.

City of Myrtle Beach Board of Zoning Appeals and Ken May, Zoning Administrator for City of Myrtle Beach, Respondents.

Appellate Case No. 2021-001074

Appeal from Horry County
Benjamin H. Culbertson, Circuit Court Judge

Opinion No. 28151
Heard February 9, 2023 – Filed April 19, 2023

AFFIRMED

Reese R. Boyd III, of Davis & Boyd, LLC, of Myrtle Beach, and Gene McCain Connell Jr., of Kelaher, Connell, & Connor, PC, of Surfside Beach, both for Appellants.

Michael Warner Battle, of Battle Law Firm, LLC, of Conway, for Respondents.

JUSTICE KITTREDGE: The City of Myrtle Beach (the city) is a town economically driven and funded by tourism. After receiving frequent criticism from tourists and residents alike, the city became concerned that the proliferation of smoke shops and tobacco stores were repelling families from the area due to those stores' merchandise and advertising practices. More specifically, the city was troubled with those shops' sale of sexually explicit items, cannabidiol (CBD)-infused products, and tobacco paraphernalia. Therefore, in an effort to improve the "family friendly" nature of the downtown area, the city created a zoning overlay district[1] that prohibited the operation of smoke shops and tobacco stores, among others, in the city's downtown.

Appellants are nine of the twenty-five affected stores located in the area, and each was issued a citation by the city's zoning administrator for failing to comply with the zoning overlay ordinance. Following a complicated legal battle, appellants raised a host of constitutional challenges to the zoning overlay ordinance. However, the circuit court found the ordinance survived appellants' veritable barrage. Appellants directly appealed that decision to this Court. We now hold that, under this Court's long-standing precedent, the overlay ordinance did not impermissibly spot zone the city's historic downtown area. We additionally find the overlay ordinance is a constitutional exercise of the city's police powers. We therefore affirm the decision of the circuit court and uphold the validity of the ordinance.

I.

A.

In 2011, the city adopted a comprehensive plan that, among other things, set forth future objectives aimed at increasing tourism and revenue. In the comprehensive plan, the city noted that tourists and residents had repeatedly expressed concern over the "noise and behavior of certain groups visiting the area," resulting in "negative

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[1] *See* S.C. Code Ann. § 6-29-720(C)(5) (Supp. 2022) (defining an overlay zone as "a zone which imposes a set of requirements or relaxes a set of requirements imposed by the underlying zoning district when there is a special public interest in a particular geographic area that does not coincide with the underlying zone boundaries").

perceptions about Myrtle Beach." Likewise, the city determined that "[c]rime and the perception of crime [was] a problem that need[ed] addressing." The city concluded all businesses needed to encourage and support a "family beach image" and determined that a positive "city image" would foster more tourism. To that end, the city outlined a number of specific objectives, including its desires to (1) "define and maintain Myrtle Beach as a family beach"; (2) "revitalize the downtown area of Myrtle Beach"; and (3) "create an environment[] which ensures that visitors and residents are safe."

Ultimately, the Myrtle Beach city council effectuated those objectives by enacting Ordinance 1807 (the ordinance), which created a zoning overlay district—known as the Ocean Boulevard Entertainment Overlay District (OBEOD)—that encompassed the historic downtown area of the city. Myrtle Beach, S.C., Code of Ordinances app. A § 1807 (2019). In creating the OBEOD, the ordinance extensively set forth its purpose and intent, emphasizing, among other things, the importance of fostering more family tourism and discouraging things that were "repulsive" to families, including "unhealthy tobacco use, crudity and the stigma of drug use and paraphernalia." *Id.* § 1807.A. As a result, the city council found the displacement of smoke shops and tobacco stores from the historic downtown area was "in the interests of the public health, safety, and general welfare." *Id.* Likewise, city council stated the presence of smoke shops and tobacco stores heightened the risk of "negative aesthetic impacts, blight, and loss of property values of residential neighborhoods and businesses in close proximity to such uses." *Id.* Finally, city council noted that despite the creation of the OBEOD, there were numerous other locations throughout the city available for the continued operation of smoke shops and tobacco stores. *Id.*

Following the city council's lengthy recitation of the purpose and rationale underlying the ordinance, the ordinance prohibited certain retail businesses and offerings within the OBEOD, including (1) smoke shops and tobacco stores; (2) any merchandising of tobacco paraphernalia or products containing CBD, such as lotions, oils, and food; (3) any merchandising of tobacco products more than that of an incidental nature (i.e., more than 10% of store's inventory); and (4) any merchandising of sexually oriented material (collectively, the prohibited retail uses). *Id.* § 1807.D.

The prohibited retail uses were declared immediately nonconforming upon passage of the ordinance on August 14, 2018. *Id.* § 1807.E. However, the ordinance provided for an amortization period that gave affected businesses until December

31, 2018, to cease the nonconforming part of their retail offerings. *Id.* The ordinance likewise stated that, should a business continue engaging in the prohibited retail uses, it would be subject to suspension or revocation of its business license. *Id.* § 1807.F.

B.

Shortly before the end of the amortization period, on December 19, 2018, appellants filed suit in federal court seeking damages, injunctive relief, and a declaration that the ordinance was unconstitutional.[2] Two days later, appellants filed a motion for a temporary restraining order, but the parties resolved the motion by consent, agreeing the city would enforce the ordinance "through use of [the city's] zoning ordinance administrative procedures."

Six months later, the city's zoning administrator issued individual citations to each of the appellants for continuing to engage in the prohibited retail uses in violation of the ordinance. The zoning administrator also requested that each of the businesses comply with the ordinance. No penalties were imposed on appellants at that time; rather, the letters were merely the zoning administrator's determination that appellants' businesses were nonconforming under the ordinance.

Appellants appealed the zoning administrator 's determination to the city's Board of Zoning Appeals (BZA). At the BZA hearing, the zoning administrator set forth evidence as to how each appellant was engaged in the prohibited retail uses, submitting photographs of appellants' stores and merchandise. Appellants' only

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[2] The federal lawsuit alleged the ordinance amounted to an unconstitutional taking and violated appellants' rights to free speech, due process, and equal protection. Eventually, the federal court dismissed appellants' due process claim, citing the *Burford* abstention doctrine. *See Burford v. Sun Oil Co.*, 319 U.S. 315 (1943); *Quackenbush v. Allstate Ins. Co.*, 517 U.S. 706, 726–27 (1996) (explaining the *Burford* abstention doctrine allows a federal court to dismiss a case "only if it presents difficult questions of state law bearing on policy problems of substantial public import whose importance transcends the result in the case then at bar, or if its adjudication in a federal forum would be disruptive of state efforts to establish a coherent policy with respect to a matter of substantial public concern" (citation omitted) (internal quotation marks omitted)). The federal court also dismissed the takings claim without prejudice, finding the claim was not yet ripe. The court stayed the remaining claims (free speech and equal protection) pending resolution of this state court proceeding.

witness, Tim Wilkes, conceded each of appellants' stores was engaged in one or more of the prohibited retail uses. Nonetheless, appellants requested the BZA either declare the ordinance unconstitutional or grant variances to appellants so that they could continue engaging in the prohibited retail uses. Ultimately, the BZA found (1) it did not have jurisdiction to declare the ordinance unconstitutional;[3] (2) it could not grant a use variance because it would allow the continuation of a use not otherwise allowed in the OBEOD;[4] and (3) appellants' businesses were engaged in one or more of the prohibited retail uses.

Appellants appealed the BZA's decision to the circuit court, but the circuit court affirmed the BZA's decision and found meritless appellants' twenty-five grounds for challenging the ordinance. In relevant part, the circuit court held the boundaries of the OBEOD were not arbitrary and capricious, citing to the city council's extensive recitation of the rationale for adopting the OBEOD and locating the boundaries where it did. *See* Myrtle Beach, S.C., Code of Ordinances app. A § 1807.A. The circuit court also found that whether the ordinance promoted the public welfare was "fairly debatable." In support, the circuit court cited to the zoning administrator's testimony regarding a number of complaints he had received regarding the sale of tobacco paraphernalia and sexually oriented merchandise in the historic downtown where there was a high level of pedestrian traffic by families with young children. The court thus concluded appellants had failed to meet their burden to show the ordinance was unconstitutional.

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[3] *See* S.C. Code Ann. § 6-29-800(E) (Supp. 2022) (explaining that in exercising its statutory authority, as outlined in subsection (A), the BZA "has all the powers of the officer from whom the appeal is taken"). No one contends the zoning administrator here—the "officer from whom the appeal [was] taken"—would have had the authority to declare a zoning ordinance unconstitutional.

[4] *See* S.C. Code Ann. § 6-29-800(A)(2)(d)(i) ("The [BZA] may not grant a variance, the effect of which would be to allow the establishment of a use not otherwise permitted in a zoning district, to extend physically a nonconforming use of land or to change the zoning district boundaries shown on the official zoning map. The fact that property may be utilized more profitably, if a variance is granted, may not be considered grounds for a variance. Other requirements may be prescribed by the zoning ordinance.").

Appellants directly appealed to this Court pursuant to Rule 203(d)(1)(A)(ii), SCACR, raising five issues challenging the validity of the ordinance on both procedural and constitutional grounds.[5] We address each in turn.

II.

"A municipal ordinance is a legislative enactment and is presumed to be constitutional." *Town of Scranton v. Willoughby*, 306 S.C. 421, 422, 412 S.E.2d 424, 425 (1991) (per curiam); *see also Rush v. City of Greenville*, 246 S.C. 268, 276, 143 S.E.2d 527, 531 (1965) ("There is a strong presumption in favor of the validity of municipal zoning ordinances, and in favor of the validity of their application . . . ."). Courts must make every presumption in favor of the constitutionality of a legislative enactment. *McMaster v. Columbia Bd. of Zoning Appeals*, 395 S.C. 499, 504, 719 S.E.2d 660, 662 (2011) (per curiam) (quoting *City of Rock Hill v. Harris*, 391 S.C. 149, 154, 705 S.E.2d 53, 55 (2011)). Thus, courts may only declare a municipal ordinance unconstitutional "when its invalidity appears so clearly as to leave no room for reasonable doubt that it violates some provision of the Constitution." *Id.* at 504, 719 S.E.2d at 663 (quoting *Harris*, 391 S.C. at 154, 705 S.E.2d at 55).

More specifically, "The Court will not overturn the action of the City if the decision is fairly debatable because the City's action is presumed to have been a valid exercise of power and it is not the prerogative of the Court to pass upon the wisdom of the decision." *Rushing v. City of Greenville*, 265 S.C. 285, 288, 217 S.E.2d 797, 799 (1975); *see also Rush*, 246 S.C. at 276, 143 S.E.2d at 531 (explaining the Court must exercise "carefully and cautiously" its power to declare a challenged ordinance invalid on the basis that the ordinance unreasonably impaired or destroyed a constitutional right). Thus, when a local city council enacts a zoning ordinance after considering all of the relevant facts, the Court should not disturb the council's action unless the council's findings were arbitrary and capricious or had no reasonable relation to a lawful purpose. *Rush*, 246 S.C. at 276, 143 S.E.2d at 531; *Rest. Row Assocs. v. Horry Cnty.*, 335 S.C. 209, 216, 516 S.E.2d 442, 446 (1999); *see also Willoughby*, 306 S.C. at 422, 412 S.E.2d at 425 ("The exercise of police power under a municipal ordinance is subject to judicial correction only if the action is arbitrary and has no reasonable relation to a lawful purpose." (citation omitted)); *Aakjer v. City of Myrtle Beach*, 388 S.C. 129, 133, 694 S.E.2d 213, 215 (2010) ("This State's

[5] To be more precise, appellants' brief listed eleven issues on appeal, but because some of the issues overlapped, we have condensed them to five.

constitution provides that the powers of local governments should be liberally construed." (citing S.C. Const. art. VIII, § 17)).

The burden of establishing the invalidity of a zoning ordinance is on the party attacking it to establish by clear and convincing evidence that the acts of the city council were arbitrary, unreasonable, and unjust. *Bibco Corp. v. City of Sumter*, 332 S.C. 45, 52, 504 S.E.2d 112, 116 (1998) (citing *Willoughby*, 306 S.C. at 422, 412 S.E.2d at 425); *Rush*, 246 S.C. at 276, 143 S.E.2d at 531.

III.

Appellants first argue the ordinance is defective as a matter of law because it was not adopted following the procedure set forth in section 5-7-270 of the South Carolina Code. *See* S.C. Code Ann. § 5-7-270 (2004) (requiring generally that municipal ordinances be "read two times on two separate days with at least six days between each reading" prior to being adopted and having the force of law). Specifically, appellants contend the versions of the ordinance introduced for the first and second readings were so different from one another that the city council was required to conduct a third reading prior to enacting the ordinance. We disagree.

Because appellants failed to timely challenge the efficacy of the two readings of the ordinance, they are statutorily barred from raising this issue. Section 6-29-760(D) of the South Carolina Code (2004) requires parties to challenge the validity of an ordinance within sixty days of the decision of the governing body, provided "there has been substantial compliance with the notice requirements of this section or with established procedures of the governing authority or the planning commission." The ordinance was formally adopted and went into effect upon the second reading on August 14, 2018. Appellants did not file their federal suit or take any other formal action to challenge the validity of the ordinance until December 19, 2018—well over sixty days later. As a result, appellants can no longer challenge the validity of the ordinance under section 5-7-270. *See Quail Hill, L.L.C. v. Cnty. of Richland*, 379 S.C. 314, 320–21, 665 S.E.2d 194, 197 (Ct. App. 2008) (holding a challenge to the validity of the enactment of a county ordinance was untimely because the challenge was made long after the sixty-day window had closed), *aff'd in part on this ground and rev'd in part on other grounds*, 387 S.C. 223, 692 S.E.2d 499 (2010).

Even were we to overlook the untimeliness of appellants' challenge and address the merits of their argument, appellants' suggestion that the two readings of the ordinance were vastly different is simply untrue. While the city council expanded the "purpose and intent" section of the original version of the ordinance and added a

number of definitions, the prohibited retail uses in the final version were identical to those in the original version. If anything, the amendments merely better-defined the terms used to describe actions or merchandise that qualified as a prohibited retail use. There is no basis on which to conclude the amendments to the ordinance were so drastic as to trigger the need for a new first reading. *Cf. Brown v. Cnty. of Charleston*, 303 S.C. 245, 247, 399 S.E.2d 784, 785–86 (Ct. App. 1990) (explaining the purpose of providing public notice related to zoning amendments is to satisfy the "general principles of due process that require notice which fairly and reasonably apprises those whose rights may be affected of the nature and character of the action proposed"). We therefore affirm the circuit court's decision as to this issue.

IV.

Appellants next argue the ordinance violates the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution. Specifically, appellants broadly contend the creation of the OBEOD was unfair to them because they cannot sell certain merchandise that similar stores can continue selling in other areas of the city. Appellants therefore claim the creation of the OBEOD was arbitrary and capricious because it treated them differently from other, similarly situated businesses throughout the city. Appellants point to three specific concerns as evidencing the arbitrary and capricious nature of the ordinance: (1) city council reverse spot zoned the OBEOD; (2) the boundaries of the OBEOD are not drawn in straight lines or with any discernable reasoning behind them; and (3) there is no evidence that the prohibited retail uses affect public safety. We will address each of these concerns below.[6]

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[6] Amongst their eleven issues on appeal, appellants raise two takings claims. The first is a traditional takings claim arising under the Fifth Amendment to the United States Constitution, which we address further below. The second is a claim that because the ordinance violated appellants' right to equal protection, the ordinance took their business without just compensation. Appellants' Br. at 10. We find such an argument meritless and do not address it further other than to note that takings and equal protection are two distinct constitutional doctrines with wholly separate requirements and bodies of case law.

A.

Appellants first contend the ordinance constitutes impermissible reverse spot zoning—a novel issue in South Carolina. We disagree.

There are two types of spot zoning. Traditional spot zoning occurs when a small parcel of land is singled out for a use classification different from that of the surrounding area, for the benefit of the parcel's owner(s) and to the detriment of others. *Bob Jones Univ. v. City of Greenville*, 243 S.C. 351, 361, 133 S.E.2d 843, 848 (1963); *see also id.* at 362, 133 S.E.2d at 848 (noting it is "not [] considered [] spot zoning where the proposed change is from one use to another and there was already a considerable amount of property adjoining the property sought to be reclassified falling within the proposed [new use] classification" (citing *Eckes v. Bd. of Zoning Appeals*, 121 A.2d 249 (Md. 1956))). Typically, traditional spot zoning singles out and reclassifies a relatively small tract that is owned by a single person and surrounded by a much larger, uniformly zoned area, such that the small tract is relieved from restrictions to which the rest of the area is subjected. *See Talbot v. Myrtle Beach Bd. of Adjustment*, 222 S.C. 165, 175, 72 S.E.2d 66, 71 (1952) (citation omitted); Mark S. Dennison, Annotation, *Determination whether zoning or rezoning of particular parcel constitutes illegal spot zoning*, 73 A.L.R.5th 223 (1999) ("The zoning or rezoning of a single tract of land, usually small in size, such that it is zoned differently from surrounding property may be invalidated as illegal spot zoning.").

In contrast, reverse spot zoning occurs when a zoning ordinance restricts the use of a property when virtually all the property's adjoining neighbors are not subject to the use restriction. 83 Am. Jur. 2d *Zoning and Planning* § 89 (2013). Oftentimes, reverse spot zoning occurs where a zoning "island" develops as the result of a municipality's failure to rezone a portion of land to bring it into conformity with similar surrounding parcels that are otherwise indistinguishable. *In re Realen Valley Forge Greenes Assocs.*, 838 A.2d 718, 731 (Pa. 2003); *Palmer Trinity Priv. Sch., Inc. v. Vill. of Palmetto Bay*, 31 So. 3d 260, 262 (Fla. Dist. Ct. App. 2010) ("The properties surrounding Parcel B were all originally zoned AU or EU-2, but they have been changed to less restrictive zoning classifications as the agricultural character of the area has changed over the years.").

Thus, spot zoning may arise in two ways: (1) by an affirmative legislative act that affects the parcel at issue (traditional spot zoning); or (2) by changes to the zoning map around the parcel at issue (reverse spot zoning). *See* 39 Am. Jur. Proof of Facts 3d 433, § 3 (West 2023) (describing types of spot zoning challenges).

Spot zoning is not impermissible per se in South Carolina. Rather, as this Court has previously explained,

> [W]here an ordinance establishes a small area within the limits of a zone in which are permitted uses different from or inconsistent with those permitted within the larger, such "spot zoning" is invalid where the ordinance does not form a part of a comprehensive plan of zoning or is for mere private gain as distinguished from the good of the common welfare.

Talbot, 222 S.C. at 175, 72 S.E.2d at 71 (citation omitted); *see also id.* at 175, 72 S.E.2d at 70 (cautioning that courts should not "become city planners but [should only] correct injustices when they are clearly shown to result from the municipal action"). Thus, when the Court finds an ordinance constitutes spot zoning, "the appropriate analysis is to closely scrutinize the following factors: (1) the adherence of the zoning to the City's comprehensive plan; and (2) promotion of the good of the common welfare but to only correct injustices which are clearly shown." *Knowles v. City of Aiken*, 305 S.C. 219, 223, 407 S.E.2d 639, 642 (1991); *see also* 39 Am. Jur. Proof of Facts 3d 433 ("Legal challenges to [spot zoning] are generally based on allegations and proof of discriminatory treatment of a single landowner, inconsistency with the comprehensive plan, incompatibility with neighboring uses, and harm to the general welfare of the community.").

Here, despite Appellants' contentions, the creation of the OBEOD does not fit within the accepted definition of reverse spot zoning. The prohibited retail uses in the OBEOD were not the result of a zoning "island" that developed as the surrounding area was rezoned while the OBEOD was left behind; rather, the OBEOD was created by an affirmative legislative act by the city. In other words, if anything, the creation of the OBEOD more closely resembles traditional spot zoning.

However, we find it equally doubtful the creation of this overlay district constituted traditional spot zoning. The OBEOD is a fairly large area: it overlays at least twenty distinct zones; it comprises an approximate rectangle measuring slightly less than two miles by one-quarter mile; and it encompasses over fifty city blocks which are, of course, further divided into a significant number of individual properties owned by separate property owners. It goes without saying that creating an overlay zoning district over such a large, diverse area is distinct from the typical, traditional spot zoning factual scenario. *See Talbot*, 222 S.C. at 175, 72 S.E.2d at 71 (noting spot zoning occurs when an ordinance affects a small area within the limits of a single zone); Dennison, *supra*, 73 A.L.R.5th at 223 (explaining spot zoning involves a

single, small tract of land); 39 Am. Jur. Proof of Facts 3d 433 (stating spot zoning challenges generally require proof the ordinance has affected a single landowner).

Even were we to accept appellants' argument that the creation of the OBEOD constituted spot zoning in some fashion, we find that argument unavailing. Specifically, applying the test outlined in *Knowles* and *Talbot*, we find any spot zoning caused by the ordinance was legally permissible. *See Knowles*, 305 S.C. at 223, 407 S.E.2d at 642; *Talbot*, 222 S.C. at 175, 72 S.E.2d at 70. First, the ordinance was consistent with the city's comprehensive plan. Second, as we discuss further below, it is "fairly debatable" that city council enacted the ordinance to promote the public welfare. *See Rushing*, 265 S.C. at 288, 217 S.E.2d at 799 (explaining the Court will not overturn a municipality's action if the decision is "fairly debatable" because the action is presumed to be a valid exercise of power, and it is not the Court's prerogative to weigh in on the wisdom of the decision). Third, the ordinance did not result in clear injustice to appellants: even after the creation of the OBEOD, appellants retained ownership of their property—the real estate and the merchandise—and they presented no evidence that they could not pivot to another business model. *See Helena Sand & Gravel, Inc. v. Lewis & Clark Cnty. Plan. & Zoning Comm'n*, 290 P.3d 691, 699–700 (Mont. 2012) (applying the state's traditional spot zoning test under a similar factual scenario, rather than some separate reverse-spot-zoning test, and concluding that because the zoning regulation was consistent with the county's comprehensive plan, it was not impermissible spot zoning); *cf.* S.C. Code Ann. § 6-29-800(A)(2)(d)(i) (noting the BZA may not grant a variance if the effect of the variance would be to allow a use not otherwise permitted in a zoning district, and "[t]he fact that property may be utilized more profitably, if a variance is granted, may not be considered grounds for a variance"). We therefore reject appellants' equal protection challenge on the basis of impermissible spot zoning.

B.

Second, appellants contend the OBEOD's boundaries are irrational and, to be constitutional, must ban the prohibited retail uses throughout the entire city. We disagree.

The Equal Protection Clause of the Fourteenth Amendment to the United States Constitution provides, "No State shall . . . deny to any person within its jurisdiction the equal protection of the laws." U.S. Const. amend. XIV, § 1. Where, as here, "there is no suspect or quasi-suspect class and no fundamental right is involved,

zoning ordinances should be tested under the 'rational basis' standard." *Bibco Corp.*, 332 S.C. at 52, 504 S.E.2d at 116.

Under rational basis review, the Equal Protection Clause is satisfied so long as (1) there is a plausible policy reason for the classification; (2) the facts on which the classification is based rationally may have been considered to be true by the decision maker; and (3) the relationship of the classification to the goal is not so attenuated as to render the distinction arbitrary or irrational. *Nordlinger v. Hahn*, 505 U.S. 1, 11 (1992); *see also Denene, Inc. v. City of Charleston*, 359 S.C. 85, 91, 596 S.E.2d 917, 920 (2004) ("Under the rational basis test, the requirements of equal protection are satisfied when: (1) the classification bears a reasonable relation to the legislative purpose sought to be affected; (2) the members of the class are treated alike under similar circumstances and conditions; and[] (3) the classification rests on some reasonable basis."). A party challenging a legislative enactment under rational basis review "must negate every conceivable basis which might support" the enactment and, therefore, has a "steep hill to climb." *Bodman v. State*, 403 S.C. 60, 69–70, 742 S.E.2d 363, 367–68 (2013) (quoting *Lee v. S.C. Dep't of Nat. Res.*, 339 S.C. 463, 470 n.4, 530 S.E.2d 112, 115 n.4 (2000)) (internal quotation marks omitted)).

Here, the ordinance explicitly states the city council enacted the ordinance to foster a more "family friendly" atmosphere in the historic downtown area and encourage more tourism by families. *See* Myrtle Beach, S.C., Code of Ordinances app. A § 1807.A. The zoning administrator testified that he had received complaints from families about the prohibited retail uses. The city council found the prohibited retail uses "repelled" families from the area. We find it is, at the very least, "fairly debatable" that prohibiting the sale of sexually oriented merchandise and tobacco paraphernalia would encourage a more "family friendly" atmosphere in the historic downtown area. *See Rushing*, 265 S.C. at 288, 217 S.E.2d at 799 (stating the Court should not overturn a municipality's decision if the action is "fairly debatable").

Moreover, the zoning administrator stated the boundaries for the OBEOD corresponded with the boundaries of the historic downtown area of the city as much as was practical. Those boundaries were set long ago based on pedestrian travel patterns, family-friendly attractions, and historical uses that preexisted the ordinance. There are two deviations from the historic downtown's boundary lines, both of which have rational explanations. First, the northwestern edge of the OBEOD is shifted half a block away from US-17 Business (the boundary for the historic downtown). Because the OBEOD was created in part to foster more pedestrian traffic in the historic downtown, and because the city council did not

believe families of pedestrians would readily walk along a busy road such as US-17 Business, the city council felt it unnecessary to include that portion of the historic downtown in the OBEOD. Second, and relatedly, the boundary line does not run in a completely straight line along the backs of *every* property that fronts US-17 Business because it cannot: two properties in the OBEOD are large enough that they comprise several city blocks, stretching from US-17 Business all the way to Ocean Boulevard.[7] In those two places, the boundary line runs on the US-17 Business side of the property rather than the ocean-side of the property. The city's decision regarding where to set the boundaries of the OBEOD is certainly not irrational or without basis.

Appellants have failed to show by clear and convincing evidence that the location of or rationale behind the boundaries of the OBEOD is arbitrary and capricious. Consequently, the boundaries of the OBEOD are valid. *See McMaster*, 395 S.C. at 504, 719 S.E.2d at 663 (quoting *Harris*, 391 S.C. at 154, 705 S.E.2d at 55); *Knowles*, 305 S.C. at 224, 407 S.E.2d at 642. As the circuit court found, "Zones must have beginning and terminating points. If the existence of divergent uses across zone boundary lines were taken *per se* as an appropriate basis for a constitutional violation, the entire zone plan in any municipality might well crumble by chain reaction." (Citations omitted.) The disparate treatment of similarly situated businesses on either side of the OBEOD boundary line is not a basis on which to find an equal protection violation. *Cf. Bibco Corp.*, 332 S.C. at 52–54, 504 S.E.2d at 116–17 (finding a zoning ordinance that prohibited mobile homes from some residential districts in the city—but not all—survived rational basis review).

C.

Finally, appellants argue the creation of the OBEOD was arbitrary and capricious because the city did not submit any evidence that the prohibited retail uses impacted public safety. We summarily dismiss this argument, as appellants—not the city—had the burden of proof. *Rush*, 246 S.C. at 276, 143 S.E.2d at 531. The city did not need to submit anything affirmatively proving its policy decision was correct. *Cf. Nordlinger*, 505 U.S. at 11 (noting that the Equal Protection Clause requires only that the legislative fact on which the classification is apparently based rationally *may* have been considered to be true by the governmental decisionmaker). Rather, it was incumbent upon appellants to submit evidence that the city's policy decision was

[7] One property contains Pavilion Park, and the other contains Family Kingdom Amusement Park.

based on a faulty factual premise, and the prohibited retail uses had no impact on public safety. Appellants failed to do so.

Accordingly, we hold appellants have failed to demonstrate the ordinance violated their right to equal protection, and we affirm the circuit court's decision on this basis.

V.

Next, appellants raise two due process arguments. First, appellants argue the ordinance does not explicitly provide for a hearing in which an affected vendor could challenge the zoning administrator's finding that certain merchandise fits within the ordinance's definition of sexually oriented merchandise. Second, appellants contend the ordinance imposes an arbitrary and unreasonable amortization period. We disagree with both arguments.

We reject appellants' first argument as it is based on a faulty factual premise. Rather, section 6-29-800(A)(1) of the South Carolina Code explicitly provides the BZA has the authority to hear any appeal "where it is alleged there is error in . . . [a] determination made by an administrative official in the enforcement of the zoning ordinance." Section 6-29-800(E) additionally provides the BZA "has all the powers of the officer from whom the appeal is taken" and, therefore, may determine—just as the zoning administrator does in the first instance—whether the challenged merchandise fits within the ordinance's definition of "sexually oriented merchandise." Further, as occurred here, should an affected property owner disagree with the BZA's decision, it can appeal the decision to the circuit court and, if necessary, this Court.[8]

Turning to appellants' second due process argument, we find any contention that the amortization period was too draconian is moot. *See Curtis v. State*, 345 S.C. 557, 567, 549 S.E.2d 591, 596 (2001) ("An appellate court will not pass on moot and academic questions or make an adjudication where there remains no actual controversy. . . . A case becomes moot when judgment, if rendered, will have no practical legal effect upon the existing controversy." (cleaned up)). Any attempts by the city to enforce the ordinance and actually impose the provided-for civil penalties were stymied by the pendency of this appeal. As a result, appellants have had nearly

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[8] Of course, here, appellants conceded they were engaged in the prohibited retail uses, so there would be no need for an additional hearing challenging the determination of the zoning administrator.

five years to come into compliance with the ordinance and, apparently, have failed to do so. We cannot say an effective five-year amortization period is per se unreasonable.

We therefore reject both of appellants' due process claims.

VI.

Appellants additionally claim the ordinance effects a taking of their property without just compensation, specifically citing the three-factor test set forth by the United States Supreme Court in *Penn Central Transportation Co. v. City of New York*, 438 U.S. 104, 124 (1978) (explaining that, in regulatory takings cases, courts should examine (1) the economic impact of the regulation on the affected property; (2) the extent to which the regulation interfered with the property owner's investment-backed expectations; and (3) the character of the government action). We disagree.

Takings claims are "essentially ad hoc, factual inquiries" that "depend[] largely upon the particular circumstances in that case." *Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg'l Plan. Agency*, 535 U.S. 302, 322, 336 (2002) (cleaned up); *see also Dunes W. Golf Club, L.L.C. v. Town of Mt. Pleasant*, 401 S.C. 280, 314, 737 S.E.2d 601, 619 (2013) (explaining the question of whether a taking has occurred is a question of law that this Court must review de novo (citations omitted)). Appellants, however, have not developed any of the facts necessary to support a takings claim. For example, they do not quantify the economic impact of the ordinance on their properties—the first *Penn Central* factor. *See Penn Cent.*, 438 U.S. at 124. Rather, appellants merely claim the impact is a "significant amount" that is "dire" and "severe."[9]

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[9] This lack of specificity stands in stark contrast to other takings cases, where parties typically quibble over the appropriate numbers to enter into the takings fraction, as well as the exact percentage necessary to amount to an unconstitutional taking. *See, e.g.*, *Murr v. Wisconsin*, 137 S. Ct. 1933, 1941 (2017) (explaining the parties submitted competing appraisals for the value of the affected properties, including figures corresponding to the values of the properties with and without the challenged regulation); *Lingle v. Chevron U.S.A., Inc.*, 544 U.S. 528, 534 (2005) (discussing the exact figures corresponding to the impact of the challenged regulation on each of sixty-four affected properties owned by the claimant); *Tahoe-Sierra Pres. Council*, 535 U.S. at 302, 316 n.12 (involving a dispute over how to define and calculate the denominator of the takings fraction, and detailing the average values of the over-400 affected properties); *Palazzolo v. Rhode Island*, 533 U.S. 606, 616 (2001)

We are left to speculate about the facts necessary to support appellants' takings claim.[10] We therefore reject appellants' claim that the ordinance took their property without just compensation in violation of the Fifth Amendment to the United States Constitution.

VII.

Finally, appellants claim the ordinance criminalizes the sale of consumer products that are otherwise legal under state law, and it therefore conflicts with—and must be preempted by—the State's criminal laws. This argument, too, rests on a faulty factual premise.

The ordinance does not impose any criminal penalties for continuing to engage in the prohibited retail uses after the amortization period; rather, the penalty provided for in the ordinance is the suspension or revocation of the nonconforming business's business license.[11] Myrtle Beach, S.C., Code of Ordinances app. A § 1807.F. Thus, the ordinance does not criminalize the sale of legal products in contravention of the State's criminal laws. *Compare, e.g., Foothills Brewing Concern, Inc. v. City of Greenville*, 377 S.C. 355, 660 S.E.2d 264 (2008) (upholding the validity of a municipal ordinance banning smoking in bars and restaurants despite the fact that smoking was legal throughout the State, and finding significant the fact that the no-smoking ordinance imposed only civil penalties), *with Beachfront Ent., Inc. v. Town*

(explaining the plaintiff in a takings action submitted an appraiser's report to quantify the amount of damages sought).

[10] In fact, appellants make no argument at all regarding the second and third *Penn Central* factors, i.e., the extent to which the ordinance impacted their investment-backed expectations or the character of the government action. We therefore find appellants have abandoned any argument regarding those two factors. *See Video Gaming Consultants, Inc. v. S.C. Dep't of Revenue*, 342 S.C. 34, 42 n.7, 535 S.E.2d 642, 646 n.7 (2000) (stating an issue is deemed abandoned if a party fails to make an argument as to the merits of the issue).

[11] We note appellants did not specify from which section of the Myrtle Beach Code of Ordinances they believed the criminal penalty arose. Thus, to the extent appellants believed the criminal penalty arose from another ordinance distinct from the ordinance at issue here (Ordinance 1807), we find that portion of their argument abandoned.

of Sullivan's Island, 379 S.C. 602, 666 S.E.2d 912 (2008) (striking down a municipal ordinance banning smoking in the workplace because it imposed significant criminal penalties for violations and, therefore, conflicted with State law that otherwise allowed smoking in the workplace). We therefore reject this argument as a basis on which to find the ordinance invalid.

VIII.

After examining the host of appellants' constitutional and procedural challenges to the ordinance, we hold the ordinance was a valid exercise of the city's police powers. *See Rush*, 246 S.C. at 276, 143 S.E.2d at 530–31 ("The authority of a municipality to enact zoning ordinances, restricting the use of privately owned property[,] is founded in the police power. The governing bodies of municipalities clothed with authority to determine residential and industrial districts are better qualified by their knowledge of the situation to act upon such matters than are the Courts, and they will not be interfered with in the exercise of their police power to accomplish [their] desired end unless there is [a] plain violation of the constitutional rights of [the] citizens."). We therefore affirm the decisions of the circuit court and BZA.

AFFIRMED.

BEATTY, C.J., FEW, JAMES, JJ., and Acting Justice Kaye G. Hearn, concur.

THE STATE OF SOUTH CAROLINA
In The Supreme Court

Braden's Folly, LLC, Respondent,

v.

City of Folly Beach, Appellant.

Appellate Case No. 2022-000020

Appeal from Charleston County
Roger M. Young Sr., Circuit Court Judge

Opinion No. 28148
Heard November 15, 2022 – Filed April 5, 2023

REVERSED AND REMANDED

Danny Calvert Crowe, of Crowe LaFave, LLC, of Columbia; and Joseph C. Wilson IV, of Joseph C. Wilson Law Firm LLC, of Folly Beach, both for Appellant.

Keith M. Babcock, Ariail Elizabeth King, and Joseph B. Berry, all of Lewis Babcock LLP, of Columbia, for Respondent.

JUSTICE KITTREDGE: Respondent Braden's Folly, LLC owns two small, contiguous, developed coastal properties on the northeast end of Folly Beach. The City of Folly Beach amended an ordinance to require certain contiguous properties under common ownership—like those owned by Braden's Folly—to be merged into a single, larger property. The ordinance did not impact the existing uses of Braden's Folly's contiguous lots. Nevertheless, Braden's Folly challenged the

merger ordinance, claiming it had planned to sell one of the developed properties, and that the merger ordinance interfered with its investment-backed expectation under the *Penn Central* test. *See generally Penn Cent. Transp. Co. v. City of N.Y.*, 438 U.S. 104, 124 (1978) (stating in regulatory takings cases, courts must examine the economic impact of the regulation on the property owner's investment-backed expectations, as well as the character of the government action). Folly Beach denied the claim of an unconstitutional regulatory taking. Pursuant to cross-motions for summary judgment, the circuit court agreed with Braden's Folly, finding the merger ordinance effected an as-applied taking of Braden's Folly's beachfront property. Folly Beach appeals from the grant of summary judgment in favor of Braden's Folly. We reverse.

Underlying our application of the *Penn Central* factors is the distinct fragility of Folly Beach's coastline, which is subject to such extreme erosion that the General Assembly exempted Folly Beach from parts of the South Carolina Beachfront Management Act.[1] This exemption gave the city the authority to act in the State's stead in protecting the beach there. As we will describe more fully below, one of Braden's Folly's properties is contributing to worsening erosion rates on Folly Beach and, along with similarly situated properties, is threatening the existence of the entire beach in that area of the state.

Turning to the *Penn Central* test, we hold two of the three factors—the economic impact of the merger ordinance on Braden's Folly and the character of the governmental action—weigh in favor of finding the merger ordinance did not amount to a taking of Braden's Folly's properties. We find the remaining factor—the extent to which the merger ordinance interfered with Braden's Folly investment-backed expectations—does not weigh in favor of either party. Accordingly, we hold Braden's Folly has not suffered a taking under the *Penn Central* test. We therefore reverse and remand to the circuit court for entry of judgment in favor of Folly Beach.

I.

A.

In the 1890s, the United States Army Corps of Engineers (ACOE) constructed jetties in Charleston's harbor in order to protect the oceanic shipping channels.

[1] S.C. Code Ann. §§ 48-39-250 to -360 (2008 & Supp. 2022).

Following construction of the jetties, the sand migration in the area was disrupted, and the erosion rate in Folly Beach increased exponentially as sand left the area and was not replaced.[2]

In response to the high rate of yearly erosion, Folly Beach began engaging in periodic beach renourishment, in which millions of cubic yards of sand would be brought to the area to build the beach vertically upwards by five feet or more. Each renourishment project was funded largely (85%) by the federal government—specifically, the ACOE—in recognition of the fact that the federal government caused much of the erosion by constructing the Charleston jetties.[3]

Nonetheless, the ACOE refused to renourish privately owned property. Therefore, in the early 1990s, Folly Beach secured perpetual easements from all of the oceanfront property owners. In granting the easements, the property owners permanently gave up their right to build oceanward of the perpetual easement line running through their properties.

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[2] After the jetties were built, Folly Beach's yearly rate of erosion increased to nine feet per year. In comparison, other coastal areas in the state experience less than two feet of erosion per year. Chester W. Jackson Jr., *Mapping Coastal Erosion Hazards Along Sheltered Coastlines in South Carolina 1849 to 2015*, Dep't of Health & Env't Control vi (2017), https://scdhec.gov/sites/default/files/docs/HomeAndEnvironment/Docs/Jackson_SCShorelineReport122017.pdf.

[3] As one witness for Folly Beach explained:

> Section 111 of the 1968 River and Harbor Act[, 33 U.S.C. § 426i (2018),] provides authority for the [ACOE] to develop and construct projects for prevention or mitigation of damages caused by Federal navigation work, such as jetties. In 1987, Folly[Beach]'s Section 111 study determined that approximately 57[%] of the erosion of Folly Beach was due to the construction and continued operation of the Charleston Harbor Federal navigation project. As a result of this determination, the cost sharing percentages were adjusted from the standard 65% federal and 35% local to 85[%] federal and 15[%] non-federal (City of Folly Beach).

(Footnote omitted.)

Around that same time, in recognition of the quickly changing beachfront, the General Assembly exempted Folly Beach from part of the requirements of the South Carolina Beachfront Management Act. *See* S.C. Code Ann. § 48-39-290(E). Folly Beach's unique treatment under the Beachfront Management Act extends to three notable areas. First, the South Carolina Department of Health and Environmental Control (DHEC) is typically tasked with redrawing the baseline[4] every seven to ten years based on updated erosion rates. *See* S.C. Code Ann. § 48-39-285. However, in Folly Beach, the baseline was set in 1993 and is not subject to change regardless of any erosion or accretion, no matter how extreme. Second, the State typically strictly regulates any development in the beach area between the baseline and the setback line.[5] However, there is no setback line established in Folly Beach, so the city has the sole discretion to allow all types of development right up to the baseline with no oversight from the State. Finally, in a similar vein, the Beachfront Management Act prohibits oceanfront property owners from building new erosion control structures—or from repairing existing structures damaged greater than 50%—if the structures are located seaward of the setback line.[6] However, because Folly Beach does not have a setback requirement, oceanfront property owners may build new seawalls or repair existing seawalls all the way up to the baseline, so long as the plans are approved by the city.

B.

A portion of the northeast end of Folly Beach has a double row of properties. The "A lots" are directly adjacent to the ocean-side of East Ashley Avenue, and the "B lots"—also known as "super-beachfront" lots—are closest to the ocean. There is

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[4] The baseline is an invisible jurisdictional line typically drawn along the crests of the oceanfront sand dunes, and it serves as the starting point for determining the other jurisdictional line—the setback line—under the Beachfront Management Act. *See* S.C. Code Ann. § 48-39-280.

[5] The setback line "must be established landward of the baseline a distance which is forty times the average annual erosion rate or not less than twenty feet from the baseline . . . ." S.C. Code Ann. § 48-39-280(B); *see also* Jackson, *supra* note 2 (stating the average annual erosion rate for beaches in South Carolina is 1.8 feet per year); S.C. Code Ann. § 48-39-290(B) (setting forth a number of restrictions on development in the area between the baseline and setback line).

[6] *See* S.C. Code Ann. § 48-39-290(B)(2).

no road between the A and B lots, so the B lots are accessible only through the A lots.

Historically, an individual or entity would own an A lot and the contiguous B lot and would transfer the lots to a new owner simultaneously. The B lots—all of which were undeveloped until some twenty years ago—were frequently submerged or, at best, on active beach. Therefore, the B lots typically had little to no independent value[7] and served no purpose other than to provide beach access to the A lots directly adjacent to them.

However, beginning in the mid- to late-1990s, following Folly Beach's first round of beach renourishment, some of the B lots were elevated enough to make development possible. As a result, over the next decade and with Folly Beach's approval, seventeen of the thirty-seven super-beachfront lot owners developed single-family residences on their B lots. Nonetheless, the perpetual easement line runs through the B lots, preventing many B-lot owners from developing their properties and leaving the owners who did develop super-beachfront houses little buildable area to do so.[8]

Due to the high rate of erosion in Folly Beach, the newly renourished B lots were quickly reclaimed by the sea. In response, many of the owners who developed their B lot also built seawalls in front of their super-beachfront houses.[9]

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[7] The B lots were often worth less than $500, and many of the owners voluntarily abandoned their B lot in tax sales. In fact, the only reason the B lots even exist is because in the 1950s, another road was platted and paved in front of the B lots, parallel to East Ashley Avenue. That road has long since been destroyed by the eroding beach and is now permanently lost.

[8] Accordingly, most of the new super-beachfront houses touched the edge of the buildable area on the B lots, with little to no space between the houses and the perpetual easement line. In fact, between beach renourishments, the super-beachfront houses were not infrequently surrounded by the ocean on three sides. Because the ACOE places the renourishment sand all the way up to the perpetual easement line, the vertical rebuilding of the beach occurs within mere feet of the backdoors to these super-beachfront houses.

[9] A few of the super-beachfront houses do not have a seawall. Folly Beach and DHEC often take those unprotected super-beachfront houses "out of service" for renters due to safety concerns, usually related to the failure or overflow of the

Unfortunately, the seawalls did not stop the beach erosion and, instead, exacerbated the erosion problem for neighboring properties with undeveloped B lots and no seawalls. The sand attrition on the neighboring properties turned into areas the ACOE dubbed "blue blobs"—giant depressions that held rain and seawater and spanned the length of multiple properties, even reaching into A lots in some places. Because these blue blob areas were located on private property, they were not repaired by the ACOE or the periodic beach renourishment, nor were the costs to repair the blue blob areas paid for by the federal government. Rather, the repair of the erosion on lots neighboring the super-beachfront properties was required to be paid for entirely by the City of Folly Beach or the owners of the damaged lots. In other words, innocent property owners who had chosen *not* to develop their B lots had to pay for the damage caused by the seawalls of their neighbors' super-beachfront properties.

C.

Each round of beach renourishment in Folly Beach was projected to last for around eight years. However, as the number of super-beachfront houses and associated seawalls increased, so too did the frequency and cost of beach renourishment. As is relevant to this case, the last four rounds of renourishment occurred in 2005, 2007, 2014, and 2018, and the next one is already scheduled for 2024—none of which are eight years apart. As a result, the ACOE threatened to cut off federal funding for the renourishment projects unless Folly Beach stopped allowing super-beachfront lots to be developed and attempted to unwind the existing super-beachfront development. Given the importance of the beach to the local economy, and its inability to pay for the renourishment projects on its own, Folly Beach agreed to do so.

The city took multiple steps to reverse super-beachfront development. For example, it created a Dune Management Area (DMA), which prohibits development within forty feet of the perpetual easement line. The DMA affects all of the B lots. In consequence, the DMA prohibits new development on the B lots and—should any existing super-beachfront houses be more than 50% damaged in a storm or otherwise—prevents repair of the existing structures on the B lots.

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home's unprotected septic system onto active beach. However, even super-beachfront homes with seawalls are occasionally taken out of service for similar reasons, including Braden's Folly's B lot.

Likewise, in April 2019, Folly Beach amended its Code of Ordinances. Notable to this appeal, Folly Beach amended its existing merger ordinance to provide that adjacent lots under common ownership may no longer be sold or developed as separate lots if (1) either lot is undersized[10] and (2) one or both lots touch the baseline.[11] The zoning ordinances allow nonconforming uses to continue on properties affected by the merger ordinance. Likewise, the zoning ordinances prohibit the rebuilding of a nonconforming structure that is damaged or destroyed by more than 50% of its market value.[12] Thus, if an affected property owner had

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[10] Folly Beach's zoning ordinances set the minimum lot size at 10,500 square feet, but a grandfather clause relaxes this restriction for substandard lots that preexisted adoption of the ordinances. Therefore, a number of nonconforming small lots exist in Folly Beach, particularly along the ocean. As we discuss further below, the two lots at issue in this case are both less than 10,500 square feet and, thus, are nonconforming with Folly Beach's zoning ordinances.

[11] Specifically, the newly amended merger ordinance stated, in relevant part:

> (B) *Combination of lots.* If two or more lots of record . . . are in single ownership on or after March 1, 2019, . . . and if all or part of one or more of these lots do not comply with the lot area standards [requiring lots to be a minimum of 10,500 square feet in size] . . . ; and if one or both of these lots are adjacent to . . . [the] Baseline, the lots involved shall be considered to be an individual lot for the purposes of this [zoning ordinance], and no portion of these lots shall be used or sold which do not comply with the lot area standards, nor shall any division of the lots be made that leaves remaining any lot that fails to comply with the lot area standards.

Folly Beach, S.C., Code of Ordinances § 168.04-01 (2022). The prior version of the merger ordinance did not apply unless both commonly owned, undersized lots touched the baseline.

[12] In particular, the reconstruction ordinance provides, in relevant part:

> (A) *More than 50% of pre-damaged market value.* In the event a nonconforming structure is damaged or destroyed, by any means, to the extent of 50% [or more] of its market value prior to such

developed both his A and B lots, and those lots were merged by the amended ordinance, he could continue to use or rent both houses on the merged lot even though the area is zoned single-family residential. This nonconforming use could continue until one of the houses was destroyed beyond 50% of its pre-damaged market value. However, upon a 50% or more destruction of one of the houses, the zoning ordinances would prevent the rebuilding of the damaged structure, instead allowing the existence of only one house on the single, merged lot.[13]

> destruction, such structure shall not be restored unless in conformance with the standards for the zoning district in which it is located . . . .
>
> (B) *Less than 50% of pre-damaged market value*. . . . [If] a nonconforming structure . . . is damaged or destroyed, by any means, to an extent of less than 50% of its market value prior to such damage or destruction, it may be restored to its pre-damaged state provided reconstruction is initiated within 24 months and provided the reconstruction complies with all other city ordinances as well as all state and federal laws and does not create any new nonconformities.

Folly Beach, S.C., Code of Ordinances § 168.03-05 (2022).

[13] In tandem with its creation of the DMA and amendment of the merger ordinance, Folly Beach began more aggressively applying the avulsion doctrine. *See Severance v. Patterson*, 370 S.W.3d 705, 722 (Tex. 2012) ("Courts generally adhere to the principle that a riparian or littoral owner acquires or loses title to the land gradually or imperceptibly added to or taken away from their banks or shores through erosion, the wearing away of land, and accretion, the enlargement of the land. . . . Avulsion, by contrast, as derived from English common law, is the sudden and perceptible change in land and is said not to divest an owner of title." (cleaned up)). As a result, Folly Beach filed suit against any B-lot owner who was attempting to develop his property in the near future. In particular, Folly Beach sought to prohibit B-lot owners from building on the portions of their lots that resulted from avulsion (i.e., the beach renourishment) because that land was part of the active beach and, thus, was owned by the State and protected by the public trust doctrine. The circuit court granted the property owners' motion to dismiss the lawsuit in May 2020. Folly Beach's appeal of that decision is pending in the court of appeals at this time.

With this background in mind, we now turn to the particular facts of this case.

II.

A.

Braden's Folly owns adjacent lots (Lot A and Lot B) on East Ashley Avenue. Both Lots are very small: Lot A is 8,377 square feet, and Lot B is 3,808 square feet.[14] Pursuant to Folly Beach's local zoning ordinances, all lots must be at least 10,500 square feet. Because Lots A and B preexisted Folly Beach's zoning ordinances, their sizes were grandfathered in upon passage of the zoning laws but are nonetheless classified as nonconforming.

When Braden's Folly acquired the Lots in 1999, there was a small house on Lot A, and Lot B was undeveloped because it was either underwater or part of the active beach. Following a beach renourishment in 2005, Lot B became developable because it had been transformed into mostly sandy beach. Therefore, between 2006 and 2007, Braden's Folly received building permits from Folly Beach and constructed two single-family residences—a larger, more modern one on Lot A and a smaller one on Lot B—for a total cost of $1.1 million.[15]

According to Braden's Folly, it had always intended to keep one of the Lots and sell the other—whichever of Lot A or B received the highest offer—in order to pay for the construction costs of the two houses. However, construction on the Lots finished in 2007 during the housing market collapse and Great Recession, which made selling either of the Lots financially unfeasible at that time. Nonetheless, even after the housing market recovered, Braden's Folly did not place the Lots on the market, continuing to use them for family vacations and as rental properties

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[14] To be more precise, Lot B is approximately the same size as Lot A. However, taking the perpetual easement line into account, the buildable area on Lot B is only 3,808 square feet.

[15] Lot A did not have independent access to the beach except for through Lot B. Likewise, Lot B did not have independent access to a road or room for a septic system. One had to cross Lot A to access Lot B. As a result, while the homes were being constructed, Braden's Folly granted itself a series of purported easements across the Lots to provide beach access for Lot A and road access and septic lines for Lot B. We discuss the efficacy of these easements in section IV.D of the opinion.

that grossed an average of $117,000 per year combined. It was not until February 2018 that Braden's Folly finally put the houses on the market, listing Lot A for $1.3 million and Lot B for $1.2 million.

One year later, upon the amendment of Folly Beach's merger ordinance in April 2019, Lots A and B were legally combined or "merged" into a single lot. In May 2019, Folly Beach sent a letter to Braden's Folly requesting it stop marketing the Lots separately and advising it to inform any prospective purchasers of the merger ordinance. Braden's Folly did not respond, continuing to list the Lots separately with no indicia either Lot was impacted by the merger ordinance.

Eventually, in August 2019, Braden's Folly received its first offer: a $1.1 million offer to purchase Lot A. Braden's Folly did not accept the offer, and the prospective purchasers declined to pursue the property further after learning of the existence of the merger ordinance and its impact on Lot A. Braden's Folly's realtor thereafter advised Braden's Folly to "[u]se this [offer] contract to go after the city. You might get your money and not have to sell" either Lot.

Four months later, not having received a single other offer, Braden's Folly filed suit against Folly Beach, claiming its inability to sell was due to the existence of the merger ordinance. According to Braden's Folly, the merger ordinance had upset its reasonable, investment-backed expectation under the *Penn Central* test and amounted to an unconstitutional taking.

Subsequently, in October 2020, Braden's Folly received a second offer to purchase Lot A for $1.2 million but instructed its realtor to decline the offer as it was "unable to accept due to the City's [merger] ordinance." Upon learning of the second offer, Folly Beach informed Braden's Folly it objected "in the strongest terms to the continued marketing of these properties separately during the pendency of this lawsuit." Braden's Folly again ignored the city's correspondence. Rather, despite receiving only two offers in nearly two-and-a-half years, Braden's Folly inexplicably raised the listing price for Lot B to $1.25 million.

In December 2020, Braden's Folly received a third offer, this time to purchase Lot B for $1.2 million. When Braden's Folly informed the prospective purchaser (Christopher Bonner) of the merger ordinance and pending litigation, Bonner stated he did not care whether the properties were merged and "would still like to get the [Lots] under contract." Therefore, on January 4, 2021, Bonner offered $2.2 million for Lots A and B together. The offer did not have an expiration date, but

Braden's Folly did not respond, later claiming it had no intention of selling during litigation or "below market value."

Having received no response, one week later, on January 11, 2021, Bonner unilaterally raised his offer to $2.55 million for Lots A and B—full asking price. Again, Braden's Folly did not respond to the offer. That same day, the listing for Lot A was removed from the internet. Three days later, the listing for Lot B naturally expired and was removed from the internet.

For the next two weeks, Bonner repeatedly attempted to get a response from Braden's Folly, reiterating his $2.55 million offer on numerous occasions. Meanwhile, an unrelated property went on the market just down the street from Lots A and B, and Bonner purchased that lot instead.

On January 28, 2021, after Bonner had acquired the other nearby lot, Braden's Folly reached out to Bonner, purportedly attempting to accept Bonner's $2.55 million offer for both Lots. However, Bonner replied that he had purchased another property nearby and no longer had as high a motivation to purchase Lots A and B. Because Bonner now intended Lots A and B to be purely investment properties, rather than ones he would live on with his family, he lowered his offer for Lots A and B to $2 million. Braden's Folly countered, stating it would accept $2.6 million (i.e., higher than Bonner's initial offer when he was a more motivated buyer). Bonner declined to purchase the Lots at that price. Because the Lots have remained off the market since January 2021, Braden's Folly has not received any further offers to purchase Lots A and B, whether merged or separate.

B.

In the interim, the pending takings lawsuit progressed, and Braden's Folly and Folly Beach filed cross-motions for summary judgment. The circuit court ultimately granted summary judgment to Braden's Folly, finding the merger ordinance constituted an as-applied taking because it unreasonably interfered with Braden's Folly's investment-backed expectation to sell the Lots separately. The circuit court held a property owner's reasonable investment-backed expectations are defined at the time the investment is made, and Braden's Folly intended to sell one of the Lots when it constructed the houses in 2006 and 2007. Likewise, the circuit court found the merger ordinance had an impermissibly detrimental economic impact on the value of the Lots, citing an alleged $508,000 market value loss calculated by an appraiser hired by Braden's Folly during litigation. Lastly, the circuit court found the character of the merger ordinance was akin to a classic

taking, explaining that, while merging "undeveloped or partially developed properties may not amount to a regulatory taking, . . . forcing two single-family residential houses to be merged into one property amounts to a taking."[16] The circuit court therefore concluded that "all" of the *Penn Central* factors weighed in favor of Braden's Folly, and that the merger ordinance as-applied to the Lots amounted to a regulatory taking.

Folly Beach directly appealed to this Court pursuant to Rule 203(d)(1)(A)(ii), SCACR (stating the notice of appeal should be directly filed with the clerk of this Court if the appeal involves a constitutional challenge to a municipal ordinance).

III.

In reviewing the grant of summary judgment, this Court applies the same standard as the circuit court. *Byrd v. City of Hartsville*, 365 S.C. 650, 656, 620 S.E.2d 76, 79 (2005). Summary judgment is appropriate "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Rule 56(c), SCRCP. The Court must view the evidence and all reasonable inferences taken from it in the light most favorable to the non-moving party. *Osborne v. Adams*, 346 S.C. 4, 7, 550 S.E.2d 319, 321 (2001).

The question of whether a taking has occurred is a question of law that this Court reviews de novo. *Dunes W. Golf Club, L.L.C. v. Town of Mt. Pleasant*, 401 S.C. 280, 314, 737 S.E.2d 601, 619 (2013) (first citing *Carolina Chloride, Inc. v. Richland Cnty.*, 394 S.C. 154, 171, 714 S.E.2d 869, 877 (2011); and then citing *Ex parte Brown*, 393 S.C. 214, 224, 711 S.E.2d 899, 904 (2011)).

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[16] While the amended ordinance merged a number of lots, in many cases, one or both of the lots merged was undeveloped. Moreover, some of the developed B lots are owned by a different entity than the A lots. Because those adjacent A and B lots are not contiguous *and* owned by the same entity, the merger ordinance does not apply to them. There are only five developed B lots owned by the same entity as the A lots, so aside from Braden's Folly, there are only four other property owners for whom the merger ordinance merged two *developed* lots. None of those property owners sued Folly Beach over the merger ordinance.

IV.

The Takings Clause of the Fifth Amendment to the United States Constitution provides that private property shall not "be taken for public use, without just compensation." U.S. Const. amend. V; *see Chi., Burlington & Quincy R.R. v. City of Chi.*, 166 U.S. 226, 239 (1897) (making the Takings Clause applicable to the States via the Due Process Clause of the Fourteenth Amendment).[17] "As its text makes plain, the Takings Clause does not prohibit the taking of private property, but instead places a condition on the exercise of that power," namely, the payment of just compensation to the affected property owner. *Lingle v. Chevron U.S.A. Inc.*, 544 U.S. 528, 536 (2005) (quoting *First Eng. Evangelical Lutheran Church of Glendale v. Cnty. of L.A.*, 482 U.S. 304, 314 (1987)) (internal quotation marks omitted).

"The paradigmatic taking requiring just compensation is a direct government appropriation or physical invasion of private property." *Id.* at 537. However, beginning with its decision in *Pennsylvania Coal v. Mahon*, 260 U.S. 393 (1922), the United States Supreme Court recognized that "government regulation of private property may, in some instances, be so onerous that its effect is tantamount to a direct appropriation or ouster—and that such 'regulatory takings' may be compensable under the Fifth Amendment." *Lingle*, 544 U.S. at 538; *see also Byrd*, 365 S.C. at 656, 620 S.E.2d at 79 ("An inverse condemnation may result from the government's physical appropriation of private property, or it may result from government-imposed limitations on the use of private property.").

The question of what constitutes a regulatory taking for purposes of requiring just compensation has proven considerably difficult for courts to answer. *Penn Cent.*, 438 U.S. at 123. In *Mahon*'s "storied but cryptic formulation, 'while property may be regulated to a certain extent, if [the] regulation goes too far it will be recognized as a taking.'" *Lingle*, 544 U.S. at 538 (quoting *Mahon*, 260 U.S. at 415). "The rub, of course, has been—and remains—how to discern how far is 'too far.'" *Id.*; *see also Murr v. Wisconsin*, 137 S. Ct. 1933, 1942 (2017) (recognizing that a regulation "can be so burdensome as to become a taking, yet the *Mahon* Court did

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[17] The South Carolina Constitution has a similar Takings Clause. *See* S.C. Const. art. I, § 13. The takings analysis under the South Carolina Constitution is identical to the analysis under federal law. *Byrd*, 365 S.C. at 656 n.6, 620 S.E.2d at 79 n.6. Because neither party raises the Takings Clause in the South Carolina Constitution, we do not discuss it further.

not formulate more detailed guidance for determining when this limit is reached"); *Palazzolo v. Rhode Island*, 533 U.S. 606, 617 (2001) ("Since *Mahon*, we have given some, but not too specific, guidance to courts confronted with deciding whether a particular government action goes too far and effects a regulatory taking.").

In answering that question, the Supreme Court, "quite simply, has been unable to develop any 'set formula.'" *Penn Cent.*, 438 U.S. at 124; *Ark. Game & Fish Comm'n v. United States*, 568 U.S. 23, 31 (2012) (recognizing there is "no magic formula"). Nonetheless, it has articulated two overarching principles that should guide all takings decisions. First, a court's analysis must be "informed by the purpose of the Takings Clause, which is to prevent the government from 'forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.'" *Palazzolo*, 533 U.S. at 617–18 (quoting *Armstrong v. United States*, 364 U.S. 40, 49 (1960)); *Andrus v. Allard*, 444 U.S. 51, 65 (1979) ("The Takings Clause, therefore, preserves governmental power to regulate, subject only to the dictates of justice and fairness." (citation omitted) (internal quotation marks omitted)). Second,

> government regulation—by definition—involves the adjustment of rights for the public good. Often this adjustment curtails some potential for the use or economic exploitation of private property. To require compensation in all such circumstances would effectively compel the government to regulate by purchase. "Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law."

Andrus, 444 U.S. at 65 (quoting *Mahon*, 260 U.S. at 413).

Applying those principles, the Supreme Court has carved out two relatively narrow categories of regulatory takings that always require compensation, neither of which is implicated here.[18] Other than those narrow categories, however, regulatory takings challenges are generally governed by the balancing test set forth in *Penn*

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[18] *See Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982) (holding a government regulation that requires a property owner suffer a permanent physical invasion of his property, however minor, will require just compensation); *Lucas v. S.C. Coastal Council*, 505 U.S. 1003 (1992) (finding a regulation that completely deprives a property owner of all economically beneficial use of his property amounts to a compensable taking).

Central. *Lingle*, 544 U.S. at 538; *Palazzolo*, 533 U.S. at 617. That test requires consideration of three factors: "(1) the economic impact of the regulation on the claimant; (2) the extent to which the regulation has interfered with distinct investment-backed expectations; and (3) the character of the governmental action." *Murr*, 137 S. Ct. at 1943; *Penn Cent.*, 438 U.S. at 124; *see also Palazzolo*, 533 U.S. at 633 (O'Connor, J., concurring) (characterizing the *Penn Central* test as the polestar for regulatory takings). The Supreme Court has described the *Penn Central* test as an "essentially ad hoc, factual inquir[y]" amounting to a "complex factual assessment[] of the purposes and economic effects of government action[]" that "depends largely upon the particular circumstances in that case." *Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg'l Plan. Agency*, 535 U.S. 302, 323, 326 (2002) (internal alteration and quotation marks omitted) (first quoting *Penn Cent.*, 438 U.S. at 124; then quoting *Yee v. Escondido*, 503 U.S. 519, 523 (1992); and then quoting *Penn Cent.*, 438 U.S. at 124).

It bears repeating that, because *Penn Central* is a balancing test, "[t]here is no abstract or fixed point at which judicial intervention under the Takings Clause becomes appropriate. . . . Resolution of each case . . . ultimately calls as much for the exercise of judgment as for the application of logic." *Andrus*, 444 U.S. at 65; *see also Murr*, 137 S. Ct. at 1943 ("A central dynamic of the Court's regulatory takings jurisprudence, then, is its flexibility. This has been and remains a means to reconcile two competing objectives central to regulatory takings doctrine. One is the individual's right to retain the interests and exercise the freedoms at the core of private property ownership. . . . The other persisting interest is the government's well-established power to adjust rights for the public good. . . . In all instances, the analysis must be driven by the purpose of the Takings Clause, which is to prevent the government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole." (cleaned up)).

A.

"Before determining whether a taking has occurred, a court must first determine what, precisely, is the property at issue." *Dunes W. Golf Club*, 401 S.C. at 305, 737 S.E.2d at 614. "The definition of the relevant parcel profoundly influences the outcome of a takings analysis." *Dist. Intown Props. v. Dist. of Columbia*, 198 F.3d 874, 880 (D.C. Cir. 1999). Because a takings analysis requires a court to compare the value that has been taken from the property with the value remaining in the property, one of the most critical steps is determining how to define the unit of property whose value supplies the denominator of the takings fraction. *Keystone*

Bituminous Coal Ass'n v. DeBenedictis, 480 U.S. 470, 497 (1987); *Palazzolo*, 533 U.S. at 631 (describing the determination of the denominator in the takings fraction as a "difficult, persisting question"). In essence, the question is whether a court must consider a regulation's impact on only part of the property or on the whole parcel. *Dunes W. Golf Club*, 401 S.C. at 306, 737 S.E.2d at 615.

In the past, the Supreme Court oftentimes—but not always—found the denominator in the takings fraction amounted to the entire property, and not merely the part "taken" or interfered with by the government regulation. *See, e.g.*, *Penn Cent.*, 438 U.S. at 130–31 ("'Taking' jurisprudence does not divide a single parcel into discrete segments and attempt to determine whether rights in a particular segment have been entirely abrogated. In deciding whether a particular governmental action has effected a taking, this Court focuses . . . [on] the parcel as a whole . . . ."); *Tahoe-Sierra Pres. Council*, 535 U.S. at 331 ("Of course, defining the property interest taken in terms of the very regulation being challenged is circular."). More recently, in *Murr v. Wisconsin* the United States Supreme Court set forth a new, more nuanced multifactor test to define the relevant parcel. 137 S. Ct. at 1945–46 (applying the new test to two contiguous properties affected by a merger ordinance).

"First, courts should give substantial weight to the treatment of the land, in particular how it is bounded or divided, under state and local law." *Id.* at 1945. Second, courts should consider the physical characteristics of the property, including "the surrounding human and ecological environment." *Id.* As to this second factor, it may be particularly relevant whether "the property is located in an area that is subject to, or likely to become subject to, environmental or other regulation." *Id.* at 1945–46 (citing *Lucas*, 505 U.S. at 1035 (Kennedy, J., concurring) ("Coastal property may present such unique concerns for a fragile land system that the State can go further in regulating its development and use than the common law of nuisance might otherwise permit.")). Third and finally,

> courts should assess the value of the property under the challenged regulation, with special attention to the effect of burdened land on the value of other holdings. Though a use restriction may decrease the market value of the property, the effect may be tempered if the regulated land adds value to the remaining property, such as by increasing privacy, expanding recreational space, or preserving surrounding natural beauty. . . . [I]f the landowner's other property is adjacent to the small lot, the market value of the properties may well

> increase if their combination enables the expansion of a structure, or if development restraints for one part of the parcel protect the unobstructed skyline views of another part. That, in turn, may counsel in favor of treatment as a single parcel and may reveal the weakness of a regulatory takings challenge to the law.

Murr, 137 S. Ct. at 1946; *see also Dunes W. Golf Club*, 401 S.C. at 309 n.17, 737 S.E.2d at 616 n.17 (explaining the "extent of contiguous commonly-owned property gives rise to a rebuttable presumption defining the relevant parcel," and stating the court may consider "various factors including whether the property is divided by a road; whether the property was acquired at the same time; whether the purchase and financing of parcels were linked; the timing of development; whether the land is put to the same use or different uses; whether the owner intended to or actually did use the property as one economic unit; and the treatment of the property under state law") (quoting *Giovanella v. Conserv. Comm'n of Ashland*, 857 N.E.2d 451, 457–58 (Mass. 2006))).

Here, we find the *Murr* factors weigh in favor of identifying the relevant parcel as Lots A and B combined. *See Quinn v. Bd. of Cnty. Comm'rs*, 862 F.3d 433, 441 (4th Cir. 2017) ("The multifactor standard established by the Supreme Court's decision in *Murr* suggests that the lots subject to merger should be viewed as a collective.").

As to the first *Murr* factor (the treatment of the land), Lots A and B are currently merged under state and local law, and there are no physical or topographical boundaries that would limit joint treatment or development of the Lots. *See Quinn*, 862 F.3d at 441; *Dunes W. Golf Club*, 401 S.C. at 309 n.17, 737 S.E.2d at 616 n.17 (citing *Giovanella*, 857 N.E.2d at 457–58). In fact, the Lots have always been owned and sold as a single unit and were even redeveloped by Braden's Folly at the same time. *See Dunes W. Golf Club*, 401 S.C. at 309 n.17, 737 S.E.2d at 616 n.17 (citing *Giovanella*, 857 N.E.2d at 457–58). Likewise, due to both the zoning ordinances and the DMA, Braden's Folly is prohibited from selling the Lots separately or from building separate homes on each should one of the existing homes be more than 50% destroyed. *See Murr*, 137 S. Ct. at 1948.

Furthermore, with respect to the second *Murr* factor (the property's physical characteristics), the Lots are located on the beach, a quintessential example of an area that is heavily regulated and likely to become subject to additional environmental regulations. *See Lucas*, 505 U.S. at 1035 (Kennedy, J., concurring).

Finally, turning to the third *Murr* factor (the value of the property), "the prospective value that Lot [A] brings to Lot [B] supports considering the two as one parcel for purposes of determining if there is a regulatory taking." *Murr*, 137 S. Ct. at 1948. As it currently stands, and regardless of the impact of the merger ordinance, Lot B is restricted by Folly Beach's DMA. As a result, should the house on Lot B be destroyed by 50% or more, the DMA would prevent any redevelopment on that lot. The merger of Lots A and B would allow the property owner to maintain a beach house on at least one of the lots—Lot A—while simultaneously enjoying the unparalleled beach access of Lot B. Moreover, any economic impact resulting from the merger ordinance "is mitigated by the benefits of using the property as an integrated whole, allowing increased privacy and recreational space, plus the optimal location of any improvements." *Id.* Allowing only one house to be built on the two combined lots could increase the market value of the Lots as well because it would allow for the expansion of the existing Lot A house, and it ensures unobstructed ocean views for that single, larger house (rather than Lot A having little to no ocean view due to the existence of the home on Lot B). *Id.* at 1946.

As a result, we hold the appropriate denominator in the takings fraction, and the appropriate parcel to compare any economic impact resulting from the merger ordinance, is the entirety of Lots A and B combined.

B.

Equally important to defining the relevant parcel, we recognize that the unique legal landscape surrounding beach management regulation in Folly Beach must underlie our analysis of the *Penn Central* factors and inform our determination of what is "just and fair" in this situation. As discussed above, the extreme erosion in Folly Beach has caused it to receive unparalleled discretion to promulgate its own beachfront management regulations, including those dealing with setback requirements and erosion control barriers. The legal exemptions Folly Beach is afforded by the state's Beachfront Management Act create an unusual situation that leaves a locality—rather than the state or federal government—as the primary entity in charge of establishing policies to protect the beach and public trust, including prohibiting beachfront development. Of course, the same locality also has competing interests, such as fostering local beachfront development, drawing in tourism via rental properties, and increasing the local tax base.

It is clear Folly Beach weighed those competing interests differently in the past. Two decades ago, Folly Beach prioritized growth and development. Now,

however, it appears Folly Beach believes that allowing development of the super-beachfront lots causes a nuisance to nearby property owners, whose lots are eroded even more than the nine-feet-per-year average due to the seawalls in front of the neighboring super-beachfront properties. Moreover, in recent years, Folly Beach has pursued policies reflecting its view that super-beachfront development risks the livelihood of the entire community via the potential destruction of the beach (if there is no renourishment) or levying a significant, unpopular tax assessment on locals (if forced to pay for the renourishment itself).

Given the uniqueness of letting a locality control its own beach management, we find some discretion must be allowed to the locality to review and unwind decisions that it later realizes were unwise. *Cf. Esposito v. S.C. Coastal Council*, 939 F.2d 165, 169 (4th Cir. 1991) (explaining that establishing a policy of withdrawal from building seaward of a setback line in an effort to address beachfront erosion is a decision "in which . . . legislatures who deal with the situation from a practical standpoint[] are better qualified than the courts to determine the necessity, character[,] and degree of regulation which these new and perplexing conditions require" (internal alteration and quotation marks omitted) (quoting *Gorieb v. Fox*, 274 U.S. 603, 608 (1927))); *Lucas*, 505 U.S. at 1035 (Kennedy, J., concurring) (noting that coastal property in particular presents unique concerns for a fragile land system, and that those unique concerns may allow the regulating authority to "go further in regulating [beach properties'] development and use than the common law of nuisance might otherwise permit"). Borrowing from Justice Kennedy's sound rationale, the unique concerns facing the beach and coastline at Folly Beach may allow the city to "go further" in regulating super-beachfront development than the law might otherwise permit.

Of equal importance, the merger ordinance is only one of several tools Folly Beach has employed to push back super-beachfront development. In particular, the creation of the DMA must impact our analysis, as—wholly separate from the merger ordinance—development is now prohibited in Folly Beach within forty feet of the perpetual easement line. Thus, regardless of our decision on the constitutionality of the merger ordinance, Braden's Folly cannot redevelop Lot B in the event it is ever destroyed more than 50% of its current value because Lot B is located almost entirely within the DMA. The DMA is but one example of Folly Beach's attempts to ensure the continuing availability of federal funding to rebuild the beach.

The benefits resulting from periodic beach renourishment not only impact the public as a whole, but Braden's Folly in particular. According to the ACOE, absent the ongoing beach renourishment projects, the erosion in Folly Beach would have swept away not only the entirety of the B lots by now, *but also the entirety of the A lots on East Ashley Avenue as well.*[19] If federal funding is lost due to super-beachfront development, and Folly Beach is unable to secure enough local funds to itself pay for the renourishment projects, all of the houses on the northeast end of Folly Beach—including both of Braden's Folly's Lots—will be underwater in the next two to three decades.

Keeping Folly Beach's unique legal landscape in mind, we turn to the *Penn Central* test.

C.

The first *Penn Central* factor is the economic impact of the merger ordinance on Braden's Folly.

The United States Supreme Court has uniformly rejected the proposition that a diminution in property value, standing alone, can establish a taking. *Penn Cent.*, 438 U.S. at 131; *Andrus*, 444 U.S. at 66; *Dunes W. Golf Club*, 401 S.C. at 317–18, 737 S.E.2d at 621. Rather, the Supreme Court has advised that courts must focus "on the uses the regulations permit." *Penn Cent.*, 438 U.S. at 131; *Dunes W. Golf Club*, 401 S.C. at 317–18, 737 S.E.2d at 621. Likewise, while a comparison of property values before and after the regulation is relevant, "it is by no means conclusive." *Keystone Bituminous*, 480 U.S. at 490 (quoting *Goldblatt v. Hempstead*, 369 U.S. 590, 594 (1962)). "The extent of diminution in value is but one fact for consideration in determining whether governmental action constitutes a taking." *Dunes W. Golf Club*, 401 S.C. at 317, 737 S.E.2d at 621 (cleaned up) (citation omitted).

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[19] We specifically reference an ACOE map in the record showing that, absent any of the federally-funded beach renourishments (which started in the 1990s), the ACOE estimates the location of the mean highwater line would be in the middle of East Ashley Avenue—a staggering impact on local property owners that would result from only thirty years of unchecked erosion on Folly Beach. It may be important to recall that the ACOE does not provide federally-funded beach renourishment behind the perpetual easement line, thereby imposing all costs to restore those areas on the city and the property owners.

Here, an appraisal report commissioned by Braden's Folly found that if Lots A and B were sold separately, they were worth $508,000 more than if they were sold as a single, merged lot. Thus, Braden's Folly asserts it has lost the opportunity to obtain $508,000 in future profits. While we take issue with the appraiser's calculations,[20] we will assume for the purposes of discussion that they are accurate, and the appraiser correctly calculated the value of the Lots merged together as $2.2 million. Thus, using the takings fraction, Braden's Folly is asserting a 23% economic impact due to the merger ordinance:

$$\frac{\text{Value of property taken (Numerator)}}{\text{Value of relevant parcel (Denominator)}} = \frac{\$508,000}{\$2,200,000} = 23\%$$

While not insignificant, a 23% reduction in value is far less than other reductions in value found constitutional by the Supreme Court. *E.g.*, *Vill. of Euclid v. Ambler Realty Co.*, 272 U.S. 365 (1926) (75% diminution in value not a taking); *Hadacheck v. Sebastian*, 239 U.S. 394 (1915) (87.5% diminution in value not a taking).

Notably, the Supreme Court has considered a number of takings cases in which a loss of an opportunity to make future profits was at issue. *See, e.g.*, *Andrus*, 444 U.S. at 54, 66 (dealing with a prohibition on the sale of certain bird artifacts); *Mahon*, 260 U.S. at 412–13, 414–15 (involving a regulation prohibiting the

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[20] We find any reliance on the appraiser's report is questionable at best. For example, although there are also other areas of concern, the values of the Lots merged and separate were calculated using different methods, making any comparison between the results akin to comparing apples to oranges. Specifically, in finding a $508,000 difference between the Lots value if sold separately as compared to merged into a single property, the appraiser compared the *gross* proceeds of the Lots sold separately with the *net* proceeds of the Lots sold as a single unit. In comparing net proceeds to net proceeds, the difference in values of the Lots merged and separate is around $64,000—a negligible diminution in value of around 3%. *See Murr*, 137 S. Ct. at 1949 ("The expert appraisal relied upon by the state courts refutes any claim that the economic impact of the regulation is severe.").

removal of coal from underground if it would cause subsidence of human habitations aboveground). In those two cases, the Supreme Court found the key distinction was whether a regulation physically restricted the property at issue: *Mahon* involved a loss of profit opportunity accompanied by a physical restriction against the removal of the coal, whereas *Andrus* involved a loss of profit opportunity that was not accompanied by a physical restriction of the property. *See Andrus*, 444 U.S. at 65–66 & n.22 (distinguishing *Mahon*). As explained by the *Andrus* Court,

> The regulations challenged here do not compel the surrender of the artifacts, and there is no physical invasion or restraint upon them. Rather, *a significant restriction has been imposed on one means of disposing of the artifacts*. But the denial of one traditional property right does not always amount to a taking. *At least where an owner possesses a full "bundle" of property rights, the destruction of one "strand" of the bundle is not a taking, because the aggregate must be viewed in its entirety*. In this case, it is crucial that appellees retain the rights to possess and transport their property, and to donate or devise the protected birds [and bird artifacts].
>
> It is, to be sure, undeniable that the regulations here prevent the most profitable use of appellees' property. Again, however, that is not dispositive. When we review regulation, a reduction in the value of property is not necessarily equated with a taking. In the instant case, it is not clear that appellees will be unable to derive economic benefit from the artifacts; for example, they might exhibit the artifacts for an admissions charge. *At any rate, loss of future profits—unaccompanied by any physical property restriction—provides a slender reed upon which to rest a takings claim.* Prediction of profitability is essentially a matter of reasoned speculation that courts are not especially competent to perform. Further, perhaps because of its very uncertainty, the interest in anticipated gains has traditionally been viewed as less compelling than other property-related interests.

444 U.S. at 65–66 (emphasis added) (internal citations omitted). Here, the merger ordinance is not accompanied by any physical restriction on the Lots.

Moreover, as Folly Beach has repeatedly conceded, even under the merger ordinance, Braden's Folly remains able to rent out the houses on the Lots separately and continue bringing in revenue, with the average gross receipts for the

Lots amounting to approximately $117,000 per year. *See Penn Cent.*, 438 U.S. at 131 (stating courts should focus "on the uses the regulations permit," rather than what is not permitted); *Dunes W. Golf Club*, 401 S.C. at 317–18, 737 S.E.2d at 621 (same); *cf. Murr*, 137 S. Ct. at 1949 ("They can use the property for residential purposes, including an enhanced, larger residential improvement."); *Palazzolo*, 533 U.S. at 631 ("A regulation permitting a landowner to build a substantial residence on an 18-acre parcel does not leave the property 'economically idle.'" (citation omitted)); *Quinn*, 862 F.3d at 442 ("Quinn can still build homes on his land; the [Merger] Provision only requires that the development be less dense than he had hoped."); *Beard v. S.C. Coastal Council*, 304 S.C. 205, 208, 403 S.E.2d 620, 622 (1991) (finding a setback provision did not effect a taking in part because the property owners could still sell the property and utilize the rental units on the property).

Finally, it is legally significant that, during the pendency of this lawsuit, Bonner—a buyer who was unquestionably aware of the amended merger ordinance and its impact on the Lots—offered Braden's Folly its full asking price of $2.55 million for both Lots. Bonner diligently pursued the sale, emailing and calling Braden's Folly daily for several weeks but receiving no response to his inquiries or full-priced offer. Given those facts, it is absurd to suggest the merger ordinance had an unconstitutionally negative economic impact on the Lots. After all, Braden's Folly was offered its full asking price for the Lots. It simply chose not to accept that offer, perhaps due to its realtor's advice to continue marketing the Lots solely to "go after the city. You might get your money and not have to sell."

For all of these reasons, it is our opinion the economic impact factor weighs heavily in favor of finding there has been no compensable taking.

D.

We next turn to the second *Penn Central* factor: the extent to which the merger ordinance interfered with Braden's Folly's investment-backed expectations.

"In evaluating a regulatory takings claim, the purpose of consider[ing] . . . investment-backed expectations is to limit recoveries to property owners who can demonstrate that they [invested in] their property in reliance on a state of affairs that did not include the challenged regulatory regime." *Columbia Venture, L.L.C. v. Richland Cnty.*, 413 S.C. 423, 449, 776 S.E.2d 900, 914 (2015) (internal alteration and quotation marks omitted) (citation omitted). "A reasonable investment-backed expectation must be more than a unilateral expectation or an

abstract need." *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1005 (1984) (quoting *Webb's Fabulous Pharmacies, Inc. v. Beckwith*, 449 U.S. 155, 161 (1980)) (internal quotation marks omitted); *Penn Cent.*, 438 U.S. at 130 ("[T]he submission that [a property owner] may establish a 'taking' simply by showing that they have been denied the ability to exploit a property interest that they heretofore had believed was available for development is quite simply untenable."). Rather, courts will evaluate a property owner's reasonable, investment-backed expectations through an objective lens. *Dunes W. Golf Club*, 401 S.C. at 320, 737 S.E.2d at 622; *Columbia Venture*, 413 S.C. at 449, 776 S.E.2d at 914 ("The subjective expectations of the claimant are irrelevant. The critical question is what a reasonable owner in the claimant's position should have anticipated." (internal alteration marks omitted) (quoting *Chancellor Manor v. United States*, 331 F.3d 891, 904 (Fed. Cir. 2003)) (internal citation omitted)).

For example, courts in the past have looked to a number of objective factors, including: (1) whether the challenged regulation interferes with the existing use of the property;[21] (2) the degree to which the property's general locale is subject to

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[21] *Penn Cent.*, 438 U.S. at 136 (noting the regulation at issue did not interfere with the present use of the property: "[The property's] designation as a landmark not only permits but contemplates that appellants may continue to use the property precisely as it has been used for the past 65 years . . . . So the law does not interfere with what must be regarded as Penn Central's primary expectation concerning the use of the parcel."); *Esposito*, 939 F.2d at 170 ("[W]e note that the courts have traditionally looked to the existing use of property as a basis for determining the extent of interference with the owner's primary expectation concerning the use of the parcel. We find that the Act permitted the . . . plaintiffs to continue their existing use of their property and dwellings in the same manner that they could have used the property prior to its enactment. The plaintiffs, in fact, have stipulated that 'none of the Plaintiffs . . . have discontinued use of their property, as it was used before enactment of the subject Statutes.' They continued to retain the fundamental incidents of ownership, including the right to possess the property, exclude others from it, alienate the property and continue to use it for residential and recreational purposes; and *they were significantly diminished only in their discretion to rebuild a structure in the speculative event of its virtually complete destruction*." (emphasis added) (cleaned up)); *Carolina Chloride*, 394 S.C. at 173, 714 S.E.2d at 878 (stating that "continuation of the existing use of the property is the property owner's primary expectation when considering an owner's investment-backed expectations for the property" (quoting *Byrd*, 365 S.C. at 662,

regulation;[22] and (3) whether the property owner acquired the land after the regulation went into effect.[23] Likewise, in cases involving merger ordinances,

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620 S.E.2d at 82) (internal quotation marks omitted)); *Dunes W. Golf Club*, 401 S.C. at 319, 737 S.E.2d at 622 (finding the fact that the property had always been used as a golf course necessarily meant the owner's primary expectation was to continue using the property as a golf course, not to build houses on the land).

[22] *Lucas*, 505 U.S. at 1035 (Kennedy, J., concurring) (stating coastal property engenders a greater degree of concern due to the fragile ecosystem, and therefore the State may be permitted to go further in regulating development and use than in other types of environments); *Murr*, 137 S. Ct. at 1948 ("The land's location along the river is also significant. Petitioners could have anticipated public regulation might affect their enjoyment of their property, as the Lower St. Croix was a regulated area under federal, state, and local law long before petitioners possessed the land."); *Columbia Venture*, 413 S.C. at 449, 776 S.E.2d at 914 ("In examining the reasonable expectations prong, the level of industry regulation is a pertinent but not determinative factor." (quoting *Chancellor Manor*, 331 F.3d at 906) (internal quotation marks omitted)); *Dunes W. Golf Club*, 401 S.C. at 319, 737 S.E.2d at 622 (finding the property owner's expectations were unreasonable in part because they "did not take into account the wetlands, easements, or substantial changes to the [property] that would be required" to bring those expectations to fruition); *cf. Concrete Pipe & Prods. of Cal., Inc. v. Constr. Laborers Pension Tr. for S. Cal.*, 508 U.S. 602, 645 (1993) ("Those who do business in [a] regulated field cannot object if the legislative scheme is buttressed by subsequent amendments to achieve the legislative end.") (citation omitted)).

[23] *Palazzolo*, 533 U.S. at 633, 634 (O'Connor, J., concurring) ("Further, the regulatory regime in place at the time the claimant [invests in] the property at issue helps to shape the reasonableness of those expectations. . . . For example, the nature and extent of permitted development under the regulatory regime vis-à-vis the development sought by the claimant may also shape legitimate expectations without vesting any kind of development right in the property owner."); *Murr*, 137 S. Ct. at 1949 ("Petitioners cannot claim that they reasonably expected to sell or develop their lots separately given the regulations which predated their acquisition of both lots."); *Columbia Venture*, 413 S.C. at 449, 776 S.E.2d at 914 (explaining a property owner's reasonable investment-backed expectations are defined at the time he makes the relevant investment in the property, and any regulatory regime in place at that time informs the scope of those expectations; but also stating that

courts may also find objective indicia of a property owner's investment-backed expectations by examining the sizes and shapes of the properties to be merged. *Cf. Murr*, 137 S. Ct. at 1948 (noting it was reasonable to treat two adjacent lots as merged because they were contiguous along their longest edge, and their narrow shape and topography made it "reasonable to expect their range of potential uses might be limited").

Here, there is some objective evidence that Braden's Folly's investment-backed expectation in developing Lot B was to sell one of its Lots separately from the other. Braden's Folly invested in its Lots in 2006 and 2007 when it redeveloped the house on Lot A and built a new super-beachfront house on Lot B.[24] At that time, the merger ordinance did not exist, and property owners along East Ashley Avenue freely developed and sold their A and B lots independently from one another. Objectively, it would have been reasonable for Braden's Folly to have expected to be able to do the same. *See Murr*, 137 S. Ct. at 1949; *Palazzolo*, 533 U.S. at 633, 634 (O'Connor, J., concurring); *Columbia Venture*, 413 S.C. at 449, 776 S.E.2d at 914.[25] Additionally, Braden's Folly attempted to set up a

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while "timing and sequence are quite probative and material to [the] analysis, . . . they are simply not dispositive" (citations omitted)).

[24] There is language in one of our prior cases that could indicate a property owner's investment-backed expectations are defined only at the time he purchases the property. *See, e.g.*, *Columbia Venture*, 413 S.C. at 449, 776 S.E.2d at 914 ("A property owner's reasonable investment-backed expectations are defined at the time the property is purchased." (quoting *Norman v. United States*, 63 Fed. Cl. 231, 267 (2004))). However, that language should not be read out of context: in that case, the owner's investment in the property was made when he purchased the property. Here, the relevant investment was made in the property when Braden's Folly redeveloped the land. In other words, investment-backed expectations are set at the time the property owner actually invests in the property, for example, at the time he purchases it or at some other future point in time. However, as we explain below, the reasonableness of those expectations may be impacted by future events occurring after the time the investment is made.

[25] Likewise, Folly Beach affirmatively issued building permits for super-beachfront construction, which could have increased Braden's Folly's expectation that developing Lot B was reasonable. *But cf. Palazzolo*, 533 U.S. at 633, 634 (O'Connor, J., concurring) ("[T]he nature and extent of permitted development

complicated system of easements between Lots A and B to ensure both properties had road and beach access as well as room for a septic system. There would have been no reason for Braden's Folly to establish the easements if it did not intend to sell one of the Lots.

However, there are also a number of objective factors that weigh against finding Braden's Folly's reasonable, investment-backed expectation was solely to be able to sell the Lots separately from one another. First, Braden's Folly has used these Lots for family vacations and as rental properties for several decades. The "primary expectation" would seemingly be to continue those uses—something with which the merger ordinance does not interfere. *See Penn Cent.*, 438 U.S. at 136; *Esposito*, 939 F.2d at 170; *Dunes W. Golf Club*, 401 S.C. at 319, 737 S.E.2d at 622; *Carolina Chloride*, 394 S.C. at 173, 714 S.E.2d at 878.

Second, we find significant Braden's Folly's delay in attempting to sell the Lots after their redevelopment. As explained above, the housing market collapsed around the time construction on the Lots was completed, which made selling one of the Lots financially unfeasible for several years. However, once the market recovered, Braden's Folly waited many years to put the Lots on the market, continuing to use them both as family vacation homes and rental properties. Moreover, even after the houses were placed on the market, Braden's Folly made little to no effort to actually sell either property.[26] While Braden's Folly may have initially intended to sell one of the Lots following construction, that expectation apparently changed over time.[27]

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under the regulatory regime vis-à-vis the development sought by the claimant may also shape legitimate expectations *without vesting any kind of development right in the property owner*." (emphasis added)).

[26] For example, although the houses were continuously listed for nearly three years beginning in February 2018, Braden's Folly received only two offers over the first two-and-a-half years—one in August 2019, and one in October 2020. Nonetheless, Braden's Folly never lowered the listing prices for the Lots, instead raising the listing price for Lot B by $500,000 in December 2020.

[27] At three different places in the record, one of the Braden brothers testified specifically about the changed expectation regarding the Lots, stating:

(1) "Eventually, the real estate market rebounded and offers were

Third, even assuming Braden's Folly's investment-backed expectation remained the same, the government cannot be held hostage by a property owner's expectations indefinitely when an owner refuses to implement those expectations. Rather, at some point, the government must have a right to regulate local properties in a measured fashion without running afoul of the takings doctrine, even if its regulation runs contrary to an owner's unspoken and unimplemented investment-backed expectations. *See Columbia Venture*, 413 S.C. at 449, 776 S.E.2d at 914 (explaining the property owner's subjective expectations and efforts to implement those expectations are irrelevant, and courts must instead focus on what a reasonable, similarly situated property owner should have anticipated (quoting *Chancellor Manor*, 331 F.3d at 904)).

This is particularly true when, as here, the government regulation affects properties in a dynamic, fragile environment. Coastal areas are some of the most heavily regulated areas in the state due to their inherent vulnerability and volatility. Nonetheless, at the time Lot B was developed and Braden's Folly initially formulated its investment-backed expectation, Folly Beach had enacted little to no regulations protecting the beach from over-development, including setback requirements or prohibitions on seawalls. In terms of beach regulation, Folly Beach was an outlier compared to surrounding coastal towns.

Over a decade later, when Braden's Folly half-heartedly attempted to actually implement its purported investment-backed expectation and placed the Lots on the market, there had been a number of events that impacted the reasonableness of Braden's Folly's initial expectation. More specifically, the need for regulation in Folly Beach's coastal areas had become evident. The frequency of large-scale beach renourishments steadily increased due to the super-beachfront development, objectively indicating that development was not sustainable. Of more concern, the

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available for us to sell *but we decided to continue renting and vacationing at the houses instead*." (Emphasis added).

(2) "[I]t was our intention to own one and sell one. When that didn't happen, then we went into rental, and that then kind of became sort of the combination of usage, where it was personal and rental, and it sort of bounced up and down based upon the different ages of [our] children and the locations of [our family members]."

(3) "There was a lot of family resistance [to selling the Lots]."

super-beachfront houses and their seawalls created a public nuisance via the blue blob areas. Once it became apparent that the developed B lots were the source of these flooded areas, it likewise became objectively unreasonable for Braden's Folly to expect to own Lot B with no restrictions or regulations impacting its ownership, including its ability to alienate the property in whatever manner it chose. While it is true the unreasonableness of Braden's Folly's expectations did not fully manifest until after it invested in the redevelopment of the Lots, we harken back to Braden's Folly's inexplicable delay in implementing its investment-backed expectation. That delay was entirely within Braden's Folly's control. We find it objectively unreasonable for Braden's Folly to see the creation and worsening of a public nuisance created by super-beachfront development and *not* expect the city to regulate in some fashion to attempt to fix the problem. *See Lucas*, 505 U.S. at 1035 (Kennedy, J., concurring) ("I agree with the Court that nuisance prevention accords with the most common expectations of property owners who face regulation . . . ."); *Quinn*, 862 F.3d at 442 (holding a merger ordinance did not constitute an unconstitutional taking even though it interfered with the owner's investment-backed expectations to develop the affected properties; explaining the owner could still implement his expectations, just in a less dense manner than he had initially envisioned).

Fourth, we find the purported creation of easements between Lots A and B does not weigh heavily in favor of Braden's Folly's investment-backed expectation. As briefly alluded to in note 15, *supra*, the easements were created when "Mark Braden granted *himself*" the rights to beach access for Lot A and road access and septic lines for Lot B. (Emphasis added.) However, Braden's Folly could not create those easements while owning both the dominant and servient estates, so the easements do not legally exist. *Windham v. Riddle*, 370 S.C. 415, 419, 635 S.E.2d 558, 560 (Ct. App. 2006) (explaining an easement cannot exist where both the purported servient and dominant estates are owned by the same person (citing *Haselden v. Schein*, 167 S.C. 534, 539, 166 S.E. 634, 635 (1932))), *aff'd*, 381 S.C. 192, 672 S.E.2d 578 (2009); *cf.* 12 S.C. Jur. *Easements* § 32 (Sept. 2022 Update) ("Courts generally have held that upon acquisition of the dominant tenement and the servient tenement by the same person at the same time, an easement is extinguished by merger."). Thus, while Braden's Folly argues the attempt to create the easements showed its investment-backed expectation to separately sell the Lots, because the easements do not exist, their attempted creation does not impact this factor of the *Penn Central* test or cause this factor to weigh in favor of Braden's Folly.

Fifth and finally, the size, shape, and orientation of the Lots provides objective indicia that Braden's Folly's expectation to develop and sell Lot B was unreasonable. Specifically, most of Lot B is subject to the perpetual easement for renourishment, leaving a very small footprint in which a house could be built, far below the minimum lot size requirement in Folly Beach's zoning ordinances. However, Lot B is contiguous with another undersized (albeit slightly larger) parcel—Lot A—owned by the same entity. Combining the two Lots makes a single "normal" sized lot that many other property owners living on East Ashley Avenue have used to develop one single-family home. Thus, the small size of the Lots provides some objective evidence that Braden's Folly's intent to develop and sell a separate single-family residence was objectively unreasonable. *See Murr*, 137 S. Ct. at 1948; *see also id.* at 1947 ("[L]ot lines are themselves creatures of state law, which can be overridden by the State in the reasonable exercise of its power.").

Accordingly, in sum, there are some facts that weigh in favor of finding Braden's Folly's investment-backed expectation was reasonable and some that weigh in favor of finding its expectation was unreasonable. We therefore find this factor of the *Penn Central* balancing test does not weigh in favor of either party. *See Palazzolo*, 533 U.S. at 634, 635 (O'Connor, J., concurring) (explaining that "[I]nvestment-backed expectations, though important, are not talismanic under *Penn Central*"; and counseling against giving investment-backed expectations "exclusive significance" lest the State wield too much power, or the property owner "reap windfalls and an important indicium of fairness is lost"); *Columbia Venture*, 413 S.C. at 454, 776 S.E.2d at 917 ("[D]eveloping real estate carries with it certain financial risks, and it is not the government's duty to underwrite this risk as an extension of obligations under the takings clause." (quoting *Taub v. City of Deer Park*, 882 S.W.2d 824, 826 (Tex. 1994))).

E.

Finally, we turn to the third *Penn Central* factor and analyze the character of the government action, specifically, whether Folly Beach's merger ordinance is akin to an eminent domain action.

Regulatory takings cases "aim[] to identify regulatory actions that are functionally equivalent to the classic taking in which government directly appropriates private property or ousts the owner from his domain." *Lingle*, 544 U.S. at 539. A regulation will be more readily found to amount to an unconstitutional taking if it causes "private property [to be] pressed into some form of public service under the

guise of mitigating serious public harm." *Lucas*, 505 U.S. at 1018; *Penn Cent.*, 438 U.S. at 124. However, if the regulation is merely a "public program adjusting the benefits and burdens of economic life to promote the common good," the regulation will pass constitutional muster. *Penn Cent.*, 438 U.S. at 124, 125 (stating that "[z]oning law[s] are, of course, the classic example" of such a public program). It therefore becomes important for a court to consider "the magnitude or character of the burden a particular regulation imposes upon private property rights" as well as "how any regulatory burden is distributed among property owners." *Lingle*, 544 U.S. at 542 (emphasis omitted) ("In answering [the takings] question, we must remain cognizant that 'government regulation—by definition—involves the adjustment of rights for the public good . . . .'" (quoting *Andrus*, 444 U.S. at 65)); *see also Penn Cent.*, 438 U.S. at 133 ("Legislation designed to promote the general welfare commonly burdens some more than others.").

In *Murr*, the Supreme Court discussed the character of merger ordinances extensively, stating:

> The merger provision here is likewise a legitimate exercise of government power, as reflected by its consistency with a long history of state and local merger regulations that originated nearly a century ago. Merger provisions often form part of a regulatory scheme that establishes a minimum lot size in order to preserve open space while still allowing orderly development.
>
> When States or localities first set a minimum lot size, there often are existing lots that do not meet the new requirements, and so local governments will strive to reduce substandard lots in a gradual manner. The regulations here represent a classic way of doing this: by implementing a merger provision, which combines contiguous substandard lots under common ownership, alongside a grandfather clause, which preserves adjacent substandard lots that are in separate ownership. Also, as here, the harshness of a merger provision may be ameliorated by the availability of a variance from the local zoning authority for landowners in special circumstances.
>
> Petitioners' insistence that lot lines define the relevant parcel ignores the well-settled reliance on the merger provision as a common means of balancing the legitimate goals of regulation with the reasonable expectations of landowners. Petitioners' rule would frustrate municipalities' ability to implement minimum lot size regulations by

> casting doubt on the many merger provisions that exist nationwide today.
>
> . . . .
>
> . . . Finally, the [character of the] governmental action [(i.e., the merger ordinance)] was a reasonable land-use regulation, enacted as part of a coordinated federal, state, and local effort to preserve the river and surrounding land.

137 S. Ct. at 1947–48, 1949–50 (internal citations omitted); *see also Quinn*, 862 F.3d at 441, 443, 445 (reaching a similar holding for similar reasons: "Local governments require flexibility to expand services like sewer in response to community needs; those governments also must be able to control the density of development in order to prevent overcrowding in schools, clogging of streets, overload on sewer facilities, degradation of the environment, and a host of other concerns. As recognized in *Murr*, adding a highly dubious constitutional overlay to the already complex mixture of legal requirements risks making land use planning a well-nigh impossible undertaking.").

Here, Folly Beach's merger ordinance does not unfairly single out Braden's Folly's Lots. Rather, as discussed by the *Murr* Court, merger ordinances have long been employed as a tool to regulate lot sizes. Like in *Murr*, the merger ordinance here is "a reasonable land-use regulation, enacted as part of a coordinated . . . effort to preserve the [beach] and surrounding land." 137 S. Ct. at 1949–50.[28]

While Braden's Folly was slightly burdened by the merger ordinance, it in turn will "benefit greatly from the restrictions that are placed on others." *Keystone Bituminous*, 480 U.S. at 491. Folly Beach and its witnesses set forth in detail the advantages to local beachfront property owners and the public at large should the city unwind the super-beachfront development. The most important of the benefits to local property owners is the continued existence of federal funding for beach

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[28] We find it significant that the quote in the preceding sentence is the entirety of the *Murr* Court's analysis of this *Penn Central* factor: the Supreme Court was so dismissive of the possibility that a merger ordinance could enact a taking that it addressed the character of the government action in a single sentence in its opinion. That cursory analysis speaks volumes as to the strength of its finding as to this factor of the *Penn Central* test.

renourishment, which in turn (1) protects the A and B lots—particularly given that *all* of the lots would be underwater at this point if it were not for the continual beach renourishment; and (2) avoids property owners paying higher taxes if federal funding is extinguished and Folly Beach must pay for the renourishments with local funds alone.

Accordingly, we find the character of the merger ordinance is not akin to a classic eminent domain action. Rather, in light of the potential public costs of continuing unchecked super-beachfront development, we reject the argument that Folly Beach's merger ordinance constitutes anything but responsible land use policy—one that is generally applicable and widely accepted nationwide. *See, e.g.*, *Murr*, 137 S. Ct. at 1949–50; *Quinn*, 862 F.3d at 443. We thus hold this factor of the *Penn Central* test weighs in favor of finding the merger ordinance did not effect a taking of the Lots.

F.

After applying the *Penn Central* test, we find two factors weigh strongly in favor of Folly Beach: the economic impact and the character of the government action. As to the third factor, we find there is competing evidence regarding whether the merger ordinance interfered with Braden's Folly's reasonable, investment-backed expectation. We therefore conclude the third factor is a neutral factor that does not weigh in favor of either party. As a result, we hold the *Penn Central* balancing test overall weighs in favor of Folly Beach, and the merger ordinance did not effect an unconstitutional taking of Braden's Folly's Lots.

V.

Braden's Folly's super-beachfront house is one of a handful in Folly Beach that are unintentionally threatening the continued existence of the beach as a whole. In response, Folly Beach amended its merger ordinance to require the combination of jointly-held, undersized, contiguous lots that abut the beach. That merger ordinance is but one part of a coordinated effort by the city to protect the beach and the federal funding that keeps the beach from eroding away entirely.

In accordance with every other jurisdiction in the country that has addressed the constitutionality of merger ordinances, we find Folly Beach's ordinance is a reasonable land-use regulation. It is true that Braden's Folly is slightly burdened by the merger ordinance in that the ordinance restricts one method by which Braden's Folly could alienate its property. However, despite the impact of the

merger ordinance, Braden's Folly generally retains a near-full "bundle of sticks" incident to its ownership of the Lots: it may continue to use the properties in the same manner it has for decades, it may alienate the properties as a single unit, and it may exclude others from the properties as it sees fit. *See Andrus*, 444 U.S. at 65–66. Moreover, any economic impact on the value of the Lots appears to be *de minimis*. We therefore hold the merger ordinance did not unconstitutionally take Braden's Folly's property without just compensation. As a result, we reverse the circuit court's entry of summary judgment in favor of Braden's Folly and remand to the circuit court to enter judgment for Folly Beach.

REVERSED AND REMANDED.

BEATTY, C.J., FEW, JAMES, JJ., and Acting Justice Kaye G. Hearn, concur.

340 S.C. 606
533 S.E.2d 886

Teresa HARKINS, Appellant,
v.
GREENVILLE COUNTY, Respondent.
J.O.D., Inc., Appellant,
v.
Greenville County, Respondent.
R.P. Social Club, Inc., Appellant,
v.
Greenville County, Respondent.
Runaway Entertainment, Inc., d/b/a The Landing Strip, Appellant,
v.
Greenville County, Respondent.
Malcolm Johnson and Dawn Lewis, individually and d/b/a Taboo's, Appellants,
v.
Greenville County, Respondent.

No. 25112.

Supreme Court of South Carolina.

Heard September 21, 1999.

Filed April 24, 2000.

Refiled June 12, 2000.

[340 S.C. 611]

William G. Yarborough, III and Denise Campbell Yarborough, both of Ashmore & Yarborough, of Greenville; and Suzanne E. Coe, of Coe & Turnage, LLC, of Greenville, all, for appellants.

W. Howard Boyd, Jr. and Ronald K. Wray, II, of Gibbes, Gallivan, White & Boyd, PA, of Greenville, for respondent.

ORDER

The opinion heretofore filed in this case, Opinion No. 25112, filed April 24, 2000 is withdrawn and the attached opinion is substituted in its place. The Conclusion section of the initial opinion has been clarified so that only the licensing portion of the Greenville County Ordinance is declared unconstitutional. Respondent's petition for rehearing is denied.

/s/ Ernest A. Finney, Jr., C.J. /s/ Jean H. Toal, J. /s/ James E. Moore, J. /s/ John H. Waller, Jr., J. /s/ E.C. Burnett, III, J.

TOAL, Justice:

Appellants The Landing Strip, Taboo's, Harkins, J.O.D., Nepal's, and R.P. Social Club ("the Adult Businesses") challenged the constitutionality of a Greenville County ("the County") permitting and zoning ordinance. The trial court found the ordinance constitutional and the sexually oriented businesses have appealed. We reverse.

FACTUAL/PROCEDURAL BACKGROUND

In February 1995, the County enacted Greenville County Zoning Ordinance No. 2673 ("the Ordinance") regulating the location of all sexually oriented businesses. The Ordinance requires sexually oriented businesses to obtain a permit from

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the County's zoning administrator in order to operate. Furthermore, the Ordinance controls where sexually oriented businesses can locate. The Adult Businesses are all sexually oriented businesses located in zoned areas that do not permit adult uses.

The County sent each Adult Business a letter informing them they were in violation of the Ordinance and had one year to comply. At the end of that year, none of the Adult Businesses had complied with the Ordinance and the County ordered them closed. The Adult Businesses then filed suit claiming the Ordinance is unconstitutional and sought injunctive relief against the County. The County counterclaimed

seeking an injunction requiring the Adult Businesses to comply with the Ordinance.

At trial, the Adult Businesses argued the Ordinance is an unconstitutional prior restraint because it fails to provide for prompt judicial review. Also, the Adult Businesses argued that the Ordinance impermissibly zoned them out of the County. The Adult Businesses supported this argument with expert testimony that only four to five S-1 sites were available in the County for sexually oriented businesses to locate.

The County responded by pointing out that the Ordinance required a permit to be issued within 30 days of the application unless one of seven specified conditions existed. The County argued that this time limit provided for prompt judicial review because if the permit was not issued within the 30 days, the sexually oriented business could seek relief from the court system. The County also presented expert testimony showing fourteen available S-1 sites. The expert also estimated that there were "a couple of hundred" sites available in the unzoned portion of the County.

The trial court ruled for the County on all issues. Initially, the trial court determined over one hundred sites existed for relocation in the unzoned portion of the County. Furthermore, the trial court found nine S-1 sites existed in the County where the Adult Businesses could relocate. Based on these findings, the trial court concluded the Adult Businesses were not impermissibly zoned out of the County.

The trial court also found the Ordinance was not an unconstitutional prior restraint because the zoning administrator did

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not have unbridled discretion in granting or denying a permit. Also, the trial court ruled that the relatively brief 30 day period between the permit application and decision by the zoning administrator guaranteed prompt judicial review.

The Adult Businesses appealed and the following issues are before the Court:

> (1) Did the trial court err in finding the Ordinance was not an unconstitutional prior restraint on speech?
>
> (2) Did the trial court err in finding the Ordinance was a reasonable time, manner, and place restriction because there were locations both in the zoned and unzoned areas of the County where the Adult Businesses could relocate?

LAW/ANALYSIS

Our United States Supreme Court has held that businesses providing non-obscene, sexually explicit material are entitled to protection by the First and Fourteenth Amendment. *See Young v. American Mini Theatres, Inc.*, 427 U.S. 50, 96 S.Ct. 2440, 49 L.Ed.2d 310 (1976); *City of Renton v. Playtime Theatres, Inc.*, 475 U.S. 41, 106 S.Ct. 925, 89 L.Ed.2d 29 (1986); *see also Barnes v. Glen Theatre, Inc.*, 501 U.S. 560, 111 S.Ct. 2456, 115 L.Ed.2d 504 (1991) (recognizing that nude dancing also receives First Amendment protection). However, the Supreme Court has also recognized sexually oriented businesses may have negative secondary effects, such as an increase in crime, on their surrounding communities. *Young*, 427 U.S. at 68, 96 S.Ct. at 2452-53. In light of these secondary effects, the Supreme Court has allowed local governments to regulate sexually oriented businesses, not based on the content of the speech, but as a response to their negative impact on the community. *Id.* Most often, local governments have chosen to use zoning restrictions and licensing requirements as the tools to balance free speech concerns with the regulation of secondary effects.

Local governments can enact zoning laws based on their police power to protect the health, safety, and welfare of the community. *See, e.g.*, S.C.Code Ann. § 5-23-10 (1976); S.C.Code Ann. § 6-7-10 (1976). Zoning laws that have the effect of

restricting freedom of expression without regard to

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the content of the speech are referred to as "content neutral" laws. *Renton,* at 46-47, 106 S.Ct. at 928. Zoning ordinances merely restricting the location of adult businesses without banning them altogether are considered content neutral as long as they are based on their prevention of the harmful secondary effects the Supreme Court has noted these sexually oriented businesses may cause. *Id.* Since these zoning laws are considered content neutral, they are evaluated as "time, place, and manner" regulations for purposes of determining their validity under the First Amendment. *Id.* Permissible time, place, and manner restrictions are justified by a substantial governmental interest unrelated to free speech and allows for adequate alternative avenues of communication of the sexually explicit material. *Id.* Therefore, sexually oriented business regulations will be upheld if they are designed to serve the substantial governmental interest of preventing harmful secondary effects and they allow for reasonable avenues of communication. *Id.*

Based on their police powers described above, local governments may also impose licensing requirements on adult businesses. However, when a municipality imposes licensing requirements on only businesses which retail a certain kind of speech, such as non-obscene, sexually explicit speech, serious questions as to the validity of the licensing requirements arise. *See FW/PBS, Inc. v. City of Dallas,* 493 U.S. 215, 225, 110 S.Ct. 596, 604, 107 L.Ed.2d 603 (1990). In order not to offend the First Amendment, such licensing regulations must satisfy two tests: (1) the regulation must impose adequate standards for officials to apply in rendering a decision as whether to grant, deny, or revoke a license; and (2) the regulation must also impose procedural safeguards. *Id.* at 225-26, 110 S.Ct. at 605.

The County attempts to use both forms of regulations of businesses retailing sexually explicit materials: zoning restrictions based on location and imposition of licensing requirements. The Ordinance in this case is basically a duplicate of the Richland County ordinance this Court analyzed in both *Centaur, Inc. v. Richland County,* 301 S.C. 374, 392 S.E.2d 165 (1990) and *Rothschild v. Richland County Bd. of Adjustment,* 309 S.C. 194, 420 S.E.2d 853 (1992). Those cases focused mainly on whether the Richland County ordinance was

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a proper time, place, and manner zoning restriction. In regards to the licensing requirement, *Centaur* only analyzed whether the ordinance imposed adequate standards for officials to apply in rendering a decision as whether to deny, suspend, or revoke a license. However, as *Centaur's* footnote 4 makes clear, this Court did not discuss whether the licensing requirement met procedural safeguards so as to be constitutional.

I. THE COUNTY'S ORDINANCE AS AN UNCONSTITUTIONAL PRIOR RESTRAINT

The Adult Businesses argue that the Ordinance's licensing requirement operates as an unconstitutional prior restraint on speech because it fails to impose adequate procedural safeguards. We agree.

The Adult Businesses base their arguments on *FW/PBS, Inc. v. City of Dallas,* 493 U.S. 215, 110 S.Ct. 596, 107 L.Ed.2d 603 (1990). In *FW/PBS,* the Supreme Court struck down a Dallas licensing scheme as being an impermissible prior restraint on protected speech. In finding the permitting scheme improper, the U.S. Supreme Court outlined a two prong analysis:

> [T]he licensor must make the decision whether to issue the license within a specified and reasonable time period during which the status quo is maintained, and there must be the possibility of prompt judicial

> review in the event that the license is erroneously denied.

Id. at 228, 110 S.Ct. at 606. The Supreme Court struck down the Dallas scheme because it failed to require the licensor to make the decision whether to issue the license "within a specified and reasonable time period." The *FW/PBS* opinion did not address the second prong of "prompt judicial review."

A. THE ADMINISTRATIVE DECISION

In regards to the first prong of the Supreme Court's test, the Ordinance differs significantly from the Dallas ordinance found unconstitutional in *FW/PBS*. Under the Ordinance, the County Zoning Administrator has 30 days from the date of the application to issue a permit to a sexually oriented business. Unlike the unconstitutional Dallas ordinance, all

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necessary inspections of the Adult Business applicant must be completed within 21 days of the application. Therefore, 30 days is the longest period of time that a sexually oriented business permit applicant would have to wait for the County's zoning administrator's decision.

However, the lower court failed to discuss the procedure for appealing a decision by the County zoning administrator. Before appealing to the circuit court, the Adult Businesses must exhaust all administrative remedies. *See generally Garris v. Governing Bd. of South Carolina Reinsurance Facility,* 333 S.C. 432, 511 S.E.2d 48 (1998). Since the Ordinance fails to proscribe any special method for appealing a permit denial by the zoning administrator, the standard process for appealing a zoning administrator's decision would apply. The record does not contain the Greenville Ordinances controlling appeals from zoning administrator decisions. Furthermore, this Court cannot take judicial notice of such local ordinances. *Kincaid v. Landing Dev. Corp.,* 289 S.C. 89, 344 S.E.2d 869 (Ct.App.1986). Without those ordinances, it is impossible to know whether the zoning administrator's decision is immediately appealable to the circuit court, or whether the zoning administrator's decision must first be heard by a board of zoning appeals in order to exhaust all administrative remedies. In any event, it is impossible to determine the full time period necessary to reach a final administrative decision.

Since the ordinances governing appeals from the zoning administrator are not part of the record on appeal, we affirm the lower court's decision on this issue in favor of the County. The Adult Businesses failed to include these ordinances in the record on appeal. The Adult Businesses, as the appellant in this issue, have the burden of presenting this Court with an adequate record. *Goode v. St. Stephens United Methodist Church,* 329 S.C. 433, 446-47, 494 S.E.2d 827, 834 (Ct.App.1997). Without the necessary County ordinances, this Court cannot determine the time period between the initial permit application and a final appealable administrative decision.

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B. PROMPT JUDICIAL REVIEW

The Adult Businesses argue that the trial court erred in finding that mere access to the state court system satisfies *FW/PBS's* requirement of "prompt judicial review." We agree.

Prior to the *FW/PBS* decision, prompt judicial review required a final judicial determination on the merits. In *Freedman v. Maryland,* 380 U.S. 51, 59, 85 S.Ct. 734, 739, 13 L.Ed.2d 649 (1965), the Supreme Court stated:

> Any restraint imposed *in advance of a final judicial determination* on the merits must similarly be limited to preservation of the status quo for the shortest fixed period compatible with sound judicial resolution ... [T]he procedure must ... assure *a prompt final judicial decision,* to

> minimize the deterrent effect of an interim and possible erroneous denial of a license. (Emphasis added).

However, since the *FW/PBS* decision, the federal circuits have split on retaining the "final judicial determination on the merits" requirement as an element of prompt judicial review. This split occurred because Justice O'Connor used language in her opinion such as the "possibility of," or the provision of "an avenue for," prompt judicial review as the essence of the safeguard.[1]

The Fourth, Sixth, and Ninth Circuits hold the view that "prompt judicial review" continues to require a timely judicial

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determination on the merits. *See Baby Tam & Co. v. City of Las Vegas,* 154 F.3d 1097, 1101-02 (9th Cir.1998); *11126 Baltimore Blvd., Inc. v. Prince George's County,* 58 F.3d 988, 998-1001 (4th Cir.1995); *East Brooks Books, Inc. v. City of Memphis,* 48 F.3d 220, 225 (6th Cir.1995). These courts have reasoned that because a person always has a judicial forum available when his or her speech is allegedly encroached, "to hold that mere access to judicial review fulfills *[Freedman's* prompt review requirement] makes the safeguard itself meaningless." *Baby Tam,* 154 F.3d at 1101. As the Ninth Circuit explained in *Baby Tam:*

> The phrase "judicial review" compels this conclusion. The phrase necessarily has two elements—(1) consideration of a dispute by a judicial officer, and (2) a decision. Without consideration, there is no review; without a decision, the most exhaustive review is worthless. In baseball terms it would be like throwing a pitch and not getting a call. As legendary major league umpire Bill Klem once said to an inquisitive catcher: "It ain't nothin' till I call it." This is also true of judicial review. Until the judicial officer makes the call, it ain't nothin'.

Id. at 1101-02. In these cases a "final" determination does not refer to a court's decision becoming final through various rehearing and appellate procedures. *Id.* A final determination means that a judicial officer should make the final decision denying a license rather than an administrative officer. *Id.*

The Courts of the First, Fifth, and Seventh Circuits have approached the meaning of "prompt judicial review" differently after the *FW/PBS* case. *See TK's Video, Inc. v. Denton County,* 24 F.3d 705, 709 (5th Cir.1994); *Graff v. City of Chicago,* 9 F.3d 1309, 1324-25 (7th Cir.1993); *Jews for Jesus, Inc. v. Massachusetts Bay Transp. Auth.,* 984 F.2d 1319, 1327 (1st Cir.1993). These Circuits have found that prompt access to judicial review is sufficient, even if there is no time frame for either a hearing or a decision on the merits. *See TK's Video, Inc.,* 24 F.3d at 709; *Graff,* 9 F.3d at 1324-25.

In order to comport with the requirements of *Freedman* and *FW/PBS,* we choose to follow the Fourth, Sixth, and Ninth Circuits by requiring that the procedure provide for a

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final judicial determination within a reasonable time frame. Otherwise, the prompt judicial review requirement loses all significance since the protection afforded by judicial review is meaningful only when it can be anticipated within a brief time period. Also, whether the *FW/PBS* decision could even alter the prompt judicial review standard as set by *Freedman* is questionable due to the fractured nature of the *FW/PBS* court.

In the current case, there is no guarantee that a judicial hearing will be held or a decision will be rendered within a prescribed period of time. Because of the absence of such a guarantee, the licensing scheme fails to provide for prompt judicial review.[2] Without prompt judicial review,

the Ordinance's permitting scheme is unconstitutional. The other portions of the Ordinance are severable from those sections pertaining only to the licensing requirements for adult businesses. *See Joytime Distrib. & Amusement Co. v. State,* 338 S.C. 634, 528 S.E.2d 647 (1999). As such, those portions of the Ordinance not addressed in this opinion may still be enforced.

C. PERMIT SUSPENSIONS BY THE ZONING ADMINISTRATOR

The Adult Businesses argue on appeal that the Ordinance is unconstitutional because of the power granted to the zoning administrator to unilaterally suspend the permits of sexually oriented businesses. This issue has not been preserved for review.

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In order to be preserved for review, the lower court must rule upon the issue. *Wilder Corp. v. Wilke,* 330 S.C. 71, 497 S.E.2d 731 (1998). The trial court order does not address the power of permit suspension by the zoning administrator. Since the Adult Businesses failed to have the trial court rule on this issue, this Court will not address it on appeal.

II. THE ORDINANCE DOES NOT ZONE THE ADULT BUSINESSES OUT OF EXISTENCE

The Adult Businesses argue section 12(a) of the Ordinance unreasonably limits alternative avenues of communication because it restricts the location of sexually oriented businesses to S-1 zoned property and that not enough S-1 property is available for relocation. We disagree.

Section 12 of the Ordinance has nine subsections regulating the permissible locations of sexually oriented businesses. Section (a) states:

> A person commits a misdemeanor if he operates or causes to be operated a sexually oriented business outside of a designated S-1 district. All sexually oriented businesses shall be located within a S-1 district.

When read alone, this section appears to prevent a sexually oriented business from locating in the unzoned portion of the County. However, subsection (i) of Section 12 states:

> With the *exception of subsection (a) above,* the provisions of this ordinance shall apply to those areas of the county that are not zoned. (Emphasis added).

Subsection (i) specifically excludes the S-1 zoning requirement of subsection (a) from applying to sexually oriented businesses located in unzoned areas of the County. "In construing statutory language, the statute must be read as a whole, and sections which are part of the same general statutory law must be construed together and each one given effect." *TNS Mills, Inc. v. South Carolina Dept. of Revenue,* 331 S.C. 611, 620, 503 S.E.2d 471, 476 (1998). Also, "statutes are to be construed in favor of constitutionality, and the court will presume a legislative act is constitutionally valid unless a clear showing to the contrary is made." *Bradley v. Hullander,* 277 S.C. 327, 330, 287 S.E.2d 140, 141 (1982). When read together, subsection (i) allows sexually oriented businesses to locate

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in the County's unzoned areas while still requiring such businesses to meet the other requirements of Section 12.

Furthermore, the trial court made the factual finding that nine S-1 sites existed in the County where the Adult Businesses could relocate. An action for a declaratory judgment that a zoning ordinance is invalid is at law. *Petersen v. City of Clemson,* 312 S.C. 162, 439 S.E.2d 317 (Ct.App. 1993). In actions at law tried without a jury, the

findings of fact of the judge will not be disturbed on appeal unless found to be without evidence which reasonably supports them. *Townes Assocs. Ltd. v. City of Greenville,* 266 S.C. 81, 221 S.E.2d 773 (1976). Since the trial court found that nine S-1 sites are available for relocation, more than enough S-1 properties exist where the six Adult Businesses could relocate.

CONCLUSION

Despite finding the permitting scheme of the Ordinance at issue unconstitutional, this Court continues to view local governmental regulation of sexually oriented businesses as proper. *See Restaurant Row Associates v. Horry County,* 335 S.C. 209, 516 S.E.2d 442 (1999). As with other legislative enactments, this Court accords ordinances regulating sexually oriented businesses a presumption of constitutionality which the attacking party has the burden of overcoming. *See Centaur, Inc. v. Richland County,* 301 S.C. 374, 392 S.E.2d 165 (1990). However, when zoning ordinances invoke First Amendment concerns, we must follow the guidelines supplied by the United States Supreme Court. *Id.,* 301 S.C. at 379, 392 S.E.2d at 168. That precedent requires local municipalities to tailor their sexually oriented business regulations to address their local situations.

Richland County's zoning situation is very different from Greenville County's in that the former is wholly zoned and the later is not. Whether a sexually oriented business zoning regulation is designed to serve a substantial governmental interest and allows for reasonable avenues of communication is a question that must be answered in light of the particular situation of each locality that enacts such an ordinance. Municipalities different from Richland County cannot merely copy the ordinance at issue in *Centaur* and expect to automatically

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meet every constitutional requirement. Each governmental body must look at its own situation and do the legal work necessary to ensure that their laws comport with precedent from this Court as well as the United States Supreme Court.

Based on the foregoing, we REVERSE the trial court's decision, and hold that the permitting scheme of the Greenville County ordinance is unconstitutional.

FINNEY, C.J., MOORE, WALLER, and BURNETT, JJ., concur.

Notes:

1. The Fourth Circuit has taken the position that because of the fragmented nature of the *FW/PBS* decision, this case does not effectuate any change in the prompt judicial review requirement. The Fourth Circuit held:

Moreover, it is well settled that "[w]hen a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, `the holding of the Court may be viewed as that position taken by those Members who concurred in the judgments on the narrowest grounds.' (Citations omitted) Thus, even if Justice O'Connor's opinion in *FW/PBS* could be read as having altered the *Freedman* "prompt judicial review" factor ... because this position obviously did not gain the assent of the concurring Justices (Brennan, Marshall, and Blackmun, who made clear that they believed that all three of the *Freedman* procedural safeguards were required), *FW/PBS* could not have modified *Freedman."*

*11126 Baltimore Blvd., Inc. v. Prince George's County,*58 F.3d 988, 999 (1995).

2. We recognize that under the South Carolina Rules of Civil Procedure, municipal issues of this type are not expedited or required to be decided within a certain time frame. Other states have specific provisions in their rules of civil procedure that allow for such expedited

review. *See e.g.,* Pa. R. Civ. P. 1531(f)(1). Without such a provision, a municipality cannot guarantee that a judicial hearing will be held and a decision rendered within any specific amount of time. This procedural problem illustrates how constitutionally perilous it can be for a municipality to use a licensing scheme to regulate protected speech. Zoning schemes, although they have First Amendment concerns of their own, have met with greater success in balancing free speech concerns with the regulation of adult businesses. *See Restaurant Row Associates v. Horry County,* 335 S.C. 209, 516 S.E.2d 442 (1999); *Condor, Inc. v. Board of Zoning Appeals,* 328 S.C. 173, 493 S.E.2d 342 (1997); *Rothschild v. Richland County Bd. of Adjustment,* 309 S.C. 194, 420 S.E.2d 853 (1992); *Centaur, Inc. v. Richland County,* 301 S.C. 374, 392 S.E.2d 165 (1990).

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675 S.E.2d 776
Jeffrey HARBIT, Thomas L. Harbit, Plaintiffs, of whom Jeffrey Harbit is Appellant,
v.
CITY OF CHARLESTON, City of Charleston Planning Department, Respondents.
No. 4511.
Court of Appeals of South Carolina.
Heard January 21, 2009.
Decided February 25, 2009.
Rehearing Denied May 4, 2009.

[675 S.E.2d 778]

Thomas R. Goldstein, of North Charleston, for Appellant.

Timothy Alan Domin, of Charleston, for Respondents.

GEATHERS, J.:

In this appeal, Jeffrey Harbit (Harbit) argues that the circuit court improperly granted summary judgment in favor of the City of Charleston (the City) on several claims stemming from the City's refusal to rezone Harbit's single family residential property for limited commercial use. We affirm.

FACTS

Harbit is the owner of property located at 7 Wesley Drive, which is within the City's limits. The property is on the corner of Wesley Drive and Stocker Drive. The house at 7 Wesley Drive faces Wesley Drive with a rear entrance and driveway accessible only from Stocker Drive. Wesley Drive is a five-lane thoroughfare, connecting Folly Road to Highways 17 and 61. Stocker Drive is a purely residential street, which may be accessed from the heavier-traveled Wesley Drive.

At all times pertinent to this appeal, this property has been zoned for single family residential purposes. Harbit purchased this property in 2003 for $180,000 from Truett Nettles (Nettles). Prior to selling the property to Harbit, Nettles attempted to rezone the property for limited commercial use as an attorney's office, but the City denied his request. Harbit was aware of the City's denial of Nettles' request for rezoning when he purchased the property from Nettles in 2003.

In 2005, Harbit applied for rezoning of the Wesley Drive property based on its location within the Savannah Highway Overlay Zone (the Zone). The Zone was created as a result of a comprehensive study of land surrounding the Ashley River Bridge in Charleston.[1] Based on this study, the City developed the "Ashley Bridge District" plan, which identified the need to maintain residential communities in the Zone, despite increased commercialization. While highlighting the need to maintain residential uses in the Zone, the plan allows certain properties along Savannah Highway and Wesley Drive to be used for limited commercial purposes, including professional office use. Under the Ashley Bridge District plan, the other properties on Harbit's side of Wesley Drive within

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the Zone have been rezoned for limited commercial use.

On June 15, 2005, the City of Charleston Planning Commission (the Planning Commission) reviewed Harbit's application, at which time Harbit's counsel presented Harbit's position for rezoning the Wesley Drive property. The Planning Commission, however, voted to recommend denying Harbit's rezoning application, finding the request was in contradiction to the Ashley Bridge District plan and the overall neighborhood sentiment to retain the residential use of the structures within the area. On September 27, 2005, Charleston City Council (City Council) received the Planning Commission's recommendation and held a public hearing to address local zoning issues, including Harbit's application. Harbit's counsel was present for the City Council meeting. City Council denied Harbit's request, citing a concern over increased commercialization, loss of residential use, and the

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special location of the property at the entrance of a residential neighborhood, particularly its frontage on a purely residential street.

After City Council's denial of his application, Harbit appealed the zoning decision to the circuit court and asserted additional grounds for relief, including a request for a writ of mandamus and causes of action for due process and equal protection violations. The City filed a motion for summary judgment on all claims, which the circuit court granted. In its order, the circuit court found a writ of mandamus was inappropriate because zoning is not a ministerial act and thus cannot be mandated by the court.[2] In dismissing Harbit's claims for procedural and substantive due process, the circuit court found Harbit was provided with sufficient notice to satisfy his procedural due process rights, and because he had no prior property interest in commercial zoning, his substantive due process rights were not violated. Regarding Harbit's equal protection claim, the circuit court found City Council had a rational basis for denying Harbit's application such that Harbit was afforded equal protection of the law. It is from this order that Harbit now appeals.

STANDARD OF REVIEW

An appellate court reviews the grant of summary judgment under the same standard applied by the circuit court. *David v. McLeod Reg'l Med. Ctr.*, 367 S.C. 242, 247, 626 S.E.2d 1, 3 (2006). The circuit court should grant summary judgment "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Rule 56(c), SCRCP; *Russell v. Wachovia Bank, N.A.*, 353 S.C. 208, 217, 578 S.E.2d 329, 334 (2003). In determining whether any triable issues of fact exist, the evidence and all reasonable inferences must be viewed in the light most favorable to the non-moving party. *Law v. S.C. Dep't of Corr.*, 368 S.C. 424, 434, 629 S.E.2d 642, 648 (2006). "The purpose of summary judgment is to expedite disposition of cases which do not require the services of a fact finder." *George v. Fabri*, 345 S.C. 440, 452, 548 S.E.2d 868, 874 (2001). Summary judgment is not appropriate when further inquiry into the facts of the case is desirable to clarify the application of the law. *Englert, Inc. v. LeafGuard USA, Inc.*, 377 S.C. 129, 134, 659 S.E.2d 496, 498 (2008).

ISSUE ON APPEAL

Do genuine issues of material fact exist on Harbit's claims such that the circuit court erred in granting summary judgment to the City as a matter of law?

LAW/ANALYSIS

A. "Fairly Debatable" Standard in Zoning Decisions

Harbit asserts that viewing the evidence in his favor, City Council's refusal to rezone Harbit's property is so unreasonable that this Court should invalidate City Council's decision. We disagree.

Rezoning is a legislative matter. *Lenardis v. City of Greenville*, 316 S.C. 471, 471, 450 S.E.2d 597, 597 (Ct.App.1994). The legislative body's decision in zoning matters

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is presumptively valid, and the property owner has the burden of proving to the contrary. *Rushing v. City of Greenville*, 265 S.C. 285, 288, 217 S.E.2d 797, 799 (1975). The authority of a municipality to enact zoning ordinances that restrict the use of privately owned property is founded in the municipality's police power. *Rush v. City of Greenville*, 246 S.C. 268, 276, 143 S.E.2d 527, 530-31 (1965). The governing bodies of municipalities clothed with authority to decide residential and industrial districts are better qualified by their knowledge of the situation to act upon these matters than are the courts, and their decisions will not be interfered with unless there is a plain violation of the constitutional rights of citizens. Id. As in this case, the determinative

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question is whether the city council's refusal to change the zoning of the owner's property is so unreasonable as to impair or destroy the owner's constitutional rights. *Rushing,* 265 S.C. at 288, 217 S.E.2d at 799. We cannot insinuate our judgment into a review of the city council's decision but must leave that decision undisturbed if the propriety of that decision is even "fairly debatable." *Knowles v. City of Aiken,* 305 S.C. 219, 223, 407 S.E.2d 639, 642 (1991).

Additionally, there is a strong presumption in favor of the validity of municipal zoning ordinances, and in favor of the validity of their application, and when the planning commission and the city council of a municipality have acted after reviewing all of the facts, the court should not disturb the finding unless such action is arbitrary, unreasonable, or in clear abuse of its discretion, or unless it has acted illegally and in excess of its lawfully delegated authority. *Bob Jones Univ., Inc. v. City of Greenville,* 243 S.C. 351, 360, 133 S.E.2d 843, 847 (1963). Likewise, the power to declare an ordinance invalid because it is so unreasonable as to impair or destroy constitutional rights is one which will be exercised carefully and cautiously, as it is not the court's function to pass upon the wisdom or expediency of municipal ordinances or regulations. *Id.*

We find that City Council's decision is "fairly debatable" because the City proffered several reasonable grounds for the denial of Harbit's rezoning application. First, the Planning Commission and City Council concluded that rezoning Harbit's property would not be in the community's best interests because the City has a vested interest in preserving the area's residential character and in minimizing commercialization. As stated in the Ashley Bridge District Plan, one of the major concerns in this area was increased commercialization due to rezoning. Further, both the Planning Commission and City Council cited concerns of neighborhood residents who feared loss of residential use in the area and the possibility that continued rezoning would create a domino effect. While all of the residents' concerns might not be well-founded, City Council's response to public opposition does not rise to the level of a constitutional violation. *See Sunrise Corp. of Myrtle Beach v. City of Myrtle Beach,* 420 F.3d 322, 329 (4th Cir.2005) (in finding the state court of appeals' decision was not res judicata of the developers' § 1983 due process and equal protection claims, the Fourth Circuit Court of Appeals determined the city council's improper denial of the zoning application in response to public opposition did not rise to the level of a constitutional violation because "matters of zoning are inherently political, and [ ] it is a zoning official's responsibility to mediate disputes between developers[ ] and local residents").

Additionally, City Council specifically cited the unique location of Harbit's property as opposed to other properties on Wesley Drive that were zoned for limited commercial use, noting that two of its sides are situated on the interior of the neighborhood. Moreover, because it is a corner lot, the property effectively serves as a buffer between the heavier-traveled Wesley Drive and the purely residential Stocker Drive. *See Hampton v. Richland County,* 292 S.C. 500, 503, 357 S.E.2d 463, 465 (Ct.App.1987) (finding the city council's refusal to rezone property from an office and industrial classification to a general commercial classification was "fairly debatable" because the property lay between commercial and residential properties thus creating a buffer between the two zones).

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While other similarly situated properties on Wesley Drive are zoned for limited commercial use, the record does not indicate that Harbit was the subject of purposeful, invidious discrimination. *See Sylvia Dev. Corp. v. Calvert County, Md.,* 48 F.3d 810, 825 (4th Cir.1995) (internal citations omitted) ("If disparate treatment alone were sufficient to warrant a constitutional remedy, then every blunder by a local authority, in which the authority erroneously or mistakenly treats an individual differently than it treats another who is similarly situated, would rise to the level of a federal constitutional claim."). For instance, there are other properties on Harbit's side of Wesley Drive that are currently

zoned residential, and with the exception of one property cornering on Savannah Highway and Wesley Drive, all of the properties on the other side of Wesley Drive are zoned residential. The properties on his side of Wesley Drive that are zoned for limited commercial use are distinguishable in that they either also front on Savannah Highway or are not accessed by a purely residential street.

Based on the evidence in the record, the City properly denied Harbit's rezoning application in an effort to hold the line on commercial development in the area and protect its residential nature. We will not invalidate City Council's decision as its propriety is at least "fairly debatable" based on the facts and is not "so unreasonable as to impair or destroy constitutional rights." *See Knowles,* 305 S.C. at 224, 407 S.E.2d at 642. As such, it is not this Court's function to pass upon the wisdom or expediency of City Council's decision. *See Bob Jones Univ., Inc.,* 243 S.C. at 360, 133 S.E.2d at 847.

B. Due Process

Harbit contends the circuit court erred in dismissing his procedural and substantive due process claims. We disagree.

1. Procedural Due Process

Procedural due process imposes constraints on governmental decisions that deprive individuals of liberty or property interests within the meaning of the Due Process Clause of the Fifth or Fourteenth Amendment of the United States Constitution. U.S. Const. amends. V and XIV, § 1; *Mathews v. Eldridge,* 424 U.S. 319, 331, 96 S.Ct. 893, 47 L.Ed.2d 18 (1976). The fundamental requirements of due process under the United States Constitution and the South Carolina Constitution include notice, an opportunity to be heard in a meaningful way, and judicial review. U.S. Const. amends. V and XIV, § 1; S.C. Const. art. 1, § 22; *Stono River Envtl. Prot. Ass'n v. S.C. Dep't of Health and Envtl. Control,* 305 S.C. 90, 94, 406 S.E.2d 340, 342 (1991). Further, due process is flexible and calls for such procedural protections as the particular situation demands. *Kurschner v. City of Camden Planning Comm'n,* 376 S.C. 165, 172, 656 S.E.2d 346, 350 (2008).

We are of the opinion that Harbit received due process, both procedural and substantive, thus entitling the City to judgment as a matter of law. First, Harbit was afforded procedural due process because he was provided with notice of both public hearings as evidenced by the rezoning application that he completed and signed.[3] He also had a meaningful opportunity to be heard as he was allowed to present his arguments at both the Planning Commission and City Council levels. While Harbit chose not to be present, his attorney represented Harbit's interests by presenting exhibits and arguing Harbit's position for rezoning his property in both instances.

Further, Harbit has received three levels of review, in each of which he was allowed to present his position.[4] The existence of review is an indication of the presence of procedural due process, rather than its absence.

[675 S.E.2d 782]

See Sunrise, 420 F.3d at 328 (finding district court properly granted city's motion for summary judgment on developers' claims for due process violations after city denied building permit as developers received four levels of state review which was "an indication of the existence of procedural due process, rather than its absence"). Because Harbit was provided with both predeprivation and postdeprivation remedies, his procedural due process rights were not violated.

2. Substantive Due Process

In order to prove a denial of substantive due process, a party must show that he was arbitrarily and capriciously deprived of a cognizable property interest rooted in state law. *Sunset Cay, LLC v. City of Folly Beach,* 357 S.C. 414, 430, 593 S.E.2d 462, 470 (2004). The State's deprivation of the property interest must fall so far beyond the

outer boundaries of legitimate governmental authority that no process could remedy the deficiency. *Sunrise,* 420 F.3d at 328. A legislative body does not deny due process simply because it does not permit a landowner to make the most beneficial use of its property. *Bear Enters. v. County of Greenville,* 319 S.C. 137, 141, 459 S.E.2d 883, 886 (Ct.App.1995). In reviewing a substantive due process challenge to a zoning ordinance, we must determine whether the ordinance bears a reasonable relationship to any legitimate government interest. *See Sunset,* 357 S.C. at 430, 593 S.E.2d at 470 (stating that the standard of review for all substantive due process challenges to state statutes, including municipal ordinances, is whether the statute bears a reasonable relationship to any legitimate interest of government).

The City did not violate Harbit's substantive due process rights when it denied his rezoning application. First, Harbit did not have a prior property interest in commercial zoning. While Harbit may have purchased the property with the expectation that City Council would grant his application, this alone is insufficient to establish a violation of his constitutional rights. *See Rush,* 246 S.C. at 280-81, 143 S.E.2d at 533 (citing to 62 C.J.S., *Municipal Corporations,* § 227(11)) ("Although it is an element in the situation which is entitled to fair and careful consideration, mere disadvantage in property value or income, or both, to a single owner of property, resulting from application of zoning restrictions ordinarily does not warrant relaxation in his favor...."); *Hampton,* 292 S.C. at 503-04, 357 S.E.2d at 465 (holding a property owner is not entitled to have his property zoned for its most profitable use).

Furthermore, Harbit was aware at the time of purchasing 7 Wesley Drive that the prior owner's application had been denied based on the same zoning restrictions and that his efforts might likely share the same fate. *See id.* at 281, 143 S.E.2d at 533 (internal citation omitted) (in denying the plaintiff's variance request, the supreme court found that the plaintiff who purchased property after a zoning restriction was in effect must have contemplated potential hardships, financial or otherwise, resulting from the existing conditions at the time of purchase). Because the City's decision was reasonably founded and rationally related to its stated interests of preserving the area's residential character in the face of continuing commercialization, whether it be strictly commercial or limited commercial use, the City's actions did not rise to the level of being arbitrary or capricious and thus did not violate Harbit's substantive due process rights.

C. Equal Protection

Harbit also asserts the circuit court erred in dismissing his equal protection claim. We disagree.

Under the Equal Protection Clause of the Fourteenth Amendment, a state may not "deny to any person within its jurisdiction the equal protection of the laws." U.S. Const. amend. XIV, § 1; *see* S.C. Const. art. I, § 3 ("The privileges and immunities of citizens of this State and of the United States under this Constitution shall not be abridged, nor shall any person be deprived of life, liberty, or property without due process of law, nor shall any person be denied the equal protection of the laws."). This clause requires that "the states apply each law, within its scope, equally to persons similarly situated, and that any differences of application must be justified by the law's purpose." *Sylvia Dev. Corp.,* 48 F.3d at 818. It does not prohibit different treatment of

[675 S.E.2d 783]

people in different circumstances under the law. *Town of Iva ex rel. Zoning Administrator v. Holley,* 374 S.C. 537, 541, 649 S.E.2d 108, 110 (Ct.App.2007). Instead, "`the classification must be reasonable, not arbitrary, and must rest upon some ground of difference having a fair and substantial relation to the object of the legislation, so that all persons similarly circumstanced shall be treated alike.'" *Id.* In a case such as this, the rational basis standard, rather than strict scrutiny, applies because the classification at issue does not affect a fundamental right and does

not draw upon inherently suspect distinctions such as race, religion, or alienage. *Sunset Cay,* 357 S.C. at 428-29, 593 S.E.2d at 469.

Further, one seeking to show discriminatory enforcement in violation of the Equal Protection Clause must demonstrate arbitrary and purposeful discrimination in the administration of the law being enforced. *See State v. Solomon,* 245 S.C. 550, 574, 141 S.E.2d 818, 831 (1965). "[E]ven assuming [a governmental entity] is not enforcing [an] ordinance equally, the fact that there is some unequal treatment does not necessarily rise to the level of a constitutional equal protection violation." *Denene, Inc. v. City of Charleston,* 359 S.C. 85, 96, 596 S.E.2d 917, 922 (2004).

The City had a rational basis to deny Harbit's application, despite the fact that other properties on Wesley Drive were zoned for limited commercial use. As the circuit court notes in its order, Harbit's property is the only one of those properties which has frontage on Stocker Drive. Further, unlike the other properties, Harbit's property effectively serves as a buffer between the purely residential Stocker Drive and the heavier-traveled Wesley Drive. In contrast to Harbit's property, the other corner property on his side of Wesley Drive that is zoned for limited commercial use has frontage on Savannah Highway and abuts other commercial property. Consequently, because the record does not indicate that Harbit was the subject of purposeful, invidious discrimination, the circuit court did not err in granting summary judgment on his equal protection claim. *See Sylvia Dev. Corp.,* 48 F.3d at 825 (internal citations omitted) ("While an equal protection claim must be rooted in an allegation of unequal treatment for similarly situated individuals, a showing of such disparate treatment, even if the product of erroneous or illegal state action, is not enough by itself to state a constitutional claim."). Consequently, the circuit court appropriately granted summary judgment on Harbit's claims stemming from the denial of his rezoning application.

CONCLUSION

Based on the foregoing, the circuit court did not err in granting the City's motion for summary judgment.

Accordingly, the circuit court's order is

AFFIRMED.

WILLIAMS and PIEPER, JJ., concur.

Notes:

1. City of Charleston Zoning Ordinance § 54-202(e) (1996) states: "Savannah Highway SH Overlay Zone. The SH Overlay Zone is intended to allow office and neighborhood service uses in addition to the uses allowed in the base zoning district. Existing structures in the SH zone that are used for a non-residential use shall retain their residential appearance.... Parking shall be restricted to the side or rear of the principal buildings and buffering from adjoining residential lots shall be required."

2. Harbit does not appeal the circuit court's decision on this issue.

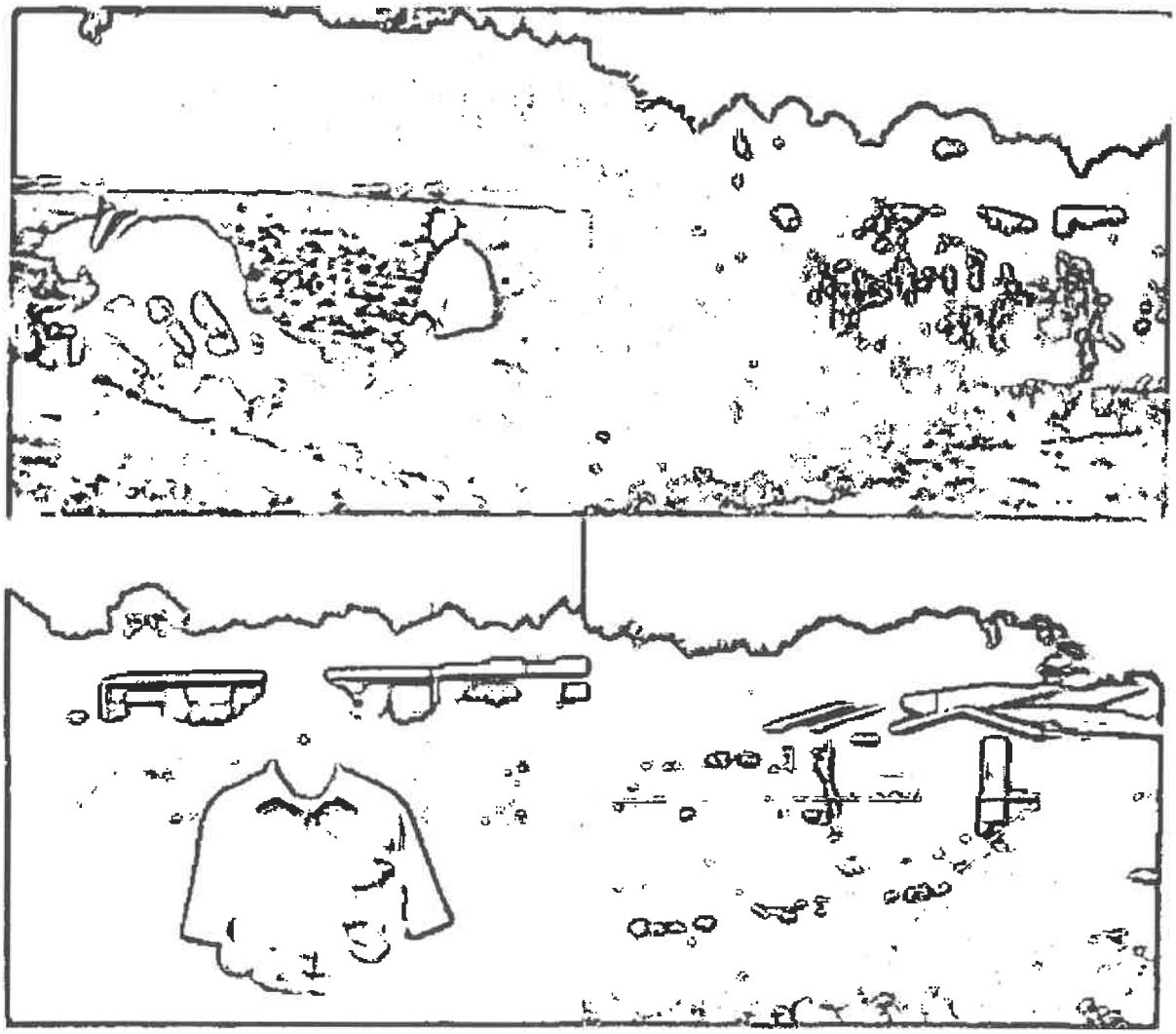
3. The rezoning application that Harbit signed states, "The Planning Commission will hold **a public hearing** and make a recommendation to City Council for approval, approval with conditions, disapproval or deferral of the rezoning.... After the Planning Commission makes its recommendation, the application will be forwarded to City Council where **another public hearing** will be held approximately one month later." (emphasis added).

4. The Planning Commission's recommendation was reviewed by City Council, whose decision was then reviewed by the circuit court, and is now before this Court.

Mr. Gay

SAVING OUR LAND:

A Legal Manual on Land Use and Retention



Penn Center, Inc.

Thought this might be of some interest.

HB

THE HISTORY

Where does history really begin? Is it merely recorded history, or is history that which can be pieced together through archeological studies and the like? Daufuskie is steeped in history of yesterday, perhaps dating back to the ice age, most certainly it has evidences of habitation 4,000 to 5,000 years ago.

Even though the Spanish sailed into Port Royal Sound in 1520, it was not until around 1740 that King George II of England bestowed on David Mongin an island in the area known only as "Daufuskie"! Tradition has it that it's name is Indian, meaning "place of blood", being called this because of an indian massacre by the white settlers in the year of 1715. Even today the spot is still called "Bloody Point"!

The name of Daufuskie is really probably of Muskhogean Indian derivation: perhaps it was even the name of the tribe. It's meaning is truly not known and it's spelling has even been uncertain in the past; Dawfuskee, Defoskey, D.' Awfoskie.

Colonists on Daufuskie remained "loyal" to the King during the Revolutionary War and bloody skirmishes were held with their Tory neighbors on nearby Hilton Head Island.

Daufuskie, during the anti-bellum days flourished with several large and prosperous plantations harvesting typically indigo and long staple Sea Island Cotton. These plantations, before and even after the Civil War, were scenes of much merriment and social gatherings. George Wymberly Jones De Renne, of Wormsloe, Georgia near Savannah notes in his journal dated April 12, 1878, "We left the wharf at the foot of Drayton Street, at 9:15 a.m., arrived at Daufuskie (Bloody Point) at 11:15;

visited that place, Mr. Stoddard, Mrs. Habersham, myself and my gardner going in a carriage to Melrose (plantation) for the two hours, the rest remaining at Bloody Point .... We crossed to Tybee, lunched enroute on boned turkey, sandwiched rolls, crab salad, chicken salad, orange sherbert, strawberries and ice cream, snowball pound cake, 6 bottles of Champagne, 2 bottles of Sherry, 2 bottles of Whiskey and lots of ice. Five rocking chairs (bamboo) for the ladies from my house ....."

Melrose Plantation House the grandest on the island, burned in 1912 by which time its famed gardens had become overgrown and even some, including the house site washed into the Atlantic. In April 1867, Eliza Ann Summers, a visiting yankee school teacher from Hilton Head said that seldom had she seen anything "that would be a thousandth part compared to this." She wrote of 50 kinds of roses and japonicas.

In 1873 at Haig Point Plantation the United States Government constructed a lighthouse which is one of the few remaining buildings of historical significance on Daufuskie Island today. This lighthouse was actually the rear-light to mark the entrance to Calibogue Sound. Historical records indicate "two lights are attended by a keeper." The front-range light is shown from a tower 18 feet high, 1/2 mile from the dwelling. The rear-light is shown from a tower 61 feet high on the dwelling. Operation of the lighthouse stopped in 1934 and the lighthouse fell into total disrepair. It has now been totally restored and stands as evidence that history must and will be preserved.

During the years following the Civil War many black islanders were given property by the Union and remained side by side with their former owners of the large plantations. Living off the land and from the sea, these island folk, some 1,200 strong, thrived until the 1950's when pollution from the Savannah River closed not only the oyster beds, but the three oyster factorys on the island. Truck farming once a vital source of the areas produce needs came to a halt with the rise in popularity of the super market! From the early fifties until now, Daufuskie has lain dormant with little mention of its name save the works of Author, Pat Conroy in his book "The Water is Wide," published in 1972. With the founding of the Daufuskie Island Land Trust and the Daufuskie Island Historical Society, life on the island will once again be filled with activity, opportunity and hope for the Daufuskie if 100 years ago.

COMMUNITY CONCEPT

The community being proposed and planned by the Daufuskie Island Land Trust is invisioned as a "community of yesterday with convenience of today"! A community that is removed but not remote. One in which a person may realize that there is still time to smell a few roses and still function in the work a day

world!

The following is a portion of an article reprinted exactly as it appeared in the Savannah Morning News, April 30, 1895. "The opening up of the inland passage to Beaufort, S.C., will be of great benefit to Savannah. The route is a very attractive one. Already there are two steamboat lines between Savannah and Beaufort.

There has been recently established a day line from Savannah leaving at a convenient hour in the morning, returning in the early evening. Mr. G.U. Beach, owner of the steamer "Gov. Safford," a thorough steamboat man, having had long experience in Florida waters both with passengers and freight, after making a thorough investigation of the route has come to the conclusion that it is a paying one. Heretofore people traveling from the north during the winter season, to see the coast and the long stretch of sea island, through which the island passage winds, have been unable to do so on account of the trip taking up too long a time.

The freight and passenger traffic is in itself a good business, as seen by the report of the committee from the cotton exchange appointed to investigate the importance of the inland route to Beaufort, as published in the Morning News some time ago.

A trip to Beaufort is well worth the time. Passengers have ample opportunity to view the harbor improvements, passing six or eight dredges with their attending tugs at work on the channel. A fine view of Tybee beach and lighthouse is had as the steamer swings into her course across the sound; then Daufuskie Island is approached. The water changes color, as the mouth of Savannah river is left behind, and turns to the clear sea green, and schools of porpoises begin to chase the steamer as she nears the light-house on Hague's point. A stop is made for passengers at the point, not long enough however, to see any of the beauty of this famous island, which was the summer home of the old Mongin family, the Stoddards and others. A beautiful avenue of oaks, heavily covered with Spanish moss, leads from the light-house to a point where once stood the old family mansion, the remains of which are still seen. Mr. Stoddard's home, "Melrose," is also one of the points of interest on Daufuskie. This is further around on the ocean side, and can be seen from the steamer."

Imagine arriving at the wharf on Haig Point after a short relaxing ride across Calibogue Sound, being transported to the Great House or your house via a carriage drawn by a pair of matched grey's! Traveling over narrow live oak shrouded lanes, you realize at once you're stepping back in time. Not so far back however, that modern conveniences of every kind aren't available. Everything you could possibly want on the mainland and none of the things you don't want!

Specifically planned for the community being proposed by the Daufuskie Island Trust are such amenities as; 900 acres of preservation or recreational land, 600 single family residential home sites, 2 championship golf courses, Yacht basin and Marina village, Great House Inn and Lighthouse Tennis Village both having waterfront multi-family dwellings. The Trust's Communities will make available to the members of the Daufuskie Island Historical Society virtually every type of island property, from true water front to unsurpassed water view properties perched on sound bluffs. Larger (up to 5 acres) will be available inland for permanent residential use. The concept is to create or recreate a residential and recreational community that is free from virtually all internal combusiton engine vehicles. Horse drawn taxies, privately owned electrical cars; bicycles and jitneys for moving longer distances would be the first step in attempting to keep Daufuskie much as was years and years ago!



Melrose House, 1870

ORIGINAL DOCUMENT
POOR CONDITION OR CONTRAST

LOW COUNTRY SKETCHES

Albert H. Stoddard of Daufuskie Island

by Edith Inglesby

The uniqueness of Albert H. Stoddard came from environment. And this environment was the sea island of Daufuskie and the lands and waters about it. This also had been his heritage since 1740.

South Carolina's sea islands have played an important part in its history. And they have harbored a diverse lot . . . pirates, buccaneers, explorers, wealthy planters and eccentrics. From here, too, came the first Bishop of Georgia. It was to this region that Captain Hilton, in 1663, wished transported "All they that want a happy settlement of our English nation."

As well he might. From the lonely beaches of the barrier islands where on moonlight nights huge sea turtles rise from the surf to lay their eggs in warm sands, from the sea islands where long staple cotton made fortunes and shaped the course of history, to the coastal regions in whose shadowy lagoons long-plumed egrets made their nests, the Carolina Low Country is beautiful.

But now one wonders fearfully, how long? Daufuskie Island, almost the last to hear the strident noise of modernity, is apparently to be roused from quiet beauty by the roar of bulldozer and the scream of crane . . . a pity. It has had a long and interesting history.

Daufuskie was at one time known locally as "Stoddard's Island," owing to that family's large holdings. But it was David Mongin, their ancestor, to whom the English king gave the grant. Mongin, a Huguenot, fleeing persecution in his native France, settled in England in 1725. Later he held high rank in the Royal Navy and for his efforts in subduing pirates was, in 1740, given by George II a grant of land on Daufuskie Island. In 1775 George III bestowed on this family more lands "Situate in Saint Peter's Parish, Granville (now Beaufort) County." These lands were along the May River estuary. The Mongin coat of arms is a sunflower turning to the sun. If the sun was their god they were fortunate in their new possessions.

Transfer of Daufuskie Island from Mongin to Stoddard came about through a marriage. In 1830 John Stoddard, descendant of Jonathan Edwards, noted theologian, writer and president of what is now Princeton University, married Mary Mongin, "orphan granddaughter and heiress of John David Mongin." Their wedding took place in the American Embassy at Paris where Stoddard, member of a Boston importing house, had been sent. In time they settled on her South Carolina property and his obituary notes: "Her income, already of opulent dimensions, was, by her husband's judicious management, enhanced two and a half times."

The Stoddards as well as the Mongins prospered under the magic of sea island cotton. However, it is not with this we are concerned, but with Albert Stoddard (1872-1954) whose great contribution . . . though he, too, successfully planted sea island cotton . . . was the perpetuation of the mores and language of the Gullah Negro.

That part of Daufuskie Island known

"Bloody Point" from its role in the Indian uprising of 1715, was the site of the original Mongin house. During the lifetime of Albert Stoddard's father the Mongin properties were divided; his uncle Henry Mongin Stoddard getting Bloody Point, his uncle John Stoddard, Ingleside, and his father, Melrose Plantation. Albert Stoddard should have been born at Melrose; but to his everlasting shame was not — a fact he kept dark. He arrived in summer when his parents, following the established custom, were seeking the coolness of a Northern resort. Newport, it may be said, owed its origin to South Carolina rice and cotton planters who were its greatest patrons until the Civil War.

But if Albert Stoddard was not born at Melrose Plantation he made up for it. Here from infancy he lived and imbibed with every pore its scents and sounds and history, its color and atmosphere . . . the very character of the island and its black people. It was a different world, remote and soon to disappear. He would have been a lonely little boy had it not been for his black friends. His father, a widower and an extremely well-educated man, delighted in his company and, rather than part with him for boarding school, taught him himself. Straight from his father's tutoring young Albert entered the University of Virginia, where he did well. But the senior Stoddard, popular in Savannah, seeking the Florida sun in winter or the bracing quality of North Carolina's mountains in summer, was oft-times away. Yet Albert was never dull. He loved this beautiful, isolated island. Fascinated by the Negro spirituals, he knew them well, and knew from which plantation each had emanated. Every plantation had its crew of oarsmen, and as the long boats passed and the wind brought him the tune by which the oarsmen kept unison, he could tell from the song whose boat it was. He himself grew to be an excellent oarsman. When the lovely Huger sisters left their father's rice plantation for Bluffton's high land, the young Albert would be invited to spend the day and went under his own oars, so to speak. He would leave Daufuskie on the outgoing tide and return again by the incoming one. Sometimes he rowed with the tide to Savannah, attended a party, and rowed home again next day on the return tide. He led, as do most island people, a life governed largely by the rhythm of water.

His greatest pleasures as a child were his black friends and the stories they told which made individuals of all the plantation birds and beasts. Hearing these tales the boy learned a second



Albert H. Stoddard (1872-1954)

language, Gullah. This is the patois spoken by Negroes of the Georgia and South Carolina sea islands and coastal regions. Found in no other sections of the South, it could be (and by Northerners often was) taken for a foreign language. Ordinary Negro dialect has no resemblance . . . as that in "Uncle Remus," for instance. Called Gullah by the fact that most Africans here were from the Angola tribe of West Africa, it contained some words of their own language, some archaic English words (a Charleston authority traced bits of Devon and Dorset speech) and words that were the Negro's effort to use those of his master or overseer. It is soft, full of cadence and often extremely to the point. There was a saying on the islands: "Some men are born to Gullah, some achieve Gullah, while others have Gullah thrust upon them . . . and are nonplussed." An islander's upcountry wife might have to enlist his aid to understand her cook.

Albert Stoddard not only could understand Gullah; he could speak it as few white men could. An anecdote might illustrate how his second language helped him in running Melrose Plantation when it became his. Once he gave a man called James "a crop." That is, he furnished land, seed, fertilizer, equipment . . . everything needed to plant a crop successfully. About the middle of the season James disappeared and was not seen for ten days. On his return his master gave him a thorough dressing down. Through it all James stood with a perfectly placid, unmoved expression. Seeing he was getting nowhere and by that time utterly exasperated, Mr. Stoddard lapsed into Gullah. "Jeems," he said, "You jis ain fitten" (fit for nothing). At that moment James' face fell and tears came into his eyes. "No Suh, uh knows uh ain fitten, fuh go off en leff muh crop." "Of all my oratory," Mr. Stoddard recalled, "the only thing he understood was in the vernacular" and he believed that, rather than stupidity, it was failure to understand that often was the trouble.

Another time a young house maid was being taken to task and the butler made excuses for her. Disdaining excuse from that quarter, she made a sucking noise through her teeth and turned her back on him. Afterwards the butler explained: "Uh try fuh refen she, but him suck e teet puntop me, so uh lef um fuh Maussa squisit um fuh e self." Fortunately the master of Melrose could interpret this as "I tried to defend her, but she sucked her teeth at me, so I left her for Maussa to inquisit or catechise himself." "Squisit" (inquisit-catechise) is one of the old English words that still survived among them. Incidentally, we have here the Gullah characteristic of using she, him, um and e, all to denote the second person feminine.

The Negroes had a saying they thoroughly believed in . . . as they do today. "E's a po man ef e ain got no escuse." When a hurricane twisted a Negro church at Daufuskie, one of the congregation, unfortunately not a good carpenter, was asked to make repairs. When the job was almost completed, the committee made inspection. "Bredder, you done uh berry good job yuh (here) but us tink da cornder sort uh swag ober leetle."

"No Suh, Bredder. Da cornder ain swag ober none tall."

"Yeh Bredder, uh tink e swag ober leetle."

"No Suh, Bredder. Da cornder ain swag none tall. Uh'l git one plumb line en show you."

The plumb-line showed the corner to be several inches out of the perpendicular, so the deacon remarked, "Entty uh tell you say da cornder swag ober?"

"No Suh, Bredder, dis cornder ain swag ober none tall. Dis duh one berry

POOR CONDITION OR CONTRAST



Melrose Housemaids



Melrose Houseparty, 1890
Albert Stoddard at Top Left on Steps



After a Swim

le plumb line suh, en e's *onreliable*."

When Albert Stoddard married Eve-n Byrd Pollard of Virgina, the young ouple joined his father at Melrose Plan-ation. This charming place, famed for s houseparties and lavish hospitality, new well "the flower" of Savannah and harleston. A Charleston relative was Iddleton of Middleton Place whose an-als appeared in the May issue of *Is-ander*. This delightful life came to an nexpected end when, in 1912, Melrose urned to the ground. One irreparable ss was the library, the foundations of hich were made by an ancestor who rought from Europe many books in e original French and Italian. Other sses were the family plate and the old usic and instruments in the Music oom.

A newspaper writing of the tragedy alled the house "one of the best known nd most beautiful near Savannah." acing the ocean, it was two stories igh above a tall brick basement and ad been built many years before the ivil War. Marble mantlepieces and urnishings had been brought from Eng-and: it contained a great number of ooms and was surrounded by a wide erandah. The garden went in terraces own to the sea and must have been agnificent. The journal of Wymberly ones DeRenne of Wormsloe Plantation, avannah, tells of taking his gardener long to see it . . . and perhaps receive n-piration.

After the fire the young Stoddards ived in a small house on the estate, and e continued to plant cotton. Evelyn Stoddard had been dismayed by the aphazard mail service; sacks from the Savannah-Beaufort steamer would be dumped on the dock and islanders rummaged through them for their letters. She now applied for the position of post mistress and the tack room at Melrose's big barn became the Island's first post office. But Melrose was at least three miles from the nearest dwelling so eventually a storekeeper at the landing took it over.

Fire could not destroy the Mongin-Stoddard dynasty on Daufuskie Island, but the boll weevil did. With its advent, the planting of sea island cotton came to an abrupt . . . and permanent . . . end in America. And the Stoddards moved to Savannah. Their son, another Albert and banker rather than planter, lives in a handsome house, the end one of Savannah's famous "Gordon Row."

Albert Stoddard may have left Daufuskie Island but its aura remained with him. Mostly for his own pleasure he wrote the animal stories he'd learned on the Island and through phonetic spelling captured, to a remarkable degree, the sound of Gullah. When they were published, the small books' covers carried drawings by Bill Haynes, artist and owner of Ashintilly Press near Darien, Georgia. Stoddard also did a little book of Gullah anecdotes from which we have here quoted. In his soft, melodious voice with authentic Gullah accent, cadence, rhythm and inflection he used also on occasion to tell his animal stories to delighted friends. It was fortunate that others knew of his gift. For this knowledge led to a more permanent preservation of these stories of his black friends into whose dark skins he seemed to slip in the telling.

In 1949 Duncan Emrich, chief of the Folklore Section of the Library of Congress and author of several books on American folklore, heard of Mr. Stoddard and the Gullah tales he told. So he sent a man to enlist Stoddard's aid in locating a Negro who could record for them stories in authentic Gullah dialect. Naturally enough their search began at Daufuskie Island. Time had passed and civilization, as exemplified by radio and boats that took them over on Saturday nights to Beaufort hot spots, had come. It turned out to be an exceedingly difficult task. One old man at Daufuskie remembered Mr. Stoddard and had in fact recounted stories to him in the past. But he proved too old for the task; he would forget and drifted thinly away into nothing. So they tried Hilton Head Island, Beaufort and the hinterlands about. But Albert Stoddard's ear, tuned to the purity of his boyhood Gullah, was not satisfied. Nor were the field trip recordings as good as they might have been. Finally after many disappointing days during which the Library of Congress man heard Mr. Stoddard himself resort to Gullah . . . to prime the pump, as it were . . . he said, "You know, Mr. Stoddard, you speak Gullah better than anyone we have listened to. Why don't you come up to Washington and record these stories for us?"

That is exactly what happened. Stoddard, according to Mr. Emrich, "a sprightly seventy-seven," went to the Library of Congress and recorded some fifty tales, of which thirty belong to the "Bah Rabbit" or animal story cycle, while the remaining twenty are local

ORIGINAL DOCUMENT
POOR CONDITION OR CONTRAST

Daufuskie stories. Twenty-eight of the former have been issued by the Library of Congress on long-playing records and each is a delight. There are more records that will be released. Stoddard, Mr. Emrich found, was a born storyteller, a person whose cadence, rhythm and sense of timing in the telling of the tales was extraordinary. "Although at second hand, his telling of the tales is quite authentic (there is no sense of 'outside' mimicry whatever) and is about as close to any Gullah original as it now seems possible to come." These records, entitled: "Animal Tales Told in the Gullah Dialect" by Albert H. Stoddard of Savannah, Georgia, may be purchased from the Recording Laboratory, Library of Congress, Washington, D. C. Each is accompanied by Mr. Stoddard's full transcription of the text of the stories. Mr. Emrich expected to edit the transcription but he thought Stoddard's phonetics perfectly conveyed the sound.

A learned writer in the *Saturday Review of Literature* said of them: "His 'Buh' Rabbit is Loki, or Ulysses of most of the stories, the eternal con man; he is weak but clever, suave rather than wise, the hunted turned hunter with his wits." All of which Mr. Stoddard knew, of course. And so did his black friends . . . in substance. The wily character whose exploits they recounted with such gusto — villain, yet hero — was to them "Buh" Rabbit.

Circumstance forced Albert Stoddard's separation from Daufuskie; but he brought with him a lot of it and gave it out for others' enjoyment and edification. It was his contribution to a place he knew and loved. As has been said, "The uniqueness of Albert Stoddard came from environment. And his environment was the sea island of Daufuskie and the lands and waters about it. This also had been his heredity since 1740."



From Melrose Looking Across Calibogue Sound to Hilton Head Island

ORIGINAL DOCUMENT
POOR CONDITION OR CONTRAST

KNICKER

FIRST ANNUAL
SUMMER
BerSerK
SALE



IF YOU THOUGHT
WE WERE CRAZY
LAST FALL —
YOU KNOW IT
FOR SURE NOW —

OUR PRICES ARE
TOO LOW
TO BE QUOTED

YOU MUST
SEE THEM
TO BELIEVE

KNICKERS
671-2291

MISS KNICKERS
671-3791

SHOE STORE
671-3240

10 a.m. — 6 p.m. — MONDAY - SATURDAY
ALL STORES LOCATED IN HARBOUR TOWN

SAVING OUR LAND:

A Legal Manual on Land Use and Retention

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Preface by Emory S. Campbell
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PREFACE

The adage, "The more things change, the more they remain the same accurately describes what has occurred in the South Carolina Sea Islands, over the last two centuries.

A little more than a century ago the Sea Islands from Charleston to Beaufort were among the most important strategic locations of Civil War Union Forces. The area was strategic to the Union because it contained some of the largest and richest plantations in the South and the waterways around the Islands provided perfect ship routes for the Southerners.

Today these Sea Islands that once harbored the most durable slaves, stately homes, mint julep sipping aristocrats and southern belles are being redesigned with hundreds of millions of dollars for golf courses, tennis courts, condominiums, ultra modern computerized homes and housekeepers, yard hands, and yes green keepers for golf courses. These islands are being invaded for the second time by large numbers of people from Northern United States--this time seeking pleasure and the relaxed life.

The first invasion came in November, 1861, when more than 12,000 soliders and marines landed at Hilton Head Island in Beaufort County. These troops proceeded to block important waterways and eventually captured the entire area of Port Royal Island now known as greater Beaufort which includes perhaps the richest plantations in the south.

Slaves who had worked the plantations of the surrounding Islands of St. Helena, Hilton Head, Daufuskie, Lady's, Dawtaw, Fripp, Parris, and others became contrabands of war.

The same resulted from actions of union troops in the Sea Islands of Edisto, Johns, Kiawah, and others around Charleston. Plantations of cotton along with the big plantation houses were "confiscated." The former slaves although jubilant to see "The Yankees" were sometimes bewildered and generally ignored.

Lincoln's order to set aside abandoned land from the sea 30 miles inland for the benefit of freedmen was the first step toward reconstructing the lives of the freed slaves. Many slaves purchased land and began a new life in the Sea Islands.

Numerous schools were established in the area to begin to teach functional lessons including the use of newly acquired land. The department of the south was established on Hilton Head to insure an orderly transition.

The Emancipation Proclamation had established the boiler plate for a motivated people to succeed. The Sea Islands was to become the prototype for abolitionists' claim that the slaves were humans who could learn, earn, and produce for themselves.

But the assassination of Lincoln in 1865 began a new struggle for the freed slaves as Lincoln's order to distribute abandoned land was repealed. Freedmen who had acquired land were threatened with death and violence against freedmen becoming rampant. Many freedmen retained land, but some refused to officially record their deeds for fear of reprisals from whites.

Inspite of efforts throughout the south to return to the "good ole days", the Sea Islands remained isolated from most of these efforts. Blacks by and large retained possession of much of what they had acquired because of physical isolation of the Islands from the mainland and because large plantations had been acquired by northerners and remained unoccupied. Blacks were able to thrive toward self-sufficiency while re-establishing some of the customs and traditions of Africa.

Eventually, schools ranging from 3 to 12 grades were established throughout the Sea Islands. These schools emphasized the three R's and other lessons needed to function in the Islands. One of the first in the south and perhaps the most outstanding of those was Penn School. Established during the Civil War in 1862, the school stressed land ownership and land uses. It was the only high school in the area for many years.

In ;the late 1950's the public school system began to address the secondary education needs of the black children. Penn School, however, remained as the community owned education center continuing the effort of landownership.

From the mid 1860's to the 1960's the Sea Islands population remained predominantly black. These proud residents were employed by their own farm, built their own boats to fish and transport their goods to market, grew abundance of peas, cotton, beans, and watermelon. During the winter, while the men left to find seasonal work on the mainland, the women made quilts and clothes. They and their children maintained the farm and boats until the next season.

The community of the Sea Islands were self-sufficent. The Gullah dialect and culture prevailed and families supported one another.

In the mid 1950's re-designing of the plantation system began. Because of the decline in income from the farm many Blacks had moved to the large cities such as Savannah, New York City, and Philadelphia. During this same period, funding for new highway systems became available to connect the Sea Islands to the mainland. Developers began buying large plantations which had been owned by northerners and had returned to their original landscape. These lands were undisturbed except for occasional wild life hunting by private clubs.

The first real impact on the indigenous population came when two men, Fred Hack and Joseph Fraser who owned a timber company in Georgia bought large tracts of land on Hilton Head Island that had been cotton plantations before the Civil war. They had previously bought the timber and barged the timber and lumber to Georgia. In 1953 Charles Fraser, a son of Joseph Fraser, began developing a 5200 acre resort private community and named it Sea Pines Plantation. Its potential success and plans for further development of the Islands must have motivated state fathers at the time to build a bridge in 1956 connecting Hilton Head with the rest of the world. Sea Pines has since become one of the premier resort communities in the nation.

The market value of farm land owned by blacks, which comprised of about 1/3 of Hilton Head Island's 27,000 acres before the completion of Sea Pines was valued no more than $100 an acre.

Because of Fraser's success, the remaining large plantations were similarly developed leaving black owned land, traditionally used for subsistance farming, vulnerable to increased tax assessment and land speculators. By 1980, market value of these parcels increased to as much as $100,000 an acre. Although some parcels may remain farmland or lie dormant, they are assessed on the basis of the highest and best potential use.

Land owned by blacks are being transferred to white developers at a steady rate. Families who can no longer afford to pay the taxes or cannot resist the offered price per acre soon sell. Perhaps the most comomon cause of land loss among Blank landownership is heirs property where as many as fifty people may hold interest in a single parcel. Typically, speculators convince one or more of the heirs to sell leaving the others no other choice. Some members of these families who otherwise would live on land left by their foreparents must now relocate to rental units either on the island or somewhere off the island. A typical example is recently a native family of Hilton Head with some 40 members that sold 50 acres that is bordered by the ocean and the highway to one of the developers. Later members of that same family who had residences on the property frantically searched for land on Hilton Head to buy. Most of them did not receive enough money from the sale to purchase another parcel on Hilton Head.

Incorporated as a town in 1983, Hilton Head has nearly 10 private communities with guarded gates requiring passes and fees to enter if a person is considered a desired vistor.

Sensing that the Hilton Head Island scenario was likely to repeat itself on all Sea Islands, Penn Center and local organizations including the Hilton Head NAACP have made efforts to retard land loss among blacks with an education and title clearance program. The Hilton Head NAACP's effort was interrupted when a grant award of $36,000 from the Sea Pines Company in 1973 was repealed because the company became financially unable to award the remaining funds after about $10,000 was spent. Penn Center's current program is the only program of its kind in the Sea Island Community.

Some low income landowners are forced to depend on the private sector for land related legal assistance. Most families cannot afford to retain attorneys to clear titles so that they can subdivide the land even for their own residential use. Those who can afford legal fees are often frustrated by the slow pace at which lawyers attend their case. Some lawyers advise them to sell although the opposite may be in their best interest.

The struggle of the indigenous population to retain ownership to land is compounded by land use planning efforts of the county government which often include restrictive provisions that require one to have a degree of sophistication as a property owner. Unfortunately, most Black landowners in the Sea Islands are ordinary rural folk.

In 1983, Penn Center conducted a survey sampling 150 landowners in the various neighborhoods in the St. Helena Island area to determine the extent to which the average low income family may be at risk to the rapid development activities.

The most pertinent questions asked and the result of the answers follow:

1. Do you own land? Yes: 93% No: 7%
2. Do you share ownership with other heirs? Yes: 23% No: 71%
3. Do you use your land for residence? Yes: 100%
4. Is your land located near either of these: River an/or Marsh: 44% Highway: 80%
5. Future plans for the land: Would like to develop: 13% Other plans: 17% No specific plans: 70%
6. Household income below $6,000/year: 48%
7. Would you like to sell your land: Yes: 7.5% No: 86.5% No answer: 5.2%
8. Do you know the most common ways by which people lose land? Yes: 58% No: 42%
9. Have you made a will: Yes 25% No: 75%
10. Do you know the purpose of the Planning Commission for Beaufort County: Yes: 23% No: 77%
11. Have you ever attended a meeting of your county government? Yes: 19% No: 81%

It is highly likely that the scenario of Hilton Head will repeated throughout the Sea Islands unless an aggressive education program related to landownership among the indigenous population is undertaken.

Master plans have already been approved for the islands of Dataw, Daufuskie, Gibb, Cat, and Harbour. Daufuskie has an indigenous population of 100 dwindled form more than 1,000 a decade ago thanks to pollution of
the oysters. Other landowners have since moved to large urban

centers, but retain ownership of land on the Island. Virtually all the Sea Islands are heavily populated with low income families with small farms.

Further north in the Charleston area, the same situation exists.

Development of the Sea Islands into plush communities brings problems other than land loss to the indigenous population. More regulations produce higher living costs. For an example, housing cost is prohibitive for most indigenous landowners who earn meager income as maids, maintenance workers, waiters and carpenter helpers. Shopping must be done at resort shopping centers where prices are aimed at tourists and are therefore marked relatively high.

Improved schools like other improvements is also mixed blessing. While the education system is improving, the children who are native to the area are having difficulty adjusting to the new pace and new culture. Most educators are resisting the need to address the problems of native children brought on by social isolation. To compound their learning process, some native children are forced to work until late at night after school to help with the family income which must now meet greater expense.

The use of drugs and alcohol have increased to an alarming rate, destroying once very stable families and changing the values of area youth.

The disparity in culture and economics between Black and White students are some what manifested in achievement at school. In 1984, only 25% of all Black students tested, while 71% of all White students met the State Educational standards in Beaufort County. A simular disparity prevailed in mathematic and reading

standards.

Unless there is intervention, the current trend will lead to the ultimate displacement of those who Lincoln intended to launch into the main stream of American life with land and a means to use it. Aside from displacement, the percentage of the black population in Beaufort County is dwindling. Although Blacks still make up about 30% of the total county population, this percentage is steadily decreasing from more than 50% in 1960. This is mainly due to the rebirthing of plantations.

Since in a democracy such as ours, the majority controls the decision making process, special provision is needed now to protect the indigenous population from becoming displaced. The alternative is to ignore the current trend and face the social consequences in the 21st Century.

Following the reconstruction era volunteer programs were established to teach the newly freed slaves how to cope with a system which was new to them. Lessons were taught in land ownership and increased production and fool producing crops.

Today, a Comprehensive Program is needed to teach descendants of those same freed slaves how to make the transition in land use from farming to resort development. Such a program must provide hands-on guidance in specific appropriate land use in order to avert social, economic and cultural annihilation of the indigenous population. This manual is but the first step. But "the journey of a thousand mile begins with a first step."

This manual is designed to assist Local Landowners according to regulations and laws of Beaufort County. Many of the county's regulations are based on State Laws, consequently, the manual can be used on a statewide level.

Introduction: HOW TO USE THIS MANUAL

This manual was written to explain land laws so that landowners can act to protect their property. It describes the legal processes landowners are most commonly involved in, and emphasizes the actions a landowner can take to secure and improve his or her property, as well as what to do if land is threatened. It suggests what a landowner can do him or herself and when to consult a lawyer. By detailing each legal process, the manual gives the landowner the knowledge to question a lawyer about the steps they will need to take, and to evaluate the lawyer's answers.

The manual is written for people with little or no legal knowledge. Where possible, non-legal terms are used. Where legal terms are unavoidable or will be helpful to the landowner, they are defined first, then given between parentheses.

The manual is organized in sections, and each section is written so that it may be consulted alone, without reading the ones before it. Where it is necessary to refer to information in another part of the manual, the reader is directed to the other section, and the section heading is printed in boldface type.

Our hope is that this manual will not just be used when a landowner has a legal problem, but will be an impetus for families to think about the land: how we can best use it now and how we can preserve it for our children and grandchildren. This requires legal and financial planning. More important, it requires us to teach those who will use the land after us to appreciate it, and to pass this commitment to the land to yet another generation.

HOW LAND IS HELD

Land can be owned by one person or divided among many. When one person owns land, he or she can do anything with the property, including rent, deed or will it. When more than one person owns land, each has an interest in it. An interest is like a share -- by combining their interests into a whole, the owners of the property can do anything with it. When the owners act as less than a whole, they must so so in a way that does not interfere with others' interest in the land.

INDIVIDUAL OWNERSHIP

When a person owns property individually, he or she may do anything with it -- including lease, will or sell it. To transfer land to one person, deed or will it "to (name of the person) and his or her heirs."

SIMULTANEOUS OWNERSHIP: COTENANCY

A contenancy is when two or more people own land together at the same time. Each is entitled to use of the whole property, and each may end the cotenancy by asking the court to divide the land into separate lots (see Partition). There is no limit to the number of cotenants who can share a property.

There are two types of cotenancies: tenancies in common and joint tenancies, and they are defined according to whether the cotenants can deed or will their shares in the property.

In a tenancy in common each cotenant can deed or will his or her share in the property as if he or she owned it individually. These shares do not have to be equal; for example, one person can own a 1/3 interest in the property, and another a 2/3 interest.

A tenancy in common is created by deeding or willing land "to (name or persons) as tenants in common." When a person dies without a will (intestate) property is divided among relatives who then become tenants in common. This is known as **Heirs Property.**

In a joint tenancy, contenants can not deed or will their shares in the land. When one joint tenant dies, his or her share is divided among the other contenants. This is known as the right of survivorship. For example, if Mr. Adams deeded land to his four children as joint tenants and one died, the other four would divide that child's share. When another child died, the reamining three would divide that share, and so forth. The last child, the "survior" would own the land individually, and could deed or will it.

A joint tenancy is created by deeding or willing land "to (name of person) and (name of person) as joint tenants with the right of survivorship."

CONSECTUTIVE OWNERSHIP: **LIFE ESTATE and TERM OF YEARS**

Two or more people can also own land so that one uses it for a number of years and then it goes to the other. The most common way of doing this is through a legal arrangement called a life estate. A life estate allows someone to live on and use land for as long as he or she lives. This person is called the life tenant. At the life tenant's death the property either returns to the person who created the life estate (or his or her heirs) or goes to others, called remaindermen. The life tenant may not do anything to decrease the value of the property.

Advantages

This ensures that the life tenant will always have a place to live and that the land will return to the owner or go to the remaindermen. Life Estates are usually created for a spouse or children, with the property going after their death(s) to children or grandchildren.

Disadvantages

There are two major problems with the life estate. First, there may be disputes between the life tenant and the people the land goes to next about who should maintain the property, pay taxes or mortgages on it, etc. There may also be arguments about whether the life tenant is using the land in a way that decreases its value. Although a life estate is usually created in an attempt to provide for family members, it may end up provoking conflict among them.

A more serious problem is that the life tenant may be "land rich but cash poor". Although the life tenant may have no other source of income; he or she can not mortgage or sell the land. The life tenant probably can not rent it either, since any lease would end at his or her death. The life tenant in this situation has two alternatives. First, the life tenant can try to find all the people who will own the land after he or she dies and get them to agree to cosign a mortgage, lease or deed. This can be difficult if they are living far away or have different ideas about what should be done with the property. If this fails the life tenant can ask the court to sell part of the land and give him or her the income. This can be hard on the life tenant, who may be asked by the court to justify expenses and come back to the court every few months for more money. It defeats the usual reason for creating a life estate -- to preserve land intact.

A life estate is created by deeding or willing land "to (name of person) for life, remainder to (name of person)." There may be any number of life tenants or remaindermen, and they do not have to be related to each other or to the person establishing the life estate.

A term of years is similar to a life estate, except that the period of time that each person lives on and uses the property is measured not by that person's life, as in a life estate, but by a period of years. A person may, for example, establish a term of years for a niece, allowing her to live on the land for the number of years it will take for her children to grow up, and then have the land go to someone else. Any transfer of land for more than three years must be in writing. To create a term of years, deed or will land "to (name of person) for (number of years), then to (name of next person)".

TRUST

A trust is property that one person (the trustee) owns and manages for the benefit of another person (the beneficiary). A trust may be created to benefit more than one person, either at the same time or one after another. The trust relieves the beneficiary of the responsiblities of managing the property. This can be important where, for example, the beneficiary is inexperienced with money or land or is ill.

A trust provides many of the benefits of a contenancy or life estate and avoidds some of their problems. Like a cotenancy, more than one person can benefit from the property at the same time. As in a life estate, the proerty can be used by one person and at his or her death go to another. Unlike a cotenancy of life estate, however, the land has only one owner -- the trust -- and can be leased, mortgaged or sold without the permission of everyone who has an interest in it. While some may consider this a disadvantage, the greater flexibility of a trust usually works in everyone's favor. The trustee has a legal obligation to manage the property wisely for the gain of all the beneficiaries, and if he or she does not do this the beneficiaries can take the trustee to court.

Although most people think of trusts as only for the rich, anyone with property can establish one. A lawyer should be consulted. A trust must be created in writing and signed by the property owner. It can be contained in a will. It must include the names of the beneficiaries and at least one trustee, and a complete description of the property. The selection of the trustee is crucial to the success of the trust. A lawyer may be helpful in choosing someone, and also in explaining the trustee's responsibilities.

HOW LAND IS TRANSFERRED

DEED

A deed is a document that transfers land from one person to another. To be valid it must clearly show the intent to transfer, be signed by two witnesses, include a complete description of the property and a notary's seal (although if the seal is omitted unintentionally, the deed is still good). While no special legal words are required to deed land, if the deed is not made out to the new owner and his or her "heirs and assigns", it will be interpreted as conveying only a life estate.

A person can deed only as much land as he or she owns. For instance, if a man owns 1/2 interest in a property, he can not deed 3/4 of the land to another. Similarly, if a woman has a life estate in a property, she can deed it to someone else only for as long as she lives.

Types of Deeds

There are two types of deeds: Warranty and Quitclaim. A Warranty Deed guarantees that title to the property is good and that no one else will claim to own the land. If this happens, the seller agrees to defend the new owner in court, and promises that his or her heirs will do the same. A sample warranty deed is reproduced below.

Illustration A

A Quitclaim Deed simply transfers property from the seller to the buyer, and is used when the seller does not have clear title. It releases the seller's interest in the land, but does not say that he or she is the only owner -- or even legally owns it at all. Any one purchasing land under a quitclaim deed should question the seller about why title is not clear and, more importantly, do a title search to ensure that there are no other land owners and no mortgages or liens against the property. See **Searching Title** for information on how to do this.

All deeds should be immediately registered at the courthouse. This protects the new owner in case the seller tries to make out a second deed to someone else. If two people have a deed to the same property, the one who registers first is favored by the law as the owner. In Beaufort County, deeds are registered in the Assessor's Office. There is a small fee.

Keep your deed in a safe place, like a safe deposit box at the bank, or with a lawyer.

In Beaufort County there are many old deeds which have become hard to read or do not describe land specifically enough to identify it. Anyone with a poor deed should see a lawyer about getting a new one or bringing a legal action to establish ownership of the land.

A. Sample Warranty Deed

Know all men by these presents that I (**name of seller**), in the State of South Carolina, in consideration of the sum of (_____) dollars, to me in hand paid by (**name of buyer**), the receipt of which is hereby acknowledged, have granted, bargained, sold and released and by these presents do grant, bargain, sell and release unto the said (**name of buyer**) all that (**description of land**), together with all and singular the rights, members hereditaments and appurtenances to said premises belonging or in any wise icident or appertaining; to have and to hold all and singular the premises before mentioned unto said (**name of buyer**) his heirs and assigns, forever. And I do hereby bind myself, my heirs, executors, and administrators, to warrant and forever defend all and singular said premises unto said (**name of buyer**), his heirs and assigns, against myself and my heirs and against every person whomsoever lawfully claiming or to claim the same, or any part thereof.

Witness my hand and seal this _____ day of _____ in the year of our Lord _____ and in the _____ year of the independence of the United States of America.

_____
(signature of seller)

_____

_____
(signature of Witnesses)

B. Sample Description of Land for Deeds and Wills

ALL that certain piece of land or lot of land lying and bein Edisto Island containing ten (10) acres, more or less, being bounded on the West by U.S. Highway 278 and having a frontag said Highway 278 of 330 feet and extending in depth 1,080 fe more or less, and bounded on the lands now or formerly held Joe Mungin, on the East by lands formerly held by Joe Mungin on the South by lands now held or formerly held by Dillons a Drysdale.

MAKING A WILL

A will is a legal document stating who you want your property to go to after you die. Both land (real property) and personal property may be included in a will; this section deals primarily with real property.

There are several benefits to making a will. It ensures as much as possible that the property is divided the way the person making the will (the testator) wants. If a person dies without a will, land is divided among relatives who may have no personal ties to the land and may try to sell it. A will can also prevent family squabbling after the landowner dies by deciding beforehand exactly who should get what. Often families write wills together, leaving land to the members who can use it best.

Anyone 18 years of age or older (or under 18 if the person is married) and of "sound mind" can make a will. A will must be written and signed by the testator or someone he or she directs to sign it. A will must also be signed by two witnesses, although three should be used for safety's sake. South Carolina law recognizes and recommends what is know as a self-providing will. This is a will into which a signed and legally sealed statement (an affidavit) has been incorporated, in which the testator, witnesses and a notary public declare that the will was properly signed, that the testator was capable of making it, and that the testator's act was free and voluntary. A self-proving will significantly reduces the possiblility that it will be questioned. It can be made at the same time that the will is signed or any time after.

A will can be changed at any time either by replacing it or intentionally destroying it.

A will should say as specifically as possible what property should go to whom. First the land itself must be accurately described. A lawyer can find the exact recorded description of the land, or the testator or someone else can look this up at the county courthouse. (see **Searching Title**) The description should include the size of the tract and its boundaries, as in this example:

Illustration B

Second, if the land is being left to more than one person the will should state how it should be divided and in what form it should be owned. If land is being left to two children, for example, does the person making the will intend that they share the entire lot equally? Is each to

get a certain section? If there is a house or other building, how should it be divided?

The person making the will should also appoint a personal representative (executor) who will be responsible for carrying out the provisions of the will. The personal representative may be an individual 18 years of age or older, or an institution like a bank. If a corporation is chosen, it must have a place of business in South Carolina. Most people prefer to apoint someone who they know well --a friend or family member who they know will devote time, energy and care to settling the estate. If the testator does not choose a personal representative, the court will appoint one, usually a spouse or someone left property under the will. A will should be kept in a safe place like a safe deposit box known to others or with a lawyer.

Below is an example of a will:

Probating the Will

The probate court is a special court that deals with a deceased person's property. After someone dies, the person who is holding the will or who knows where it is has 30 days to bring it to the probate court, where the judge will declare it valid in one of three proceedings:

Informal probate. When there is a will and its validity is not contested, the personal representative or one of the people who will receive property under it will seek an order of probate to make it operative. This is the preferred procedure for most wills.

Formal probate. This procedure is required when someone dies without a will that includes all of his or her property; the validity of a will is questioned; someone wants to block or overturn an informal probate proceeding; or a will has been lost, destroyed or is otherwise unavailable. The probate judge formally decides the case.This is a more complex, expensive and time-consuming method than informal probate and a lawyer probally will be needed.

Affidavit. There is also an affidavit procedure for settling estates worth less than $7500. It can not be used where land or creditors are involved.

Before the property can be distributed under a will, the law requires that certain payments be made. These payments are not automatic. Anyone who thinks that he or she fits into one of these catagories should consult with a lawyer or the probate judge.

Last Will and Testament

I, _____
of _____, being of sound and disposing mind and memory and desiring to make such disposition of my wordly estate as I deem best, DO HEREBY MAKE, PUBLISH AND DECLARE THIS TO BE MY LAST WILL AND TESTAMENT, hereby revoking any and all former wills and codicils whatever by me made.

First, I direct that all my just debts and funeral expenses be paid out of my estate as soon after my decease as conveniently may be and to that end charge my whole estate, real and personal, with the same.

Second: I give, devise and bequeath to _____.

I nominate and appoint _____ to be the executor _____ of this my Last Will and Testament.

_____

_____

IN WITNESS WHEREOF, I have hereunto set my hand and seal to this my Last Will and Testament at _____ this _____ day of _____, in the year of our Lord One Thousand Nine Hundred and _____.

Signed, sealed, published and declared by the said _____ as and for _____ last will and testament in the presence of us, who in _____ presence, at _____ request and in the presence of one another, all present together, have hereunto subscribed our names as witnesses.

_____

_____

These payments fall into three catagories -- exemptions, debts, and rights of a spouse or child -- and must be paid in this order:

Exemptions reserve part of the property for the family of the deceased. Up to $5000 worth of personal property (everything but land) is set aside for the husband or the wife of the person who died or, if the spouse is not living for any minor or dependant children.

If land must be sold to pay debts, the head of the family may also be able to claim a homestead exemption of up to $1000, reserving a section of the property for the families use, as well as an exemption of up to $5000 on a residence.

Debts are what is owed. Creditors must be paid in an order set by law and the costs of probating the estate deducted. Where necessary, the court may order the sale of as much land as is needed to pay the debts, but it must first notify all heirs and anyone left property under the will. They will have 20 days to pay the debts or give reasons why the land should not be sold.

Provisions for a spouse or children may give them a greater share of the deceased's money or property than they were left in the will. If the person leaving the will did not provide for a spouse married or a child born after the will was made, and the omission does not seem intentional to the court, the spouse or child will get the same share as it would have if there had been no will. See **Intestate Succession.**

A spouse is also entitled to claim 1/3 of the estate after debts, taxes and other expenses listed above have been paid. This is discussed in more detail under **Elective Share.**

ELECTIVE SHARE

If a married person living in South Carolina dies, the surviving spouse is entitled to 1/3 of the estate (after taxes, debts and other expenses have been paid), even if this is more than the husband or wife was left under the will. The spouse must file a request with the probate court and mail or deliver a copy to the personal representative (if there is one) within 9 months after the testator's death or 6 months after the will is probated, whichever is later. Property reserved for a spouse under an exemption is in addition to the elective share, but property that passes to the spouse under the will is included as part of the elective share.

INTESTATE SUCCESSION

Intestate Succession is the legal formula for dividing among relatives any property of a deceased person not included in a will. If there are no close relatives living, or if the land has been passed in this manner for several generations, ownership may be splintered among many heirs. This is the problem of **Heirs Property.**

There are two steps to determining ownership through intestate succession. The first is deciding who owns the land. The formula for intestate succession sets this out. The second step is determining what share each owner is entitled to. This depends on how closely related each owner was to the deceased (degree of kinship).

Formula for Intestate Succession:

A. If a married person dies leaving a spouse (husband or wife) and no children, grandchildren, greatgrandchildren, etc., either natural opr legally adopted (issue), the spouse takes the entire estate. If there are issue, the spouse takes ½ and the issue divide the other half..

b. If no spouse is alive the property is divided among the first of the following groups to have a living member.
   1. Issue;
   2. Parents;
   3. Siblings or, if there are none, half brothers and sisters, with the issue of the half siblings and whole siblings getting equal shares;
   4. Grandparents or, if they are not alive, their issue. If there are both maternal and paternal relations living, half of the estate goes to each side of the family;
   5. Great-grandparents and their issue in the same way as for grandparents.
   6. Stepchildren and their descendents.

C. If none of the above relations are living, the property goes to the government.

Degree of Kinship

Degree of kinship determines how an estate (real and personal property) will be divided when the heirs are not all related to the deceased in the same way.

Where property is divided between kin of the same degree, each receives an equal share. For example, if property were to be divided among three children, each would receive one-third.

Where kin are of different degree, they share by another legal formula called "representation" If Mr. Adams died and his property were to be divided among three children and two grandchildren by a fourth child who died before Mr. Adams, the settlement would look like this (The circled people are deceased):

Each living child would take ¼, and the child who died would be represented by his or her children, who would divide their parent's share equally.

The division begins among the nearest degree of kin who have surviving members counting both those who survive and those who died leaving issue surving. So if when Mrs. Baker dies her children are already dead but she has grandchildren living, the division would be based on the number of grandchildren who are either alive or have issue living. In the example below, the circled people -- Mrs. Baker, her two children, and one grandchild -- are dead. Her property is divided between her grandchildren and any great-grandchildren whose parents are dead.

Note: The laws on intestate succession were thoroughly revised in 1986. If a person died without a will after July 1, 1987, the property was divided as described above. If you are unraveling a piece of heirs property and some of the owners died before this date, you will want to refer to the previsions in codes (1976: 21-3-20 and 1962: 19-52) to determine the appropriate shares.

Insert D.

Mr. Adams

x X X X - Children
¼ each

X X - Grandchildren
1/8 each

Insert E.

Mrs. Baker

X X - Children

X X X - Grandchildren
1/3 each

X X - Great Grandchildren
1/6 each

ADVERSE POSSESSION

Another way a person can acquire or lose land is by Adverse Possession. Adverse Possession is where, if someone remains on another's land for ten years without the owner objecting, the occupant or adverse possessor gains ownership of the property. Usually adverse possession is against a stranger. Though harder to prove, it may be claimed against a former cotenant or landlord. Except in rare cases, it can not be claimed against the government.

Land is considered in "possession" when it has been fenced off or cultivated or improved in the manner usual for that area. The possession must satisfy all of the following criteria:

Hostile. The possession is without the permission of the owner and the intent of the occupier is to gain title to other's land.

Open and Notorious. The adverse possessor's actions are so obvious that the owner knows about the occupancy, or should have known if he or she had been taking proper care of the property.

Continuous. The adverse possessor has used the land without interuption. Occasional entry to cut timber, for example, is not sufficient.

Exclusive. Other people, especially the owner, have not gone on to and used the land during the ten year period for which the occupant is claiming possession.

Adverse Possession claims are decided by a jury. The jury looks first to the person's intent -- was it sufficiently "hostile" -- and then determines whether the adverse possessor's actions satisfy the other criteria and make it obvious to ordinary people that he or she is claiming ownership. The jury takes into consideration the nature, character and location of the property and the way similiar property in the area is used. The person claiming title through adverse possession has the burden of proof. Evidence may include a deed or mortgage and tax receipts; these cannot by themselves confer ownership, but can be used to support the adverse possessor's claim of ownership.

It is difficult to prove a case of adverse possession against cotenants since by law each is entitled to complete use of common property. The cotenant asserting exclusive title must oust the others. While a physical "turning out by the hels" is not necessary, the ouster must be actual and unmistakable. Some courts have held that exclusive possession for 20 years by one cotenant gives rise to a presumption of ouster.

Adverse possession against a landlord begins from the time the lease ceases or the last rent is paid, whichever is later.

The courts at present are interpreting the requirement of "hostility" very strictly and it is becoming increasingly difficult to gain or lose ownership through adverse possession. Anyone thinking of asserting ownership this way, and anyone who owns land and thinks that someone else may be trying to claim it through adverse possession, should see a lawyer as soon as possible.

HEIRS PROPERTY AND PARTITION

Heirs is the name given to the land that is divided among relatives after the original owner dies without a will. The relatives or heirs own the land as tenants in common. If ownership is transfered this way for several generations, it becomes splintered among many people, most of whom have very small shares in the property. There are estimates that more than half of all Black-owned land in coastal counties, such as Beaufort is owned as heirs property.

People concerned with retaining Black-owned land disagree about whether heirs property is more of a benefit or a disadvantage to its owners and whether it has helped people retain land or has contributed to its loss.

On one hand are those who beleive that heirs property is beneficial because it gicves all the owners a place to come home to. Because there are frequently many owners, it is unlikely that they will all agree to sell the land. It is also doubtful that any of the cotenants can mortgage the property, and this prevents its loss through foreclosure.

On the other hand are those who say that heirs property makes life difficult for the owners living on the land. They may be the only small share of it. They can not mortgage the land to finance improvements, and have little incentive to make them since the other cotenants have an equal right to any improvements and, more important, since they can not be sure that another cotenant will not sue for partition.

Partition means division. Any cotenant can ask the court to divide the heirs property, which almost always results in its sale -- usually for less than its worth and to someone outside the family.

Keeping heirs property

There are several ways that an owner of heirs property can work with the other cotenants to keep the land from being sold. Among the things an owner can do are:

Obtain cotenants' interests. A cotenant who is living on the property and wants to own it individually can ask the other owners to deed him or her their shares. Some of the owners may ask for payment. Others may do this for free, especially if they have not been using the land and the cotenant who wants it presents them with convincing arguments. A cotenant can deed with reservations. The deed can say, for example, "to (name of person) so long as he or she reserves a part of it for me to live on when I visit" or "to (name of person)

so long as he or she does not sell the land". Cotenants who want to put this type of reservation in a deed should consult a lawyer.

Divide the property among the cotenants. Property owners can agree to partition the land themselves. This works best when there are only a few owners. Partition can also

be combined with purchase; those who want to keep the land can negotiate with those who want to sell it. Once it has been established what percent of the land each of the resulting cotenants owns, they can with the help of a lawyer write up a partition it agreement.

Claim the land by adverse possession. See Adverse Possession. This option is difficult and, unlike the others, may deprive cotenants of their shares without compensation or agreement.

Lease the property. This is an alternative to sale which can provide the cotenants with a steady source of income. The cotenants must all agree to lease land, and may want to form a corporation to do so. They may decide to lease part of the land, and partition the rest among themselves. A lawyer should be consulted.

Partition

Every cotenant is entitled to ask the court to divide the property. The court has three options: to divide the land among the owners, assign the land to one if he or she pays the others for their interests, or order the land sold and the money divided among the owners. The court almost always chooses the third option.

A cotenant who does not want the land to be sold in a partition action has rights. He or she should contact a lawyer immediately.

The cotenant requesting the partition action (plantiff) must notify the other cotenants about it. The plantiff must make a reasonably diligent effort to find out where the other cotenants live and notify them by mailo. If the plantiff is unable to find the address of any cotenant, he or she must say this in a sworn statement (affidavit) to the court, which will then order the plantiff to publish notice of the partition action for three weeks in a newspaper printed in the county where the land is located.

If a cotenant thinks that he or she was not notified properly, the cotenant can protest to the court.

The procedure in a partition action is for a commission of five people to determine whether the land should be divided, assigned to one person, or sold, and to work out the details of whichever option it chooses. The cotenant requesting the partition (plantiff) chooses two commissioners, the court appoints one, and the other cotenants (defendants) can select the remaining two.

The cotenants should take advantage of the opportunity to select commissioners who they think will agree with them about what should be done with the land. If the cotenants do not get together and select two commissioners, the plantiff chooses three and the court appoints the other two.

The commissioners have one month to decide what should happen to the land. Cotenants who want to keep the land should get together, with a lawyer if possible, to prove that the land can be divided fairly and does not have to be sold. The cotenants should make a map, or hire a surveyor to make one, showing how the land can be divided without prejudicing anyone. The cotenants should present this information to the commissioners.

If the commissioners decide that the land should be sold, cotenants who made improvements to it are intitled to receive their value so long as it does not decrease the value of common property.

TAX SALES

All landowners must pay taxes on their property. If taxes are not paid, the government has the right to take the land and sell enough to cover the taxes. Many people lose their land this way.

How Taxes are Set

Taxes are based on the value of the land. The board of Assessors in each county determines (assesses) the value of individuals lots based on how much the land would be worth if sold. This called its "market value". The Board compares the lots to be assessed with similiar pieces of property nearby that have been sold recently. In Beaufort County property is reassessed every five years.

Assessments must be uniform and equitable. The Board must inform property owners of any increase by the fourth Monday in March of the year the taxes are due (or as soon after as possible). A landowner who thinks that his or her property is valued unfairly can appeal to the Board of Assessors for review. This must be done within thirty days of receiving the assessment.

A tax break entitles certain landowners to pay a reduced amount of taxes. A landowner is eligable to file for a tax break if he or she is:

65 years of age or older or classified as disabled by a state or federal agency. The elderly or disabled person is entitled to have the first $20,000 of his or her home exempted from taxes. This is known as a homestead exemption. The landowner must apply in person to the County Auditor between January 1 and May 1 of the year for which he or she is claiming exemptions.

A landowner applying for the 65 and over exemption must bring proof that he or she turned 65 before the start of that year and has lived in Beaufort County for more than one year. A landowner applying for the disability exemption must bring proof of disability , which can be obtained from the State Agency of Rehabilitation.

Once this exemption is approved, it continues until the landowner's death so long as taxes are paid by March 15 of every year. If the landowner moves, he or she can transfer it ti another property.

If a person eligible for a homestead exemption dies and the surviving spouse is at least 50 years and owns the property individually or has a life estate on it, the exemption continues so long as the spouse remains unmarried and uses the property as a permanent home and legal residence.

An elderly or disabled person who lives in a mobil home on property leased from another is exempt from

personal taxes to the same extent that a landowner is exempt from property taxes.

A veteran totally disabled by a service related injury. The veteran is exempt from paying taxes on a house and one acre of land. Veterans apply for this exemption through the South Carolina Tax Commission in Columbia. Applications are available in the County Assessor's office.

Using the land for agriculture. Land is normally assessed based on its market value. If land is used for agriculture, the owner can have it assessed based on its "use value", which is almost always much less than its "market value". The rate of the assessment is also less -- 4% instead of the usual 6% of the value.

The landowner must file an application with the County Assessor. The filing period is January 1 through May 1 of each tax year. Once the inital application is filed, it will be automatically renewed each year until the next reapplication is required. The reapplications are required in years ending in the numbers "2" or "7", and are mailed to the landowner at his or her last known address.

It is the owner's responsibility to make sure the inital application and future reapplications are filed on time. The County Council is the final review authority for any application received after the May 1 filing deadline. A late application must include a statement on why it was not filed on time.

Using the land as an actual or primary residence. The property will be assessed at a 4% rather than a 6% rate. The owner must have title to the property or a contract to purchase it, and must be living on the land by January 1 of the tax year. The application procedure is the same as for an agricultural tax break.

The Tax Calendar

October 1 -- A notice is sent to all landowners telling them how much their property tax will be for that year. (This date is approximate.)

September 30 - January 15 -- Taxes are due for the year ending December 31. Pay on time! If taxes are not paid by January 15 (or 30 days after the tax notice is mailed, whichever is later), a 3% penalty is added. If they are not paid by February 2, another 7% is added, and if they are not paid by March 17, another 5% is added to the amount due.

April 1 -- If the taxes are not paid by this date, the landowner is notified by certified mail of the amount due and is told that if it is not paid, the land will be sold. If the letter is returned

unopened, a notice is posted on the property saying that it has been taken by the government because the taxes were not paid. Sometimes the notice is posted where it can not be seen and warn the owner. If the taxes are not piad within 30 days after the letter is mailed, the government can take possession of the land.

September 1 -- A list of properties to be sold is printed and the land is advertised in the local paper. Land must be advertised for a 3 consecutive weeks prior to the sale. The ad must specify the property, time and place of sale, name of the owner, and party requesting the sale (the government). The cost of these ads is added to the amount due.

1st Monday in October -- If the amount of taxes due is not paid by 10:00 a.m., the land is sold at the county courthouse.

By law, the government can sell only as much land as is necessary to cover the amount of taxes and penalties due. This is often not enforced. In Beaufort County, for example, the Assessor's Office has no surveyor on staff to determine how much land needs to be sold. Consequently, the entire property is put up for sale. A landowner whose property is going to be sold for unpaid taxes should contact a lawyer immediately to challenge this practice.

After the land is sold, the purchaser can not take immediate possession of the property. The defaulting landowner has 12 months from the date of sale to get the land back by paying all the taxes and costs due plus an additional 8% interest charge. This time is called the Redemption Period. Between 45 and 20 days before the end of this period, the defaulting landowner is sent a notice by certified mail saying that if the amount due is not paid by the end of the 12 months, the land will be lost and ownership officially transfered to the purchaser.

If the land was sold for more than the amount of taxes due (which happens when the bids are competitive or the amount owed is so small that there is money left over when the government sells the minimum amount of acreage feasible), the defaulting landowner has five years from the date of sale to claim the excess from the County Treasurer.

MORTGAGES

A mortgage is a right to or interest in land that is created to make sure a debt is paid. A person may mortgate land to a bank, credit union or government agency like the Farmers Home Administration (FMHA) im return for a loan. If the loan is not repaid, the lending institution has a right to the property.

Before mortgaging land, the owner should think carefully about his or her ability to repay a loan, and should "shop around" to see what types of loans are avilable. The landowner ;should try to mortgage as little property as possible. He or she may be able to mortgage only a section of the land, or deed part of it to relatives before taking out a mortgage on the reminder. Some lenders will agree to decrease tha amount of land subject to the mortgage as the landowner pays off the debt. The landowner should consult with a lawyer before signing the mortgage.

There are no legal words or forms needed to create a mortgage, just a writing signed by the person taking out the mortgage saying that he or she intends to give the lender an interest in the property. Both the property to be morgaged and the amount of the debt should be carefully specified. The lender will require that the person applying for the mortgage own the property individually or get the other owners to agree to the mortgage. The lender will also charge interest on the loan, and the landowner should check that this is not higher than the state allows. A mortgage should be recorded at the courthouse.

When the mortgage debt is paid, the landowner should ask the lender to enter this in the courthouse records. If the lender has agreed to release a portion of the land from the mortgage when an agreed upon number of payments have been made, any releases should be put in writing, witnessed, and attached to the mortgage paper at the courthouse. If, after all payments have been made, the landowner asks the lender does not do this within three months of the request, the landowner can sue the lender and get back up to one-half of the amount of the loan.

Foreclosure

A landowner who can not pay all the money owned on time should contact a lawyer and the lender immediately. If approached when the landowner first begins to have problems, the lender may be able to reschedule payments, especially if the landowner's problems are beyond his or her control, like a poor harvest or family illness. The longer the landowner waits before contacting the lender, the less likely they will be able to work out something.

If the FMHA is the lender, it is legally obligated to consider other choices before selling the land. It may

consolidate the loan, which means adding a new loan; reschedule payments; or put payments off for a "breathing period" of up to three years.

If the debt is not paid, the lender can foreclose on the property. To "foreclose" is to shut out or bar the owner from keeping the land by making further payments on the loan. To foreclose, the lender must prove in court that a specific amount is owed. The landowner will be required to agree in court to this amount, unless he or she has done so in writing within the last 12 months. The landowner should be sure to attend all court and administrative hearings, and should bring with him or her a copy of the mortgage agreement, receipts for apyments made, and any letters to or from the lender.

Before the land is old it must be advertised in the local paper for three consecutive weeks. The ad must specify the property to be sold, the time and place of sale, and the names of the owner and of the party requesting sale (the lender). Land is sold at the ocunty courthouse on the first Monday of the month. The defaulting landowner can bid at the sale. Bidding will remain open for 30 days after the sale, so that the land will bring as much money as possible. The landowner is not allowed to bid during these 30 days.

If the land is not sold for as much money as the lender is owed, the defaulting landowner is personally responsible for the difference. This is called a deficiency judgement.

Example:	amount owed	$500.00
	amount of sale	-200.00
	amount due from the defaulting landowner	300.00

If the defaulting landowner thinks that the land was sold for less than it was worth, he or she can ask the court to determine the true value of the property. This is called an appraisal, and must be requested within 90 days of the sale.

SALE OF LAND TO PAY DEBTS

Land can be sold if the owner does not pay his or her debts. The person or company owed money (creditor) can ask the court for a judgment stating that the landowner owes a certain amount of money. The creditor then has 10 years to record this judgment in the county courthouse where the land is located. A judgment against land is called a "lien". If the landowner does not pay the amount due, the creditor can ask the court to sell the land. It is illegal for the owner to sell the land when there is a lien on it.

A landowner can also agree to have a lien placed on his or her property -- often without realizing it. Contracts to repair or improve a home often include a clause in small print saying that if the owner does not pay for the repairs on time, the person who furnished the labor or materials is entitled to have the property sold to pay the debt. This is known as a "mechanic's lien". The creditor must still get a court judgment before the property can be sold.

If the landowner does not pay the debt and the land is sold, the sale must take place in the county where the land is located. The land must be advertised for three consecutive weeks prior to sale, and the notice includes a description of the property, the time and place of sale, and the name of the owner and of the person who wants to collect on the judgment. Sales by the court are usually held the first Monday of each month between 11:00 a.m. and 5:00 p.m. The bidding is held open for 30 days after the date of sale so that the land will bring as high a price as possible. The landowner may bid at the sale, but not during the 30 day period.

PROPERTY EXEMPT FROM SALE

Not all of a person's land or personal property may be sold to pay debts. The law allows to debtor to keep (exempt) certain things. These exemptions are not automatic and do not apply in every circumstance. A person whose property is going to be sold should consult a lawyer immediately upon receiving notice of the sale to determine what property is exempt.

Among the property that may be exempt from sale is:

* $1000 worth of land and the present harvest. This is called a homestead exemption and is available to the head of the family. It does not apply against mortgages, mechanic's liens, or taxes, and can not be used by cotenants. The landowner may give up (waive), this exemption, often by mistake, if he or she signs contracts without reading the small print.
* $5000 worth of a home;
* $1500 worth of a car;
* Household goods and clothes worth up to $2000;
* Jewelry worth up to $500;
* Cash or other "liquid assets" worth up to $1000 if a homestead exemption is not claimed;
* Professional tools and books, up to $750 in value;
* Unmatured life insurance, if it is not under a credit life insurance contract;
* Certain interest earned on a loan, stock dividend or life insurance contract;
* Prescription health aids;
* Certain benefits including health, unemployment and veterans benefits; alimony, and some life insurance payments.

EMINENT DOMAIN

Eminent domain or condemnation is the power of the government to take private land for public use. Federal, state, and municipal governments can condemn land for a public purpose, and may delegate this power to private corporations. This is how the government acquires land to widen highways, build new facilities,, etc.

Anyone who receives a notice that the government is going to condemn land should contact a lawyer immediately. Condemnation proceedings are tricky. There are several ways the government can take land, and the requirements for notifying the landowner, providing him or her a hearing, determining the value of the property, and transfering ownership to the government vary. What they have in common is the requirement that the landowner act quickly or risk losing the land and the right of appeal. Unlike other legal procedures which may drag on for years, condemnation actions can happen very fast. Less than two months may pass between the time the landowner is notified and the final court decision setting compensation for the property.

Each stage of the condemnation process has its own deadlines, and missing one may have serious consequences. The landowner may lose the right to appoint someone sympathetic to the commission that will set the value of his or her land, or to appeal from an adverse ruling.

The landowner is entitled to receive the fair market value of any property taken. The government may try to avoid this requirement by saying that by condemning part of a property for public use, the value of the rest increases. The landowner should not be lulled or overcome by arguments like this, but should have his or her lawyer insist on proper payment. If the land is being taken for a federally-funded project, the owner may be entitled to additional expenses, including relocation costs. Money the landowner receives in payment is tax free and may not be used to calculate or change eligibility for public assistance programs.

A landowner may ask the court to consider mineral and timber rights to the property separate from the value of the land itself if it appears that this will increase the compensation.

PERMITS TO IMPROVE OR ALTER LAND IN BEAUFORT COUNTY

Permission from government agencies is frequently required before you can alter your land. Below is a chart of common activities that require permits, the agencies to contact, and the things you will need to do. The addresses and phone numbers of the agencies mentioned are listed after the chart. This chart is valid for the unincorporated parts of Beaufort County only; within the municipalities the roles of the Joint Planning Council and Building Codes Department are replaced by municipal agencies. A list of who to contact for permits in the municipalities is included after the chart.

If you want to:	Contact (in this order):	And do the following:
Build on your property	Joint Planning Commission	You will need to apply for a development permit from the JPC unless: a. Only the interior of a structure or the decoration of the exterior is affected; or b. You own the land and use it as your single-family residence; or c. You use the land for agricultural purposes. A sample development permit application is included after the chart.
	Army Corps of Engineers	Determine whether the construction is located on or could affect freshwater wetlands. If so, a permit from the Corps is required. Wetlands are not always obvious. While they include swamps, marshes and bogs, some appear to be "dry" most of the year. If you are in doubt about whether

If you want to:	Contact (in this order):	And do the following:
Build on your property, continued	Army Corps of Engineers	your property includes freshwater wetlands, ask the Corps for a determination. You will need to provide them with a location map and plat and, if possible, an aerial photograph of the property from the county assessor's office. When you submit a request for freshwater wetlands determination, you grant the Corps permission to enter your property to make this assessment. It may take the Corps two or more weeks to reply to your request.
	Coastal Council	The CC can also make an informal determination, usually in less time than the Corps.
	Building Codes Department	Determine whether you are in a flood zone. If you know your tax district and parcel number, you can call the BCD; if not, you will have to go to the office. Any property located in a flood zone must elevated so that the lowest floor is at or above flood level. If you are building a house in a velocity zone, the foundation must be designed by an engineer or architect registered in South Carolina. You may also want to have the land

If you want to:	Contact (in this order):	And do the following:
Build on your property, continued	Building Codes Department	surveyed to determine whether it can be rezoned. If the surveyor finds that the elevation is higher than the present map says, submit a map amendment to the BCD, which will forward it to the federal government for review. This may take several months.
	County Health Dept.	Obtain a septic tank permit, if necessary. Any building which is to be occupied for more than two hours per day must be provided with adequate sewage disposal facilities. If public sewer is not available and a septic tank system is needed, construction may not begin until and unless a septic tank permit is issued by the CHD. Contact the CHD well in advance of construction so that they can perform the necessary site and soil evaluation to determine septic tank feasibility.
	Building Codes Dept.	Request a building permit application. The BCD issues permits for all building projects except marine construction, which is authorized by the Coastal Council. Projects may require approval from both agencies; for example, the Coastal Council permits docks while permission to run electrical wiring

If you want to:	Contact (in this order):	And do the following:
Build on your property, continued	Building Codes Dept.	under them or build a boathouse on the shore end comes from the BCD. In addition to the completed application you will be required to submit: a. Site plans indicating the location of the property, boundaries, and where the building will be situated; b. A complete set of blueprints; c. A septic tank permit from the CHD, if applicable; d. The license numbers of any contractors; e. Estimates of the total cost of construction. Your permit fee will be based on this cost. If the BCD finds that your project costs less than $500, it will issue an exemption from the permitting process.
	Joint Planning Commission	All construction must meet the standards listed in the Development Standards Ordinance, section 4, which is available from the Joint Planning Commission. One requirement is that all utility lines be located undergound.
	County Engineer	Contact the County Engineer to inspect the building.

If you want to:	Contact (in this order):	And do the following:
Build on your property, continued	Building Codes Department	The BCD will make a final inspection and issue a Certificat of Occupancy. The utility companies can not begin service until after this inspection. You should contact them beforehand, however, so that it can start immediately afterwards. You may be required to pay a deposit.
ring a mobile ome onto our property r move it rom one site o another	Building Codes Dept.	Determine whether you are in a flood zone. If you know your tax district and parcel number, you can do this by phone. If you are in a flood zone, you will need a flood certificate fro the surveyor showing that the floor of the mobile home will be above flood level. You may also want to have the lan resurveyed to determine whether i can be rezoned. If the surveyor determines that the elevation is higher than the present map says, submit a map amendment to the BCD which will forward it to the federal government for review. This may take several months. Apply to the BCD for a moving permit, if applicable.

If you want to:	Contact (in this order):	And do the following:
Bring a mobile home onto your property or move it from one site to another, continued	Joint Planning Commission	A permit from the JPC is require if there is a house or mobile ho already on the lot, and the ne mobile home is not going to be used by immediate family members of the owner of the original dwelling. A sample development permit is attached.
	Building Codes Dept.	To apply for a mobile home permi you will need to bring with you: a. A bill of sale or proof of title; b. The name of the owner of the property and of the mobile home, if different from yourself; c. A septic tank permit from the CHD if sewer service is not available; d. The fee for registration and electrical permit (in 1986 th was $15); e. If you are moving the mobile home from one lot to another, you will need a tax receipt t show that your taxes are paid BCD will inspect your mobile hom before issuing an electrical permit. Either someone must be home, or you must leave the mobi home open. The utility companie can not turn on your services until after this inspection has been made and a certificate of occupancy issued. Contact them before the inspection, however, that service can begin immediate afterwards. You may be required to pay a deposit to the utilitie
Subdivide or sell a portion of your land	Joint Planning Commission	You do not need permission from the JPC if: a. You are selling or giving lan to a member of your immediate family; or b. Each new lot will be 5 acres larger and no new roads will cut; c. The subdivision is part of a will or intestacy settlement.

If you want to:	Contact (in this order):	And do the following:
Subdivide or sell a portion of your land, continued	Joint Planning Commission	Obtain an exemption stamp from th JPC. If you do not fall under one of these categories you must file fo a site development permit. A sample application is attached after the chart. Among the documents you will be required to include are:
	County Health Dept. S.C. Coastal Council	a. Proof from the CHD that sewer service is available or that each lot can support a septic tank; b. A "critical line determinatior if the land is on a marsh. This states how high the property is and whether furthe certification from the CC will be necessary.
Move a building	Building Codes Dept.	Contact the BCD for a moving permit application. You will als need to submit a foundation plan for the new site and have a termite inspection before the structure can be moved, and a final inspection before a Certificate of Occupancy can be issued.
Dig a well	Beaufort-Jasper Water Authority	Find out whether there is a publi water supply that you can hook into.
	County Health Dept.	The CHD must determine that the proper distance exists between your well and any private septic tank.

If you want to:	Contact (in this order):	And do the following:
Put up a sign to advertise your business	Building Codes Department	Request a permit application. You are only allowed to advertise on the site and must meet setback and size requirements (the maximu dimensions of the sign depend on the size of the property). The BCD will physically inspect the site before issuing a permit.
Cut down trees	Joint Planning Commission	You do not need to contact the JP if you own and live on a single-family lot or use your lan for agricultural purposes. If you don't meet one of these exceptions and want to cut down a tree whose trunk is 8 inches or more in diameter as measured 3 feet from the base, you must: a. If the tree is diseased: this must be verified to the JPC by a forester with the Clemson Extension Service; or b. If the tree is not diseased: get permission from the JPC. Clear-cutting of trees -- cutting them for the sole purpose of clearing the land in anticipation of selling it -- is prohibited.
Test your water for bacteria and chemicals (optional)	County Health Dept.	To have your water tested for bacteria, pick up a bottle from the CHD, fill it with water and return it to the CHD, which will send it to Columbia for testing. To determine the level of different chemicals in your water bring a quart of it to the CHD. Both tests are free.
Install a septic tank	County Health Dept.	Any building occupied more than two hours a day is required to have approved sewage disposal facilities. In areas where sewer is not available, septic tanks ar needed. The CHD must evaluate th site before any system is installed. Contact the CHD for a application. You will be require to submit a plat or deed or other legal document that specifies the size of the property.

If you want to:	Contact (in this order):	And do the following:
Install a drainage system	Corps of Engineers	Request a permit application from the Corps. You can not do anything that would appreciably alter the surfac runoff to or from adjoining property. Nor can you develop a site or erect a structure -- including a dike, dam or levee -- that will result in an increased flood hazard to nearby properties.
Use 100,000 gallons or more of water per day	South Carolina Water Resources Commission	Individuals and corporations must apply to the SCWRC for a permit application. Applications are processed i the following manner: a. SCWRC staff review the application; b. Staff meet with the perso requesting the permit to discuss well-construction specifications, water-use reporting, and ground-water monitoring requirements (if applicable); c. SCWRC issues 15-day Publi Notices, which it sends t permitted water users within a one-mile radius of the proposed well(s) and various state agencies, including the Coastal Council. The Coastal Council must certify the project befor the SCWRC can issue a permit. d. The SCWRC sends Letter(s) of Concurrence which specify the conditions fo well construction. The well must be constructed within one year after the date on the letter(s). e. The final permit is processed after the well is completed according to the terms agreed upon.

If you want to:	Contact (in this order):	And do the following:
Use 100,000 gallons or more of water per day, continued	South Carolina Water Resources Commission	The SCWRC must reply to an application within 60 days. It usually takes 30-45 days from the time the SCWRC receives an application for it to send The Letter of Concurrence.
Build a dock, boat ramp, or erosion control structure or put up a sign in the water	Army Corps of Engineers and Coastal Council	Permits are required from the Corps and the CC. The Corps regulates certain types of work done in the waters of the United States. The CC has authority over projects that would alter a critical area of the South Carolina coast, which includes the tidelands, beaches, primary oceanfront sand dunes and coastal waters. You will only be required to fill out one application, from the Corps. It will in turn notify the CC about your project, and when your application is complete will send a copy to the CC for review. The CC also requires information that is not included in the Corps permit application. It will contact you about this, a will also ask you to submit an administrative fee of $50 or non-commercial use, and #200 if it is for commercial use. The Corps will also require a fee -- $10 for non-commercial use and $100 for commercial use. This should not be submitted with the application; if and when the Corps approves your project, it will ask you to send it in. Among the items the application will require are: a. Proof of land ownership -- a certified copy of the deed, lease or other instrument under which you claim title, possession or permission from the owner to build;

If you want to:	Contact (in this order):	And do the following:
Build a dock, boat ramp, or erosion control structure or put up a sign in the water, continued	Army Corps of Engineers and Coastal Council	b. A plat or copy of a plat of the site; c. A detailed drawing of the proposed structure and description of the purpos of the project, the metho of construction and materials and equipment t be used; d. A list of adjoining landowners and their addresses; e. Proof that you have met the requirements, detaile in the application, of publishing notice of the proposed construction in newspaper. The permit request will be approved, denied or conditionally approved (meaning that the work can b done only if certain conditions are met). There is an appeals procedure. Each agency exempts certain activities from the permitting process. The exceptions are not necessarily the same; if the Corps says you do not need a permit, you must still contact the CC, and visa versa. Contact the Corps to determine whether you project fits under one of its exemptions. The Corps may also authorize you project under a general permit or through a procedure called "Letters of Permission". A general permit authorizes types of minor activities without the need for individual processing. A project may qualify for a Letter of Permission if the work is minor or routine with minimum impact and objections are unlikely. A Letter of Permission can be issued much more quickly than a standard permit since an individual

If you want to:	Contact (in this order):	And do the following:
Build a dock, boat ramp, or erosion control structure or put up a sign in the water, continued	Army Corps of Engineers and Coastal Council	public notice is not required. Among the exceptions to the CC permit requirements are: a. Hunting, erecting duckblinds, fishing shellfishing and trapping when and where permitted by law; b. The discharge of effluent (waste) as permitted by law; c. Construction of walkways over sand dunes in accordance with criteria available from the CC; d. Emergency repairs to an existing dike or bank; e. Maintenance or repair of drainage and sewer facilities; f. Normal maintenance or repair to a pier or walkway so long as this does not involve dredge c fill.

COUNTY OF BEAUFORT, SOUTH CAROLINA
– DEVELOPMENT PERMIT APPLICATION –
– COMMERCIAL/INDUSTRIAL/INSTITUTIONAL –

PERMIT #	DATE APPLICATION COMPLETED	RECEIVED BY	FILING FEE	RCPT #	☐ STAFF REVIEW ☐ FULL BODY RV

PROJECT NAME	PROJECT TYPE

APPLICANT (DEVELOPER) NAME, ADDRESS	PROPERTY OWNER (NAME, ADDRESS) PH. #

PROJECT LOCATION	TAX MAP NO.	LAND AREA		
	PARCEL NO.	BLDG. AREA	BLDG. HEIGHT	FIRE DIST

– PRELIMINARY APPLICATION INFORMATION REQUIRED –

- ☐ SIX COPIES OF SITE PLAN
- ☐ EXISTING AND PROPOSED BLDGS., STRUCTURES, FACILITIES
- ☐ EXISTING AND PROPOSED ROADS, PARKING AREAS, OPEN SPACE
- ☐ EXISTING AND PROPOSED LAKES, PONDS, LAGOONS, DITCHES
- ☐ PROPERTY LINES, BEARINGS AND DISTANCES
- ☐ NORTH ARROW, GRAPHIC SCALE
- ☐ SEAL OF REGISTERED SURVEYOR OR REPRESENTATIVE
- ☐ VICINITY MAP
- ☐ ADJACENT LAND OWNERS AND LAND USE
- ☐ ADJACENT ROADS, HIGHWAYS (NAME, NUMBER, RIGHT OF WAY WIDTH, PUBLIC OR PRIVATE)
- ☐ EXISTING AND PROPOSED EASEMENTS (TYPE, SIZE, HOLDER)
- ☐ EXISTING RIVERS, CREEKS, MARSHES, AND OTHER WETLANDS
- ☐ PROPOSED BLDG. SETBACKS AND BUFFERS
- ☐ TREE SURVEY AND PROPOSED TREE REMOVAL
- ☐ EXISTING COVENANTS OR RESTRICTIONS
- ☐ EXISTING WATER, SEWER LINES ON OR ADJACENT TO PROPERTY
- ☐ DISTANCE TO NEAREST COMMUNITY WATER OR SEWER LINES
- ☐ EXISTING ELECTRIC/TELEPHONE/GAS UTILITY LINES ON OR ADJACENT TO PROPERTY
- ☐ EXISTING FIRE HYDRANTS WITHIN 1000 FT OF PROPERTY
- ☐ PROPOSED FIRE HYDRANT LOCATIONS
- ☐ PROPOSED ACCESS TO EXISTING ROADS, HIGHWAYS AND DISTANCES TO NEAREST EXISTING ACCESS POINTS
- ☐ PROPOSED WATER SUPPLY, SEWAGE DISPOSAL SYSTEMS
- ☐ PROPOSED SOLID WASTE DISPOSAL PLAN
- ☐ PRELIMINARY DRAINAGE PLAN
- ☐ PROPOSED PHASING
- ☐ LETTERS OF CAPABILITY AND INTENT TO SERVE WATER, SEWER, ELECTRIC, TELEPHONE, GAS UTILITY SERVICE FROM APPLICABLE AGENCY
- ☐ PRELIM. APPROVAL WATER/SEWER METHODS BY DEPT. HEALTH/ENVIRON. CONTROL
- PERVIOUS – IMPERVIOUS % SQ.FT. OR ACREAGE
- ☐ PROPOSED OFFERS OF PUBLIC DEDICATION
- PARKING REQ'D BY DSO

– FINAL APPLICATION INFORMATION REQUIRED –

- ☐ FINAL SITE PLAN
- ☐ FINAL WATER/SEWER SYSTEM LAYOUTS
- ☐ FINAL DRAINAGE PLAN
- ☐ FINAL UNDERGROUND ELECTRIC, TELEPHONE, GAS, CABLE LAYOUTS BY UTILITY COMPANY
- ☐ FINAL LANDSCAPE PLAN
- ☐ CERTIFIED SCCC PERMITTING LINE
- ☐ OPEN SPACE/IMPERVIOUS SURFACE CALCULATIONS
- ☐ FLOOD HAZARD DISTRICT ZONE/LINE
- ☐ CONSERVATION DISTRICT SURVEYED LINE
- ☐ PRIMARY SAND DUNE SURVEYED LINE (BEACH DEVELOPMENT DISTRICT ONLY)
- ☐ DHEC CONSTRUCTION PERMITS WATER/SEWER SYSTEMS
- ☐ OTHER APPLICABLE AGENCY PERMITS/APPROVALS
- ☐ FIRE OFFICIAL APPROVAL
- ☐ COUNTY ENGINEER APPROVAL

APPLICANT'S SIGNATURE	DATE	DATE PUBLIC NOTICE	DATE SHOULD RE
LANDOWNER'S SIGNATURE	DATE	DATE PRELIMINARY APPVL	DATE FINAL APPV

Agency Addresses and Phones Numbers

Beaufort
Joint Planning Commission
P.O. Drawer 1228
Beaufort, S.C. 29902
(803) 525-7138

Building Codes Department
Beaufort County Department of Inspections
Ribaut Road, P.O. Box 1228
Beaufort, S.C. 29901
525-7110

150-Hwy. 278
Hilton Head Island, S.C. 29928
681-7704

S.C. Coastal Council
P.O. Box 587
Beaufort, S.C. 29901
524-0755

Beaufort County Health Dept.
P. O. Box 459
Beaufort, S.C. 29901-0459
525-7215

S.C. Electric & Gas Co.
P.O. Box 1168
Beaufort, S.C. 29901
524-4161

Beaufort Jasper County Water Authority
P.O. Box 2115
Beaufort, S.C. 29901
524-7322

S.C. Water Resources Commission
143-A Ribaut Square
Beaufort, S.C. 29902
524-1995

Dept. of The Army
Corps of Engineers
P.O. Box 919
Charleston, S.C. 29402-0919
724-4330

Permits within the municipalities of Beaufort County

To apply for a permit to improve or alter land within one of the incorporated sections (municipalities) of Beaufort County, contact the appropriate agency listed below:

WITHIN THE CITY OF BEAUFORT

--subdivide land - contact JPC (525-7138)
--find out zoning classification of land - Planning Division 524-3831
--build any structure or sign - Code Enforcement 524-1694
--conduct any activity in Historic District - Planning Division 524-3831

Within Town of Port Royal

--subdivide land - JPC 525-7138

--find out zoning classification
Public Works Department 524-0846
--build any type improvement
Public Works Department 524-0846

Within Town of Bluffton

--subdivision, zoning, building
Contact Town Council 757-2642

Within Town of Hilton Head

--subdivision, zoning, building
Dept. of Planning & Inspections
681-9440

BANKRUPTCY

Bankruptcy is a declaration that a person can not pay his or her debts. The majority of a person's possessions are taken by the court and sold, and the proceeds distributed among creditors. Bankruptcy should be considered by a landowner as a last resort because in some situations it may allow him or her to keep the land.

A person who declares bankruptcy gets relief from all debts at once and can make a new start. In the process, he or she loses most property. A person who declares bankruptcy may find it difficult to get credit in the future.

Sometimes a person declaring bankruptcy can negotiate with creditors to pay them money to keep (redeem) property. A wage earner's plan allows an employed person declaring bankruptcy to keep property that he or she can pay the debt on within three to five years. A person declaring bankruptcy may also negotiate with creditors to keep property is the money the creditor would get through its sale would be less than the amount owed. This is most often the case where there are many creditors and little property, or if the property is not worth very much.

Bankruptcy is a legal procedure and anyone considering it should consult a lawyer. The person asking for bankruptcy is required by law to seek credit counseling. A counselor will weigh the person's debts against what he or she owns and can pay and will recommend to the court that the request for bankruptcy be granted or denied. The nearest credit counselors to Beaufort County are in Savannah and Charleston.

SEARCHING TITLE

Title is ownership. Searching title is looking through Court records to establish who owns a property and to ensure that there are no liens against it. This is most commonly done before purchasing a property.

Most title searches cover a period of forty years. The records needed to do the search are public. A lawyer is not needed to do a search, although one should be contacted if the researcher finds that ownership is unclear or there are liens on the property.

The following steps are necessary to search title:

Locate an accurate description of the property. It should include the size of the tract and list its boundaries. An old deed may be helpful. Check it against the county tax maps to make sure that the names of streets or the description itself have not changed over time.

Establish who has owned the property (chain of title). When property is transferred by deed, the new owner is supposed to register it at the county courthouse. The transaction is noted under the names of the old owner (grantor) and the new owner (grantee) in the the grantor and grantee indexes. These are located in the Register of Mesne Conveyances office.

The person searching title should look up the present owner in the grantee index and find out from whom he or she received the property. The name of this person should in turn be looked up in the grantee index until the researcher has a list of all grantors and grantees over the past 40 years. The researcher should then look up the same names in the grantor index to make sure that each grantor deeded the property only once - to the the grantee on the researcher's list - and placed no restrictions on the property.

If there are no deeds to the property listed in the grantee and grantor indexes, the owner may have received the property by a will or through intestate succession. This information should be recorded in the probate court. Look up the name of the owner in the Estates Index, which is organized alphabetically. It will refer to a box and package number (or a book and page number) where information about the will or intestacy settlement can be found. If there was a will, check to see that it gave the property to the person anticipated and that there are no conditions on the ownership.

If the property was transferred through intestate succession, make sure that the property being transferred is equal to or less than the owner's share.

If there is no record of the owner in the Estate Index, but the researcher thinks that he or she got title through a will or intestate succession, the researcher should contact the family or neighbors of the owner for information about how the land was transferred. If there is no information on this, the researcher should contact a lawyer about starting a court action to clear title.

Check for mortgages or other liens on the property, including liens for failure to pay taxes. These give the owner of the mortgage or lien the right to ask the court to sell the land to pay the landowner's debts. All mortgages and liens are recorded in the office of the Register of Mesne Conveyances, except those for county taxes. These are listed in the county assessor's office.

Liens against the land last for 10 years. This means that a lien can affect title to property even after the debtor has sold it.

Ensure that no one has filed a lawsuit involving the property. This information is listed in a Lis Pendens index in the office of the Register of Mesne Conveyances.

GOVERNMENT AGRICULTURAL OFFICES

Below is a list of county, state and federal agricultural offices, their addresses and phone numbers. These offices have been established with your tax dollars to serve you. It is important that you contact them and let them know what your concerns are and what needs to be done. They may be able to help you with farm problems.

The agencies are listed by categories according to whether they will be able to help you with 1) Financing (loans, crop budget, debt, etc.); Marketing (consumer demand, vendors, price outlook, etc.); or Production (soil sampling, pest and disease control, fertigation, etc.)

FINANCING:

1. Farmers Home Administration (FmHA)
   3012 Harding Street
   Burton, SC 29902
   Phone # 524-3882

2. Agriculture Stabilization Conservation Service (ASCS)
   Highway 280
   Burton, SC 29902
   Phone # 524-2721

3. Clemson Extenstion Service
   Arthur Horne Building
   Post Office Drawer 189
   Beaufort, SC 29901
   Phone # 525-7117

4. Production Credit Association
   317 Bells Highway
   Walterboro, SC
   Phone # 594-2513

5. South Carolina Department of Agriculture
   Small Farms Division
   Post Office Box 11280
   Columbia, SC 29211
   Phone # 758-3531

6. South Carolina Family Farms
   Post Office Box 11735
   Columbia, SC 29201
   Phone # 758-5956

PRODUCTION:

1. Clemson Extension Service
   Arthur Horne Building
   Post Office Box 189
   Beaufort, SC 29902
   Phone # 525-7117

2. South Carolina Department of Agriculture
   Small Farms Division
   Post Office Box 11280
   Columbia, SC 29211
   Phone # 758-3531

3. Coastal Research and Development Center
   2865 Savannah Highway
   Charleston, SC
   Phone # 766-3761

MARKETING:

1. South Carolina Farmer's Market Bulletin
   (Crop Price Quotation)
   Phone # 758-3761

2. South Carolina Farmer's Market
   1001 Bluff Road
   Columbia, SC
   Phone # 758-3325

3. South Carolina Department of Agriculture
   Small Farms Division
   Post Office Box 11280
   Phone # 758-3531

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Low Country Gullah Culture

Special Resource Study and Final Environmental Impact Statement

National Park Service
U.S. Department of the Interior

Southeast Regional Office
Atlanta, Georgia











BEAUFORT COUNTY, SOUTH CAROLINA
COMMUNITY DEVELOPMENT CODE, CULTURAL PROTECTION OVERLAY ZONE STANDARDS
INDEX TO LEGISLATIVE DOCUMENTATION
(April 20, 2023)

1. U.S. Supreme Court Case
    a. *Penn Central Transp. Co. v. New York City*, 483 U.S. 104 (1978)
2. South Carolina Supreme Court Cases
    a. *Ani Creation, Inc. d/b/a Rasta, et al. v. City of Myrtle Beach Bd. Of Zoning Appeals,* Op. No. 28151 (S.C. Sup. Ct. filed April 19, 2023) (Howard Adv. Sh. No. 15 at 52)
    b. *Braden's Folly, LLC v. City of Folly Beach,* Op. No. 28148 (S.C. Sup. Ct. filed April 5, 2023)(Howard Ad. Sh. No. 14 at 33)
    c. *Harkins v Greenville Cty.*, 340 S.C. 606, 533 S.E.2d. 886 (2000)
3. South Carolina Court of Appeals Case
    a. *Harbit v. City of Charleston*, 382 S.C. 383, 675 S.E.2d 776 (2009)
4. *Saving Our Land: A Legal Manual on Land Use and Retention*, Penn Center, Inc. (1986) Beaufort County Archives
5. National Park Service, U.S. Dep't of the Interior, *Low Country Gullah Culture: Special Resource Study and Final Environmental Impact Statement* (July 2005)
6. 1997 Beaufort County Comprehensive Plan, 1997

7. 2007 Northern Beaufort County Regional Plan, 2007

8. 2010 Beaufort County Comprehensive Plan, 2010

9. 2040 Beaufort County Comprehensive Plan, 2021

10. Southern Watershed Rural Area Preservation Program, Final Report. 30 September 2001

11. Beaufort County, South Carolina Population 2023, World Population Review

12. Larson, Lucas & Kacen Bayless & Lana Ferguson. "2020 Census: 4 Things to know about how Beaufort County grew in the last 10 years". *The Island Packet*, 12 August 2021

13. Gullah Geechee Cultural Heritage Corridor Commission, *Strategic Plan to Promote Preservation of Gullah Geechee Land Ownership in the Gullah Geechee Cultural Heritage Corridor*, 2020

14. Jebaily, Carolyn. "Protection of Gullah-Geechee culture, ACE Basin crucial for St. Helena's future". *The Island News*, 20 April 2023

15. Opinion. "We cannot allow the land of the treasured Gullah people to become 'gwine wit de tide'". *The Island Packet*, 9 April 2023

16. Puckett, Karl. "18-hole golf course blocked on St. Helena, but how about 3 with 6 holes? 450 say no way." *The Island Packet*, 1 April 2023

17. Brown, DeNeen, & Rita Harper. "White Gold From Black Hands: The Gullah Geechee Fight For A Legacy After Slavery." *The Guardian*, 30 March, 2023

18. McCombs, Mike. "Rally to 'protect St. Helena' set for Thursday". *The Island News*, 29 March 2023

19. Editorial Staff. Strengthen Charleston County's urban growth boundary to protect rural areas". *Post and Courier*, 21 March 2023

20. Editorial Staff. "Protect Wadmalaw Island's agricultural zoning". *Post and Courier,* 18 March 2023

21. Douglas, Blake. "Hilton Head residents unite against Jonesville development, town working on district plan". *The Island Packet*, 9 January 2023

22. Leslie Lenhart, letter to Queen Quet & Daryl Orage, 31 January 2023. TS

23. Amy Armstrong, letter to Queen Quet, Marquetta L. Goodwine, 21 March 2023. TS

24. William J. Cook, letter to St. Helena Cultural Property Overlay District Committee, 21 March 2023. TS

25. Andrew Gowder, letter to Kristin Williams, 5 April 2023. TS

26. Amy Armstrong, letter to Honorable Alice Howard, 9 April 2023. TS

Penn Central Transportation Co. v. New York City, 438 U.S. 104 (1978)

Justia Opinion Summary and Annotations

Annotation

Primary Holding
A city does not need to pay compensation to a property owner under the Takings Clause of the Fifth Amendment when it designates their property as a landmark and limits its development.

Facts
As provided under the Landmark Preservation Law in New York, the Landmark Preservation Commission had the authority to designate certain buildings and properties as landmarks of historic or scenic value. Once it had applied a landmark designation to a property, the owner could appeal the decision through administrative and judicial proceedings. The owner also retained the right to transfer development rights to other properties under its control.

The railroad company Penn Central sought to build a multistory office building above Grand Central Terminal, which the Commission had designated as a historic landmark. Appeals against that designation failed, Central was prevented from constructing

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Majority

- William Joseph Brennan, Jr. (Author)
- Potter Stewart
- Byron Raymond White
- Thurgood Marshall
- Harry Andrew Blackmun
- Lewis Franklin Powell, Jr.

Brennan pointed out that Penn Central still could develop the rest of the parcel on which Grand Central Terminal stood, since the law only burdened its ability to use the air space above the Terminal. He was not concerned by the fact that the law burdened certain property owners more than others, since this is often true of laws that promote the public good. Brennan stated that the government interference with private property should be evaluated both qualitatively (the type of interference) and quantitatively (the extent of the interference). He found that the restrictions under the law had a substantial relationship to the government's legitimate interest in preserving historical landmarks for the general welfare and that Penn Central had plenty of alternative ways to develop this property and others.

Dissent

- William Hubbs Rehnquist (Author)
- Warren Earl Burger
- John Paul Stevens

Observing that fewer than 0.1 percent of the buildings in New York City were affected by the law, Rehnquist argued that the takings principle should prohibit laws that impose substantial burdens on a very small group in exchange for a small benefit to a very large group.

Case Commentary

The Court's reasoning showed that, in evaluating whether a taking requires compensation, a key inquiry consists of evaluating the economic impact of the regulation and whether it has undermined the investment-backed expectations of a private property owner. Although Penn Central lost the case, it eventually s at it wanted because the terminal later

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Syllabus Case

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U.S. Supreme Court

Penn Central Transportation Co. v. New York City, 438 U.S. 104 (1978)

Penn Central Transportation Co. v. New York City

No. 77-444

Argued April 17, 1978

Decided June 26, 1978

438 U.S. 104

Syllabus

Under New York City's Landmarks Preservation Law (Landmarks Law), which was enacted to protect historic landmarks and neighborhoods from precipitate decisions to destroy or fundamentally alter their character, the Landmarks Preservation Commission (Commission) may designate a building to be a "landmark" on a particular "landmark site" or may designate an area to be a "historic district." The Board of Estimate may thereafter modify or disapprove the designation, and the owner may seek judicial review of the final designation decision. The owner of the designated landmark must keep the building's exterior "in good repair," and, before exterior alterations are made, must secure Commission approval. Under two ordinances, owners of landmark sites may transfer development rights from a landmark parcel to proximate lots. Under the Landmarks Law, the Grand Central Terminal (Terminal), which is owned by the Penn Central Transportation Co. and its affiliates (Penn Central) was designated a "landmark" and the block it occupies a "landmark site." Appellant Penn Central, though opposing the designation before the Commission, did not seek judicial review of the final designation decision. Thereafter appellant Penn Central entered into a lease with appellant UGP Properties, whereby UGP was to construct a multistory office building over the Terminal. After the Commission had rejected appellants' plans for the building as destructive of the Terminal's historic and aesthetic feature judicial review thereafter being sought.

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Item 15.

Oral Argument - April 17, 1978

Opinion Announced - June 26, 1978

was reversed on appeal, the New York Court of Appeals ultimately concluding that there was no "taking," since the Landmarks Law had not transferred control of the property to the city, but only restricted appellants' [illegible]oitation of it; and that there was no denial of due process because (1) the same use of the Terminal was permitted as before; (2) the appellants had not shown that they could not earn a reasonable return on their investment in the Terminal itself; (3) even if the Terminal proper could never operate at a reasonable profit, some of the income from Penn Central's extensive real estate holdings in the area must realistically be imputed to the Terminal; and (4) the development rights above the Terminal, which were made transferable to numerous sites in the vicinity, provided significant compensation for loss of rights above the Terminal itself.

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Page 438 U. S. 105

Held: The application of the Landmarks Law to the Terminal property does not constitute a "taking" of appellants' property within the meaning of the Fifth Amendment as made applicable to the States by the Fourteenth Amendment. Pp. 438 U. S. 123-138.

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(a) In a wide variety of contexts, the government may execute laws or programs that adversely affect recognized economic values without its action constituting a "taking," and

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PENN CENTRAL TRANSPORTATION COMPANY et al., Appellants, v. CITY OF NEW YORK et al.

Supreme Court

438 U.S. 104

98 S.Ct. 2646

57 L.Ed.2d 631

PENN CENTRAL TRANSPORTATION COMPANY et al., Appellants,
v.
CITY OF NEW YORK et al.

No. 77-444.

Argued April 17, 1978.

Decided June 26, 1978.

Rehearing Denied Oct. 2, 1978.

See 439 U.S. 883, 99 S.Ct. 226.

Syllabus

Under New York City's Landmarks Preservation Law (Landmarks Law), which was enacted to protect historic landmarks and neighborhoods from precipitate decisions to destroy or fundamentally alter their character, the Landmarks Preservation Commission (Commission) may designate a building to be a "landmark" on a particular "landmark site" or may designate an area to be a "historic district." The Board of Estimate may thereafter modify or disapprove the designation, and the owner may seek judicial review of the final designation decision. The owner of the

designated landmark must keep the building's exterior "in good repair" and before exterior alterations are made must secure Commission approval. Under two ordinances owners of landmark sites may transfer development rights from a landmark parcel to proximate lots. Under the Landmarks Law, the Grand Central Terminal (Terminal), which is owned by the Penn Central Transportation Co. and its affiliates (Penn Central) was designated a "landmark" and the block it occupies a "landmark site." Appellant Penn Central, though opposing the designation before the Commission, did not seek judicial review of the final designation decision. Thereafter appellant Penn Central entered into a lease with appellant UGP Properties, whereby UGP was to construct a multistory office building over the Terminal. After the Commission had rejected appellants' plans for the building as destructive of the Terminal's historic and aesthetic features, with no judicial review thereafter being sought, appellants brought suit in state court claiming that the application of the Landmarks Law had "taken" their property without just compensation in violation of the Fifth and Fourteenth Amendments and arbitrarily deprived them of their property without due process of law in violation of the Fourteenth Amendment. The trial court's grant of relief was reversed on appeal, the New York Court of Appeals ultimately concluding that there was no "taking" since the Landmarks Law had not transferred control of the property to the city, but only restricted appellants' exploitation of it; and that there was no denial of due process because (1) the same use of the Terminal was permitted as before; (2) the appellants had not shown that they could not earn a reasonable return on their investment in the Terminal itself; (3) even if the Terminal proper could never operate at a reasonable profit, some of the income from Penn Central's extensive real estate holdings in the area must realistically be imputed to the Terminal; and (4) the development rights above the Terminal, which were made transferable to numerous sites in the vicinity, provided significant compensation for loss of rights above the Terminal itself. *Held:* The application of the Landmarks Law to the Terminal property does not constitute a "taking" of appellants' property within the meaning of the Fifth Amendment as made applicable to the States by the Fourteenth Amendment. Pp. 2559-2666.

(a) In a wide variety of contexts the government may execute laws or programs that adversely affect recognized economic values without its action constituting a "taking," and in instances such as zoning laws where a state tribunal has reasonably concluded that "the health, safety, morals, or general welfare" would be promoted by prohibiting particular contemplated uses of land, this Court has upheld land-use regulations that destroyed or adversely affected real property interests. In many instances use restrictions that served a substantial public purpose have been upheld against "taking" challenges, *e. g., Goldblatt v. Hempstead*, 369 U.S. 590, 82 S.Ct. 987, 8 L.Ed.2d 130; *Hadacheck v. Sebastian*, 239 U.S. 394, 36 S.Ct. 143, 60 L.Ed. 348, though a state statute that substantially

furthers important public policies may so frustrate distinct investment-backed expectations as to constitute a "taking," *e. g., Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 43 S.Ct. 158, 67 L.Ed. 322, and government acquisitions of resources to permit uniquely public functions constitute "takings," *e. g., United States v. Causby*, 328 U.S. 256, 66 S.Ct. 1062, 90 L.Ed. 1206. Pp. 123-128.

(b) In deciding whether particular governmental action has effected a "taking," the character of the action and nature and extent of the interference with property rights (here the city tax block designated as the "landmark site") are focused upon, rather than discrete segments thereof. Consequently, appellants cannot establish a "taking" simply by showing that they have been denied the ability to exploit the super-jacent airspace, irrespective of the remainder of appellants' parcel. Pp. 130-131.

(c) Though diminution in property value alone, as may result from a zoning law, cannot establish a "taking," as appellants concede, they urge that the regulation of individual landmarks is different because it applies only to selected properties. But it does not follow that landmark laws, which embody a comprehensive plan to preserve structures of historic or aesthetic interest, are discriminatory, like "reverse spot" zoning. Nor can it be successfully contended that designation of a landmark involves only a matter of taste and therefore will inevitably lead to arbitrary results, for judicial review is available and there is no reason to believe it will be less effective than would be so in the case of zoning or any other context. Pp. 131-133.

(d) That the Landmarks Law affects some landowners more severely than others does not itself result in "taking," for that is often the case with general welfare and zoning legislation. Nor, contrary to appellants' contention, are they solely burdened and unbenefited by the Landmarks Law, which has been extensively applied and was enacted on the basis of the legislative judgment that the preservation of landmarks benefits the citizenry both economically and by improving the overall quality of city life. Pp. 133-135.

(e) The Landmarks Law no more effects an appropriation of the airspace above the Terminal for governmental uses than would a zoning law appropriate property; it simply prohibits appellants or others from occupying certain features of that space while allowing appellants gainfully to use the remainder of the parcel. *United States v. Causby, supra*, distinguished. P. 135.

(f) The Landmarks Law, which does not interfere with the Terminal's present uses or prevent Penn Central from realizing a "reasonable return" on its investment, does not impose the drastic limitation on appellants' ability to use the air rights above the Terminal that appellants claim, for on this record there is no showing that a smaller, harmonizing structure would not be authorized. Moreover, the pre-

existing air rights are made transferable to other parcels in the vicinity of the Terminal, thus mitigating whatever financial burdens appellants have incurred. Pp. 135-137.

42 N.Y.2d 324, 397 N.Y.S.2d 914, 366 N.E.2d 1271, affirmed

Daniel M. Gribbon, Washington, D. C., for appellants.

Leonard J. Koerner, New York City, for appellees.

Patricia M. Wald, Washington, D. C., for the U. S., as amicus curiae, by special leave of Court.

Mr. Justice BRENNAN delivered the opinion of the Court.

1

The question presented is whether a city may, as part of a comprehensive program to preserve historic landmarks and historic districts, place restrictions on the development of individual historic landmarks—in addition to those imposed by applicable zoning ordinances—without effecting a "taking" requiring the payment of "just compensation." Specifically, we must decide whether the application of New York City's Landmarks Preservation Law to the parcel of land occupied by Grand Central Terminal has "taken" its owners' property in violation of the Fifth and Fourteenth Amendments.

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* A.

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Over the past 50 years, all 50 States and over 500 municipalities have enacted laws to encourage or require the preservation of buildings and areas with historic or aesthetic importance.[1] These nationwide legislative efforts have been precipitated by two concerns. The first is recognition that, in recent years, large numbers of historic structures, landmarks, and areas have been destroyed[2] without adequate consideration of either the values represented therein or the possibility of preserving the destroyed properties for use in economically productive ways.[3] The second is a widely shared belief that structures with special historic, cultural, or architectural significance enhance the quality of life for all. Not only do these buildings and their workmanship represent the lessons of the past and embody precious features of our heritage, they serve as examples of quality for today. "[H]istoric conservation is but one aspect of the much larger problem, basically an environmental one, of enhancing—or perhaps developing for the first time—the quality of life for people."[4]

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New York City, responding to similar concerns and acting pursuant to a New York State enabling Act,[5] adopted its Landmarks Preservation Law in 1965. See N.Y.C. Admin. Code, ch. 8-A, § 205-1.0 *et seq*. (1976). The city acted from the conviction that "the standing of [New York City] as a world-wide tourist center and world capital of business, culture and government" would be threatened if legislation were not enacted to protect historic landmarks and neighborhoods from pr cipitate decisions to destroy or fundamentally alter their character. § 205-1.0(a). The city believed that comprehensive measures to safeguard desirable features of the existing urban fabric would benefit its citizens in a variety of ways: *e. g.*, fostering "civic pride in the beauty and noble accomplishments of the past"; protecting and enhancing "the city's attractions to tourists and visitors"; "support[ing] and stimul[ating] business and industry"; "strengthen[ing] the economy of the city"; and promoting "the use of historic districts, landmarks, interior landmarks and scenic landmarks for the education, pleasure and welfare of the people of the city." § 205-1.0(b).

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The New York City law is typical of many urban landmark laws in that its primary method of achieving its goals is not by acquisitions of historic properties,[6] but rather by involving public entities in land-use decisions affecting these properties and providing services, standards, controls, and incentives that will encourage preservation by private owners and users.[7] While the law does place special restrictions on landmark properties as a necessary feature to the attainment of its larger objectives, the major theme of the law is to ensure the owners of any such properties both a "reasonable return" on their investments and maximum latitude to use their parcels for purposes not inconsistent with the preservation goals.

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The operation of the law can be briefly summarized. The primary responsibility for administering the law is vested in the Landmarks Preservation Commission (Commission), a broad based, 11-member agency[8] assisted by a technical staff. The Commission first performs the function, critical to any landmark preservation effort, of identifying properties and areas that have "a special character or special historical or aesthetic interest or value as part of the development, heritage or cultural characteristics of the city, state or nation." § 207-1.0(n); see § 207-1.0(h). If the Commission determines, after giving all interested parties an opportunity to be heard, that a building or area satisfies the ordinance's criteria, it will designate a building to be a "landmark," § 207-1.0(n),[9] situated on a particular "landmark site," § 207-1.0(*o*),[10] or will designate an area to be a "historic district," § 207-1.0(h).[11] After the Commission makes a designation, New York City's Board of Estimate, after considering the relationship of the designated property "to the master plan, the zoning resolution, projected public improvements and any plans for the renewal of the area involved," § 207-2.0(g)(1), may modify or disapprove

the designation, and the owner may seek judicial review of the final designation decision. Thus far, 31 historic districts and over 400 individual landmarks have been finally designated,[12] and the process is a continuing one.

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Final designation as a landmark results in restrictions upon the property owner's options concerning use of the landmark site. First, the law imposes a duty upon the owner to keep the exterior features of the building "in good repair" to assure that the law's objectives not be defeated by the landmark's falling into a state of irremediable disrepair. See § 207-10.0(a). Second, the Commission must approve in advance any proposal to alter the exterior architectural features of the landmark or to construct any exterior improvement on the landmark site, thus ensuring that decisions concerning construction on the landmark site are made with due consideration of both the public interest in the maintenance of the structure and the landowner's interest in use of the property. See §§ 207-4.0 to 207-9.0.

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In the event an owner wishes to alter a landmark site, three separate procedures are available through which administrative approval may be obtained. First, the owner may apply to the Commission for a "certificate of no effect on protected architectural features": that is, for an order approving the improvement or alteration on the ground that it will not change or affect any architectural feature of the landmark and will be in harmony therewith. See § 207-5.0. Denial of the certificate is subject to judicial review.

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Second, the owner may apply to the Commission for a certificate of "appropriateness." See § 207-6.0. Such certificates will be granted if the Commission concludes—focusing upon aesthetic, historical, and architectural values —that the proposed construction on the landmark site would not unduly hinder the protection, enhancement, perpetuation, and use of the landmark. Again, denial of the c rtificate is subject to judicial review. Moreover, the owner who is denied either a certificate of no exterior effect or a certificate of appropriateness may submit an alternative or modified plan for approval. The final procedure seeking a certificate of appropriateness on the ground of "insufficient return," see § 207-8.0—provides special mechanisms, which vary depending on whether or not the landmark enjoys a tax exemption,[13] to ensure that designation does not cause economic hardship.

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Although the designation of a landmark and landmark site restricts the owner's control over the parcel, designation also enhances the economic position of the landmark owner in one significant respect. Under New York City's zoning laws, owners of real property who have not developed their property to the full extent permitted by the applicable zoning laws are allowed to transfer development rights

to contiguous parcels on the same city block. See New York City, Zoning Resolution Art. I, ch. 2, § 12-10 (1978) (definition of "zoning lot"). A 1968 ordinance gave the owners of landmark sites additional opportunities to transfer development rights to other parcels. Subject to a restriction that the floor area of the transferee lot may not be increased by more than 20% above its authorized level, the ordinance permitted transfers from a landmark parcel to property across the street or across a street inte section. In 1969, the law governing the conditions under which transfers from landmark parcels could occur was liberalized, see New York City Zoning Resolutions 74-79 to 74-793, apparently to ensure that the Landmarks Law would not unduly restrict the development options of the owners of Grand Central Terminal. See Marcus, Air Rights Transfers in New York City, 36 Law & Contemp. Prob. 372, 375 (1971). The class of recipient lots was expanded to include lots "across a street and opposite to another lot or lots which except for the intervention of streets or street intersections f[or]m a series extending to the lot occupied by the landmark building[, provided that] all lots [are] in the same ownership." New York City Zoning Resolution 74-79 (emphasis deleted).[14] In addition, the 1969 amendment permits, in highly commercialized areas like midtown Manhattan, the transfer of all unused development rights to a single parcel. *Ibid*.

B

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This case involves the application of New York City's Landmarks Preservation Law to Grand Central Terminal (Terminal). The Terminal, which is owned by the Penn Central Transportation Co. and its affiliates (Penn Central), is one of New York City's most famous buildings. Opened in 1913, it is regarded not only as providing an ingenious engineering solution to the problems presented by urban railroad stations, but also as a magnificent example of the French beaux-arts style.

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The Terminal is located in midtown Manhattan. Its south facade faces 42d Street and that street's intersection with Park Avenue. At street level, the Terminal is bounded on the west by Vanderbilt Avenue, on the east by the Commodore Hotel, and on the north by the Pan-American Building. Although a 20-story office tower, to have been located above the Terminal, was part of the original design, the planned tower was never constructed.[15] The Terminal itself is an eight-story structure which Penn Central uses as a railroad station and in which it rents space not needed for railroad purposes to a variety of commercial interests. The Terminal is one of a number of properties owned by appellant Penn Central in this area of midtown Manhattan. The others include the Barclay, Biltmore, Commodore, Roosevelt, and Waldorf-Astoria Hotels, the Pan-American Building and other office

buildings along Park Avenue, and the Yale Club. At least eight of these are eligible to be recipients of development rights afforded the Terminal by virtue of landmark designation.

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On August 2, 1967, following a public hearing, the Commission designated the Terminal a "landmark" and designated the "city tax block" it occupies a "landmark site."[16] The Board of Estimate confirmed this action on September 21, 1967. Although appellant Penn Central had opposed the designation before the Commission, it did not seek judicial review of the final designation decision.

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On January 22, 1968, appellant Penn Central, to increase its income, entered into a renewable 50-year lease and sublease agreement with appellant UGP Properties, Inc. (UGP), a wholly owned subsidiary of Union General Properties, Ltd., a United Kingdom corporation. Under the terms of the agreement, UGP was to construct a multistory office building above the Terminal. UGP promised to pay Penn Central $1 million annually during construction and at least $3 million annually thereafter. The rentals would be offset in part by a loss of some $700,000 to $1 million in net rentals presently received from concessionaires displaced by the new building.

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Appellants UGP and Penn Central then applied to the Commission for permission to construct an office building atop the Terminal. Two separate plans, both designed by architect Marcel Breuer and both apparently satisfying the terms of the applicable zoning ordinance, were submitted to the Commission for approval. The first, Breuer I, provided for the construction of a 55-story office building, to be cantilevered above the existing facade and to rest on the roof of the Terminal. The second, Breuer II Revised,[17] called for tearing down a portion of the Terminal that included the 42d Street facade, stripping off some of the remaining features of the Terminal's facade, and constructing a 53-story office building. The Commission denied a certificate of no exterior effect on September 20, 1968. Appellants then applied for a certificate of "appropriateness" as to both proposals. After four days of hearings at which over 80 witnesses testified, the Commission denied this application as to both proposals.

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The Commission's reasons for rejecting certificates respecting Breuer II Revised are summarized in the following statement: "To protect a Landmark, one does not tear it down. To perpetuate its architectural features, one does not strip them off." Record 2255. Breuer I, which would have preserved the existing vertical facades of the present structure, received more sympathetic consideration. The Commission first focused on the effect that the proposed tower would have on one desirable feature created by the present structure and its surroundings: the dramatic view of

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the Terminal from Park Avenue South. Although appellants had contended that the Pan-American Building had already destroyed the silhouette of the south facade and that one additional tower could do no further damage and might even provide a better background for the facade, the Commission disagreed, stating that it found the majestic approach from the south to be still unique in the city and that a 55-story tower atop the Terminal would be far more detrimental to its south facade than the Pan-American Building 375 feet away. Moreover, the Commission found that from closer vantage points the Pan Am Building and the other towers were largely cut off from view, which would not be the case of the mass on top of the Terminal planned under Breuer I. In conclusion, the Commission stated:

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"[We have] no fixed rule against making additions to designated buildings—it all depends on how they are done . . . . But to balance a 55-story office tower above a flamboyant Beaux-Arts facade seems nothing more than an aesthetic joke. Quite simply, the tower would overwhelm the Terminal by its sheer mass. The 'addition' would be four times as high as the existing structure and would reduce the Landmark itself to the status of a curi sity.

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"Landmarks cannot be divorced from their settings particularly when the setting is a dramatic and integral part of the original concept. The Terminal, in its setting, is a great example of urban design. Such examples are not so plentiful in New York City that we can afford to lose any of the few we have. And we must preserve them in a meaningful way—with alterations and additions of such character, scale, materials and mass as will protect, enhance and perpetuate the original design rather than overwhelm it." *Id.*, at 2251.[18]

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Appellants did not seek judicial review of the denial of either certificate. Because the Terminal site enjoyed a tax exemption,[19] remained suitable for its present and future uses, and was not the subject of a contract of sale, there were no further administrative remedies available to appellants as to the Breuer I and Breuer II Revised plans. See n. 13, *supra*. Further, appellants did not avail themselves of the opportunity to develop and submit other plans for the Commission's consideration and approval. Instead, appellants filed suit in New York Supreme Court, Trial Term, claiming, *inter alia*, that the application of the Landmarks Preservation Law had "taken" their property without just compensation in violation of the Fifth and Fourteenth Amendments and arbitrarily deprived them of their property without due process of law in violation of the Fourteenth Amendment. Appellants sought a declaratory judgment, injunctive relief barring the city from using the Landmarks Law to impede the construction of any structure that might otherwise lawfully be constructed on the Terminal site, and damages for the "temporary taking" that

occurred between August 2, 1967, the designation date, and the date when the restrictions arising from the Landmarks Law would be lifted. The trial court granted the injunctive and declaratory relief, but severed the question of damages for a "temporary taking."[20]

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Appellees appealed, and the New York Supreme Court, Appellate Division, reversed. 50 A.D.2d 265, 377 N.Y.S.2d 20 (1975). The Appellate Division held that the restrictions on the development of the Terminal site were necessary to promote the legitimate public purpose of protecting landmarks and therefore that appellants could sustain their constitutional claims only by proof that the regulation deprived them of all reasonable beneficial use of the property. The Appellate Division held that the evidence appellants introduced at trial—"Statements of Revenues and Co ts," purporting to show a net operating loss for the years 1969 and 1971, which were prepared for the instant litigation—had not satisfied their burden.[21] First, the court rejected the claim that these statements showed that the Terminal was operating at a loss, for in the court's view, appellants had improperly attributed some railroad operating expenses and taxes to their real estate operations and compounded that error by failing to impute any rental value to the vast space in the Terminal devoted to railroad purposes. Further, the Appellate Division concluded that appellants had failed to establish either that they were unable to increase the Terminal's commercial income by transforming vacant or underutilized space to revenue-producing use, or that the unused development rights over the Terminal could not have been profitably transferred to one or more nearby sites.[22] The Appellate Division concluded that all appellants had succeeded in showing was that they had been deprived of the property's most profitable use, and that this showing did not establish that appellants had been unconstitutionally deprived of their property.

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The New York Court of Appeals affirmed. 42 N.Y.2d 324, 397 N.Y.S.2d 914, 366 N.E.2d 1271 (1977). That court summarily rejected any claim that the Landmarks Law had "taken" property without "just compensation," *id.*, at 329, 397 N.Y.S.2d, at 917, 366 N.E.2d, at 1274, indicating that there could be no "taking" since the law had not transferred control of the property to the city, but only restricted appellants' exploitation of it. In that circumstance, the Court of Appeals held that appellants' attack on the law could prevail only if the law deprived appellants of their property in violation of the Due Process Clause of the Fourteenth Amendment. Whether or not there was a denial of substantive due process turned on whether the restrictions deprived Penn Central of a "reasonable return" on the "privately created and privately managed ingredient" of the Terminal. *Id.*, at 328, 397 N.Y.S.2d, at 916, 366 N.E.2d, at 1273.[23] The Court of Appeals concluded that the Landmarks Law had not effected a denial of due process because: (1) the landmark

regulation permitted the same use as had been made of the Terminal for more than half a century; (2) the appellants had failed to show that they could not earn a reasonable return on their investment in the Terminal itself; (3) even if the Terminal proper could never operate at a reasonable profit some of the income from Penn Central's extensive real estate holdings in the area, which include hotels and office buildings, must realistically be imputed to the Terminal; and (4) the development rights above the Terminal, which had been made transferable to numerous sites in the vicinity of the Terminal, one or two of which were suitable for the construction of office buildings, were valuable to appellants and provided "significant, perhaps 'fair,' compensation for the loss of rights above the terminal itself." *Id.*, at 333-336, 397 N.Y.S.2d, at 922, 366 N.E.2d, at 1276-1278.

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Observing that its affirmance was "[o]n the present record," and that its analysis had not been fully developed by counsel at any level of the New York judicial system, the Court of Appeals directed that counsel "should be entitled to present . . . any additional submissions which, in the light of [the court's] opinion, may usefully develop further the factors discussed." *Id.*, at 337, 397 N.Y.S.2d, at 922, 366 N.E.2d, at 1279. Appellants chose not to avail themselves of this opportunity and filed a notice of appeal in this Court. We noted probable jurisdiction. 434 U.S. 983 (1977). We affirm.

II

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The issues presented by appellants are (1) whether the restrictions imposed by New York City's law upon appellants' exploitation of the Terminal site effect a "taking" of appellants' property for a public use within the meaning of the Fifth Amendment, which of course is made applicable to the States through the Fourteenth Amendment, see *Chicago, B. & Q. R. Co. v. Chicago*, 166 U.S. 226, 239, 17 S.Ct. 581, 585, 41 L.Ed. 979 (1897), and, (2), if so, whether the transferable development rights afforded appellants constitute "just compensation" within the meaning of the Fifth Amendment.[24] We need only address the question whether a "taking" has occurred.[25]

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* Before considering appellants' specific contentions, it will be useful to review the factors that have shaped the jurisprudence of the Fifth Amendment injunction "nor shall private property be taken for public use, without just compensation." The question of what constitutes a "taking" for purposes of the Fifth Amendment has proved to be a problem of considerable difficulty. While this Court has recognized that the "Fifth Amendment's guarantee . . . [is] designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole," *Armstrong v. United States*, 364 U.S.

40, 49, 80 S.Ct. 1563, 1569, 4 L.Ed.2d 1554 (1960), this Court, quite simply, has been unable to develop any "set formula" for determining when "justice and fairness" require that economic injuries caused by public action be compensated by the government, rather than remain disproportionately concentrated on a few persons. See *Goldblatt v. Hempstead*, 369 U.S. 590, 594, 82 S.Ct. 987, 990, 8 L.Ed.2d 130 (1962). Indeed, we have frequently observed that whether a particular restriction will be rendered invalid by the government's failure to pay for any losses proximately caused by it depends largely "upon the particular circumstances [in that] case." *United States v. Central Eureka Mining Co.*, 357 U.S. 155, 168, 78 S.Ct. 1097, 1104, 2 L.Ed.2d 1228 (1958); see *United States v. Caltex, Inc.*, 344 U.S. 149, 156, 73 S.Ct. 200, 203, 97 L.Ed. 157 (1952).

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In engaging in these essentially ad hoc, factual inquiries, the Court's decisions have identified several factors that have particular significance. The economic impact of the regulation on the claimant and, particularly, the extent to which the regulation has interfered with distinct investment-backed expectations are, of course, relevant considerations. See *Goldblatt v. Hempstead, supra,* 369 U.S., at 594, 82 S.Ct., at 990. So, too, is the character of the governmental action. A "taking" may more readily be found when the interference with property can be characterized as a physical invasion by government, see, *e. g., United States v. Causby,* 328 U.S. 256, 66 S.Ct. 1062, 90 L.Ed. 1206 (1946), than when interference arises from some public program adjusting the benefits and burdens of economic life to promote the common good.

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"Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law," *Pennsylvania Coal Co. v. Mahon,* 260 U.S. 393, 413, 43 S.Ct. 158, 159, 67 L.Ed. 322 (1922), and this Court has accordingly recognized, in a wide variety of contexts, that government may execute laws or programs that adversely affect recognized economic values. Exercises of the taxing power are one obvious example. A second are the decisions in which this Court has dismissed "taking" challenges on the ground that, while the challenged government action caused economic harm, it did not interfere with interests that were sufficiently bound up with the reasonable expectations of the claimant to constitute "property" for Fifth Amendment purposes. See, *e. g., United States v. Willow River Power Co.,* 324 U.S. 499, 65 S.Ct. 761, 89 L.Ed. 1101 (1945) (interest in high-water level of river for runoff for tailwaters to maintain power head is not property); *United States v. Chandler-Dunbar Water Power Co.,* 229 U.S. 53, 33 S.Ct. 667, 57 L.Ed. 1063 (1913) (no property interest can exist in navigable waters); see also *Demorest v.*

City Bank Co., 321 U.S. 36, 64 S.Ct. 384, 88 L.Ed. 526 (1944); *Muhlker v. Harlem R. Co.,* 197 U.S. 544, 25 S.Ct. 522, 49 L.Ed. 872 (1905); Sax, Takings and the Police Power, 74 Yale L.J. 36, 61-62 (1964).

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More importantly for the present case, in instances in which a state tribunal reasonably concluded that "the health, safety, morals, or general welfare" would be promoted by prohibiting particular contemplated uses of land, this Court has upheld land-use regulations that destroyed or adversely affected recognized real property interests. See *Nectow v. Cambridge,* 277 U.S. 183, 188, 48 S.Ct. 447, 448, 72 L.Ed. 842 (1928). Zoning laws are, of course, the classic example, see *Euclid v. Ambler Realty Co.,* 272 U.S. 365, 47 S.Ct. 114, 71 L.Ed. 303 (1926) (prohibition of industrial use); *Gorieb v. Fox,* 274 U.S. 603, 608, 47 S.Ct. 675, 677, 71 L.Ed. 1228 (1927) (requirement that portions of parcels be left unbuilt); *Welch v. Swasey,* 214 U.S. 91, 29 S.Ct. 567, 53 L.Ed. 923 (1909) (height restriction), which have been viewed as permissible governmental action even when prohibiting the most beneficial use of the property. See *Goldblatt v. Hempstead, supra,* 369 U.S., at 592-593, 82 S.Ct., at 988-989, and cases cited; see also *Eastlake v. Forest City Enterprises, Inc.,* 426 U.S. 668, 674, n. 8, 96 S.Ct. 2358, 2362 n. 8, 49 L.Ed.2d 132 (1976).

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Zoning laws generally do not affect existing uses of real property, but "taking" challenges have also been held to be without merit in a wide variety of situations when the challenged governmental actions prohibited a beneficial use to which individual parcels had previously been devoted and thus caused substantial individualized harm. *Miller v. Schoene,* 276 U.S. 272, 48 S.Ct. 246, 72 L.Ed. 568 (1928), is illustrative. In that case, a state entomologist, acting pursuant to a state statute, ordered the claimants to cut down a large number of ornamental red cedar trees because they produced cedar rust fatal to apple trees cultivated nearby. Although the statute provided for recovery of any expense incurred in removing the cedars, and permitted claimants to use the felled trees, it did not provide compensation for the value of the standing trees or for the resulting decrease in market value of the properties as a whole. A unanimous Court held that this latter omission did not render the statute invalid. The Court held that the State might properly make "a choice between the preservation of one class of property and that of the other" and since the apple industry was important in the State involved, concluded that the State had not exceeded "its constitutional powers by deciding upon the destruction of one class of property [without compensation] in order to save another which, in the judgment of the legislature, is of greater value to the public." *Id.,* at 279, 48 S.Ct., at 247.

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Again, *Hadacheck v. Sebastian,* 239 U.S. 394, 36 S.Ct. 143, 60 L.Ed. 348 (1915), upheld a law prohibiting the claimant from continuing his otherwise lawful business of operating a brickyard in a particular physical community on the ground that the legislature had reasonably concluded that the presence of the brickyard was inconsistent with neighboring uses. See also *United States v. Central Eureka Mining Co., supra* (Government order closing gold mines so that skilled miners would be available for other mining work held not a taking); *Atchison, T. & S. F. R. Co. v. Public Utilities Comm'n,* 346 U.S. 346, 74 S.Ct. 92, 98 L.Ed. 51 (1953) (railroad may be required to share cost of constructing railroad grade improvement); *Walls v. Midland Carbon Co.,* 254 U.S. 300, 41 S.Ct. 118, 65 L.Ed. 276 (1920) (law prohibiting manufacture of carbon black upheld); *Reinman v. Little Rock,* 237 U.S. 171, 35 S.Ct. 511, 59 L.Ed. 900 (1915) (law prohibiting livery stable upheld); *Mugler v. Kansas,* 123 U.S. 623, 8 S.Ct. 273, 31 L.Ed. 205 (1887) (law prohibiting liquor business upheld).

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Goldblatt v. Hempstead, supra, is a recent example. There, a 1958 city safety ordinance banned any excavations below the water table and effectively prohibited the claimant from continuing a sand and gravel mining business that had been operated on the particular parcel since 1927. The ourt upheld the ordinance against a "taking" challenge, although the ordinance prohibited the present and presumably most beneficial use of the property and had, like the regulations in *Miller* and *Hadacheck,* severely affected a particular owner. The Court assumed that the ordinance did not prevent the owner's reasonable use of the property since the owner made no showing of an adverse effect on the value of the land. Because the restriction served a substantial public purpose, the Court thus held no taking had occurred. It is, of course, implicit in *Goldblatt* that a use restriction on real property may constitute a "taking" if not reasonably necessary to the effectuation of a substantial public purpose, see *Nectow v. Cambridge, supra;* cf. *Moore v. East Cleveland,* 431 U.S. 494, 513-514, 97 S.Ct. 1932, 1943, 52 L.Ed.2d 531 (1977) (STEVENS, J., concurring), or perhaps if it has an unduly harsh impact upon the owner's use of the property.

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Pennsylvania Coal Co. v. Mahon, 260 U.S. 393, 43 S.Ct. 158, 67 L.Ed. 322 (1922), is the leading case for the proposition that a state statute that substantially furthers important public policies may so frustrate distinct investment-backed expectations as to amount to a "taking." There the claimant had sold the surface rights to particular parcels of property, but expressly reserved the right to remove the coal thereunder. A Pennsylvania statute, enacted after the transactions, forbade any mining of coal that caused the subsidence of any house, unless the house was the property of the owner of the underlying coal and was more than 150 feet from the improved property of another. Because the statute made it

commercially impracticable to mine the coal, *id.*, at 414, 43 S.Ct., at 159, and thus had nearly the same effect as the complete destruction of rights claimant had reserved from the owners of the surface land, see *id.*, at 414-415, 43 S.Ct., at 159-160, the Court held that the statute was invalid as effecting a "taking" without just compensation. See also *Armstrong v. United States,* 364 U.S. 40, 80 S.Ct. 1563, 4 L.Ed.2d 1554 (1960) (Government's complete destruction of a materialman's lien in certain property held a "taking"); *Hudson Water Co. v. McCarter,* 209 U.S. 349, 355, 28 S.Ct. 529, 531, 52 L.Ed. 828 (1908) (if height restriction makes property wholly useless "the rights of property . . . prevail over the other public interest" and compensation is required). See generally Michelman, Property, Utility, and Fairness: Comments on the Ethical Foundations of "Just Compensation" Law, 80 Harv.L.Rev. 1165, 1229-1234 (1967).

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Finally, government actions that may be characterized as acquisitions of resources to permit or facilitate uniquely public functions have often been held to constitute "takings." *United States v. Causby,* 328 U.S. 256, 66 S.Ct. 1062, 90 L.Ed. 1206 (1946), is illustrative. In holding that direct overflights above the claimant's land, that destroyed the present use of the land as a chicken farm, constituted a "taking," *Causby* emphasized that Government had not "merely destroyed property [but was] using a part of it for the flight of its planes." *Id.,* 328 U.S., at 262-263, n. 7, 66 S.Ct., at 1066. See also *Griggs v. Allegheny County,* 369 U.S. 84, 82 S.Ct. 531, 7 L.Ed.2d 585 (1962) (overflights held a taking); *Portsmouth Co. v. United States,* 260 U.S. 327, 43 S.Ct. 135, 67 L.Ed. 287 (1922) (United States military installations' repeated firing of guns over claimant's land is a taking); *United States v. Cress,* 243 U.S. 316, 37 S.Ct. 380, 61 L.Ed. 746 (1917) (repeated floodings of land caused by water project is taking); but see *YMCA v. United States,* 395 U.S. 85, 89 S.Ct. 1511, 23 L.Ed.2d 117 (1969) (damage caused to building when federal officers who were seeking to protect building were attacked by rioters held not a taking). See generally Michelman, *supra*, at 1226-1229; Sax, Takings and the Police Power, 74 Yale L. . 36 (1964).

B

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In contending that the New York City law has "taken" their property in violation of the Fifth and Fourteenth Amendments, appellants make a series of arguments, which, while tailored to the facts of this case, essentially urge that any substantial restriction imposed pursuant to a landmark law must be accompanied by just compensation if it is to be constitutional. Before considering these, we emphasize what is not in dispute. Because this Court has recognized, in a number of settings, that States and cities may enact land-use restrictions or controls to enhance the quality of life by preserving the character and desirable aesthetic features of a city,

see *New Orleans v. Dukes,* 427 U.S. 297, 96 S.Ct. 2513, 49 L.Ed.2d 511 (1976); *Young v. American Mini Theatres, Inc.,* 427 U.S. 50, 96 S.Ct. 2440, 49 L.Ed.2d 310 (1976); *Village of Belle Terre v. Boraas,* 416 U.S. 1, 9-10, 94 S.Ct. 1536, 39 L.Ed.2d 797 (1974); *Berman v. Parker,* 348 U.S. 26, 33, 75 S.Ct. 98, 102, 99 L.Ed. 27 (1954); *Welch v. Swasey,* 214 U.S., at 108, 29 S.Ct., at 571, appellants do not contest that New York City's objective of preserving structures and areas with special historic, architectural, or cultural significance is an entirely permissible governmental goal. They also do not dispute that the restrictions imposed on its parcel are appropriate means of securing the purposes of the New York City law. Finally, appellants do not challenge any of the specific factual premises of the decision below. They accept for present purposes both that the parcel of land occupied by Grand Central Terminal must, in its present state, be regarded as capable of earning a reasonable return,[26] and that the transferable development rights afforded appellants by virtue of the Terminal's designation as a landmark are valuable, even if not as valuable as the rights to construct above the Terminal. In appellants' view none of these factors derogate from their claim that New York City's law has effected a "taking." They first observe that the airspace above the Terminal is a valuable property interest, citing *United States v. Causby, supra.* They urge that the Landmarks Law has deprived them of any gainful use of their "air rights" above the Terminal and that, irrespective of the value of the remainder of their parcel, the city has "taken" their right to this superadjacent airspace, thus entitling them to "just compensation" measured by the fair market value of these air rights.

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Apart from our own disagreement with appellants' characterization of the effect of the New York City law, see *infra*, at 134-135, the submission that appellants may establish a "taking" simply by showing that they have been denied the ability to exploit a property interest that they heretofore had believed was available for development is quite simply untenable. Were this the rule, this Court would have erred not only in upholding laws restricting the development of air rights, see *Welch v. Swasey, supra,* but also in approving those prohibiting both the subjacent, see *Goldblatt v. Hempstead,* 369 U.S. 590, 82 S.Ct. 987, 8 L.Ed.2d 130 (1962), and the lateral, see *Gorieb v. Fox,* 274 U.S. 603, 47 S.Ct. 675, 71 L.Ed. 1228 (1927), development of particular parcels.[27] "Taking" jurisprudence does not divide a single parcel into discrete segments and ttempt to determine whether rights in a particular segment have been entirely abrogated. In deciding whether a particular governmental action has effected a taking, this Court focuses rather both on the character of the action and on the nature and extent of the interference with rights in the parcel as a whole—here, the city tax block designated as the "landmark site."

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Secondly, appellants, focusing on the character and impact of the New York City law, argue that it effects a "taking" because its operation has significantly diminished the value of the Terminal site. Appellants concede that the decisions sustaining other land-use regulations, which, like the New York City law, are reasonably related to the promotion of the general welfare, uniformly reject the proposition that diminution in property value, standing alone, can establish a "taking," see *Euclid v. Ambler Realty Co.*, 272 U.S. 365, 47 S.Ct. 114, 71 L.Ed. 303 (1926) (75% diminution in value caused by zoning law); *Hadacheck v. Sebastian*, 239 U.S. 394, 36 S.Ct. 143, 60 L.Ed. 348 (1915) (871/2% diminution in value); cf. *Eastlake v. Forest City Enterprises, Inc.*, 426 U.S., at 674 n. 8, 96 S.Ct., at 2362 n. 8, and that the "taking" issue in these contexts is resolved by focusing on the uses the regulations permit. See also *Goldblatt v. Hempstead, supra.* Appellants, moreover, also do not dispute that a showing of diminution in property value would not establish a taking if the restriction had been imposed as a result of historic-district legislation, see generally *Maher v. New Orleans*, 516 F.2d 1051 (CA5 1975), but appellants argue that New York City's regulation of individual landmarks is fundamentally different from zoning or from historic-district legislation because the controls imposed by New York City's law apply only to individuals who own selected properties.

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Stated baldly, appellants' position appears to be that the only means of ensuring that selected owners are not singled out to endure financial hardship for no reason is to hold that any restriction imposed on individual landmarks pursuant to the New York City scheme is a "taking" requiring the payment of "just compensation." Agreement with this argument would, of course, invalidate not just New York City's law, but all comparable landmark legislation in the Nation. We find no merit in it.

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It is true, as appellants emphasize, that both historic-district legislation and zoning laws regulate all properties within given physical communities whereas landmark laws apply only to selected parcels. But, contrary to appellants' suggestions, landmark laws are not like discriminatory, or "reverse spot," zoning: that is, a land-use decision which arbitrarily singles out a particular parcel for different, less favorable treatment than the neighboring ones. See 2 A. Rathkopf, The Law of Zoning and Planning 26-4, and n. 6 (4th ed. 1978). In contrast to discriminatory zoning, which is the antithesis of land-use control as part of some comprehensive plan, the New York City law embodies a comprehensive plan to preserve structures of historic or aesthetic interest wherever they might be found in the city,[28] and as noted, over 400 landmarks and 31 historic districts have been designated pursuant to this plan.

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Equally without merit is the related argument that the decision to designate a structure as a landmark "is inevitably arbitrary or at least subjective, because it is basically a matter of taste," Reply Brief for Appellants 22, thus unavoidably singling out individual landowners for disparate and unfair treatment. The argument has a particularly hollow ring in this case. For appellants not only did not seek judicial review of either the designation or of the denials of the certificates of appropriateness and of no exterior effect, but do not even now suggest that the Commission's decisions concerning the Terminal were in any sense arbitrary or unprincipled. But, in any event, a landmark owner has a right to judicial review of any Commission decision, and, quite simply, there is no basis whatsoever for a conclusion that courts will have any greater difficulty identifying arbitrary or discriminatory action in the context of landmark regulation than in the context of classic zoning or indeed in any other context.[29]

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Next, appellants observe that New York City's law differs from zoning laws and historic-district ordinances in that the Landmarks Law does not impose identical or similar restrictions on all structures located in particular physical communities. It follows, they argue, that New York City's law is inherently incapable of producing the fair and equitable distribution of benefits and burdens of governmental action which is characteristic of zoning laws and historic-district legislation and which they maintain is a constitutional requirement if "just compensation" is not to be afforded. It is, of course, true that the Landmarks Law has a more severe impact on some landowners than on others, but that in itself does not mean that the law effects a "taking." Legislation designed to promote the general welfare commonly burdens some more than others. The owners of the brickyard in *Hadacheck*, of the cedar trees in *Miller v. Schoene*, and of the gravel and sand mine in *Goldblatt v. Hempstead*, were uniquely burdened by the legislation sustained in those cases.[30] Similarly, zoning laws often affect some property owners more severely than others but have not been held to be invalid on that account. For example, the property owner in *Euclid* who wished to use its property for industrial purposes was affected far more severely by the ordinance than its neighbors who wished to use their land for residences.

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In any event, appellants' repeated suggestions that they are solely burdened and unbenefited is factually inaccurate. This contention overlooks the fact that the New York City law applies to vast numbers of structures in the city in addition to the Terminal—all the structures contained in the 31 historic districts and over 400 individual landmarks, many of which are close to the Terminal.[31] Unless we are to reject the judgment of the New York City Council that the preservation of landmarks benefits all New York citizens and all structures, both economically and by improving the quality of life in the city as a whole—which we are unwilling to do

—we cannot conclude that the owners of the Terminal have in no sense been benefited by the Landmarks Law. Doubtless appellants believe they are more burdened than benefited by the law, but that must have been true, too, of the property owners in *Miller, Hadacheck, Euclid*, and *Goldblatt*.[32]

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Appellants' final broad-based attack would have us treat the law as an instance, like that in *United States v. Causby*, in which government, acting in an enterprise capacity, has appropriated part of their property for some strictly governmental purpose. Apart from the fact that *Causby* was a case of invasion of airspace that destroyed the use of the farm beneath and this New York City law has in nowise impaired the present use of the Terminal, the Landmarks Law neither exploits appellants' parcel for city purposes nor facilitates nor arises from any entrepreneurial operations of the city. The situation is not remotely like that in *Causby* where the airspace above the property was in the flight pattern for military aircraft. The Landmarks Law's effect is simply to prohibit appellants or anyone else from occupying portions of the airspace above the Terminal, while permitting appellants to use the remainder of the parcel in a gainful fashion. This is no more an appropriation of property by government for its own uses than is a zoning law prohibiting, for "aesthetic" reasons, two or more adult theaters within a specified area, see *Young v. American Mini Theatres, Inc.*, 427 U.S. 50, 96 S.Ct. 2440, 49 L.Ed.2d 310 (1976), or a safety regulat on prohibiting excavations below a certain level. See *Goldblatt v. Hempstead*.

C

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Rejection of appellants' broad arguments is not, however, the end of our inquiry, for all we thus far have established is that the New York City law is not rendered invalid by its failure to provide "just compensation" whenever a landmark owner is restricted in the exploitation of property interests, such as air rights, to a greater extent than provided for under applicable zoning laws. We now must consider whether the interference with appellants' property is of such a magnitude that "there must be an exercise of eminent domain and compensation to sustain [it]." *Pennsylvania Coal Co. v. Mahon*, 260 U.S., at 413, 43 S.Ct., at 159. That inquiry may be narrowed to the question of the severity of the impact of the law on appellants' parcel, and its resolution in turn requires a careful assessment of the impact of the regulation on the Terminal site.

it says thus far, all we have said is that the law is not invalid b/c it doesn't provide compensation. Now - the Q is - Is there a taking that reg's comp?

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Unlike the governmental acts in *Goldblatt, Miller, Causby, Griggs*, and *Hadacheck*, the New York City law does not interfere in any way with the present uses of the Terminal. Its designation as a landmark not only permits but contemplates that appellants may continue to use the property precisely as it has been used for the

past 65 years: as a railroad terminal containing office space and concessions. So the law does not interfere with what must be regarded as Penn Central's primary expectation concerning the use of the parcel. More importantly, on this record, we must regard the New York City law as permitting Penn Central not only to profit from the Terminal but also to obtain a "reasonable return" on its investment.

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Appellants, moreover, exaggerate the effect of the law on their ability to make use of the air rights above the Terminal in two respects.[33] First, it simply cannot be maintained, on this record, that appellants have been prohibited from occupying *any* portion of the airspace above the Terminal. While the Commission's actions in denying applications to construct an office building in excess of 50 stories above the Terminal may indicate that it will refuse to issue a certificate of appropriateness for any comparably sized structure, nothing the Commission has said or done suggests an intention to prohibit *any* construction above the Terminal. The Commission's report emphasized that whether any construction would be allowed depended upon whether the proposed addition "would harmonize in scale, material and character with [the Terminal]." Record 2251. Since appellants have not sought approval for the construction of a smaller structure, we do not know that appellants will be denied any use of any portion of the airspace above the Terminal.[34]

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Second, to the extent appellants have been denied the right to build above the Terminal, it is not literally accurate to say that they have been denied *all* use of even those pre-existing air rights. Their ability to use these rights has not been abrogated; they are made transferable to at least eight parcels in the vicinity of the Terminal, one or two of which have been found suitable for the construction of new office buildings. Although appellants and others have argued that New York City's transferable development-rights program is far from ideal,[35] the New York courts here supportably found that, at least in the case of the Terminal, the rights afforded are valuable. While these rights may well not have constituted "just compensation" if a "taking" had occurred, the rights nevertheless undo btedly mitigate whatever financial burdens the law has imposed on appellants and, for that reason, are to be taken into account in considering the impact of regulation. Cf. *Goldblatt v. Hempstead*, 369 U.S., at 594 n. 3, 82 S.Ct., at 990 n. 3.

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On this record, we conclude that the application of New York City's Landmarks Law has not effected a "taking" of appellants' property. The restrictions imposed are substantially related to the promotion of the general welfare and not only permit

reasonable beneficial use of the landmark site but also afford appellants opportunities further to enhance not only the Terminal site proper but also other properties.[36]

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Affirmed.

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Mr. Justice REHNQUIST, with whom THE CHIEF JUSTICE and Mr. Justice STEVENS join, dissenting.

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Of the over one million buildings and structures in the city of New York, appellees have singled out 400 for designation as official landmarks.[1] The owner of a building might initially be pleased that his property has been chosen by a distinguished committee of architects, historians, and city planners for such a singular distinction. But he may well discover, as appellant Penn Central Transportation Co. did here, that the landmark designation imposes upon him a substantial cost, with little or no offsetting benefit except for the honor of the designation. The question in this case is whether the cost associated with the city of New York's desire to preserve a limited number of "landmarks" within its borders must be borne by all of its taxpayers or whether it can instead be imposed entirely on the owners of the individual properties.

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Only in the most superficial sense of the word can this case be said to involve "zoning."[2] Typical zoning restrictions may, it is true, so limit the prospective uses of a piece of property as to diminish the value of that property in the abstract because it may not be used for the forbidden purposes. But any such abstract decrease in value will more than likely be at least partially offset by an increase in value which flows from similar restrictions as to use on neighboring properties. All property owners in a designated area are placed under the same restrictions, not only for the benefit of the municipality as a whole but also for the common benefit of one another. In the words of Mr. Justice Holmes, speaking for the Court in *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 415, 43 S.Ct. 158, 160, 67 L.Ed. 322 (1922), there is "an average recipro ity of advantage."

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Where a relatively few individual buildings, all separated from one another, are singled out and treated differently from surrounding buildings, no such reciprocity exists. The cost to the property owner which results from the imposition of restrictions applicable only to his property and not that of his neighbors may be substantial—in this case, several million dollars with no comparable reciprocal benefits. And the cost associated with landmark legislation is likely to be of a completely different order of magnitude than that which results from the imposition

of normal zoning restrictions. Unlike the regime affected by the latter, the landowner is not simply prohibited from using his property for certain purposes, while allowed to use it for all other purposes. Under the historic-landmark preservation scheme adopted by New York, the property owner is under an affirmative duty to *preserve* his property *as a landmark* at his own expense. To suggest that because traditional zoning results in some limitation of use of the property zoned, the New York City landmark preservation scheme should likewise be upheld, represents the ultimate in treating as alike things which are different. The rubric of "zoning" has not yet sufficed to avoid the well-established proposition that the Fifth Amendment bars the "Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole." *Armstrong v. United States*, 364 U.S. 40, 49, 80 S.Ct. 1563, 1569, 4 L.Ed.2d 1554 (1960). See discussion *infra*, at pp. 147-150.

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In August 1967, Grand Central Terminal was designated a landmark over the objections of its owner Penn Central. Immediately upon this designation, Penn Central, like all owners of a landmark site, was placed under an affirmative duty, backed by criminal fines and penalties, to keep "exterior portions" of the landmark "in good repair." Even more burdensome, however, were the strict limitations that were thereupon imposed on Penn Central's use of its property. At the time Grand Central was designated a landmark, Penn Central was in a precarious financial condition. In an effort to increase its sources of revenue, Penn Central had entered into a lease agreement with appellant UGP Properties, Inc., under which UGP would construct and operate a multistory office building cantilevered above the Terminal building. During the period of construction, UGP would pay Penn Central $1 million per year. Upon completion, UGP would rent the building for 50 years, with an option for another 25 years, at a guaranteed *minimum* rental of $3 million per year. The record is clear that the p oposed office building was in full compliance with all New York zoning laws and height limitations. Under the Landmarks Preservation Law, however, appellants could not construct the proposed office building unless appellee Landmarks Preservation Commission issued either a "Certificate of No Exterior Effect" or a "Certificate of Appropriateness." Although appellants' architectural plan would have preserved the facade of the Terminal, the Landmarks Preservation Commission has refused to approve the construction.

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* The Fifth Amendment provides in part: "nor shall private property be taken for public use, without just compensation."[3] In a very literal sense, the actions of appellees violated this constitutional prohibition. Before the city of New York declared Grand Central Terminal to be a landmark, Penn Central could have used its "air rights" over the Terminal to build a multistory office building, at an apparent value of several million dollars per year. Today, the Terminal cannot be modified in

any form, including the erection of additional stories, without the permission of the Landmark Preservation Commission, a permission which appellants, despite good-faith attempts, have so far been unable to obtain. Because the Taking Clause of the Fifth Amendment has not always been read literally, however, the constitutionality of appellees' actions requires a closer scrutiny of this Court's interpretation of the three key words in the Taking Clause—"property," "taken," and "just compensation."[4]

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Appellees do not dispute that valuable property rights have been destroyed. And the Court has frequently emphasized that the term "property" as used in the Taking Clause includes the entire "group of rights inhering in the citizen's [ownership]." *United States v. General Motors Corp.*, 323 U.S. 373, 65 S.Ct. 357, 89 L.Ed. 311 (1945). The term is not used in the

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"vulgar and untechnical sense of the physical thing with respect to which the citizen exercises rights recognized by law. [Instead, it] . . . denote[s] the *group of rights* inhering in the citizen's relation to the physical THING, *AS* THE RIGHT TO POSSESS, USE AND DISPOSE OF IT. . . . the constitutional provision is addressed to *every sort of interest* the citizen may possess." *Id.*, at 377-378, 65 S.Ct., at 359 (emphasis added).

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While neighboring landowners are free to use their land and "air rights" in any way consistent with the broad boundaries of New York zoning, Penn Central, absent the permission of appellees, must forever maintain its property in its present state.[5] The property has been thus subjected to a nonconsensual servitude not borne by any neighboring or similar properties.[6]

B

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Appellees have thus destroyed—in a literal sense, "taken" substantial property rights of Penn Central. While the term "taken" might have been narrowly interpreted to include only physical seizures of property rights, "the construction of the phrase has not been so narrow. The courts have held that the deprivation of the former owner rather than the accretion of a right or interest to the sovereign constitutes the taking." *Id.*, at 378, 65 S.Ct., at 359. See also *United States v. Lynah*, 188 U.S. 445, 469, 23 S.Ct. 349, 47 L.Ed. 539 (1903);[7] *Dugan v. Rank*, 372 U.S. 609, 625, 83 S.Ct. 999, 1009, 10 L.Ed.2d 15 (1963). Because "not every destruction or injury to property by governmental action has been held to be a 'taking' in the constitutional sense," *Armstrong v. United States*, 364 U.S., at 48,

80 S.Ct., at 1568, however, this does not end our inquiry. But an examination of the two exceptions where the destruction of property does *not* constitute a taking demonstrates that a compensable taking has occurred here.

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* As early as 1887, the Court recognized that the government can prevent a property owner from using his property to injure others without having to compensate the owner for the value of the forbidden use.

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"A prohibition simply upon the use of property for purposes that are declared, by valid legislation, to be *injurious to the health, morals, or safety of the community*, cannot, in any just sense, be deemed a taking or an appropriation of property for the public benefit. Such legislation does not disturb the owner in the control or use of his property for lawful purposes, nor restrict his right to dispose of it, but is only a declaration by the State that its use by any one, for certain forbidden purposes, is prejudicial to the public interests. . . . The power which the States have of prohibiting such use by individuals of their property as will be prejudicial to the health, the morals, or the safety of the public, is not—and, consistently with the existence and safety of organized society, cannot be burdened with the condition that the State must compensate such individual owners for pecuniary losses they may sustain, *by reason of their not being permitted, by a noxious use of* their property, to inflict injury upon the community." *Mugler v. Kansas*, 123 U.S. 623, 668-669, 8 S.Ct. 273, 301, 31 L.Ed. 205.

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Thus, there is no "taking" where a city prohibits the operation of a brickyard within a residential area, see *Hadacheck v. Sebastian*, 239 U.S. 394, 36 S.Ct. 143, 60 L.E . 348 (1915), or forbids excavation for sand and gravel below the water line, see *Goldblatt v. Hempstead*, 369 U.S. 590, 82 S.Ct. 987, 8 L.Ed.2d 130 (1962). Nor is it relevant, where the government is merely prohibiting a noxious use of property, that the government would seem to be singling out a particular property owner. *Hadacheck, supra*, at 413, 36 S.Ct., at 146.[8]

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The nuisance exception to the taking guarantee is not coterminous with the police power itself. The question is whether the forbidden use is dangerous to the safety, health, or welfare of others. Thus, in *Curtin v. Benson*, 222 U.S. 78, 32 S.Ct. 31, 56 L.Ed. 102 (1911), the Court held that the Government, in prohibiting the owner of property within the boundaries of Yosemite National Park from grazing cattle on his property, had taken the owner's property. The Court assumed that the Government could constitutionally require the owner to fence his land or take other action to prevent his cattle from straying onto others' land without compensating him.

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"Such laws might be considered as strictly regulations of the use of property, of so using it that no injury could result to others. They would have the effect of making the owner of land herd his cattle on his own land and of making him responsible for a neglect of it." *Id.*, at 86, 32 S.Ct., at 33.

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The prohibition in question, however, was "not a prevention of a misuse or illegal use but the prevention of a legal and essential use, an attribute of its ownership." *Ibid.*

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Appellees are not prohibiting a nuisance. The record is clear that the proposed addition to the Grand Central Terminal would be in full compliance with zoning, height limitations, and other health and safety requirements. Instead, appellees are seeking to preserve what they believe to be an outstanding example of beaux-arts architecture. Penn Central is prevented from further developing its property basically because too good a job was done in designing and building it. The city of New York, because of its unadorned admiration for the design, has decided that the owners of the building must preserve it unchanged for the benefit of sightseeing New Yorkers and tourists.

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Unlike land-use regulations, appellees' actions do not merely *prohibit* Penn Central from using its property in a narrow set of noxious ways. Instead, appellees have placed an *affirmative* duty on Penn Central to maintain the Terminal in its present state and in "good repair." Appellants are not free to use their property as they see fit within broad outer boundaries but must strictly adhere to their past use except where appellees conclude that alternative uses would not detract from the landmark. While Penn Central may continue to use the Terminal as it is presently designed, appellees otherwise "exercise complete dominion and control over the surface of the land," *United States v. Causby*, 328 U.S. 256, 262, 66 S.Ct. 1062, 1066, 90 L.Ed. 1206 (1946), and must compensate the owner for his loss. *Ibid.* "Property is taken in the constitutional sense when inroads are made upon an owner's use of it to an extent that, as between private parties, a servitude has been acquired." *United States v. Dickinson*, 331 U.S. 745, 748, 67 S.Ct. 1382, 1385, 91 L.Ed. 1789 (1947). See also *Dugan v. Rank, supra*, 372 U.S., at 625, 83 S.Ct., at 1009.[9]

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Even where the government prohibits a noninjurious use, the Court has ruled that a taking does not take place if the prohibition applies over a broad cross section of land and thereby "secure[s] an average reciprocity of advantage." *Pennsylvania Coal Co. v. Mahon*, 260 U.S., at 415, 43 S.Ct., at 160.[10] It is for this reason that zoning does not constitute a "taking." While zoning at times reduces *individual* property values, the burden is shared relatively evenly and it is reasonable to conclude that on the whole an individual who is harmed by one aspect of the zoning will be benefited by another.

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Here, however, a multimillion dollar loss has been imposed on appellants; it is uniquely felt and is not offset by any benefits flowing from the preservation of some 400 other "landmarks" in New York City. Appellees have imposed a substantial cost on less than one one-tenth of one percent of the buildings in New York City for the general benefit of all its people. It is exactly this imposition of general costs on a few individuals at which the "taking" protection is directed. The Fifth Amendment

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"prevents the public from loading upon one individual more than his just share of the burdens of government, and says that when he surrenders to the public something more and different from that which is exacted from other members of the public, a full and just equivalent shall be returned to him." *Monongahela Navigation Co. v. United States*, 148 U.S. 312, 325, 13 S.Ct. 622, 626, 37 L.Ed. 463 (1893).

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Less than 20 years ago, this Court reiterated that the

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"Fifth Amendment's guarantee that private property shall not be taken for a public use without just compensation was designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole." *Armstrong v. United States*, 364 U.S., at 49, 80 S.Ct., at 1569.

71

Cf. *Nashville, C. & St. L. R. Co. v. Walters*, 294 U.S. 405, 428-430, 55 S.Ct. 486, 494-495, 79 L.Ed. 949 (1935).[11]

72

As Mr. Justice Holmes pointed out in *Pennsylvania Coal Co. v. Mahon*, "the question at bottom" in an eminent domain case "is upon whom the loss of the changes desired should fall." 260 U.S., at 416, 43 S.Ct., at 160. The benefits that appellees believe will flow from preservation of the Grand Central Terminal will accrue to all

the citizens of New York City. There is no reason to believe that appellants will enjoy a substantially greater share of these benefits. If the cost of preserving Grand Central Terminal were spread evenly across the entire population of the city of New York, the burden per person would be in cents per year a minor cost appellees would surely concede for the benefit accrued. Instead, however, appellees would impose the entire cost of several million dollars per year on Penn Central. But it is precisely this sort of discrimination that the Fifth Amendment prohibits.[12]

73

Appellees in response would argue that a taking only occurs where a property owner is denied *all* reasonable value of his property.[13] The Court has frequently held that, even where a destruction of property rights would not *otherwise* constitute a taking, the inability of the owner to make a reasonable return on his property requires compensation under the Fifth Amendment. See, *e. g., United States v. Lynah*, 188 U.S., at 470, 23 S.Ct., at 357. But the converse is not true. A taking does not become a noncompensable exercise of police power simply because the government in its grace allows the owner to make some "reasonable" use of his property. "[I]t is the character of the invasion, not the amount of damage resulting from it, so long as the damage is substantial, that determines the question whether it is a taking." *United States v. Cress*, 243 U.S. 316, 328, 37 S.Ct. 380, 385, 61 L.Ed. 746 (1917); *United States v. Causby*, 328 U.S., at 266, 66 S.Ct., at 1068. See also *Goldblatt v. Hempstead*, 369 U.S., at 594, 82 S.Ct., at 990.

C

74

Appellees, apparently recognizing that the constraints imposed on a landmark site constitute a taking for Fifth Amendment purposes, do not leave the property owner empty-handed. As the Court notes, *ante*, at 113-114, the property owner may theoretically "transfer" his previous right to develop the landmark property to adjacent properties if they are under his control. ppellees have coined this system "Transfer Development Rights," or TDR's.

75

Of all the terms used in the Taking Clause, "just compensation" has the strictest meaning. The Fifth Amendment does not allow simply an approximate compensation but requires "a full and perfect equivalent for the property taken." *Monongahela Navigation Co. v. United States*, 148 U.S., at 326, 13 S.Ct., at 626.

76

"[I]f the adjective 'just' had been omitted, and the provision was simply that property should not be taken without compensation, the natural import of the language would be that the compensation should be the equivalent of the property.

And this is made emphatic by the adjective 'just.' There can, in view of the combination of those two words, be no doubt that the compensation must be a full and perfect equivalent for the property taken." *Ibid.*

77

See also *United States v. Lynah, supra*, 188 U.S., at 465, 23 S.Ct., at 355; *United States v. Pewee Coal Co.*, 341 U.S. 114, 117, 71 S.Ct. 670, 671, 95 L.Ed. 809 (1951). And the determination of whether a "full and perfect equivalent" has been awarded is a "judicial function." *United States v. New River Collieries Co.*, 262 U.S. 341, 343-344, 43 S.Ct. 565, 566-567, 67 L.Ed. 1014 (1923). The fact that *appellees* may believe that TDR's provide full compensation is irrelevant.

78

"The legislature may determine what private property is needed for public purposes —that is a question of a political and legislative character; but when the taking has been ordered, then the question of compensation is judicial. It does not rest with the public, taking the property, through Congress or the legislature, its representative, to say what compensation shall be paid, or even what shall be the rule of compensation. The Constitution has declared that just compensation shall be paid, and the ascertainment of that is a judicial inquiry." *Monongahela Navigation Co. v. United States, supra*, 148 U.S., at 327, 13 S.Ct., at 626.

79

Appellees contend that, even if they have "taken" appellants' property, TDR's constitute "just compensation." Appellants, of course, argue that TDR's are highly imperfect compensation. Because the lower courts held that there was no "taking," they did not have to reach the question of whether or not just compensation has already been awarded. The New York Court of Appeals' discussion of TDR's gives some support to appellants:

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"The many defects in New York City's program for development rights transfers have been detailed elsewhere . . . . The area to which transfer is permitted is severely limited [and] complex procedures are required to obtain a transfer permit." 42 N.Y.2d 324, 334-335, 397 N.Y.S.2d 914, 920, 366 N.E.2d 1271, 1277 (1977).

81

And in other cases the Court of Appeals has noted that TDR's have an "uncertain and contingent market value" and do "not adequately preserve" the value lost when a building is declared to be a landmark. *French Investing Co. v. City of New York*, 39 N.Y.2d 587, 591, 385 N.Y.S.2d 5, 7, 350 N.E.2d 381, 383, appeal dismissed 429 U.S. 990, 97 S.Ct. 515, 50 L.Ed.2d 602 (1976). On the other hand, there is evidence in the record that Penn Central has been offered substantial

amounts for its TDR's. Because the record on appeal is relatively slim, I would remand to the Court of Appeals for a determination of whether TDR's constitute a "full and perfect equivalent for the property taken."[14]

II

82

Over 50 years ago, Mr. Justice Holmes, speaking for the Court, warned that the courts were "in danger of forgetting that a strong public desire to improve the public condition is not enough to warrant achieving the desire by a shorter cut than the constitutional way of paying for the change." *Pennsylvania Coal Co. v. Mahon*, 260 U.S., at 416, 43 S.Ct., at 160. The Court's opinion in this case demonstrates that the danger thus foreseen has not abated. The city of New York is in a precarious financial state, and some may believe that the costs of landmark preservation will be more easily borne by corporations such as Penn Central than the overburdened individual taxpayers of New York. But these concerns do not allow us to ignore past precedents construing the Eminent Domain Clause to the end that the desire to improve the public condition is, indeed, achieved by a shorter cut than the constitutional way of paying for the change.

1

See National Trust for Historic Preservation, A Guide to State Historic Preservation Programs (1976); National Trust for Historic Preservation, Directory of Landmark and Historic District Commissions (1976). In addition to these state and municipal legislative efforts, Congress has determined that "the historical and cultural foundations of the Nation should be preserved as a living part of our community life and development in order to give a sense of orientation to the American people," National Historic Preservation Act of 1966, 80 Stat. 915, 16 U.S.C. § 470(b) (1976 ed.), and has enacted a series of measures designed to encourage preservation of sites and structures of historic, architectural, or cultural significance. See generally Gray, The Response of Federal Legislation to Historic Preservation, 36 Law & Contemp. Prob. 314 (1971).

2

Over one-half of the buildings listed in the Historic American Buildings Survey, begun by the Federal Government in 1933, have been destroyed. See Costonis, The Chicago Plan: Incentive Zoning and the Preservation of Urban Landmarks, 85 Harv.L.Rev. 574, 574 n. 1 (1972), citing Huxtable, Bank's Building Plan Sets Off Debate on "Progress," N.Y. Times, Jan. 17, 1971, section 8, p. 1, col. 2.

3

See, *e. g.*, N.Y.C. Admin. Code, § 205-1.0(a) (1976).

4

Gilbert, Introduction, Precedents for the Future, 36 Law & Contemp. Prob. 311, 312 (1971), quoting address by Robert Stipe, 1971 Conference on Preservation Law, Washington, D. C., May 1, 1971 (unpublished text, pp. 6-7).

5

See N.Y.Gen.Mun.Law § 96-a (McKinney 1977). It declares that it is the public policy of the State of New York to preserve structures and areas with special historical or aesthetic interest or value and authorizes local governments to impose reasonable restrictions to perpetuate such structures and areas.

6

The consensus is that widespread public ownership of historic properties in urban settings is neither feasible nor wise. Public ownership reduces the tax base, burdens the public budget with costs of acquisitions and maintenance, and results in the preservation of public buildings as museums and similar facilities, rather than as economically productive features of the urban scene. See Wilson & Winkler, The Response of State Legislation to Historic Preservation, 36 Law & Contemp. Prob. 329, 330-331, 339-340 (1971).

7

See Costonis, *supra* n.2, at 580-581; Wilson & Winkler, *supra* n.6; Rankin, Operation and Interpretation of the New York City Landmark Preservation Law, 36 Law & Contemp. Prob. 366 (1971).

8

The ordinance creating the Co mission requires that it include at least three architects, one historian qualified in the field, one city planner or landscape architect, one realtor, and at least one resident of each of the city's five boroughs. N.Y.C. Charter § 534 (1976). In addition to the ordinance's requirements concerning the composition of the Commission, there is, according to a former chairman, a "prudent tradition" that the Commission include one or two lawyers, preferably with experience in municipal government, and several laymen with no specialized qualifications other than concern for the good of the city. Goldstone, Aesthetics in Historic Districts, 36 Law & Contemp. Prob. 379, 384-385 (1971).

9

" 'Landmark.' Any improvement, any part of which is thirty years old or older, which has a special character or special historical or aesthetic interest or value as part of the development, heritage or cultural characteristics of the city, state or nation and which has been designated as a landmark pursuant to the provisions of this chapter." § 207-1.0(n).

10

" 'Landmark site.' An improvement parcel or part thereof on which is situated a landmark and any abutting improvement parcel or part thereof used as and constituting part of the premises on which the landmark is situated, and which has been designated as a landmark site pursuant to the provisions of this chapter." § 207-1.0(*o*).

11

" 'Historic district.' Any area which: (1) contains improvements which: (a) have a special character or special historical or aesthetic interest or value; and (b) represent one or more periods or styles of architecture typical of one or more eras in the history of the city; and (c) cause such area, by reason of such factors, to constitute a distinct section of the city; and (2) has been designated as a historic district pursuant to the provisions of this chapter." § 207-1.0(h). The Act also provides for the designation of a "scenic landmark," see § 207-1.0(w), and an "interior landmark." See § 207-1.0(m).

12

See Landmarks Preservation Commission of the City of New York, Landmarks and Historic Districts (1977). Although appellants are correct in noting that some of the designated landmarks are publicly owned, the vast majority are, like Grand Central Terminal, privately owned structures.

13

If the owner of a non-tax-exempt parcel has been denied certificates of appropriateness for a proposed alteration and shows that he is not earning

a reasonable return on the property in its present state, the Commission and other city agencies must assume the burden of developing a plan that will enable the landmark owner to earn a reasonable return on the landmark site. The plan may include, but need not be limited to, partial or complete tax exemption, remission of taxes, and authorizations for alterations, construction, or reconstruction appropriate for and not inconsistent with the purposes of the law. § 207-8.0(c). The owner is free to accept or reject a plan devised by the Commission and approved by the other city agencies. If he accepts the plan, he proceeds to operate the property pursuant to the plan. If he rejects the plan, the Commission may recommend that the city proceed by eminent domain to acquire a protective interest in the landmark, but if the city does not do so within a specified time period, the Commission must issue a notice allowing the property owner to proceed with the alteration or improvement as originally proposed in his application for a certificate of appropriateness.

Tax-exempt structures are treated somewhat differently. They become eligible for special treatment only if four preconditions are satisfied: (1) the owner previously entered into an agreement to sell the parcel that was contingent upon the issuance of a certificate of approval; (2) the property, as it exists at the time of the request,

is not capable of earning a reasonable return; (3) the structure is no longer suitable to its past or present purposes; and (4) the prospective buyer intends to alter the landmark structure. In the event the owner demonstrates that the property in its present state is not earning a reasonable return, the Commission must either find another buyer for it or allow the sale and construction to proceed.

But this is not the only remedy available for owners of tax-exempt landmarks. As the case at bar illustrates, see *infra*, at 121, if an owner files suit and establishes that he is incapable of earning a "reasonable return" on the site in its present state, he can be afforded judicial relief. Similarly, where a landmark owner who enjoys a tax exemption has demonstrated that the landmark structure, as restricted, is totally inadequate for the owner's "legitimate needs," the law has been held invalid as applied to that parcel. See *Lutheran Church v. City of New York*, 35 N.Y.2d 121, 359 N.Y.S.2d 7, 316 N.E.2d 305 (1974).

14

To obtain approval for a proposed transfer, the landmark owner must follow the following procedure. First, he must obtain the permission of the Commission which will examine the plans for the development of the transferee lot to determine whether the planned construction would be compatible with the landmark. Second, he must obtain the approbation of New York City's Planning Commission which will focus on the effects of the transfer on occupants of the buildings in the vicinity of the transferee lot and whether the landmark owner will preserve the landmark. Finally, the matter goes to the Board of Estimate, which has final authority to grant or deny the application. See also Costonis, *supra* n.2, at 585-586 (1972).

15

The Terminal's present foundation includes columns, which were built into it for the express purpose of supporting the proposed 20-story tower.

16

The Commission's report stated:

"Grand Central Station, one of the great buildings of America, evokes a spirit that is unique in this City. It combines distinguished architecture with a brilliant engineering solution, wedded t one of the most fabulous railroad terminals of our time. Monumental in scale, this great building functions as well today as it did when built. In style, it represents the best of the French Beaux Arts." Record 2240.

17

Appellants also submitted a plan, denominated Breuer II, to the Commission. However, because appellants learned that Breuer II would have violated existing easements, they substituted Breuer II Revised for Breuer II, and the Commission evaluated the appropriateness only of Breuer II Revised.

18

In discussing Breuer I, the Commission also referred to a number of instances in which it had approved additions to landmarks: "The office and reception wing added to Gracie Mansion and the school and church house added to the 12th Street side of the First Presbyterian Church are examples that harmonize in scale, material and character with the structures they adjoin. The new Watch Tower Bible and Tract Society building on Brooklyn Heights, though completely modern in idiom, respects the qualities of its surroundings and will enhance the Brooklyn Heights Historic District, as Butterfield House enhances West 12th Street, and Breuer's own Whitney Museum its Madison Avenue locale." Record 2251.

19

See N.Y. Real Prop. Tax Law § 489-aa *et seq.* (McKinney Supp. 1977).

20

Although that court suggested that any regulation of private property to protect landmark values was unconstitutional if "just compensation" were not afforded, it also appeared to rely upon its findings: first, that the cost to Penn Central of operating the Terminal building itself, exclusive of purely railroad operations, exceeded the revenues received from concessionaires and tenants in the Terminal; and second, that the special transferable development rights afforded Penn Central as an owner of a landmark site did not "provide compensation to plaintiffs or minimize the harm suffered by plaintiffs due to the designation of the Terminal as a landmark."

21

These statements appear to have reflected the costs of maintaining the exterior architectural features of the Terminal in "good repair" as required by the law. As would have been apparent in any case therefore, the existence of the duty to keep up the property was here—and will presumably always be—factored into the inquiry concerning the constitutionality of the landmark restrictions.

The Appellate Division also rejected the claim that an agreement of Penn Central with the Metropolitan Transit Authority and the Connecticut Transit Authority provided a basis for invalidating the application of the Landmarks Law.

22

The record reflected that Penn Central had given serious consideration to transferring some of those rights to either the Biltmore Hotel or the Roosevelt Hotel.

23

The Court of Appeals suggested that in calculating the value of the property upon which appellants were e titled to earn a reasonable return, the "publicly created" components of the value of the property—*i. e.*, those elements of its value attributable to the "efforts of organized society" or to the "social complex" in which

the Terminal is located—had to be excluded. However, since the record upon which the Court of Appeals decided the case did not, as that court recognized, contain a basis for segregating the privately created from the publicly created elements of the value of the Terminal site and since the judgment of the Court of Appeals in any event rests upon bases that support our affirmance see *infra*, this page, we have no occasion to address the question whether it is permissible or feasible to separate out the "social increments" of the value of property. See Costonis, The Disparity Issue: A Context for the *Grand Central Terminal* Decision, 91 Harv.L.Rev. 402, 416-417 (1977).

24

Our statement of the issues is a distillation of four questions presented in the jurisdictional statement:

"Does the social and cultural desirability of preserving historical landmarks through government regulation derogate from the constitutional

requirement that just compensation be paid for private property taken for public use?

"Is Penn Central entitled to no compensation for that large but unmeasurable portion of the value of its rights to construct an office building over the Grand Central Terminal that is said to have been created by the efforts of 'society as an organized entity'?

"Does a finding that Penn Central has failed to establish that there is no possibility, without exercising its development rights, of earning a reasonable return on all of its remaining properties that benefit in any way from the operations of the Grand Central Terminal warrant the conclusion that no compensation need be paid for the taking of those rights?

"Does the possibility accorded to Penn Central, under the landmark-preservation regulation, of realizing some value at some time by transferring the Terminal development rights to other buildings, under a procedure that is conceded to be defective, severely limited, procedurally complex and speculative, and that requires ultimate discretionary approval by governmental authorities, meet the constitutional requirements of just compensation as applied to landmarks?" Jurisdictional Statement 3-4.

The first and fourth questions assume that there has been a taking and raise the problem whether, under the circumstances of this case, the transferable development rights constitute "just compensation." The second and third questions, on the other hand, are directed to the issue whether a taking has occurred.

25

As is implicit in our opinion, we do not embrace the pr position that a "taking" can never occur unless government has transferred physical control over a portion of a parcel.

26

Both the Jurisdictional Statement 7-8, n. 7, and Brief for Appellants 8 n. 7 state that appellants are not seeking review of the New York courts' determination that Penn Central could earn a "reasonable return" on its investment in the Terminal. Although appellants suggest in their reply brief that the factual conclusions of the New York courts cannot be sustained unless we accept the rationale of the New York Court of Appeals, see Reply Brief for Appellants 12 n. 15, it is apparent that the findings concerning Penn Central's ability to profit from the Terminal depend in no way on the Court of Appeals' rationale.

27

These cases dispose of any contention that might be based on *Pennsylvania Coal Co. v. Mahon,* 260 U.S. 393, 43 S.Ct. 158, 67 L.Ed. 322 (1922), that full use of air rights is so bound up with the investment-backed expectations of appellants that governmental deprivation of these rights invariably—*i. e.,* irrespective of the impact of the restriction on the value of the parcel as a whole constitutes a "taking." Similarly, *Welch, Goldblatt,* and *Gorieb* illustrate the fallacy of appellants' related contention that a "taking" must be found to have occurred whenever the land-use restriction may be characterized as imposing a "servitude" on the claimant's parcel.

28

A though the New York Court of Appeals contrasted the New York City Landmarks Law with both zoning and historic-district legislation and stated at one point that landmark laws do not "further a general community plan," 42 N.Y.2d 324, 330, 397 N.Y.S.2d 914, 918, 366 N.E.2d 1271, 1274 (1977), it also emphasized that the implementation of the objectives of the Landmarks Law constitutes an "acceptable reason for singling out one particular parcel for different and less favorable treatment." *Ibid.*, 397 N.Y.S.2d, at 918, 366 N.E.2d, at 1275. Therefore, we do not understand the New York Court of Appeals to disagree with our characterization of the law.

29

When a property owner challenges the application of a zoning ordinance to his property, the judicial inquiry focuses upon whether the challenged restriction can reasonably be deemed to promote the objectives of the community land-use plan, and will include consideration of the treatment of similar parcels. See generally *Nectow v. Cambridge*, 277 U.S. 183, 48 S.Ct. 447, 72 L.Ed. 842 (1928). When a property owner challenges a landmark designation or restriction as arbitrary or discriminatory, a similar inquiry presumably will occur.

30

- Appellants attempt to distinguish these cases on the ground that, in each, government was prohibiting a "noxious" use of land and that in the present case, in contrast, appellants' proposed construction above the Terminal would be beneficial. We observe that the uses in issue in *Hadacheck, Miller*, and *Goldblatt* were p rfectly lawful in themselves. They involved no "blameworthiness, . . . moral wrongdoing or conscious act of dangerous risk-taking which induce[d society] to shift the cost to a pa[rt]icular individual." Sax, Takings and the Police Power, 74 Yale L.J. 36, 50 (1964). These cases are better understood as resting not on any supposed "noxious" quality of the prohibited uses but rather on the ground that the restrictions were reasonably related to the implementation of a policy—not unlike historic preservation—expected to produce a widespread public benefit and applicable to all similarly situated property.

Nor, correlatively, can it be asserted that the destruction or fundamental alteration of a historic landmark is not harmful. The suggestion that the beneficial quality of appellants' proposed construction is established by the fact that the construction would have been consistent with applicable zoning laws ignores the development in sensibilities and ideals reflected in landmark legislation like New York City's. Cf. *West Bros. Brick Co. v. Alexandria*, 169 Va. 271, 282-283, 192 S.E. 881, 885-886, *appeal dismissed for want of a substantial federal question*, 302 U.S. 658, 58 S.Ct. 369, 82 L.Ed. 508 (1937).

31

There are some 53 designated landmarks and 5 historic districts or scenic landmarks in Manhattan between 14th and 59th Streets. See Landmarks Preservation Commission, Landmarks and Historic Districts (1977).

32

It is, of course, true that the fact the duties imposed by zoning and historic-district legislation apply throughout particular physical communities provides assurances against arbitrariness, but the applicability of the Landmarks Law to a large number of parcels in the city, in our view, provides comparable, if not identical, assurances.

33

Appellants, of course, argue at length that the transferable development rights, while valuable, do not constitute "just compensation." Brief for Appellants 36-43.

34

Counsel for appellants admitted at oral argument that the Commission has not suggested that it would not, for example, approve a 20-story office tower along the lines of that which was part of the original plan for the Terminal. See Tr. of Oral Arg. 19.

35

See Costonis, *supra* n. 2, at 585-589.

36

We emphasize that our holding today is on the present record, which in turn is based on Penn Central's present ability to use the Terminal for its intended purposes and in a gainful fashion. The city conceded at oral argument that if appellants can demonstrate at some point in the future that circumstances have so changed that the Terminal ceases to be "economically viable," appellants may obtain relief. See Tr. of Oral Arg. 42-43.

1

A large percentage of the designated landmarks are public structures (such as the Brooklyn Bridge, City Hall, the Statute of Liberty and the Municipal Asphalt Plant) and thus do not raise Fifth Amendment taking questions. See Landmarks Preservation Commission of the City of New York, Landmarks and Historic Districts (1977 and Jan. 10, 1978, Supplement). Although the Court refers to the New York ordinance as a *comprehensive* program to preserve *historic* landmarks, *ante*, at 107, the ordinance is not limited to historic buildings and gives little guidance to the Landmarks Preservation Commission in its selection of landmark sites. Section 207-1.0(n) of the Landmarks Preservation Law, as set forth in N.Y.C. Admin. Code, ch. 8-A (1976), requires only that the selected landmark be at least 30 years old and possess "a special character or special historical or aesthetic interest or value as part of the development, heritage or cultural characteristics of the city, state or nation."

2

Even the New York Court of Appeals conceded that "[t]his is not a zoning case. . . . Zoning restrictions operate to advance a comprehensive community plan for the common good. Each property owner in the zone is both benefited and restricted from exploitation, presumably without discrimination, except for permitted continuing nonconforming uses. The restrictions may be designed to maintain the general character of the area, or to assure orderly development, objectives inuring to the benefit of all, which property owners acting individually would find difficult or impossible to achieve . . . .

"Nor does this case involve landmark regulation of a historic district. . . . [In historic districting, as in traditional zoning,] owners although burdened by the restrictions also benefit, to some extent, from the furtherance of a general community plan.

* * * * *

"Restrictions on alteration of individual landmarks are not designed to further a general community plan. Landmark restrictions are designed to prevent alteration or demolition of a single piece of property. To this extent, such restrictions

Item 15.

resémble 'discriminatory' zoning restrictions, properly condemned . . . ." 42 N.Y.2d 324, 329-330, 397 N.Y.S.2d 914, 917-918, 366 N.E.2d 1271, 1274 (1977).

3

The guarantee that private property shall not be taken for public use without just compensation is applicable to the States through the Fourteenth Amendment. Although the state "legislature may prescribe a form of procedure to be observed in the taking of private property for public use, . . . it is not due process of law if provision be not made for compensation." *Chicago, B. & Q. R. Co. v. Chicago*, 166 U.S. 226, 236, 17 S.Ct. 581, 584, 41 L.Ed. 979 (1897).

4

The Court's opinion touches base with, or at least attempts to touch base with, most of the major eminent domain cases decided by this Court. Its use of them, however, is anything but meticulous. In citing to *United States v. Caltex, Inc.*, 344 U.S. 149, 156, 73 S.Ct. 200, 97 L.Ed. 157 (1952), for example, *ante*, at 124, the only language remotely applicable to eminent domain is stated in terms of "the destruction of respondents' terminals by a trained team of engineers in the face of their impending seizure by the enemy." 344 U.S., at 156, 73 S.Ct., at 203.

5

In particular, Penn Central cannot increase the height of the Terminal. This Court has previously held that the "air rights" over an area of land are "property" for urposes of the Fifth Amendment. See *United States v. Causby*, 328 U.S. 256, 66 S.Ct. 1062, 90 L.Ed. 1206 (1946) ("air rights" taken by low-flying airplanes); *Griggs v. Allegheny County*, 369 U.S. 84, 82 S.Ct. 531, 7 L.Ed.2d 585 (1962) (same); *Portsmouth Harbor Land & Hotel Co. v. United States*, 260 U.S. 327, 43 S.Ct. 135, 67 L.Ed. 287 (1922) (firing of projectiles over summer resort can constitute taking). See also *Butler v. Frontier Telephone Co.*, 186 N.Y. 486, 79 N.E. 716 (1906) (stringing of telephone wire across property constitutes a taking).

6

It is, of course, irrelevant that appellees interfered with or destroyed property rights that Penn Central had not yet physically used. The Fifth Amendment must be applied with "reference to the uses for which the property is suitable, having regard to the existing business or wants of the community, *or such as may be reasonably expected in the immediate future*." *Boom Co. v. Patterson*, 98 U.S. 403, 408, 25 L.Ed. 206 (1879) (emphasis added).

7

"Such a construction would pervert the constitutional provision into a restriction upon the rights of the citizen, as those rights stood at the common law, instead of the government, and make it an authority for invasion of private right under the pretext of the public good, which had no warrant in the laws or practices of our ancestors." 188 U.S., at 470, 23 S.Ct., at 357.

8

Each of the cases cited by the Court for the proposition that legislation which severely affects some landowners but not others does not effect a "taking" involved noxious uses of property. See *Hadacheck; Miller v. Schoene*, 276 U.S. 272, 48 S.Ct. 246, 72 L.Ed. 568 (1928); *Goldblatt*. See *ante*, at 125-127, 133.

9

In *Monongahela Navigation Co. v. United States*, 148 U.S. 312, 13 S.Ct. 622, 37 L.Ed. 463 (1893), the Monongahela company had expended large sums of money in improving the Monongahela River by means of locks and dams. When the United States condemned this property for its own use, the Court held that full compensation had to be awarded. "Suppose, in the improvement of a navigable stream, it was deemed essential to construct a canal with locks, in order to pass around rapids or falls. Of the power of Congress to condemn whatever land may be necessary for such canal, there can be no question; and of the equal necessity of paying full compensation for all private property taken there can be as little doubt." *Id.*, at 337, 13 S.Ct., at 630. Under the Court's rationale, however, where the Government wishes to preserve a pre-existing canal system for public use, it need not condemn the property but need merely order that it be preserved in its present form and be kept "in good repair."

10

Appellants concede that the preservation of buildings of historical or aesthetic importance is a permissible objective of state action. Brief for Appellants 12. *Cf. Berman v. Parker*, 348 U.S. 26, 75 S.Ct. 98, 99 L.Ed. 27 (1954); *United States v. Gettysburg Electric R. Co.*, 160 U.S. 668, 16 S.Ct. 427, 40 L.Ed. 576 (1896).

For the reasons noted in the text, historic *zoning*, as has been undertaken by cities, such as New Orleans, may well not require compensation under the Fifth Amendment.

11

"It is true that the police power embraces regulations designed to promote public convenience or the general welfare, and not merely those in the interest of public health, safety and morals. . . . But when particular individuals are singled out to bear the cost of advancing the public convenience, that imposition must bear some reasonable relation to the evils to be eradicated or the advantages to be secured. . . . While moneys raised by general taxation may constitutionally be applied to purposes from which the individual taxed may receive no benefit, and indeed, suffer serious detriment, . . . so-called assessments for public improvements laid upon particular property o ners are ordinarily constitutional only if based on benefits received by them." 294 U.S., at 429-430, 55 S.Ct., at 494-495.

12

The fact that the Landmarks Preservation Commission may have allowed additions to a relatively few landmarks is of no comfort to appellants. *Ante*, at 118 n. 18. Nor is it of any comfort that the Commission refuses to allow appellants to construct any additional stories because of their belief that such construction would not be aesthetic. *Ante*, at 117-118.

13

Difficult conceptual and legal problems are posed by a rule that a taking only occurs where the property owner is denied all reasonable return on his property. Not only must the Court define "reasonable return" for a variety of types of property (farmlands, residential properties, commercial and industrial areas), but the Court must define the particular property unit that should be examined. For example, in this case, if appellees are viewed as having restricted Penn Central's use of its "air rights," *all* return has been denied. See *Pennsylvania Coal Co. v. Mahon*, 260 U.S. 393, 43 S.Ct. 158, 67 L.Ed. 322 (1922). The Court does little to resolve these questions in its opinion. Thus, at one point, the Court implies that the question is whether the restrictions have "an unduly harsh impact upon the owner's use of the property," *ante*, at 127; at another point, the question is phrased as whether Penn Central can obtain "a 'reasonable return' on its investment," *ante*, at 136; and, at yet another point, the question becomes whether the landmark is "economically viable," *ante*, at 138 n. 36.

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The Court suggests, *ante*, at 131, that if appellees are held to have "taken" property sights of landmark owners, not only the New York City Landmarks Preservation Law, but "all comparable landmark legislation in the Nation" must fall. This assumes, of course, that TDR's are not "just compensation" for the property rights destroyed. It also ignores the fact that many States and cities in the Nation have chosen to preserve landmarks by purchasing or condemning restrictive easements over the facade of the landmarks and are apparently quite satisfied with the results. See, *e. g.*, Ore.Rev.Stat. §§ 271.710, 271.720 (1977); Md.Ann.Code, Art. 41, § 181A (1978); Va.Code §§ 10-145.1 and 10-138(e) (1978); Richmond, Va., City Code §§ 21-23 *et seq.* (1975). The British National Trust has effectively used restrictive easements to preserve landmarks since 1937. See National Trust Act, 1937, 1 Edw. 8 and 1 Geo. 6 ch. lvii, §§ 4 and 8. Other States and cities have found that tax incentives are also an effective means of encouraging the private preservation of landmark sites. See, *e. g.,* Conn.Gen.Stat. § 12-127a (1977); Ill.Rev.Stat., ch. 24, § 11-48.2-6 (1976); Va.Code § 10-139 (1978). The New York City Landmarks Preservation Law departs drastically from these traditional, and constitutional, means of preserving landmarks.

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THE STATE OF SOUTH CAROLINA
In The Supreme Court

Ani Creation, Inc. d/b/a Rasta: Ani Creation, Inc. d/b/a Wacky T's; Blue Smoke, LLC d/b/a Doctor Vape: Blue Smoke, LLC d/b/a Blue Smoke Vape Shop; ABNME, LLC d/b/a Best for Less; Koretzky, LLC d/b/a Grasshopper; Red Hot Shoppe, Inc.; E.T. Sportswear, Inc, d/b/a Pacific Beachwear; Myrtle Beach General Store, LLC; I Am It, Inc. d/b/a T-Shirt King; and Blue Bay Retail, Inc. d/b/a Surf's Up, Appellants,

v.

City of Myrtle Beach Board of Zoning Appeals and Ken May, Zoning Administrator for City of Myrtle Beach, Respondents.

Appellate Case No. 2021-001074

Appeal from Horry County
Benjamin H. Culbertson, Circuit Court Judge

Opinion No. 28151
Heard February 9, 2023 – Filed April 19, 2023

AFFIRMED

Reese R. Boyd III, of Davis & Boyd, LLC, of Myrtle Beach, and Gene McCain Connell Jr., of Kelaher, Connell, & Connor, PC, of Surfside Beach, both for Appellants.

Michael Warner Battle, of Battle Law Firm, LLC, of Conway, for Respondents.

JUSTICE KITTREDGE: The City of Myrtle Beach (the city) is a town economically driven and funded by tourism. After receiving frequent criticism from tourists and residents alike, the city became concerned that the proliferation of smoke shops and tobacco stores were repelling families from the area due to those stores' merchandise and advertising practices. More specifically, the city was troubled with those shops' sale of sexually explicit items, cannabidiol (CBD)-infused products, and tobacco paraphernalia. Therefore, in an effort to improve the "family friendly" nature of the downtown area, the city created a zoning overlay district[1] that prohibited the operation of smoke shops and tobacco stores, among others, in the city's downtown.

Appellants are nine of the twenty-five affected stores located in the area, and each was issued a citation by the city's zoning administrator for failing to comply with the zoning overlay ordinance. Following a complicated legal battle, appellants raised a host of constitutional challenges to the zoning overlay ordinance. However, the circuit court found the ordinance survived appellants' veritable barrage. Appellants directly appealed that decision to this Court. We now hold that, under this Court's long-standing precedent, the overlay ordinance did not impermissibly spot zone the city's historic downtown area. We additionally find the overlay ordinance is a constitutional exercise of the city's police powers. We therefore affirm the decision of the circuit court and uphold the validity of the ordinance.

I.

A.

In 2011, the city adopted a comprehensive plan that, among other things, set forth future objectives aimed at increasing tourism and revenue. In the comprehensive plan, the city noted that tourists and residents had repeatedly expressed concern over the "noise and behavior of certain groups visiting the area," resulting in "negative

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[1] *See* S.C. Code Ann. § 6-29-720(C)(5) (Supp. 2022) (defining an overlay zone as "a zone which imposes a set of requirements or relaxes a set of requirements imposed by the underlying zoning district when there is a special public interest in a particular geographic area that does not coincide with the underlying zone boundaries").

perceptions about Myrtle Beach." Likewise, the city determined that "[c]rime and the perception of crime [was] a problem that need[ed] addressing." The city concluded all businesses needed to encourage and support a "family beach image" and determined that a positive "city image" would foster more tourism. To that end, the city outlined a number of specific objectives, including its desires to (1) "define and maintain Myrtle Beach as a family beach"; (2) "revitalize the downtown area of Myrtle Beach"; and (3) "create an environment[] which ensures that visitors and residents are safe."

Ultimately, the Myrtle Beach city council effectuated those objectives by enacting Ordinance 1807 (the ordinance), which created a zoning overlay district—known as the Ocean Boulevard Entertainment Overlay District (OBEOD)—that encompassed the historic downtown area of the city. Myrtle Beach, S.C., Code of Ordinances app. A § 1807 (2019). In creating the OBEOD, the ordinance extensively set forth its purpose and intent, emphasizing, among other things, the importance of fostering more family tourism and discouraging things that were "repulsive" to families, including "unhealthy tobacco use, crudity and the stigma of drug use and paraphernalia." *Id.* § 1807.A. As a result, the city council found the displacement of smoke shops and tobacco stores from the historic downtown area was "in the interests of the public health, safety, and general welfare." *Id.* Likewise, city council stated the presence of smoke shops and tobacco stores heightened the risk of "negative aesthetic impacts, blight, and loss of property values of residential neighborhoods and businesses in close proximity to such uses." *Id.* Finally, city council noted that despite the creation of the OBEOD, there were numerous other locations throughout the city available for the continued operation of smoke shops and tobacco stores. *Id.*

Following the city council's lengthy recitation of the purpose and rationale underlying the ordinance, the ordinance prohibited certain retail businesses and offerings within the OBEOD, including (1) smoke shops and tobacco stores; (2) any merchandising of tobacco paraphernalia or products containing CBD, such as lotions, oils, and food; (3) any merchandising of tobacco products more than that of an incidental nature (i.e., more than 10% of store's inventory); and (4) any merchandising of sexually oriented material (collectively, the prohibited retail uses). *Id.* § 1807.D.

The prohibited retail uses were declared immediately nonconforming upon passage of the ordinance on August 14, 2018. *Id.* § 1807.E. However, the ordinance provided for an amortization period that gave affected businesses until December

31, 2018, to cease the nonconforming part of their retail offerings. *Id.* The ordinance likewise stated that, should a business continue engaging in the prohibited retail uses, it would be subject to suspension or revocation of its business license. *Id.* § 1807.F.

B.

Shortly before the end of the amortization period, on December 19, 2018, appellants filed suit in federal court seeking damages, injunctive relief, and a declaration that the ordinance was unconstitutional.[2] Two days later, appellants filed a motion for a temporary restraining order, but the parties resolved the motion by consent, agreeing the city would enforce the ordinance "through use of [the city's] zoning ordinance administrative procedures."

Six months later, the city's zoning administrator issued individual citations to each of the appellants for continuing to engage in the prohibited retail uses in violation of the ordinance. The zoning administrator also requested that each of the businesses comply with the ordinance. No penalties were imposed on appellants at that time; rather, the letters were merely the zoning administrator's determination that appellants' businesses were nonconforming under the ordinance.

Appellants appealed the zoning administrator 's determination to the city's Board of Zoning Appeals (BZA). At the BZA hearing, the zoning administrator set forth evidence as to how each appellant was engaged in the prohibited retail uses, submitting photographs of appellants' stores and merchandise. Appellants' only

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[2] The federal lawsuit alleged the ordinance amounted to an unconstitutional taking and violated appellants' rights to free speech, due process, and equal protection. Eventually, the federal court dismissed appellants' due process claim, citing the *Burford* abstention doctrine. *See Burford v. Sun Oil Co.*, 319 U.S. 315 (1943); *Quackenbush v. Allstate Ins. Co.*, 517 U.S. 706, 726–27 (1996) (explaining the *Burford* abstention doctrine allows a federal court to dismiss a case "only if it presents difficult questions of state law bearing on policy problems of substantial public import whose importance transcends the result in the case then at bar, or if its adjudication in a federal forum would be disruptive of state efforts to establish a coherent policy with respect to a matter of substantial public concern" (citation omitted) (internal quotation marks omitted)). The federal court also dismissed the takings claim without prejudice, finding the claim was not yet ripe. The court stayed the remaining claims (free speech and equal protection) pending resolution of this state court proceeding.

witness, Tim Wilkes, conceded each of appellants' stores was engaged in one or more of the prohibited retail uses. Nonetheless, appellants requested the BZA either declare the ordinance unconstitutional or grant variances to appellants so that they could continue engaging in the prohibited retail uses. Ultimately, the BZA found (1) it did not have jurisdiction to declare the ordinance unconstitutional;[3] (2) it could not grant a use variance because it would allow the continuation of a use not otherwise allowed in the OBEOD;[4] and (3) appellants' businesses were engaged in one or more of the prohibited retail uses.

Appellants appealed the BZA's decision to the circuit court, but the circuit court affirmed the BZA's decision and found meritless appellants' twenty-five grounds for challenging the ordinance. In relevant part, the circuit court held the boundaries of the OBEOD were not arbitrary and capricious, citing to the city council's extensive recitation of the rationale for adopting the OBEOD and locating the boundaries where it did. *See* Myrtle Beach, S.C., Code of Ordinances app. A § 1807.A. The circuit court also found that whether the ordinance promoted the public welfare was "fairly debatable." In support, the circuit court cited to the zoning administrator's testimony regarding a number of complaints he had received regarding the sale of tobacco paraphernalia and sexually oriented merchandise in the historic downtown where there was a high level of pedestrian traffic by families with young children. The court thus concluded appellants had failed to meet their burden to show the ordinance was unconstitutional.

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[3] *See* S.C. Code Ann. § 6-29-800(E) (Supp. 2022) (explaining that in exercising its statutory authority, as outlined in subsection (A), the BZA "has all the powers of the officer from whom the appeal is taken"). No one contends the zoning administrator here—the "officer from whom the appeal [was] taken"—would have had the authority to declare a zoning ordinance unconstitutional.

[4] *See* S.C. Code Ann. § 6-29-800(A)(2)(d)(i) ("The [BZA] may not grant a variance, the effect of which would be to allow the establishment of a use not otherwise permitted in a zoning district, to extend physically a nonconforming use of land or to change the zoning district boundaries shown on the official zoning map. The fact that property may be utilized more profitably, if a variance is granted, may not be considered grounds for a variance. Other requirements may be prescribed by the zoning ordinance.").

Appellants directly appealed to this Court pursuant to Rule 203(d)(1)(A)(ii), SCACR, raising five issues challenging the validity of the ordinance on both procedural and constitutional grounds.[5] We address each in turn.

II.

"A municipal ordinance is a legislative enactment and is presumed to be constitutional." *Town of Scranton v. Willoughby*, 306 S.C. 421, 422, 412 S.E.2d 424, 425 (1991) (per curiam); *see also Rush v. City of Greenville*, 246 S.C. 268, 276, 143 S.E.2d 527, 531 (1965) ("There is a strong presumption in favor of the validity of municipal zoning ordinances, and in favor of the validity of their application . . . ."). Courts must make every presumption in favor of the constitutionality of a legislative enactment. *McMaster v. Columbia Bd. of Zoning Appeals*, 395 S.C. 499, 504, 719 S.E.2d 660, 662 (2011) (per curiam) (quoting *City of Rock Hill v. Harris*, 391 S.C. 149, 154, 705 S.E.2d 53, 55 (2011)). Thus, courts may only declare a municipal ordinance unconstitutional "when its invalidity appears so clearly as to leave no room for reasonable doubt that it violates some provision of the Constitution." *Id.* at 504, 719 S.E.2d at 663 (quoting *Harris*, 391 S.C. at 154, 705 S.E.2d at 55).

More specifically, "The Court will not overturn the action of the City if the decision is fairly debatable because the City's action is presumed to have been a valid exercise of power and it is not the prerogative of the Court to pass upon the wisdom of the decision." *Rushing v. City of Greenville*, 265 S.C. 285, 288, 217 S.E.2d 797, 799 (1975); *see also Rush*, 246 S.C. at 276, 143 S.E.2d at 531 (explaining the Court must exercise "carefully and cautiously" its power to declare a challenged ordinance invalid on the basis that the ordinance unreasonably impaired or destroyed a constitutional right). Thus, when a local city council enacts a zoning ordinance after considering all of the relevant facts, the Court should not disturb the council's action unless the council's findings were arbitrary and capricious or had no reasonable relation to a lawful purpose. *Rush*, 246 S.C. at 276, 143 S.E.2d at 531; *Rest. Row Assocs. v. Horry Cnty.*, 335 S.C. 209, 216, 516 S.E.2d 442, 446 (1999); *see also Willoughby*, 306 S.C. at 422, 412 S.E.2d at 425 ("The exercise of police power under a municipal ordinance is subject to judicial correction only if the action is arbitrary and has no reasonable relation to a lawful purpose." (citation omitted)); *Aakjer v. City of Myrtle Beach*, 388 S.C. 129, 133, 694 S.E.2d 213, 215 (2010) ("This State's

[5] To be more precise, appellants' brief listed eleven issues on appeal, but because some of the issues overlapped, we have condensed them to five.

constitution provides that the powers of local governments should be liberally construed." (citing S.C. Const. art. VIII, § 17)).

The burden of establishing the invalidity of a zoning ordinance is on the party attacking it to establish by clear and convincing evidence that the acts of the city council were arbitrary, unreasonable, and unjust. *Bibco Corp. v. City of Sumter*, 332 S.C. 45, 52, 504 S.E.2d 112, 116 (1998) (citing *Willoughby*, 306 S.C. at 422, 412 S.E.2d at 425); *Rush*, 246 S.C. at 276, 143 S.E.2d at 531.

III.

Appellants first argue the ordinance is defective as a matter of law because it was not adopted following the procedure set forth in section 5-7-270 of the South Carolina Code. *See* S.C. Code Ann. § 5-7-270 (2004) (requiring generally that municipal ordinances be "read two times on two separate days with at least six days between each reading" prior to being adopted and having the force of law). Specifically, appellants contend the versions of the ordinance introduced for the first and second readings were so different from one another that the city council was required to conduct a third reading prior to enacting the ordinance. We disagree.

Because appellants failed to timely challenge the efficacy of the two readings of the ordinance, they are statutorily barred from raising this issue. Section 6-29-760(D) of the South Carolina Code (2004) requires parties to challenge the validity of an ordinance within sixty days of the decision of the governing body, provided "there has been substantial compliance with the notice requirements of this section or with established procedures of the governing authority or the planning commission." The ordinance was formally adopted and went into effect upon the second reading on August 14, 2018. Appellants did not file their federal suit or take any other formal action to challenge the validity of the ordinance until December 19, 2018—well over sixty days later. As a result, appellants can no longer challenge the validity of the ordinance under section 5-7-270. *See Quail Hill, L.L.C. v. Cnty. of Richland*, 379 S.C. 314, 320–21, 665 S.E.2d 194, 197 (Ct. App. 2008) (holding a challenge to the validity of the enactment of a county ordinance was untimely because the challenge was made long after the sixty-day window had closed), *aff'd in part on this ground and rev'd in part on other grounds*, 387 S.C. 223, 692 S.E.2d 499 (2010).

Even were we to overlook the untimeliness of appellants' challenge and address the merits of their argument, appellants' suggestion that the two readings of the ordinance were vastly different is simply untrue. While the city council expanded the "purpose and intent" section of the original version of the ordinance and added a

number of definitions, the prohibited retail uses in the final version were identical to those in the original version. If anything, the amendments merely better-defined the terms used to describe actions or merchandise that qualified as a prohibited retail use. There is no basis on which to conclude the amendments to the ordinance were so drastic as to trigger the need for a new first reading. *Cf. Brown v. Cnty. of Charleston*, 303 S.C. 245, 247, 399 S.E.2d 784, 785–86 (Ct. App. 1990) (explaining the purpose of providing public notice related to zoning amendments is to satisfy the "general principles of due process that require notice which fairly and reasonably apprises those whose rights may be affected of the nature and character of the action proposed"). We therefore affirm the circuit court's decision as to this issue.

IV.

Appellants next argue the ordinance violates the Equal Protection Clause of the Fourteenth Amendment to the United States Constitution. Specifically, appellants broadly contend the creation of the OBEOD was unfair to them because they cannot sell certain merchandise that similar stores can continue selling in other areas of the city. Appellants therefore claim the creation of the OBEOD was arbitrary and capricious because it treated them differently from other, similarly situated businesses throughout the city. Appellants point to three specific concerns as evidencing the arbitrary and capricious nature of the ordinance: (1) city council reverse spot zoned the OBEOD; (2) the boundaries of the OBEOD are not drawn in straight lines or with any discernable reasoning behind them; and (3) there is no evidence that the prohibited retail uses affect public safety. We will address each of these concerns below.[6]

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[6] Amongst their eleven issues on appeal, appellants raise two takings claims. The first is a traditional takings claim arising under the Fifth Amendment to the United States Constitution, which we address further below. The second is a claim that because the ordinance violated appellants' right to equal protection, the ordinance took their business without just compensation. Appellants' Br. at 10. We find such an argument meritless and do not address it further other than to note that takings and equal protection are two distinct constitutional doctrines with wholly separate requirements and bodies of case law.

A.

Appellants first contend the ordinance constitutes impermissible reverse spot zoning—a novel issue in South Carolina. We disagree.

There are two types of spot zoning. Traditional spot zoning occurs when a small parcel of land is singled out for a use classification different from that of the surrounding area, for the benefit of the parcel's owner(s) and to the detriment of others. *Bob Jones Univ. v. City of Greenville*, 243 S.C. 351, 361, 133 S.E.2d 843, 848 (1963); *see also id.* at 362, 133 S.E.2d at 848 (noting it is "not [] considered [] spot zoning where the proposed change is from one use to another and there was already a considerable amount of property adjoining the property sought to be reclassified falling within the proposed [new use] classification" (citing *Eckes v. Bd. of Zoning Appeals*, 121 A.2d 249 (Md. 1956))). Typically, traditional spot zoning singles out and reclassifies a relatively small tract that is owned by a single person and surrounded by a much larger, uniformly zoned area, such that the small tract is relieved from restrictions to which the rest of the area is subjected. *See Talbot v. Myrtle Beach Bd. of Adjustment*, 222 S.C. 165, 175, 72 S.E.2d 66, 71 (1952) (citation omitted); Mark S. Dennison, Annotation, *Determination whether zoning or rezoning of particular parcel constitutes illegal spot zoning*, 73 A.L.R.5th 223 (1999) ("The zoning or rezoning of a single tract of land, usually small in size, such that it is zoned differently from surrounding property may be invalidated as illegal spot zoning.").

In contrast, reverse spot zoning occurs when a zoning ordinance restricts the use of a property when virtually all the property's adjoining neighbors are not subject to the use restriction. 83 Am. Jur. 2d *Zoning and Planning* § 89 (2013). Oftentimes, reverse spot zoning occurs where a zoning "island" develops as the result of a municipality's failure to rezone a portion of land to bring it into conformity with similar surrounding parcels that are otherwise indistinguishable. *In re Realen Valley Forge Greenes Assocs.*, 838 A.2d 718, 731 (Pa. 2003); *Palmer Trinity Priv. Sch., Inc. v. Vill. of Palmetto Bay*, 31 So. 3d 260, 262 (Fla. Dist. Ct. App. 2010) ("The properties surrounding Parcel B were all originally zoned AU or EU-2, but they have been changed to less restrictive zoning classifications as the agricultural character of the area has changed over the years.").

Thus, spot zoning may arise in two ways: (1) by an affirmative legislative act that affects the parcel at issue (traditional spot zoning); or (2) by changes to the zoning map around the parcel at issue (reverse spot zoning). *See* 39 Am. Jur. Proof of Facts 3d 433, § 3 (West 2023) (describing types of spot zoning challenges).

Spot zoning is not impermissible per se in South Carolina. Rather, as this Court has previously explained,

> [W]here an ordinance establishes a small area within the limits of a zone in which are permitted uses different from or inconsistent with those permitted within the larger, such "spot zoning" is invalid where the ordinance does not form a part of a comprehensive plan of zoning or is for mere private gain as distinguished from the good of the common welfare.

Talbot, 222 S.C. at 175, 72 S.E.2d at 71 (citation omitted); *see also id.* at 175, 72 S.E.2d at 70 (cautioning that courts should not "become city planners but [should only] correct injustices when they are clearly shown to result from the municipal action"). Thus, when the Court finds an ordinance constitutes spot zoning, "the appropriate analysis is to closely scrutinize the following factors: (1) the adherence of the zoning to the City's comprehensive plan; and (2) promotion of the good of the common welfare but to only correct injustices which are clearly shown." *Knowles v. City of Aiken*, 305 S.C. 219, 223, 407 S.E.2d 639, 642 (1991); *see also* 39 Am. Jur. Proof of Facts 3d 433 ("Legal challenges to [spot zoning] are generally based on allegations and proof of discriminatory treatment of a single landowner, inconsistency with the comprehensive plan, incompatibility with neighboring uses, and harm to the general welfare of the community.").

Here, despite Appellants' contentions, the creation of the OBEOD does not fit within the accepted definition of reverse spot zoning. The prohibited retail uses in the OBEOD were not the result of a zoning "island" that developed as the surrounding area was rezoned while the OBEOD was left behind; rather, the OBEOD was created by an affirmative legislative act by the city. In other words, if anything, the creation of the OBEOD more closely resembles traditional spot zoning.

However, we find it equally doubtful the creation of this overlay district constituted traditional spot zoning. The OBEOD is a fairly large area: it overlays at least twenty distinct zones; it comprises an approximate rectangle measuring slightly less than two miles by one-quarter mile; and it encompasses over fifty city blocks which are, of course, further divided into a significant number of individual properties owned by separate property owners. It goes without saying that creating an overlay zoning district over such a large, diverse area is distinct from the typical, traditional spot zoning factual scenario. *See Talbot*, 222 S.C. at 175, 72 S.E.2d at 71 (noting spot zoning occurs when an ordinance affects a small area within the limits of a single zone); Dennison, *supra*, 73 A.L.R.5th at 223 (explaining spot zoning involves a

single, small tract of land); 39 Am. Jur. Proof of Facts 3d 433 (stating spot zoning challenges generally require proof the ordinance has affected a single landowner).

Even were we to accept appellants' argument that the creation of the OBEOD constituted spot zoning in some fashion, we find that argument unavailing. Specifically, applying the test outlined in *Knowles* and *Talbot*, we find any spot zoning caused by the ordinance was legally permissible. *See Knowles*, 305 S.C. at 223, 407 S.E.2d at 642; *Talbot*, 222 S.C. at 175, 72 S.E.2d at 70. First, the ordinance was consistent with the city's comprehensive plan. Second, as we discuss further below, it is "fairly debatable" that city council enacted the ordinance to promote the public welfare. *See Rushing*, 265 S.C. at 288, 217 S.E.2d at 799 (explaining the Court will not overturn a municipality's action if the decision is "fairly debatable" because the action is presumed to be a valid exercise of power, and it is not the Court's prerogative to weigh in on the wisdom of the decision). Third, the ordinance did not result in clear injustice to appellants: even after the creation of the OBEOD, appellants retained ownership of their property—the real estate and the merchandise—and they presented no evidence that they could not pivot to another business model. *See Helena Sand & Gravel, Inc. v. Lewis & Clark Cnty. Plan. & Zoning Comm'n*, 290 P.3d 691, 699–700 (Mont. 2012) (applying the state's traditional spot zoning test under a similar factual scenario, rather than some separate reverse-spot-zoning test, and concluding that because the zoning regulation was consistent with the county's comprehensive plan, it was not impermissible spot zoning); *cf.* S.C. Code Ann. § 6-29-800(A)(2)(d)(i) (noting the BZA may not grant a variance if the effect of the variance would be to allow a use not otherwise permitted in a zoning district, and "[t]he fact that property may be utilized more profitably, if a variance is granted, may not be considered grounds for a variance"). We therefore reject appellants' equal protection challenge on the basis of impermissible spot zoning.

B.

Second, appellants contend the OBEOD's boundaries are irrational and, to be constitutional, must ban the prohibited retail uses throughout the entire city. We disagree.

The Equal Protection Clause of the Fourteenth Amendment to the United States Constitution provides, "No State shall . . . deny to any person within its jurisdiction the equal protection of the laws." U.S. Const. amend. XIV, § 1. Where, as here, "there is no suspect or quasi-suspect class and no fundamental right is involved,

zoning ordinances should be tested under the 'rational basis' standard." *Bibco Corp.*, 332 S.C. at 52, 504 S.E.2d at 116.

Under rational basis review, the Equal Protection Clause is satisfied so long as (1) there is a plausible policy reason for the classification; (2) the facts on which the classification is based rationally may have been considered to be true by the decision maker; and (3) the relationship of the classification to the goal is not so attenuated as to render the distinction arbitrary or irrational. *Nordlinger v. Hahn*, 505 U.S. 1, 11 (1992); *see also Denene, Inc. v. City of Charleston*, 359 S.C. 85, 91, 596 S.E.2d 917, 920 (2004) ("Under the rational basis test, the requirements of equal protection are satisfied when: (1) the classification bears a reasonable relation to the legislative purpose sought to be affected; (2) the members of the class are treated alike under similar circumstances and conditions; and[] (3) the classification rests on some reasonable basis."). A party challenging a legislative enactment under rational basis review "must negate every conceivable basis which might support" the enactment and, therefore, has a "steep hill to climb." *Bodman v. State*, 403 S.C. 60, 69–70, 742 S.E.2d 363, 367–68 (2013) (quoting *Lee v. S.C. Dep't of Nat. Res.*, 339 S.C. 463, 470 n.4, 530 S.E.2d 112, 115 n.4 (2000)) (internal quotation marks omitted)).

Here, the ordinance explicitly states the city council enacted the ordinance to foster a more "family friendly" atmosphere in the historic downtown area and encourage more tourism by families. *See* Myrtle Beach, S.C., Code of Ordinances app. A § 1807.A. The zoning administrator testified that he had received complaints from families about the prohibited retail uses. The city council found the prohibited retail uses "repelled" families from the area. We find it is, at the very least, "fairly debatable" that prohibiting the sale of sexually oriented merchandise and tobacco paraphernalia would encourage a more "family friendly" atmosphere in the historic downtown area. *See Rushing*, 265 S.C. at 288, 217 S.E.2d at 799 (stating the Court should not overturn a municipality's decision if the action is "fairly debatable").

Moreover, the zoning administrator stated the boundaries for the OBEOD corresponded with the boundaries of the historic downtown area of the city as much as was practical. Those boundaries were set long ago based on pedestrian travel patterns, family-friendly attractions, and historical uses that preexisted the ordinance. There are two deviations from the historic downtown's boundary lines, both of which have rational explanations. First, the northwestern edge of the OBEOD is shifted half a block away from US-17 Business (the boundary for the historic downtown). Because the OBEOD was created in part to foster more pedestrian traffic in the historic downtown, and because the city council did not

believe families of pedestrians would readily walk along a busy road such as US-17 Business, the city council felt it unnecessary to include that portion of the historic downtown in the OBEOD. Second, and relatedly, the boundary line does not run in a completely straight line along the backs of *every* property that fronts US-17 Business because it cannot: two properties in the OBEOD are large enough that they comprise several city blocks, stretching from US-17 Business all the way to Ocean Boulevard.[7] In those two places, the boundary line runs on the US-17 Business side of the property rather than the ocean-side of the property. The city's decision regarding where to set the boundaries of the OBEOD is certainly not irrational or without basis.

Appellants have failed to show by clear and convincing evidence that the location of or rationale behind the boundaries of the OBEOD is arbitrary and capricious. Consequently, the boundaries of the OBEOD are valid. *See McMaster*, 395 S.C. at 504, 719 S.E.2d at 663 (quoting *Harris*, 391 S.C. at 154, 705 S.E.2d at 55); *Knowles*, 305 S.C. at 224, 407 S.E.2d at 642. As the circuit court found, "Zones must have beginning and terminating points. If the existence of divergent uses across zone boundary lines were taken *per se* as an appropriate basis for a constitutional violation, the entire zone plan in any municipality might well crumble by chain reaction." (Citations omitted.) The disparate treatment of similarly situated businesses on either side of the OBEOD boundary line is not a basis on which to find an equal protection violation. *Cf. Bibco Corp.*, 332 S.C. at 52–54, 504 S.E.2d at 116–17 (finding a zoning ordinance that prohibited mobile homes from some residential districts in the city—but not all—survived rational basis review).

C.

Finally, appellants argue the creation of the OBEOD was arbitrary and capricious because the city did not submit any evidence that the prohibited retail uses impacted public safety. We summarily dismiss this argument, as appellants—not the city—had the burden of proof. *Rush*, 246 S.C. at 276, 143 S.E.2d at 531. The city did not need to submit anything affirmatively proving its policy decision was correct. *Cf. Nordlinger*, 505 U.S. at 11 (noting that the Equal Protection Clause requires only that the legislative fact on which the classification is apparently based rationally *may* have been considered to be true by the governmental decisionmaker). Rather, it was incumbent upon appellants to submit evidence that the city's policy decision was

[7] One property contains Pavilion Park, and the other contains Family Kingdom Amusement Park.

based on a faulty factual premise, and the prohibited retail uses had no impact on public safety. Appellants failed to do so.

Accordingly, we hold appellants have failed to demonstrate the ordinance violated their right to equal protection, and we affirm the circuit court's decision on this basis.

V.

Next, appellants raise two due process arguments. First, appellants argue the ordinance does not explicitly provide for a hearing in which an affected vendor could challenge the zoning administrator's finding that certain merchandise fits within the ordinance's definition of sexually oriented merchandise. Second, appellants contend the ordinance imposes an arbitrary and unreasonable amortization period. We disagree with both arguments.

We reject appellants' first argument as it is based on a faulty factual premise. Rather, section 6-29-800(A)(1) of the South Carolina Code explicitly provides the BZA has the authority to hear any appeal "where it is alleged there is error in . . . [a] determination made by an administrative official in the enforcement of the zoning ordinance." Section 6-29-800(E) additionally provides the BZA "has all the powers of the officer from whom the appeal is taken" and, therefore, may determine—just as the zoning administrator does in the first instance—whether the challenged merchandise fits within the ordinance's definition of "sexually oriented merchandise." Further, as occurred here, should an affected property owner disagree with the BZA's decision, it can appeal the decision to the circuit court and, if necessary, this Court.[8]

Turning to appellants' second due process argument, we find any contention that the amortization period was too draconian is moot. *See Curtis v. State*, 345 S.C. 557, 567, 549 S.E.2d 591, 596 (2001) ("An appellate court will not pass on moot and academic questions or make an adjudication where there remains no actual controversy. . . . A case becomes moot when judgment, if rendered, will have no practical legal effect upon the existing controversy." (cleaned up)). Any attempts by the city to enforce the ordinance and actually impose the provided-for civil penalties were stymied by the pendency of this appeal. As a result, appellants have had nearly

[8] Of course, here, appellants conceded they were engaged in the prohibited retail uses, so there would be no need for an additional hearing challenging the determination of the zoning administrator.

five years to come into compliance with the ordinance and, apparently, have failed to do so. We cannot say an effective five-year amortization period is per se unreasonable.

We therefore reject both of appellants' due process claims.

VI.

Appellants additionally claim the ordinance effects a taking of their property without just compensation, specifically citing the three-factor test set forth by the United States Supreme Court in *Penn Central Transportation Co. v. City of New York*, 438 U.S. 104, 124 (1978) (explaining that, in regulatory takings cases, courts should examine (1) the economic impact of the regulation on the affected property; (2) the extent to which the regulation interfered with the property owner's investment-backed expectations; and (3) the character of the government action). We disagree.

Takings claims are "essentially ad hoc, factual inquiries" that "depend[] largely upon the particular circumstances in that case." *Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg'l Plan. Agency*, 535 U.S. 302, 322, 336 (2002) (cleaned up); *see also Dunes W. Golf Club, L.L.C. v. Town of Mt. Pleasant*, 401 S.C. 280, 314, 737 S.E.2d 601, 619 (2013) (explaining the question of whether a taking has occurred is a question of law that this Court must review de novo (citations omitted)). Appellants, however, have not developed any of the facts necessary to support a takings claim. For example, they do not quantify the economic impact of the ordinance on their properties—the first *Penn Central* factor. *See Penn Cent.*, 438 U.S. at 124. Rather, appellants merely claim the impact is a "significant amount" that is "dire" and "severe."[9]

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[9] This lack of specificity stands in stark contrast to other takings cases, where parties typically quibble over the appropriate numbers to enter into the takings fraction, as well as the exact percentage necessary to amount to an unconstitutional taking. *See, e.g.*, *Murr v. Wisconsin*, 137 S. Ct. 1933, 1941 (2017) (explaining the parties submitted competing appraisals for the value of the affected properties, including figures corresponding to the values of the properties with and without the challenged regulation); *Lingle v. Chevron U.S.A., Inc.*, 544 U.S. 528, 534 (2005) (discussing the exact figures corresponding to the impact of the challenged regulation on each of sixty-four affected properties owned by the claimant); *Tahoe-Sierra Pres. Council*, 535 U.S. at 302, 316 n.12 (involving a dispute over how to define and calculate the denominator of the takings fraction, and detailing the average values of the over-400 affected properties); *Palazzolo v. Rhode Island*, 533 U.S. 606, 616 (2001)

We are left to speculate about the facts necessary to support appellants' takings claim.[10] We therefore reject appellants' claim that the ordinance took their property without just compensation in violation of the Fifth Amendment to the United States Constitution.

VII.

Finally, appellants claim the ordinance criminalizes the sale of consumer products that are otherwise legal under state law, and it therefore conflicts with—and must be preempted by—the State's criminal laws. This argument, too, rests on a faulty factual premise.

The ordinance does not impose any criminal penalties for continuing to engage in the prohibited retail uses after the amortization period; rather, the penalty provided for in the ordinance is the suspension or revocation of the nonconforming business's business license.[11] Myrtle Beach, S.C., Code of Ordinances app. A § 1807.F. Thus, the ordinance does not criminalize the sale of legal products in contravention of the State's criminal laws. *Compare, e.g., Foothills Brewing Concern, Inc. v. City of Greenville*, 377 S.C. 355, 660 S.E.2d 264 (2008) (upholding the validity of a municipal ordinance banning smoking in bars and restaurants despite the fact that smoking was legal throughout the State, and finding significant the fact that the no-smoking ordinance imposed only civil penalties), *with Beachfront Ent., Inc. v. Town*

(explaining the plaintiff in a takings action submitted an appraiser's report to quantify the amount of damages sought).

[10] In fact, appellants make no argument at all regarding the second and third *Penn Central* factors, i.e., the extent to which the ordinance impacted their investment-backed expectations or the character of the government action. We therefore find appellants have abandoned any argument regarding those two factors. *See Video Gaming Consultants, Inc. v. S.C. Dep't of Revenue*, 342 S.C. 34, 42 n.7, 535 S.E.2d 642, 646 n.7 (2000) (stating an issue is deemed abandoned if a party fails to make an argument as to the merits of the issue).

[11] We note appellants did not specify from which section of the Myrtle Beach Code of Ordinances they believed the criminal penalty arose. Thus, to the extent appellants believed the criminal penalty arose from another ordinance distinct from the ordinance at issue here (Ordinance 1807), we find that portion of their argument abandoned.

of Sullivan's Island, 379 S.C. 602, 666 S.E.2d 912 (2008) (striking down a municipal ordinance banning smoking in the workplace because it imposed significant criminal penalties for violations and, therefore, conflicted with State law that otherwise allowed smoking in the workplace). We therefore reject this argument as a basis on which to find the ordinance invalid.

VIII.

After examining the host of appellants' constitutional and procedural challenges to the ordinance, we hold the ordinance was a valid exercise of the city's police powers. *See Rush*, 246 S.C. at 276, 143 S.E.2d at 530–31 ("The authority of a municipality to enact zoning ordinances, restricting the use of privately owned property[,] is founded in the police power. The governing bodies of municipalities clothed with authority to determine residential and industrial districts are better qualified by their knowledge of the situation to act upon such matters than are the Courts, and they will not be interfered with in the exercise of their police power to accomplish [their] desired end unless there is [a] plain violation of the constitutional rights of [the] citizens."). We therefore affirm the decisions of the circuit court and BZA.

AFFIRMED.

BEATTY, C.J., FEW, JAMES, JJ., and Acting Justice Kaye G. Hearn, concur.

THE STATE OF SOUTH CAROLINA
In The Supreme Court

Braden's Folly, LLC, Respondent,

v.

City of Folly Beach, Appellant.

Appellate Case No. 2022-000020

Appeal from Charleston County
Roger M. Young Sr., Circuit Court Judge

Opinion No. 28148
Heard November 15, 2022 – Filed April 5, 2023

REVERSED AND REMANDED

Danny Calvert Crowe, of Crowe LaFave, LLC, of Columbia; and Joseph C. Wilson IV, of Joseph C. Wilson Law Firm LLC, of Folly Beach, both for Appellant.

Keith M. Babcock, Ariail Elizabeth King, and Joseph B. Berry, all of Lewis Babcock LLP, of Columbia, for Respondent.

JUSTICE KITTREDGE: Respondent Braden's Folly, LLC owns two small, contiguous, developed coastal properties on the northeast end of Folly Beach. The City of Folly Beach amended an ordinance to require certain contiguous properties under common ownership—like those owned by Braden's Folly—to be merged into a single, larger property. The ordinance did not impact the existing uses of Braden's Folly's contiguous lots. Nevertheless, Braden's Folly challenged the

merger ordinance, claiming it had planned to sell one of the developed properties, and that the merger ordinance interfered with its investment-backed expectation under the *Penn Central* test. *See generally Penn Cent. Transp. Co. v. City of N.Y.*, 438 U.S. 104, 124 (1978) (stating in regulatory takings cases, courts must examine the economic impact of the regulation on the property owner's investment-backed expectations, as well as the character of the government action). Folly Beach denied the claim of an unconstitutional regulatory taking. Pursuant to cross-motions for summary judgment, the circuit court agreed with Braden's Folly, finding the merger ordinance effected an as-applied taking of Braden's Folly's beachfront property. Folly Beach appeals from the grant of summary judgment in favor of Braden's Folly. We reverse.

Underlying our application of the *Penn Central* factors is the distinct fragility of Folly Beach's coastline, which is subject to such extreme erosion that the General Assembly exempted Folly Beach from parts of the South Carolina Beachfront Management Act.[1] This exemption gave the city the authority to act in the State's stead in protecting the beach there. As we will describe more fully below, one of Braden's Folly's properties is contributing to worsening erosion rates on Folly Beach and, along with similarly situated properties, is threatening the existence of the entire beach in that area of the state.

Turning to the *Penn Central* test, we hold two of the three factors—the economic impact of the merger ordinance on Braden's Folly and the character of the governmental action—weigh in favor of finding the merger ordinance did not amount to a taking of Braden's Folly's properties. We find the remaining factor—the extent to which the merger ordinance interfered with Braden's Folly investment-backed expectations—does not weigh in favor of either party. Accordingly, we hold Braden's Folly has not suffered a taking under the *Penn Central* test. We therefore reverse and remand to the circuit court for entry of judgment in favor of Folly Beach.

I.

A.

In the 1890s, the United States Army Corps of Engineers (ACOE) constructed jetties in Charleston's harbor in order to protect the oceanic shipping channels.

[1] S.C. Code Ann. §§ 48-39-250 to -360 (2008 & Supp. 2022).

Following construction of the jetties, the sand migration in the area was disrupted, and the erosion rate in Folly Beach increased exponentially as sand left the area and was not replaced.[2]

In response to the high rate of yearly erosion, Folly Beach began engaging in periodic beach renourishment, in which millions of cubic yards of sand would be brought to the area to build the beach vertically upwards by five feet or more. Each renourishment project was funded largely (85%) by the federal government—specifically, the ACOE—in recognition of the fact that the federal government caused much of the erosion by constructing the Charleston jetties.[3]

Nonetheless, the ACOE refused to renourish privately owned property. Therefore, in the early 1990s, Folly Beach secured perpetual easements from all of the oceanfront property owners. In granting the easements, the property owners permanently gave up their right to build oceanward of the perpetual easement line running through their properties.

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[2] After the jetties were built, Folly Beach's yearly rate of erosion increased to nine feet per year. In comparison, other coastal areas in the state experience less than two feet of erosion per year. Chester W. Jackson Jr., *Mapping Coastal Erosion Hazards Along Sheltered Coastlines in South Carolina 1849 to 2015*, Dep't of Health & Env't Control vi (2017), https://scdhec.gov/sites/default/files/docs/HomeAndEnvironment/Docs/Jackson_SCShorelineReport122017.pdf.

[3] As one witness for Folly Beach explained:

> Section 111 of the 1968 River and Harbor Act[, 33 U.S.C. § 426i (2018),] provides authority for the [ACOE] to develop and construct projects for prevention or mitigation of damages caused by Federal navigation work, such as jetties. In 1987, Folly[Beach]'s Section 111 study determined that approximately 57[%] of the erosion of Folly Beach was due to the construction and continued operation of the Charleston Harbor Federal navigation project. As a result of this determination, the cost sharing percentages were adjusted from the standard 65% federal and 35% local to 85[%] federal and 15[%] non-federal (City of Folly Beach).

(Footnote omitted.)

Around that same time, in recognition of the quickly changing beachfront, the General Assembly exempted Folly Beach from part of the requirements of the South Carolina Beachfront Management Act. *See* S.C. Code Ann. § 48-39-290(E). Folly Beach's unique treatment under the Beachfront Management Act extends to three notable areas. First, the South Carolina Department of Health and Environmental Control (DHEC) is typically tasked with redrawing the baseline[4] every seven to ten years based on updated erosion rates. *See* S.C. Code Ann. § 48-39-285. However, in Folly Beach, the baseline was set in 1993 and is not subject to change regardless of any erosion or accretion, no matter how extreme. Second, the State typically strictly regulates any development in the beach area between the baseline and the setback line.[5] However, there is no setback line established in Folly Beach, so the city has the sole discretion to allow all types of development right up to the baseline with no oversight from the State. Finally, in a similar vein, the Beachfront Management Act prohibits oceanfront property owners from building new erosion control structures—or from repairing existing structures damaged greater than 50%—if the structures are located seaward of the setback line.[6] However, because Folly Beach does not have a setback requirement, oceanfront property owners may build new seawalls or repair existing seawalls all the way up to the baseline, so long as the plans are approved by the city.

B.

A portion of the northeast end of Folly Beach has a double row of properties. The "A lots" are directly adjacent to the ocean-side of East Ashley Avenue, and the "B lots"—also known as "super-beachfront" lots—are closest to the ocean. There is

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[4] The baseline is an invisible jurisdictional line typically drawn along the crests of the oceanfront sand dunes, and it serves as the starting point for determining the other jurisdictional line—the setback line—under the Beachfront Management Act. *See* S.C. Code Ann. § 48-39-280.

[5] The setback line "must be established landward of the baseline a distance which is forty times the average annual erosion rate or not less than twenty feet from the baseline . . . ." S.C. Code Ann. § 48-39-280(B); *see also* Jackson, *supra* note 2 (stating the average annual erosion rate for beaches in South Carolina is 1.8 feet per year); S.C. Code Ann. § 48-39-290(B) (setting forth a number of restrictions on development in the area between the baseline and setback line).

[6] *See* S.C. Code Ann. § 48-39-290(B)(2).

no road between the A and B lots, so the B lots are accessible only through the A lots.

Historically, an individual or entity would own an A lot and the contiguous B lot and would transfer the lots to a new owner simultaneously. The B lots—all of which were undeveloped until some twenty years ago—were frequently submerged or, at best, on active beach. Therefore, the B lots typically had little to no independent value[7] and served no purpose other than to provide beach access to the A lots directly adjacent to them.

However, beginning in the mid- to late-1990s, following Folly Beach's first round of beach renourishment, some of the B lots were elevated enough to make development possible. As a result, over the next decade and with Folly Beach's approval, seventeen of the thirty-seven super-beachfront lot owners developed single-family residences on their B lots. Nonetheless, the perpetual easement line runs through the B lots, preventing many B-lot owners from developing their properties and leaving the owners who did develop super-beachfront houses little buildable area to do so.[8]

Due to the high rate of erosion in Folly Beach, the newly renourished B lots were quickly reclaimed by the sea. In response, many of the owners who developed their B lot also built seawalls in front of their super-beachfront houses.[9]

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[7] The B lots were often worth less than $500, and many of the owners voluntarily abandoned their B lot in tax sales. In fact, the only reason the B lots even exist is because in the 1950s, another road was platted and paved in front of the B lots, parallel to East Ashley Avenue. That road has long since been destroyed by the eroding beach and is now permanently lost.

[8] Accordingly, most of the new super-beachfront houses touched the edge of the buildable area on the B lots, with little to no space between the houses and the perpetual easement line. In fact, between beach renourishments, the super-beachfront houses were not infrequently surrounded by the ocean on three sides. Because the ACOE places the renourishment sand all the way up to the perpetual easement line, the vertical rebuilding of the beach occurs within mere feet of the backdoors to these super-beachfront houses.

[9] A few of the super-beachfront houses do not have a seawall. Folly Beach and DHEC often take those unprotected super-beachfront houses "out of service" for renters due to safety concerns, usually related to the failure or overflow of the

Unfortunately, the seawalls did not stop the beach erosion and, instead, exacerbated the erosion problem for neighboring properties with undeveloped B lots and no seawalls. The sand attrition on the neighboring properties turned into areas the ACOE dubbed "blue blobs"—giant depressions that held rain and seawater and spanned the length of multiple properties, even reaching into A lots in some places. Because these blue blob areas were located on private property, they were not repaired by the ACOE or the periodic beach renourishment, nor were the costs to repair the blue blob areas paid for by the federal government. Rather, the repair of the erosion on lots neighboring the super-beachfront properties was required to be paid for entirely by the City of Folly Beach or the owners of the damaged lots. In other words, innocent property owners who had chosen *not* to develop their B lots had to pay for the damage caused by the seawalls of their neighbors' super-beachfront properties.

C.

Each round of beach renourishment in Folly Beach was projected to last for around eight years. However, as the number of super-beachfront houses and associated seawalls increased, so too did the frequency and cost of beach renourishment. As is relevant to this case, the last four rounds of renourishment occurred in 2005, 2007, 2014, and 2018, and the next one is already scheduled for 2024—none of which are eight years apart. As a result, the ACOE threatened to cut off federal funding for the renourishment projects unless Folly Beach stopped allowing super-beachfront lots to be developed and attempted to unwind the existing super-beachfront development. Given the importance of the beach to the local economy, and its inability to pay for the renourishment projects on its own, Folly Beach agreed to do so.

The city took multiple steps to reverse super-beachfront development. For example, it created a Dune Management Area (DMA), which prohibits development within forty feet of the perpetual easement line. The DMA affects all of the B lots. In consequence, the DMA prohibits new development on the B lots and—should any existing super-beachfront houses be more than 50% damaged in a storm or otherwise—prevents repair of the existing structures on the B lots.

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home's unprotected septic system onto active beach. However, even super-beachfront homes with seawalls are occasionally taken out of service for similar reasons, including Braden's Folly's B lot.

Likewise, in April 2019, Folly Beach amended its Code of Ordinances. Notable to this appeal, Folly Beach amended its existing merger ordinance to provide that adjacent lots under common ownership may no longer be sold or developed as separate lots if (1) either lot is undersized[10] and (2) one or both lots touch the baseline.[11] The zoning ordinances allow nonconforming uses to continue on properties affected by the merger ordinance. Likewise, the zoning ordinances prohibit the rebuilding of a nonconforming structure that is damaged or destroyed by more than 50% of its market value.[12] Thus, if an affected property owner had

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[10] Folly Beach's zoning ordinances set the minimum lot size at 10,500 square feet, but a grandfather clause relaxes this restriction for substandard lots that preexisted adoption of the ordinances. Therefore, a number of nonconforming small lots exist in Folly Beach, particularly along the ocean. As we discuss further below, the two lots at issue in this case are both less than 10,500 square feet and, thus, are nonconforming with Folly Beach's zoning ordinances.

[11] Specifically, the newly amended merger ordinance stated, in relevant part:

> (B) *Combination of lots.* If two or more lots of record . . . are in single ownership on or after March 1, 2019, . . . and if all or part of one or more of these lots do not comply with the lot area standards [requiring lots to be a minimum of 10,500 square feet in size] . . . ; and if one or both of these lots are adjacent to . . . [the] Baseline, the lots involved shall be considered to be an individual lot for the purposes of this [zoning ordinance], and no portion of these lots shall be used or sold which do not comply with the lot area standards, nor shall any division of the lots be made that leaves remaining any lot that fails to comply with the lot area standards.

Folly Beach, S.C., Code of Ordinances § 168.04-01 (2022). The prior version of the merger ordinance did not apply unless both commonly owned, undersized lots touched the baseline.

[12] In particular, the reconstruction ordinance provides, in relevant part:

> (A) *More than 50% of pre-damaged market value.* In the event a nonconforming structure is damaged or destroyed, by any means, to the extent of 50% [or more] of its market value prior to such

developed both his A and B lots, and those lots were merged by the amended ordinance, he could continue to use or rent both houses on the merged lot even though the area is zoned single-family residential. This nonconforming use could continue until one of the houses was destroyed beyond 50% of its pre-damaged market value. However, upon a 50% or more destruction of one of the houses, the zoning ordinances would prevent the rebuilding of the damaged structure, instead allowing the existence of only one house on the single, merged lot.[13]

> destruction, such structure shall not be restored unless in conformance with the standards for the zoning district in which it is located . . . .
>
> (B) *Less than 50% of pre-damaged market value*. . . . [If] a nonconforming structure . . . is damaged or destroyed, by any means, to an extent of less than 50% of its market value prior to such damage or destruction, it may be restored to its pre-damaged state provided reconstruction is initiated within 24 months and provided the reconstruction complies with all other city ordinances as well as all state and federal laws and does not create any new nonconformities.

Folly Beach, S.C., Code of Ordinances § 168.03-05 (2022).

[13] In tandem with its creation of the DMA and amendment of the merger ordinance, Folly Beach began more aggressively applying the avulsion doctrine. *See Severance v. Patterson*, 370 S.W.3d 705, 722 (Tex. 2012) ("Courts generally adhere to the principle that a riparian or littoral owner acquires or loses title to the land gradually or imperceptibly added to or taken away from their banks or shores through erosion, the wearing away of land, and accretion, the enlargement of the land. . . . Avulsion, by contrast, as derived from English common law, is the sudden and perceptible change in land and is said not to divest an owner of title." (cleaned up)). As a result, Folly Beach filed suit against any B-lot owner who was attempting to develop his property in the near future. In particular, Folly Beach sought to prohibit B-lot owners from building on the portions of their lots that resulted from avulsion (i.e., the beach renourishment) because that land was part of the active beach and, thus, was owned by the State and protected by the public trust doctrine. The circuit court granted the property owners' motion to dismiss the lawsuit in May 2020. Folly Beach's appeal of that decision is pending in the court of appeals at this time.

With this background in mind, we now turn to the particular facts of this case.

II.

A.

Braden's Folly owns adjacent lots (Lot A and Lot B) on East Ashley Avenue. Both Lots are very small: Lot A is 8,377 square feet, and Lot B is 3,808 square feet.[14] Pursuant to Folly Beach's local zoning ordinances, all lots must be at least 10,500 square feet. Because Lots A and B preexisted Folly Beach's zoning ordinances, their sizes were grandfathered in upon passage of the zoning laws but are nonetheless classified as nonconforming.

When Braden's Folly acquired the Lots in 1999, there was a small house on Lot A, and Lot B was undeveloped because it was either underwater or part of the active beach. Following a beach renourishment in 2005, Lot B became developable because it had been transformed into mostly sandy beach. Therefore, between 2006 and 2007, Braden's Folly received building permits from Folly Beach and constructed two single-family residences—a larger, more modern one on Lot A and a smaller one on Lot B—for a total cost of $1.1 million.[15]

According to Braden's Folly, it had always intended to keep one of the Lots and sell the other—whichever of Lot A or B received the highest offer—in order to pay for the construction costs of the two houses. However, construction on the Lots finished in 2007 during the housing market collapse and Great Recession, which made selling either of the Lots financially unfeasible at that time. Nonetheless, even after the housing market recovered, Braden's Folly did not place the Lots on the market, continuing to use them for family vacations and as rental properties

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[14] To be more precise, Lot B is approximately the same size as Lot A. However, taking the perpetual easement line into account, the buildable area on Lot B is only 3,808 square feet.

[15] Lot A did not have independent access to the beach except for through Lot B. Likewise, Lot B did not have independent access to a road or room for a septic system. One had to cross Lot A to access Lot B. As a result, while the homes were being constructed, Braden's Folly granted itself a series of purported easements across the Lots to provide beach access for Lot A and road access and septic lines for Lot B. We discuss the efficacy of these easements in section IV.D of the opinion.

that grossed an average of $117,000 per year combined. It was not until February 2018 that Braden's Folly finally put the houses on the market, listing Lot A for $1.3 million and Lot B for $1.2 million.

One year later, upon the amendment of Folly Beach's merger ordinance in April 2019, Lots A and B were legally combined or "merged" into a single lot. In May 2019, Folly Beach sent a letter to Braden's Folly requesting it stop marketing the Lots separately and advising it to inform any prospective purchasers of the merger ordinance. Braden's Folly did not respond, continuing to list the Lots separately with no indicia either Lot was impacted by the merger ordinance.

Eventually, in August 2019, Braden's Folly received its first offer: a $1.1 million offer to purchase Lot A. Braden's Folly did not accept the offer, and the prospective purchasers declined to pursue the property further after learning of the existence of the merger ordinance and its impact on Lot A. Braden's Folly's realtor thereafter advised Braden's Folly to "[u]se this [offer] contract to go after the city. You might get your money and not have to sell" either Lot.

Four months later, not having received a single other offer, Braden's Folly filed suit against Folly Beach, claiming its inability to sell was due to the existence of the merger ordinance. According to Braden's Folly, the merger ordinance had upset its reasonable, investment-backed expectation under the *Penn Central* test and amounted to an unconstitutional taking.

Subsequently, in October 2020, Braden's Folly received a second offer to purchase Lot A for $1.2 million but instructed its realtor to decline the offer as it was "unable to accept due to the City's [merger] ordinance." Upon learning of the second offer, Folly Beach informed Braden's Folly it objected "in the strongest terms to the continued marketing of these properties separately during the pendency of this lawsuit." Braden's Folly again ignored the city's correspondence. Rather, despite receiving only two offers in nearly two-and-a-half years, Braden's Folly inexplicably raised the listing price for Lot B to $1.25 million.

In December 2020, Braden's Folly received a third offer, this time to purchase Lot B for $1.2 million. When Braden's Folly informed the prospective purchaser (Christopher Bonner) of the merger ordinance and pending litigation, Bonner stated he did not care whether the properties were merged and "would still like to get the [Lots] under contract." Therefore, on January 4, 2021, Bonner offered $2.2 million for Lots A and B together. The offer did not have an expiration date, but

Braden's Folly did not respond, later claiming it had no intention of selling during litigation or "below market value."

Having received no response, one week later, on January 11, 2021, Bonner unilaterally raised his offer to $2.55 million for Lots A and B—full asking price. Again, Braden's Folly did not respond to the offer. That same day, the listing for Lot A was removed from the internet. Three days later, the listing for Lot B naturally expired and was removed from the internet.

For the next two weeks, Bonner repeatedly attempted to get a response from Braden's Folly, reiterating his $2.55 million offer on numerous occasions. Meanwhile, an unrelated property went on the market just down the street from Lots A and B, and Bonner purchased that lot instead.

On January 28, 2021, after Bonner had acquired the other nearby lot, Braden's Folly reached out to Bonner, purportedly attempting to accept Bonner's $2.55 million offer for both Lots. However, Bonner replied that he had purchased another property nearby and no longer had as high a motivation to purchase Lots A and B. Because Bonner now intended Lots A and B to be purely investment properties, rather than ones he would live on with his family, he lowered his offer for Lots A and B to $2 million. Braden's Folly countered, stating it would accept $2.6 million (i.e., higher than Bonner's initial offer when he was a more motivated buyer). Bonner declined to purchase the Lots at that price. Because the Lots have remained off the market since January 2021, Braden's Folly has not received any further offers to purchase Lots A and B, whether merged or separate.

B.

In the interim, the pending takings lawsuit progressed, and Braden's Folly and Folly Beach filed cross-motions for summary judgment. The circuit court ultimately granted summary judgment to Braden's Folly, finding the merger ordinance constituted an as-applied taking because it unreasonably interfered with Braden's Folly's investment-backed expectation to sell the Lots separately. The circuit court held a property owner's reasonable investment-backed expectations are defined at the time the investment is made, and Braden's Folly intended to sell one of the Lots when it constructed the houses in 2006 and 2007. Likewise, the circuit court found the merger ordinance had an impermissibly detrimental economic impact on the value of the Lots, citing an alleged $508,000 market value loss calculated by an appraiser hired by Braden's Folly during litigation. Lastly, the circuit court found the character of the merger ordinance was akin to a classic

taking, explaining that, while merging "undeveloped or partially developed properties may not amount to a regulatory taking, . . . forcing two single-family residential houses to be merged into one property amounts to a taking."[16] The circuit court therefore concluded that "all" of the *Penn Central* factors weighed in favor of Braden's Folly, and that the merger ordinance as-applied to the Lots amounted to a regulatory taking.

Folly Beach directly appealed to this Court pursuant to Rule 203(d)(1)(A)(ii), SCACR (stating the notice of appeal should be directly filed with the clerk of this Court if the appeal involves a constitutional challenge to a municipal ordinance).

III.

In reviewing the grant of summary judgment, this Court applies the same standard as the circuit court. *Byrd v. City of Hartsville*, 365 S.C. 650, 656, 620 S.E.2d 76, 79 (2005). Summary judgment is appropriate "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Rule 56(c), SCRCP. The Court must view the evidence and all reasonable inferences taken from it in the light most favorable to the non-moving party. *Osborne v. Adams*, 346 S.C. 4, 7, 550 S.E.2d 319, 321 (2001).

The question of whether a taking has occurred is a question of law that this Court reviews de novo. *Dunes W. Golf Club, L.L.C. v. Town of Mt. Pleasant*, 401 S.C. 280, 314, 737 S.E.2d 601, 619 (2013) (first citing *Carolina Chloride, Inc. v. Richland Cnty.*, 394 S.C. 154, 171, 714 S.E.2d 869, 877 (2011); and then citing *Ex parte Brown*, 393 S.C. 214, 224, 711 S.E.2d 899, 904 (2011)).

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[16] While the amended ordinance merged a number of lots, in many cases, one or both of the lots merged was undeveloped. Moreover, some of the developed B lots are owned by a different entity than the A lots. Because those adjacent A and B lots are not contiguous *and* owned by the same entity, the merger ordinance does not apply to them. There are only five developed B lots owned by the same entity as the A lots, so aside from Braden's Folly, there are only four other property owners for whom the merger ordinance merged two *developed* lots. None of those property owners sued Folly Beach over the merger ordinance.

IV.

The Takings Clause of the Fifth Amendment to the United States Constitution provides that private property shall not "be taken for public use, without just compensation." U.S. Const. amend. V; *see Chi., Burlington & Quincy R.R. v. City of Chi.*, 166 U.S. 226, 239 (1897) (making the Takings Clause applicable to the States via the Due Process Clause of the Fourteenth Amendment).[17] "As its text makes plain, the Takings Clause does not prohibit the taking of private property, but instead places a condition on the exercise of that power," namely, the payment of just compensation to the affected property owner. *Lingle v. Chevron U.S.A. Inc.*, 544 U.S. 528, 536 (2005) (quoting *First Eng. Evangelical Lutheran Church of Glendale v. Cnty. of L.A.*, 482 U.S. 304, 314 (1987)) (internal quotation marks omitted).

"The paradigmatic taking requiring just compensation is a direct government appropriation or physical invasion of private property." *Id.* at 537. However, beginning with its decision in *Pennsylvania Coal v. Mahon*, 260 U.S. 393 (1922), the United States Supreme Court recognized that "government regulation of private property may, in some instances, be so onerous that its effect is tantamount to a direct appropriation or ouster—and that such 'regulatory takings' may be compensable under the Fifth Amendment." *Lingle*, 544 U.S. at 538; *see also Byrd*, 365 S.C. at 656, 620 S.E.2d at 79 ("An inverse condemnation may result from the government's physical appropriation of private property, or it may result from government-imposed limitations on the use of private property.").

The question of what constitutes a regulatory taking for purposes of requiring just compensation has proven considerably difficult for courts to answer. *Penn Cent.*, 438 U.S. at 123. In *Mahon*'s "storied but cryptic formulation, 'while property may be regulated to a certain extent, if [the] regulation goes too far it will be recognized as a taking.'" *Lingle*, 544 U.S. at 538 (quoting *Mahon*, 260 U.S. at 415). "The rub, of course, has been—and remains—how to discern how far is 'too far.'" *Id.*; *see also Murr v. Wisconsin*, 137 S. Ct. 1933, 1942 (2017) (recognizing that a regulation "can be so burdensome as to become a taking, yet the *Mahon* Court did

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[17] The South Carolina Constitution has a similar Takings Clause. *See* S.C. Const. art. I, § 13. The takings analysis under the South Carolina Constitution is identical to the analysis under federal law. *Byrd*, 365 S.C. at 656 n.6, 620 S.E.2d at 79 n.6. Because neither party raises the Takings Clause in the South Carolina Constitution, we do not discuss it further.

not formulate more detailed guidance for determining when this limit is reached"); *Palazzolo v. Rhode Island*, 533 U.S. 606, 617 (2001) ("Since *Mahon*, we have given some, but not too specific, guidance to courts confronted with deciding whether a particular government action goes too far and effects a regulatory taking.").

In answering that question, the Supreme Court, "quite simply, has been unable to develop any 'set formula.'" *Penn Cent.*, 438 U.S. at 124; *Ark. Game & Fish Comm'n v. United States*, 568 U.S. 23, 31 (2012) (recognizing there is "no magic formula"). Nonetheless, it has articulated two overarching principles that should guide all takings decisions. First, a court's analysis must be "informed by the purpose of the Takings Clause, which is to prevent the government from 'forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole.'" *Palazzolo*, 533 U.S. at 617–18 (quoting *Armstrong v. United States*, 364 U.S. 40, 49 (1960)); *Andrus v. Allard*, 444 U.S. 51, 65 (1979) ("The Takings Clause, therefore, preserves governmental power to regulate, subject only to the dictates of justice and fairness." (citation omitted) (internal quotation marks omitted)). Second,

> government regulation—by definition—involves the adjustment of rights for the public good. Often this adjustment curtails some potential for the use or economic exploitation of private property. To require compensation in all such circumstances would effectively compel the government to regulate by purchase. "Government hardly could go on if to some extent values incident to property could not be diminished without paying for every such change in the general law."

Andrus, 444 U.S. at 65 (quoting *Mahon*, 260 U.S. at 413).

Applying those principles, the Supreme Court has carved out two relatively narrow categories of regulatory takings that always require compensation, neither of which is implicated here.[18] Other than those narrow categories, however, regulatory takings challenges are generally governed by the balancing test set forth in *Penn*

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[18] *See Loretto v. Teleprompter Manhattan CATV Corp.*, 458 U.S. 419 (1982) (holding a government regulation that requires a property owner suffer a permanent physical invasion of his property, however minor, will require just compensation); *Lucas v. S.C. Coastal Council*, 505 U.S. 1003 (1992) (finding a regulation that completely deprives a property owner of all economically beneficial use of his property amounts to a compensable taking).

Central. *Lingle*, 544 U.S. at 538; *Palazzolo*, 533 U.S. at 617. That test requires consideration of three factors: "(1) the economic impact of the regulation on the claimant; (2) the extent to which the regulation has interfered with distinct investment-backed expectations; and (3) the character of the governmental action." *Murr*, 137 S. Ct. at 1943; *Penn Cent.*, 438 U.S. at 124; *see also Palazzolo*, 533 U.S. at 633 (O'Connor, J., concurring) (characterizing the *Penn Central* test as the polestar for regulatory takings). The Supreme Court has described the *Penn Central* test as an "essentially ad hoc, factual inquir[y]" amounting to a "complex factual assessment[] of the purposes and economic effects of government action[]" that "depends largely upon the particular circumstances in that case." *Tahoe-Sierra Pres. Council, Inc. v. Tahoe Reg'l Plan. Agency*, 535 U.S. 302, 323, 326 (2002) (internal alteration and quotation marks omitted) (first quoting *Penn Cent.*, 438 U.S. at 124; then quoting *Yee v. Escondido*, 503 U.S. 519, 523 (1992); and then quoting *Penn Cent.*, 438 U.S. at 124).

It bears repeating that, because *Penn Central* is a balancing test, "[t]here is no abstract or fixed point at which judicial intervention under the Takings Clause becomes appropriate. . . . Resolution of each case . . . ultimately calls as much for the exercise of judgment as for the application of logic." *Andrus*, 444 U.S. at 65; *see also Murr*, 137 S. Ct. at 1943 ("A central dynamic of the Court's regulatory takings jurisprudence, then, is its flexibility. This has been and remains a means to reconcile two competing objectives central to regulatory takings doctrine. One is the individual's right to retain the interests and exercise the freedoms at the core of private property ownership. . . . The other persisting interest is the government's well-established power to adjust rights for the public good. . . . In all instances, the analysis must be driven by the purpose of the Takings Clause, which is to prevent the government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole." (cleaned up)).

A.

"Before determining whether a taking has occurred, a court must first determine what, precisely, is the property at issue." *Dunes W. Golf Club*, 401 S.C. at 305, 737 S.E.2d at 614. "The definition of the relevant parcel profoundly influences the outcome of a takings analysis." *Dist. Intown Props. v. Dist. of Columbia*, 198 F.3d 874, 880 (D.C. Cir. 1999). Because a takings analysis requires a court to compare the value that has been taken from the property with the value remaining in the property, one of the most critical steps is determining how to define the unit of property whose value supplies the denominator of the takings fraction. *Keystone*

Bituminous Coal Ass'n v. DeBenedictis, 480 U.S. 470, 497 (1987); *Palazzolo*, 533 U.S. at 631 (describing the determination of the denominator in the takings fraction as a "difficult, persisting question"). In essence, the question is whether a court must consider a regulation's impact on only part of the property or on the whole parcel. *Dunes W. Golf Club*, 401 S.C. at 306, 737 S.E.2d at 615.

In the past, the Supreme Court oftentimes—but not always—found the denominator in the takings fraction amounted to the entire property, and not merely the part "taken" or interfered with by the government regulation. *See, e.g.*, *Penn Cent.*, 438 U.S. at 130–31 ("'Taking' jurisprudence does not divide a single parcel into discrete segments and attempt to determine whether rights in a particular segment have been entirely abrogated. In deciding whether a particular governmental action has effected a taking, this Court focuses . . . [on] the parcel as a whole . . . ."); *Tahoe-Sierra Pres. Council*, 535 U.S. at 331 ("Of course, defining the property interest taken in terms of the very regulation being challenged is circular."). More recently, in *Murr v. Wisconsin* the United States Supreme Court set forth a new, more nuanced multifactor test to define the relevant parcel. 137 S. Ct. at 1945–46 (applying the new test to two contiguous properties affected by a merger ordinance).

"First, courts should give substantial weight to the treatment of the land, in particular how it is bounded or divided, under state and local law." *Id.* at 1945. Second, courts should consider the physical characteristics of the property, including "the surrounding human and ecological environment." *Id.* As to this second factor, it may be particularly relevant whether "the property is located in an area that is subject to, or likely to become subject to, environmental or other regulation." *Id.* at 1945–46 (citing *Lucas*, 505 U.S. at 1035 (Kennedy, J., concurring) ("Coastal property may present such unique concerns for a fragile land system that the State can go further in regulating its development and use than the common law of nuisance might otherwise permit.")). Third and finally,

> courts should assess the value of the property under the challenged regulation, with special attention to the effect of burdened land on the value of other holdings. Though a use restriction may decrease the market value of the property, the effect may be tempered if the regulated land adds value to the remaining property, such as by increasing privacy, expanding recreational space, or preserving surrounding natural beauty. . . . [I]f the landowner's other property is adjacent to the small lot, the market value of the properties may well

> increase if their combination enables the expansion of a structure, or if development restraints for one part of the parcel protect the unobstructed skyline views of another part. That, in turn, may counsel in favor of treatment as a single parcel and may reveal the weakness of a regulatory takings challenge to the law.

Murr, 137 S. Ct. at 1946; *see also Dunes W. Golf Club*, 401 S.C. at 309 n.17, 737 S.E.2d at 616 n.17 (explaining the "extent of contiguous commonly-owned property gives rise to a rebuttable presumption defining the relevant parcel," and stating the court may consider "various factors including whether the property is divided by a road; whether the property was acquired at the same time; whether the purchase and financing of parcels were linked; the timing of development; whether the land is put to the same use or different uses; whether the owner intended to or actually did use the property as one economic unit; and the treatment of the property under state law") (quoting *Giovanella v. Conserv. Comm'n of Ashland*, 857 N.E.2d 451, 457–58 (Mass. 2006))).

Here, we find the *Murr* factors weigh in favor of identifying the relevant parcel as Lots A and B combined. *See Quinn v. Bd. of Cnty. Comm'rs*, 862 F.3d 433, 441 (4th Cir. 2017) ("The multifactor standard established by the Supreme Court's decision in *Murr* suggests that the lots subject to merger should be viewed as a collective.").

As to the first *Murr* factor (the treatment of the land), Lots A and B are currently merged under state and local law, and there are no physical or topographical boundaries that would limit joint treatment or development of the Lots. *See Quinn*, 862 F.3d at 441; *Dunes W. Golf Club*, 401 S.C. at 309 n.17, 737 S.E.2d at 616 n.17 (citing *Giovanella*, 857 N.E.2d at 457–58). In fact, the Lots have always been owned and sold as a single unit and were even redeveloped by Braden's Folly at the same time. *See Dunes W. Golf Club*, 401 S.C. at 309 n.17, 737 S.E.2d at 616 n.17 (citing *Giovanella*, 857 N.E.2d at 457–58). Likewise, due to both the zoning ordinances and the DMA, Braden's Folly is prohibited from selling the Lots separately or from building separate homes on each should one of the existing homes be more than 50% destroyed. *See Murr*, 137 S. Ct. at 1948.

Furthermore, with respect to the second *Murr* factor (the property's physical characteristics), the Lots are located on the beach, a quintessential example of an area that is heavily regulated and likely to become subject to additional environmental regulations. *See Lucas*, 505 U.S. at 1035 (Kennedy, J., concurring).

Finally, turning to the third *Murr* factor (the value of the property), "the prospective value that Lot [A] brings to Lot [B] supports considering the two as one parcel for purposes of determining if there is a regulatory taking." *Murr*, 137 S. Ct. at 1948. As it currently stands, and regardless of the impact of the merger ordinance, Lot B is restricted by Folly Beach's DMA. As a result, should the house on Lot B be destroyed by 50% or more, the DMA would prevent any redevelopment on that lot. The merger of Lots A and B would allow the property owner to maintain a beach house on at least one of the lots—Lot A—while simultaneously enjoying the unparalleled beach access of Lot B. Moreover, any economic impact resulting from the merger ordinance "is mitigated by the benefits of using the property as an integrated whole, allowing increased privacy and recreational space, plus the optimal location of any improvements." *Id.* Allowing only one house to be built on the two combined lots could increase the market value of the Lots as well because it would allow for the expansion of the existing Lot A house, and it ensures unobstructed ocean views for that single, larger house (rather than Lot A having little to no ocean view due to the existence of the home on Lot B). *Id.* at 1946.

As a result, we hold the appropriate denominator in the takings fraction, and the appropriate parcel to compare any economic impact resulting from the merger ordinance, is the entirety of Lots A and B combined.

B.

Equally important to defining the relevant parcel, we recognize that the unique legal landscape surrounding beach management regulation in Folly Beach must underlie our analysis of the *Penn Central* factors and inform our determination of what is "just and fair" in this situation. As discussed above, the extreme erosion in Folly Beach has caused it to receive unparalleled discretion to promulgate its own beachfront management regulations, including those dealing with setback requirements and erosion control barriers. The legal exemptions Folly Beach is afforded by the state's Beachfront Management Act create an unusual situation that leaves a locality—rather than the state or federal government—as the primary entity in charge of establishing policies to protect the beach and public trust, including prohibiting beachfront development. Of course, the same locality also has competing interests, such as fostering local beachfront development, drawing in tourism via rental properties, and increasing the local tax base.

It is clear Folly Beach weighed those competing interests differently in the past. Two decades ago, Folly Beach prioritized growth and development. Now,

however, it appears Folly Beach believes that allowing development of the super-beachfront lots causes a nuisance to nearby property owners, whose lots are eroded even more than the nine-feet-per-year average due to the seawalls in front of the neighboring super-beachfront properties. Moreover, in recent years, Folly Beach has pursued policies reflecting its view that super-beachfront development risks the livelihood of the entire community via the potential destruction of the beach (if there is no renourishment) or levying a significant, unpopular tax assessment on locals (if forced to pay for the renourishment itself).

Given the uniqueness of letting a locality control its own beach management, we find some discretion must be allowed to the locality to review and unwind decisions that it later realizes were unwise. *Cf. Esposito v. S.C. Coastal Council*, 939 F.2d 165, 169 (4th Cir. 1991) (explaining that establishing a policy of withdrawal from building seaward of a setback line in an effort to address beachfront erosion is a decision "in which . . . legislatures who deal with the situation from a practical standpoint[] are better qualified than the courts to determine the necessity, character[,] and degree of regulation which these new and perplexing conditions require" (internal alteration and quotation marks omitted) (quoting *Gorieb v. Fox*, 274 U.S. 603, 608 (1927))); *Lucas*, 505 U.S. at 1035 (Kennedy, J., concurring) (noting that coastal property in particular presents unique concerns for a fragile land system, and that those unique concerns may allow the regulating authority to "go further in regulating [beach properties'] development and use than the common law of nuisance might otherwise permit"). Borrowing from Justice Kennedy's sound rationale, the unique concerns facing the beach and coastline at Folly Beach may allow the city to "go further" in regulating super-beachfront development than the law might otherwise permit.

Of equal importance, the merger ordinance is only one of several tools Folly Beach has employed to push back super-beachfront development. In particular, the creation of the DMA must impact our analysis, as—wholly separate from the merger ordinance—development is now prohibited in Folly Beach within forty feet of the perpetual easement line. Thus, regardless of our decision on the constitutionality of the merger ordinance, Braden's Folly cannot redevelop Lot B in the event it is ever destroyed more than 50% of its current value because Lot B is located almost entirely within the DMA. The DMA is but one example of Folly Beach's attempts to ensure the continuing availability of federal funding to rebuild the beach.

The benefits resulting from periodic beach renourishment not only impact the public as a whole, but Braden's Folly in particular. According to the ACOE, absent the ongoing beach renourishment projects, the erosion in Folly Beach would have swept away not only the entirety of the B lots by now, *but also the entirety of the A lots on East Ashley Avenue as well.*[19] If federal funding is lost due to super-beachfront development, and Folly Beach is unable to secure enough local funds to itself pay for the renourishment projects, all of the houses on the northeast end of Folly Beach—including both of Braden's Folly's Lots—will be underwater in the next two to three decades.

Keeping Folly Beach's unique legal landscape in mind, we turn to the *Penn Central* test.

C.

The first *Penn Central* factor is the economic impact of the merger ordinance on Braden's Folly.

The United States Supreme Court has uniformly rejected the proposition that a diminution in property value, standing alone, can establish a taking. *Penn Cent.*, 438 U.S. at 131; *Andrus*, 444 U.S. at 66; *Dunes W. Golf Club*, 401 S.C. at 317–18, 737 S.E.2d at 621. Rather, the Supreme Court has advised that courts must focus "on the uses the regulations permit." *Penn Cent.*, 438 U.S. at 131; *Dunes W. Golf Club*, 401 S.C. at 317–18, 737 S.E.2d at 621. Likewise, while a comparison of property values before and after the regulation is relevant, "it is by no means conclusive." *Keystone Bituminous*, 480 U.S. at 490 (quoting *Goldblatt v. Hempstead*, 369 U.S. 590, 594 (1962)). "The extent of diminution in value is but one fact for consideration in determining whether governmental action constitutes a taking." *Dunes W. Golf Club*, 401 S.C. at 317, 737 S.E.2d at 621 (cleaned up) (citation omitted).

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[19] We specifically reference an ACOE map in the record showing that, absent any of the federally-funded beach renourishments (which started in the 1990s), the ACOE estimates the location of the mean highwater line would be in the middle of East Ashley Avenue—a staggering impact on local property owners that would result from only thirty years of unchecked erosion on Folly Beach. It may be important to recall that the ACOE does not provide federally-funded beach renourishment behind the perpetual easement line, thereby imposing all costs to restore those areas on the city and the property owners.

Here, an appraisal report commissioned by Braden's Folly found that if Lots A and B were sold separately, they were worth $508,000 more than if they were sold as a single, merged lot. Thus, Braden's Folly asserts it has lost the opportunity to obtain $508,000 in future profits. While we take issue with the appraiser's calculations,[20] we will assume for the purposes of discussion that they are accurate, and the appraiser correctly calculated the value of the Lots merged together as $2.2 million. Thus, using the takings fraction, Braden's Folly is asserting a 23% economic impact due to the merger ordinance:

$$\frac{\text{Value of property taken (Numerator)}}{\text{Value of relevant parcel (Denominator)}} = \frac{\$508{,}000}{\$2{,}200{,}000} = 23\%$$

While not insignificant, a 23% reduction in value is far less than other reductions in value found constitutional by the Supreme Court. *E.g.*, *Vill. of Euclid v. Ambler Realty Co.*, 272 U.S. 365 (1926) (75% diminution in value not a taking); *Hadacheck v. Sebastian*, 239 U.S. 394 (1915) (87.5% diminution in value not a taking).

Notably, the Supreme Court has considered a number of takings cases in which a loss of an opportunity to make future profits was at issue. *See, e.g.*, *Andrus*, 444 U.S. at 54, 66 (dealing with a prohibition on the sale of certain bird artifacts); *Mahon*, 260 U.S. at 412–13, 414–15 (involving a regulation prohibiting the

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[20] We find any reliance on the appraiser's report is questionable at best. For example, although there are also other areas of concern, the values of the Lots merged and separate were calculated using different methods, making any comparison between the results akin to comparing apples to oranges. Specifically, in finding a $508,000 difference between the Lots value if sold separately as compared to merged into a single property, the appraiser compared the *gross* proceeds of the Lots sold separately with the *net* proceeds of the Lots sold as a single unit. In comparing net proceeds to net proceeds, the difference in values of the Lots merged and separate is around $64,000—a negligible diminution in value of around 3%. *See Murr*, 137 S. Ct. at 1949 ("The expert appraisal relied upon by the state courts refutes any claim that the economic impact of the regulation is severe.").

removal of coal from underground if it would cause subsidence of human habitations aboveground). In those two cases, the Supreme Court found the key distinction was whether a regulation physically restricted the property at issue: *Mahon* involved a loss of profit opportunity accompanied by a physical restriction against the removal of the coal, whereas *Andrus* involved a loss of profit opportunity that was not accompanied by a physical restriction of the property. *See Andrus*, 444 U.S. at 65–66 & n.22 (distinguishing *Mahon*). As explained by the *Andrus* Court,

> The regulations challenged here do not compel the surrender of the artifacts, and there is no physical invasion or restraint upon them. Rather, *a significant restriction has been imposed on one means of disposing of the artifacts*. But the denial of one traditional property right does not always amount to a taking. *At least where an owner possesses a full "bundle" of property rights, the destruction of one "strand" of the bundle is not a taking, because the aggregate must be viewed in its entirety*. In this case, it is crucial that appellees retain the rights to possess and transport their property, and to donate or devise the protected birds [and bird artifacts].
>
> It is, to be sure, undeniable that the regulations here prevent the most profitable use of appellees' property. Again, however, that is not dispositive. When we review regulation, a reduction in the value of property is not necessarily equated with a taking. In the instant case, it is not clear that appellees will be unable to derive economic benefit from the artifacts; for example, they might exhibit the artifacts for an admissions charge. *At any rate, loss of future profits—unaccompanied by any physical property restriction—provides a slender reed upon which to rest a takings claim.* Prediction of profitability is essentially a matter of reasoned speculation that courts are not especially competent to perform. Further, perhaps because of its very uncertainty, the interest in anticipated gains has traditionally been viewed as less compelling than other property-related interests.

444 U.S. at 65–66 (emphasis added) (internal citations omitted). Here, the merger ordinance is not accompanied by any physical restriction on the Lots.

Moreover, as Folly Beach has repeatedly conceded, even under the merger ordinance, Braden's Folly remains able to rent out the houses on the Lots separately and continue bringing in revenue, with the average gross receipts for the

Lots amounting to approximately $117,000 per year. *See Penn Cent.*, 438 U.S. at 131 (stating courts should focus "on the uses the regulations permit," rather than what is not permitted); *Dunes W. Golf Club*, 401 S.C. at 317–18, 737 S.E.2d at 621 (same); *cf. Murr*, 137 S. Ct. at 1949 ("They can use the property for residential purposes, including an enhanced, larger residential improvement."); *Palazzolo*, 533 U.S. at 631 ("A regulation permitting a landowner to build a substantial residence on an 18-acre parcel does not leave the property 'economically idle.'" (citation omitted)); *Quinn*, 862 F.3d at 442 ("Quinn can still build homes on his land; the [Merger] Provision only requires that the development be less dense than he had hoped."); *Beard v. S.C. Coastal Council*, 304 S.C. 205, 208, 403 S.E.2d 620, 622 (1991) (finding a setback provision did not effect a taking in part because the property owners could still sell the property and utilize the rental units on the property).

Finally, it is legally significant that, during the pendency of this lawsuit, Bonner—a buyer who was unquestionably aware of the amended merger ordinance and its impact on the Lots—offered Braden's Folly its full asking price of $2.55 million for both Lots. Bonner diligently pursued the sale, emailing and calling Braden's Folly daily for several weeks but receiving no response to his inquiries or full-priced offer. Given those facts, it is absurd to suggest the merger ordinance had an unconstitutionally negative economic impact on the Lots. After all, Braden's Folly was offered its full asking price for the Lots. It simply chose not to accept that offer, perhaps due to its realtor's advice to continue marketing the Lots solely to "go after the city. You might get your money and not have to sell."

For all of these reasons, it is our opinion the economic impact factor weighs heavily in favor of finding there has been no compensable taking.

D.

We next turn to the second *Penn Central* factor: the extent to which the merger ordinance interfered with Braden's Folly's investment-backed expectations.

"In evaluating a regulatory takings claim, the purpose of consider[ing] . . . investment-backed expectations is to limit recoveries to property owners who can demonstrate that they [invested in] their property in reliance on a state of affairs that did not include the challenged regulatory regime." *Columbia Venture, L.L.C. v. Richland Cnty.*, 413 S.C. 423, 449, 776 S.E.2d 900, 914 (2015) (internal alteration and quotation marks omitted) (citation omitted). "A reasonable investment-backed expectation must be more than a unilateral expectation or an

abstract need." *Ruckelshaus v. Monsanto Co.*, 467 U.S. 986, 1005 (1984) (quoting *Webb's Fabulous Pharmacies, Inc. v. Beckwith*, 449 U.S. 155, 161 (1980)) (internal quotation marks omitted); *Penn Cent.*, 438 U.S. at 130 ("[T]he submission that [a property owner] may establish a 'taking' simply by showing that they have been denied the ability to exploit a property interest that they heretofore had believed was available for development is quite simply untenable."). Rather, courts will evaluate a property owner's reasonable, investment-backed expectations through an objective lens. *Dunes W. Golf Club*, 401 S.C. at 320, 737 S.E.2d at 622; *Columbia Venture*, 413 S.C. at 449, 776 S.E.2d at 914 ("The subjective expectations of the claimant are irrelevant. The critical question is what a reasonable owner in the claimant's position should have anticipated." (internal alteration marks omitted) (quoting *Chancellor Manor v. United States*, 331 F.3d 891, 904 (Fed. Cir. 2003)) (internal citation omitted)).

For example, courts in the past have looked to a number of objective factors, including: (1) whether the challenged regulation interferes with the existing use of the property;[21] (2) the degree to which the property's general locale is subject to

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[21] *Penn Cent.*, 438 U.S. at 136 (noting the regulation at issue did not interfere with the present use of the property: "[The property's] designation as a landmark not only permits but contemplates that appellants may continue to use the property precisely as it has been used for the past 65 years . . . . So the law does not interfere with what must be regarded as Penn Central's primary expectation concerning the use of the parcel."); *Esposito*, 939 F.2d at 170 ("[W]e note that the courts have traditionally looked to the existing use of property as a basis for determining the extent of interference with the owner's primary expectation concerning the use of the parcel. We find that the Act permitted the . . . plaintiffs to continue their existing use of their property and dwellings in the same manner that they could have used the property prior to its enactment. The plaintiffs, in fact, have stipulated that 'none of the Plaintiffs . . . have discontinued use of their property, as it was used before enactment of the subject Statutes.' They continued to retain the fundamental incidents of ownership, including the right to possess the property, exclude others from it, alienate the property and continue to use it for residential and recreational purposes; and *they were significantly diminished only in their discretion to rebuild a structure in the speculative event of its virtually complete destruction*." (emphasis added) (cleaned up)); *Carolina Chloride*, 394 S.C. at 173, 714 S.E.2d at 878 (stating that "continuation of the existing use of the property is the property owner's primary expectation when considering an owner's investment-backed expectations for the property" (quoting *Byrd*, 365 S.C. at 662,

regulation;[22] and (3) whether the property owner acquired the land after the regulation went into effect.[23] Likewise, in cases involving merger ordinances,

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620 S.E.2d at 82) (internal quotation marks omitted)); *Dunes W. Golf Club*, 401 S.C. at 319, 737 S.E.2d at 622 (finding the fact that the property had always been used as a golf course necessarily meant the owner's primary expectation was to continue using the property as a golf course, not to build houses on the land).

[22] *Lucas*, 505 U.S. at 1035 (Kennedy, J., concurring) (stating coastal property engenders a greater degree of concern due to the fragile ecosystem, and therefore the State may be permitted to go further in regulating development and use than in other types of environments); *Murr*, 137 S. Ct. at 1948 ("The land's location along the river is also significant. Petitioners could have anticipated public regulation might affect their enjoyment of their property, as the Lower St. Croix was a regulated area under federal, state, and local law long before petitioners possessed the land."); *Columbia Venture*, 413 S.C. at 449, 776 S.E.2d at 914 ("In examining the reasonable expectations prong, the level of industry regulation is a pertinent but not determinative factor." (quoting *Chancellor Manor*, 331 F.3d at 906) (internal quotation marks omitted)); *Dunes W. Golf Club*, 401 S.C. at 319, 737 S.E.2d at 622 (finding the property owner's expectations were unreasonable in part because they "did not take into account the wetlands, easements, or substantial changes to the [property] that would be required" to bring those expectations to fruition); *cf. Concrete Pipe & Prods. of Cal., Inc. v. Constr. Laborers Pension Tr. for S. Cal.*, 508 U.S. 602, 645 (1993) ("Those who do business in [a] regulated field cannot object if the legislative scheme is buttressed by subsequent amendments to achieve the legislative end.") (citation omitted)).

[23] *Palazzolo*, 533 U.S. at 633, 634 (O'Connor, J., concurring) ("Further, the regulatory regime in place at the time the claimant [invests in] the property at issue helps to shape the reasonableness of those expectations. . . . For example, the nature and extent of permitted development under the regulatory regime vis-à-vis the development sought by the claimant may also shape legitimate expectations without vesting any kind of development right in the property owner."); *Murr*, 137 S. Ct. at 1949 ("Petitioners cannot claim that they reasonably expected to sell or develop their lots separately given the regulations which predated their acquisition of both lots."); *Columbia Venture*, 413 S.C. at 449, 776 S.E.2d at 914 (explaining a property owner's reasonable investment-backed expectations are defined at the time he makes the relevant investment in the property, and any regulatory regime in place at that time informs the scope of those expectations; but also stating that

courts may also find objective indicia of a property owner's investment-backed expectations by examining the sizes and shapes of the properties to be merged. *Cf. Murr*, 137 S. Ct. at 1948 (noting it was reasonable to treat two adjacent lots as merged because they were contiguous along their longest edge, and their narrow shape and topography made it "reasonable to expect their range of potential uses might be limited").

Here, there is some objective evidence that Braden's Folly's investment-backed expectation in developing Lot B was to sell one of its Lots separately from the other. Braden's Folly invested in its Lots in 2006 and 2007 when it redeveloped the house on Lot A and built a new super-beachfront house on Lot B.[24] At that time, the merger ordinance did not exist, and property owners along East Ashley Avenue freely developed and sold their A and B lots independently from one another. Objectively, it would have been reasonable for Braden's Folly to have expected to be able to do the same. *See Murr*, 137 S. Ct. at 1949; *Palazzolo*, 533 U.S. at 633, 634 (O'Connor, J., concurring); *Columbia Venture*, 413 S.C. at 449, 776 S.E.2d at 914.[25] Additionally, Braden's Folly attempted to set up a

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while "timing and sequence are quite probative and material to [the] analysis, . . . they are simply not dispositive" (citations omitted)).

[24] There is language in one of our prior cases that could indicate a property owner's investment-backed expectations are defined only at the time he purchases the property. *See, e.g.*, *Columbia Venture*, 413 S.C. at 449, 776 S.E.2d at 914 ("A property owner's reasonable investment-backed expectations are defined at the time the property is purchased." (quoting *Norman v. United States*, 63 Fed. Cl. 231, 267 (2004))). However, that language should not be read out of context: in that case, the owner's investment in the property was made when he purchased the property. Here, the relevant investment was made in the property when Braden's Folly redeveloped the land. In other words, investment-backed expectations are set at the time the property owner actually invests in the property, for example, at the time he purchases it or at some other future point in time. However, as we explain below, the reasonableness of those expectations may be impacted by future events occurring after the time the investment is made.

[25] Likewise, Folly Beach affirmatively issued building permits for super-beachfront construction, which could have increased Braden's Folly's expectation that developing Lot B was reasonable. *But cf. Palazzolo*, 533 U.S. at 633, 634 (O'Connor, J., concurring) ("[T]he nature and extent of permitted development

complicated system of easements between Lots A and B to ensure both properties had road and beach access as well as room for a septic system. There would have been no reason for Braden's Folly to establish the easements if it did not intend to sell one of the Lots.

However, there are also a number of objective factors that weigh against finding Braden's Folly's reasonable, investment-backed expectation was solely to be able to sell the Lots separately from one another. First, Braden's Folly has used these Lots for family vacations and as rental properties for several decades. The "primary expectation" would seemingly be to continue those uses—something with which the merger ordinance does not interfere. *See Penn Cent.*, 438 U.S. at 136; *Esposito*, 939 F.2d at 170; *Dunes W. Golf Club*, 401 S.C. at 319, 737 S.E.2d at 622; *Carolina Chloride*, 394 S.C. at 173, 714 S.E.2d at 878.

Second, we find significant Braden's Folly's delay in attempting to sell the Lots after their redevelopment. As explained above, the housing market collapsed around the time construction on the Lots was completed, which made selling one of the Lots financially unfeasible for several years. However, once the market recovered, Braden's Folly waited many years to put the Lots on the market, continuing to use them both as family vacation homes and rental properties. Moreover, even after the houses were placed on the market, Braden's Folly made little to no effort to actually sell either property.[26] While Braden's Folly may have initially intended to sell one of the Lots following construction, that expectation apparently changed over time.[27]

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under the regulatory regime vis-à-vis the development sought by the claimant may also shape legitimate expectations *without vesting any kind of development right in the property owner*." (emphasis added)).

[26] For example, although the houses were continuously listed for nearly three years beginning in February 2018, Braden's Folly received only two offers over the first two-and-a-half years—one in August 2019, and one in October 2020. Nonetheless, Braden's Folly never lowered the listing prices for the Lots, instead raising the listing price for Lot B by $500,000 in December 2020.

[27] At three different places in the record, one of the Braden brothers testified specifically about the changed expectation regarding the Lots, stating:

(1) "Eventually, the real estate market rebounded and offers were

Third, even assuming Braden's Folly's investment-backed expectation remained the same, the government cannot be held hostage by a property owner's expectations indefinitely when an owner refuses to implement those expectations. Rather, at some point, the government must have a right to regulate local properties in a measured fashion without running afoul of the takings doctrine, even if its regulation runs contrary to an owner's unspoken and unimplemented investment-backed expectations. *See Columbia Venture*, 413 S.C. at 449, 776 S.E.2d at 914 (explaining the property owner's subjective expectations and efforts to implement those expectations are irrelevant, and courts must instead focus on what a reasonable, similarly situated property owner should have anticipated (quoting *Chancellor Manor*, 331 F.3d at 904)).

This is particularly true when, as here, the government regulation affects properties in a dynamic, fragile environment. Coastal areas are some of the most heavily regulated areas in the state due to their inherent vulnerability and volatility. Nonetheless, at the time Lot B was developed and Braden's Folly initially formulated its investment-backed expectation, Folly Beach had enacted little to no regulations protecting the beach from over-development, including setback requirements or prohibitions on seawalls. In terms of beach regulation, Folly Beach was an outlier compared to surrounding coastal towns.

Over a decade later, when Braden's Folly half-heartedly attempted to actually implement its purported investment-backed expectation and placed the Lots on the market, there had been a number of events that impacted the reasonableness of Braden's Folly's initial expectation. More specifically, the need for regulation in Folly Beach's coastal areas had become evident. The frequency of large-scale beach renourishments steadily increased due to the super-beachfront development, objectively indicating that development was not sustainable. Of more concern, the

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available for us to sell *but we decided to continue renting and vacationing at the houses instead*." (Emphasis added).

(2) "[I]t was our intention to own one and sell one. When that didn't happen, then we went into rental, and that then kind of became sort of the combination of usage, where it was personal and rental, and it sort of bounced up and down based upon the different ages of [our] children and the locations of [our family members]."

(3) "There was a lot of family resistance [to selling the Lots]."

super-beachfront houses and their seawalls created a public nuisance via the blue blob areas. Once it became apparent that the developed B lots were the source of these flooded areas, it likewise became objectively unreasonable for Braden's Folly to expect to own Lot B with no restrictions or regulations impacting its ownership, including its ability to alienate the property in whatever manner it chose. While it is true the unreasonableness of Braden's Folly's expectations did not fully manifest until after it invested in the redevelopment of the Lots, we harken back to Braden's Folly's inexplicable delay in implementing its investment-backed expectation. That delay was entirely within Braden's Folly's control. We find it objectively unreasonable for Braden's Folly to see the creation and worsening of a public nuisance created by super-beachfront development and *not* expect the city to regulate in some fashion to attempt to fix the problem. *See Lucas*, 505 U.S. at 1035 (Kennedy, J., concurring) ("I agree with the Court that nuisance prevention accords with the most common expectations of property owners who face regulation . . . ."); *Quinn*, 862 F.3d at 442 (holding a merger ordinance did not constitute an unconstitutional taking even though it interfered with the owner's investment-backed expectations to develop the affected properties; explaining the owner could still implement his expectations, just in a less dense manner than he had initially envisioned).

Fourth, we find the purported creation of easements between Lots A and B does not weigh heavily in favor of Braden's Folly's investment-backed expectation. As briefly alluded to in note 15, *supra*, the easements were created when "Mark Braden granted *himself*" the rights to beach access for Lot A and road access and septic lines for Lot B. (Emphasis added.) However, Braden's Folly could not create those easements while owning both the dominant and servient estates, so the easements do not legally exist. *Windham v. Riddle*, 370 S.C. 415, 419, 635 S.E.2d 558, 560 (Ct. App. 2006) (explaining an easement cannot exist where both the purported servient and dominant estates are owned by the same person (citing *Haselden v. Schein*, 167 S.C. 534, 539, 166 S.E. 634, 635 (1932))), *aff'd*, 381 S.C. 192, 672 S.E.2d 578 (2009); *cf.* 12 S.C. Jur. *Easements* § 32 (Sept. 2022 Update) ("Courts generally have held that upon acquisition of the dominant tenement and the servient tenement by the same person at the same time, an easement is extinguished by merger."). Thus, while Braden's Folly argues the attempt to create the easements showed its investment-backed expectation to separately sell the Lots, because the easements do not exist, their attempted creation does not impact this factor of the *Penn Central* test or cause this factor to weigh in favor of Braden's Folly.

Fifth and finally, the size, shape, and orientation of the Lots provides objective indicia that Braden's Folly's expectation to develop and sell Lot B was unreasonable. Specifically, most of Lot B is subject to the perpetual easement for renourishment, leaving a very small footprint in which a house could be built, far below the minimum lot size requirement in Folly Beach's zoning ordinances. However, Lot B is contiguous with another undersized (albeit slightly larger) parcel—Lot A—owned by the same entity. Combining the two Lots makes a single "normal" sized lot that many other property owners living on East Ashley Avenue have used to develop one single-family home. Thus, the small size of the Lots provides some objective evidence that Braden's Folly's intent to develop and sell a separate single-family residence was objectively unreasonable. *See Murr*, 137 S. Ct. at 1948; *see also id.* at 1947 ("[L]ot lines are themselves creatures of state law, which can be overridden by the State in the reasonable exercise of its power.").

Accordingly, in sum, there are some facts that weigh in favor of finding Braden's Folly's investment-backed expectation was reasonable and some that weigh in favor of finding its expectation was unreasonable. We therefore find this factor of the *Penn Central* balancing test does not weigh in favor of either party. *See Palazzolo*, 533 U.S. at 634, 635 (O'Connor, J., concurring) (explaining that "[I]nvestment-backed expectations, though important, are not talismanic under *Penn Central*"; and counseling against giving investment-backed expectations "exclusive significance" lest the State wield too much power, or the property owner "reap windfalls and an important indicium of fairness is lost"); *Columbia Venture*, 413 S.C. at 454, 776 S.E.2d at 917 ("[D]eveloping real estate carries with it certain financial risks, and it is not the government's duty to underwrite this risk as an extension of obligations under the takings clause." (quoting *Taub v. City of Deer Park*, 882 S.W.2d 824, 826 (Tex. 1994))).

E.

Finally, we turn to the third *Penn Central* factor and analyze the character of the government action, specifically, whether Folly Beach's merger ordinance is akin to an eminent domain action.

Regulatory takings cases "aim[] to identify regulatory actions that are functionally equivalent to the classic taking in which government directly appropriates private property or ousts the owner from his domain." *Lingle*, 544 U.S. at 539. A regulation will be more readily found to amount to an unconstitutional taking if it causes "private property [to be] pressed into some form of public service under the

guise of mitigating serious public harm." *Lucas*, 505 U.S. at 1018; *Penn Cent.*, 438 U.S. at 124. However, if the regulation is merely a "public program adjusting the benefits and burdens of economic life to promote the common good," the regulation will pass constitutional muster. *Penn Cent.*, 438 U.S. at 124, 125 (stating that "[z]oning law[s] are, of course, the classic example" of such a public program). It therefore becomes important for a court to consider "the magnitude or character of the burden a particular regulation imposes upon private property rights" as well as "how any regulatory burden is distributed among property owners." *Lingle*, 544 U.S. at 542 (emphasis omitted) ("In answering [the takings] question, we must remain cognizant that 'government regulation—by definition—involves the adjustment of rights for the public good . . . .'" (quoting *Andrus*, 444 U.S. at 65)); *see also Penn Cent.*, 438 U.S. at 133 ("Legislation designed to promote the general welfare commonly burdens some more than others.").

In *Murr*, the Supreme Court discussed the character of merger ordinances extensively, stating:

> The merger provision here is likewise a legitimate exercise of government power, as reflected by its consistency with a long history of state and local merger regulations that originated nearly a century ago. Merger provisions often form part of a regulatory scheme that establishes a minimum lot size in order to preserve open space while still allowing orderly development.
>
> When States or localities first set a minimum lot size, there often are existing lots that do not meet the new requirements, and so local governments will strive to reduce substandard lots in a gradual manner. The regulations here represent a classic way of doing this: by implementing a merger provision, which combines contiguous substandard lots under common ownership, alongside a grandfather clause, which preserves adjacent substandard lots that are in separate ownership. Also, as here, the harshness of a merger provision may be ameliorated by the availability of a variance from the local zoning authority for landowners in special circumstances.
>
> Petitioners' insistence that lot lines define the relevant parcel ignores the well-settled reliance on the merger provision as a common means of balancing the legitimate goals of regulation with the reasonable expectations of landowners. Petitioners' rule would frustrate municipalities' ability to implement minimum lot size regulations by

> casting doubt on the many merger provisions that exist nationwide today.
>
> . . . .
>
> . . . Finally, the [character of the] governmental action [(i.e., the merger ordinance)] was a reasonable land-use regulation, enacted as part of a coordinated federal, state, and local effort to preserve the river and surrounding land.

137 S. Ct. at 1947–48, 1949–50 (internal citations omitted); *see also Quinn*, 862 F.3d at 441, 443, 445 (reaching a similar holding for similar reasons: "Local governments require flexibility to expand services like sewer in response to community needs; those governments also must be able to control the density of development in order to prevent overcrowding in schools, clogging of streets, overload on sewer facilities, degradation of the environment, and a host of other concerns. As recognized in *Murr*, adding a highly dubious constitutional overlay to the already complex mixture of legal requirements risks making land use planning a well-nigh impossible undertaking.").

Here, Folly Beach's merger ordinance does not unfairly single out Braden's Folly's Lots. Rather, as discussed by the *Murr* Court, merger ordinances have long been employed as a tool to regulate lot sizes. Like in *Murr*, the merger ordinance here is "a reasonable land-use regulation, enacted as part of a coordinated . . . effort to preserve the [beach] and surrounding land." 137 S. Ct. at 1949–50.[28]

While Braden's Folly was slightly burdened by the merger ordinance, it in turn will "benefit greatly from the restrictions that are placed on others." *Keystone Bituminous*, 480 U.S. at 491. Folly Beach and its witnesses set forth in detail the advantages to local beachfront property owners and the public at large should the city unwind the super-beachfront development. The most important of the benefits to local property owners is the continued existence of federal funding for beach

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[28] We find it significant that the quote in the preceding sentence is the entirety of the *Murr* Court's analysis of this *Penn Central* factor: the Supreme Court was so dismissive of the possibility that a merger ordinance could enact a taking that it addressed the character of the government action in a single sentence in its opinion. That cursory analysis speaks volumes as to the strength of its finding as to this factor of the *Penn Central* test.

renourishment, which in turn (1) protects the A and B lots—particularly given that *all* of the lots would be underwater at this point if it were not for the continual beach renourishment; and (2) avoids property owners paying higher taxes if federal funding is extinguished and Folly Beach must pay for the renourishments with local funds alone.

Accordingly, we find the character of the merger ordinance is not akin to a classic eminent domain action. Rather, in light of the potential public costs of continuing unchecked super-beachfront development, we reject the argument that Folly Beach's merger ordinance constitutes anything but responsible land use policy—one that is generally applicable and widely accepted nationwide. *See, e.g.*, *Murr*, 137 S. Ct. at 1949–50; *Quinn*, 862 F.3d at 443. We thus hold this factor of the *Penn Central* test weighs in favor of finding the merger ordinance did not effect a taking of the Lots.

F.

After applying the *Penn Central* test, we find two factors weigh strongly in favor of Folly Beach: the economic impact and the character of the government action. As to the third factor, we find there is competing evidence regarding whether the merger ordinance interfered with Braden's Folly's reasonable, investment-backed expectation. We therefore conclude the third factor is a neutral factor that does not weigh in favor of either party. As a result, we hold the *Penn Central* balancing test overall weighs in favor of Folly Beach, and the merger ordinance did not effect an unconstitutional taking of Braden's Folly's Lots.

V.

Braden's Folly's super-beachfront house is one of a handful in Folly Beach that are unintentionally threatening the continued existence of the beach as a whole. In response, Folly Beach amended its merger ordinance to require the combination of jointly-held, undersized, contiguous lots that abut the beach. That merger ordinance is but one part of a coordinated effort by the city to protect the beach and the federal funding that keeps the beach from eroding away entirely.

In accordance with every other jurisdiction in the country that has addressed the constitutionality of merger ordinances, we find Folly Beach's ordinance is a reasonable land-use regulation. It is true that Braden's Folly is slightly burdened by the merger ordinance in that the ordinance restricts one method by which Braden's Folly could alienate its property. However, despite the impact of the

merger ordinance, Braden's Folly generally retains a near-full "bundle of sticks" incident to its ownership of the Lots: it may continue to use the properties in the same manner it has for decades, it may alienate the properties as a single unit, and it may exclude others from the properties as it sees fit. *See Andrus*, 444 U.S. at 65–66. Moreover, any economic impact on the value of the Lots appears to be *de minimis*. We therefore hold the merger ordinance did not unconstitutionally take Braden's Folly's property without just compensation. As a result, we reverse the circuit court's entry of summary judgment in favor of Braden's Folly and remand to the circuit court to enter judgment for Folly Beach.

REVERSED AND REMANDED.

BEATTY, C.J., FEW, JAMES, JJ., and Acting Justice Kaye G. Hearn, concur.

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533 S.E.2d 886

Teresa HARKINS, Appellant,
v.
GREENVILLE COUNTY, Respondent.
J.O.D., Inc., Appellant,
v.
Greenville County, Respondent.
R.P. Social Club, Inc., Appellant,
v.
Greenville County, Respondent.
Runaway Entertainment, Inc., d/b/a The Landing Strip, Appellant,
v.
Greenville County, Respondent.
Malcolm Johnson and Dawn Lewis, individually and d/b/a Taboo's, Appellants,
v.
Greenville County, Respondent.

No. 25112.

Supreme Court of South Carolina.

Heard September 21, 1999.

Filed April 24, 2000.

Refiled June 12, 2000.

[340 S.C. 611]

William G. Yarborough, III and Denise Campbell Yarborough, both of Ashmore & Yarborough, of Greenville; and Suzanne E. Coe, of Coe & Turnage, LLC, of Greenville, all, for appellants.

W. Howard Boyd, Jr. and Ronald K. Wray, II, of Gibbes, Gallivan, White & Boyd, PA, of Greenville, for respondent.

ORDER

The opinion heretofore filed in this case, Opinion No. 25112, filed April 24, 2000 is withdrawn and the attached opinion is substituted in its place. The Conclusion section of the initial opinion has been clarified so that only the licensing portion of the Greenville County Ordinance is declared unconstitutional. Respondent's petition for rehearing is denied.

/s/ Ernest A. Finney, Jr., C.J. /s/ Jean H. Toal, J. /s/ James E. Moore, J. /s/ John H. Waller, Jr., J. /s/ E.C. Burnett, III, J.

TOAL, Justice:

Appellants The Landing Strip, Taboo's, Harkins, J.O.D., Nepal's, and R.P. Social Club ("the Adult Businesses") challenged the constitutionality of a Greenville County ("the County") permitting and zoning ordinance. The trial court found the ordinance constitutional and the sexually oriented businesses have appealed. We reverse.

FACTUAL/PROCEDURAL BACKGROUND

In February 1995, the County enacted Greenville County Zoning Ordinance No. 2673 ("the Ordinance") regulating the location of all sexually oriented businesses. The Ordinance requires sexually oriented businesses to obtain a permit from

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the County's zoning administrator in order to operate. Furthermore, the Ordinance controls where sexually oriented businesses can locate. The Adult Businesses are all sexually oriented businesses located in zoned areas that do not permit adult uses.

The County sent each Adult Business a letter informing them they were in violation of the Ordinance and had one year to comply. At the end of that year, none of the Adult Businesses had complied with the Ordinance and the County ordered them closed. The Adult Businesses then filed suit claiming the Ordinance is unconstitutional and sought injunctive relief against the County. The County counterclaimed

seeking an injunction requiring the Adult Businesses to comply with the Ordinance.

At trial, the Adult Businesses argued the Ordinance is an unconstitutional prior restraint because it fails to provide for prompt judicial review. Also, the Adult Businesses argued that the Ordinance impermissibly zoned them out of the County. The Adult Businesses supported this argument with expert testimony that only four to five S-1 sites were available in the County for sexually oriented businesses to locate.

The County responded by pointing out that the Ordinance required a permit to be issued within 30 days of the application unless one of seven specified conditions existed. The County argued that this time limit provided for prompt judicial review because if the permit was not issued within the 30 days, the sexually oriented business could seek relief from the court system. The County also presented expert testimony showing fourteen available S-1 sites. The expert also estimated that there were "a couple of hundred" sites available in the unzoned portion of the County.

The trial court ruled for the County on all issues. Initially, the trial court determined over one hundred sites existed for relocation in the unzoned portion of the County. Furthermore, the trial court found nine S-1 sites existed in the County where the Adult Businesses could relocate. Based on these findings, the trial court concluded the Adult Businesses were not impermissibly zoned out of the County.

The trial court also found the Ordinance was not an unconstitutional prior restraint because the zoning administrator did

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not have unbridled discretion in granting or denying a permit. Also, the trial court ruled that the relatively brief 30 day period between the permit application and decision by the zoning administrator guaranteed prompt judicial review.

The Adult Businesses appealed and the following issues are before the Court:

> (1) Did the trial court err in finding the Ordinance was not an unconstitutional prior restraint on speech?
>
> (2) Did the trial court err in finding the Ordinance was a reasonable time, manner, and place restriction because there were locations both in the zoned and unzoned areas of the County where the Adult Businesses could relocate?

LAW/ANALYSIS

Our United States Supreme Court has held that businesses providing non-obscene, sexually explicit material are entitled to protection by the First and Fourteenth Amendment. *See Young v. American Mini Theatres, Inc.*, 427 U.S. 50, 96 S.Ct. 2440, 49 L.Ed.2d 310 (1976); *City of Renton v. Playtime Theatres, Inc.*, 475 U.S. 41, 106 S.Ct. 925, 89 L.Ed.2d 29 (1986); *see also Barnes v. Glen Theatre, Inc.*, 501 U.S. 560, 111 S.Ct. 2456, 115 L.Ed.2d 504 (1991) (recognizing that nude dancing also receives First Amendment protection). However, the Supreme Court has also recognized sexually oriented businesses may have negative secondary effects, such as an increase in crime, on their surrounding communities. *Young*, 427 U.S. at 68, 96 S.Ct. at 2452-53. In light of these secondary effects, the Supreme Court has allowed local governments to regulate sexually oriented businesses, not based on the content of the speech, but as a response to their negative impact on the community. *Id.* Most often, local governments have chosen to use zoning restrictions and licensing requirements as the tools to balance free speech concerns with the regulation of secondary effects.

Local governments can enact zoning laws based on their police power to protect the health, safety, and welfare of the community. *See, e.g.*, S.C.Code Ann. § 5-23-10 (1976); S.C.Code Ann. § 6-7-10 (1976). Zoning laws that have the effect of

restricting freedom of expression without regard to

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the content of the speech are referred to as "content neutral" laws. *Renton,* at 46-47, 106 S.Ct. at 928. Zoning ordinances merely restricting the location of adult businesses without banning them altogether are considered content neutral as long as they are based on their prevention of the harmful secondary effects the Supreme Court has noted these sexually oriented businesses may cause. *Id.* Since these zoning laws are considered content neutral, they are evaluated as "time, place, and manner" regulations for purposes of determining their validity under the First Amendment. *Id.* Permissible time, place, and manner restrictions are justified by a substantial governmental interest unrelated to free speech and allows for adequate alternative avenues of communication of the sexually explicit material. *Id.* Therefore, sexually oriented business regulations will be upheld if they are designed to serve the substantial governmental interest of preventing harmful secondary effects and they allow for reasonable avenues of communication. *Id.*

Based on their police powers described above, local governments may also impose licensing requirements on adult businesses. However, when a municipality imposes licensing requirements on only businesses which retail a certain kind of speech, such as non-obscene, sexually explicit speech, serious questions as to the validity of the licensing requirements arise. *See FW/PBS, Inc. v. City of Dallas,* 493 U.S. 215, 225, 110 S.Ct. 596, 604, 107 L.Ed.2d 603 (1990). In order not to offend the First Amendment, such licensing regulations must satisfy two tests: (1) the regulation must impose adequate standards for officials to apply in rendering a decision as whether to grant, deny, or revoke a license; and (2) the regulation must also impose procedural safeguards. *Id.* at 225-26, 110 S.Ct. at 605.

The County attempts to use both forms of regulations of businesses retailing sexually explicit materials: zoning restrictions based on location and imposition of licensing requirements. The Ordinance in this case is basically a duplicate of the Richland County ordinance this Court analyzed in both *Centaur, Inc. v. Richland County,* 301 S.C. 374, 392 S.E.2d 165 (1990) and *Rothschild v. Richland County Bd. of Adjustment,* 309 S.C. 194, 420 S.E.2d 853 (1992). Those cases focused mainly on whether the Richland County ordinance was

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a proper time, place, and manner zoning restriction. In regards to the licensing requirement, *Centaur* only analyzed whether the ordinance imposed adequate standards for officials to apply in rendering a decision as whether to deny, suspend, or revoke a license. However, as *Centaur's* footnote 4 makes clear, this Court did not discuss whether the licensing requirement met procedural safeguards so as to be constitutional.

I. THE COUNTY'S ORDINANCE AS AN UNCONSTITUTIONAL PRIOR RESTRAINT

The Adult Businesses argue that the Ordinance's licensing requirement operates as an unconstitutional prior restraint on speech because it fails to impose adequate procedural safeguards. We agree.

The Adult Businesses base their arguments on *FW/PBS, Inc. v. City of Dallas,* 493 U.S. 215, 110 S.Ct. 596, 107 L.Ed.2d 603 (1990). In *FW/PBS,* the Supreme Court struck down a Dallas licensing scheme as being an impermissible prior restraint on protected speech. In finding the permitting scheme improper, the U.S. Supreme Court outlined a two prong analysis:

> [T]he licensor must make the decision whether to issue the license within a specified and reasonable time period during which the status quo is maintained, and there must be the possibility of prompt judicial

> review in the event that the license is erroneously denied.

Id. at 228, 110 S.Ct. at 606. The Supreme Court struck down the Dallas scheme because it failed to require the licensor to make the decision whether to issue the license "within a specified and reasonable time period." The *FW/PBS* opinion did not address the second prong of "prompt judicial review."

A. THE ADMINISTRATIVE DECISION

In regards to the first prong of the Supreme Court's test, the Ordinance differs significantly from the Dallas ordinance found unconstitutional in *FW/PBS*. Under the Ordinance, the County Zoning Administrator has 30 days from the date of the application to issue a permit to a sexually oriented business. Unlike the unconstitutional Dallas ordinance, all

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necessary inspections of the Adult Business applicant must be completed within 21 days of the application. Therefore, 30 days is the longest period of time that a sexually oriented business permit applicant would have to wait for the County's zoning administrator's decision.

However, the lower court failed to discuss the procedure for appealing a decision by the County zoning administrator. Before appealing to the circuit court, the Adult Businesses must exhaust all administrative remedies. *See generally Garris v. Governing Bd. of South Carolina Reinsurance Facility,* 333 S.C. 432, 511 S.E.2d 48 (1998). Since the Ordinance fails to proscribe any special method for appealing a permit denial by the zoning administrator, the standard process for appealing a zoning administrator's decision would apply. The record does not contain the Greenville Ordinances controlling appeals from zoning administrator decisions. Furthermore, this Court cannot take judicial notice of such local ordinances. *Kincaid v. Landing Dev. Corp.,* 289 S.C. 89, 344 S.E.2d 869 (Ct.App.1986). Without those ordinances, it is impossible to know whether the zoning administrator's decision is immediately appealable to the circuit court, or whether the zoning administrator's decision must first be heard by a board of zoning appeals in order to exhaust all administrative remedies. In any event, it is impossible to determine the full time period necessary to reach a final administrative decision.

Since the ordinances governing appeals from the zoning administrator are not part of the record on appeal, we affirm the lower court's decision on this issue in favor of the County. The Adult Businesses failed to include these ordinances in the record on appeal. The Adult Businesses, as the appellant in this issue, have the burden of presenting this Court with an adequate record. *Goode v. St. Stephens United Methodist Church,* 329 S.C. 433, 446-47, 494 S.E.2d 827, 834 (Ct.App.1997). Without the necessary County ordinances, this Court cannot determine the time period between the initial permit application and a final appealable administrative decision.

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B. PROMPT JUDICIAL REVIEW

The Adult Businesses argue that the trial court erred in finding that mere access to the state court system satisfies *FW/PBS's* requirement of "prompt judicial review." We agree.

Prior to the *FW/PBS* decision, prompt judicial review required a final judicial determination on the merits. In *Freedman v. Maryland,* 380 U.S. 51, 59, 85 S.Ct. 734, 739, 13 L.Ed.2d 649 (1965), the Supreme Court stated:

> Any restraint imposed *in advance of a final judicial determination* on the merits must similarly be limited to preservation of the status quo for the shortest fixed period compatible with sound judicial resolution ... [T]he procedure must ... assure *a prompt final judicial decision,* to

> minimize the deterrent effect of an interim and possible erroneous denial of a license. (Emphasis added).

However, since the *FW/PBS* decision, the federal circuits have split on retaining the "final judicial determination on the merits" requirement as an element of prompt judicial review. This split occurred because Justice O'Connor used language in her opinion such as the "possibility of," or the provision of "an avenue for," prompt judicial review as the essence of the safeguard.[1]

The Fourth, Sixth, and Ninth Circuits hold the view that "prompt judicial review" continues to require a timely judicial

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determination on the merits. *See Baby Tam & Co. v. City of Las Vegas,* 154 F.3d 1097, 1101-02 (9th Cir.1998); *11126 Baltimore Blvd., Inc. v. Prince George's County,* 58 F.3d 988, 998-1001 (4th Cir.1995); *East Brooks Books, Inc. v. City of Memphis,* 48 F.3d 220, 225 (6th Cir.1995). These courts have reasoned that because a person always has a judicial forum available when his or her speech is allegedly encroached, "to hold that mere access to judicial review fulfills *[Freedman's* prompt review requirement] makes the safeguard itself meaningless." *Baby Tam,* 154 F.3d at 1101. As the Ninth Circuit explained in *Baby Tam:*

> The phrase "judicial review" compels this conclusion. The phrase necessarily has two elements—(1) consideration of a dispute by a judicial officer, and (2) a decision. Without consideration, there is no review; without a decision, the most exhaustive review is worthless. In baseball terms it would be like throwing a pitch and not getting a call. As legendary major league umpire Bill Klem once said to an inquisitive catcher: "It ain't nothin' till I call it." This is also true of judicial review. Until the judicial officer makes the call, it ain't nothin'.

Id. at 1101-02. In these cases a "final" determination does not refer to a court's decision becoming final through various rehearing and appellate procedures. *Id.* A final determination means that a judicial officer should make the final decision denying a license rather than an administrative officer. *Id.*

The Courts of the First, Fifth, and Seventh Circuits have approached the meaning of "prompt judicial review" differently after the *FW/PBS* case. *See TK's Video, Inc. v. Denton County,* 24 F.3d 705, 709 (5th Cir.1994); *Graff v. City of Chicago,* 9 F.3d 1309, 1324-25 (7th Cir.1993); *Jews for Jesus, Inc. v. Massachusetts Bay Transp. Auth.,* 984 F.2d 1319, 1327 (1st Cir.1993). These Circuits have found that prompt access to judicial review is sufficient, even if there is no time frame for either a hearing or a decision on the merits. *See TK's Video, Inc.,* 24 F.3d at 709; *Graff,* 9 F.3d at 1324-25.

In order to comport with the requirements of *Freedman* and *FW/PBS,* we choose to follow the Fourth, Sixth, and Ninth Circuits by requiring that the procedure provide for a

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final judicial determination within a reasonable time frame. Otherwise, the prompt judicial review requirement loses all significance since the protection afforded by judicial review is meaningful only when it can be anticipated within a brief time period. Also, whether the *FW/PBS* decision could even alter the prompt judicial review standard as set by *Freedman* is questionable due to the fractured nature of the *FW/PBS* court.

In the current case, there is no guarantee that a judicial hearing will be held or a decision will be rendered within a prescribed period of time. Because of the absence of such a guarantee, the licensing scheme fails to provide for prompt judicial review.[2] Without prompt judicial review,

the Ordinance's permitting scheme is unconstitutional. The other portions of the Ordinance are severable from those sections pertaining only to the licensing requirements for adult businesses. *See Joytime Distrib. & Amusement Co. v. State,* 338 S.C. 634, 528 S.E.2d 647 (1999). As such, those portions of the Ordinance not addressed in this opinion may still be enforced.

C. PERMIT SUSPENSIONS BY THE ZONING ADMINISTRATOR

The Adult Businesses argue on appeal that the Ordinance is unconstitutional because of the power granted to the zoning administrator to unilaterally suspend the permits of sexually oriented businesses. This issue has not been preserved for review.

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In order to be preserved for review, the lower court must rule upon the issue. *Wilder Corp. v. Wilke,* 330 S.C. 71, 497 S.E.2d 731 (1998). The trial court order does not address the power of permit suspension by the zoning administrator. Since the Adult Businesses failed to have the trial court rule on this issue, this Court will not address it on appeal.

II. THE ORDINANCE DOES NOT ZONE THE ADULT BUSINESSES OUT OF EXISTENCE

The Adult Businesses argue section 12(a) of the Ordinance unreasonably limits alternative avenues of communication because it restricts the location of sexually oriented businesses to S-1 zoned property and that not enough S-1 property is available for relocation. We disagree.

Section 12 of the Ordinance has nine subsections regulating the permissible locations of sexually oriented businesses. Section (a) states:

> A person commits a misdemeanor if he operates or causes to be operated a sexually oriented business outside of a designated S-1 district. All sexually oriented businesses shall be located within a S-1 district.

When read alone, this section appears to prevent a sexually oriented business from locating in the unzoned portion of the County. However, subsection (i) of Section 12 states:

> With the *exception of subsection (a) above,* the provisions of this ordinance shall apply to those areas of the county that are not zoned. (Emphasis added).

Subsection (i) specifically excludes the S-1 zoning requirement of subsection (a) from applying to sexually oriented businesses located in unzoned areas of the County. "In construing statutory language, the statute must be read as a whole, and sections which are part of the same general statutory law must be construed together and each one given effect." *TNS Mills, Inc. v. South Carolina Dept. of Revenue,* 331 S.C. 611, 620, 503 S.E.2d 471, 476 (1998). Also, "statutes are to be construed in favor of constitutionality, and the court will presume a legislative act is constitutionally valid unless a clear showing to the contrary is made." *Bradley v. Hullander,* 277 S.C. 327, 330, 287 S.E.2d 140, 141 (1982). When read together, subsection (i) allows sexually oriented businesses to locate

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in the County's unzoned areas while still requiring such businesses to meet the other requirements of Section 12.

Furthermore, the trial court made the factual finding that nine S-1 sites existed in the County where the Adult Businesses could relocate. An action for a declaratory judgment that a zoning ordinance is invalid is at law. *Petersen v. City of Clemson,* 312 S.C. 162, 439 S.E.2d 317 (Ct.App. 1993). In actions at law tried without a jury, the

findings of fact of the judge will not be disturbed on appeal unless found to be without evidence which reasonably supports them. *Townes Assocs. Ltd. v. City of Greenville,* 266 S.C. 81, 221 S.E.2d 773 (1976). Since the trial court found that nine S-1 sites are available for relocation, more than enough S-1 properties exist where the six Adult Businesses could relocate.

CONCLUSION

Despite finding the permitting scheme of the Ordinance at issue unconstitutional, this Court continues to view local governmental regulation of sexually oriented businesses as proper. *See Restaurant Row Associates v. Horry County,* 335 S.C. 209, 516 S.E.2d 442 (1999). As with other legislative enactments, this Court accords ordinances regulating sexually oriented businesses a presumption of constitutionality which the attacking party has the burden of overcoming. *See Centaur, Inc. v. Richland County,* 301 S.C. 374, 392 S.E.2d 165 (1990). However, when zoning ordinances invoke First Amendment concerns, we must follow the guidelines supplied by the United States Supreme Court. *Id.,* 301 S.C. at 379, 392 S.E.2d at 168. That precedent requires local municipalities to tailor their sexually oriented business regulations to address their local situations.

Richland County's zoning situation is very different from Greenville County's in that the former is wholly zoned and the later is not. Whether a sexually oriented business zoning regulation is designed to serve a substantial governmental interest and allows for reasonable avenues of communication is a question that must be answered in light of the particular situation of each locality that enacts such an ordinance. Municipalities different from Richland County cannot merely copy the ordinance at issue in *Centaur* and expect to automatically

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meet every constitutional requirement. Each governmental body must look at its own situation and do the legal work necessary to ensure that their laws comport with precedent from this Court as well as the United States Supreme Court.

Based on the foregoing, we REVERSE the trial court's decision, and hold that the permitting scheme of the Greenville County ordinance is unconstitutional.

FINNEY, C.J., MOORE, WALLER, and BURNETT, JJ., concur.

Notes:

1. The Fourth Circuit has taken the position that because of the fragmented nature of the *FW/PBS* decision, this case does not effectuate any change in the prompt judicial review requirement. The Fourth Circuit held:

Moreover, it is well settled that "[w]hen a fragmented Court decides a case and no single rationale explaining the result enjoys the assent of five Justices, `the holding of the Court may be viewed as that position taken by those Members who concurred in the judgments on the narrowest grounds.' (Citations omitted) Thus, even if Justice O'Connor's opinion in *FW/PBS* could be read as having altered the *Freedman* "prompt judicial review" factor ... because this position obviously did not gain the assent of the concurring Justices (Brennan, Marshall, and Blackmun, who made clear that they believed that all three of the *Freedman* procedural safeguards were required), *FW/PBS* could not have modified *Freedman."*

*11126 Baltimore Blvd., Inc. v. Prince George's County,*58 F.3d 988, 999 (1995).

2. We recognize that under the South Carolina Rules of Civil Procedure, municipal issues of this type are not expedited or required to be decided within a certain time frame. Other states have specific provisions in their rules of civil procedure that allow for such expedited

review. *See e.g.,* Pa. R. Civ. P. 1531(f)(1). Without such a provision, a municipality cannot guarantee that a judicial hearing will be held and a decision rendered within any specific amount of time. This procedural problem illustrates how constitutionally perilous it can be for a municipality to use a licensing scheme to regulate protected speech. Zoning schemes, although they have First Amendment concerns of their own, have met with greater success in balancing free speech concerns with the regulation of adult businesses. *See Restaurant Row Associates v. Horry County,* 335 S.C. 209, 516 S.E.2d 442 (1999); *Condor, Inc. v. Board of Zoning Appeals,* 328 S.C. 173, 493 S.E.2d 342 (1997); *Rothschild v. Richland County Bd. of Adjustment,* 309 S.C. 194, 420 S.E.2d 853 (1992); *Centaur, Inc. v. Richland County,* 301 S.C. 374, 392 S.E.2d 165 (1990).

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675 S.E.2d 776
Jeffrey HARBIT, Thomas L. Harbit, Plaintiffs, of whom Jeffrey Harbit is Appellant,
v.
CITY OF CHARLESTON, City of Charleston Planning Department, Respondents.
No. 4511.
Court of Appeals of South Carolina.
Heard January 21, 2009.
Decided February 25, 2009.
Rehearing Denied May 4, 2009.

[675 S.E.2d 778]

Thomas R. Goldstein, of North Charleston, for Appellant.

Timothy Alan Domin, of Charleston, for Respondents.

GEATHERS, J.:

In this appeal, Jeffrey Harbit (Harbit) argues that the circuit court improperly granted summary judgment in favor of the City of Charleston (the City) on several claims stemming from the City's refusal to rezone Harbit's single family residential property for limited commercial use. We affirm.

FACTS

Harbit is the owner of property located at 7 Wesley Drive, which is within the City's limits. The property is on the corner of Wesley Drive and Stocker Drive. The house at 7 Wesley Drive faces Wesley Drive with a rear entrance and driveway accessible only from Stocker Drive. Wesley Drive is a five-lane thoroughfare, connecting Folly Road to Highways 17 and 61. Stocker Drive is a purely residential street, which may be accessed from the heavier-traveled Wesley Drive.

At all times pertinent to this appeal, this property has been zoned for single family residential purposes. Harbit purchased this property in 2003 for $180,000 from Truett Nettles (Nettles). Prior to selling the property to Harbit, Nettles attempted to rezone the property for limited commercial use as an attorney's office, but the City denied his request. Harbit was aware of the City's denial of Nettles' request for rezoning when he purchased the property from Nettles in 2003.

In 2005, Harbit applied for rezoning of the Wesley Drive property based on its location within the Savannah Highway Overlay Zone (the Zone). The Zone was created as a result of a comprehensive study of land surrounding the Ashley River Bridge in Charleston.[1] Based on this study, the City developed the "Ashley Bridge District" plan, which identified the need to maintain residential communities in the Zone, despite increased commercialization. While highlighting the need to maintain residential uses in the Zone, the plan allows certain properties along Savannah Highway and Wesley Drive to be used for limited commercial purposes, including professional office use. Under the Ashley Bridge District plan, the other properties on Harbit's side of Wesley Drive within

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the Zone have been rezoned for limited commercial use.

On June 15, 2005, the City of Charleston Planning Commission (the Planning Commission) reviewed Harbit's application, at which time Harbit's counsel presented Harbit's position for rezoning the Wesley Drive property. The Planning Commission, however, voted to recommend denying Harbit's rezoning application, finding the request was in contradiction to the Ashley Bridge District plan and the overall neighborhood sentiment to retain the residential use of the structures within the area. On September 27, 2005, Charleston City Council (City Council) received the Planning Commission's recommendation and held a public hearing to address local zoning issues, including Harbit's application. Harbit's counsel was present for the City Council meeting. City Council denied Harbit's request, citing a concern over increased commercialization, loss of residential use, and the

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special location of the property at the entrance of a residential neighborhood, particularly its frontage on a purely residential street.

After City Council's denial of his application, Harbit appealed the zoning decision to the circuit court and asserted additional grounds for relief, including a request for a writ of mandamus and causes of action for due process and equal protection violations. The City filed a motion for summary judgment on all claims, which the circuit court granted. In its order, the circuit court found a writ of mandamus was inappropriate because zoning is not a ministerial act and thus cannot be mandated by the court.[2] In dismissing Harbit's claims for procedural and substantive due process, the circuit court found Harbit was provided with sufficient notice to satisfy his procedural due process rights, and because he had no prior property interest in commercial zoning, his substantive due process rights were not violated. Regarding Harbit's equal protection claim, the circuit court found City Council had a rational basis for denying Harbit's application such that Harbit was afforded equal protection of the law. It is from this order that Harbit now appeals.

STANDARD OF REVIEW

An appellate court reviews the grant of summary judgment under the same standard applied by the circuit court. *David v. McLeod Reg'l Med. Ctr.*, 367 S.C. 242, 247, 626 S.E.2d 1, 3 (2006). The circuit court should grant summary judgment "if the pleadings, depositions, answers to interrogatories, and admissions on file, together with the affidavits, if any, show that there is no genuine issue as to any material fact and that the moving party is entitled to a judgment as a matter of law." Rule 56(c), SCRCP; *Russell v. Wachovia Bank, N.A.*, 353 S.C. 208, 217, 578 S.E.2d 329, 334 (2003). In determining whether any triable issues of fact exist, the evidence and all reasonable inferences must be viewed in the light most favorable to the non-moving party. *Law v. S.C. Dep't of Corr.*, 368 S.C. 424, 434, 629 S.E.2d 642, 648 (2006). "The purpose of summary judgment is to expedite disposition of cases which do not require the services of a fact finder." *George v. Fabri*, 345 S.C. 440, 452, 548 S.E.2d 868, 874 (2001). Summary judgment is not appropriate when further inquiry into the facts of the case is desirable to clarify the application of the law. *Englert, Inc. v. LeafGuard USA, Inc.*, 377 S.C. 129, 134, 659 S.E.2d 496, 498 (2008).

ISSUE ON APPEAL

Do genuine issues of material fact exist on Harbit's claims such that the circuit court erred in granting summary judgment to the City as a matter of law?

LAW/ANALYSIS

A. "Fairly Debatable" Standard in Zoning Decisions

Harbit asserts that viewing the evidence in his favor, City Council's refusal to rezone Harbit's property is so unreasonable that this Court should invalidate City Council's decision. We disagree.

Rezoning is a legislative matter. *Lenardis v. City of Greenville*, 316 S.C. 471, 471, 450 S.E.2d 597, 597 (Ct.App.1994). The legislative body's decision in zoning matters

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is presumptively valid, and the property owner has the burden of proving to the contrary. *Rushing v. City of Greenville*, 265 S.C. 285, 288, 217 S.E.2d 797, 799 (1975). The authority of a municipality to enact zoning ordinances that restrict the use of privately owned property is founded in the municipality's police power. *Rush v. City of Greenville*, 246 S.C. 268, 276, 143 S.E.2d 527, 530-31 (1965). The governing bodies of municipalities clothed with authority to decide residential and industrial districts are better qualified by their knowledge of the situation to act upon these matters than are the courts, and their decisions will not be interfered with unless there is a plain violation of the constitutional rights of citizens. Id. As in this case, the determinative

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question is whether the city council's refusal to change the zoning of the owner's property is so unreasonable as to impair or destroy the owner's constitutional rights. *Rushing,* 265 S.C. at 288, 217 S.E.2d at 799. We cannot insinuate our judgment into a review of the city council's decision but must leave that decision undisturbed if the propriety of that decision is even "fairly debatable." *Knowles v. City of Aiken,* 305 S.C. 219, 223, 407 S.E.2d 639, 642 (1991).

Additionally, there is a strong presumption in favor of the validity of municipal zoning ordinances, and in favor of the validity of their application, and when the planning commission and the city council of a municipality have acted after reviewing all of the facts, the court should not disturb the finding unless such action is arbitrary, unreasonable, or in clear abuse of its discretion, or unless it has acted illegally and in excess of its lawfully delegated authority. *Bob Jones Univ., Inc. v. City of Greenville,* 243 S.C. 351, 360, 133 S.E.2d 843, 847 (1963). Likewise, the power to declare an ordinance invalid because it is so unreasonable as to impair or destroy constitutional rights is one which will be exercised carefully and cautiously, as it is not the court's function to pass upon the wisdom or expediency of municipal ordinances or regulations. *Id.*

We find that City Council's decision is "fairly debatable" because the City proffered several reasonable grounds for the denial of Harbit's rezoning application. First, the Planning Commission and City Council concluded that rezoning Harbit's property would not be in the community's best interests because the City has a vested interest in preserving the area's residential character and in minimizing commercialization. As stated in the Ashley Bridge District Plan, one of the major concerns in this area was increased commercialization due to rezoning. Further, both the Planning Commission and City Council cited concerns of neighborhood residents who feared loss of residential use in the area and the possibility that continued rezoning would create a domino effect. While all of the residents' concerns might not be well-founded, City Council's response to public opposition does not rise to the level of a constitutional violation. *See Sunrise Corp. of Myrtle Beach v. City of Myrtle Beach,* 420 F.3d 322, 329 (4th Cir.2005) (in finding the state court of appeals' decision was not res judicata of the developers' § 1983 due process and equal protection claims, the Fourth Circuit Court of Appeals determined the city council's improper denial of the zoning application in response to public opposition did not rise to the level of a constitutional violation because "matters of zoning are inherently political, and [ ] it is a zoning official's responsibility to mediate disputes between developers[ ] and local residents").

Additionally, City Council specifically cited the unique location of Harbit's property as opposed to other properties on Wesley Drive that were zoned for limited commercial use, noting that two of its sides are situated on the interior of the neighborhood. Moreover, because it is a corner lot, the property effectively serves as a buffer between the heavier-traveled Wesley Drive and the purely residential Stocker Drive. *See Hampton v. Richland County,* 292 S.C. 500, 503, 357 S.E.2d 463, 465 (Ct.App.1987) (finding the city council's refusal to rezone property from an office and industrial classification to a general commercial classification was "fairly debatable" because the property lay between commercial and residential properties thus creating a buffer between the two zones).

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While other similarly situated properties on Wesley Drive are zoned for limited commercial use, the record does not indicate that Harbit was the subject of purposeful, invidious discrimination. *See Sylvia Dev. Corp. v. Calvert County, Md.,* 48 F.3d 810, 825 (4th Cir.1995) (internal citations omitted) ("If disparate treatment alone were sufficient to warrant a constitutional remedy, then every blunder by a local authority, in which the authority erroneously or mistakenly treats an individual differently than it treats another who is similarly situated, would rise to the level of a federal constitutional claim."). For instance, there are other properties on Harbit's side of Wesley Drive that are currently

zoned residential, and with the exception of one property cornering on Savannah Highway and Wesley Drive, all of the properties on the other side of Wesley Drive are zoned residential. The properties on his side of Wesley Drive that are zoned for limited commercial use are distinguishable in that they either also front on Savannah Highway or are not accessed by a purely residential street.

Based on the evidence in the record, the City properly denied Harbit's rezoning application in an effort to hold the line on commercial development in the area and protect its residential nature. We will not invalidate City Council's decision as its propriety is at least "fairly debatable" based on the facts and is not "so unreasonable as to impair or destroy constitutional rights." *See Knowles,* 305 S.C. at 224, 407 S.E.2d at 642. As such, it is not this Court's function to pass upon the wisdom or expediency of City Council's decision. *See Bob Jones Univ., Inc.,* 243 S.C. at 360, 133 S.E.2d at 847.

B. Due Process

Harbit contends the circuit court erred in dismissing his procedural and substantive due process claims. We disagree.

1. Procedural Due Process

Procedural due process imposes constraints on governmental decisions that deprive individuals of liberty or property interests within the meaning of the Due Process Clause of the Fifth or Fourteenth Amendment of the United States Constitution. U.S. Const. amends. V and XIV, § 1; *Mathews v. Eldridge,* 424 U.S. 319, 331, 96 S.Ct. 893, 47 L.Ed.2d 18 (1976). The fundamental requirements of due process under the United States Constitution and the South Carolina Constitution include notice, an opportunity to be heard in a meaningful way, and judicial review. U.S. Const. amends. V and XIV, § 1; S.C. Const. art. 1, § 22; *Stono River Envtl. Prot. Ass'n v. S.C. Dep't of Health and Envtl. Control,* 305 S.C. 90, 94, 406 S.E.2d 340, 342 (1991). Further, due process is flexible and calls for such procedural protections as the particular situation demands. *Kurschner v. City of Camden Planning Comm'n,* 376 S.C. 165, 172, 656 S.E.2d 346, 350 (2008).

We are of the opinion that Harbit received due process, both procedural and substantive, thus entitling the City to judgment as a matter of law. First, Harbit was afforded procedural due process because he was provided with notice of both public hearings as evidenced by the rezoning application that he completed and signed.[3] He also had a meaningful opportunity to be heard as he was allowed to present his arguments at both the Planning Commission and City Council levels. While Harbit chose not to be present, his attorney represented Harbit's interests by presenting exhibits and arguing Harbit's position for rezoning his property in both instances.

Further, Harbit has received three levels of review, in each of which he was allowed to present his position.[4] The existence of review is an indication of the presence of procedural due process, rather than its absence.

[675 S.E.2d 782]

See Sunrise, 420 F.3d at 328 (finding district court properly granted city's motion for summary judgment on developers' claims for due process violations after city denied building permit as developers received four levels of state review which was "an indication of the existence of procedural due process, rather than its absence"). Because Harbit was provided with both predeprivation and postdeprivation remedies, his procedural due process rights were not violated.

2. Substantive Due Process

In order to prove a denial of substantive due process, a party must show that he was arbitrarily and capriciously deprived of a cognizable property interest rooted in state law. *Sunset Cay, LLC v. City of Folly Beach,* 357 S.C. 414, 430, 593 S.E.2d 462, 470 (2004). The State's deprivation of the property interest must fall so far beyond the

outer boundaries of legitimate governmental authority that no process could remedy the deficiency. *Sunrise,* 420 F.3d at 328. A legislative body does not deny due process simply because it does not permit a landowner to make the most beneficial use of its property. *Bear Enters. v. County of Greenville,* 319 S.C. 137, 141, 459 S.E.2d 883, 886 (Ct.App.1995). In reviewing a substantive due process challenge to a zoning ordinance, we must determine whether the ordinance bears a reasonable relationship to any legitimate government interest. *See Sunset,* 357 S.C. at 430, 593 S.E.2d at 470 (stating that the standard of review for all substantive due process challenges to state statutes, including municipal ordinances, is whether the statute bears a reasonable relationship to any legitimate interest of government).

The City did not violate Harbit's substantive due process rights when it denied his rezoning application. First, Harbit did not have a prior property interest in commercial zoning. While Harbit may have purchased the property with the expectation that City Council would grant his application, this alone is insufficient to establish a violation of his constitutional rights. *See Rush,* 246 S.C. at 280-81, 143 S.E.2d at 533 (citing to 62 C.J.S., *Municipal Corporations,* § 227(11)) ("Although it is an element in the situation which is entitled to fair and careful consideration, mere disadvantage in property value or income, or both, to a single owner of property, resulting from application of zoning restrictions ordinarily does not warrant relaxation in his favor...."); *Hampton,* 292 S.C. at 503-04, 357 S.E.2d at 465 (holding a property owner is not entitled to have his property zoned for its most profitable use).

Furthermore, Harbit was aware at the time of purchasing 7 Wesley Drive that the prior owner's application had been denied based on the same zoning restrictions and that his efforts might likely share the same fate. *See id.* at 281, 143 S.E.2d at 533 (internal citation omitted) (in denying the plaintiff's variance request, the supreme court found that the plaintiff who purchased property after a zoning restriction was in effect must have contemplated potential hardships, financial or otherwise, resulting from the existing conditions at the time of purchase). Because the City's decision was reasonably founded and rationally related to its stated interests of preserving the area's residential character in the face of continuing commercialization, whether it be strictly commercial or limited commercial use, the City's actions did not rise to the level of being arbitrary or capricious and thus did not violate Harbit's substantive due process rights.

C. Equal Protection

Harbit also asserts the circuit court erred in dismissing his equal protection claim. We disagree.

Under the Equal Protection Clause of the Fourteenth Amendment, a state may not "deny to any person within its jurisdiction the equal protection of the laws." U.S. Const. amend. XIV, § 1; *see* S.C. Const. art. I, § 3 ("The privileges and immunities of citizens of this State and of the United States under this Constitution shall not be abridged, nor shall any person be deprived of life, liberty, or property without due process of law, nor shall any person be denied the equal protection of the laws."). This clause requires that "the states apply each law, within its scope, equally to persons similarly situated, and that any differences of application must be justified by the law's purpose." *Sylvia Dev. Corp.,* 48 F.3d at 818. It does not prohibit different treatment of

[675 S.E.2d 783]

people in different circumstances under the law. *Town of Iva ex rel. Zoning Administrator v. Holley,* 374 S.C. 537, 541, 649 S.E.2d 108, 110 (Ct.App.2007). Instead, "`the classification must be reasonable, not arbitrary, and must rest upon some ground of difference having a fair and substantial relation to the object of the legislation, so that all persons similarly circumstanced shall be treated alike.'" *Id.* In a case such as this, the rational basis standard, rather than strict scrutiny, applies because the classification at issue does not affect a fundamental right and does

not draw upon inherently suspect distinctions such as race, religion, or alienage. *Sunset Cay,* 357 S.C. at 428-29, 593 S.E.2d at 469.

Further, one seeking to show discriminatory enforcement in violation of the Equal Protection Clause must demonstrate arbitrary and purposeful discrimination in the administration of the law being enforced. *See State v. Solomon,* 245 S.C. 550, 574, 141 S.E.2d 818, 831 (1965). "[E]ven assuming [a governmental entity] is not enforcing [an] ordinance equally, the fact that there is some unequal treatment does not necessarily rise to the level of a constitutional equal protection violation." *Denene, Inc. v. City of Charleston,* 359 S.C. 85, 96, 596 S.E.2d 917, 922 (2004).

The City had a rational basis to deny Harbit's application, despite the fact that other properties on Wesley Drive were zoned for limited commercial use. As the circuit court notes in its order, Harbit's property is the only one of those properties which has frontage on Stocker Drive. Further, unlike the other properties, Harbit's property effectively serves as a buffer between the purely residential Stocker Drive and the heavier-traveled Wesley Drive. In contrast to Harbit's property, the other corner property on his side of Wesley Drive that is zoned for limited commercial use has frontage on Savannah Highway and abuts other commercial property. Consequently, because the record does not indicate that Harbit was the subject of purposeful, invidious discrimination, the circuit court did not err in granting summary judgment on his equal protection claim. *See Sylvia Dev. Corp.,* 48 F.3d at 825 (internal citations omitted) ("While an equal protection claim must be rooted in an allegation of unequal treatment for similarly situated individuals, a showing of such disparate treatment, even if the product of erroneous or illegal state action, is not enough by itself to state a constitutional claim."). Consequently, the circuit court appropriately granted summary judgment on Harbit's claims stemming from the denial of his rezoning application.

CONCLUSION

Based on the foregoing, the circuit court did not err in granting the City's motion for summary judgment.

Accordingly, the circuit court's order is

AFFIRMED.

WILLIAMS and PIEPER, JJ., concur.

Notes:

1. City of Charleston Zoning Ordinance § 54-202(e) (1996) states: "Savannah Highway SH Overlay Zone. The SH Overlay Zone is intended to allow office and neighborhood service uses in addition to the uses allowed in the base zoning district. Existing structures in the SH zone that are used for a non-residential use shall retain their residential appearance.... Parking shall be restricted to the side or rear of the principal buildings and buffering from adjoining residential lots shall be required."

2. Harbit does not appeal the circuit court's decision on this issue.

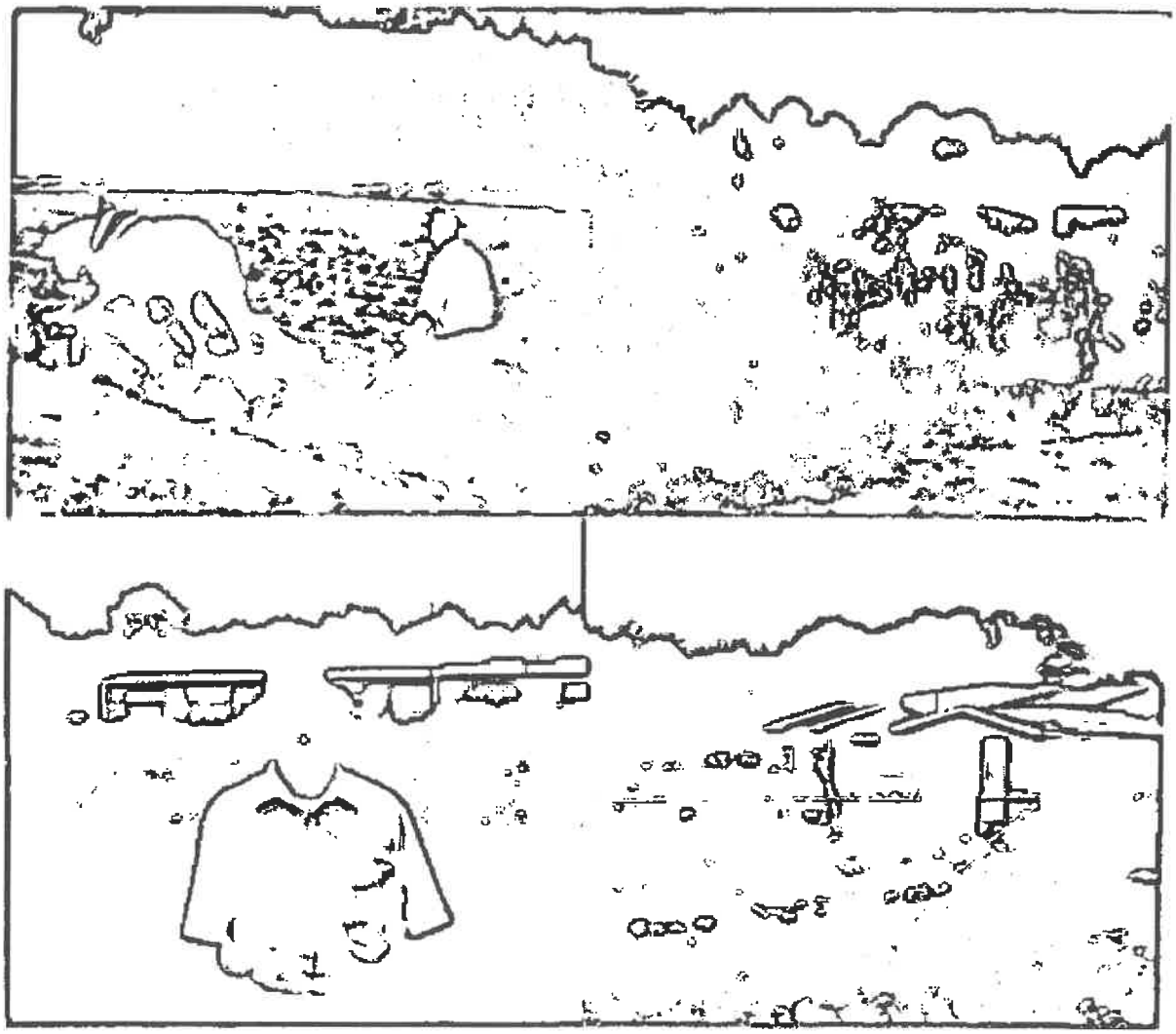
3. The rezoning application that Harbit signed states, "The Planning Commission will hold **a public hearing** and make a recommendation to City Council for approval, approval with conditions, disapproval or deferral of the rezoning.... After the Planning Commission makes its recommendation, the application will be forwarded to City Council where **another public hearing** will be held approximately one month later." (emphasis added).

4. The Planning Commission's recommendation was reviewed by City Council, whose decision was then reviewed by the circuit court, and is now before this Court.

Mr. Gay

SAVING OUR LAND:

A Legal Manual on Land Use and Retention



Penn Center, Inc.

Thought this might be of some interest.

HB

THE HISTORY

Where does history really begin? Is it merely recorded history, or is history that which can be pieced together through archeological studies and the like? Daufuskie is steeped in history of yesterday, perhaps dating back to the ice age, most certainly it has evidences of habitation 4,000 to 5,000 years ago.

Even though the Spanish sailed into Port Royal Sound in 1520, it was not until around 1740 that King George II of England bestowed on David Mongin an island in the area known only as "Daufuskie"! Tradition has it that it's name is Indian, meaning "place of blood", being called this because of an indian massacre by the white settlers in the year of 1715. Even today the spot is still called "Bloody Point"!

The name of Daufuskie is really probably of Muskhogean Indian derivation: perhaps it was even the name of the tribe. It's meaning is truly not known and it's spelling has even been uncertain in the past; Dawfuskee, Defoskey, D.' Awfoskie.

Colonists on Daufuskie remained "loyal" to the King during the Revolutionary War and bloody skirmishes were held with their Tory neighbors on nearby Hilton Head Island.

Daufuskie, during the anti-bellum days flourished with several large and prosperous plantations harvesting typically indigo and long staple Sea Island Cotton. These plantations, before and even after the Civil War, were scenes of much merriment and social gatherings. George Wymberly Jones De Renne, of Wormsloe, Georgia near Savannah notes in his journal dated April 12, 1878, "We left the wharf at the foot of Drayton Street, at 9:15 a.m., arrived at Daufuskie (Bloody Point) at 11:15;

visited that place, Mr. Stoddard, Mrs. Habersham, myself and my gardner going in a carriage to Melrose (plantation) for the two hours, the rest remaining at Bloody Point .... We crossed to Tybee, lunched enroute on boned turkey, sandwiched rolls, crab salad, chicken salad, orange sherbert, strawberries and ice cream, snowball pound cake, 6 bottles of Champagne, 2 bottles of Sherry, 2 bottles of Whiskey and lots of ice. Five rocking chairs (bamboo) for the ladies from my house ....."

Melrose Plantation House the grandest on the island, burned in 1912 by which time its famed gardens had become overgrown and even some, including the house site washed into the Atlantic. In April 1867, Eliza Ann Summers, a visiting yankee school teacher from Hilton Head said that seldom had she seen anything "that would be a thousandth part compared to this." She wrote of 50 kinds of roses and japonicas.

In 1873 at Haig Point Plantation the United States Government constructed a lighthouse which is one of the few remaining buildings of historical significance on Daufuskie Island today. This lighthouse was actually the rear-light to mark the entrance to Calibogue Sound. Historical records indicate "two lights are attended by a keeper." The front-range light is shown from a tower 18 feet high, 1/2 mile from the dwelling. The rear-light is shown from a tower 61 feet high on the dwelling. Operation of the lighthouse stopped in 1934 and the lighthouse fell into total disrepair. It has now been totally restored and stands as evidence that history must and will be preserved.

During the years following the Civil War many black islanders were given property by the Union and remained side by side with their former owners of the large plantations. Living off the land and from the sea, these island folk, some 1,200 strong, thrived until the 1950's when pollution from the Savannah River closed not only the oyster beds, but the three oyster factorys on the island. Truck farming once a vital source of the areas produce needs came to a halt with the rise in popularity of the super market! From the early fifties until now, Daufuskie has lain dormant with little mention of its name save the works of Author, Pat Conroy in his book "The Water is Wide," published in 1972. With the founding of the Daufuskie Island Land Trust and the Daufuskie Island Historical Society, life on the island will once again be filled with activity, opportunity and hope for the Daufuskie if 100 years ago.

COMMUNITY CONCEPT

The community being proposed and planned by the Daufuskie Island Land Trust is invisioned as a "community of yesterday with convenience of today"! A community that is removed but not remote. One in which a person may realize that there is still time to smell a few roses and still function in the work a day

world!

The following is a portion of an article reprinted exactly as it appeared in the Savannah Morning News, April 30, 1895. "The opening up of the inland passage to Beaufort, S.C., will be of great benefit to Savannah. The route is a very attractive one. Already there are two steamboat lines between Savannah and Beaufort.

There has been recently established a day line from Savannah leaving at a convenient hour in the morning, returning in the early evening. Mr. G.U. Beach, owner of the steamer "Gov. Safford," a thorough steamboat man, having had long experience in Florida waters both with passengers and freight, after making a thorough investigation of the route has come to the conclusion that it is a paying one. Heretofore people traveling from the north during the winter season, to see the coast and the long stretch of sea island, through which the island passage winds, have been unable to do so on account of the trip taking up too long a time.

The freight and passenger traffic is in itself a good business, as seen by the report of the committee from the cotton exchange appointed to investigate the importance of the inland route to Beaufort, as published in the Morning News some time ago.

A trip to Beaufort is well worth the time. Passengers have ample opportunity to view the harbor improvements, passing six or eight dredges with their attending tugs at work on the channel. A fine view of Tybee beach and lighthouse is had as the steamer swings into her course across the sound; then Daufuskie Island is approached. The water changes color, as the mouth of Savannah river is left behind, and turns to the clear sea green, and schools of porpoises begin to chase the steamer as she nears the light-house on Hague's point. A stop is made for passengers at the point, not long enough however, to see any of the beauty of this famous island, which was the summer home of the old Mongin family, the Stoddards and others. A beautiful avenue of oaks, heavily covered with Spanish moss, leads from the light-house to a point where once stood the old family mansion, the remains of which are still seen. Mr. Stoddard's home, "Melrose," is also one of the points of interest on Daufuskie. This is further around on the ocean side, and can be seen from the steamer."

Imagine arriving at the wharf on Haig Point after a short relaxing ride across Calibogue Sound, being transported to the Great House or your house via a carriage drawn by a pair of matched grey's! Traveling over narrow live oak shrouded lanes, you realize at once you're stepping back in time. Not so far back however, that modern conveniences of every kind aren't available. Everything you could possibly want on the mainland and none of the things you don't want!

Specifically planned for the community being proposed by the Daufuskie Island Trust are such amenities as; 900 acres of preservation or recreational land, 600 single family residential home sites, 2 championship golf courses, Yacht basin and Marina village, Great House Inn and Lighthouse Tennis Village both having waterfront multi-family dwellings. The Trust's Communities will make available to the members of the Daufuskie Island Historical Society virtually every type of island property, from true water front to unsurpassed water view properties perched on sound bluffs. Larger (up to 5 acres) will be available inland for permanent residential use. The concept is to create or recreate a residential and recreational community that is free from virtually all internal combusiton engine vehicles. Horse drawn taxies, privately owned electrical cars; bicycles and jitneys for moving longer distances would be the first step in attempting to keep Daufuskie much as was years and years ago!



Melrose House, 1870

ORIGINAL DOCUMENT
POOR CONDITION OR CONTRAST

LOW COUNTRY SKETCHES

Albert H. Stoddard of Daufuskie Island

by Edith Inglesby

The uniqueness of Albert H. Stoddard came from environment. And this environment was the sea island of Daufuskie and the lands and waters about it. This also had been his heritage since 1740.

South Carolina's sea islands have played an important part in its history. And they have harbored a diverse lot . . . pirates, buccaneers, explorers, wealthy planters and eccentrics. From here, too, came the first Bishop of Georgia. It was to this region that Captain Hilton, in 1663, wished transported "All they that want a happy settlement of our English nation."

As well he might. From the lonely beaches of the barrier islands where on moonlight nights huge sea turtles rise from the surf to lay their eggs in warm sands, from the sea islands where long staple cotton made fortunes and shaped the course of history, to the coastal regions in whose shadowy lagoons long-plumed egrets made their nests, the Carolina Low Country is beautiful.

But now one wonders fearfully, how long? Daufuskie Island, almost the last to hear the strident noise of modernity, is apparently to be roused from quiet beauty by the roar of bulldozer and the scream of crane . . . a pity. It has had a long and interesting history.

Daufuskie was at one time known locally as "Stoddard's Island," owing to that family's large holdings. But it was David Mongin, their ancestor, to whom the English king gave the grant. Mongin, a Huguenot, fleeing persecution in his native France, settled in England in 1725. Later he held high rank in the Royal Navy and for his efforts in subduing pirates was, in 1740, given by George II a grant of land on Daufuskie Island. In 1775 George III bestowed on this family more lands "Situate in Saint Peter's Parish, Granville (now Beaufort) County." These lands were along the May River estuary. The Mongin coat of arms is a sunflower turning to the sun. If the sun was their god they were fortunate in their new possessions.

Transfer of Daufuskie Island from Mongin to Stoddard came about through a marriage. In 1830 John Stoddard, descendant of Jonathan Edwards, noted theologian, writer and president of what is now Princeton University, married Mary Mongin, "orphan granddaughter and heiress of John David Mongin." Their wedding took place in the American Embassy at Paris where Stoddard, member of a Boston importing house, had been sent. In time they settled on her South Carolina property and his obituary notes: "Her income, already of opulent dimensions, was, by her husband's judicious management, enhanced two and a half times."

The Stoddards as well as the Mongins prospered under the magic of sea island cotton. However, it is not with this we are concerned, but with Albert Stoddard (1872-1954) whose great contribution . . . though he, too, successfully planted sea island cotton . . . was the perpetuation of the mores and language of the Gullah Negro.

That part of Daufuskie Island known

"Bloody Point" from its role in the Indian uprising of 1715, was the site of the original Mongin house. During the lifetime of Albert Stoddard's father the Mongin properties were divided; his uncle Henry Mongin Stoddard getting Bloody Point, his uncle John Stoddard, Ingleside, and his father, Melrose Plantation. Albert Stoddard should have been born at Melrose; but to his everlasting shame was not — a fact he kept dark. He arrived in summer when his parents, following the established custom, were seeking the coolness of a Northern resort. Newport, it may be said, owed its origin to South Carolina rice and cotton planters who were its greatest patrons until the Civil War.

But if Albert Stoddard was not born at Melrose Plantation he made up for it. Here from infancy he lived and imbibed with every pore its scents and sounds and history, its color and atmosphere . . . the very character of the island and its black people. It was a different world, remote and soon to disappear. He would have been a lonely little boy had it not been for his black friends. His father, a widower and an extremely well-educated man, delighted in his company and, rather than part with him for boarding school, taught him himself. Straight from his father's tutoring young Albert entered the University of Virginia, where he did well. But the senior Stoddard, popular in Savannah, seeking the Florida sun in winter or the bracing quality of North Carolina's mountains in summer, was oft-times away. Yet Albert was never dull. He loved this beautiful, isolated island. Fascinated by the Negro spirituals, he knew them well, and knew from which plantation each had emanated. Every plantation had its crew of oarsmen, and as the long boats passed and the wind brought him the tune by which the oarsmen kept unison, he could tell from the song whose boat it was. He himself grew to be an excellent oarsman. When the lovely Huger sisters left their father's rice plantation for Bluffton's high land, the young Albert would be invited to spend the day and went under his own oars, so to speak. He would leave Daufuskie on the outgoing tide and return again by the incoming one. Sometimes he rowed with the tide to Savannah, attended a party, and rowed home again next day on the return tide. He led, as do most island people, a life governed largely by the rhythm of water.

His greatest pleasures as a child were his black friends and the stories they told which made individuals of all the plantation birds and beasts. Hearing these tales the boy learned a second



Albert H. Stoddard (1872-1954)

language, Gullah. This is the patois spoken by Negroes of the Georgia and South Carolina sea islands and coastal regions. Found in no other sections of the South, it could be (and by Northerners often was) taken for a foreign language. Ordinary Negro dialect has no resemblance . . . as that in "Uncle Remus," for instance. Called Gullah by the fact that most Africans here were from the Angola tribe of West Africa, it contained some words of their own language, some archaic English words (a Charleston authority traced bits of Devon and Dorset speech) and words that were the Negro's effort to use those of his master or overseer. It is soft, full of cadence and often extremely to the point. There was a saying on the islands: "Some men are born to Gullah, some achieve Gullah, while others have Gullah thrust upon them . . . and are nonplussed." An islander's upcountry wife might have to enlist his aid to understand her cook.

Albert Stoddard not only could understand Gullah; he could speak it as few white men could. An anecdote might illustrate how his second language helped him in running Melrose Plantation when it became his. Once he gave a man called James "a crop." That is, he furnished land, seed, fertilizer, equipment . . . everything needed to plant a crop successfully. About the middle of the season James disappeared and was not seen for ten days. On his return his master gave him a thorough dressing down. Through it all James stood with a perfectly placid, unmoved expression. Seeing he was getting nowhere and by that time utterly exasperated, Mr. Stoddard lapsed into Gullah. "Jeems," he said, "You jis ain fitten" (fit for nothing). At that moment James' face fell and tears came into his eyes. "No Suh, uh knows uh ain fitten, fuh go off en leff muh crop." "Of all my oratory," Mr. Stoddard recalled, "the only thing he understood was in the vernacular" and he believed that, rather than stupidity, it was failure to understand that often was the trouble.

Another time a young house maid was being taken to task and the butler made excuses for her. Disdaining excuse from that quarter, she made a sucking noise through her teeth and turned her back on him. Afterwards the butler explained: "Uh try fuh refen she, but him suck e teet puntop me, so uh lef um fuh Maussa squisit um fuh e self." Fortunately the master of Melrose could interpret this as "I tried to defend her, but she sucked her teeth at me, so I left her for Maussa to inquisit or catechise himself." "Squisit" (inquisit-catechise) is one of the old English words that still survived among them. Incidentally, we have here the Gullah characteristic of using she, him, um and e, all to denote the second person feminine.

The Negroes had a saying they thoroughly believed in . . . as they do today. "E's a po man ef e ain got no escuse." When a hurricane twisted a Negro church at Daufuskie, one of the congregation, unfortunately not a good carpenter, was asked to make repairs. When the job was almost completed, the committee made inspection. "Bredder, you done uh berry good job yuh (here) but us tink da cornder sort uh swag ober leetle."

"No Suh, Bredder. Da cornder ain swag ober none tall."

"Yeh Bredder, uh tink e swag ober leetle."

"No Suh, Bredder. Da cornder ain swag none tall. Uh'l git one plumb line en show you."

The plumb-line showed the corner to be several inches out of the perpendicular, so the deacon remarked, "Entty uh tell you say da cornder swag ober?"

"No Suh, Bredder, dis cornder ain swag ober none tall. Dis duh one berry

POOR CONDITION OR CONTRAST



Melrose Housemaids



Melrose Houseparty, 1890
Albert Stoddard at Top Left on Steps



After a Swim

le plumb line suh, en e's *onreliable*."

When Albert Stoddard married Eve-n Byrd Pollard of Virgina, the young ouple joined his father at Melrose Plan-ation. This charming place, famed for s houseparties and lavish hospitality, new well "the flower" of Savannah and harleston. A Charleston relative was Iddleton of Middleton Place whose an-als appeared in the May issue of *Is-ander*. This delightful life came to an nexpected end when, in 1912, Melrose urned to the ground. One irreparable ss was the library, the foundations of hich were made by an ancestor who rought from Europe many books in e original French and Italian. Other sses were the family plate and the old usic and instruments in the Music oom.

A newspaper writing of the tragedy alled the house "one of the best known nd most beautiful near Savannah." acing the ocean, it was two stories igh above a tall brick basement and ad been built many years before the ivil War. Marble mantlepieces and urnishings had been brought from Eng-and: it contained a great number of ooms and was surrounded by a wide erandah. The garden went in terraces own to the sea and must have been agnificent. The journal of Wymberly ones DeRenne of Wormsloe Plantation, avannah, tells of taking his gardener long to see it . . . and perhaps receive n-piration.

After the fire the young Stoddards ived in a small house on the estate, and e continued to plant cotton. Evelyn Stoddard had been dismayed by the aphazard mail service; sacks from the Savannah-Beaufort steamer would be dumped on the dock and islanders rummaged through them for their letters. She now applied for the position of post mistress and the tack room at Melrose's big barn became the Island's first post office. But Melrose was at least three miles from the nearest dwelling so eventually a storekeeper at the landing took it over.

Fire could not destroy the Mongin-Stoddard dynasty on Daufuskie Island, but the boll weevil did. With its advent, the planting of sea island cotton came to an abrupt . . . and permanent . . . end in America. And the Stoddards moved to Savannah. Their son, another Albert and banker rather than planter, lives in a handsome house, the end one of Savannah's famous "Gordon Row."

Albert Stoddard may have left Daufuskie Island but its aura remained with him. Mostly for his own pleasure he wrote the animal stories he'd learned on the Island and through phonetic spelling captured, to a remarkable degree, the sound of Gullah. When they were published, the small books' covers carried drawings by Bill Haynes, artist and owner of Ashintilly Press near Darien, Georgia. Stoddard also did a little book of Gullah anecdotes from which we have here quoted. In his soft, melodious voice with authentic Gullah accent, cadence, rhythm and inflection he used also on occasion to tell his animal stories to delighted friends. It was fortunate that others knew of his gift. For this knowledge led to a more permanent preservation of these stories of his black friends into whose dark skins he seemed to slip in the telling.

In 1949 Duncan Emrich, chief of the Folklore Section of the Library of Congress and author of several books on American folklore, heard of Mr. Stoddard and the Gullah tales he told. So he sent a man to enlist Stoddard's aid in locating a Negro who could record for them stories in authentic Gullah dialect. Naturally enough their search began at Daufuskie Island. Time had passed and civilization, as exemplified by radio and boats that took them over on Saturday nights to Beaufort hot spots, had come. It turned out to be an exceedingly difficult task. One old man at Daufuskie remembered Mr. Stoddard and had in fact recounted stories to him in the past. But he proved too old for the task; he would forget and drifted thinly away into nothing. So they tried Hilton Head Island, Beaufort and the hinterlands about. But Albert Stoddard's ear, tuned to the purity of his boyhood Gullah, was not satisfied. Nor were the field trip recordings as good as they might have been. Finally after many disappointing days during which the Library of Congress man heard Mr. Stoddard himself resort to Gullah . . . to prime the pump, as it were . . . he said, "You know, Mr. Stoddard, you speak Gullah better than anyone we have listened to. Why don't you come up to Washington and record these stories for us?"

That is exactly what happened. Stoddard, according to Mr. Emrich, "a sprightly seventy-seven," went to the Library of Congress and recorded some fifty tales, of which thirty belong to the "Bah Rabbit" or animal story cycle, while the remaining twenty are local

ORIGINAL DOCUMENT
POOR CONDITION OR CONTRAST

Daufuskie stories. Twenty-eight of the former have been issued by the Library of Congress on long-playing records and each is a delight. There are more records that will be released. Stoddard, Mr. Emrich found, was a born storyteller, a person whose cadence, rhythm and sense of timing in the telling of the tales was extraordinary. "Although at second hand, his telling of the tales is quite authentic (there is no sense of 'outside' mimicry whatever) and is about as close to any Gullah original as it now seems possible to come." These records, entitled: "Animal Tales Told in the Gullah Dialect" by Albert H. Stoddard of Savannah, Georgia, may be purchased from the Recording Laboratory, Library of Congress, Washington, D. C. Each is accompanied by Mr. Stoddard's full transcription of the text of the stories. Mr. Emrich expected to edit the transcription but he thought Stoddard's phonetics perfectly conveyed the sound.

A learned writer in the *Saturday Review of Literature* said of them: "His 'Buh' Rabbit is Loki, or Ulysses of most of the stories, the eternal con man; he is weak but clever, suave rather than wise, the hunted turned hunter with his wits." All of which Mr. Stoddard knew, of course. And so did his black friends . . . in substance. The wily character whose exploits they recounted with such gusto — villain, yet hero — was to them "Buh" Rabbit.

Circumstance forced Albert Stoddard's separation from Daufuskie; but he brought with him a lot of it and gave it out for others' enjoyment and edification. It was his contribution to a place he knew and loved. As has been said, "The uniqueness of Albert Stoddard came from environment. And his environment was the sea island of Daufuskie and the lands and waters about it. This also had been his heredity since 1740."



From Melrose Looking Across Calibogue Sound to Hilton Head Island

ORIGINAL DOCUMENT
POOR CONDITION OR CONTRAST

KNICKER

FIRST ANNUAL
SUMMER
BerSerK
SALE



IF YOU THOUGHT
WE WERE CRAZY
LAST FALL —
YOU KNOW IT
FOR SURE NOW —

OUR PRICES ARE
TOO LOW
TO BE QUOTED

YOU MUST
SEE THEM
TO BELIEVE

KNICKERS
671-2291

MISS KNICKERS
671-3791

SHOE STORE
671-3240

10 a.m. — 6 p.m. — MONDAY - SATURDAY
ALL STORES LOCATED IN HARBOUR TOWN

SAVING OUR LAND:

A Legal Manual on Land Use and Retention

copyright 1986 by Penn Center, Inc.
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Preface by Emory S. Campbell
Director, Penn Center, Inc.

PREFACE

The adage, "The more things change, the more they remain the same accurately describes what has occurred in the South Carolina Sea Islands, over the last two centuries.

A little more than a century ago the Sea Islands from Charleston to Beaufort were among the most important strategic locations of Civil War Union Forces. The area was strategic to the Union because it contained some of the largest and richest plantations in the South and the waterways around the Islands provided perfect ship routes for the Southerners.

Today these Sea Islands that once harbored the most durable slaves, stately homes, mint julep sipping aristocrats and southern belles are being redesigned with hundreds of millions of dollars for golf courses, tennis courts, condominiums, ultra modern computerized homes and housekeepers, yard hands, and yes green keepers for golf courses. These islands are being invaded for the second time by large numbers of people from Northern United States--this time seeking pleasure and the relaxed life.

The first invasion came in November, 1861, when more than 12,000 soliders and marines landed at Hilton Head Island in Beaufort County. These troops proceeded to block important waterways and eventually captured the entire area of Port Royal Island now known as greater Beaufort which includes perhaps the richest plantations in the south.

Slaves who had worked the plantations of the surrounding Islands of St. Helena, Hilton Head, Daufuskie, Lady's, Dawtaw, Fripp, Parris, and others became contrabands of war.

The same resulted from actions of union troops in the Sea Islands of Edisto, Johns, Kiawah, and others around Charleston. Plantations of cotton along with the big plantation houses were "confiscated." The former slaves although jubilant to see "The Yankees" were sometimes bewildered and generally ignored.

Lincoln's order to set aside abandoned land from the sea 30 miles inland for the benefit of freedmen was the first step toward reconstructing the lives of the freed slaves. Many slaves purchased land and began a new life in the Sea Islands.

Numerous schools were established in the area to begin to teach functional lessons including the use of newly acquired land. The department of the south was established on Hilton Head to insure an orderly transition.

The Emancipation Proclamation had established the boiler plate for a motivated people to succeed. The Sea Islands was to become the prototype for abolitionists' claim that the slaves were humans who could learn, earn, and produce for themselves.

But the assassination of Lincoln in 1865 began a new struggle for the freed slaves as Lincoln's order to distribute abandoned land was repealed. Freedmen who had acquired land were threatened with death and violence against freedmen becoming rampant. Many freedmen retained land, but some refused to officially record their deeds for fear of reprisals from whites.

Inspite of efforts throughout the south to return to the "good ole days", the Sea Islands remained isolated from most of these efforts. Blacks by and large retained possession of much of what they had acquired because of physical isolation of the Islands from the mainland and because large plantations had been acquired by northerners and remained unoccupied. Blacks were able to thrive toward self-sufficiency while re-establishing some of the customs and traditions of Africa.

Eventually, schools ranging from 3 to 12 grades were established throughout the Sea Islands. These schools emphasized the three R's and other lessons needed to function in the Islands. One of the first in the south and perhaps the most outstanding of those was Penn School. Established during the Civil War in 1862, the school stressed land ownership and land uses. It was the only high school in the area for many years.

In ;the late 1950's the public school system began to address the secondary education needs of the black children. Penn School, however, remained as the community owned education center continuing the effort of landownership.

From the mid 1860's to the 1960's the Sea Islands population remained predominantly black. These proud residents were employed by their own farm, built their own boats to fish and transport their goods to market, grew abundance of peas, cotton, beans, and watermelon. During the winter, while the men left to find seasonal work on the mainland, the women made quilts and clothes. They and their children maintained the farm and boats until the next season.

The community of the Sea Islands were self-sufficent. The Gullah dialect and culture prevailed and families supported one another.

In the mid 1950's re-designing of the plantation system began. Because of the decline in income from the farm many Blacks had moved to the large cities such as Savannah, New York City, and Philadelphia. During this same period, funding for new highway systems became available to connect the Sea Islands to the mainland. Developers began buying large plantations which had been owned by northerners and had returned to their original landscape. These lands were undisturbed except for occasional wild life hunting by private clubs.

The first real impact on the indigenous population came when two men, Fred Hack and Joseph Fraser who owned a timber company in Georgia bought large tracts of land on Hilton Head Island that had been cotton plantations before the Civil war. They had previously bought the timber and barged the timber and lumber to Georgia. In 1953 Charles Fraser, a son of Joseph Fraser, began developing a 5200 acre resort private community and named it Sea Pines Plantation. Its potential success and plans for further development of the Islands must have motivated state fathers at the time to build a bridge in 1956 connecting Hilton Head with the rest of the world. Sea Pines has since become one of the premier resort communities in the nation.

The market value of farm land owned by blacks, which comprised of about 1/3 of Hilton Head Island's 27,000 acres before the completion of Sea Pines was valued no more than $100 an acre.

Because of Fraser's success, the remaining large plantations were similarly developed leaving black owned land, traditionally used for subsistance farming, vulnerable to increased tax assessment and land speculators. By 1980, market value of these parcels increased to as much as $100,000 an acre. Although some parcels may remain farmland or lie dormant, they are assessed on the basis of the highest and best potential use.

Land owned by blacks are being transferred to white developers at a steady rate. Families who can no longer afford to pay the taxes or cannot resist the offered price per acre soon sell. Perhaps the most comomon cause of land loss among Blank landownership is heirs property where as many as fifty people may hold interest in a single parcel. Typically, speculators convince one or more of the heirs to sell leaving the others no other choice. Some members of these families who otherwise would live on land left by their foreparents must now relocate to rental units either on the island or somewhere off the island. A typical example is recently a native family of Hilton Head with some 40 members that sold 50 acres that is bordered by the ocean and the highway to one of the developers. Later members of that same family who had residences on the property frantically searched for land on Hilton Head to buy. Most of them did not receive enough money from the sale to purchase another parcel on Hilton Head.

Incorporated as a town in 1983, Hilton Head has nearly 10 private communities with guarded gates requiring passes and fees to enter if a person is considered a desired vistor.

Sensing that the Hilton Head Island scenario was likely to repeat itself on all Sea Islands, Penn Center and local organizations including the Hilton Head NAACP have made efforts to retard land loss among blacks with an education and title clearance program. The Hilton Head NAACP's effort was interrupted when a grant award of $36,000 from the Sea Pines Company in 1973 was repealed because the company became financially unable to award the remaining funds after about $10,000 was spent. Penn Center's current program is the only program of its kind in the Sea Island Community.

Some low income landowners are forced to depend on the private sector for land related legal assistance. Most families cannot afford to retain attorneys to clear titles so that they can subdivide the land even for their own residential use. Those who can afford legal fees are often frustrated by the slow pace at which lawyers attend their case. Some lawyers advise them to sell although the opposite may be in their best interest.

The struggle of the indigenous population to retain ownership to land is compounded by land use planning efforts of the county government which often include restrictive provisions that require one to have a degree of sophistication as a property owner. Unfortunately, most Black landowners in the Sea Islands are ordinary rural folk.

In 1983, Penn Center conducted a survey sampling 150 landowners in the various neighborhoods in the St. Helena Island area to determine the extent to which the average low income family may be at risk to the rapid development activities.

The most pertinent questions asked and the result of the answers follow:

1. Do you own land? Yes: 93% No: 7%
2. Do you share ownership with other heirs? Yes: 23% No: 71%
3. Do you use your land for residence? Yes: 100%
4. Is your land located near either of these: River an/or Marsh: 44% Highway: 80%
5. Future plans for the land: Would like to develop: 13% Other plans: 17% No specific plans: 70%
6. Household income below $6,000/year: 48%
7. Would you like to sell your land: Yes: 7.5% No: 86.5% No answer: 5.2%
8. Do you know the most common ways by which people lose land? Yes: 58% No: 42%
9. Have you made a will: Yes 25% No: 75%
10. Do you know the purpose of the Planning Commission for Beaufort County: Yes: 23% No: 77%
11. Have you ever attended a meeting of your county government? Yes: 19% No: 81%

It is highly likely that the scenario of Hilton Head will repeated throughout the Sea Islands unless an aggressive education program related to landownership among the indigenous population is undertaken.

Master plans have already been approved for the islands of Dataw, Daufuskie, Gibb, Cat, and Harbour. Daufuskie has an indigenous population of 100 dwindled form more than 1,000 a decade ago thanks to pollution of
the oysters. Other landowners have since moved to large urban

centers, but retain ownership of land on the Island. Virtually all the Sea Islands are heavily populated with low income families with small farms.

Further north in the Charleston area, the same situation exists.

Development of the Sea Islands into plush communities brings problems other than land loss to the indigenous population. More regulations produce higher living costs. For an example, housing cost is prohibitive for most indigenous landowners who earn meager income as maids, maintenance workers, waiters and carpenter helpers. Shopping must be done at resort shopping centers where prices are aimed at tourists and are therefore marked relatively high.

Improved schools like other improvements is also mixed blessing. While the education system is improving, the children who are native to the area are having difficulty adjusting to the new pace and new culture. Most educators are resisting the need to address the problems of native children brought on by social isolation. To compound their learning process, some native children are forced to work until late at night after school to help with the family income which must now meet greater expense.

The use of drugs and alcohol have increased to an alarming rate, destroying once very stable families and changing the values of area youth.

The disparity in culture and economics between Black and White students are some what manifested in achievement at school. In 1984, only 25% of all Black students tested, while 71% of all White students met the State Educational standards in Beaufort County. A simular disparity prevailed in mathematic and reading

standards.

Unless there is intervention, the current trend will lead to the ultimate displacement of those who Lincoln intended to launch into the main stream of American life with land and a means to use it. Aside from displacement, the percentage of the black population in Beaufort County is dwindling. Although Blacks still make up about 30% of the total county population, this percentage is steadily decreasing from more than 50% in 1960. This is mainly due to the rebirthing of plantations.

Since in a democracy such as ours, the majority controls the decision making process, special provision is needed now to protect the indigenous population from becoming displaced. The alternative is to ignore the current trend and face the social consequences in the 21st Century.

Following the reconstruction era volunteer programs were established to teach the newly freed slaves how to cope with a system which was new to them. Lessons were taught in land ownership and increased production and fool producing crops.

Today, a Comprehensive Program is needed to teach descendants of those same freed slaves how to make the transition in land use from farming to resort development. Such a program must provide hands-on guidance in specific appropriate land use in order to avert social, economic and cultural annihilation of the indigenous population. This manual is but the first step. But "the journey of a thousand mile begins with a first step."

This manual is designed to assist Local Landowners according to regulations and laws of Beaufort County. Many of the county's regulations are based on State Laws, consequently, the manual can be used on a statewide level.

Introduction: HOW TO USE THIS MANUAL

This manual was written to explain land laws so that landowners can act to protect their property. It describes the legal processes landowners are most commonly involved in, and emphasizes the actions a landowner can take to secure and improve his or her property, as well as what to do if land is threatened. It suggests what a landowner can do him or herself and when to consult a lawyer. By detailing each legal process, the manual gives the landowner the knowledge to question a lawyer about the steps they will need to take, and to evaluate the lawyer's answers.

The manual is written for people with little or no legal knowledge. Where possible, non-legal terms are used. Where legal terms are unavoidable or will be helpful to the landowner, they are defined first, then given between parentheses.

The manual is organized in sections, and each section is written so that it may be consulted alone, without reading the ones before it. Where it is necessary to refer to information in another part of the manual, the reader is directed to the other section, and the section heading is printed in boldface type.

Our hope is that this manual will not just be used when a landowner has a legal problem, but will be an impetus for families to think about the land: how we can best use it now and how we can preserve it for our children and grandchildren. This requires legal and financial planning. More important, it requires us to teach those who will use the land after us to appreciate it, and to pass this commitment to the land to yet another generation.

HOW LAND IS HELD

Land can be owned by one person or divided among many. When one person owns land, he or she can do anything with the property, including rent, deed or will it. When more than one person owns land, each has an interest in it. An interest is like a share -- by combining their interests into a whole, the owners of the property can do anything with it. When the owners act as less than a whole, they must so so in a way that does not interfere with others' interest in the land.

INDIVIDUAL OWNERSHIP

When a person owns property individually, he or she may do anything with it -- including lease, will or sell it. To transfer land to one person, deed or will it "to (name of the person) and his or her heirs."

SIMULTANEOUS OWNERSHIP: COTENANCY

A contenancy is when two or more people own land together at the same time. Each is entitled to use of the whole property, and each may end the cotenancy by asking the court to divide the land into separate lots (see Partition). There is no limit to the number of cotenants who can share a property.

There are two types of cotenancies: tenancies in common and joint tenancies, and they are defined according to whether the cotenants can deed or will their shares in the property.

In a tenancy in common each cotenant can deed or will his or her share in the property as if he or she owned it individually. These shares do not have to be equal; for example, one person can own a 1/3 interest in the property, and another a 2/3 interest.

A tenancy in common is created by deeding or willing land "to (name or persons) as tenants in common." When a person dies without a will (intestate) property is divided among relatives who then become tenants in common. This is known as **Heirs Property.**

In a joint tenancy, contenants can not deed or will their shares in the land. When one joint tenant dies, his or her share is divided among the other contenants. This is known as the right of survivorship. For example, if Mr. Adams deeded land to his four children as joint tenants and one died, the other four would divide that child's share. When another child died, the reamining three would divide that share, and so forth. The last child, the "survior" would own the land individually, and could deed or will it.

A joint tenancy is created by deeding or willing land "to (name of person) and (name of person) as joint tenants with the right of survivorship."

CONSECTUTIVE OWNERSHIP: **LIFE ESTATE and TERM OF YEARS**

Two or more people can also own land so that one uses it for a number of years and then it goes to the other. The most common way of doing this is through a legal arrangement called a life estate. A life estate allows someone to live on and use land for as long as he or she lives. This person is called the life tenant. At the life tenant's death the property either returns to the person who created the life estate (or his or her heirs) or goes to others, called remaindermen. The life tenant may not do anything to decrease the value of the property.

Advantages

This ensures that the life tenant will always have a place to live and that the land will return to the owner or go to the remaindermen. Life Estates are usually created for a spouse or children, with the property going after their death(s) to children or grandchildren.

Disadvantages

There are two major problems with the life estate. First, there may be disputes between the life tenant and the people the land goes to next about who should maintain the property, pay taxes or mortgages on it, etc. There may also be arguments about whether the life tenant is using the land in a way that decreases its value. Although a life estate is usually created in an attempt to provide for family members, it may end up provoking conflict among them.

A more serious problem is that the life tenant may be "land rich but cash poor". Although the life tenant may have no other source of income; he or she can not mortgage or sell the land. The life tenant probably can not rent it either, since any lease would end at his or her death. The life tenant in this situation has two alternatives. First, the life tenant can try to find all the people who will own the land after he or she dies and get them to agree to cosign a mortgage, lease or deed. This can be difficult if they are living far away or have different ideas about what should be done with the property. If this fails the life tenant can ask the court to sell part of the land and give him or her the income. This can be hard on the life tenant, who may be asked by the court to justify expenses and come back to the court every few months for more money. It defeats the usual reason for creating a life estate -- to preserve land intact.

A life estate is created by deeding or willing land "to (name of person) for life, remainder to (name of person)." There may be any number of life tenants or remaindermen, and they do not have to be related to each other or to the person establishing the life estate.

A term of years is similar to a life estate, except that the period of time that each person lives on and uses the property is measured not by that person's life, as in a life estate, but by a period of years. A person may, for example, establish a term of years for a niece, allowing her to live on the land for the number of years it will take for her children to grow up, and then have the land go to someone else. Any transfer of land for more than three years must be in writing. To create a term of years, deed or will land "to (name of person) for (number of years), then to (name of next person)".

TRUST

A trust is property that one person (the trustee) owns and manages for the benefit of another person (the beneficiary). A trust may be created to benefit more than one person, either at the same time or one after another. The trust relieves the beneficiary of the responsiblities of managing the property. This can be important where, for example, the beneficiary is inexperienced with money or land or is ill.

A trust provides many of the benefits of a contenancy or life estate and avoidds some of their problems. Like a cotenancy, more than one person can benefit from the property at the same time. As in a life estate, the proerty can be used by one person and at his or her death go to another. Unlike a cotenancy of life estate, however, the land has only one owner -- the trust -- and can be leased, mortgaged or sold without the permission of everyone who has an interest in it. While some may consider this a disadvantage, the greater flexibility of a trust usually works in everyone's favor. The trustee has a legal obligation to manage the property wisely for the gain of all the beneficiaries, and if he or she does not do this the beneficiaries can take the trustee to court.

Although most people think of trusts as only for the rich, anyone with property can establish one. A lawyer should be consulted. A trust must be created in writing and signed by the property owner. It can be contained in a will. It must include the names of the beneficiaries and at least one trustee, and a complete description of the property. The selection of the trustee is crucial to the success of the trust. A lawyer may be helpful in choosing someone, and also in explaining the trustee's responsibilities.

HOW LAND IS TRANSFERRED

DEED

A deed is a document that transfers land from one person to another. To be valid it must clearly show the intent to transfer, be signed by two witnesses, include a complete description of the property and a notary's seal (although if the seal is omitted unintentionally, the deed is still good). While no special legal words are required to deed land, if the deed is not made out to the new owner and his or her "heirs and assigns", it will be interpreted as conveying only a life estate.

A person can deed only as much land as he or she owns. For instance, if a man owns 1/2 interest in a property, he can not deed 3/4 of the land to another. Similarly, if a woman has a life estate in a property, she can deed it to someone else only for as long as she lives.

Types of Deeds

There are two types of deeds: Warranty and Quitclaim. A Warranty Deed guarantees that title to the property is good and that no one else will claim to own the land. If this happens, the seller agrees to defend the new owner in court, and promises that his or her heirs will do the same. A sample warranty deed is reproduced below.

Illustration A

A Quitclaim Deed simply transfers property from the seller to the buyer, and is used when the seller does not have clear title. It releases the seller's interest in the land, but does not say that he or she is the only owner -- or even legally owns it at all. Any one purchasing land under a quitclaim deed should question the seller about why title is not clear and, more importantly, do a title search to ensure that there are no other land owners and no mortgages or liens against the property. See **Searching Title** for information on how to do this.

All deeds should be immediately registered at the courthouse. This protects the new owner in case the seller tries to make out a second deed to someone else. If two people have a deed to the same property, the one who registers first is favored by the law as the owner. In Beaufort County, deeds are registered in the Assessor's Office. There is a small fee.

Keep your deed in a safe place, like a safe deposit box at the bank, or with a lawyer.

In Beaufort County there are many old deeds which have become hard to read or do not describe land specifically enough to identify it. Anyone with a poor deed should see a lawyer about getting a new one or bringing a legal action to establish ownership of the land.

A. Sample Warranty Deed

Know all men by these presents that I (**name of seller**), in the State of South Carolina, in consideration of the sum of (_____) dollars, to me in hand paid by (**name of buyer**), the receipt of which is hereby acknowledged, have granted, bargained, sold and released and by these presents do grant, bargain, sell and release unto the said (**name of buyer**) all that (**description of land**), together with all and singular the rights, members hereditaments and appurtenances to said premises belonging or in any wise icident or appertaining; to have and to hold all and singular the premises before mentioned unto said (**name of buyer**) his heirs and assigns, forever. And I do hereby bind myself, my heirs, executors, and administrators, to warrant and forever defend all and singular said premises unto said (**name of buyer**), his heirs and assigns, against myself and my heirs and against every person whomsoever lawfully claiming or to claim the same, or any part thereof.

Witness my hand and seal this _____ day of _____ in the year of our Lord _____ and in the _____ year of the independence of the United States of America.

_____
(signature of seller)

_____

_____
(signature of Witnesses)

B. Sample Description of Land for Deeds and Wills

ALL that certain piece of land or lot of land lying and bein Edisto Island containing ten (10) acres, more or less, being bounded on the West by U.S. Highway 278 and having a frontag said Highway 278 of 330 feet and extending in depth 1,080 fe more or less, and bounded on the lands now or formerly held Joe Mungin, on the East by lands formerly held by Joe Mungin on the South by lands now held or formerly held by Dillons a Drysdale.

MAKING A WILL

A will is a legal document stating who you want your property to go to after you die. Both land (real property) and personal property may be included in a will; this section deals primarily with real property.

There are several benefits to making a will. It ensures as much as possible that the property is divided the way the person making the will (the testator) wants. If a person dies without a will, land is divided among relatives who may have no personal ties to the land and may try to sell it. A will can also prevent family squabbling after the landowner dies by deciding beforehand exactly who should get what. Often families write wills together, leaving land to the members who can use it best.

Anyone 18 years of age or older (or under 18 if the person is married) and of "sound mind" can make a will. A will must be written and signed by the testator or someone he or she directs to sign it. A will must also be signed by two witnesses, although three should be used for safety's sake. South Carolina law recognizes and recommends what is know as a self-providing will. This is a will into which a signed and legally sealed statement (an affidavit) has been incorporated, in which the testator, witnesses and a notary public declare that the will was properly signed, that the testator was capable of making it, and that the testator's act was free and voluntary. A self-proving will significantly reduces the possiblility that it will be questioned. It can be made at the same time that the will is signed or any time after.

A will can be changed at any time either by replacing it or intentionally destroying it.

A will should say as specifically as possible what property should go to whom. First the land itself must be accurately described. A lawyer can find the exact recorded description of the land, or the testator or someone else can look this up at the county courthouse. (see **Searching Title**) The description should include the size of the tract and its boundaries, as in this example:

Illustration B

Second, if the land is being left to more than one person the will should state how it should be divided and in what form it should be owned. If land is being left to two children, for example, does the person making the will intend that they share the entire lot equally? Is each to

get a certain section? If there is a house or other building, how should it be divided?

The person making the will should also appoint a personal representative (executor) who will be responsible for carrying out the provisions of the will. The personal representative may be an individual 18 years of age or older, or an institution like a bank. If a corporation is chosen, it must have a place of business in South Carolina. Most people prefer to apoint someone who they know well --a friend or family member who they know will devote time, energy and care to settling the estate. If the testator does not choose a personal representative, the court will appoint one, usually a spouse or someone left property under the will. A will should be kept in a safe place like a safe deposit box known to others or with a lawyer.

Below is an example of a will:

Probating the Will

The probate court is a special court that deals with a deceased person's property. After someone dies, the person who is holding the will or who knows where it is has 30 days to bring it to the probate court, where the judge will declare it valid in one of three proceedings:

Informal probate. When there is a will and its validity is not contested, the personal representative or one of the people who will receive property under it will seek an order of probate to make it operative. This is the preferred procedure for most wills.

Formal probate. This procedure is required when someone dies without a will that includes all of his or her property; the validity of a will is questioned; someone wants to block or overturn an informal probate proceeding; or a will has been lost, destroyed or is otherwise unavailable. The probate judge formally decides the case.This is a more complex, expensive and time-consuming method than informal probate and a lawyer probally will be needed.

Affidavit. There is also an affidavit procedure for settling estates worth less than $7500. It can not be used where land or creditors are involved.

Before the property can be distributed under a will, the law requires that certain payments be made. These payments are not automatic. Anyone who thinks that he or she fits into one of these catagories should consult with a lawyer or the probate judge.

Last Will and Testament

I, _____
of _____, being of sound and disposing mind and memory and desiring to make such disposition of my wordly estate as I deem best, DO HEREBY MAKE, PUBLISH AND DECLARE THIS TO BE MY LAST WILL AND TESTAMENT, hereby revoking any and all former wills and codicils whatever by me made.

First, I direct that all my just debts and funeral expenses be paid out of my estate as soon after my decease as conveniently may be and to that end charge my whole estate, real and personal, with the same.

Second: I give, devise and bequeath to _____.

I nominate and appoint _____ to be the executor _____ of this my Last Will and Testament.

_____

_____

IN WITNESS WHEREOF, I have hereunto set my hand and seal to this my Last Will and Testament at _____ this _____ day of _____, in the year of our Lord One Thousand Nine Hundred and _____.

Signed, sealed, published and declared by the said _____ as and for _____ last will and testament in the presence of us, who in _____ presence, at _____ request and in the presence of one another, all present together, have hereunto subscribed our names as witnesses.

_____

_____

These payments fall into three catagories -- exemptions, debts, and rights of a spouse or child -- and must be paid in this order:

Exemptions reserve part of the property for the family of the deceased. Up to $5000 worth of personal property (everything but land) is set aside for the husband or the wife of the person who died or, if the spouse is not living for any minor or dependant children.

If land must be sold to pay debts, the head of the family may also be able to claim a homestead exemption of up to $1000, reserving a section of the property for the families use, as well as an exemption of up to $5000 on a residence.

Debts are what is owed. Creditors must be paid in an order set by law and the costs of probating the estate deducted. Where necessary, the court may order the sale of as much land as is needed to pay the debts, but it must first notify all heirs and anyone left property under the will. They will have 20 days to pay the debts or give reasons why the land should not be sold.

Provisions for a spouse or children may give them a greater share of the deceased's money or property than they were left in the will. If the person leaving the will did not provide for a spouse married or a child born after the will was made, and the omission does not seem intentional to the court, the spouse or child will get the same share as it would have if there had been no will. See **Intestate Succession.**

A spouse is also entitled to claim 1/3 of the estate after debts, taxes and other expenses listed above have been paid. This is discussed in more detail under **Elective Share.**

ELECTIVE SHARE

If a married person living in South Carolina dies, the surviving spouse is entitled to 1/3 of the estate (after taxes, debts and other expenses have been paid), even if this is more than the husband or wife was left under the will. The spouse must file a request with the probate court and mail or deliver a copy to the personal representative (if there is one) within 9 months after the testator's death or 6 months after the will is probated, whichever is later. Property reserved for a spouse under an exemption is in addition to the elective share, but property that passes to the spouse under the will is included as part of the elective share.

INTESTATE SUCCESSION

Intestate Succession is the legal formula for dividing among relatives any property of a deceased person not included in a will. If there are no close relatives living, or if the land has been passed in this manner for several generations, ownership may be splintered among many heirs. This is the problem of **Heirs Property.**

There are two steps to determining ownership through intestate succession. The first is deciding who owns the land. The formula for intestate succession sets this out. The second step is determining what share each owner is entitled to. This depends on how closely related each owner was to the deceased (degree of kinship).

Formula for Intestate Succession:

A. If a married person dies leaving a spouse (husband or wife) and no children, grandchildren, greatgrandchildren, etc., either natural opr legally adopted (issue), the spouse takes the entire estate. If there are issue, the spouse takes ½ and the issue divide the other half..

b. If no spouse is alive the property is divided among the first of the following groups to have a living member.
   1. Issue;
   2. Parents;
   3. Siblings or, if there are none, half brothers and sisters, with the issue of the half siblings and whole siblings getting equal shares;
   4. Grandparents or, if they are not alive, their issue. If there are both maternal and paternal relations living, half of the estate goes to each side of the family;
   5. Great-grandparents and their issue in the same way as for grandparents.
   6. Stepchildren and their descendents.

C. If none of the above relations are living, the property goes to the government.

Degree of Kinship

Degree of kinship determines how an estate (real and personal property) will be divided when the heirs are not all related to the deceased in the same way.

Where property is divided between kin of the same degree, each receives an equal share. For example, if property were to be divided among three children, each would receive one-third.

Where kin are of different degree, they share by another legal formula called "representation" If Mr. Adams died and his property were to be divided among three children and two grandchildren by a fourth child who died before Mr. Adams, the settlement would look like this (The circled people are deceased):

Each living child would take ¼, and the child who died would be represented by his or her children, who would divide their parent's share equally.

The division begins among the nearest degree of kin who have surviving members counting both those who survive and those who died leaving issue surving. So if when Mrs. Baker dies her children are already dead but she has grandchildren living, the division would be based on the number of grandchildren who are either alive or have issue living. In the example below, the circled people -- Mrs. Baker, her two children, and one grandchild -- are dead. Her property is divided between her grandchildren and any great-grandchildren whose parents are dead.

Note: The laws on intestate succession were thoroughly revised in 1986. If a person died without a will after July 1, 1987, the property was divided as described above. If you are unraveling a piece of heirs property and some of the owners died before this date, you will want to refer to the previsions in codes (1976: 21-3-20 and 1962: 19-52) to determine the appropriate shares.

Insert D.

Mr. Adams

x	X	X	X	- Children ¼ each
		X	X	- Grandchildren 1/8 each

Insert E.

Mrs. Baker

		X	X	- Children
		X	X	X - Grandchildren 1/3 each
			X	X - Great Grandchildren 1/6 each

ADVERSE POSSESSION

Another way a person can acquire or lose land is by Adverse Possession. Adverse Possession is where, if someone remains on another's land for ten years without the owner objecting, the occupant or adverse possessor gains ownership of the property. Usually adverse possession is against a stranger. Though harder to prove, it may be claimed against a former cotenant or landlord. Except in rare cases, it can not be claimed against the government.

Land is considered in "possession" when it has been fenced off or cultivated or improved in the manner usual for that area. The possession must satisfy all of the following criteria:

Hostile. The possession is without the permission of the owner and the intent of the occupier is to gain title to other's land.

Open and Notorious. The adverse possessor's actions are so obvious that the owner knows about the occupancy, or should have known if he or she had been taking proper care of the property.

Continuous. The adverse possessor has used the land without interuption. Occasional entry to cut timber, for example, is not sufficient.

Exclusive. Other people, especially the owner, have not gone on to and used the land during the ten year period for which the occupant is claiming possession.

Adverse Possession claims are decided by a jury. The jury looks first to the person's intent -- was it sufficiently "hostile" -- and then determines whether the adverse possessor's actions satisfy the other criteria and make it obvious to ordinary people that he or she is claiming ownership. The jury takes into consideration the nature, character and location of the property and the way similiar property in the area is used. The person claiming title through adverse possession has the burden of proof. Evidence may include a deed or mortgage and tax receipts; these cannot by themselves confer ownership, but can be used to support the adverse possessor's claim of ownership.

It is difficult to prove a case of adverse possession against cotenants since by law each is entitled to complete use of common property. The cotenant asserting exclusive title must oust the others. While a physical "turning out by the hels" is not necessary, the ouster must be actual and unmistakable. Some courts have held that exclusive possession for 20 years by one cotenant gives rise to a presumption of ouster.

Adverse possession against a landlord begins from the time the lease ceases or the last rent is paid, whichever is later.

The courts at present are interpreting the requirement of "hostility" very strictly and it is becoming increasingly difficult to gain or lose ownership through adverse possession. Anyone thinking of asserting ownership this way, and anyone who owns land and thinks that someone else may be trying to claim it through adverse possession, should see a lawyer as soon as possible.

HEIRS PROPERTY AND PARTITION

Heirs is the name given to the land that is divided among relatives after the original owner dies without a will. The relatives or heirs own the land as tenants in common. If ownership is transfered this way for several generations, it becomes splintered among many people, most of whom have very small shares in the property. There are estimates that more than half of all Black-owned land in coastal counties, such as Beaufort is owned as heirs property.

People concerned with retaining Black-owned land disagree about whether heirs property is more of a benefit or a disadvantage to its owners and whether it has helped people retain land or has contributed to its loss.

On one hand are those who beleive that heirs property is beneficial because it gicves all the owners a place to come home to. Because there are frequently many owners, it is unlikely that they will all agree to sell the land. It is also doubtful that any of the cotenants can mortgage the property, and this prevents its loss through foreclosure.

On the other hand are those who say that heirs property makes life difficult for the owners living on the land. They may be the only small share of it. They can not mortgage the land to finance improvements, and have little incentive to make them since the other cotenants have an equal right to any improvements and, more important, since they can not be sure that another cotenant will not sue for partition.

Partition means division. Any cotenant can ask the court to divide the heirs property, which almost always results in its sale -- usually for less than its worth and to someone outside the family.

Keeping heirs property

There are several ways that an owner of heirs property can work with the other cotenants to keep the land from being sold. Among the things an owner can do are:

Obtain cotenants' interests. A cotenant who is living on the property and wants to own it individually can ask the other owners to deed him or her their shares. Some of the owners may ask for payment. Others may do this for free, especially if they have not been using the land and the cotenant who wants it presents them with convincing arguments. A cotenant can deed with reservations. The deed can say, for example, "to (name of person) so long as he or she reserves a part of it for me to live on when I visit" or "to (name of person)

so long as he or she does not sell the land". Cotenants who want to put this type of reservation in a deed should consult a lawyer.

Divide the property among the cotenants. Property owners can agree to partition the land themselves. This works best when there are only a few owners. Partition can also

be combined with purchase; those who want to keep the land can negotiate with those who want to sell it. Once it has been established what percent of the land each of the resulting cotenants owns, they can with the help of a lawyer write up a partition it agreement.

Claim the land by adverse possession. See Adverse Possession. This option is difficult and, unlike the others, may deprive cotenants of their shares without compensation or agreement.

Lease the property. This is an alternative to sale which can provide the cotenants with a steady source of income. The cotenants must all agree to lease land, and may want to form a corporation to do so. They may decide to lease part of the land, and partition the rest among themselves. A lawyer should be consulted.

Partition

Every cotenant is entitled to ask the court to divide the property. The court has three options: to divide the land among the owners, assign the land to one if he or she pays the others for their interests, or order the land sold and the money divided among the owners. The court almost always chooses the third option.

A cotenant who does not want the land to be sold in a partition action has rights. He or she should contact a lawyer immediately.

The cotenant requesting the partition action (plantiff) must notify the other cotenants about it. The plantiff must make a reasonably diligent effort to find out where the other cotenants live and notify them by mailo. If the plantiff is unable to find the address of any cotenant, he or she must say this in a sworn statement (affidavit) to the court, which will then order the plantiff to publish notice of the partition action for three weeks in a newspaper printed in the county where the land is located.

If a cotenant thinks that he or she was not notified properly, the cotenant can protest to the court.

The procedure in a partition action is for a commission of five people to determine whether the land should be divided, assigned to one person, or sold, and to work out the details of whichever option it chooses. The cotenant requesting the partition (plantiff) chooses two commissioners, the court appoints one, and the other cotenants (defendants) can select the remaining two.

The cotenants should take advantage of the opportunity to select commissioners who they think will agree with them about what should be done with the land. If the cotenants do not get together and select two commissioners, the plantiff chooses three and the court appoints the other two.

The commissioners have one month to decide what should happen to the land. Cotenants who want to keep the land should get together, with a lawyer if possible, to prove that the land can be divided fairly and does not have to be sold. The cotenants should make a map, or hire a surveyor to make one, showing how the land can be divided without prejudicing anyone. The cotenants should present this information to the commissioners.

If the commissioners decide that the land should be sold, cotenants who made improvements to it are intitled to receive their value so long as it does not decrease the value of common property.

TAX SALES

All landowners must pay taxes on their property. If taxes are not paid, the government has the right to take the land and sell enough to cover the taxes. Many people lose their land this way.

How Taxes are Set

Taxes are based on the value of the land. The board of Assessors in each county determines (assesses) the value of individuals lots based on how much the land would be worth if sold. This called its "market value". The Board compares the lots to be assessed with similiar pieces of property nearby that have been sold recently. In Beaufort County property is reassessed every five years.

Assessments must be uniform and equitable. The Board must inform property owners of any increase by the fourth Monday in March of the year the taxes are due (or as soon after as possible). A landowner who thinks that his or her property is valued unfairly can appeal to the Board of Assessors for review. This must be done within thirty days of receiving the assessment.

A tax break entitles certain landowners to pay a reduced amount of taxes. A landowner is eligable to file for a tax break if he or she is:

65 years of age or older or classified as disabled by a state or federal agency. The elderly or disabled person is entitled to have the first $20,000 of his or her home exempted from taxes. This is known as a homestead exemption. The landowner must apply in person to the County Auditor between January 1 and May 1 of the year for which he or she is claiming exemptions.

A landowner applying for the 65 and over exemption must bring proof that he or she turned 65 before the start of that year and has lived in Beaufort County for more than one year. A landowner applying for the disability exemption must bring proof of disability , which can be obtained from the State Agency of Rehabilitation.

Once this exemption is approved, it continues until the landowner's death so long as taxes are paid by March 15 of every year. If the landowner moves, he or she can transfer it ti another property.

If a person eligible for a homestead exemption dies and the surviving spouse is at least 50 years and owns the property individually or has a life estate on it, the exemption continues so long as the spouse remains unmarried and uses the property as a permanent home and legal residence.

An elderly or disabled person who lives in a mobil home on property leased from another is exempt from

personal taxes to the same extent that a landowner is exempt from property taxes.

A veteran totally disabled by a service related injury. The veteran is exempt from paying taxes on a house and one acre of land. Veterans apply for this exemption through the South Carolina Tax Commission in Columbia. Applications are available in the County Assessor's office.

Using the land for agriculture. Land is normally assessed based on its market value. If land is used for agriculture, the owner can have it assessed based on its "use value", which is almost always much less than its "market value". The rate of the assessment is also less -- 4% instead of the usual 6% of the value.

The landowner must file an application with the County Assessor. The filing period is January 1 through May 1 of each tax year. Once the inital application is filed, it will be automatically renewed each year until the next reapplication is required. The reapplications are required in years ending in the numbers "2" or "7", and are mailed to the landowner at his or her last known address.

It is the owner's responsibility to make sure the inital application and future reapplications are filed on time. The County Council is the final review authority for any application received after the May 1 filing deadline. A late application must include a statement on why it was not filed on time.

Using the land as an actual or primary residence. The property will be assessed at a 4% rather than a 6% rate. The owner must have title to the property or a contract to purchase it, and must be living on the land by January 1 of the tax year. The application procedure is the same as for an agricultural tax break.

The Tax Calendar

October 1 -- A notice is sent to all landowners telling them how much their property tax will be for that year. (This date is approximate.)

September 30 - January 15 -- Taxes are due for the year ending December 31. Pay on time! If taxes are not paid by January 15 (or 30 days after the tax notice is mailed, whichever is later), a 3% penalty is added. If they are not paid by February 2, another 7% is added, and if they are not paid by March 17, another 5% is added to the amount due.

April 1 -- If the taxes are not paid by this date, the landowner is notified by certified mail of the amount due and is told that if it is not paid, the land will be sold. If the letter is returned

unopened, a notice is posted on the property saying that it has been taken by the government because the taxes were not paid. Sometimes the notice is posted where it can not be seen and warn the owner. If the taxes are not piad within 30 days after the letter is mailed, the government can take possession of the land.

September 1 -- A list of properties to be sold is printed and the land is advertised in the local paper. Land must be advertised for a 3 consecutive weeks prior to the sale. The ad must specify the property, time and place of sale, name of the owner, and party requesting the sale (the government). The cost of these ads is added to the amount due.

1st Monday in October -- If the amount of taxes due is not paid by 10:00 a.m., the land is sold at the county courthouse.

By law, the government can sell only as much land as is necessary to cover the amount of taxes and penalties due. This is often not enforced. In Beaufort County, for example, the Assessor's Office has no surveyor on staff to determine how much land needs to be sold. Consequently, the entire property is put up for sale. A landowner whose property is going to be sold for unpaid taxes should contact a lawyer immediately to challenge this practice.

After the land is sold, the purchaser can not take immediate possession of the property. The defaulting landowner has 12 months from the date of sale to get the land back by paying all the taxes and costs due plus an additional 8% interest charge. This time is called the Redemption Period. Between 45 and 20 days before the end of this period, the defaulting landowner is sent a notice by certified mail saying that if the amount due is not paid by the end of the 12 months, the land will be lost and ownership officially transfered to the purchaser.

If the land was sold for more than the amount of taxes due (which happens when the bids are competitive or the amount owed is so small that there is money left over when the government sells the minimum amount of acreage feasible), the defaulting landowner has five years from the date of sale to claim the excess from the County Treasurer.

MORTGAGES

A mortgage is a right to or interest in land that is created to make sure a debt is paid. A person may mortgate land to a bank, credit union or government agency like the Farmers Home Administration (FMHA) im return for a loan. If the loan is not repaid, the lending institution has a right to the property.

Before mortgaging land, the owner should think carefully about his or her ability to repay a loan, and should "shop around" to see what types of loans are avilable. The landowner ;should try to mortgage as little property as possible. He or she may be able to mortgage only a section of the land, or deed part of it to relatives before taking out a mortgage on the reminder. Some lenders will agree to decrease tha amount of land subject to the mortgage as the landowner pays off the debt. The landowner should consult with a lawyer before signing the mortgage.

There are no legal words or forms needed to create a mortgage, just a writing signed by the person taking out the mortgage saying that he or she intends to give the lender an interest in the property. Both the property to be morgaged and the amount of the debt should be carefully specified. The lender will require that the person applying for the mortgage own the property individually or get the other owners to agree to the mortgage. The lender will also charge interest on the loan, and the landowner should check that this is not higher than the state allows. A mortgage should be recorded at the courthouse.

When the mortgage debt is paid, the landowner should ask the lender to enter this in the courthouse records. If the lender has agreed to release a portion of the land from the mortgage when an agreed upon number of payments have been made, any releases should be put in writing, witnessed, and attached to the mortgage paper at the courthouse. If, after all payments have been made, the landowner asks the lender does not do this within three months of the request, the landowner can sue the lender and get back up to one-half of the amount of the loan.

Foreclosure

A landowner who can not pay all the money owned on time should contact a lawyer and the lender immediately. If approached when the landowner first begins to have problems, the lender may be able to reschedule payments, especially if the landowner's problems are beyond his or her control, like a poor harvest or family illness. The longer the landowner waits before contacting the lender, the less likely they will be able to work out something.

If the FMHA is the lender, it is legally obligated to consider other choices before selling the land. It may

consolidate the loan, which means adding a new loan; reschedule payments; or put payments off for a "breathing period" of up to three years.

If the debt is not paid, the lender can foreclose on the property. To "foreclose" is to shut out or bar the owner from keeping the land by making further payments on the loan. To foreclose, the lender must prove in court that a specific amount is owed. The landowner will be required to agree in court to this amount, unless he or she has done so in writing within the last 12 months. The landowner should be sure to attend all court and administrative hearings, and should bring with him or her a copy of the mortgage agreement, receipts for apyments made, and any letters to or from the lender.

Before the land is old it must be advertised in the local paper for three consecutive weeks. The ad must specify the property to be sold, the time and place of sale, and the names of the owner and of the party requesting sale (the lender). Land is sold at the ocunty courthouse on the first Monday of the month. The defaulting landowner can bid at the sale. Bidding will remain open for 30 days after the sale, so that the land will bring as much money as possible. The landowner is not allowed to bid during these 30 days.

If the land is not sold for as much money as the lender is owed, the defaulting landowner is personally responsible for the difference. This is called a deficiency judgement.

Example:	amount owed	$500.00
	amount of sale	-200.00
	amount due from the defaulting landowner	300.00

If the defaulting landowner thinks that the land was sold for less than it was worth, he or she can ask the court to determine the true value of the property. This is called an appraisal, and must be requested within 90 days of the sale.

SALE OF LAND TO PAY DEBTS

Land can be sold if the owner does not pay his or her debts. The person or company owed money (creditor) can ask the court for a judgment stating that the landowner owes a certain amount of money. The creditor then has 10 years to record this judgment in the county courthouse where the land is located. A judgment against land is called a "lien". If the landowner does not pay the amount due, the creditor can ask the court to sell the land. It is illegal for the owner to sell the land when there is a lien on it.

A landowner can also agree to have a lien placed on his or her property -- often without realizing it. Contracts to repair or improve a home often include a clause in small print saying that if the owner does not pay for the repairs on time, the person who furnished the labor or materials is entitled to have the property sold to pay the debt. This is known as a "mechanic's lien". The creditor must still get a court judgment before the property can be sold.

If the landowner does not pay the debt and the land is sold, the sale must take place in the county where the land is located. The land must be advertised for three consecutive weeks prior to sale, and the notice includes a description of the property, the time and place of sale, and the name of the owner and of the person who wants to collect on the judgment. Sales by the court are usually held the first Monday of each month between 11:00 a.m. and 5:00 p.m. The bidding is held open for 30 days after the date of sale so that the land will bring as high a price as possible. The landowner may bid at the sale, but not during the 30 day period.

PROPERTY EXEMPT FROM SALE

Not all of a person's land or personal property may be sold to pay debts. The law allows to debtor to keep (exempt) certain things. These exemptions are not automatic and do not apply in every circumstance. A person whose property is going to be sold should consult a lawyer immediately upon receiving notice of the sale to determine what property is exempt.

Among the property that may be exempt from sale is:

* $1000 worth of land and the present harvest. This is called a homestead exemption and is available to the head of the family. It does not apply against mortgages, mechanic's liens, or taxes, and can not be used by cotenants. The landowner may give up (waive), this exemption, often by mistake, if he or she signs contracts without reading the small print.
* $5000 worth of a home;
* $1500 worth of a car;
* Household goods and clothes worth up to $2000;
* Jewelry worth up to $500;
* Cash or other "liquid assets" worth up to $1000 if a homestead exemption is not claimed;
* Professional tools and books, up to $750 in value;
* Unmatured life insurance, if it is not under a credit life insurance contract;
* Certain interest earned on a loan, stock dividend or life insurance contract;
* Prescription health aids;
* Certain benefits including health, unemployment and veterans benefits; alimony, and some life insurance payments.

EMINENT DOMAIN

Eminent domain or condemnation is the power of the government to take private land for public use. Federal, state, and municipal governments can condemn land for a public purpose, and may delegate this power to private corporations. This is how the government acquires land to widen highways, build new facilities,, etc.

Anyone who receives a notice that the government is going to condemn land should contact a lawyer immediately. Condemnation proceedings are tricky. There are several ways the government can take land, and the requirements for notifying the landowner, providing him or her a hearing, determining the value of the property, and transfering ownership to the government vary. What they have in common is the requirement that the landowner act quickly or risk losing the land and the right of appeal. Unlike other legal procedures which may drag on for years, condemnation actions can happen very fast. Less than two months may pass between the time the landowner is notified and the final court decision setting compensation for the property.

Each stage of the condemnation process has its own deadlines, and missing one may have serious consequences. The landowner may lose the right to appoint someone sympathetic to the commission that will set the value of his or her land, or to appeal from an adverse ruling.

The landowner is entitled to receive the fair market value of any property taken. The government may try to avoid this requirement by saying that by condemning part of a property for public use, the value of the rest increases. The landowner should not be lulled or overcome by arguments like this, but should have his or her lawyer insist on proper payment. If the land is being taken for a federally-funded project, the owner may be entitled to additional expenses, including relocation costs. Money the landowner receives in payment is tax free and may not be used to calculate or change eligibility for public assistance programs.

A landowner may ask the court to consider mineral and timber rights to the property separate from the value of the land itself if it appears that this will increase the compensation.

PERMITS TO IMPROVE OR ALTER LAND IN BEAUFORT COUNTY

Permission from government agencies is frequently required before you can alter your land. Below is a chart of common activities that require permits, the agencies to contact, and the things you will need to do. The addresses and phone numbers of the agencies mentioned are listed after the chart. This chart is valid for the unincorporated parts of Beaufort County only; within the municipalities the roles of the Joint Planning Council and Building Codes Department are replaced by municipal agencies. A list of who to contact for permits in the municipalities is included after the chart.

If you want to:	Contact (in this order):	And do the following:
Build on your property	Joint Planning Commission	You will need to apply for a development permit from the JPC unless: a. Only the interior of a structure or the decoration of the exterior is affected; or b. You own the land and use it as your single-family residence; or c. You use the land for agricultural purposes. A sample development permit application is included after the chart.
	Army Corps of Engineers	Determine whether the construction is located on or could affect freshwater wetlands. If so, a permit from the Corps is required. Wetlands are not always obvious. While they include swamps, marshes and bogs, some appear to be "dry" most of the year. If you are in doubt about whether

If you want to:	Contact (in this order):	And do the following:
Build on your property, continued	Army Corps of Engineers	your property includes freshwater wetlands, ask the Corps for a determination. You will need to provide them with a location map and plat and, if possible, an aerial photograph of the property from the county assessor's office. When you submit a request for freshwater wetlands determination, you grant the Corps permission to enter your property to make this assessment. It may take the Corps two or more weeks to reply to your request.
	Coastal Council	The CC can also make an informal determination, usually in less time than the Corps.
	Building Codes Department	Determine whether you are in a flood zone. If you know your tax district and parcel number, you can call the BCD; if not, you will have to go to the office. Any property located in a flood zone must elevated so that the lowest floor is at or above flood level. If you are building a house in a velocity zone, the foundation must be designed by an engineer or architect registered in South Carolina. You may also want to have the land

If you want to:	Contact (in this order):	And do the following:
Build on your property, continued	Building Codes Department	surveyed to determine whether it can be rezoned. If the surveyor finds that the elevation is higher than the present map says, submit a map amendment to the BCD, which will forward it to the federal government for review. This may take several months.
	County Health Dept.	Obtain a septic tank permit, if necessary. Any building which is to be occupied for more than two hours per day must be provided with adequate sewage disposal facilities. If public sewer is not available and a septic tank system is needed, construction may not begin until and unless a septic tank permit is issued by the CHD. Contact the CHD well in advance of construction so that they can perform the necessary site and soil evaluation to determine septic tank feasibility.
	Building Codes Dept.	Request a building permit application. The BCD issues permits for all building projects except marine construction, which is authorized by the Coastal Council. Projects may require approval from both agencies; for example, the Coastal Council permits docks while permission to run electrical wiring

If you want to:	Contact (in this order):	And do the following:
Build on your property, continued	Building Codes Dept.	under them or build a boathouse on the shore end comes from the BCD. In addition to the completed application you will be required to submit: a. Site plans indicating the location of the property, boundaries, and where the building will be situated; b. A complete set of blueprints; c. A septic tank permit from the CHD, if applicable; d. The license numbers of any contractors; e. Estimates of the total cost of construction. Your permit fee will be based on this cost. If the BCD finds that your project costs less than $500, it will issue an exemption from the permitting process.
	Joint Planning Commission	All construction must meet the standards listed in the Development Standards Ordinance, section 4, which is available from the Joint Planning Commission. One requirement is that all utility lines be located undergound.
	County Engineer	Contact the County Engineer to inspect the building.

If you want to:	Contact (in this order):	And do the following:
Build on your property, continued	Building Codes Department	The BCD will make a final inspection and issue a Certificat of Occupancy. The utility companies can not begin service until after this inspection. You should contact them beforehand, however, so that it can start immediately afterwards. You may be required to pay a deposit.
ring a mobile ome onto our property r move it rom one site o another	Building Codes Dept.	Determine whether you are in a flood zone. If you know your tax district and parcel number, you can do this by phone. If you are in a flood zone, you will need a flood certificate fro the surveyor showing that the floor of the mobile home will be above flood level. You may also want to have the lan resurveyed to determine whether i can be rezoned. If the surveyor determines that the elevation is higher than the present map says, submit a map amendment to the BCD which will forward it to the federal government for review. This may take several months. Apply to the BCD for a moving permit, if applicable.

If you want to:	Contact (in this order):	And do the following:
Bring a mobile home onto your property or move it from one site to another, continued	Joint Planning Commission	A permit from the JPC is require if there is a house or mobile ho already on the lot, and the ne mobile home is not going to be used by immediate family members of the owner of the original dwelling. A sample development permit is attached.
	Building Codes Dept.	To apply for a mobile home permi you will need to bring with you: a. A bill of sale or proof of title; b. The name of the owner of the property and of the mobile home, if different from yourself; c. A septic tank permit from the CHD if sewer service is not available; d. The fee for registration and electrical permit (in 1986 th was $15); e. If you are moving the mobile home from one lot to another, you will need a tax receipt t show that your taxes are paid BCD will inspect your mobile hom before issuing an electrical permit. Either someone must be home, or you must leave the mobi home open. The utility companie can not turn on your services until after this inspection has been made and a certificate of occupancy issued. Contact them before the inspection, however, that service can begin immediate afterwards. You may be required to pay a deposit to the utilitie
Subdivide or sell a portion of your land	Joint Planning Commission	You do not need permission from the JPC if: a. You are selling or giving lan to a member of your immediate family; or b. Each new lot will be 5 acres larger and no new roads will cut; c. The subdivision is part of a will or intestacy settlement.

If you want to:	Contact (in this order):	And do the following:
Subdivide or sell a portion of your land, continued	Joint Planning Commission	Obtain an exemption stamp from th JPC. If you do not fall under one of these categories you must file fo a site development permit. A sample application is attached after the chart. Among the documents you will be required to include are:
	County Health Dept. S.C. Coastal Council	a. Proof from the CHD that sewer service is available or that each lot can support a septic tank; b. A "critical line determinatior if the land is on a marsh. This states how high the property is and whether furthe certification from the CC will be necessary.
Move a building	Building Codes Dept.	Contact the BCD for a moving permit application. You will als need to submit a foundation plan for the new site and have a termite inspection before the structure can be moved, and a final inspection before a Certificate of Occupancy can be issued.
Dig a well	Beaufort-Jasper Water Authority	Find out whether there is a publi water supply that you can hook into.
	County Health Dept.	The CHD must determine that the proper distance exists between your well and any private septic tank.

If you want to:	Contact (in this order):	And do the following:
Put up a sign to advertise your business	Building Codes Department	Request a permit application. You are only allowed to advertise on the site and must meet setback and size requirements (the maximu dimensions of the sign depend on the size of the property). The BCD will physically inspect the site before issuing a permit.
Cut down trees	Joint Planning Commission	You do not need to contact the JP if you own and live on a single-family lot or use your lan for agricultural purposes. If you don't meet one of these exceptions and want to cut down a tree whose trunk is 8 inches or more in diameter as measured 3 feet from the base, you must: a. If the tree is diseased: this must be verified to the JPC by a forester with the Clemson Extension Service; or b. If the tree is not diseased: get permission from the JPC. Clear-cutting of trees -- cutting them for the sole purpose of clearing the land in anticipation of selling it -- is prohibited.
Test your water for bacteria and chemicals (optional)	County Health Dept.	To have your water tested for bacteria, pick up a bottle from the CHD, fill it with water and return it to the CHD, which will send it to Columbia for testing. To determine the level of different chemicals in your water bring a quart of it to the CHD. Both tests are free.
Install a septic tank	County Health Dept.	Any building occupied more than two hours a day is required to have approved sewage disposal facilities. In areas where sewer is not available, septic tanks ar needed. The CHD must evaluate th site before any system is installed. Contact the CHD for a application. You will be require to submit a plat or deed or other legal document that specifies the size of the property.

If you want to:	Contact (in this order):	And do the following:
Install a drainage system	Corps of Engineers	Request a permit application from the Corps. You can not do anything that would appreciably alter the surfac runoff to or from adjoining property. Nor can you develop a site or erect a structure -- including a dike, dam or levee -- that will result in an increased flood hazard to nearby properties.
Use 100,000 gallons or more of water per day	South Carolina Water Resources Commission	Individuals and corporations must apply to the SCWRC for a permit application. Applications are processed i the following manner: a. SCWRC staff review the application; b. Staff meet with the perso requesting the permit to discuss well-construction specifications, water-use reporting, and ground-water monitoring requirements (if applicable); c. SCWRC issues 15-day Publi Notices, which it sends t permitted water users within a one-mile radius of the proposed well(s) and various state agencies, including the Coastal Council. The Coastal Council must certify the project befor the SCWRC can issue a permit. d. The SCWRC sends Letter(s) of Concurrence which specify the conditions fo well construction. The well must be constructed within one year after the date on the letter(s). e. The final permit is processed after the well is completed according to the terms agreed upon.

If you want to:	Contact (in this order):	And do the following:
Use 100,000 gallons or more of water per day, continued	South Carolina Water Resources Commission	The SCWRC must reply to an application within 60 days. It usually takes 30-45 days from the time the SCWRC receives an application for it to send The Letter of Concurrence.
Build a dock, boat ramp, or erosion control structure or put up a sign in the water	Army Corps of Engineers and Coastal Council	Permits are required from the Corps and the CC. The Corps regulates certain types of work done in the waters of the United States. The CC has authority over projects that would alter a critical area of the South Carolina coast, which includes the tidelands, beaches, primary oceanfront sand dunes and coastal waters. You will only be required to fill out one application, from the Corps. It will in turn notify the CC about your project, and when your application is complete will send a copy to the CC for review. The CC also requires information that is not included in the Corps permit application. It will contact you about this, a will also ask you to submit an administrative fee of $50 or non-commercial use, and #200 if it is for commercial use. The Corps will also require a fee -- $10 for non-commercial use and $100 for commercial use. This should not be submitted with the application; if and when the Corps approves your project, it will ask you to send it in. Among the items the application will require are: a. Proof of land ownership -- a certified copy of the deed, lease or other instrument under which you claim title, possession or permission from the owner to build;

If you want to:	Contact (in this order):	And do the following:
Build a dock, boat ramp, or erosion control structure or put up a sign in the water, continued	Army Corps of Engineers and Coastal Council	b. A plat or copy of a plat of the site; c. A detailed drawing of the proposed structure and description of the purpos of the project, the metho of construction and materials and equipment t be used; d. A list of adjoining landowners and their addresses; e. Proof that you have met the requirements, detaile in the application, of publishing notice of the proposed construction in newspaper. The permit request will be approved, denied or conditionally approved (meaning that the work can b done only if certain conditions are met). There is an appeals procedure. Each agency exempts certain activities from the permitting process. The exceptions are not necessarily the same; if the Corps says you do not need a permit, you must still contact the CC, and visa versa. Contact the Corps to determine whether you project fits under one of its exemptions. The Corps may also authorize you project under a general permit or through a procedure called "Letters of Permission". A general permit authorizes types of minor activities without the need for individual processing. A project may qualify for a Letter of Permission if the work is minor or routine with minimum impact and objections are unlikely. A Letter of Permission can be issued much more quickly than a standard permit since an individual

If you want to:	Contact (in this order):	And do the following:
Build a dock, boat ramp, or erosion control structure or put up a sign in the water, continued	Army Corps of Engineers and Coastal Council	public notice is not required. Among the exceptions to the CC permit requirements are: a. Hunting, erecting duckblinds, fishing shellfishing and trapping when and where permitted by law; b. The discharge of effluent (waste) as permitted by law; c. Construction of walkways over sand dunes in accordance with criteria available from the CC; d. Emergency repairs to an existing dike or bank; e. Maintenance or repair of drainage and sewer facilities; f. Normal maintenance or repair to a pier or walkway so long as this does not involve dredge c fill.

COUNTY OF BEAUFORT, SOUTH CAROLINA
– DEVELOPMENT PERMIT APPLICATION –
– COMMERCIAL/INDUSTRIAL/INSTITUTIONAL –

PERMIT #	DATE APPLICATION COMPLETED	RECEIVED BY	FILING FEE	RCPT #	☐ STAFF REVIEW ☐ FULL BODY RV

PROJECT NAME	PROJECT TYPE

APPLICANT (DEVELOPER) NAME, ADDRESS	PROPERTY OWNER (NAME, ADDRESS) PH. #

PROJECT LOCATION	TAX MAP NO.	LAND AREA		
	PARCEL NO.	BLDG. AREA	BLDG. HEIGHT	FIRE DIST

– PRELIMINARY APPLICATION INFORMATION REQUIRED –

- ☐ SIX COPIES OF SITE PLAN
- ☐ EXISTING AND PROPOSED BLDGS., STRUCTURES, FACILITIES
- ☐ EXISTING AND PROPOSED ROADS, PARKING AREAS, OPEN SPACE
- ☐ EXISTING AND PROPOSED LAKES, PONDS, LAGOONS, DITCHES
- ☐ PROPERTY LINES, BEARINGS AND DISTANCES
- ☐ NORTH ARROW, GRAPHIC SCALE
- ☐ SEAL OF REGISTERED SURVEYOR OR REPRESNTS
- ☐ VICINITY MAP
- ☐ ADJACENT LAND OWNERS AND LAND USE
- ☐ ADJACENT ROADS, HIGHWAYS (NAME, NUMBER, RIGHT OF WAY WIDTH, PUBLIC OR PRIVATE)
- ☐ EXISTING AND PROPOSED EASEMENTS (TYPE, SIZE, HOLDER)
- ☐ EXISTING RIVERS, CREEKS, MARSHES, AND OTHER WETLANDS
- ☐ PROPOSED BLDG. SETBACKS AND BUFFERS
- ☐ TREE SURVEY AND PROPOSED TREE REMOVAL
- ☐ EXISTING COVENANTS OR RESTRICTIONS
- ☐ EXISTING WATER, SEWER LINES ON OR ADJACENT TO PROPERTY
- ☐ DISTANCE TO NEAREST COMMUNITY WATER OR SEWER LINES
- ☐ EXISTING ELECTRIC/TELEPHONE/GAS UTILITY LINES ON OR ADJACENT TO PROPERTY
- ☐ EXISTING FIRE HYDRANTS WITHIN 1000 FT OF PROPERTY
- ☐ PROPOSED FIRE HYDRANT LOCATIONS
- ☐ PROPOSED ACCESS TO EXISTING ROADS, HIGHWAYS AND DISTANCES TO NEAREST EXISTING ACCESS POINTS
- ☐ PROPOSED WATER SUPPLY, SEWAGE DISPOSAL SYSTEMS
- ☐ PROPOSED SOLID WASTE DISPOSAL PLAN
- ☐ PRELIMINARY DRAINAGE PLAN
- ☐ PROPOSED PHASING
- ☐ LETTERS OF CAPABILITY AND INTENT TO SERVE WATER, SEWER, ELECTRIC, TELEPHONE, GAS UTILITY SERVICE FROM APPLICABLE AGENCY
- ☐ PRELIM. APPROVAL WATER/SEWER METHODS BY DEPT. HEALTH/ENVIRON. CONTROL
  PERVIOUS – IMPERVIOUS % OF SQ.FT. OR ACREAGE
- ☐ PROPOSED OFFERS OF PUBLIC DEDICATION
  PARKING REQ'D BY DSO

– FINAL APPLICATION INFORMATION REQUIRED –

- ☐ FINAL SITE PLAN
- ☐ FINAL WATER/SEWER SYSTEM LAYOUTS
- ☐ FINAL DRAINAGE PLAN
- ☐ FINAL UNDERGROUND ELECTRIC, TELEPHONE, GAS, CABLE LAYOUTS BY UTILITY COMPANY
- ☐ FINAL LANDSCAPE PLAN
- ☐ CERTIFIED SCCC PERMITTING LINE
- ☐ OPEN SPACE/IMPERVIOUS SURFACE CALCULATIONS
- ☐ FLOOD HAZARD DISTRICT ZONE/LINE
- ☐ CONSERVATION DISTRICT SURVEYED LINE
- ☐ PRIMARY SAND DUNE SURVEYED LINE (BEACH DEVELOPMENT DISTRICT ONLY)
- ☐ DHEC CONSTRUCTION PERMITS WATER/SEWER SYSTEMS
- ☐ OTHER APPLICABLE AGENCY PERMITS/APPROVALS
- ☐ FIRE OFFICIAL APPROVAL
- ☐ COUNTY ENGINEER APPROVAL

APPLICANT'S SIGNATURE	DATE	DATE PUBLIC NOTICE	DATE SHOULD RE
LANDOWNER'S SIGNATURE	DATE	DATE PRELIMINARY APPVL	DATE FINAL APPV

Agency Addresses and Phones Numbers

Beaufort
Joint Planning Commission
P.O. Drawer 1228
Beaufort, S.C. 29902
(803) 525-7138

Building Codes Department
Beaufort County Department of Inspections
Ribaut Road, P.O. Box 1228
Beaufort, S.C. 29901
525-7110

150-Hwy. 278
Hilton Head Island, S.C. 29928
681-7704

S.C. Coastal Council
P.O. Box 587
Beaufort, S.C. 29901
524-0755

Beaufort County Health Dept.
P. O. Box 459
Beaufort, S.C. 29901-0459
525-7215

S.C. Electric & Gas Co.
P.O. Box 1168
Beaufort, S.C. 29901
524-4161

Beaufort Jasper County Water Authority
P.O. Box 2115
Beaufort, S.C. 29901
524-7322

S.C. Water Resources Commission
143-A Ribaut Square
Beaufort, S.C. 29902
524-1995

Dept. of The Army
Corps of Engineers
P.O. Box 919
Charleston, S.C. 29402-0919
724-4330

Permits within the municipalities of Beaufort County

To apply for a permit to improve or alter land within one of the incorporated sections (municipalities) of Beaufort County, contact the appropriate agency listed below:

WITHIN THE CITY OF BEAUFORT

--subdivide land - contact JPC (525-7138)
--find out zoning classification of land - Planning Division 524-3831
--build any structure or sign - Code Enforcement 524-1694
--conduct any activity in Historic District - Planning Division 524-3831

Within Town of Port Royal

--subdivide land - JPC 525-7138

--find out zoning classification
Public Works Department 524-0846
--build any type improvement
Public Works Department 524-0846

Within Town of Bluffton

--subdivision, zoning, building
Contact Town Council 757-2642

Within Town of Hilton Head

--subdivision, zoning, building
Dept. of Planning & Inspections
681-9440

BANKRUPTCY

Bankruptcy is a declaration that a person can not pay his or her debts. The majority of a person's possessions are taken by the court and sold, and the proceeds distributed among creditors. Bankruptcy should be considered by a landowner as a last resort because in some situations it may allow him or her to keep the land.

A person who declares bankruptcy gets relief from all debts at once and can make a new start. In the process, he or she loses most property. A person who declares bankruptcy may find it difficult to get credit in the future.

Sometimes a person declaring bankruptcy can negotiate with creditors to pay them money to keep (redeem) property. A wage earner's plan allows an employed person declaring bankruptcy to keep property that he or she can pay the debt on within three to five years. A person declaring bankruptcy may also negotiate with creditors to keep property is the money the creditor would get through its sale would be less than the amount owed. This is most often the case where there are many creditors and little property, or if the property is not worth very much.

Bankruptcy is a legal procedure and anyone considering it should consult a lawyer. The person asking for bankruptcy is required by law to seek credit counseling. A counselor will weigh the person's debts against what he or she owns and can pay and will recommend to the court that the request for bankruptcy be granted or denied. The nearest credit counselors to Beaufort County are in Savannah and Charleston.

SEARCHING TITLE

Title is ownership. Searching title is looking through Court records to establish who owns a property and to ensure that there are no liens against it. This is most commonly done before purchasing a property.

Most title searches cover a period of forty years. The records needed to do the search are public. A lawyer is not needed to do a search, although one should be contacted if the researcher finds that ownership is unclear or there are liens on the property.

The following steps are necessary to search title:

Locate an accurate description of the property. It should include the size of the tract and list its boundaries. An old deed may be helpful. Check it against the county tax maps to make sure that the names of streets or the description itself have not changed over time.

Establish who has owned the property (chain of title). When property is transferred by deed, the new owner is supposed to register it at the county courthouse. The transaction is noted under the names of the old owner (grantor) and the new owner (grantee) in the the grantor and grantee indexes. These are located in the Register of Mesne Conveyances office.

The person searching title should look up the present owner in the grantee index and find out from whom he or she received the property. The name of this person should in turn be looked up in the grantee index until the researcher has a list of all grantors and grantees over the past 40 years. The researcher should then look up the same names in the grantor index to make sure that each grantor deeded the property only once - to the the grantee on the researcher's list - and placed no restrictions on the property.

If there are no deeds to the property listed in the grantee and grantor indexes, the owner may have received the property by a will or through intestate succession. This information should be recorded in the probate court. Look up the name of the owner in the Estates Index, which is organized alphabetically. It will refer to a box and package number (or a book and page number) where information about the will or intestacy settlement can be found. If there was a will, check to see that it gave the property to the person anticipated and that there are no conditions on the ownership.

If the property was transferred through intestate succession, make sure that the property being transferred is equal to or less than the owner's share.

If there is no record of the owner in the Estate Index, but the researcher thinks that he or she got title through a will or intestate succession, the researcher should contact the family or neighbors of the owner for information about how the land was transferred. If there is no information on this, the researcher should contact a lawyer about starting a court action to clear title.

Check for mortgages or other liens on the property, including liens for failure to pay taxes. These give the owner of the mortgage or lien the right to ask the court to sell the land to pay the landowner's debts. All mortgages and liens are recorded in the office of the Register of Mesne Conveyances, except those for county taxes. These are listed in the county assessor's office.

Liens against the land last for 10 years. This means that a lien can affect title to property even after the debtor has sold it.

Ensure that no one has filed a lawsuit involving the property. This information is listed in a Lis Pendens index in the office of the Register of Mesne Conveyances.

GOVERNMENT AGRICULTURAL OFFICES

Below is a list of county, state and federal agricultural offices, their addresses and phone numbers. These offices have been established with your tax dollars to serve you. It is important that you contact them and let them know what your concerns are and what needs to be done. They may be able to help you with farm problems.

The agencies are listed by categories according to whether they will be able to help you with 1) Financing (loans, crop budget, debt, etc.); Marketing (consumer demand, vendors, price outlook, etc.); or Production (soil sampling, pest and disease control, fertigation, etc.)

FINANCING:

1. Farmers Home Administration (FmHA)
   3012 Harding Street
   Burton, SC 29902
   Phone # 524-3882

2. Agriculture Stabilization Conservation Service (ASCS)
   Highway 280
   Burton, SC 29902
   Phone # 524-2721

3. Clemson Extenstion Service
   Arthur Horne Building
   Post Office Drawer 189
   Beaufort, SC 29901
   Phone # 525-7117

4. Production Credit Association
   317 Bells Highway
   Walterboro, SC
   Phone # 594-2513

5. South Carolina Department of Agriculture
   Small Farms Division
   Post Office Box 11280
   Columbia, SC 29211
   Phone # 758-3531

6. South Carolina Family Farms
   Post Office Box 11735
   Columbia, SC 29201
   Phone # 758-5956

PRODUCTION:

1. Clemson Extension Service
   Arthur Horne Building
   Post Office Box 189
   Beaufort, SC 29902
   Phone # 525-7117

2. South Carolina Department of Agriculture
   Small Farms Division
   Post Office Box 11280
   Columbia, SC 29211
   Phone # 758-3531

3. Coastal Research and Development Center
   2865 Savannah Highway
   Charleston, SC
   Phone # 766-3761

MARKETING:

1. South Carolina Farmer's Market Bulletin
   (Crop Price Quotation)
   Phone # 758-3761

2. South Carolina Farmer's Market
   1001 Bluff Road
   Columbia, SC
   Phone # 758-3325

3. South Carolina Department of Agriculture
   Small Farms Division
   Post Office Box 11280
   Phone # 758-3531

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Low Country Gullah Culture

Special Resource Study and Final Environmental Impact Statement

National Park Service
U.S. Department of the Interior

Southeast Regional Office
Atlanta, Georgia









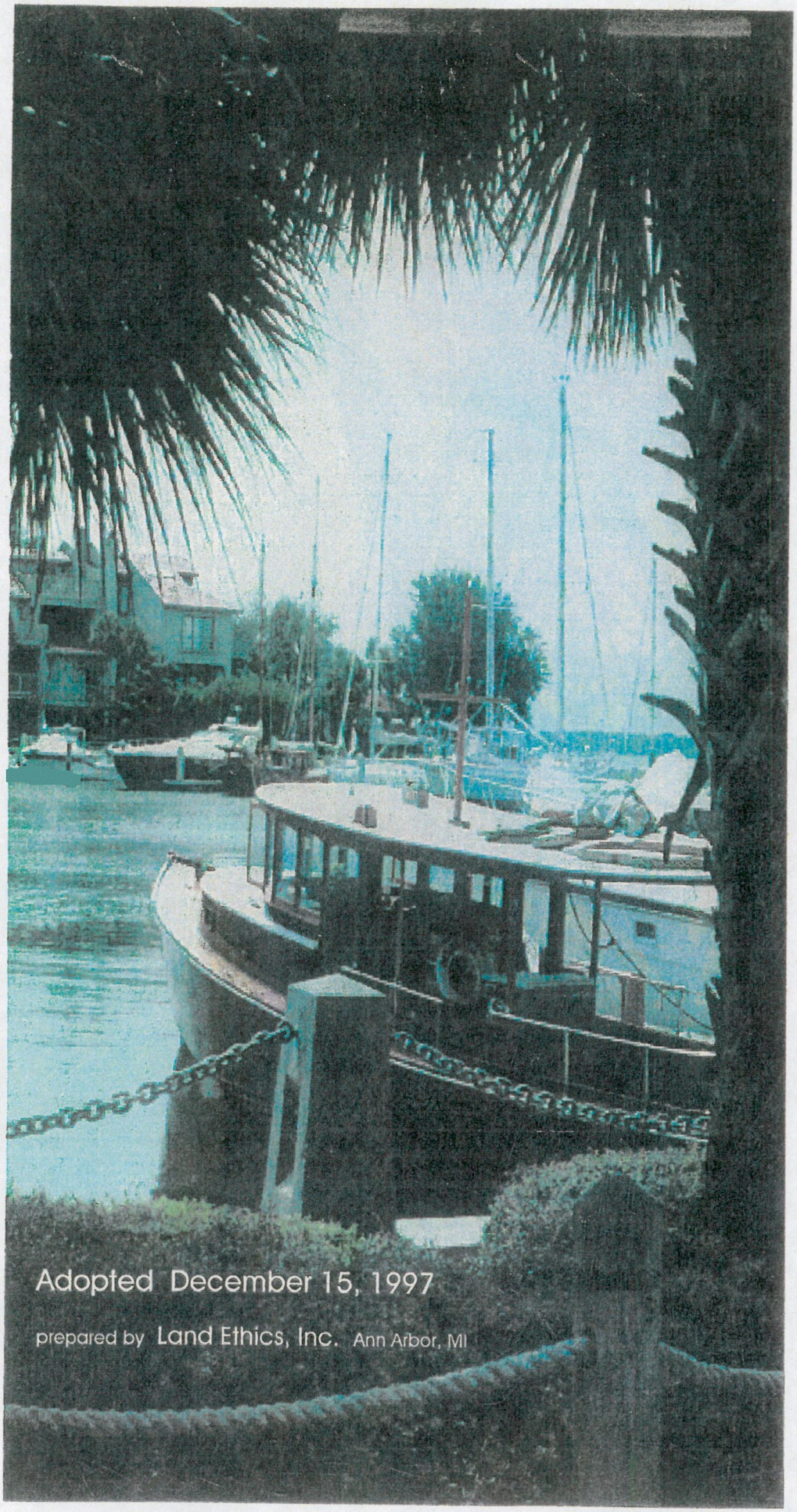








Beaufort County Comprehensive Plan



Adopted December 15, 1997

prepared by Land Ethics, Inc. Ann Arbor, MI

Get a Grip on Our Future

County Council of Beaufort County, South Carolina

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Pete Covington
Herbert N. Glaze
Dorothy P. Gnann
Elizabeth P. Grace
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Thomas C. Taylor
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Joint Planning Board of Beaufort County: 1997 – 1998

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Economic Development

Kellerco, Inc.
Leesburg, VA

Transportation

Urban Research & Development Corporation, Bethlehem, PA

Parks, Recreation and Open Space Planning

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Northampton, MA

Implementation

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Somerville, MA

Urban Design Standards

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Part

A

The County's Vision for the Future

Beaufort County must preserve, protect and enhance the. . . quality of its waterways, natural environment, historic resources, fisheries, rural areas, agricultural land (where possible), existing communities, population diversity (age and race), and unique scale and character . . . that foster a sense of community, make the County a desirable place to live, work and call home and a valuable tourist destination. The County must also develop efficient public transportation and roadway systems to protect its attractiveness in the future.

The County must expand and diversify its economy to: provide a broad employment base of "higher than minimum wage" jobs; and provide those jobs in close proximity to housing that is affordable to residents of the County.

This economic expansion and diversification should be viewed in the context of a regional economy. It should not occur at the expense of the natural and cultural environment which define the quality of life of the County.

The County must also expand its recreational opportunities both for local residents of all ages, and as an attraction for continued tourism and second home development.

The County must find a balance between both the private property rights and the rights of the neighbors and the community while preserving and enhancing the natural and cultural environment and quality of life of the community. In order to achieve this goal, the County must work toward increasing accessibility to the planning process for all citizens of the County and to carry out and respect the wishes of the people for the mutual benefit of all.



Part
B

Introduction

1. What is a Comprehensive Plan?

This Comprehensive Plan is a vital document for the County, since it contains guidance for the development of the County for the next 10 to 20 years. The Plan provides this guidance by outlining goals, policies, and implementing strategies which are supported by data and technical analysis, developed with a thorough public review process. The overall purpose of the Comprehensive Plan is to enable the government officials and citizens to anticipate and constructively deal with growth and change in the community and to encourage the development of a safe, healthy, orderly and distinctive living environment.

The Comprehensive Plan is composed of:

1. this core document;

2. Appendix A which contains the record of results of the surveys;

3. Appendix B and Appendix C which contain the record of the Public Participation which formed the basis of the Plan (copies of these Appendices can be found in the Planning Department);

4. Appendix D which contains a complete Parks, Recreation and Open space Plan; and

5. Appendix E which contains an expanded Economic Diversification Plan.

This plan is a "living" document and as such should be reviewed and updated on a regular five year basis. However, the plan should also be reviewed on a yearly basis, and the implementation plan defined and updated for the upcoming year.

1.1 Authority for the Plan

Comprehensive Plans were mandated by the State of South Carolina in 1994, and each County must comply by producing and adopting a Plan by 1999. The Beaufort County Joint Planning Board is charged (under the authority of South Carolina Local Government Comprehensive Planning Enabling Act of 1994 (Chapter 29)) with developing this Comprehensive Plan for Beaufort County, with reviewing the plan at least

every five years, and with updating the plan when appropriate or at least every ten years.

The Enabling Act describes the role of the Planning Board as the entity responsible for "developing and conducting a process by which the Comprehensive Plan is prepared and adopted." The Act also outlines the various elements of the Plan, all of which are included in this document.

1.2 Benefits and Effect Of A County-Wide Comprehensive Plan

The Comprehensive Plan lays a foundation for the consistent application of recommended growth management policies and strategies. If respected and followed, the Plan will help to balance the needs and desires of the community with the management and protection of the County's resources, while recognizing the County's financial constraints. The Plan also embodies the principle that a balance should be maintained between the disturbance of the natural environment and private property rights.

The Comprehensive Plan is not a detailed land development or zoning ordinance. It is, however, a public policy document, adopted by ordinance, forming the legal basis for any future land use ordinances. In order for local land use regulations to be valid, they must be adopted in accordance with a locally adopted plan that is based upon and includes appropriate studies of the location and the extent of the present and anticipated population, social, economic and environmental resources, and the current issues and concerns of the community.

As the legislation states, once the Plan is adopted, "no new street, structure, utility, square, park or other public way, grounds, or open space or public buildings for any use, whether publicly or privately owned, may be constructed or authorized in the political jurisdiction of the governing authority or authorities establishing the Planning Commission until the location, character and extent of it have been submitted to the Planning Commission for review and comment as to the compatibility of the proposal with the Comprehensive Plan of the community." This ensures that future development in the County will be conducted in a rational manner.

2. Citizen Participation in the Planning Process

As mentioned above, the Comprehensive Planning Enabling Act outlines a very general planning process and the roles of County agencies. A significant part of this process includes the use of "public involvement mechanisms and other resource people not members of the planning commission," as written in the legislation. The legislation does not specifically define the methods for public involvement, except that the Planning Board may want to utilize a citizen advisory committee. In determining the planning process, the County administration sought to involve the citizens of the County from beginning to end in a more interactive process, beyond the typical public hearing at the end of the process. By the time the plan was drafted, over 6,000 citizens and landowners had participated and given meaningful input in the variety of opportunities created within the process.

One of the first steps in the planning process was the creation of the Quality Growth Committee, a twenty-two member citizens' committee with two Council appointees from each councilmatic district. The charge to this committee, as expressed in their charter, was to guide the public participation process and to recommend growth management strategies as part of its review of the final Plan to the Planning Board and County Council. The activities of the Quality Growth Committee included educational work-sessions, the development of a publicity strategy for the public participation events, various outreach programs designed to gain input on specialized issues, liaison between the constituents in their district and the governing body, and advising the Planning Department on the participation process in general.

The next step was to contract with professional planning consultants. The Land Ethics consultant team was selected by a committee consisting of Beaufort County Administrative staff, two Council members, the directors of the departments involved with the Plan, the senior long-range planner, and the chairmen of the Planning Board and the Quality Growth Committee. The consultant team is composed of Land Ethics, Inc., as lead consultant was joined by Kellerco as transportation consultants; Abeles, Phillips, Preiss and Shapiro as affordable housing and housing market analysts; Urban Research Design Corporation (URDC) as parks and recreation specialists; Basile, Baumann and Prost as Economic consultants; Woodlea As-

sociates as ordinance drafting consultants; and Anne Tate, an architect. The consultant team shared the responsibility of research, analysis and preparation of the Plan with County staff.

The Land Ethics consultant team worked closely with the planning staff and the Quality Growth Committee in developing a public participation strategy. The strategy as developed was composed of five distinct parts: a written survey, the regional workshops, a slide survey, and two sets of planning area workshops.

Written Survey

A written survey was mailed by the County Planning Department in October, 1995 to all households in the County. By December approximately 3800 people responded to questions relating to attitudes about future growth, the environment and other key issues. Complete results of the survey are presented in Appendix A to this Plan.

Regional Workshops and Planning Area Meetings

A series of public workshops were conducted between September 1995 and June 1996. All workshops were widely advertised and open to all citizens in the County. Two regional meetings, one in Northern Beaufort County and one in Southern Beaufort County, were held in late October/early November 1995, during which the planning process was explained to the participants. A preliminary vision statement, as well as key issues were defined.

Planning area meetings were repeated between January and May, 1996, where citizens were asked to envision and begin planning their future. Records of these meetings are presented in full in Appendices B and C to this Plan. In addition, a series of workshops dealing specifically with parks and recreation issues, transportation issues, and economic development issues were also held at various points during the process.

Slide Survey

A countywide slide show was prepared and presented at twenty-five different meetings of civic and organizations beginning during the October/November regional meetings. The slide survey was composed primarily of images of Beaufort County, with other slides of similar communities or similar issues. These slide images illustrated different types of growth and development, natural resources, transportation routes, and parks and recreation areas. Participants were asked to score each image based on their own personal preference. Complete results of the slide survey are presented in Appendix A to this Plan.

Other Outreach Efforts

Along with being heavily involved in the various public meetings, the Quality Growth Committee held separate "Outreach" meetings to ensure that the voices of all of the special interest groups in the County were heard. These groups included land owners with large holdings, members of the minority community, crabbers/shrimpers, members of the real estate community, the military, the Home Builders Association, the environmental community, and the historic preservation community, among others.

Other publicity activities included the distribution of approximately 25,000 brochures on the comprehensive planning process through the library system, community organizations and at key business locations. Media coverage in the three major news publications was extensive, from weekly articles highlighting the events of the planning proc-

ess and accompanying activities, to the publication of meeting dates. Local radio and television stations were very supportive in their coverage as well, and produced several interview segments and shows to relay the activities and issues of the Plan to the public.

At each monthly or bi-monthly meeting of the Planning Board, the Planning Board Area Subcommittees, County Council and the Long-range Planning and Economic Development Committee of County Council, monthly updates were distributed and read aloud to these bodies and to the general public present at the meetings. Other activities at these meetings associated with the Plan included educational forums and organized discussions on specific topics and issues. Summaries of most of these forums were published in the local newspapers.

Draft Plan Review

A draft plan was presented to the public twice, one in October or 1996 and again in October of 1997. After submission of the draft plan to the public in 1996, a series of public meetings in each Planning Area was held for review and comment on the draft. The Planning Board, through its Planning Area Subcommittees held an additional series of meetings to discuss the draft plan and obtain public comment. As a result of this comment, the draft plan underwent a comprehensive revision and was presented to the Planning Board in its revised format in 1997. The Planning Board held another series of Subcommittee meetings, and recommended the Plan to County Council. Council held three hearings between November and December of 1997, and adopted the Plan in December of 1997.

3. How To Use The Comprehensive Plan

The Comprehensive Plan is the guiding document for future land use decisions in Beaufort County. It is a "living" document, reflective of the desires and concerns of the community, and requiring regular revision and updating in order to insure that it continues to represent such desires and concerns.

Parts A, B, and C of the Comprehensive Plan provide background and contextual information, with Park B, the Vision, forming the guiding principals of the Plan. Part D contains the Future Land Use Plan. Part E contains goals, policies, and implementation strategies for the seven programmatic areas that govern the Future Land Use Plan.

Each chapter in part E is structured as follows:

1. the vision and goals;

2. the technical analysis/rationale for supporting the goals; and

3. policies and actions (i.e., strategies) for implementation.

The Vision and Goals represent a synthesis of comments and concerns derived from many sources: from the public workshops and the written concerns of citizen advisory committees, departmental plans and budgets, interviews with various professionals and technical advisors, and from recent planning documents and planning department observations. Each chapter also contains a summary of the technical analysis behind the goals, and gives an explanation for the necessity for each goal in achieving the overall vision.

The policies and actions set out in the Plan should be reviewed annually, to insure that the Plan is being implemented in a timely manner. The annual review will also provide an opportunity to amend the Plan if circumstances in the community change. The strategic actions will be used principally by the County elected officials and various community boards and committees to provide administrative staff with specific direction in the areas of yearly work programs and budgeting.

Additionally, the Planning Department has the responsibility to communicate the goals

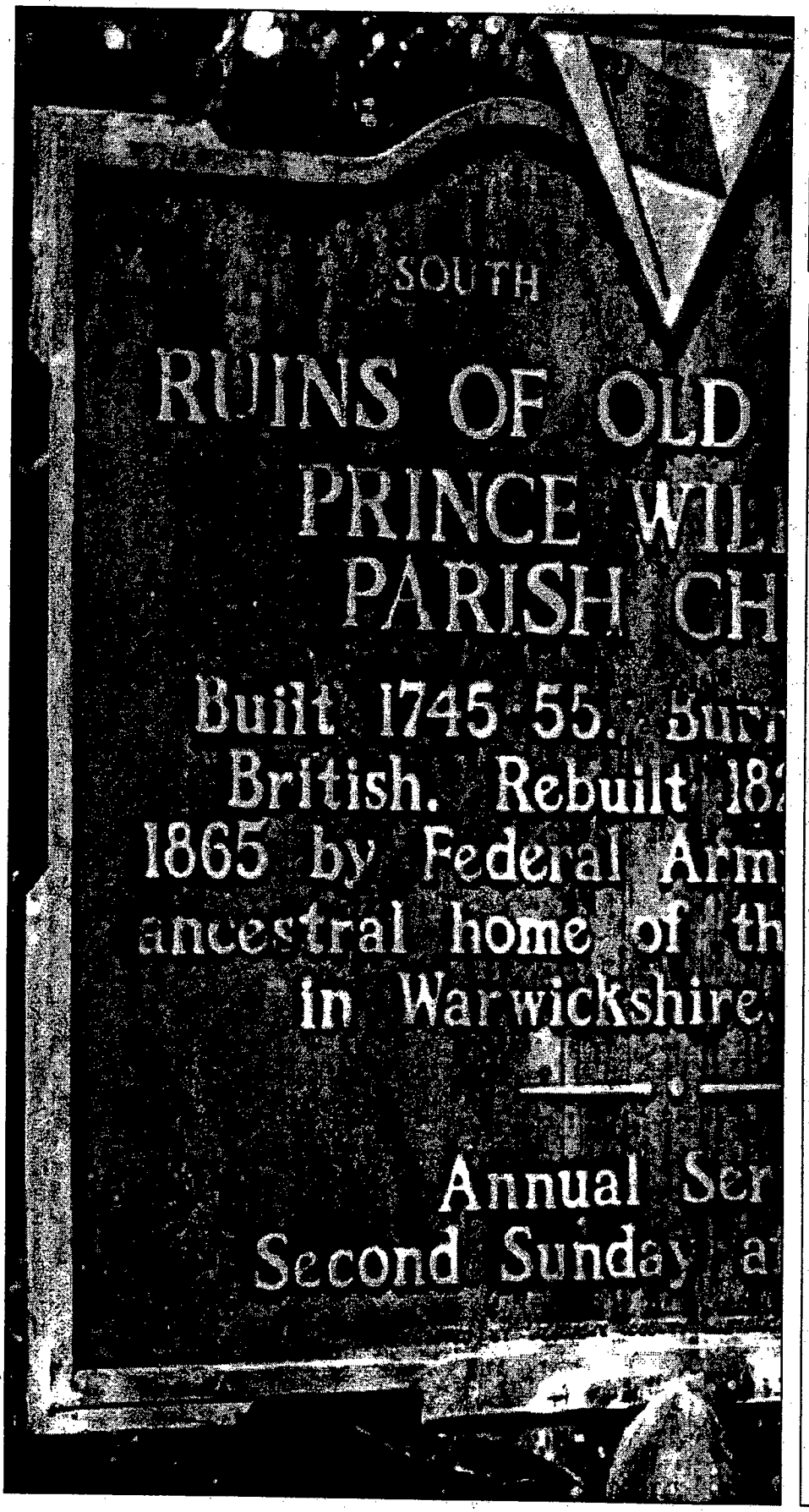
and implementation actions to both the public and the private sector and to request their assistance in meeting these community goals as implementation activities begin. Private citizens and landowners may also use them in planning for new developments.

One of the most important implementation measures is the immediate preparation of revisions to the Beaufort County Zoning and Development Standards Ordinance (ZDSO). The adoption of the Comprehensive Plan represents the direction or the "blueprint," but the actual governing laws, ordinances and programs must change to reflect the goals and action items within the Plan. Once the Plan is adopted, the Planning Staff and the consultant team will immediately commence work on changes to the ZDSO.

Appended to the Plan will be a Strategic and Capital Improvements Plan. This plan places the actions detailed in the Comprehensive Plan, prioritize them in terms of implementation phase and estimates the costs for any capital improvements actions.

Part C

A Look at the County Today



Chapter 1

Historical Perspective

There is something providential about the tide which twice daily sweeps to every corner of Beaufort County. It produces more force than all the machines man now employs to alter or preserve these coastal islands. The tide first separated the Sea Islands from the continent and the tide today provides the area with that insular quality which distinguishes it from other parts of the state. For centuries the tide hampered communications and kept Beaufort out of the mainstream of the State's development. But the tide also provided the shrimp, oysters and crabs which were the sustenance of the frontiersman and are the life blood of today's marine industries. The tide forms the broad marshes and swiftly flowing creeks along whose shores is now occurring the greatest land boom in Beaufort's history. The tide is also helping the islands gradually to slip beneath seas. From *But Such A Tide*, by Dr. Lawrence S. Rowland.

1.1 Aboriginal Peoples (1800 B.C.-1700s)

The first identified presence of the aboriginal, or Native American, people who inhabited the Southeastern coastal area dates to approximately 1800 B.C. They, like the Europeans and Africans who later came to the area, were dependent upon the tide.

The earliest known Native American sites in present day Beaufort County demonstrate that dependence. These people were hunters and gatherers who moved seasonally in search of favorable weather and changing food sources, leaving few permanent features on the landscape. The oldest component of the Fish Haul Archaeological site on Hilton Head Island is a series of seasonal encampments along the edges of Fish Haul Creek. The aboriginal people were attracted to this site and others like it because of an abundance of hickory nuts, an important food staple, as well as fish, shellfish and game. At this site the presence of post holes suggests that small, impermanent huts were built.

Other archaeological sites shed more light on the way these pre-historic people lived, although some raise more questions. About 20 pre-historic shell rings are located from the central coast of South Carolina to the central coast of Georgia, a distance of about 150 miles. All are believed to date from about the second millennium B.C. and contain some of the earliest known pottery in North America.

Beaufort County has at least seven identified large shell rings and is believed to have a few smaller rings. Only very limited excavations have been undertaken on a few of these structures, which present one of the earliest records of sedentary life among the pre-historic people and can yield valuable information. Land was cleared for homesites, community areas, burial grounds, and agriculture, while trees were felled to use in the building of more permanent structures.

The Indian Hill site on St. Helena Island and the Little Barnwell site on the Whale Branch are the locations of large mounds believed to be religious temples. Judging from the size of the Indian Hill mound, it probably served as a regional ceremonial center with an adjacent village near by. The existence of post holes indicates that all of the mounds likely had a structure on the top and were probably built in stages, dating from approximately 900-1400 A.D.

The Hasell Point site on the Colleton River was constructed around 500 A.D. for burial purposes only. The mound is constructed of alternating layers of oyster shell and sand. Evidence indicates that burned human remains as well as pottery and other materials were buried in layers and that a number of graves were located in one shell ring.

Around 1680 Native Americans began moving to the Carolina coast from Florida, fleeing the pressures to convert to Christianity and Spanish rule. In addition, the Gaule and Toma peoples from central Georgia also migrated to the coast and together with the other arrivals became known as the Yemassee. Until 1715, the Yemassee coexisted and traded with the English settlers, conducting raids on Spanish Florida and returning with other Indians who were traded into slavery with the English in Charles Town (present day Charleston). As white settlements grew, tensions arose over land encroachments and other matters. In 1707, after repeated complaints about these problems, the Yemassee were granted a reserve that covered a huge tract of land from the Combahee River in the north to the Savannah River to the south.

From 1707 to 1715, the Yemassee and the English traded and lived near one another in relative peace. However, increasing tensions over trade abuses eventually led to the Yemassee War (1715-17). The war began in April, 1715, when Yemassee attacked the settlement at Port Royal, and massacred all but a few of the residents who were able to escape by boat, as well as most of the settlers living on the inland plantations. Eventually, the Yemassee and their allies were driven from the area.

There are two identified remaining archaeological sites that were Yemassee town sites, Pocosabo Town, located near present day Sheldon, and Altamaha Town, located in the Okatie area near the Colleton River and Chechessee Creek. These were towns that covered as much as 125 acres and probably had as many as forty households. Altamaha was the head town of the lower region and was the home of the head chief. They were not defined, easily defensible towns but were more like scattered villages. There is evidence that Native Americans occupied the site of Altamaha Town for over 3,200 years.

Perhaps the most identifiable modern land feature from the time of Native American habitation is the current location of many of the roads and highways in Beaufort County. U.S. Highway 21, for instance, follows a route from northern Beaufort County to Fripp Island that was originally an Indian trail. When possible the road follows the high ground, especially across the barrier islands. Many of these trails crossed rivers and creeks making a trip of any distance one that required more than one method of transportation. Of course, in any area with so many creeks, rivers and bays, traveling by water was often the fastest and easiest way to get around.

Protection of these and other archaeological sites is imperative in order that future generations who will have more sophisticated, less intrusive technology available will be able to study these sites and learn more about Beaufort's earliest inhabitants.

1.2 The Early Settlement Period (1520-1710)

From 1520 when the Spanish first sailed the waters along the coast of present day South Carolina to the early 18th century when the English gained a permanent foothold, the area was sought after and contested for by the French, Spanish, English, and Scots. The influence of these Europeans, as well as the Africans they brought in slavery, is apparent today in Beaufort County in the names of places, by the built environment and archaeological sites, and in the language and customs of the people.

In 1526, Spanish Captain Pedro Quexos sailed the coast and named several points of land. One of these areas he named Santa Elena, a name that still exists today as St. Helena Island. Later that year, Captain Lucas Vasquez de Ayllon returned with a company of 550 men and built a fort. His fort was short-lived as hostile Indians as well as cold and exposure killed most of his men. The rest returned to Hispaniola and no trace of this first European presence remains.

The next Europeans to try and establish themselves here were French Huguenots who arrived in 1562. Led by Captain Jean Ribaut, the French explorers cast anchor in "a mighty river" he named Porte Royall because of "the largeness and fairness thereof." He reported that the sound was capable of accommodating the "greatest ships of France" and that the land around was endowed with "mighty oaks and infinite stores of cedar." He spoke of the abundant wildlife and reported that "two drafts of the net were sufficient to feed all the company of our two ships for a whole day." He said that there was "No fayrer or fytter place than Porte Royall."

Ribaut built a fort of logs and clay that he named Charles Forte. For many years the exact location was not known, however archaeologists have recently determined that Charles Forte was located on present day Parris Island near the site of later Spanish settlements. The French stayed only a few months and like the Spanish before them, abandoned the fort. Ribaut and his men were later massacred by the Spanish near St. Augustine. While Charles Forte lasted only a short time, it has the distinction of being the first Protestant settlement in North America. The most obvious reminder of the French presence here is the name of Beaufort County's largest island as well as

one of its principal towns, Port Royal, and the use of the name Ribaut.

In 1566, the Spanish, intending to establish a northern outpost to protect Florida from the French and English, returned to build another fort near the site of Charles Forte. They named it San Felipe and stayed until 1576 when an Indian uprising forced them to bury their cannon and leave. Records indicate that a town existed at San Felipe. The Spanish returned in 1577 and built another fort, San Marcos, about 100 feet from San Felipe. Like its predecessor, San Marcos had a town within its walls. This settlement was to last until 1588 when the Spanish left the area for good. But during its eleven year existence, San Marcos was a thriving place. The settlement, now known as Santa Elena, soon became an active presidio. At its peak, there were over 60 houses "constructed solidly of cedar." The presence of women, children and Catholic priests gave the settlement a sense of permanence and stability. Land was cleared, trees were felled, homes were built and crops were planted. In the end, however, the inhospitable Indians and climate forced the Spanish to return to Florida. Today, Santa Elena exists as an important archaeological site on Parris Island. Each year, teams of archaeologists dig the site in their quest for more information about the French and Spanish who attempted to establish themselves in the Carolinas.

For nearly 100 years after the Spanish left, there was no permanent settlement in the area although Spanish priests continued to sporadically operate missions along the coast. The sound provided refuge for privateers and warships of all nations as they raided one another and attempted to gain a foothold. In 1663, Captain William Hilton, for whom Hilton Head Island is named, became the first Englishman to explore the region. He reported back favorably to the Crown, and in 1670 the first shipload of colonists arrived in Port Royal Sound. They intended to establish a colony there since they considered the area to be the most favorable for settlement. However, they went further north where they established a colony near present day Charleston that became the first permanent English settlement.

In 1684, a Scotsman, Lord Cardross, with 148 of his countrymen, established a colony he named Stuart Town at Spanish Point on the Beaufort River. Difficulties with the English authorities in Charles Town over the fur trade and raids by the Spanish from Florida soon led to the demise of Stuart Town. In 1686, a Spanish force attacked the town and killed or captured most of the Scots. The survivors fled and the town was destroyed. While the approximate site of Stuart Town is known, the exact location has never been determined.

1.3 The English Colonial Period (1710-1775)

While no permanent English settlement existed for the next 25 years, English fur traders operating out of Charles Town did business in the area. In 1707, an outpost manned by rangers who patrolled the rivers and sounds to protect the interests of the government, was established on the Beaufort River. Finally, in 1710, the Lords Proprietors of Carolina ordered the establishment of a town to be named Beaufort Town, in honor of one of the Lords Proprietors, the Duke of Beaufort.

The change in plans of the English to establish their first colony further north rather than on Port Royal Sound was, according to Dr. Rowland, "... the first of a long series of altered plans, aborted projects and broken dreams that sweep across the four century history of the area...". Rowland further says that, "If the distinction and burden of Southern history is, as C. Vann Woodward asserts, the experience of defeat, then Beaufort is perhaps more distinctly Southern than any city in the South." In its history, Beaufort has been occupied by the British in the Revolutionary War and by Union soldiers in the Civil War, destroyed by Yemassee Indians in its early days, and attacked by the Spanish from Florida. In addition, the physical characteristics of the area proved to be burdensome and inconvenient to early settlers. The fact that all of Beaufort was located on islands made travel, communication and the shipment of goods difficult. As one English traveler observed as late as 1765, "the town of Beaufort, situated on Port Royal Island and Sound, has more depth of water on its bar than Charles Town. But because the town is located on an island, there is difficulty in bringing down the exportable commodities, which will forever prevent its rivaling Charles Town in wealth and grandeur."

Nevertheless, by 1710 (or 1711, depending on which calendar is used) plans were laid out for the Town of Beaufort. The growth of the town was slow. The location of the town was chosen primarily because it offered a safe harbor up the Beaufort River away from the open Port Royal Sound. By 1721, it was reported that there were only thirty white and forty-two black inhabitants of St. Helena Parish. The Yemassee Indian War (1715-17) mentioned earlier had resulted in those settlers who had survived, fleeing the area until the Yemassee were subdued and driven away. The continued threat of invasion by the Spanish also hindered growth.

Not until the establishment of the colony in Georgia and the settlement of Savannah in 1733 when a buffer between Beaufort and Spanish Florida was created, did the inhabitants of Beaufort feel safe from Spanish attack.

Even then the authorities in Charles Town were concerned about the defense of the area. The Common House of Assembly of South Carolina appropriated 1500 pounds "for the erection of a fort at Port Royal." In 1734, "a strong, bastioned tabby structure" named Fort Frederick was constructed on the Beaufort River under the supervision of the colony's treasurer, Alexander Parris, for whom Parris Island is named. Unfortunately, Fort Frederick was poorly situated and rapidly deteriorated until it was finally abandoned. Tabby ruins of Fort Frederick still exist at the site, which . Beaufort County recently acquired from the U.S. Navy and has taken steps to protect.

When Fort Frederick was abandoned, a new, more formidable tabby fort named Fort Lyttelton was built upriver, and was used through the Revolutionary War. In 1807, the fort was reinforced, renamed Fort Marion and remained in use through the War of 1812. Ruins of this fort also remain, however they are located on private property and most have been reburied after archaeological excavations.

Not only did the town of Beaufort develop slowly, but the sea island planters did not share in the great wealth being accumulated by the rice and indigo planters of the Charles Town and Georgetown areas. The lack of large freshwater swamps so plentiful on the mainland prevented them from having success with the colony's most profitable export crop, rice. As a result the planters of the area were very middle class. Rather than owning huge plantations tilled by hundreds of slaves, the average Port Royal area planter owned 574 acres of mostly wilderness and only nine slaves.

It was not until 1763 when the English finally solidified their hold on North America and the Colonial wars ended, that the Port Royal area began to experience prosperity and growth. Between 1763 and 1776 the population of the area quadrupled. The economy grew with the population and the area became a center of the shipbuilding industry. During that period several large ocean going vessels were constructed of live oak and cypress at boat yards in Beaufort and on Hilton Head, Lady's and Daufuskie Islands.

1.4 The American Revolutionary Era (1775-1783)

As Beaufort continued to grow and prosper, it also became prominent as a center of political conservatism. As sentiment for a break from England grew in the colonies and among some Beaufort people, many of the prominent families like the Bulls and the Stuarts remained Loyalist. As a result, the revolutionary government in Charles Town had little confidence in the residents of Beaufort. The smuggling of contraband to England in defiance of colonial authority was a constant problem.

The early years of the Revolutionary War were relatively quiet in the area. Then in February 1779, the British attacked in what was to become known as the Battle of Port Royal. While the battle was an American victory and the British were repelled, the American forces left soon after to aid in the defense of Charles Town. The British then occupied Beaufort and Port Royal Island and remained until near the end of the War. Frequent raids on plantations and settlements along the area's rivers were conducted by the British from Port Royal causing extensive damage. While the area did produce some revolutionary heroes such as Daniel Heyward, Jr, and John Barnwell, there was little commitment to the revolution. American commanders like Francis Marion and Daniel Horry complained that "the militia here is not of the least service" and "the militia at Port Royal are bad people, they have quitted their post and none will come off the island." The only site remaining today associated with the Revolutionary War, is Fort Lyttelton.

After three years of occupation and warfare, the area was devastated. A returning citizen noted that "all was desolation...every field, every plantation showed signs of ruin and devastation." Once again, the fortunes of history had obstructed Beaufort's strive for prominence.

A small but significant group of 18th century buildings remain in Beaufort today. Among the most prominent are St. Helena's Episcopal Church (c. 1724) and the Hepworth-Pringle House (c.1720) considered to be the oldest house in Beaufort. The most significant 18th century building outside of

the city of Beaufort is actually a ruin. The ruins of the Prince William's Parish Church (c.1745-55), commonly known as Old Sheldon Church, is said to be the first conscious attempt in America to imitate a Greek temple and is considered to have been one of the finest revival buildings in the country. It was burned by British forces in 1779, rebuilt in 1826 and later burned by Sherman's troops in 1865 and never rebuilt.

An interesting feature of many of the ruins and some of the extant buildings in the Lowcountry is the use of a building material known as tabby. Tabby is a cement like material made of oyster shells, lime, sand and water that when hardened becomes a strong material. Neither stone nor the ingredients needed to make brick are found in the area. Tabby incorporates easily available, inexpensive materials into a reliable building material. There are differing opinions as to where the formula for making tabby originated. Some credit the Africans for bringing it here while others believe that Native Americans were the first to use tabby. At least two extant homes in Beaufort are made completely of tabby and several others in the area have raised tabby basements or walls of tabby. A number of significant tabby ruins also exist. Among the most prominent are the St. Helena Parish Chapel of Ease (c.1740) on St. Helena Island and the ruins of several tabby buildings on Spring Island. The Chapel of Ease was built to serve the planters of St. Helena Island, for whom it was too far to travel to the church in Beaufort.

During the colonial and revolutionary eras more roads began to appear. The colonists used the same routes that had been traveled by the Indians before them. Colonial era maps show roads running more or less along the same routes as U.S. 21, U.S. 278 and S.C. 170 among others. Also, the Mills Atlas shows roads dating from the colonial era of which at least two still exist in the County as unimproved, private dirt roads.

1.5 The Plantations

The Antebellum Era (1783-1861)

The reconstruction and economic growth of Beaufort after the Revolutionary War was slow. The most profitable money crop on the islands had been indigo which was supported by an imperial bounty which was abolished after the Revolution. It was not until the introduction and spread of long-staple sea island cotton that Beaufort began to enjoy the prosperity it had long awaited. In fact, the years between 1800 and 1860 were in the minds of many the golden age of Beaufort. One observer noted that in the antebellum years, the white population of Beaufort was made up "almost entirely of wealthy and refined families." Years later another described Beaufort as "the wealthiest, most aristocratic and cultivated town of its size in America."

At this time the landscape of the area, especially the Sea Islands began to change dramatically. Areas that were covered with the dense maritime forests of oaks, palmettos and various other sub-tropical shrubs and trees were cleared for cotton fields. In addition, marshes and swamps were cleared, filled and diked for agricultural lands. Some of the more inland areas had been cleared and diked earlier for rice fields, but Sea Island cotton was more profitable and soon cotton was grown everywhere. The trees that were cut were used for the construction of buildings, shipbuilding, and fuel.

Two events occurred in the late 18th century which changed the plantations significantly: one was the development of a new strand of cotton, long-staple Sea Island cotton, and the other was the invention of the cotton gin in 1793. Sea Island cotton soon was considered the finest in the world and brought very high prices. The cotton gin eliminated countless hours of hand cleaning of the cotton thus freeing the slaves for other work. As the planters began to realize the enormous profits to be made, the more astute began to buy more land and more slaves. The growing sentiment for the abolition of slavery that had gained support after the Revolutionary War ended very quickly. In fact, the opposite occurred and suddenly planters needed as many slaves as they could possibly afford. The African population of the Beaufort area, especially on the Sea Islands, grew dramatically. By 1800 over 80 percent of the Beaufort District was slave, slightly higher on the Sea Islands.

The small planters and middle class yeomen of the colonial era were gradually replaced by large planters who acquired enormous wealth that was reflected in the amount of

land and slaves they owned and in the fine homes they built on their plantations and in Beaufort. The era of extremely wealthy planter with large holdings had begun, and the wealth of the area began to be concentrated in the hands of a few great families. Production of Sea Island cotton in South Carolina and Georgia increased from 10,000 pounds in 1790 to eight and one-half million pounds in 1801. The cotton was shipped from Charleston, Savannah and Port Royal to mills in England.

Typical were the St. Helena Island planters like the Fripps, Coffins, Sams, and Chaplins who owned thousands of acres of land and many hundreds of slaves. They often owned large working plantations on St. Helena and the other Sea Islands as well as homes in Beaufort or Charleston. For instance, Ebenezer Coffin, who was originally from Boston, owned a plantation house on St. Helena, a town house in Charleston, a summer home in Newport, Rhode Island, over 500 acres of land on Harbor and Hunting Islands that were used as game preserves, and approximately 3000 acres of farmland on St. Helena and Port Royal Islands.

The increased wealth of that time is most apparent today in the number of fine homes and buildings that remain. In fact, most of the finest homes and many of the important public buildings and churches in the 304 acre Beaufort City National Historic Landmark District were built during this time. Included among the most prominent public buildings erected during this era are the Beaufort College Building (c.1852), the First Baptist Church (c.1844), and Tabernacle Baptist Church (c.1840). The Beaufort Arsenal (c.1852) was built to house the Beaufort Volunteer Artillery and is one of the oldest extant arsenals in the country.

Today a number of significant buildings from the plantation era remain in the County, mostly on the Sea Islands. Because Beaufort and the Sea Islands were occupied during the Civil War by Union forces much of the destruction that took place in other parts of South Carolina did not take occur. As noted above, most of the fine antebellum buildings in Beaufort survived the war as did many of the plantation houses on St. Helena and the other islands. Several of the more important St. Helena plantation homes are still standing. The oldest known extant plantation house in the area is Retreat Plantation (c.1740), also known as the Jean de la Gaye House, on Battery Creek near Beaufort. A number of plantation house ruins are found on Daufuskie, Lady's, Hilton Head, St. Helena, and Port Royal Islands. Some of the more prominent churches from the plantation era are Brick Baptist Church (c. 1855) on St. Helena Island, The Church of the Cross (c. 1857) in Bluffton, and St. Luke's Church (c. 1824) near Bluffton.

An interesting church form found on the Sea Islands of South Carolina was the praise house. Praise houses were places of worship for slaves who had no formal churches of their own. First appearing around 1840, they were usually very small, frame structures sometimes built by the planters but often as not constructed by the slaves themselves with whatever material they could find. Elders led services that were a mixture of Christian and African customs. At one time dozens of praise houses dotted the landscape of the Sea Islands. They served not only as places of worship but as community centers for the Africans on the islands. Today, only four 20th century praise houses remain on St. Helena Island.

Praise houses are a remaining legacy of the Gullah culture. The Gullah are a community of African Americans who live along the Atlantic coast on the Sea Islands of South Carolina and Georgia. Comprised of descendants of slaves brought to the area from

West Africa from the late 17th century on, Gullah communities continue to thrive on the Sea Islands. Today the Gullah are noted for the continued preservation of their African roots and traditions: the language, arts, foods, architecture, dress and customs of the Gullah are all African based. They speak a language that derives most of its vocabulary from English but many of the words and rhythms are African in origin.

Religion in the Gullah community continues to play a dominant role, adapted to Christianity and African customs and beliefs. While accepting Christianity, they nevertheless maintained many of the African rituals in the "shout," or "ring shout," and in the call and response method used in spirituals. In the past, many believed in African witchcraft and rituals and consulted "root doctors" to remove hexes or for healing.

Gullah communities still exist on the Sea Islands today, but since the 1920s when bridges were built connecting the islands to the mainland, the culture has been in decline. The out migration caused by World War II and the later resort development of Hilton Head and other islands in the 1960s and '70s added to the decline, with many of the young people searching for better economic opportunity elsewhere.

In the past few years, the Gullah culture has experienced a revival, with programs at the Penn Center on St. Helena Island that teach and promote the Gullah culture. Since 1979, the Wycliffe Bible Translators have been translating the Bible into Gullah. Each year the Gullah Festival is held in Beaufort to celebrate Gullah culture, literature, arts, dance, music, fashion and food. The Festival continues to grow and attract visitors from around the country and the world. More young people are learning about the culture and traditions and to speak the Gullah language. While the Gullah culture is stronger than it has been in several decades, the culture is still threatened by encroaching development.

The Civil War (1861-1865)

As might be expected from an area that had a wealthy planter class whose fortunes were dependent upon slave labor, Beaufort County had a strong secessionist movement. Robert Barnwell Rhett, an early and consistent advocate of secession was known as South Carolina's "father of secession." On July 31, 1844, Rhett spoke at a meeting held under a giant live oak tree in Bluffton. This is believed to be the first secession meeting and "The Bluffton Movement" for secession was born. Later an important secession meeting was held in 1851 in the Milton Maxcy House in Beaufort, the "Secession House," which at the time was owned by Edmund Rhett, the brother of Robert Barnwell Rhett. Both the "Secession Oak" and the Milton Maxcy House are still standing.

In 1860 when South Carolina seceded from the Union, the Beaufort Artillery along with other units such as the St. Helena Mounted Rifles joined in the defense of the area. Their primary fear was that the U.S. Navy would attempt to gain control of the deep harbor of Port Royal Sound. Beaufort and Port Royal were of little use since there were no well developed port or railroad facilities. The Sound, however, was a natural anchorage for large warships and other vessels. Two fortifications, Fort Walker on Hilton Head and Fort Beauregard on Bay Point, were constructed to defend against attack from the sea. Remains of these earthworks exist today.

The Confederate fears were justified. On November 7, 1861, Union naval and ground forces attacked Confederate forces on Hilton Head Island. The Union won a complete victory routing the Confederates and forcing them to evacuate not only Forts Walker and

Beauregard, but all of Hilton Head Island, Port Royal Island and the other Sea Islands. By December of 1861, Union forces occupied Beaufort and gained control of the entire area.

Once the Union was in control, they improved upon Fort Walker and renamed it Fort Welles, and did the same with a Confederate fort on Otter Island they named Fort Drayton. They also built earthworks on Hilton Head including Fort Mitchell, Fort Howell, Fort Sherman, and Camp Holbrook. Sections of all of these earthworks remain today. Meanwhile the Confederates were reorganizing their defenses along the railroad that ran between Charleston and Savannah by building a series of earthworks to protect the railroad from the occupying Union forces. Supervising the construction of the earthworks was General Robert E. Lee. The earthworks served their purpose and kept the railroad out of Union hands until near the end of the war. Fragments of some of these earthworks remain today, including the Stoney Creek Battery located near Sheldon on U.S. Route 17.

When the Union forces occupied the area, most of the planters and others of means fled the area going to Charleston, Columbia and other locations. They left their homes in Beaufort and their plantations with no one but the slaves to maintain them. The Union army used a number of Beaufort houses as headquarters, living quarters, and hospitals throughout the occupation and later during Reconstruction. Some Beaufort homes including the Milton Maxcy House and the George Parsons Elliott House have historic graffiti written on the walls by Union troops garrisoned there.

The Union occupation was characterized by a number of social experiments which served as a prelude to the later occupation of the Southern states during the Reconstruction Era. During the occupation Beaufort was visited by a number of well intentioned Northern missionaries whose purpose was to bring education and culture to the newly liberated freedman who had been released from slavery once the army arrived and their masters fled. The former slaves were not officially free until January 1, 1863 when the Emancipation Proclamation was read to them at Camp Saxon on the Beaufort River near Fort Frederick. The Green on St. Helena is another place where the good news was given, and it has traditionally been a meeting place for celebration on the island. Both of these sites are listed in the National Register of Historic Places.

While some of the missionary's plans for the freedman were not realized, some of the so called "Port Royal Experiment" was successful. Perhaps the most lasting was the establishment of the Penn School on St. Helena Island by the Port Royal Relief Committee of Philadelphia. Under the leadership of two Quaker women, Laura Towne and Ellen Murray, the Penn School was located first at the Oaks Plantation and later at a campus in the center of St. Helena. The school operated for over a century as a center of learning, teaching young blacks not only academic subjects but job skills as well. When the school closed in the 1960s, the Penn Community Center was established and still functions as a center of cultural, political and social activities. During the civil rights movement of the 1960s, Dr. Martin Luther King Jr. and his associates used Penn as a retreat and as a place to plan such activities as the March on Washington. While none of the original buildings remain at Penn, a number of 20th century buildings are in use on the campus today. The Penn Center campus is a National Historic Landmark District, one of only three in South Carolina. (The historic districts of Beaufort and Charleston are the other two.)

The Port Royal Experiment was also an attempt by the government to continue grow-

ing Sea Island cotton on St. Helena Island. Under the leadership of Edward Pierce, a Northern lawyer, headquarters for the plan was established at The Oaks. Superintendents were appointed at each plantation to manage the growing of cotton. While at Coffin Point and a few other plantations some success was achieved, the experiment was generally not successful because of a lack of proper management, the unwillingness of the slaves to continue to perform the backbreaking work, and the lack of seeds needed for future plantings. Eventually the growing of cotton declined to the point that it became insignificant. It was never to become an important crop again.

While most of the Sea Islands were to remain agricultural into the 20th century, never again would as much of the land be cultivated. In some areas the maritime forests began to return, creating a landscape that reflected both natural and man made influences.

One other lasting result of the Union occupation of the Sea Islands like St. Helena and Daufuskie, across the Calibogue Sound from Hilton Head, was the confiscation of plantation lands and buildings by the federal government, who in turn sold the land at auction. Northern agents for the government purchased the land and then parceled it out to plantation superintendents, the military and the freedman. At first many blacks rented the land but soon they were purchasing tracts and by 1870 many of the islands were owned by a society of free black farmers who had an opportunity to become self sufficient.

The era of wealthy planters had come to an end. Many never returned, others came back and were able to reacquire some of the lands they had lost. But their influence was never the same. And while Beaufort was spared much of the physical destruction of the war, the political and social upheaval that resulted would change the face of Beaufort forever.

1.6 Post Civil War

The Reconstruction Era (1865-1877)

"The great historical preservatives in America have been poverty, plutocracy and privacy. It was poverty that protected. . . the great architectural treasures of Charleston and Beaufort, S.C. and Savannah, where nothing, literally nothing, had happened since the Civil War to change the framework or alter the old structures built before and after the revolution...nobody had the money to fix up, paint up-or even to tear down...". *America's Forgotten Architecture*

In September of 1865 President Andrew Johnson appointed Benjamin Perry, a Greenville Republican, to serve as the Provisional Governor. This government was not to last and in November of 1867, a new constitution was adopted and the Reconstruction Era began. Reconstruction brought about radical change in South Carolina. The most important of the changes seen was the enfranchisement and entry into the political arena of African-Americans.

Forty six of the 124 members of the Reconstruction Era South Carolina Legislature were black. There were two black Lieutenant Governors, eight members of Congress, six delegates to the Constitutional Convention, and several judges, including a State Supreme Court Chief Justice. Many of the men were from Beaufort County.

Perhaps the most distinguished of these representatives from Beaufort County was Robert Smalls. Smalls first gained fame when during the Civil War he commandeered a boat called "The Planter," that he served on as a crewman, and brought a number of slaves from Charleston to the freedom of Beaufort. Later he was to serve as a member of the U.S. Congress for nine years, as a member of both the House and Senate of the S.C. State Legislature, and as a delegate to two Constitutional Conventions.

In April of 1877, the Reconstruction Era in South Carolina came to an end amid charges of corruption and malfeasance. The Republican Governor, D.H. Chamberlain, and most other Republican leaders, including most blacks, resigned from office and the political winds of South Carolina changed dramatically. Wade Hampton, a Confederate General during the Civil War, became the Governor. The imposition of the notorious "Black Codes," a system of government designed to keep African-Americans from gaining political, social and economic equality

changed the lives of both black and white South Carolinians.

Like the rest of the south after the Civil War, Beaufort County suffered from poverty and a lack of growth for the rest of the 19th century and through the Great Depression of the 1930s. While most of the county did not suffer extensive damage, there were areas that were destroyed. The Town of Bluffton, established in the early part of the 19th century as a vacation spot for wealthy planters from Beaufort and Savannah, had been burned by Union troops. Many of the plantations on the Combahee, Broad and Edisto Rivers had been destroyed as well. But, as the quote above indicates, much of Beaufort was preserved intact because the owners did not have the money to make changes.

The Reconstruction Era was one of poverty and little change in the South. Most people, black and white, barely got by. Many lived on food they grew or raised themselves and little change occurred to the landscape.

The Late 19th Century (1877-1900)

Perhaps the most significant change to the landscape during the late 19th century was in the field of agriculture. The post-bellum era saw a revolution in the farming business. Land that had once been part of huge cotton plantations was now divided into smaller truck farms, the cultivation of vegetables for shipment. Whites and free blacks, now small landowners, especially on St. Helena and Daufuskie Islands, were not interested in working cotton fields and soon recognized that raising vegetables and fruit for shipment could be a lucrative business. They grew tomatoes, cucumbers, corn, squash, melons, berries, broccoli, asparagus and beans, among others. In time, large truck farms developed as the most successful purchased more acreage and expanded their operations. While it had always remained rural, the landscape began to look more agricultural again.

By the early 20th century a number of families operated large successful farms in the county, including the Trask family who owned farms throughout the county, the Bellamys in Burton, the McLeods in Seabrook, the Mitchells in Lobeco, the Godleys at the Oaks Plantation, and the Bishops at Yard Farm on St. Helena, to name just a few. Many of the farms had access to the Port Royal Railroad that ran from Port Royal to Yemassee with connections to the main line, where their produce was shipped to the cities of the north. Truck farming was to grow through the first half of the 20th century, reaching its peak in the 1950s. By the 1960s a decline had set in as farming became less profitable.

The most notable structures related to the truck farming business are the large packing sheds that dot the landscape near agricultural areas. One such shed, the Corner Packing Shed on St. Helena Island is listed in the National Register of Historic Places. The Corner Community on St. Helena has long served as a community center for island residents who farmed the land. The Corner has several buildings important to the development and life of the area including the Corner Store, the Corner Co-op, and the home of Dr. York Bailey, the island's only doctor. Farming and the fishing industry provided almost all of the income for the island's residents.

Many of the structures associated with the family owned truck farming businesses have been lost. Perhaps the most intact collection of structures is that of the W.H. McLeod and Sons farm at Seabrook on the railroad line. The complex consists of two stores, several packing sheds, an ice house, a weighing building, an equipment repair shop, storage

barns, an office, a cotton gin, a post office, and assorted other smaller buildings.

In the late 19th century, the area experienced a brief economic boom from the phosphate industry. Phosphate was mined along the coastal areas in Charleston and Beaufort for a few years until the industry eventually succumbed to competition from Florida and the hurricane of 1893. The Port Royal Railroad was built to haul phosphate to ships docking at the Port of Port Royal, and the Town of Port Royal was established during this time as well. The town, port and railroad are all still functioning, although the phosphate business has been moribund several years. A few phosphate mine sites remain today.

The 1893 hurricane, often called "the great hurricane of '93," caused widespread loss of life and damage. The high winds and ensuing flooding damaged crops, killed livestock and destroyed buildings. Some of the antebellum homes in the area that have Victorian era architectural changes date these changes to damage in the 1893 hurricane. This is especially true of some of the plantation houses on the islands.

1.7 The 20th Century

The First Half of the 20th Century (1900-1950)

Another major economic force in the late 19th and early 20th centuries was the development of the military presence. In 1883 the Federal Government purchased land on Parris Island to build a Navy coaling station. By 1891 the mission of the base changed and construction began on a large wooden drydock that was able to service the largest ships in the fleet. It was completed in 1895 and used for about eight years. Today the drydock and the Commanding General's Home are part of a small National Register Historic District on Parris Island.

In the early 20th century Parris Island fluctuated between being a small naval base and a coaling station. In 1899, plans were made to expand the Navy presence and build a large shipyard, but once again the political winds changed and Beaufort was left out. The Navy decided to build the Navy Base and Shipyard in Charleston instead. In 1915 the Marine Corps permanently moved their recruit training depot from Norfolk to Parris Island. During World War I over 500 temporary buildings were built to house and service the recruits coming through for training. At its peak Parris Island was training 13,000 recruits at a time. Between the World Wars most of the depot was closed and only a small garrison remained. World War II brought an influx of men and material not seen before. By the end of the War over 200,000 men had been trained at the depot. During the Korean War over 130,000 passed through and during Vietnam over 200,000 troops graduated from Parris Island. Today the United States Marine Corps Recruit Training Depot, Parris Island, is one of two such facilities in the country and continues its mission to train Marine men and women (all women are trained there) to serve their country.

In 1917, an airplane landing field, Page Field, was established at Parris Island. Page Field was upgraded during World War II and remained active until the Korean War. During World War II the navy constructed a Naval Air Station on land north of Beaufort to serve as a base for anti-submarine patrol planes. At the end of the War the Station was closed and deeded to the County. During the Korean War, the Marine Corps reacquired the property, closed Page Field, and in 1955 established the Marine Corps Air Station (MCAS). The Station serves as the home base for several squadrons of fighter planes that are assigned to trouble spots around the world.

In 1949, the Naval Hospital at Parris Island was closed and a new, larger Beaufort Naval Hospital was built on the Beaufort River near the site of Fort Frederick. In 1959 the Marine Corps built a large housing complex for area military personnel at Laurel Bay. Today, the three military installations are an integral part of the Port Royal Island community.

Some aspects of the military presence and its influence on the landscape are obvious. The barracks and parade grounds of Parris Island, the hangers and landing strips of the Air Station, the wards of the Naval Hospital and the houses at Laurel Bay, are all apparent. But the military has other influences on the landscape as well. Small businesses that cater to the military and their families, housing developments, and schools all contribute to the changing landscape. The number of military retirees in the area also influences housing and business growth.

One other historic military structure is Fort Fremont located at Lands End on St. Helena Island. In the 1890s work began on the three-gun concrete fortification designed to protect the Navy Yard at Parris Island. It was not completed until after the Spanish-American War but was garrisoned until 1911 when it was closed. Fort Fremont and the nearby Fort Fremont Military Hospital building are listed in the National Register of Historic Places. Both are privately owned.

Along with agriculture and the military, the other primary economic force in the County during this time was the seafood business. Fish, shrimp, crabs and oysters have been a staple of the Lowcountry diet since the days of the Native American inhabitants. From Colonial times, street peddlers and small merchants sold fish and shellfish for local consumption. As late as the 1940s, street peddlers could be seen in the early morning on the streets of Beaufort selling heads-on shrimp from carts and tubs.

It was not until the 1880s that shrimping began on a larger scale. From that time until well into the 1920s-30s most of the shrimping was done by migrant shrimpers operating mostly out of Florida. Then more local shrimpers began to buy and build the big, diesel powered boats like the ones seen today and the industry began to have an economic impact on the area. Ice houses and processing facilities began to appear on the waterfronts of Beaufort, Port Royal and the islands. From around 1870 to the late 1920s canning was a major part of the shrimp business. At one time most of the catch was processed and canned. Freezing became popular in the late 1940s and today a majority of the shrimp that is caught for shipment elsewhere is frozen. After World War II more small docks and packing houses appeared on the islands. Advances in boats and engines, equipment, radio communications, depth finding devices, and cold storage and freezing facilities all contributed to the industry's growth.

Shrimping reached its peak in Beaufort in the 1960s. But then a decline began that continues for the shrimping industry in South Carolina to the present. Declining prices, stricter federal wage laws, the energy crises of the 1970s, tougher environmental laws, the increasing costs of insurance and equipment, and the influx of imported farm-raised shrimp from Asia and Latin America, have all contributed to this decline. Nevertheless, the demand for the fresh shrimp that comes from Beaufort County's waters is still high. To many Beaufortonians, the sight of the shrimp boats as they ply the waters of St. Helena Sound and the rivers and creeks of the County seeking their catch, or a visit to one of the many docks where fresh shrimp can be bought, represent what they love most about the area.

While shrimping is the most visible and the largest water related industry in Beaufort, oystering has long been a tradition as well.

Oysterman, operating out of Daufuskie, St. Helena and the other islands, as well as Bluffton, could be seen in their small, flat bottomed boats called "bateaus" working with huge tongs as they pulled clusters of oysters from their beds and placed them in their boats. This was difficult, back-breaking work that required long working hours that revolved around the tide. Oysters then needed to cleaned and separated, and usually shucked, before they were ready to be sold to local individuals, restaurants and packing houses.

In the 1880s the first major oyster packing house was established by the Maggioni family on Factory Creek across from Beaufort on Lady's Island. An oyster packing house, the ruins of which are still visible, was also opened during the same time period in Bluffton. In 1926, a building that still exists today was built on the site on Lady's Island as an oyster processing facility. Over time a number of maritime businesses operated from this site. At their peak the packing houses provided employment for hundreds of people who worked as pickers, packers and warehouseman. Perhaps the one with the greatest impact was the Blue Channel Corporation who began in the building and later moved to a larger operation in Port Royal. While Blue Channel was best known for packing oysters, they were instrumental in developing a new seafood industry, the crab business. They developed a new packing technology that kept the flavor and color of crab intact in the canning process. Crabbing up to that time had been a small business oriented towards local consumption. A few crabbers operated but most crabs caught commercially were a by-catch of some other industry. With this new technology, crabbing became much more significant and today has emerged as a leading seafood industry in Beaufort and South Carolina. Most crabs caught today are shipped live, or picked and the meat shipped fresh. Blue Channel is no longer in operation although some buildings still remain.

While there is some fishing done, fishing has never attained the importance of the shellfish industry in the area. Most fish caught commercially is for local consumption. Recreational fishing is very popular and contributes to the local economy in boat and equipment sales and rentals, tackle shops and tourism.

Few historic resources related to the maritime industries remain. The Factory Creek Building on Lady's Island and the Bluffton Oyster Company are two 20th century historic buildings still in use. Unfortunately, the historic docks in Beaufort, Port Royal, Bluffton and on the islands no longer remain. A number of later 20th century docks, buildings and shrimp boats are still involved in the seafood business.

One aspect of maritime history still visible in Beaufort are the remaining historic lighthouses. While few lighthouses on the U.S. Coast continue to light the way for mariners, they still evoke a romantic nostalgia for many Americans and provide pleasure for residents and tourists alike. Among the historic lighthouses in Beaufort County are the Hunting Island Lighthouse and Keeper's Dwelling (c.1875) at Hunting Island State Park, the Rear Lighthouse of Hilton Head Range Light Station on Hilton Head (c.1879), and the Haig Point Lighthouse (c.1874) and Bloody Point Lighthouse (c.1883), both on Daufuskie Island.

From the Reconstruction Era to the 1930s, a number of wealthy individuals, mostly Northern industrialists, purchased large tracts of land along the Carolina and Georgia coasts for use as hunting retreats and winter vacation homes. Often the land they purchased was on former plantations where the houses had been destroyed during the Civil

War. Often building on the historic foundations, the new owners built new large beautiful homes often in revival styles. Among some of the notable examples of these homes are Bonny Hall Plantation (c.1867), Twickenham Plantation (c.1878), Brays Island Plantation (c.1938), and Clarendon Plantation (c.1935). Perhaps the most unique is Auldbrass Plantation designed by Frank Lloyd Wright. Started in 1940 it was never completed. In 1988 the present owner began an extensive restoration, and has completed most buildings from the original site design.

The Second Half of the 20th Century (1950-Present)

As traditional agriculture declined in the early 20th century, timbering, or silvaculture, emerged as a major industry in the state and in Beaufort County. Both small and large tracts began to be profitably timbered shortly after the turn of the century. As profitability increased, more land that had been used for traditional agriculture was converted to timbering. Some of the largest holdings in Beaufort County are still owned by timbering companies who grow pine to supply wood for the many paper mills along the Carolina and Georgia coasts. Today, while many smaller holdings continue to harvest timber, many timbering interests are now moving away from traditional timbering into land development.

Some traditional family farms continue to operate today, but most have ceased farming operations. How these farming families can realize a profit from their land now that farming has declined is one of the major questions facing them and those responsible for planning future growth. A few large agri-business firms operate in the county, primarily on St. Helena Island where tomatoes and other staples are grown and shipped around the country. Where in the past, black laborers did most of the work, today's workers and pickers are mostly from Mexico and Central America. Stores selling goods catering to migrant workers, temporary housing for the workers, and the establishment of a Catholic Church for migrants, all reflect more change on the physical and cultural landscape.

Throughout its history, Beaufort County has been a series of islands unconnected to each other or the mainland. Waterways provided most of the transportation between the islands. Ferries ran between the mainland and Port Royal Island, the City of Beaufort and Lady's Island, and to Hilton Head and Daufuskie. Today the only ferries left are private ones from Hilton Head to developments on Daufuskie.

Because of this, development which is very dependent in this century on the automobile was slow until the construction of bridges began. It was not until the 1920s that a bridge was constructed between Port Royal Island and the mainland and 1930s until one between Port Royal and Lady's Islands was built. Not until the 1950s were the bridges across the Broad and Chechessee Rivers built joining the northern and southern parts of the County. In 1956 Hilton Head was joined to the mainland. With the building of the bridges and improvements to the major roads, many of which were dirt until mid-century, the separate land masses of the County began to be more conveniently connected.

The most recent economic issues have centered around the growth of the tourism and retirement community industry in Beaufort County. While the antebellum homes of Beaufort have always drawn a limited number of tourists and visitors, the real tourism boom has centered around Hilton Head Island and southern Beaufort County. Hilton Head, like the other sea islands, was isolated and undeveloped in the middle of the century. In 1956, the bridge was built con-

necting the island to the mainland, and making it possible for development to occur. The development of Hilton Head that began in the 1960s with a few upscale gated communities has continued. Today Hilton Head offers a variety of resort and retirement communities often centering around golf, tennis and other recreational facilities as well as shopping, fine restaurants and hotels offering a variety of amenities.

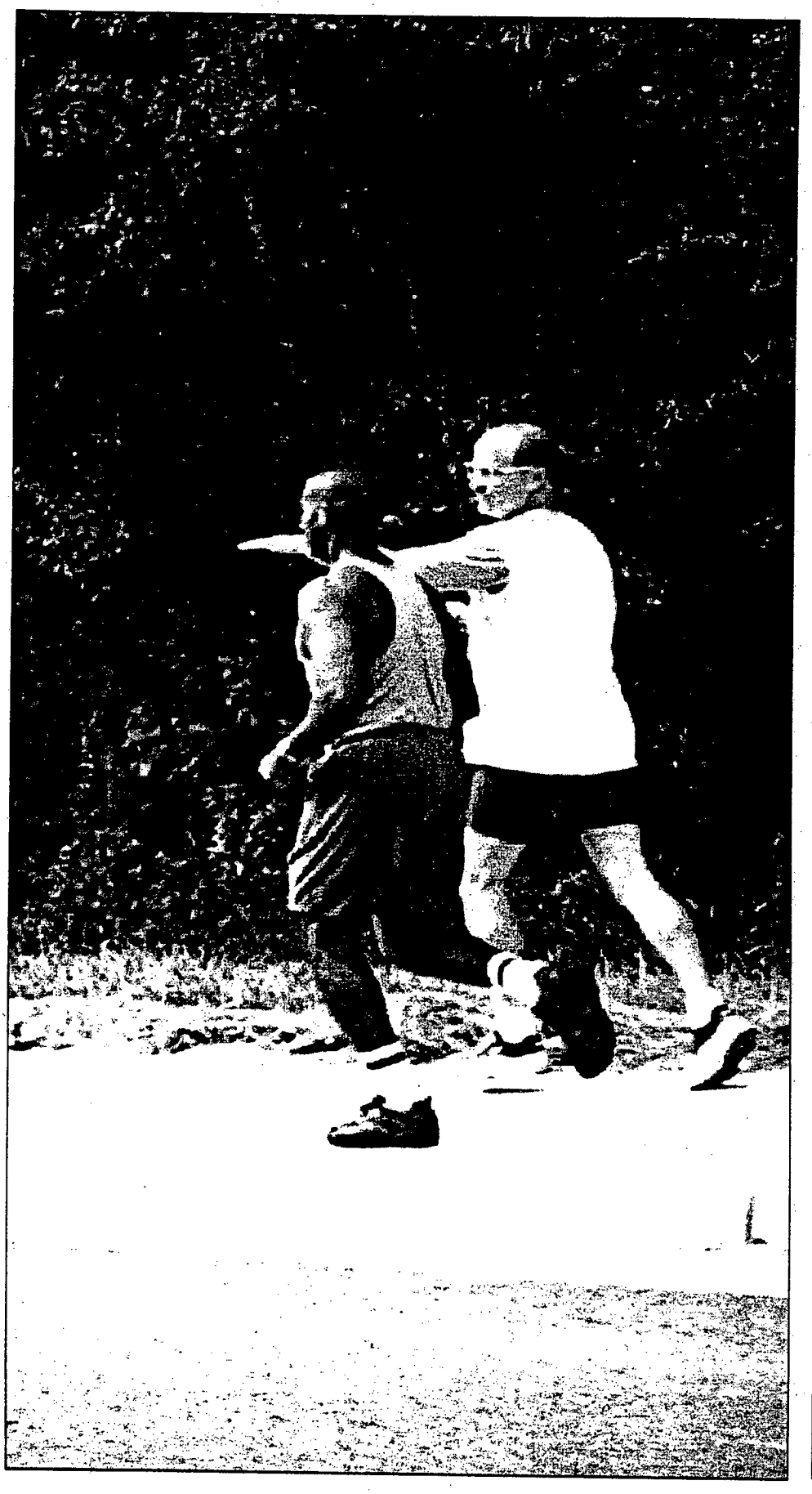
The growth of Hilton Head has spurred comparable development in other parts of Beaufort County. A number of vacation home/retirement communities have been developed in southern Beaufort County in the mainland areas leading to Hilton Head. In northern Beaufort County developments like Fripp Island, Harbor Island and Dataw have flourished. The most recent major development is the Del Webb Corporation's Sun City Hilton Head, a retirement community for people over 55 that will eventually be home to 14,000 people. The Sun City development has begun to spur other development in the southwestern part of the county.

The City of Beaufort has also been discovered by those people who enjoy heritage tourism. Many people who like architecture and history stop in Beaufort when visiting Charleston or Savannah and often return to visit again, or in many cases to live. More and more retirees and others who have the economic resources to do so, are moving to Beaufort as well as to the islands. One of the fastest growing aspects of tourism is African-American oriented tourism, with Penn Center and the sea island Gullah culture attracting increasing numbers of African-American tourists from around the nation.

The development of Hilton Head and the surrounding area has brought increasing pressure on historic areas like the Town of Bluffton and Daufuskie Island. As mentioned earlier, Bluffton began in the early 19th century as a resort for the wealthy planters and their families. Situated on a high bluff above the May River, the cool, clean breezes off of the river provided a healthy vacation spot. After the Civil War when most of the town was burned, Bluffton was somewhat dormant until the late 19th century when a new era of building began. A number of families returned to Bluffton, along with some residents from neighboring counties, and began to rebuild. Most of the people were merchants, rather than planters, and soon Bluffton became a major commercial center for the southern part of Beaufort County. In 1926, when the bridge was built over the Savannah River and residents began to drive to Savannah to shop, Bluffton began to decline as a trading center. Today a number of important homes from this era remain. The Bluffton Historic District was recently approved by the South Carolina National Register Review Board and is now listed in the National Register of Historic Places.

The history of Daufuskie Island is much different. Prior to the Civil War, there were five or six large plantations on the island. During the Civil War, Daufuskie was mostly unoccupied with only a small garrison of Union forces. As on St. Helena, freedmen returned after the War and worked the land under freedmen's contracts. Between 1879 and 1884, John J. Stoddard subdivided his Maryfield and Cooper River plantations into small tracts and sold to blacks, creating the two principal communities still in existence. During the late 19th and first half of the 20th centuries, Daufuskie was a thriving community of mostly African-Americans who earned their living by farming, oystering and timbering. At its peak the population of Daufuskie reached about 1000 people. But in the later half of the century, isolation, development pressures, the destruction of the shellfish beds, and the migration of the young has left a very small, mostly elderly community of African-Americans who share

the island with the more affluent who live in the new developments. In 1982, the entire island was listed in the National Register of Historic Places. Included in the listing are the two lighthouses mentioned previously, two schools, several churches and public meeting places, as well as several dozen vernacular homes constructed in an earlier style that were built between 1890 and 1930. Most, unfortunately, have been abandoned and are in various stages of disrepair.



Chapter 2

Demographics and Trends

2.1 Introduction

An analysis of population and housing data for Beaufort County is integral to understanding how the County has changed over time and, perhaps more importantly, how it is likely to evolve in the future. An appreciation of these demographic and development trends provides an important framework for a wide range of policy decisions, especially with regard to future community facilities, housing needs, and developmental growth.

The data presented in this chapter was gathered from the U.S. Census of Population and Housing, South Carolina's Budget and Control Board, Lowcountry Council of Governments, and the Beaufort County Planning Department. The original data was prepared at the County level with some breakdowns by geographic location.

Where possible, comparisons have been made between the 1990 census figures and earlier figures. In some cases, comparisons were only possible at the county level due to the redistricting of census tracts in the early 1980s.

2.2 1990 Population Demographics

2.2.1 Population Profile

Beaufort County's population in 1990 was documented to be 86,425 by the U.S. Bureau of Census and Population. This population is inclusive of all military installations, incorporated and unincorporated areas of the County.

Figure 1 graphically depicts the percent distribution of the 1990 population. Table 1, on the following page, describes the distribution of the 1990 census by planning area in the County.

The Beaufort/Port Royal planning area is the largest of the six planning areas identified in Beaufort County. In 1990, almost half of the County's population (47%) resided on Port Royal Island. This planning area includes the City of Beaufort, Town of Port Royal, military installations (Parris Island, Marine

Figure 1: 1990 population distribution.

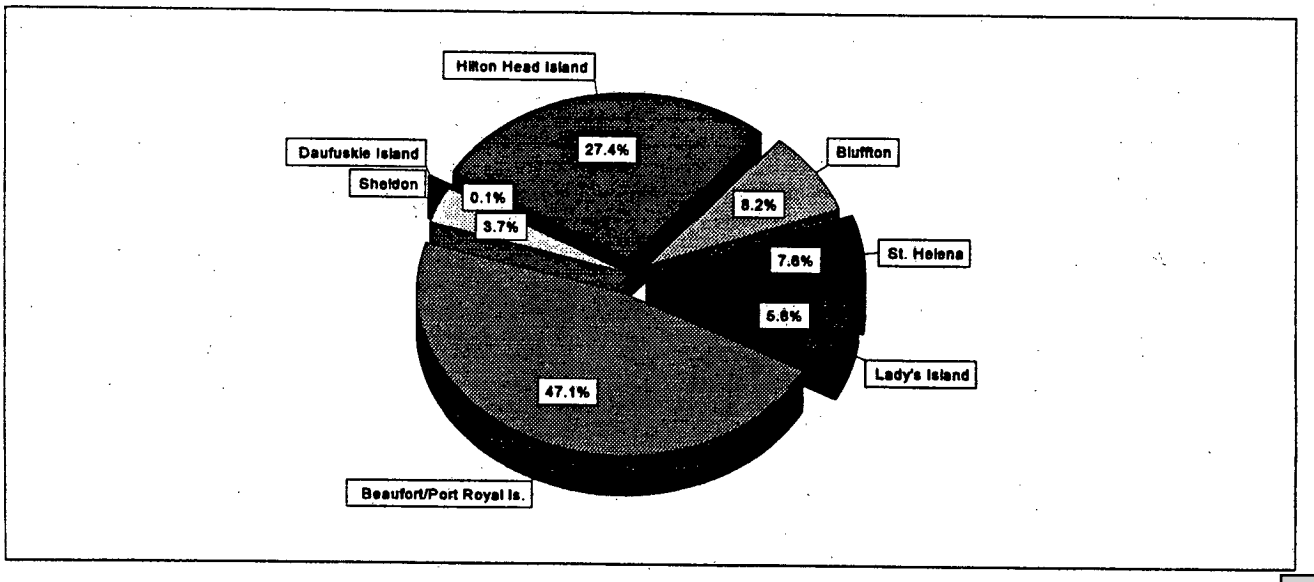


Table 1: 1990 population distribution by Planning Area.

Planning Area	1990 Population	Percent of County
Sheldon Township	3,194	3.7%
Beaufort/Port Royal Island	40,710	47.1%
Lady's Island	5,046	5.8%
St. Helena Township	6,579	7.6%
Bluffton Town and Township	7,084	27.4%
Hilton Head Island	23,694	27.4%
Daufuskie Island	118	0.1%
Total	**86,425**	**100%**

Figure 2: 1980 racial profile.

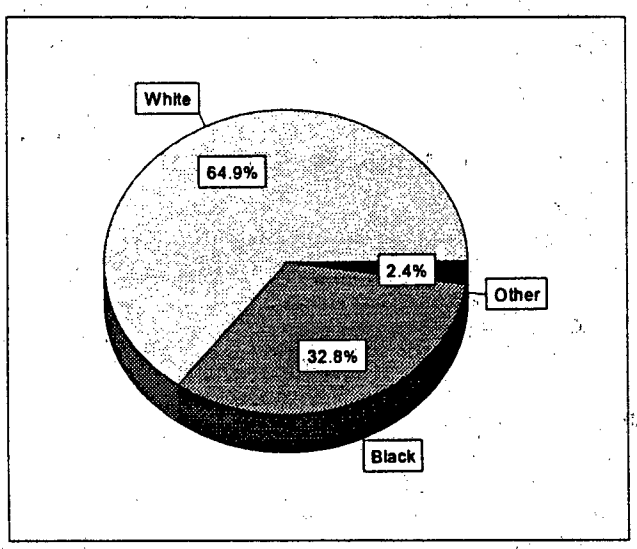


Figure 3: 1990 racial profile.

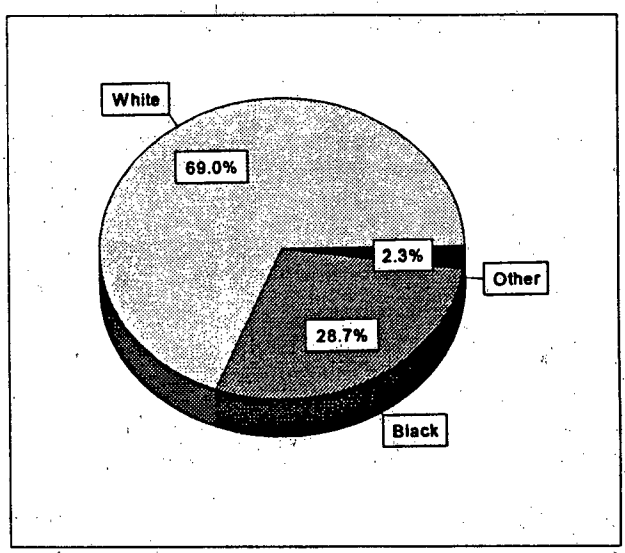
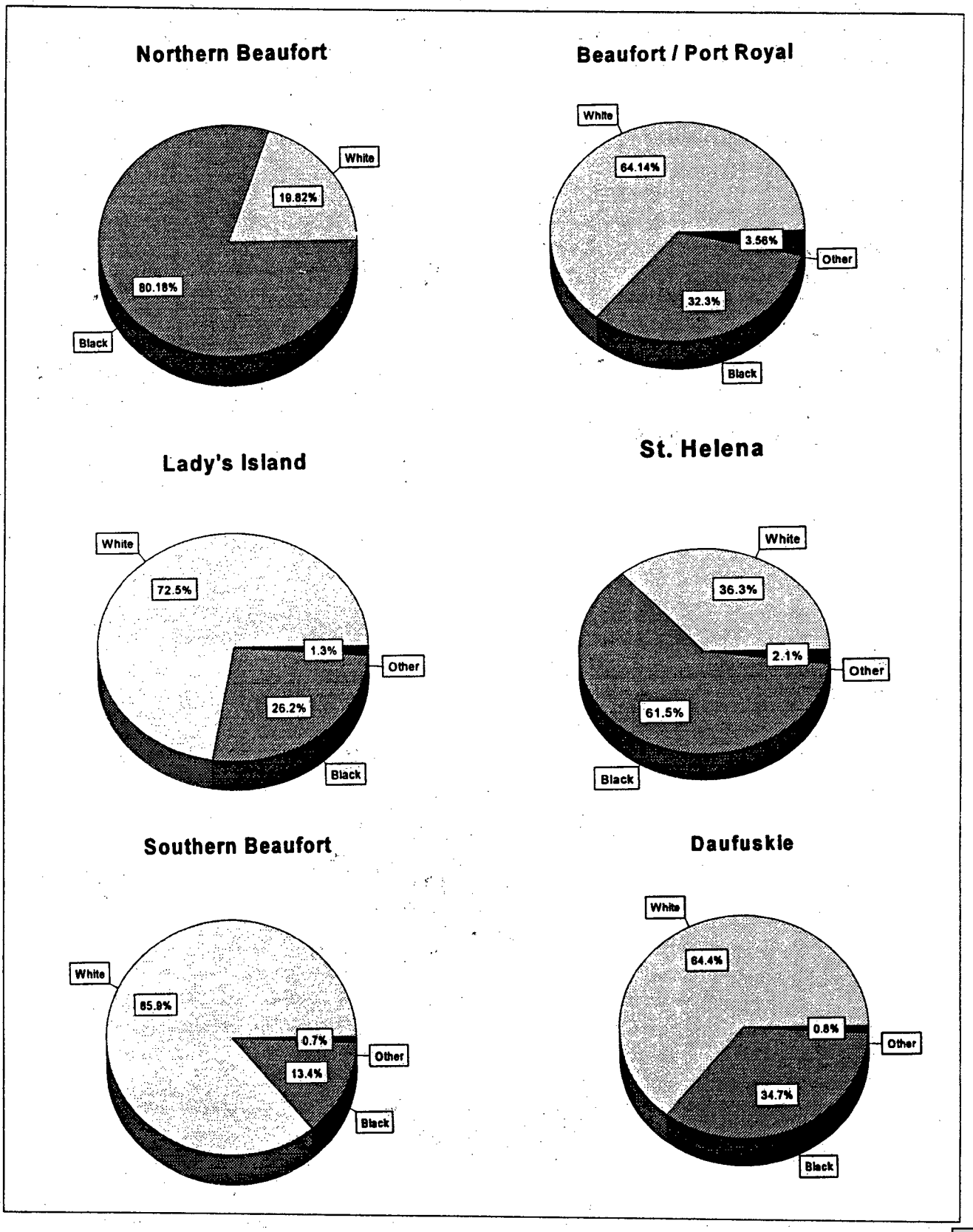


Table 2: 1990 racial profiles for Beaufort County.

Planning Area	White	Black	Other	Total
Sheldon Township	633	2,561	0	3,194
Beaufort / Port Royal	26,332	12,769	1,609	40,710
Lady's Island	3,658	1,322	66	5,046
St. Helena Township	2,391	4,047	141	6,579
Bluffton Town and Township	5,298	1,748	38	7,084
Hilton Head Island	21,207	2,318	169	23,694
Daufuskie Island	76	41	1	118
County Total	**59,595**	**24,806**	**2,024**	**86,425**

Figure 4: Racial profiles by planning area, 1990 Census.



Corps Air Station) and the unincorporated portion of Port Royal Island.

The second largest planning area is Hilton Head Island which accounted for 27 percent of Beaufort County's population in 1990.

2.2.2 Racial Profiles

According to the 1990 Census, 69 percent of the County's population were white, 28 percent were black, and about 2 percent were classified as "other," which represented the total of American Indian, Asian, Hispanic, and all other races. Figures 2 and 3 illustrate the County's racial profiles, according to the 1980 and 1990 Census, and Figure 4 illustrates racial breakdowns by planning area. Table 2 quantifies the racial makeup of each planning area in Beaufort County.

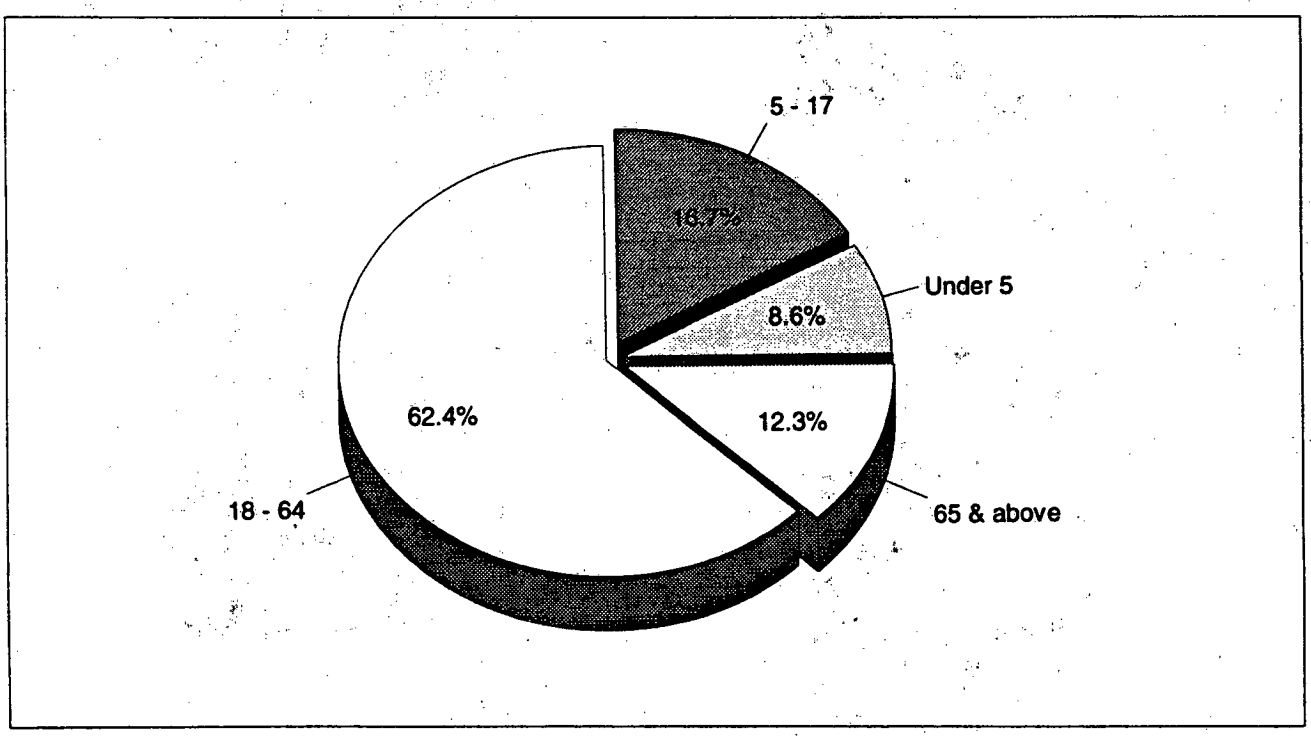
2.2.3 Age Profiles

The age profile of Beaufort County residents is presented in Figure 5. The age profiles are divided into five categories: under five, five to seventeen, eighteen to thirty-nine, forty to sixty-four, and sixty-five and over.

The majority of County residents (40%) fall between the ages of eighteen and thirty-nine. The second highest category is between forty and sixty-four which accounts for 22 percent, followed by the five to seventeen bracket (17%), sixty-five and older (12%) and those persons under the age of five (9%).

The variation from these Countywide percentages among the planning areas appeared to be minimal, even among the planning areas recognized for their concentration of retirement communities.

Figure 5: 1990 age profile.



2.2.4 Housing Units and Household Size

The U.S. Census documented 30,654 households in Beaufort County in 1990. This translated into an average of 2.6 persons per household. This represents an overall decrease in the average household size from 1980 which averaged approximately 2.8 persons.

Decreases in household size are consistent with both regional and national trends. This is a re-

Table 3: Household units and household size, 1980 & 1990.

	Housing Units		Households		Persons/Household	
Planning Area	1980	1990	1980	1990	1980	1990
Sheldon	925	1,261	792	1,053	3.8	3
Beaufort/Port Royal Is.	11,572	11,408	10,649	10,429	2.7	3
City of Beaufort		*4,149*		*3,844*		*2.5*
Town of Port Royal		*1,277*		*1,162*		*2.5*
Military Bases		*582*		*556*		*3.2*
Unincorporated Areas		*5,400*		*4,867*		*3*
Lady's Island	1,250	2,195	1,090	1,929	2.8	2.6
St. Helena	2,114	3,931	1,669	2,408	3	2.7
St. Helena Island		*2,728*		*1,915*		*2.9*
Fripp & Harbor Islands		*1,203*		*493*		*1.8*
Northern Beaufort Total	15,861	18,795	14,200	15,818	3.5	3.5
Bluffton	1,533	3,347	1,250	2,684	2.9	2.6
Town of Bluffton		*299*		*284*		
Unincorporated Areas		*3,048*		*2,400*		
Hilton Head Island	9,434	21,509	4,682	10,296	2.4	2.3
Daufuskie Island	27	132	34	61	2.1	1.9
Southern Beaufort Total	10,994	24,988	5,966	13,041	2.5	2.3

sult of the increasing numbers of nontraditional family households. This includes single-parent households, divorced parents, and couples who have chosen not to have children.

2.2.5 Income Profiles

The 1990 U.S. Census documented the figure of $30,450 as the median household income for Beaufort County residents. This figure breaks down to a per capita total of $15,213.

Considering the economic diversity of Beaufort County, a County average is limited in its usefulness when addressing the broad range of household incomes earned in 1990. Table 4 documents the average per capita and median household incomes for specific areas in Beaufort County.

Table 4: Median household income & per capita income by specific area.

Specific Area	Median Household Income	Per Capita Income
Sheldon Township	$13, 257	$7,488
Beaufort / Port Royal Island	$25,120	$10,469
Lady's Island	$37,099	$16,693
St. Helena Island	$18,217	$9,137
Harbor and Fripp Islands	$40,060	$19,786
Bluffton Town and Township	$25,574	$11,822
Daufuskie Island	$45,974	$26,412
Hilton Head Island	$42,995.	$25,171

Source: 1990 U.S. Census

2.3 Population Changes and Projections

2.3.1 County-wide Population Changes: 1960 - 1990

Beaufort County experienced unprecedented growth over the last thirty years. Between 1960 and 1970, the County grew from 41,052 to 51,136 individuals–an increase of over 24 percent. By 1980, the population had grown to 65,364–an increase of almost 28 percent. The 1990 population of 86,425 represented an additional increase of more than 32 percent. This higher rate on a much larger

Figure 6: Population changes, 1960 - 1990.

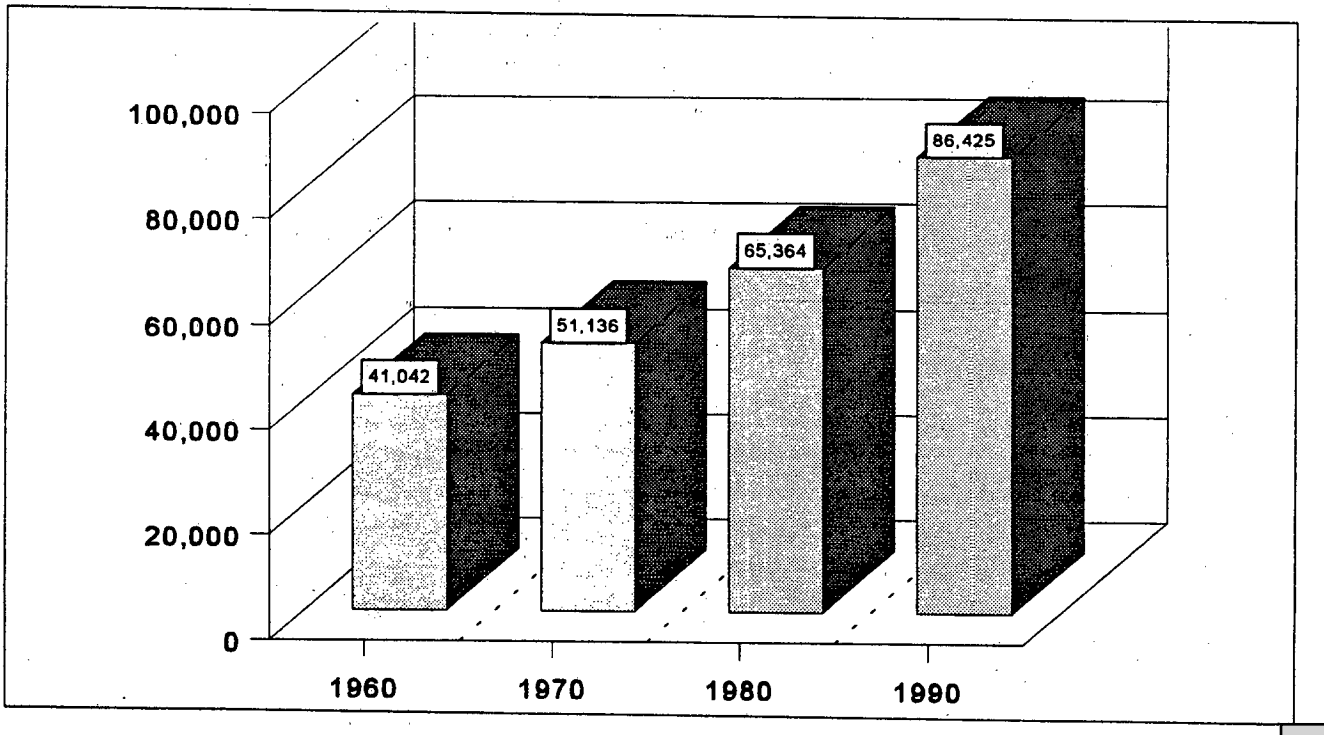


Table 5: County population changes, U.S. Census Bureau, 1960 - 1990.

1960	% Change	1970	% Change	1989	% Change	1990	% Change
41,052	—	51,136	24.6%	65,364	27.8%	86,425	32.2%

Figure 7: County-wide population projections by planning agency, 1990 - 2020.

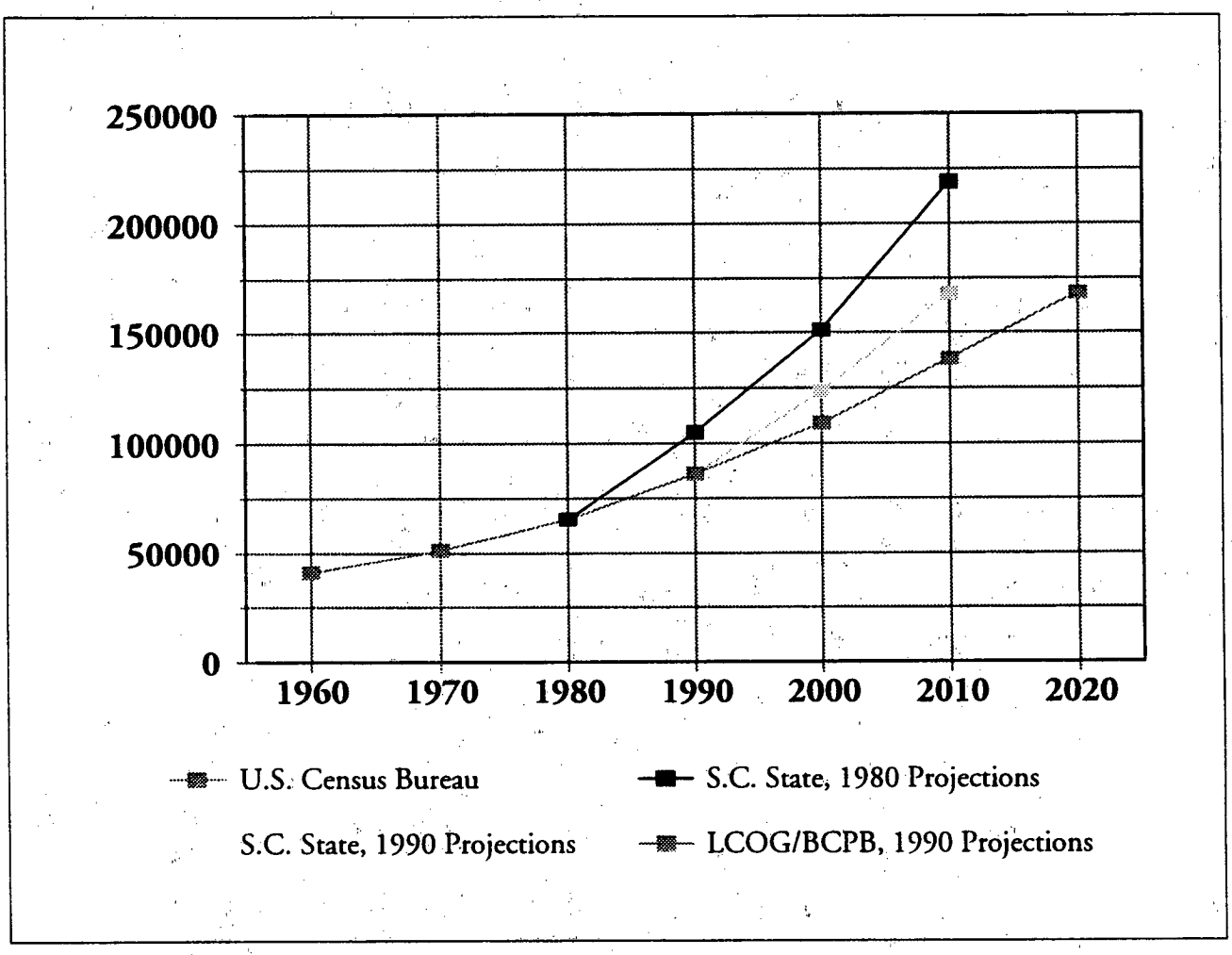


Table 6: County-wide projections by planning agency, 1990 - 2020

Planning Agency	2000	%	2010	%	2020	%
S.C. State, 1980 projections	151,400	44%	219,000	45%		
S.C. State, 1990 projections	123,500	36%	168,000	36%		
Lowcountry COG, 1990	109,124	27%	138,371	27%	168,322	22%
County Planning, 1990	109,275	27%	139,400	28%	168,300	21%

Table 7: Population by planning area, 1960 - 1990.

Planning Area	1960	1970	1980	1990
Sheldon Township	3,293	2,530	2,994	3,194
Beaufort / Port Royal	31,717	37,636	39,017	40,710
Lady's Island	——	——	3,094	5,046
St. Helena	6,047	5,718	5,091	6,579
Bluffton Township	3,135	2,757	3,652	7,084
Daufuskie Island	——	——	72	118
Hilton Head Island	——	——	11,344	23,694

Source: Beaufort County Planning.

population base is an indication of rapidly increasing growth (see figure 6 and table 5).

3.2 County-wide Projections: 1990 - 2020

Population projections have been prepared for Beaufort County by three public agencies, including the S.C. State Budget and Control Board, Lowcountry Council of Governments, and the Beaufort County Planning Department (see figure 7 and table 6).

3.3 Population Change by Planning Area

The figures are even more dramatic when this growth rate is examined by individual planning area. Tracking growth by specific planning area was not possible until the 1980 census. However, the growth rates can be extrapolated in certain planning areas by comparing old and new census divisions.

The majority of Beaufort's growth has been in the southern part of the County, particularly Hilton Head Island since in the mid 1970s and Bluffton Township since the mid 1980s.

Table 7 displays the population changes at the Census County Division (CCD) level. CCDs are geographic areas established by the Census Bureau to report sub-county statistical data. The CCDs unfortunately do not translate into the specific planning areas that have been utilized throughout this report for the time periods 1960 and 1970. The differences are that Lady's Island is aggregated with St. Helena and both Daufuskie and Hilton Head Islands are aggregated within Bluffton. After 1970, it was possible to separate those areas appropriately.

3.4 Projections by Planning Area: 1990 - 2020

The Lowcountry Council of Governments (LCOG) and the Beaufort County Planning Department prepared projections for the County's planning areas documented in Table 8. The methodology, base assumptions and extrapolations utilized by Lowcountry COG are summarized in the following paragraphs. These results are presented graphically in the bar chart in figure 8 by planning area and by time period.

Table 8: Population projections by planning area, 1990 - 2020.

Planning Area	1980	1990	1995	2000	2010	2020
Sheldon Township	2,994	3,194	3,450	3,570	3,900	4,250
Beaufort/Port Royal Island	39,017	40,710	41,351	41,992	43,104	44,046
Lady's Island	3,094	5,046	6,037	7,028	9,478	12,392
St. Helena Township	5,091	6,579	7,870	9,162	12,355	16,154
Bluffton Township	3,652	7,084	9,708	13,252	28,929	47,288
Hilton Head Island	11,344	23,694	26,700	33,914	40,383	43,966
Daufuskie Island	72	118	162	205	220	240
County Totals	65,264	86,425	95,278	109,123	138,369	168,336

a. Methodology

i. Base Assumptions

All statistical manipulations require a base set of assumptions by which to develop a mathematical projection. The following three assumptions were utilized to predict future growth trends:

- the historical data are reliable;
- past growth trends will continue without change; and
- the chosen projection method closely approximates the actual trend.

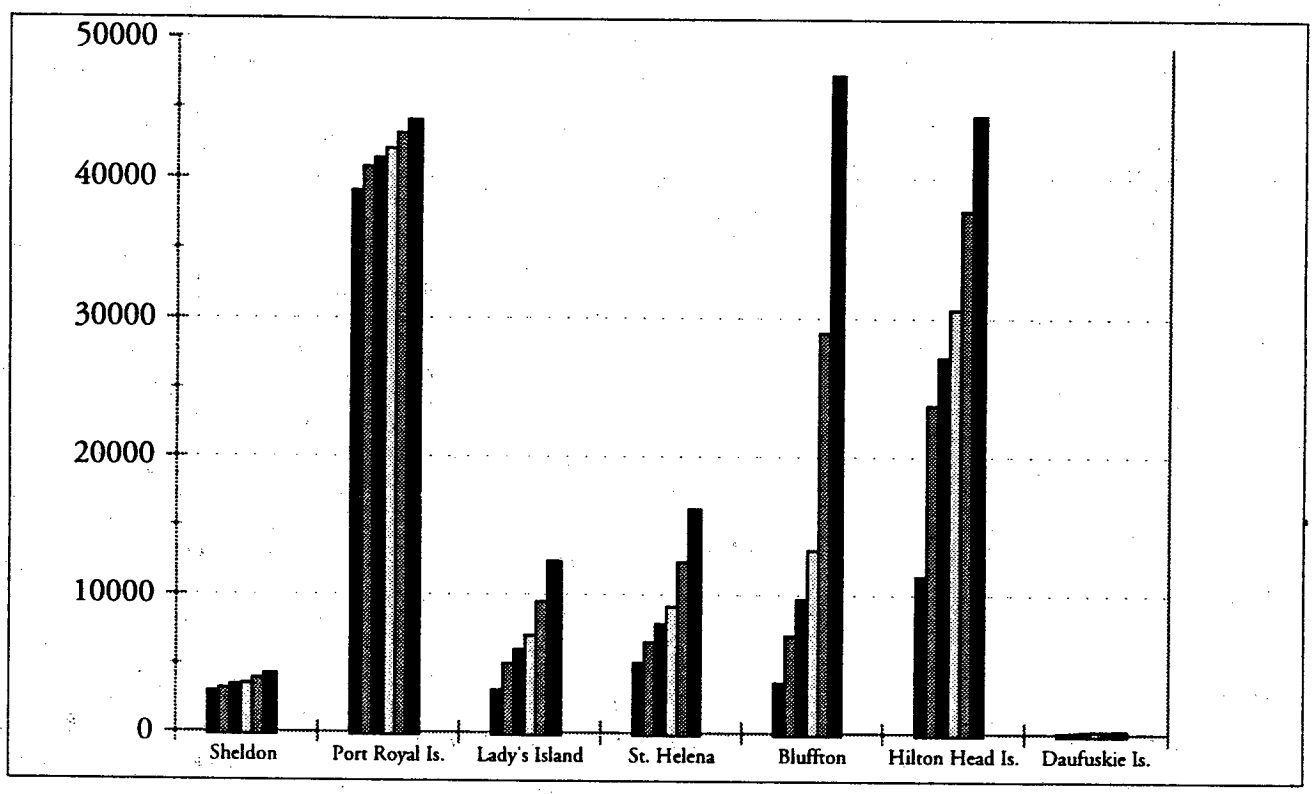
It is realized that these assumptions may or may not hold true over time. Therefore, these projections are utilized as general indicators of the future direction and magnitude of growth rather than as specific predictions of population values.

ii. Projections

The projection method employed by the Lowcountry COG involved curve fitting and extrapolation. The 1960 to 1990 or 1970 to 1990 population curves for each planning district were compared to six standard mathematical curves. These standard mathematical curves included linear, geometric, parabolic, modified exponential, gompertz and logistic curves. Each curve has its own assumption built in. These are:

- The linear curve assumes that the planning district population will grow by equal amounts for equal time periods.
- The geometric curve assumes that the population will grow at a constant, compounded rate.
- The parabolic curve assumes that growth increases or decreases by a constant amount.
- The modified exponential, gompertz and logistic curves assume that growth

Figure 8: Population projections by planning area, 1980 - 2020.



from or toward a lower or upper growth limit.

Each planning area was examined in order to determine (1) the curve that best fit the historic growth, and (2) that it is based on a realistic assumption. The curve chosen for each area was then used to extend the historical population curve to 2000, 2010, and 2020. The projected population figures presented in table 8 are the result of these curve extrapolations. These population projections are graphically portrayed in figure 8. For base reference, the U.S. Census figures for 1980 and 1990 are included in Table 8.

2.4 Development Trends

2.4.1 Development Activity: 1960 - 1990

Tracing the development trends of Beaufort County back to the early 1960s offers a glimpse into the fastest growing county in South Carolina. What makes this growth most remarkable is that the majority of it occurred in concentrated areas - specifically, on Hilton Head Island.

Prior to 1960, and indeed following through to 1990, the Beaufort/Port Royal planning area housed the greatest number of County residents. In 1960, a full 77 percent of County residents lived on Port Royal Island. By 1990 although this percentage had dropped to 47 percent, it still represents the largest population.

By far, the most intensive development within Beaufort County over the past thirty years has been on Hilton Head Island which grew from 2,499 to 11,344–an increase of over 350 percent–during the period from 1970 to 1980. During the following decade, 1980 to 1990, the population on Hilton Head Island more than doubled to a figure of 23,694.

Now, as Hilton Head Island begins to approach saturation build-out, a shift is noted toward increasing development on the mainland of southern Beaufort. During the period 1980 - 1990, the population of Bluffton Township doubled from 3,634 to 7,202 individuals. The only other area to come close to this during this time period was Lady's Island which grew from 3,094 to 5,046 - an increase of 63 percent.

2.4.2. Growth Profiles by Planning Area

Growth distribution profiles have been developed for Beaufort County by planning area. These profiles track residential growth in the County by two distinct methods, by assessed parcel data and by tracking building permits.

a. Growth Profiles by Assessed Parcels

These figures represent that period in time when a particular parcel is assessed as having a built structure (house) on it. These figures do not include the distribution of an additional 5,099 manufactured homes which the Assessor's Office has documented, but are not keyed-in to specific parcels. This has made these units inaccessible to the GIS data query which

Table 9: Growth profiles by assessed parcels.

Planning Area	Through 1970	1971-1980	1981-1985	1986-1990	1991-1994	Area Total
Sheldon Township	312	142	58	66	55	633
Beaufort/Port Royal Is.	4,455	1,206	709	737	404	7,511
Lady's Island	370	441	373	492	437	2,113
St. Helena Township	939	686	308	443	369	2,745
Bluffton Township	737	331	509	864	653	3,094

was the source for the information in the table below. Also Hilton Head Island information is not available through the County's GIS.

Table 9 depicts the number of individual parcels assessed as having a structure. This mirrors the population information presented in previous sections. Beaufort/Port Royal Island has historically experienced the most growth in the County, although since the mid-1980s, this planning area has been eclipsed by Bluffton Township in building activity. The planning area which has experienced the least growth is Sheldon Township.

An interesting contrast to these assessed figures is found by comparing them to the number of building permits issued during similar time periods. This is due to an appreciable lag between when a permit is issued and when the property is subsequently assessed as having a built and habitable structure on it. Building permit profiles are examined in the following section.

b. Growth Profiles by Building Permits

Beaufort County has been tracking building permits issued since the mid-1980s. This information differs from the parcel information presented on the previous page in that building permits may have been issued for structures which are still under construction or have not yet been built. This information is presented to offer a glimpse into the formal permitting process and to highlight where the most building activity has and is occurring in the County. This information is presented in Table 10.

The building permit records shown in Table 11 portray where in the County the most building activity is occurring. "Spikes" in building activity are apparent on Daufuskie Island in 1990 with the construction of Haig Point and Melrose Plantations and in St. Helena Township in 1994. Another notable increase is apparent in Bluffton Township which has been experiencing constant growth since the mid-1980s, followed by a great jump in the number of building permits issued in 1994 and 1995. Lady's Island has also been experiencing steady growth, with a distinct increase noted after 1991.

Table 10: Issued building permits by planning area, 1990 - 1995.

Planning Area	1990	1991	1992	1993	1994	1995
Sheldon Township	17	32	6	12	9	19
Port Royal Island	68	77	63	37	59	53
Lady's Island	69	81	119	112	161	102
St. Helena Township	71	94	88	82	122	75
Bluffton Township	143	120	142	157	318	394
Daufuskie Island	148	8	10	22	10	8

The following section examines each planning area to determine the amount of PUD and subdivision developments that have been approved in Beaufort County since 1987.

2.5 Approved & Pending Development

2.5.1 Overview

One of the most revealing components of development trends is the inventory of recently approved and pending development projects. This section presents a detailed glimpse into recent zoning and development permitting activity to illustrate the trends of increasing growth in Beaufort County.

The narrative for each planning area examines the number and status of residential and non-residential subdivisions approved since 1987 and the major developments approved before 1987. In addition, a summary of properties which have been rezoned since January 1994 is included. Also included is information, as pertinent, on rezoning requests which were denied approval during the same time period, since this information provides an equally interesting glimpse into the nature of the zoning system and the shifts in desired land uses. Projects considered as pending are those projects which have been approved but will achieve build-out in years to come.

Residential subdivision activity from 1987 to the present was obtained from the Beaufort County Zoning and Development Office and reflects their computerized records for development permits issued back to 1987. The number of lots recorded in this section may or may not reflect the total number approved, as not all phases of any particular development may have been registered for a development permit to the present time. Family subdivisions are not considered, as they are exempt from a development permit. For the purpose of this analysis, subdivision activity has been divided into four distinct categories:

1) Subdivisions within Planned Unit Developments (PUDs)

2) Subdivisions of more than 50 lots (non-PUDs)

3) Subdivisions of 20 - 49 lots

4) Subdivisions of less than 20 lots

An inventory as of July 31, 1996 was also taken of several existing subdivisions of more than 20 lots to determine the number of homes built within each subdivision. These

numbers were obtained from Building Inspections records, field surveys and development sales offices. Numbers of homes built to date for subdivisions of less than 20 lots was not available without extensive research into building permit data. Therefore, a percentage is assumed for each area of number of homes built, based on averages obtained within each planning area for non-PUD subdivisions.

The summary of past rezoning activity for each area focuses on a general description of activity. The data collection period chosen was from January 1994 to August 1996. For the purposes of this analysis, development activity from August 1996 to August 1997 has been considered in the future land use analysis, but is not included in this chapter. It furthermore highlights the activity by type of rezoning, according to the following categories:

- Residential Only to Commercial
- Low Density Residential to Higher Density Residential
- Residential to Planned Unit Development
- Other (Commercial to Industrial, PUD amendments, etc.)

2.5.2 Sheldon Township

a. Summary of Subdivision Activity, 1987 - 1996

i. Subdivisions within Planned Unit Developments (PUDs)

There is only one existing PUD in Sheldon Township, that being the Bray's Island development. Approved for 325 single family lots on 5184 acres, at a gross density of one home per 16 acres, 45 homes have been built to date.

ii. Subdivisions of more than 50 lots (non-PUDs)

The other large subdivision in this planning area, Bull Point, has approval for 154 lots on 187.9 acres. It is not a PUD, but it is anticipated that the development may become a PUD in the near future for additional lots. The development of Bull Point was commenced within the last year, and four homes have been built to date.

iii. Subdivisions of 20 - 49 lots

There are five subdivisions which have received approval since 1987 under this category. Located chiefly along the water and marsh front edge, they encompass a total of 152 approved lots on 706 aggregate acres. They range in gross densities from one dwelling unit per acre in the Marsh Point subdivision to one dwelling unit per 10 acres in the Morgan Island subdivision. Less than 2 percent of the total lots have been built upon at the present time.

iv. Subdivisions of less than 20 lots

40 subdivision permits have been issued since 1987 in this planning area for subdivisions less than 20 lots in size. There were approximately 137 lots on 589.03 acres, with an overall average of 4.3 acres per lot. The lots range in size from half acre lots to 50 and 54 acres, with the majority of lots ranging from 1 acre to 6 acres in size.

Multi-family activity was scarce during the same time period, with twelve units approved on property not qualifying for a family exemption.

b. Summary of Rezoning Requests, January 1994 - August 1996

i. Residential Only to Commercial

All three rezoning requests filed since 1994 have involved a change from RAD zoning to commercial or industrial zoning. The reasons given were to redevelop existing and non-conforming businesses or small industries or to expand an existing neighborhood commercial area. Two requests to Light Industrial zoning have been denied as spot zoning. The other case of RAD to NCD was deemed favorable by the reviewing bodies.

2.5.3 Port Royal Island

During the past few years, development changes on Port Royal Island have mainly occurred near or adjacent to the boundaries of the City of Beaufort and the Town of Port Royal, along major or minor corridors, or in parcels along the waterfront and marshfront for residential development.

a. Summary of Subdivision Activity, 1987 - 1996

i. Subdivisions within Planned Unit Developments (PUDs)

There is only one recorded PUD in unincorporated Port Royal Island, that being the Habersham Plantation PUD on the Broad River.

ii. Subdivisions of more than 50 lots (non-PUDs)

With the exception of Hilton Head Island, Port Royal Island was the first to be suburbanized in the late 1950s and early 1960s, with Lady's Island following closely behind. A number of established subdivisions with more than 50 lots are found in many areas of this planning district, most of which commenced developed from the late 1960s to approximately 1990. More than twenty subdivisions of this size were begun before 1987, and have gradually continued to add new phases. Approximately a dozen subdivisions have been added since 1987.

The larger subdivisions are principally located on large tracts following the Broad River north from S.C. 170, in the Shell Point area, near the Whale Branch River and McCalley Creek in the Stuart Point and Seabrook areas, and around the S.C. 170 and S.C. 280 area.

iii. Subdivisions of 20 - 49 lots

Approximately a dozen new subdivisions of this size were begun since 1987. These subdivisions are also found in the Broad River, Shell Point, Seabrook, and S.C.170/S.C.280 areas, much like the larger subdivisions. Most of these medium size subdivisions have already been built out, and there are very few lots remaining. Another notable feature of these subdivisions is that they tend to average .65 or 2/3 acre in lot size, with a range of 1.3 acres per lot at the high end and 1/4 acre lots at the lowest end.

iv. Subdivisions of less than 20 lots

Between 1987 and 1996, there were approximately 68 residential subdivision permits issued, with a total of 330 new lots created in that time period. Many of these lots were two, three and five lot individual subdivisions, and the rest were additions to existing larger subdivisions. These subdivisions also tend to range between 1.5 acres per lot to 1/4 acre lots, with a few exceptions creating larger lots of 2, 3, 5, and 8 acres.

These new subdivisions are fairly distributed around the planning area, with the majority of them located in the regions mentioned above for the other categories, and along waterfront and marshfront areas in particular. It is assumed that the majority of these new parcels are built out, following the percentages of the 20 - 49 lot category.

b. Summary of Rezoning Requests, January 1994 - August 1996

i. Residential Only to Commercial

Of the twenty-one rezonings listed for unincorporated Port Royal Island since January 1994, fourteen of these requests, or 67 percent, have been for a residential category to a commercial category, with 72 percent (10 out of 14) of these fourteen requests for General Commercial Zoning District (GCD) in particular.

The expansion of the municipal limits of the Town of Port Royal to the west along S.C. 802 has changed low density residential lands under County zoning to highway commercial under the Town's zoning. Other commercial rezonings have also occurred along major thoroughfares. Four of the requests were made for non-conforming properties in order to expand their present commercial uses.

ii. Low Density Residential to Higher Density Residential

Four rezonings from NPD-2, with two units per acre of single family residential only allowed, to NPD-4 or GRD4, which allows four units per acre, were requested since January 1994. Only one of these requests was approved, the others denied or withdrawn chiefly because of the inappropriateness of a higher density, involving potential septic problems and other such issues. No requests have been made for densities higher than four units per acre, and for no other zoning categories besides NPD or GRD.

iii. Residential to Planned Unit Development

No requests outside the municipal limits have been made for a change to the Planned Unit Development zoning category. The only existing PUD, Habersham Plantation on the Broad River, was approved for a PUD amendment, but land uses and densities did not increase from the original 1988 PUD approval.

iv. Other

Outside the municipal limits, no changes to heavy or light industrial zoning districts or the office commercial district have been requested, nor were any changes proposed to decrease present densities or to limit use for conservation.

2.5.4 Lady's Island

a. Summary of Subdivision Activity, 1987 - 1996

i. Subdivisions within Planned Unit Developments (PUDs)

There are six planned unit developments on Lady's Island, mostly developed during the last ten to fifteen years. Four PUDs are located south of U.S. 21, and two are located in the central and upper portions of the island. These PUDs range in size from 53.6 acres to 525 acres, and are comprised of a variety of development patterns from neo-traditional neighborhoods to golf course communities. Of the total number of single and multi-family lots and units approved for the combined PUDs, only five percent of the lots presently contain homes (160 homes out of 2831 total approved units).

ii. Subdivisions of more than 50 lots (non-PUDs)

There are slightly less than one dozen subdivisions of more than 50 lots in size, most of these located in the central and upper portions of the island and ranging in size from 15 to approximately 700 acres. One of the oldest and largest developments, Royal Pines, was begun in the late 1960s, and was the first golf course community on Lady's Island. Only four developments contain golf course facilities on Lady's Island. Some of these developments, including Royal Pines, contain several lots which at present cannot accommodate an on-site septic system and are not developable. Once water and sewer services are available on Lady's Island, many platted lots will then be available for homesites.

iii. Subdivisions of 20 - 49 lots

There are approximately a dozen developments of this size found across the island, of acreages ranging from 6 to 52 acres, and densities ranging from three lots per acre to nearly one lot per 2 acres. Most of these developments are found in the central portion of the island, along the water and marsh edge in some cases, and along Sam's Point Road (northern Rt. 802) or the other minor arterials in the northern part of the island. The majority of these subdivisions are 50 percent to 75 percent built out.

iv. Subdivisions of less than 20 lots

Between 1987 and 1996, there were approximately 112 residential subdivision permits issues, creating approximately 396 single family lots beyond the continuance of lots created in subdivisions larger than 20 lots. Approximately 145 multi-family units were created also, not counting the 106 multi-family units created in the Marsh Harbor development.

Many of these subdivisions are 1/2, 1, and 2 acre subdivisions, and are fairly distributed around the planning district. Many lots are located along the water or marshfront edge, and were carved from relatively small (10 - 30 acres) parcels.

b. Summary of Rezoning Requests, January 1994 - August 1996

i. Residential Only to Commercial

Three requests involved an approved change from GRD4 to General or Neighborhood Commercial District, in order to allow new commercial businesses. Otherwise, new commercial businesses have been built in commercial zoning districts.

ii. Low Density Residential to Higher Density Residential

There were no rezoning cases in this time period involving a residential density increase.

iii. Residential to Planned Unit Development

Four requests involved a change from Development District zoning to PUD zoning to allow a mixture of residential and commercial uses, the Village on Lady's Island and Cane Island Retreat, the Gleason tract in central Lady's Island and Upper Cane Island in the southern portion. All four of these developments have utilized traditional neighborhood development site designs.

iv. Other

No requests have been made for any industrial or conservation zoning categories, nor for General Residential categories or any increase in density.

2.5.5 St. Helena Township

a. Summary of Subdivision Activity, 1987 -1996

i. Subdivisions within Planned Unit Developments (PUDs)

Three residential PUDs were begun prior to 1987 and have continued their development to the present day, these developments being Dataw Island, Harbor Island and Fripp Island, all gated golf course communities. The only other PUD in the Township was approved for the creation of a campground and is found near Land's End on St. Helena Island. None of the residential PUDs is more than 40 percent built out, and the average density of the three combined is approximately two units per master planned acre.

ii. Subdivisions of more than 50 lots (non-PUDs)

There are six subdivisions of more than 50 lots, three of which were begun before 1988. Most of the subdivisions contain lots from ½ acre to 1 acre in size, with the notable exception of Tansy Village, which contains approximately seven lots per acre. Most of these developments are located on peninsulas or on small islands. There are approximately 900 lots approved in these six subdivisions, and no more than 40 percent of these developments have been built-out on average.

iii. Subdivisions of 20 - 49 lots

Two subdivisions have been approved since 1987 under this category, the Village Creek and the Vue Point developments. Both of these developments are developed on approximately 20 acres each, with a 0.57 units per acre and 0.80 units per acre density respectively.

iv. Subdivisions of less than 20 lots

Between 1987 and 1996, there were approximately 79 subdivision permits approved, for a total of new 215 single-family residential lots on 290.82 aggregate acres created. As an aggregate, this represents an average lot size of 1.35 acres, with actual lot size ranging from 1/4 acre lots to 9 acre lots, and a large percentage of lots around ½ acre to 1 acre in size.

There were approximately 43 multi-family units created on 83.5 acres, for an estimated 1.9 units per acre. Most of these units are located in manufactured home parksites.

b. Summary of Rezoning Requests, January 1994 - August 1996

i. Residential Only to Commercial

Only three requests from residential to commercial were filed, and subsequently disapproved by the County Council. One request involved a change to Residential Commercial District (RCD) zoning to allow for a kayak business to be placed at the waterfront rear of the applicant's property. The denial was based on the principle that the Residential Commercial zoning district, which extends only 500 feet from the road right-of-way, should never be extended to any waterbody to allow for commercial activities, even those involving eco-tourism.

The other RCD request involved the potential conversion of a vacant building to a boarding house at the Corner Community. The final request was from RAD to GCD, to allow a commercial storage building near the intersection of U.S. 21 and Fripp Point Road. Both requests were denied.

ii. Low Density Residential to Higher Density Residential

The only request filed during this time period for any residential increase involved a change from RAD to RDD to allow more manufactured homes on a site. The request was not approved by County Council.

iii. Residential to Planned Unit Development

Only one request was filed and approved for a Planned Unit Development, despite much controversy and opposition from island residents. This request involved the creation of a campground with the density not exceeding that of the original RDD zoning (four units per acre).

iv. Other

No other rezoning requests were filed or approved for changes to industrial or conservation zoning districts.

2.5.6 Bluffton Township

Since Del Webb's 8600 home development was approved in the late fall of 1993, a number of other developments have occurred in Bluffton Township. More development permits have been issued monthly in this area more than any other planning area during the past year. The many-fold increase in multi-family units within the past three years merits special attention in an area with very little prior multi-family activity.

a. Summary of Subdivision Activity, 1987 - 1996

i. Subdivisions within Planned Unit Developments (PUDs)

In addition to continuing phases of development in the ten existing PUDs, five chiefly residential PUDs, River's End, Belfair, Willow Run, Sawmill Forest and Indian Hill, and one chiefly commercial PUD, Okatie Center, have been approved within the last three years. The majority of these developments are located along the U.S. 278 corridor. Added together, with the exception of Okatie Center, there are approximately 13,434 single family units and 2821 multi-family units approved within all these PUDs.

ii. Subdivisions of more than 50 lots (non-PUDs)

Subdivisions of more than 50 lots in size range from affordable housing projects to exclusive resort developments. Most of these developments are located within a two to three mile radius of the Town of Bluffton, along S.C. 46, Burnt Church Road, the Alljoy area, and extending towards the Town of Hilton Head Island.

One notable development is Spring Island, which features 500 residential lots on 2997 acres of high ground in the Okatie and Colleton River area. Unlike some PUDs in the area, this planned development incorporates nature preserves and recreational amenities and remains compatible with the surrounding rural context despite its planned nature.

iii. Subdivisions of 20 - 49 lots

There are less than one dozen subdivisions approved since 1987 with 20 - 49 lots, most of which are located in the vicinity of the Town of Bluffton and the area between Bluffton and Hilton Head Island. Chechessee Bluffs and

Grande Oaks are exceptions, located in the Chechessee and Pritchardville areas respectively. There are some other limited developments in the Pritchardville area which were developed before 1987 as well, making this area a concentration of rural residential development secondary to the Bluffton area and smaller areas within Okatie.

iv. Subdivisions of less than 20 lots

Approximately 357 single family lots on 723.35 acres were approved since 1987, for an average gross density of 2.03 acres per lot. Density ranges from ½ acre lots to 8 acre lots, with many lots of ½, 1 and 2 acre size. These subdivisions are found throughout Southern Beaufort County, but chiefly in the greater Bluffton area, Pritchardville, and Okatie areas.

A number of multifamily developments have been permitted in the same time period, occurring in the U.S. 278 corridor area and around the Town of Bluffton. There were approximately eighteen multi-family subdivision permits issued, with 1328 units permitted altogether, including a phase of Old South apartments at 176 units. 394 units or 30% of these 1328 units are located in mobile home parks, and 895 units or 67.3% are in apartment complexes. Twenty-five units comprise the Stoney Crest campground.

Two multifamily developments which include 620 of the 895 units listed in the development permit records have never been built. These projects, the Silver Leaf Complex and Spring Meadows Apartments, received preliminary approval only in 1988 and 1990 respectively. They are located on the present site of the Old Carolina Golf Course currently under construction, and have Development District zoning. It is likely that as many as 620 units may ultimately not be built, given the present development plans for the property.

b. Summary of Rezoning Requests, January 1994 - August 1996

Generally, rezonings in Southern Beaufort County have been requested to either change a residential to a commercial use, for higher density residential uses, or to allow commercial and golf course uses in a planned unit development, where the land was zoned for residential and agricultural uses. The majority of the acreage involved the conversion of lands zoned Development District (DD) and Residential Agricultural District (RAD), and the majority of zones sought were Planned Unit Development (PUD) and General Commercial District (GCD), the most flexible and permissive zoning categories in the zoning ordinance.

i. Residential Only to Commercial

The conversion of 219 acres of pine plantation to chiefly commercial uses in the Okatie Center development has been a significant addition to the growth in this planning district. In an area recognized as a new center of growth due to its proximity to Sun City Hilton Head, significant rezoning activity to commercial uses has occurred at the McGarvey's Corner area, located at the intersection of U.S. 278 and S.C. 170. Approximately 55 acres of land has been rezoned here from RAD to General Commercial zoning during the past two years.

Other conversions from rural residential land to commercial zoning have occurred along U.S. 278, within PUD master plans along the U.S. 278 corridor, in and near the Town of Bluffton, and in Pritchardville.

ii. Low Density Residential to Higher Density Residential

Only three rezoning requests were filed for higher density residential. Two requests were to allow additional manufactured homes to be placed on family property, and the other request was to build more multi-family apartment housing as part of the Old South development.

iii. Residential to Planned Unit Development

Most of the rezonings in Southern Beaufort County for residential property have been in the form of planned unit developments. Only one PUD was denied approval, that being a prior proposal for the tract now approved as the Willow Run PUD which included a manufactured home park, commercial retail area along the highway and some light industrial acreage.

A total of 857.25 acres has been converted from RAD zoning to PUD zoning since January 1994, which include Okatie Center and the Bull Hill tract now part of Sun City Hilton Head.

iv. Other

Some demand for light industrial zoning has begun to surface in this planning area, mostly around the Town of Bluffton area. One request for light industrial zoning was filed in 1996, in order to expand on an existing non-conforming use. Other inquiries to the Planning Department suggest that consideration should be given to the careful placement of limited light industrial activities in the future.

2.5.7 Daufuskie Island

Residential construction during the past 10 years has occurred chiefly within Planned Unit Developments, but some activity occurring on small and medium size parcels along marshfront near the PUDs. Little to no additional commercial activity has been permitted in the same time period.

a. Summary of Subdivision Activity, 1987 - 1996

i. Subdivisions within Planned Unit Developments (PUDs)

The three PUDs on the island were permitted before 1987, and have continued to build out at a slow and steady pace since their inception. All gated communities, the PUDs together encompass 3260.8 acres, or approximately 63 percent of the total land mass of Daufuskie Island, and are permitted for 3871 single and multi-family dwelling units.

ii. Subdivisions of more than 50 lots (non-PUDs)

There are no subdivisions approved that feature more than 50 lots on the island.

iii. Subdivisions of 20 - 49 lots

There are four subdivisions permitted since 1987 of medium size outside the planned unit developments. These subdivisions are chiefly located on the western side of the island, along the water and marsh front, and are for more exclusive home development. A combined total of 118 lots on 84.5 acres, they are roughly an average density of .72 acres per lot.

iv. Subdivisions of less than 20 lots

Twenty-eight subdivision permits have been granted since 1987, for a total of 176 new single family residential lots on 154 aggregate acres created. Most of the subdivisions are two and three lot subdivisions, with eight subdivisions between eleven to sixteen units in size.

b. Summary of Rezoning Requests, January 1994 - August 1996

The only rezoning request filed since January 1994 on Daufuskie Island was for a PUD amendment to the existing Daufuskie Island Club (Bloody Point) PUD. The PUD amendment was chiefly for the rearrangement of single and multi-family areas and for the assignment of density to areas previously unlabelled.

Chapter 3

Existing Land Use

3.1 Introduction

3.1.1 Existing Land Use Summary

An analysis of the current quantity and concentration of land uses provides an understanding of Beaufort County's existing development pattern. In particular, the study of the amount of acreage devoted to each type of land use and to each zoning district shows how and at what rate the County is changing. This study aids in the planning for future development, as future development patterns are greatly influenced by the distribution and concentration of existing uses.

Several sources of data were utilized for this analysis, including three distinct sets of data from the County's computerized Geographic Information System (GIS). General land use and environmental characteristics were primarily derived from LANDSAT satellite imagery, which provides a "snapshot" assessment of land cover in 1988, the most recent source of photography available for the County. From the Tax Assessor's records and building permit records, it is possible to extract a detailed accounting of land uses on all assessed parcels within the County. This chapter provides an analysis of this information for the most current look at property use. Finally, growth distribution may be tracked by planning district beginning in 1970 using permit information currently within the County GIS, and from January 1987 to the present using a combination of development and building permit sources and tax assessment records. Added to this assessment is a detailed list of approved and pending developments which complete the picture of recent growth.

This Chapter is organized into three sections which describe (1) the planning area boundaries, (2) a summary of existing property use based on tax assessment data, and (3) a description and summary of the zoning districts and current uses within those districts. The second section describes each planning district within the County separately, in order to focus upon the existing land use in those distinct areas. The description of existing land use is not a policy statement in support of any uses which may be non-conforming or illegal; it represents only an inventory of actual land uses.

3.2 Description of Planning Area Boundaries

Six planning areas have been established for Beaufort County in order to facilitate planning activities for each distinct area of the County. Any and all references within the Beaufort County Comprehensive Plan to these six planning areas utilize the same boundaries as described below. The outside boundaries of these combined areas are the official boundaries of Beaufort County, which include waterways, marshlands and some portion of the Atlantic Ocean.

3.2.1 Sheldon Township

The Sheldon Township Planning Area, also referred to as Northern Beaufort County, includes all lands and waters in Beaufort County north of the Whale Branch River, bounded by the Combahee River and the adjacent counties of Hampton and Jasper.

3.2.2 Port Royal Island

The Port Royal Island Planning Area encompasses Port Royal Island and adjacent smaller islands and surrounding waters, bounded by the Whale Branch River to the north, the Beaufort River to the east and south, and the Broad River to the west. The City of Beaufort and the Town of Port Royal, along with the military bases, are found on Port Royal Island.

3.2.3 Lady's Island

The Lady's Island Planning Area includes Lady's Island and all smaller islands and surrounding waters between the Beaufort River and Chowan Creek, and the Coosaw River to the north.

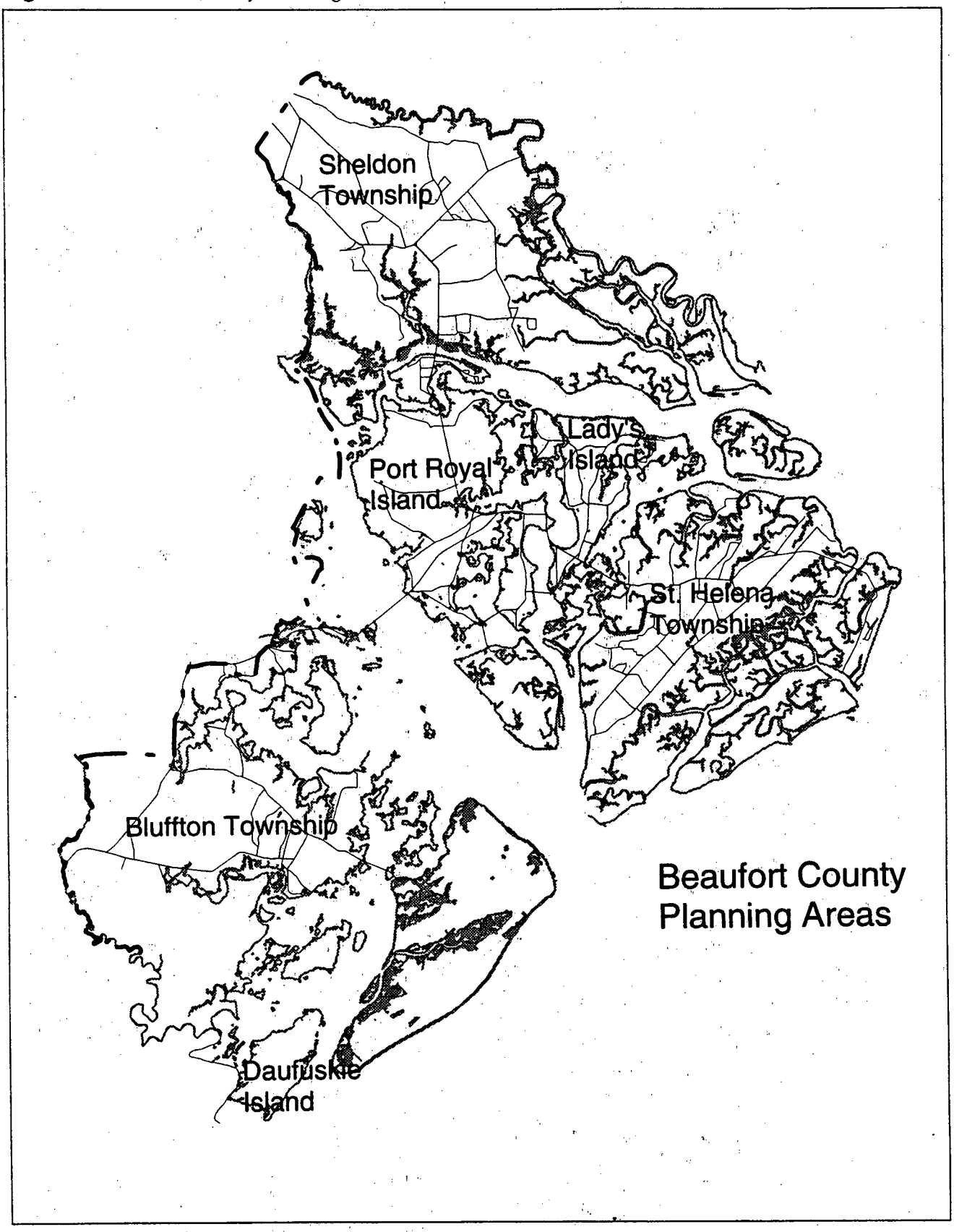
3.2.4 St. Helena Township

The St. Helena Township Planning Area includes St. Helena Island, Dataw Island, Harbor Island, Fripp Island, and all smaller islands and surrounding waters east of Chowan Creek to the Atlantic Ocean.

3.2.5 Bluffton Township

Bluffton Township, or Southern Beaufort County, encompasses all lands and waters south of the Broad River, except for the

Figure 9: Beaufort County Planning Areas.



Town of Hilton Head Island, but including the Town of Bluffton.

3.2.6 Daufuskie Island

The Daufuskie Island Planning Area incorporates Daufuskie Island alone.

3.3 Existing Property Use

An analysis of the current use of land parcels provides a detailed picture of growth and development within Beaufort County. Information used for this analysis was derived from several sources: earlier planning area plans from 1985 and 1990, 1988 aerial photography, windshield surveys conducted by planning department staff, information from citizens and landowners, tax assessment maps and records, and data from other governmental agencies.

The existing land use totals for each of the planning areas were calculated using the most current parcel layer in the County's Geographic Information System (GIS). The parcel layer illustrates the dimensions of all properties currently assessed by the County Tax Assessor. For the purpose of analysis, the total acres of land in use in each of the planning areas were also compared with the total acres of land zoned. The acreage totals for zoning were taken from the GIS and were based on the initial zoning of parcels and updated with subsequent rezoning approvals to the present. It should be noted that in many areas of the County the Assessor's Office is still working from original King's Grant property descriptions. This creates slight inaccuracies in area calculations.

Existing parcel use for the County is organized into fourteen categories, which are listed as follows:

- Single Family Residential
- Multi-Family Residential
- Retail Commercial
- Lodging Commercial
- Professional Commercial
- Heavy Industrial
- Light Industrial
- Transportation, Communication and Utilities
- Schools
- Public /Institutional
- Parks, Open Space and Recreation
- Agriculture
- Forested /Natural
- Multi-Use Parcels

These categories represent an aggregation of more detailed categories used by the County Tax Assessor. In the tax assessment system, all parcels are assigned computer codes based on use, which can then be used by the GIS computer to visually display these uses on maps. The single family category con-

tains detached dwellings, as well as condominiums and manufactured homes on individual lots; the multi-family category contains apartments, manufactured home parks and migrant labor lodgings. Retail commercial includes those categories known as "trade" in the tax assessment data base and also amusement uses. Professional commercial uses include all categories of services, except governmental and educational, which fall under Public/Institutional and Schools respectively.

Heavy Industrial contains the manufacture of wood products, chemicals, metals and mining activities. Light Industrial includes the manufacture of food products, fabrics, furniture, paper products, printing, rubber and plastics, stone, glass and clay products, scientific products and similar products. The Transportation/Communication/Utilities category contains roads and rights-of-way, railways, utility easements, parking areas, airports, and marine craft transportation. However, not all roads and rights-of-way are included within these calculations.

The Parks, Open Space and Recreation category features cultural activities, golf courses and clubs, all sports oriented facilities, open space, and passive parks. The Public/Institutional category contains governmental services, areas for public assembly, resorts and campgrounds, churches and cemeteries, lodges, and other miscellaneous cultural and entertainment facilities not classified under the commercial category.

The agriculture and forestry categories contain the activities for agriculture and forestry and other undeveloped land with no clearly defined use. Multi-use parcels typically contain a mixture of agriculture and residential, forestry and agriculture, or some other combination of two or more land uses which necessitate the assignment of more than one tax assessment code per parcel. For the purpose of the existing land use analysis, these multi-use parcels have been tallied into categories which register the chief use of the property, with the recognition that other uses may be present.

For purposes of discussion and analysis for each planning area, the above fourteen categories will be further aggregated into the following six general categories:

1) *Residential Use* (Single Family Residential and Multi-Family Residential)

2) *Commercial Use* (Retail, Lodging, and Professional Commercial)

3) *Industrial Use* (Heavy and Light Industrial)

4) *Transportation, Communication, and Utilities Use* (Miscellaneous Infrastructure)

5) *Institutional and Public Use* (Schools, Public/Institutional, Parks, Open Space and Recreation)

6) *Agricultural and Forestry Use* (Agriculture and Forested /Natural)

Multi-use parcels will be discussed in the context of the above categories, as they typically contain one dominant use contained therein.

3.3.1 Analysis of Planning Areas

A listing of acreage for the County and each planning area is contained in Table 11. Beaufort County encompasses 587 square miles or 375,680 acres, of which 205,795 are unincorporated and included in the County's zoning ordinance. The difference lies primarily in lands used as highways and marshlands. In the unincorporated areas of the County approximately 93 percent of the land is zoned residential, 2.5 percent commercial, 1.2 per-

cent industrial, and 3.2 percent conservation preservation.

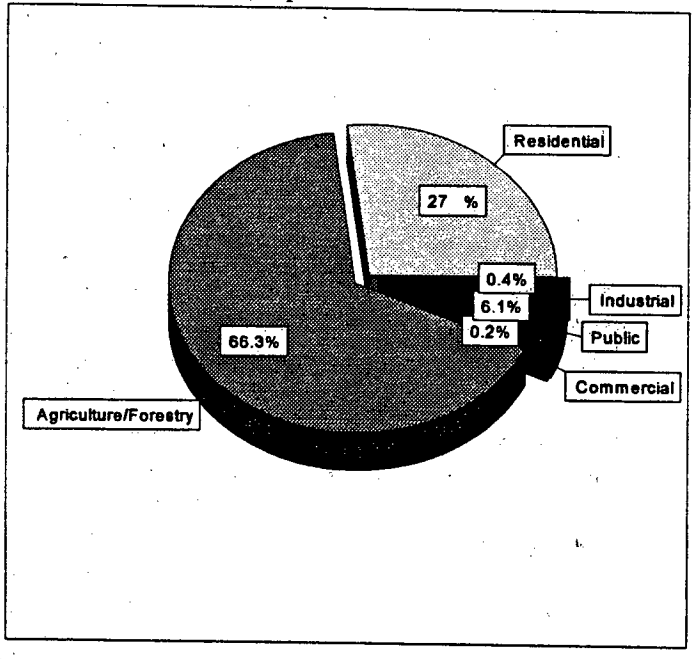
In the following discussion of land use and zoning in each planning area, maps of each area are included which indicate land use in that area. The land use is shown in an aggregated form of the categories described above.

a. Sheldon Township

Lands north of the Whale Branch River in the County are chiefly used for agriculture, forestry and residences at an extremely low density; nearly all of the area can be said to be a rural, scattered settlement pattern with a few suburban areas and crossroad concentrations, and no genuinely urban areas. There is no public water and sewer service available in this area; however, the existing major roads are more than adequate to accommodate anticipated growth.

Approximately two thirds of the acreage is assessed as agriculture and forestry, with the remainder of the acreage occupied by the five

Figure 10: Total assessed acreage for Sheldon Township.



other uses. Industrial and commercial uses are extremely limited in this planning area, and since there are only 2 acres listed within the Transportation/Communication/Utilities category, it has been deleted from Figure 10.

i. Residential Use

Residential use concentrations are found in the Dale, Lobeco, Big Estate and Sheldon areas, and smaller concentrations of lots around Gardens Corner/Stroban Road, the Paige Point area, and on the outskirts of the Town of Yemassee. These settlements are surrounded by vast tracts of private plantation land used chiefly for agriculture, forestry and hunting. These settlements formed primarily from the original plantations, when freed slaves acquired land during the Reconstruction Era, and today reflect a surprisingly historical pattern. A good portion of the land in these settlements is heirs property with no clear title.

The discrepancy between assessed and zoned acres is primarily due to the presence of King's grant property, which counts marshland and water area as part of certain properties. Twenty-seven percent of zoned acres are assessed as single family use, of which 88.2 percent are assessed as vacant. Most of these acres are zoned RAD with the remainder in the NPD-2 and PUD categories. As with other rural areas in the County, the majority (66.5 percent) of residentially zoned acres are currently devoted to agriculture and forestry uses. Twenty four percent of the acres within commercial districts are in residential use. Nearly all of the acreage (99.6 percent) assessed as single family use within the Conservation Preservation District is vacant.

In April, 1996, there were 1,667 vacant residential lots in this planning area, more than enough assessed residential land to accommodate many years of future growth.

There are no apartment buildings or condominiums within this township. There are no acres assessed as multi-family use within any zoning district, even though some "casual" multi-family uses exist in the form of non-conforming manufactured home parks and extended family house groupings.

ii. Commercial Use

Commercial land uses are dispersed and infrequent, chiefly occurring along U.S. 21 in small pockets or at historic crossroads areas. The largest concentration is in and around the Town of Yemassee. There are concentrations of neighborhood commercial uses along U.S. 21 between Keans Neck Road and Fertile Road (Dale/Lobeco area), at Gardens Corner, near the intersection of U.S. 17 and Big Estate Road/Jacob White Road, and in Sheldon along U.S. 17 near Sheldon Drive and Agnes Major Road. There are also scattered businesses along U.S. 21 from the Whale Branch River to Gardens Corner, chiefly consisting of small general or convenience stores, bait shops, a funeral home, and miscellaneous "cottage retail" type uses.

Only 6 percent of the land area is zoned as commercial. Of the commercially zoned area, one half of one percent is listed in active commercial use, one third is listed as vacant, and the remainder is assessed as agriculture, forestry and other miscellaneous uses.

iii. Industrial Use

There are two areas in this township where industrial uses occur, in Lobeco and on the outskirts of the Town of Yemassee, with over half listed as active industrial use. A good portion of this acreage is Lobeco Products in Lobeco, with the buildings occupying very little of the actual acreage. None of the acreage is assessed as light industrial.

iv. Transportation, Communication and Utilities Use

There is no public water and sewer service available to this area; all development occurs on private wells and septic systems. There is a major railway easement extending from the Town of Yemassee south through the Sheldon and Paige Point areas which continues through Port Royal Island and eventually ends in the Town of Port Royal at the docking facilities. There is another older railway remnant going east and west close to the Whale Branch River, through the Paige Point community and Lobeco and Dale; a major portion of this old line is occupied by Wimbee Landing Road in the Dale community.

U.S. 21 and U.S. 17 are major thoroughfares which bisect this Township. Other secondary roads are two lanes, and there are many private and dirt roads in the area.

v. Institutional and Public Use

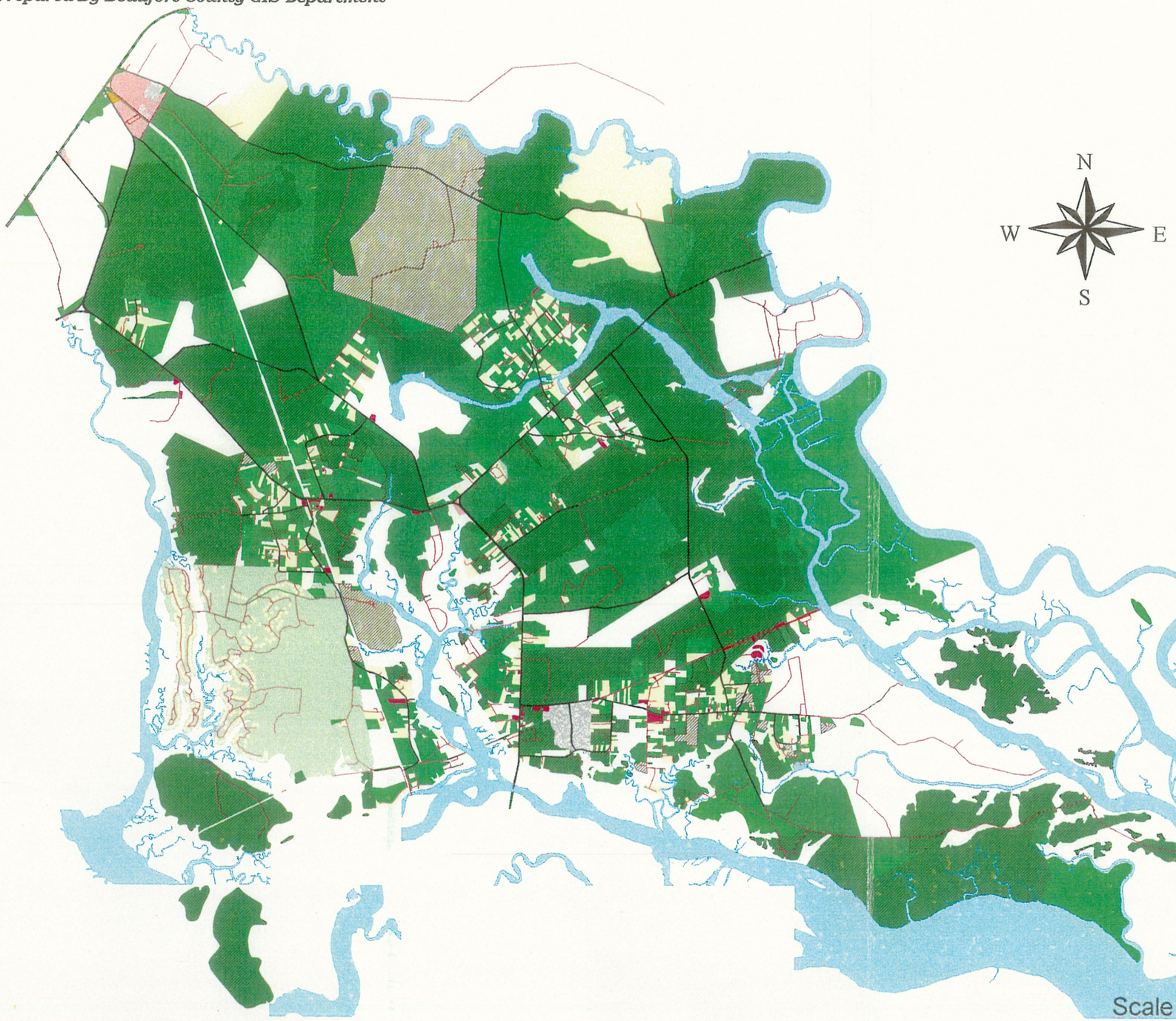
There is only one school in the Township, Davis Elementary in Dale. Other institutional facilities include the Beaufort Marine Institute in Dale, the Headstart facility in Lobeco, and community centers in Sheldon and Dale.

Parks and open space are typically unstructured and found around the water's edge or near community centers or churches, where traditional rural uses and activities occur. Beaufort County operates very little parkland in this township; the Parks and Recreation element of the Plan outlines this situation in detail. Bray's Island is a notable exception of use of open space, with most of this development devoted to common and passive recreational uses, such as hunting, nature trails, equestrian trails, golf and a 3,718-acre nature preserve.

Prepared By Beaufort County GIS Department

Sheldon Township
Property Use

MAP 1



Legend

- Single Family Residential
- Multi-Family Residential
- Commercial
- Industrial
- Institutional
- Not Classified
- Parks, Open Space, Recreation
- Natural
- Agricultural
- Multi-Use Parcels
- Class 1 Roads
- Class 2 and 3 Roads

vi. Agricultural and Forestry Use

As mentioned above, approximately two-thirds of this area this area is assessed for agriculture and forestry purposes. There are large-scale production farms found here, as well as numerous small family farms, chiefly producing truck crops, corn, tomatoes and other vegetables. Vast tracts are held in forestry use, which are harvested on occasion or used for hunting grounds. Most of the acreage is held by private persons, as opposed to for-profit corporations.

Nearly one third of the township is within the Ashepoo-Combahee-Edisto (ACE) River Basin, an area containing 350,000 acres under a state and federal program for ecosystem preservation within Beaufort, Colleton and Charleston Counties. For this reason, large tracts of land along the Combahee River are being converted to permanent conservation lands by their owners, for perpetual forestry or plantation use. Other such plantations not under conservation easement have increasing potential for conversion to residential subdivisions over the long-term, based on recent activity and development inquiries.

b. Port Royal Island

Port Royal Island has historically been the most urban of areas within Beaufort County, as it contains the two incorporated towns and the military bases and housing areas. A large portion of the island, however, remains in rural or low density suburban uses, despite the greater availability of infrastructure in many areas. As the market focal point of the County, the City of Beaufort has continued to grow and expand its borders over the past 50 years, and the Town of Port Royal is currently experiencing revitalization efforts as well as a gradual expansion of its borders. The westernmost borders of the City of Beaufort extend along the Highway 170 corridor towards the Broad River, and are hap-hazard to some degree, leaving several single or small group of parcels of County land surrounded by land under the City's jurisdiction.

Just over 40 percent of this planning area is zoned under the County's Zoning Ordinance. The remaining acreage is found within the two military bases (11,473 acres) which are unzoned, the municipalities (12,138 acres), which have their own separate zoning ordinances, and approximately 16,720 acres of water and marsh area and small unzoned islands within the marshlands.

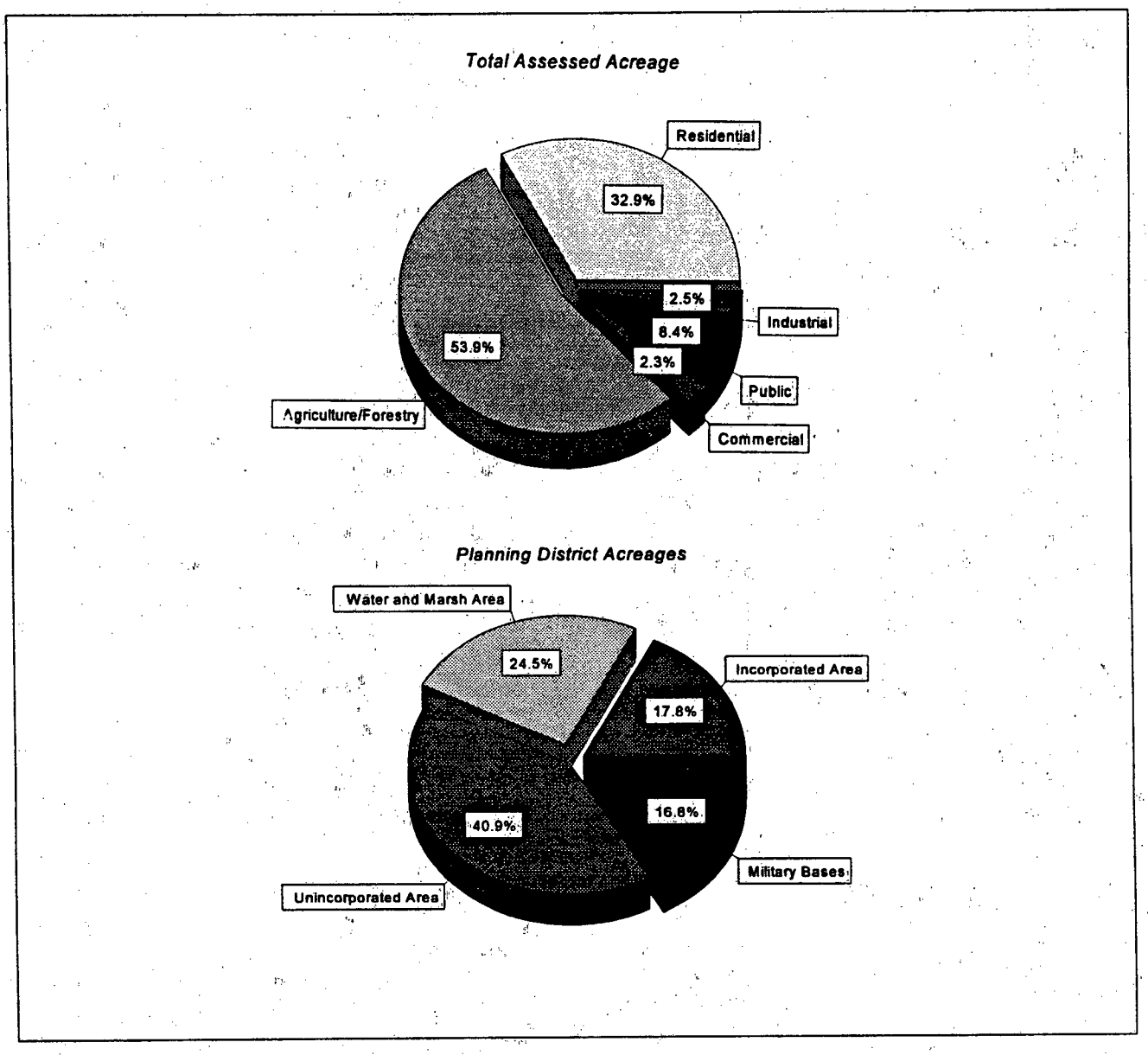
The difference between zoned and assessed acreages lies chiefly in the marshland zoned Conservation Preservation, which is not assessed. Figure 11 shows the percentages of land assessed for use within each of the six aggregated categories of land use. The municipalities and military establishments are not included within this summary.

i. Residential Land Use

Residential land uses occur in all forms, from large lot single family homes to multi-family manufactured home parks and small lot subdivisions. The incorporated areas contain the greater concentration of higher densities and multi-family uses; however, there are pockets of multi-family developments throughout the portion of Port Royal Island bounded by Battery Creek, S.C. 116, U.S. 21 and the Broad River (the southwestern portion of the island). Most of the multi-family acres are manufactured home parks.

Of the acres zoned as residential, 28 percent are currently assessed as single family residential use, with 64 percent listed as vacant; less than two percent of these acres are multi-family development (60 percent vacant). The total actual residential use assessed within the residential zoning districts is 29.8 percent.

Figure 11: Total assessed and Planning District acreage for Port Royal Island.



The largest percentage of land use within the residential zoning districts is actually agriculture and forestry (46.8 percent). The remaining uses with residential zoning districts are listed as commercial (0.3 percent), industrial (0.02 percent), public facilities and open space (7.3 percent), and the military bases (approximately 15 percent).

Over half of the land zoned as single family residential is NPD and almost one-fourth RAD. More land is used for residential purposes within commercial zoning districts (25.9 percent) than is used for commercial purposes (15 percent). The majority of RAD land (58.9 percent) is assessed as agriculture or forestry use. A very small percentage of non-conforming multi-family use exists within these same districts, with 12 acres out of 98 acres assessed as multi-family actually in use.

Of the total acres in multi-family use, 73.6 percent is found within the GRD zones. In

these zones, 46.1 percent are assessed as single family use, but over 86 percent of the zoned acres are vacant. Over 50 percent of the acres assessed as multi-family are used for that purpose and they are scattered throughout the planning area.

Concentrations of single family developments outside the incorporated areas are chiefly found along the waterfront and marshfront areas. Outside the incorporated areas, one of the major housing concentrations is the Laurel Bay housing facility, which is categorized as Public Institutional in the inventory because it is part of the military base. There is only one parcel zoned PUD, Habersham Plantation on the Broad River south of the Laurel Bay housing development. This PUD is approved for 1,000 housing units, with a density of approximately four units per acre; this density, once built out, represents a substantial change for that particular area of Port Royal Island, and will likely influence more residential growth in that area over time.

ii. Commercial Land Use

Commercial land uses are primarily concentrated in the incorporated areas, and along major corridors within the planning area, most notably, U.S. 21, S.C. 170, S.C. 802 and S.C. 280. Fifteen percent of lands, or 221 acres, zoned for commercial use are assessed as commercial use, with 85 percent of those acres currently in active use. From these estimates, it is clear that a substantial number of commercial zoned acres are currently underutilized.

Commercial land uses outside the incorporated areas are chiefly suburban in character, located along corridors and accessible chiefly by automobile. There are three to four very small neighborhood areas that could be considered mixed use with accessible neighborhood commercial within easy walking distance, but these areas are limited in the services they provide and cannot be considered to be significant.

iii. Industrial Use

The County's primary industrial park is located on Port Royal Island, accessible off U.S. 21 and across this highway from the Marine Corps Air Station. Incorporating approximately 700 acres, nearly 200 acres of this area are readily developable. Other industrial areas include the port facilities within the Town of Port Royal, and in the Mossy Oaks area of Beaufort along the railroad right-of-way. The only other parcel of land zoned for industrial use is found in the northern part of Port Royal Island, along U.S. 21 in Gray's Hill area slightly north of the Air Station, and is currently registered as a Superfund site undergoing remediation.

iv. Transportation, Communication and Utilities Use

Port Royal Island contains a full range of infrastructure and transportation facilities, from airports to railways, federal highways and the adjacent Intracoastal Waterway. The Marine Corps Air Station features one of the longest runways in North America, and is home to several squadrons of aircraft. The major railway running through the County transverses Port Royal Island, and extends parallel to U.S. 21 until it crosses Battery Creek and continues to its terminus at the Town of Port Royal port facilities. The port in the Town of Port Royal encompasses approximately 20-30 acres of land, and includes a variety of facilities. Transportation facilities are more fully described in the Transportation element of the Plan.

v. Institutional and Public Use

Public uses, schools and parks and open spaces occupy approximately 7.2 percent of the zoned acres in unincorporated Port Royal

Island, or 7.2 percent of the zoned acres, not including the military facilities. The Marine Corps Air Station and the Parris Island Marine Corps Recruit Depot, long-standing institutions in Beaufort County, comprise 16.8 percent of the land within the Port Royal Island planning area. These institutions are federally owned and operated and are exempt from County zoning. The County has enjoyed good relations with these facilities for several years, and many cooperative efforts have kept the facilities and the surrounding areas mutually supportive.

Port Royal Island contains the largest number of schools for all grade levels in the County. The recent bond referendum will add or expand additional facilities to accommodate at least three to five years of future growth for this area. Parks and other recreational facilities are described in the Parks and Recreational facilities element of the Plan, but of particular note in this planning area is the Burton Wells park, which has great potential for future expansion of uses. Other institutional and public uses in this planning district include Beaufort Memorial Hospital and accompanying medical offices and facilities, the University of South Carolina satellite campus in the City of Beaufort, the Naval Hospital, the National Veterans' Cemetery, the Laurel Bay military housing facility, and the Beaufort County and municipal government facilities.

vi. Agricultural and Forestry Use

There are a significant number of acres (46.1 percent) assessed as agricultural or forestry use, although active agricultural uses occupy comparatively few acres in this planning area. Historically, the McLeod farmlands in the Seabrook area of Port Royal Island were among the most significant in agricultural production in the area; the farms have been inactive in recent years, except for limited pursuits. Clarendon Plantation, in the northwestern portion of the island, is the largest single parcel apart from the military bases. This private plantation is currently utilized as hunting grounds, forestry and some limited agricultural pursuits. There are some isolated pockets of truck farming activities in the Burton and Gray's Hill areas, and west of the Marine Corps Air Station.

Many parcels are assessed as forestry on the island, but the harvesting activities are limited, with few acres actively managed by commercial operations.

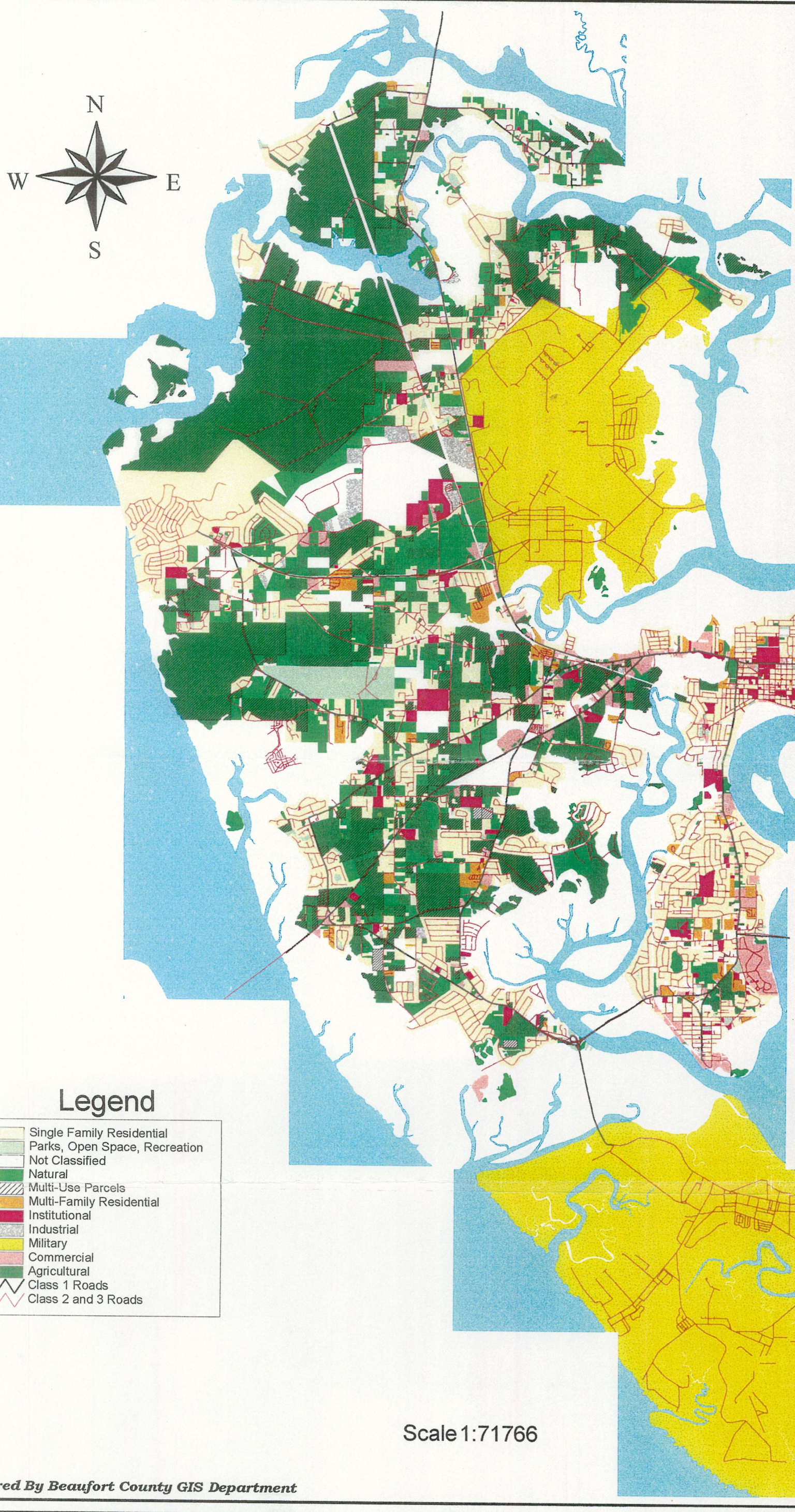
c. Lady's Island

Lady's Island and the smaller islands within this planning area have experienced significant growth during the past 10 years. Once considered a low-density suburban residential "bedroom" community for the City of Beaufort with the northern and southernmost areas still rural in character, this area is gradually becoming more urbanized. With the first sewer lines now installed in its major corridor, Lady's Island is feeling the full effects of "growing pains" as residential developments multiply and commercial activities continue to grow.

The discrepancy between assessed and zoned acres is due to inconsistencies between the GIS and tax assessment systems on boundaries drawn around marshland and waterways. Most of the assessed acres are in residential or agriculture/forestry categories.

i. Residential Land Use

Residential uses in the Lady's Island planning area encompass all types of single family dwellings of various housing prices and some multi-family uses in the central portion of Lady's Island. More exclusive housing is located along water frontage, ranging from planned, gated and golf course communities with single family dwellings and condominium units to individual lots or smaller subdi-


N
W
E
S
Legend
Single Family Residential
Parks, Open Space, Recreation
Not Classified
Natural
Multi-Use Parcels
Multi-Family Residential
Institutional
Industrial
Military
Commercial
Agricultural
Class 1 Roads
Class 2 and 3 Roads
Port Royal Island
Property Use
MAP 2
Scale 1:71766
Prepared By Beaufort County GIS Department

visions of lots. Several cul-de-sac subdivisions of moderately priced housing have been started during the last five to ten years in the central interior of the island.

Approximately 40 percent of land zoned for residential use is zoned DD, predominantly in northern Lady's Island, north of Brickyard Point Road and Holly Hall Road. Given that this area is chiefly rural, with some older, low-density planned developments such as Pleasant Point and Royal Pines, the allotment of four units per acre is at odds with the existing character of this area. In the northern section, there is still significant evidence of original land grants from the Reconstruction Era of 10 acre square parcels, especially on Coosaw Island. The remainder is characterized by NPD zoning at low densities and RDD on Coosaw Island and its neighboring islands.

The central portion of the island, roughly bounded by Brickyard Point Road and Holly Hall Road to the north and U.S. 21 to the south, has been an area of great transition over the last decade. Chiefly residential, this area exhibits a very diverse pattern, ranging from typical suburban subdivisions and more dense traditional neighborhood development to a scattering of homes more reflective of a transitional rural community. Multi-family housing is located nearer to the crossroads area, where the zoning allows such uses.

The southern portion of the planning area, from U.S. 21 on the north to the southernmost islands of Cane, Cat, Gibbs and Distant Islands are also experiencing recent developmental changes. These islands are all zoned as PUD, but are being developed and subdivided at a very gradual pace. The area bounded by U.S. 21 to the north, S.C. 802 to the east and Meridian Road to the west is a mixture of single family, multi-family and some neighborhood commercial uses in a relatively unplanned pattern.

The area between Meridian Road and the Beaufort River is all low-density residential development, the only exceptions being the Beaufort Yacht and Sailing Club and a few parcels of general commercial zoning along U.S. 21 at the northern tip. The area bounded by U.S. 21 to the north, S.C. 802 to the west and Lost Island Road and the airport to the east contains a mixture of residential uses, with various sizes of residential lots in a suburban pattern behind the businesses along the highway, and larger residential holdings of various sizes closer to the water and marsh edge. Finally, the land area between the Lady's Island Airport and Chowan Creek north of and not including Distant Island is an area known as the Eustis Community. Much like the communities on St. Helena Island, this area functions as a distinct neighborhood of family holdings in a low-density residential setting, with very few commercial businesses.

Of the acres zoned for residential use, 36 percent are assessed as single family use and 64 percent of these acres are vacant. Two acres are assessed as multi-family. These multi-family acres do not include those multi-family uses found within PUD, recent activity at Marsh Harbor, or the 4 acres assessed as multi-family under commercial zoning categories.

Lands zoned Neighborhood Preservation District NPD comprise the second largest category of residential zones, at 35 percent, with 54.4 percent assessed as single family, none assessed as multi-family, and small portions of non-conforming commercial, agriculture, forestry, and other uses. Single family uses also comprise 28.9 percent of uses within PUD zoning. There are no acres zoned RAD on Lady's Island, and 5 percent of RDD is in active single family residential use.

ii. Commercial Land Use

Commercial land uses are concentrated at the intersection of the two major thoroughfares, U.S. 21 and S.C. 802, and extend along U.S. 21 from the Woods Memorial Bridge to Chowan Creek and along the southern portion of S.C. 802 from the McTeer Bridge to not more than 1/4 mile above the U.S. 21 intersection. There are also isolated pockets of neighborhood commercial activities in the northern portion of the Island at crossroad areas along S.C. 802 (Sam's Point Road).

The Eustis Community in the eastern portion of the island has several acres along the highway zoned as General Commercial, despite the fact that there are only a few businesses present. A recent petition by land owners to downzone the land to RAD zoning indicates a strong desire by the community to keep the area as its present residential use.

Of the acres currently zoned commercial, 41.5 percent are assessed as commercial use, 15.4 percent are assessed as residential, 15.9 percent as transportation use, and the remainder are assessed as various other land uses. Ten percent of those acres assessed as commercial are currently in active commercial use, most of which are located along U.S. 21.

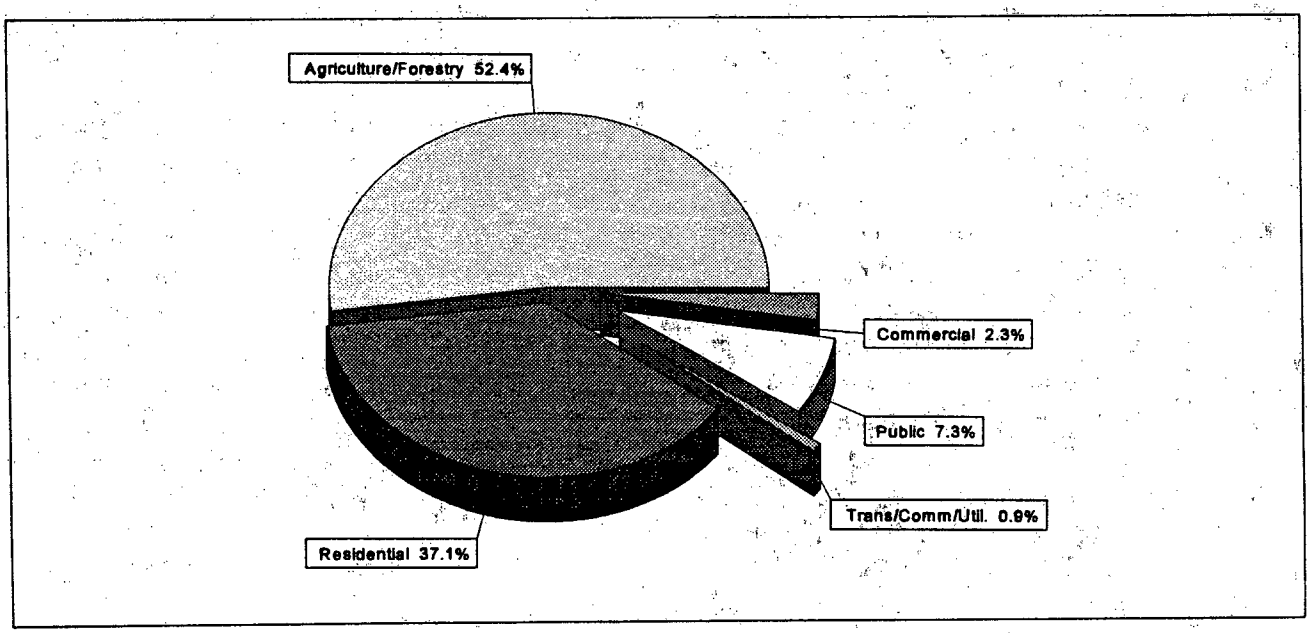
iii. Industrial Use

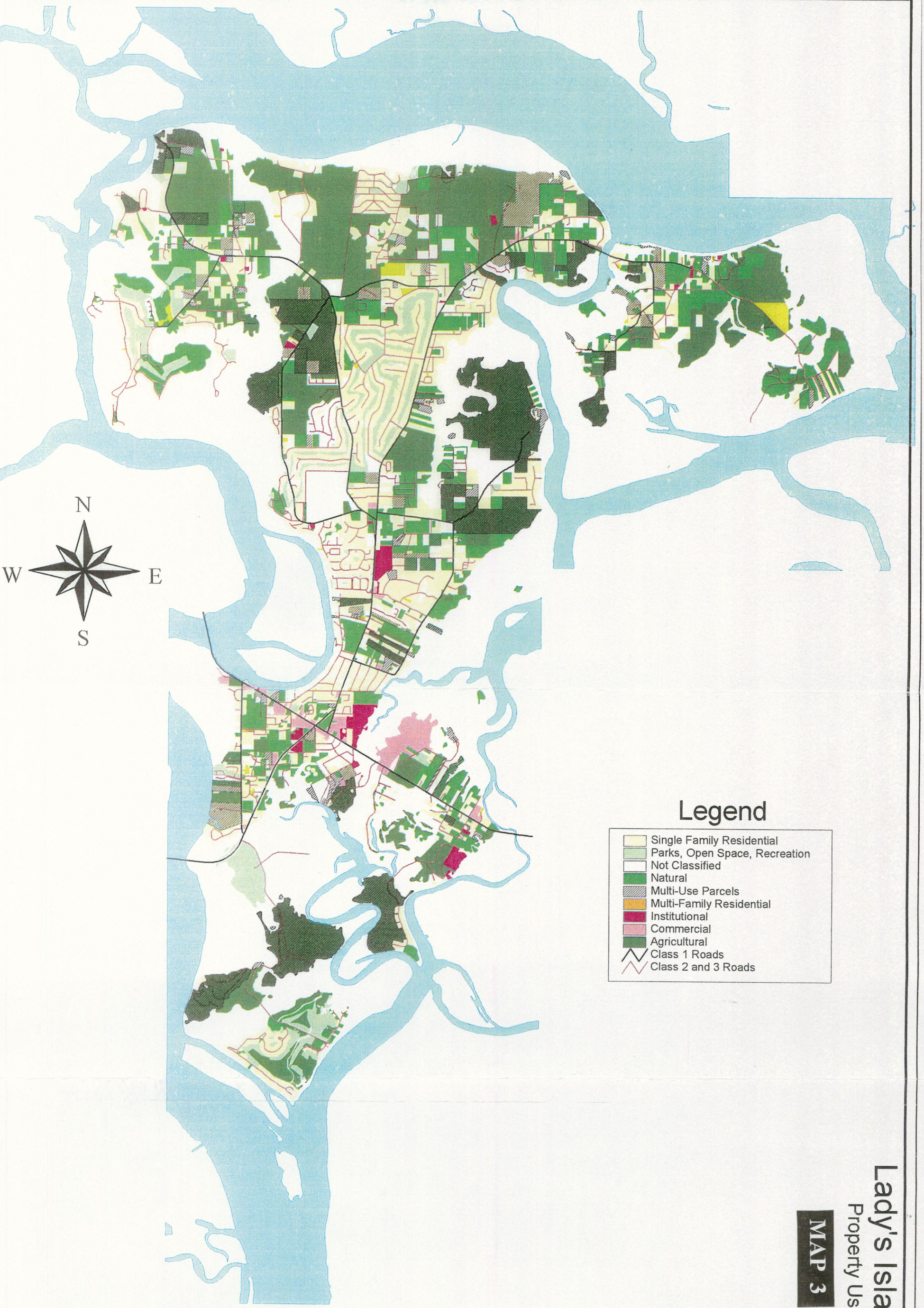
There are no lands zoned for heavy or light industrial use on Lady's Island. The limited uses existing on the island, notably the landfill area in the northwestern portion and the Lady's Island airport facility, are zoned DD or GC, and are considered to be non-conforming uses under those zones. There are no manufacturing operations or plants, or even cottage industries that could be considered light industrial in the planning area.

iv. Transportation, Communication and Utilities Use

The major thoroughfares on the island, S.C. 802 and U.S. 21, are experiencing increased constraints on capacity with all the recent residential activity that has occurred. There are only three bridges into the planning area, which constrains accessibility even further. The Lady's Island Airport is operated by Beaufort County and with the Hilton Head

Figure 12: Total assessed acreage for Lady's Island.





Lady's Island

Property Use

MAP 3

Scale 1:58639

Prepared By Beaufort County GIS Department

Airport provides commercial service for the County. Various public and private boat landings provide water accessibility to the planning area. Bike and pedestrian trails are extremely limited and disconnected, at best, across the various islands within this area. The Transportation element of the Plan describes these uses in detail.

Water service is currently available across the planning area, and public sewer service has recently been extended from the St. Helena wastewater plant west along U.S. 21 and north along S.C. 802 to the Brickyard Point area to service the new elementary school and the Marsh Harbor development.

v. Institutional and Public Use

The only major institutions on Lady's Island are the middle school and elementary school along the U.S. 21 corridor, and the private Beaufort Academy on S.C. 802 (Sam's Point Road). Some boat landings are available for public use, and the airport is also a County-maintained facility.

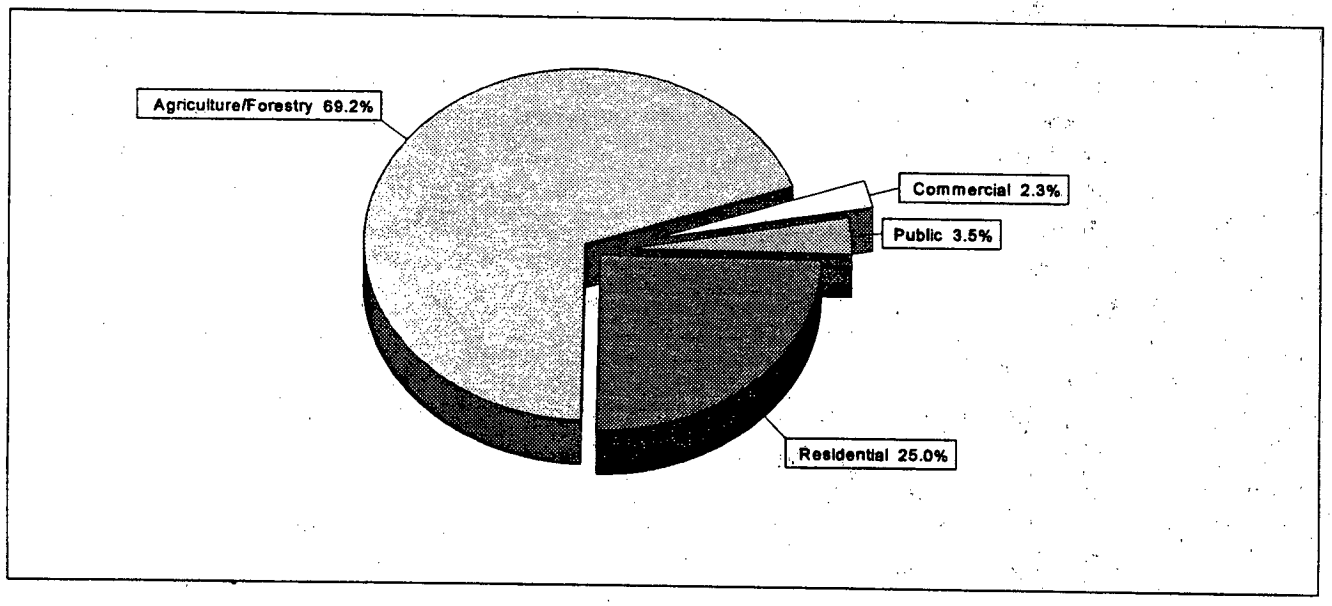
vi. Agricultural and Forestry Use

Agriculture and forestry uses are extremely limited on Lady's Island. Despite the 4,658 acres of land assessed as agriculture, and the 2,347 acres assessed as forestry, there are no active large farms apart from the daffodil farm on Upper Cane Island, and some very limited vegetable farming and nursery operations in the northern portion of the island.

d. St. Helena Township

There exists a wide range of housing types and communities in St. Helena Township. The culturally significant communities on rural St. Helena Island proper have evolved over the past two centuries from the plantation era, and continue to be socially diverse and organic and gradual in their growth. In contrast, the barrier islands further east feature planned gated communities with limited diversity and aggressive build-out rates. Located on St. Helena Island are also large produce farms and the beginnings of more modern subdivisions at the water's edge,

Figure 13: Total assessed acreage for St. Helena Island.



which have arisen mostly during the last 10 to 20 years.

The largest percentage of assessed acres is found in agriculture and forestry uses. This includes properties that may contain residences but are assessed under an agricultural exemption. There are only 2 acres assessed as industrial, and 9 acres as transportation/communication/utilities. For this reason, these categories were not included within the illustration.

i. Residential Land Use

St. Helena Island exhibits a rural development pattern shaped by decades of active farming and family settlements. Many acres are described as "heirs property," property without clear title which is owned and inhabited by indigenous families. Heirs property is found elsewhere in the County, especially in Northern Beaufort County and on Port Royal Island, but St. Helena Island has a significant portion of its land under this designation. The landscape is characterized by small rural settlements and family housing clusters, often containing a mixture of manufactured homes and frame single family homes, and larger properties of various sizes. Also, still evident on the map are a significant number of original 10 acre land grant parcels from the Reconstruction Era after the Civil War.

Of the acres zoned for residential use, 71.1 percent, are actually assessed as agriculture or forestry uses. Most of St. Helena Island is zoned RAD, with one large farm parcel zoned RDD in the center of the island and a comparatively small percentage of land zoned as NPD. Of the acres zoned RAD, 22.5 percent is assessed as single family use, and 71.4 percent agriculture/forestry. Of the residential assessed acres, only 35.2 percent are in active use. There are only 6 acres of multi-family use, and all are listed as vacant.

Dataw, Harbor and Fripp are significant PUDs in the Township. They are private, gated communities with single and multi-family residential, some very limited commercial uses and a variety of recreational amenities.

Caper's Island, located between Trenchard's Inlet and Pritchard's Island, incorporates 2,100 acres, only 120 acres of which are developable highground. It is subdivided into approximately 150 lots which are primarily used as fishing camp sites, due to the highly erosional nature of the island. Its beachfront shoreline remains in a natural condition, and it is highly unlikely that the island will ever be developed in any significant way. Very few fishing camps have been developed; most buildings are manufactured homes or wooden shacks. In addition to Caper's Island, the wide marsh that separates St. Helena Island from the barrier islands is sprinkled with a dozen or so small fishing camps or weekend retreat residences on very small marsh islands.

Two major islands in the barrier island chain are not presently used for permanent residential use, or any other definite land use, St. Phillips Island and Bay Point Island. St. Phillips contains two seasonal residential units and Bay Point Island contains one building as well. Both islands are composed of roughly 16 to 20 percent developable highlands and the rest wetlands. Although a proposal for residential development on Bay Point Island surfaced in the spring of 1997, any development on the island is considered to be extremely costly and remains unlikely in the foreseeable future. There are also significant archaeological and historical remnants on this island which should be considered in any development scenario.

ii. Commercial Land Use

Of the acreage under commercial zoning, 32.2 percent is assessed as residential, and 22.5 percent is assessed as agriculture or for-

N
W E
S

Scale 1:62498

Legend

- Single Family Residential
- Parks, Open Space, Recreation
- Not Classified
- Natural
- Multi-Use Parcels
- Multi-Family Residential
- Institutional
- Industrial
- Commercial
- Agricultural
- Class 1 Roads
- Class 2 and 3 Roads

St. Helena Island

Property Use

MAP 4

Prepared By Beaufort County GIS Department

estry. Of those 415 residential acres in commercial zones, 35.7 percent are shown as vacant on the tax assessment records. Most of these residential acres are within the Residential Commercial District, a zoning district unique to St. Helena Island. Within the RCD, 30.8 percent is assessed commercial, and 93.5 percent of these are listed as vacant. Twenty-seven acres of commercial retail use (0.1 percent) are non-conforming uses in the RAD zone.

The shrimping and crabbing industries are significant commercial enterprises on St. Helena Island, as they are in other areas of the County. These enterprises occupy a small portion of the land acreage devoted to commercial use, but contribute greatly to the economy of the island.

The Corner Community crossroads area is the main commercial center of St. Helena Island. The area is virtually free of franchise architecture and discount merchandise outlets; there are no superstores or chain retail stores, other than a few franchise gasoline stations. Limited commercial retail is also found in small pockets along U.S. 21 and Seaside Road and on or near the resort islands.

iii. Industrial Use

There are no active industrial uses on St. Helena Island or the barrier islands, nor any industrial zoning present in the Township.

iv. Transportation, Communication and Utilities Use

As described in the Community Facilities chapter, there is a wastewater treatment plant on St. Helena and private plants on the barrier islands which provide limited sewer service to a small portion of the Township. All the major and minor corridors are two lanes, with varying capacities as is described in the Transportation element of the Plan.

v. Institutional and Public Use

There are a few barrier islands that have been set aside for public use, as well as a number of sites on St. Helena Island that are owned by institutions for public use and access. Hunting Island, situated between Harbor Island and Fripp Island along U.S. 21, is owned by the State of South Carolina, most of which is occupied by the Hunting Island State Park. There are approximately four miles of white sand beach open to the public, and the park is the only public beach access in the northern part of Beaufort County apart from the public access within Harbor Island. Daufuskie Island and Hilton Head Island have the only other public access beaches in the County. There are numerous boardwalks to the beach, and approximately 200 camping sites, fourteen rental cabins, and 1,000 parking spaces throughout the state park site.

Pritchard's Island is owned in its entirety by the Research and Development Foundation of the University of South Carolina, and is used for education and research on coastal and marine biology and ecology. The island contains 2,950 acres, 750 acres of which are highland and 2,200 are wetlands. There are approximately 900 acres of maritime forest. Its two and one half mile shoreline is maintained as a wildlife preserve. There is a small research facility on the island, and no residential structures have been built.

County facilities include the St. Helena Elementary school on U.S. 21, and some limited park and recreation facilities and boat landings on St. Helena. Penn Center, located near the center of St. Helena Island, is a National Landmark historic district and a community focal point which features a museum of local history, several historic buildings, facilities which house community social programs and conference facilities.

vi. Agricultural and Forestry Use

St. Helena Island boasts a great percentage of the County's active agriculture businesses; however, no agricultural or forestry activity occurs on the barrier islands east of St. Helena Island. A variety of crops and produce are grown on St. Helena Island, chief among these being tomatoes. This area of South Carolina fills the national gap of tomato production between the Florida tomatoes and those produced further north on the east coast. Approximately 600 - 800 acres are utilized for tomatoes in recent years, and although this acreage count is down by one-third from past years, the acres are considered three times more productive due to technological advances. Approximately $12-$15 million annually are generated from the tomato harvest.

St. Helena Island was home to four or five packing sheds out of the twenty packing sheds which operated in the County in the earlier part of this century. Only two packing sheds remain active today, the Six L's packing shed in the Eustis Community of Lady's Island and the facilities which are part of the Seaside Farms operation on St. Helena. These packing sheds handle a variety of vegetables during the off-season. Beyond three large produce farms on St. Helena, there are a number of small, private operations which produce vegetables for market. Nearly half of the acreage devoted to agronomic crops produced in the County is located on St. Helena Island. Wheat, soybeans, beans, and corn are grown on approximately 500 acres on St. Helena Island of the 1,200 acres used County-wide.

Other agricultural pursuits in the Township include limited cattle and swine operations, a sod farm, and aquaculture in the form of clam farming. St. Helena Island is also surrounded by abundant waters which allow commercial fishing, shrimping, and crabbing industries to flourish. There are no major commercial forestry operations. The largest managed forest is owned by Penn Center, and many individual landowners manage their properties as forestry, as evidenced by the large percentage of land assessed as forestry.

e. Bluffton Township

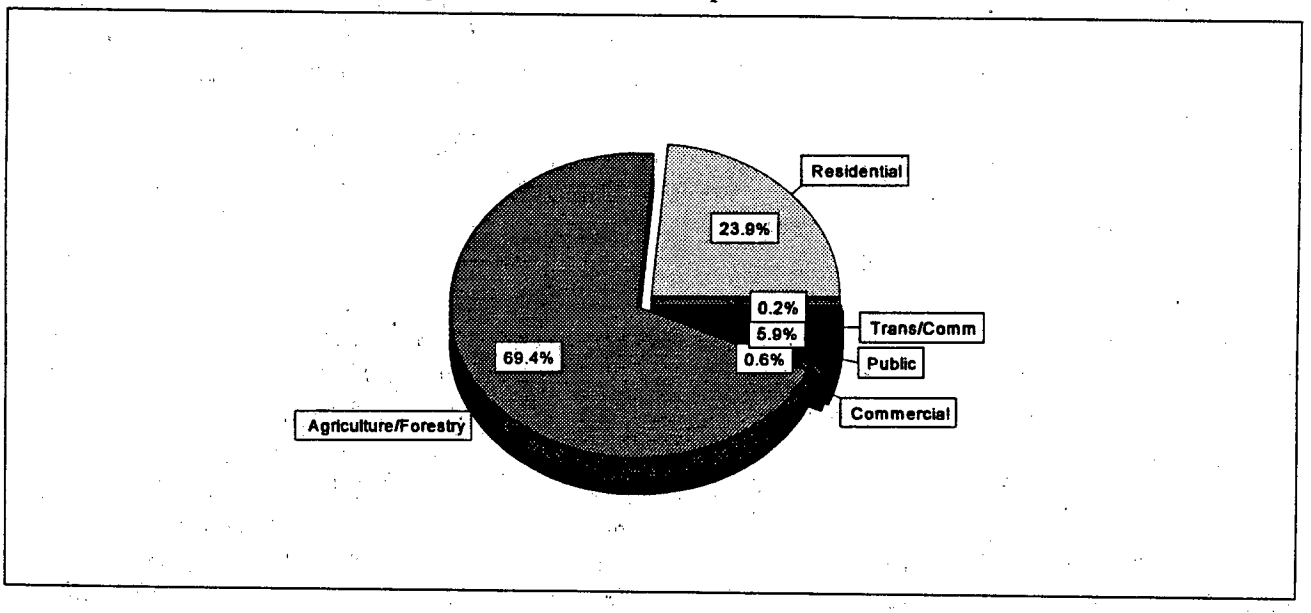
Since the last update of the Southern Beaufort Plan in 1985, this area has seen significant changes in growth and development in all categories of land use. New and continued development of large planned unit developments, most notably Del Webb's Sun City Hilton Head development of 8,600 homes, along with the growth of commercial land uses along the U.S. 278 Corridor and multi-family developments; the cumulative effect of which has begun to change the rural character of these areas, particularly along the Okatie and Colleton Rivers and the area around the Town of Bluffton. Pressure for rezoning to commercial and multi-family uses is mounting in these areas as well as in the SC 170/U.S. 278 intersection and Okatie areas.

Bluffton Township exhibits a similar percentage of agriculture and forestry to St. Helena and Sheldon Townships, at approximately 69 percent. However, as stated above, the Bluffton area is experiencing a much more rapid rate of urbanization than these other rural areas. This township already contains significantly more acres of commercial use than St. Helena and Sheldon.

i. Residential Land Use

Residential land use trends for Bluffton Township show an increasing trend towards large PUD development, similar to the development patterns on Hilton Head Island to a significant degree. An analysis by sub-area will illustrate the nature of residential development patterns with greater detail.

Figure 14: Total assessed acreage for Bluffton Township.



In the Chechessee/Chelsea area, which extends along S.C. 170 from the Broad River to the Okatie area, the residential land uses are primarily very low-density and in a scattered rural pattern, except for Spring and Callawassie Islands, which are planned developments. Spring Island has imitated a rural development pattern, while Callawassie is a more traditional golf course community with lots occupying most of the water and marsh frontage. The Camp St. Mary's and Bailey's areas are older and more established rural communities with larger lots along the Okatie River.

The modern and unofficial boundaries of the Okatie area extend approximately from the Career Education Center intersection of S.C. 170/U.S. 278, along S.C. 170/U.S. 278 south to the S.C. 170/U.S. 278 intersection and encompass all of the land between Pinckney Colony Road, U.S. 278 to the south, and S.C. 170/U.S. 278 to the west.

The New River area is said to include the Del Webb development and the Jones estate, both parcels bounded by the New River and the Jasper County line to the west, and S.C. 170 to the east. The Del Webb development is scheduled for buildout by the year 2012, with 8,600 homes. The Jones estate, comprising roughly 4,000 acres, is currently used for silvaculture, although the owners are considering other alternatives.

The Colleton River area, north of U.S. 278, includes most of the more established PUDs: Belfair Plantation, Rose Hill, Moss Creek, and Colleton River. Only two major undeveloped tracts remain in this area, the tract between Belfair Plantation and the wildlife preserve, and Footpoint Plantation north of Colleton River Plantation. The Greater Bluffton area, from Buck Island Road at the western edge to the Hilton Head bridge on the south side of U.S. 278, contains a mixture of densities, income levels, and types of development. This area has seen an increase in multi-family developments, and moderate, affordable single family developments.

The areas around Pritchardville known as Palmetto Bluff and the Buckwalter tract are chiefly Union Camp forest lands and some scattered rural residential properties. No multi-family properties exist here other than a few

manufactured home park sites near the Pritchardville village crossroads area.

Of the acres zoned for residential use, 25.5 percent are assessed as single family use with 4.4 percent in active use. Only 26 acres are currently assessed as multi-family, despite the recent activity in this category, and 15 of these acres are non-conforming within NPD zones. In the commercial zones, 122 acres are assessed as single family use Apart from acreage within PUD zones, the RAD contains more acreage of single family assessed land than does the DD, but three times as much land is in active use in DD versus RAD (737 acres vs. 243 acres respectively). There are more acres in active single family use in DD than in any other zoning category, with NPD-1 and PUD running second and third in rank.

As in the other more rural planning areas, most of the land zoned for residential use is actually assessed as agriculture or forestry, an overall percentage of 70.1 percent. Most of this land is contained with the RAD, RDD and DD zones, but a significant percentage of the NPD zones, around 32 percent, also falls under this assessment, 6 percent more than is registered as active single family use in the NPD categories.

ii. Commercial Land Use

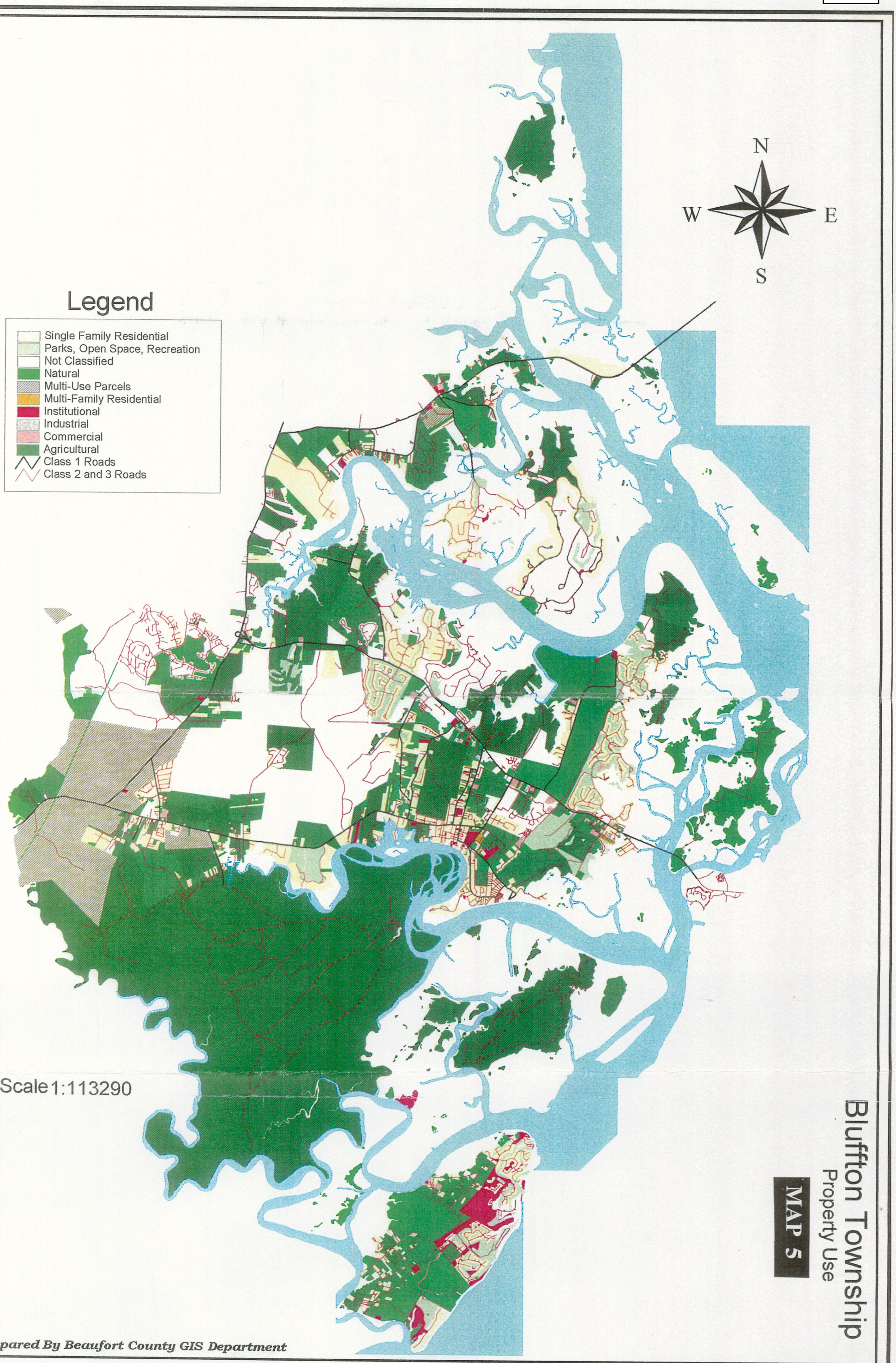
Current commercial activity is fairly concentrated along the eastern portion of the U.S. 278 corridor, within the Town of Bluffton, along S.C. 46 going south into the Town, and in limited, scattered crossroad areas throughout the Township. Many more commercial acres have been rezoned within the past two years to accommodate many years of future growth, at Union Camp's Okatie Center development, and other parcels at the SC 170/U.S. 278 intersection, and within PUDs and individual parcels along U.S. 278. The anticipated growth of commercial enterprises in Jasper County along the S.C. 170/U.S. 278 corridor, the U.S. 278 extension to Interstate-95 and S.C. 141 will add significantly to commercial development of the two-county area.

The Town of Bluffton has been the traditional center of trade and commerce for the area, with a historic connection to Savannah as the region's major retail and trade center. Within Bluffton Township, daily commerce has shifted primarily to the Town of Hilton Head over the past twenty years, and the growth of new businesses over the next two decades promises increasingly less dependence on Savannah for daily regional needs.

Presently, 45.2 percent of lands zoned commercial are assessed as agriculture or forestry, and another 18.7 percent are assessed as other non-commercial uses and 80.1 percent are listed as vacant. Only nine of these acres are found within the NCD, and the remainder in the GCD. A significant amount of commercial land is contained within the approved PUDs, with approximately 8 acres assessed as currently in use out of 559 total acres approved (including Okatie Center).

iii. Industrial Use

No major industrial activity occurs in the township other than limited warehousing uses and contractors' facilities near the outskirts of the Town of Bluffton. Only one acre of land is zoned as Light Industrial and no acres zoned as Heavy Industrial. All 5 acres of active light industrial use occur within a NPD zone, which renders the acres non-conforming. No heavy manufacturing uses are found within the area, and the one acre of assessed heavy industrial zoning is currently assessed as vacant.


N
W
E
S
Legend
Single Family Residential
Parks, Open Space, Recreation
Not Classified
Natural
Multi-Use Parcels
Multi-Family Residential
Institutional
Industrial
Commercial
Agricultural
Class 1 Roads
Class 2 and 3 Roads
Scale 1:113290
Prepared By Beaufort County GIS Department
Bluffton Township
Property Use
MAP 5

iv. Transportation, Communication and Utilities Use

There is an inactive railway easement running through Sun City Hilton Head and the lands known as the Jones tract immediately south of Sun City. The Transportation element of the Plan gives a full listing of the road corridors and their present condition, and the Community Facilities element gives an overview of water and sewer capacity.

v. Institutional and Public Use

Institutions and public lands include the Camp St. Mary's facility on the Okatie River, the Victoria Bluff holding, the Pinckney Island nature preserve and the Waddell Mariculture Center. A few boat landings and public areas near the water provide public access; there are no significant beach areas in the area apart from those on Hilton Head Island. The educational facilities include an elementary school in the Town of Bluffton; all other grades are housed in schools on Hilton Head Island.

vi. Agricultural and Forestry Use

Of the total zoned land in the township, 70.7 percent are assessed as agriculture and forestry use. The Union Camp Corporation is the long-standing owner of the majority of these acres, with managed pine plantation covering the land. Other major landowners with pine plantations include the Jones family with approximately 4,000 acres, and the Graves and Ulmer families with hundreds of combined acres in the Okatie and Greater Bluffton areas. Other agricultural uses are chiefly cattle grazing and a few very small fruit and vegetable farms in Okatie. Traditional farming pursuits have sharply declined in the past several years nearly to the point of non-existence.

f. Daufuskie Island

Since the most recent Daufuskie Island Plan was adopted in 1985, major shifts in residential patterns and development have occurred. The continued gradual growth of exclusive planned unit developments, and steady decline of residents outside the PUDs have transformed an island once teeming with a native island culture forty years ago to a fractional remnant of this population who must seek employment on Hilton Head Island and a small seasonal population of vacationers. Land uses continue to be chiefly low density residential, with very limited commercial and agricultural uses.

For analysis purposes within other sections of the Comprehensive Plan regarding environmental land cover and historic growth distribution, Daufuskie Island is listed as part of Bluffton Township. However, the existing land use numbers have been separated for the Daufuskie Island land mass to give a more detailed picture of development on the island.

i. Residential Land Use

The island is divided essentially into PUD and traditional subdivision development, with the island fairly evenly divided in acreage between the two types of development. PUD zoned areas account for 66.8 percent and GR for 33.1 percent. Of the residential acres not within the PUD zones, 13.9 percent are specifically assessed or used for residential purposes.

ii. Commercial Land Use

Commercial land uses are extremely limited on the island, comprised of a few eating establishments, and a few retail establishments within the PUDs. Residents on the island shop for necessities on Hilton Head Island. There are 192 acres of GCD on the island (1 acre assessed as active), and no acres within

any of the other commercial zoning districts. The other acreage is largely devoted to agriculture/forestry (70.3 percent), and single family and transportation/communication/utilities uses. There appears to be ample acreage available for the future growth of commercial businesses within these existing areas.

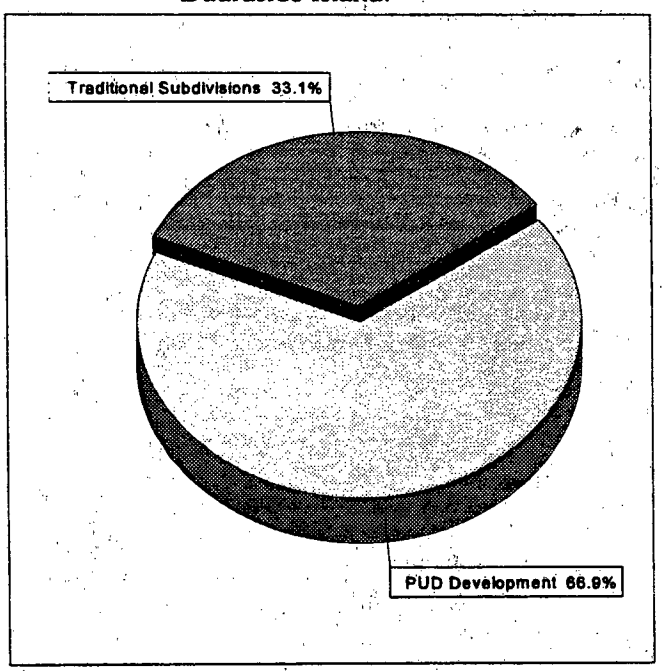
iii. Industrial Use

No industrial zoning or uses are present on Daufuskie Island.

iv. Transportation, Communication and Utilities Use

Forty-five acres are assessed for these uses on the island, with 18 acres listed as vacant. All roads are two lane, and most of them are presently unpaved. There is no public water and sewer service on Daufuskie, other than the facilities within the private residential developments.

Figure 15: Residential development acreage for Daufuskie Island.



v. Institutional and Public Use

Institutional and public uses are limited to the elementary school and the boat landings area for the general public. The PUDs contain a number of recreational uses and common areas available to the members within the developments. Approximately 1,227 acres within the PUDs are currently assessed as either parks and open space land or public use, although the master plans for these developments may specify a different acreage. The chief civic building appears to be the one church on the island, which is used for many civic as well as religious functions.

vi. Agricultural and Forestry Use

Despite the fact that 53.6 percent of the island's acres are assessed as agriculture or forestry, no major agricultural uses or active farming appear evident on the island. A large percentage of land under the PUD master plans are still assessed for these uses (39.8 percent of the PUD area), primarily selective timber harvesting.

For the areas outside the PUDs, there appears to be very limited individual agriculture and forestry pursuits, 79.3 percent of the acres within the GR areas. Given this figure, it is likely that many property owners reside on the land and utilize the agricultural exemption for their property assessment.

3.4 ZONING

3.4.1 General Summary of Zoning Ordinance

Zoning regulations were first adopted by Beaufort County in 1990 as part of the Development Standards Ordinance. They are referred to in short title as the Standards for Land Development, Chapter 15 from the Code of Ordinances, Beaufort County, South Carolina. The different zones defined in Chapter 15 are represented by name in the Code and by letter combinations on the Zoning Map. Each zone has a designated intended land use, such as residential or commercial, and is further clarified by a minimum size of lot, setback standards, maximum building height, and other such conditions.

This section of the Existing Land Use chapter provides a description of the zoning districts, and a brief narrative following each subsection on the current use and placement of the zoning districts.

4.2 Residential Zoning Districts

a. Single Family Residential Districts

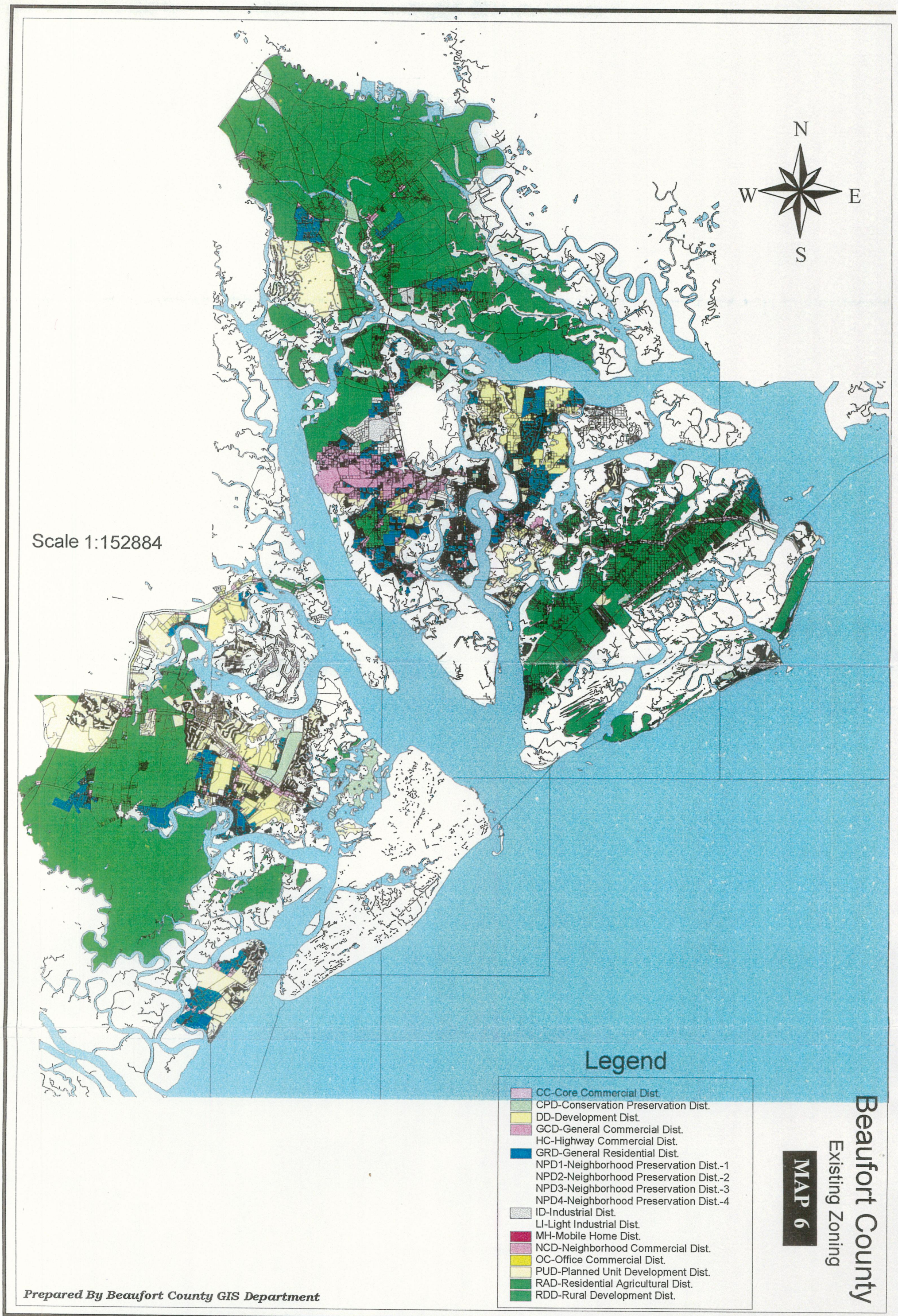
i. Description

There are two specific single family residential districts in the Beaufort County Zoning Ordinance in which most of the single family dwellings are located. Other residential and commercial zoning districts also allow single family residences under a "pyramidal" scheme; however, the two zoning districts of Residential Agricultural District (RAD) and Neighborhood Preservation District (NPD) are areas specifically designated as appropriate for single family dwelling units along with other specified uses. No multi-family uses are allowed under this designation.

The purpose of these single family districts is to discourage encroachment of land uses capable of adversely affecting the rural residential (RAD) or residential character (NPD) of such areas. Further, these zones serve to protect, preserve, and encourage existing low density rural residential land use (RAD), and to encourage the formation and continuance of a stable and healthy environment for low density residential uses, where commercial, indus-

Table 11: Acreages of zoning categories by Planning Area.

Zoning Categories	Districts in Acres					
	Bluffton/ Daufuskie	*St. Helena*	*Lady's Island*	*Port Royal*	*Sheldon*	*Total*
Residential						
DD	7,392	0	5,443	809	0	13,644
RAD	40,580	20,785	0	13,424	57,161	131,950
RDD	2,238	3,506	1,471	0	0	7,215
GRD	191	0	410	2,691	0	3,292
NPD-1	2,897	208	1,942	179	0	5,226
NPD-2	702	573	2,356	5,651	1,816	11,098
NPD-3	729	0	408	584	0	1,721
NPD-4	0	66	0	113	0	179
PUD	9,995	1,164	1,425	473	4,233	17,290
Total Residential	*64,724*	*26,302*	*13,455*	*23,924*	*63,210*	*191,615*
Commercial						
NCD	97	175	102	50	145	569
RCD	0	1,008	0	0	0	1,008
GCD	97	107	621	1,419	204	3,434
Total Commercial	*1,180*	*1,290*	*723*	*1,469*	*349*	*5,011*
Industrial						
ID	0	0	0	1,920	432	2,534
LI	1	0	0	181	0	181
Total Industrial	*1*	*0*	*0*	*2,101*	*432*	*2,534*
Conservation						
CPD	2,454	3,078	1	368	734	6,635
Total Acreage	***68,560***	***30,670***	***14,179***	***27,862***	***64,725***	***205,795***


N
W
E
S
Scale 1:152884
Legend
CC-Core Commercial Dist.
CPD-Conservation Preservation Dist.
DD-Development Dist.
GCD-General Commercial Dist.
HC-Highway Commercial Dist.
GRD-General Residential Dist.
NPD1-Neighborhood Preservation Dist.-1
NPD2-Neighborhood Preservation Dist.-2
NPD3-Neighborhood Preservation Dist.-3
NPD4-Neighborhood Preservation Dist.-4
ID-Industrial Dist.
LI-Light Industrial Dist.
MH-Mobile Home Dist.
NCD-Neighborhood Commercial Dist.
OC-Office Commercial Dist.
PUD-Planned Unit Development Dist.
RAD-Residential Agricultural Dist.
RDD-Rural Development Dist.
Beaufort County
Existing Zoning
MAP 6
Prepared By Beaufort County GIS Department

trial and high density land uses do not encroach (NPD).

Within the RAD zone, other requirements include a maximum density of two dwelling units per acre, minimum lot size of 21,780 square feet (½ acre), setbacks (minimum 25 feet or 35 feet when fronting a major thoroughfare for front yard, 10 feet side yard and rear yard), and maximum building height of 35 feet above base flood elevation or finished grade, whichever is greater.

Minimum lot sizes within an NPD zone range from one acre (NPD-1) to one quarter of an acre (NPD-4). Other requirements include setbacks (minimum 25 feet or 35 feet when fronting a major thoroughfare for front yard, 10 feet side yard and rear yard), and maximum building height of 35 feet above base flood elevation or finished grade, whichever is greater.

ii. Current Use and Functionality

The Residential Agricultural District (RAD) covers a good majority of the rural lands of the County, and is intended to support rural uses and activities. When zoning was first initiated in 1990, the original staff recommendation for this district was a density of one unit per 2 acres. This density was changed at the Planning Board level to its present two units per one acre, due to the concern that some citizens in rural areas may not be able to afford more than ½ acre of land for their home. It has become evident that two units per acre is actually a suburban density and over time, will not support the rural residential character if growth continues at its present rate.

Other concerns with RAD are certain permitted uses such as schools, daycare, child nurseries, public and private health care and nursing homes which basically could generate the need for public sewer service to outlying rural areas. Such uses should not be allowed in areas which may clearly remain rural without alternative means of sewer facilities.

The Neighborhood Preservation District (NPD) was principally established for existing subdivisions, and is an urban and suburban concept. The NPD ranges in density from one to four units per acre, and is found mostly in urban or suburban areas. There needs to be a thorough examination of the densities currently assigned and the placement of this district should the district be retained in the ordinance revisions. The concept of protecting certain single family areas is encouraged, but it should utilized with careful recognition of allowed density. Rural communities should not utilize this zone.

It is possible that where sewer is available, perhaps some form of duplex be allowed in certain single family areas. There are existing areas in the County where small NPD areas are directly adjacent to small General Residential areas of duplexes or manufactured home parks. Single family family homes and duplexes can co-exist peaceably, depending upon site and structural design.

b. Single Family or Multi-family Residential Districts

i. Description

Development District (DD), Rural Development District (RDD), and General Residential District (GRD), are zones within the County that are determined suitable for both single family and multi-family residences as well as other specified uses.

Development District (DD) and Rural Development District (RDD) have a large range of permitted uses as outlined in the Development Standards Ordinance. Generally, the difference in purpose between the DD and RDD exists in that Rural Development Dis-

trict regulates uses in an effort to protect and preserve existing low density residential and agricultural uses; protect water quality and agricultural lands from land uses and intensities that may be detrimental; and insure that residential development or other uses of land not having access to public services will occur at low densities in an effort to promote a healthful environment. Development District regulations are designed to promote the orderly expansion of urban areas by encouraging the formation and continuance of a stable and healthy environment through planned expansion of adequate community services and facilities. The desired result is the evolution of a homogenous and compatible mixture of different types and intensities of land uses.

Setbacks within Development District and Rural Development District zones are as follows: a minimum 35 feet or 50 feet on a major four-lane thoroughfare and 75 feet on a major two-lane thoroughfare, a minimum 10 feet side yard, and a minimum 10 feet rear yard.

Within the General Residential District, there are five zoning designations that specify a maximum allowable number of units per acre. Maximum density requirements for General Residential are: four dwelling units per net acre in GR-4, eight dwelling units per net acre in GR-8, twelve dwelling units per net acre in GR-12, sixteen dwelling units per net acre in GR-16, and twenty dwelling units per net acre in GR-20.

GRD density requirements reflect appropriate concentrations of housing within an area dependent mainly upon the availability of public water/sewer services and other community services desirable in high density areas. The intent of these designations is to maintain low density (GR-4) in areas where public water and sewage disposal systems may not be available, allow higher densities (GR-8, GR-12, GR-16, and GR-20) where community water and sewer systems are available, and discourage encroachment by commercial, industrial, or other uses capable of adversely affecting the residential character of neighborhoods in all General Residential zones.

Setbacks within all General Residential zones are as follows: minimum 35 feet or 50 feet on a major thoroughfare four-lane and 75 feet on a major thoroughfare two-lane, minimum 10 feet side yard, and minimum 10 feet rear yard.

ii. Current Use and Functionality

Several concerns have arisen about the Development District during the past few years, mostly regarding density and placement. At four and eight units maximum, depending upon sewer availability, it is too intense a density to be used in environmentally sensitive and rural areas. The current placement of the district, as well as its density and uses, should also be evaluated, if the district is to remain in the zoning ordinance revisions. It has been suggested that this district be eliminated in its present form, or highly reconfigured. Any district with the intent to encourage dense development should be placed clearly within accepted urbanizing areas.

Specifically, the following provisions have been suggested:

- eliminate the conditional use of 8 units with sewer;
- the district is too broad in scope of uses to be used in rural areas;
- eliminate golf courses as a by-right use;
- carefully consider the permission for airfield and communication stations;
- schools should not be allowed unless the district is within accepted growth boundaries; and

- the allowance of wastewater sludge disposal should be carefully monitored and channeled to appropriate places.

In a similar vein, the Rural Development District, with four units to the acre allowed, does not match its stated purpose, since four units per acre is decidedly not a rural density. The use of this district should not remain on the barrier islands, especially Bay Point Island and the eastern barrier islands. Existing soils cannot support such a density, and in some cases, public sewer and water services are unavailable or cost-prohibitive.

The General Residential zones are currently used for manufactured home parks in rural areas, rural family and community clusters, as on Daufuskie Island, or mixed residential uses closer to the urban core. Up to four units per acre within this "set" of zoning districts, or GR-4, can exist with septic tanks. The rest of the GR categories, which range up to twenty units per acre, must have sewer available to be utilized. The problem with GR-4 is its placement, and that it doesn't match with the purpose of low density in the more rural or outlying areas.

There is no property in the County which is classified GR-16 or GR-20, which raises the question whether or not these densities are appropriate or even marketable in the County. This issue should be investigated as part of the zoning revisions.

Overall, it is recommended that multifamily development occurs only within urbanizing areas with sewer service available. The rare multifamily uses requested in rural areas should have special treatment and consideration. A final important question to consider is whether or not there is still a "need" to separate single and multi-family so far apart. If designed well, multi-family development does not deserve the stigma traditionally attached to it that it affects single family property values. In order to encourage some areas of the County to mix residential uses, perhaps there is the need to distinguish different types of multi-family and require certain site and structural design elements.

c. Planned Unit Development District

i. Description

A Planned Unit Development District (PUD) may be established through a rezoning procedure in any area when an applicant demonstrates that the proposal meets the requirements outlined in the County Development Standards Ordinance. The purpose of the PUD is to promote the establishment and continuance of a variety of mixed-use and compatible use developments. The regulations which apply within this district are designed to provide flexibility in the design of planned projects; to encourage comprehensive planning of developments; to permit innovation in project design; and to ensure compatibility of development with the surrounding environment.

ii. Current Use and Functionality

This zoning district is the only zoning district where developers can "custom-design" a site to suit their particular development ideas. It has been used for a variety of reasons, to create unique development projects as well as to circumvent the underlying zoning districts and obtain uses not allowed in those districts. The PUD district contains a list of general and special considerations which function more or less as a checklist and list of "brownie points" to be used by the developer to justify his departure from the underlying zoning. These considerations appear to favor more traditional design patterns by their very nature, but the actual execution of this district has produced a wide variety of products.

The PUD district needs to be evaluated for its effectiveness for creative design solutions, and will likely need to be completely rewritten to be more user-friendly for the development community and the planning staff. It may be necessary to create different types of PUD districts.

3.4.3 Commercial Zoning Districts

The four commercial zoning districts will be analyzed together for their effectiveness in the regulation of commercial enterprises. It has been recognized by many in the community that the present set of commercial districts are inadequate, and need to be reconfigured for more effective use and greater flexibility. For this reason, subsection "ii." regarding "Current Use and Functionality" is located at the end of this particular section.

a. Neighborhood Commercial District

i. Description

The intent of the Neighborhood Commercial District (NCD) is to provide for the formation and continuance of a healthy environment for commercial uses that are located and sized so as to provide nearby residential areas with convenient shopping and service facilities; foster a pedestrian-oriented community center; avoid strip highway commercial development; reduce parking and traffic congestion; discourage large regional businesses, industrial activities and other land uses which might compromise the localized commercial character of the district; and accommodate essential public utilities and public safety services.

Maximum building size per parcel is 10,000 square feet (some exceptions allowed). Other requirements include setbacks and a maximum building height of 50 feet above base flood elevation or finished grade, whichever is greater.

b. Residential Commercial District

i. Description

The Residential Commercial District (RCD) serves to preserve, enhance, and encourage existing rural, low density residential, and/or low intensity commercial land uses as accessory uses to the primary residential use. This zone was designed specifically for use on St. Helena Island, and it is only used in that area along significant portions of the major thoroughfares on that island.

Within an RCD zone other requirements include a maximum density of two units per acre, minimum lot size of 21,780 square feet (½ acre), setbacks (minimum 25 feet or 35 feet when fronting a major thoroughfare for front yard, 10 feet side yard and rear yard), and maximum building height of 35 feet above base flood elevation or finished grade, whichever is greater.

c. General Commercial District

i. Description

General Commercial District (GCD) objectives are reserving land for general business purposes; encouraging the formation and continuance of a compatible and economically healthy environment for business, financial service, and professional uses which benefit from being located in close proximity to each other; and discouraging any encroachment by industrial, residential, or other uses capable of adversely affecting the basic commercial character, intent, operations, and functioning of such districts.

Minimum lot width, measured at the building line, is 50 feet. Other requirements include setbacks and a maximum building height of 50 feet above base flood elevation or finished grade, whichever is greater.

d. Office Commercial District

i. Description

The purpose of the Office Commercial District (OCD) is to provide for the formation and continuance of a healthy environment for office commercial uses that are located and sized so as to provide for office commercial uses within the neighborhood environment; foster a pedestrian-oriented community center; avoid strip highway commercial development; reduce parking and traffic congestion; discourage large regional businesses, industrial activities and other land uses which might compromise the localized commercial character of the district; and accommodate essential public utilities and public safety services.

Minimum lot size is 1/4 acre (10,890 square feet). Other requirements include a maximum building height of 35 feet above base flood elevation or finished grade, (whichever is greater) and setbacks.

There is currently no acreage zoned under the Office Commercial District.

ii. Current Use and Functionality

It is recommended that all commercial districts be evaluated and reconfigured to support the goals of the Comprehensive Plan and the proper growth of the business community. The following issues have been raised regarding the present districts, and illustrate the need for such evaluation.

- Building size limitations need to be reexamined.

The original theory behind a 3,000 square foot limitation on buildings within NCD was to keep out high traffic businesses in neighborhoods. This theory did not work in the case of fast-food restaurants, which are typically 2,400 square feet in size. An amendment made recently to this district increased the 3,000 square feet limitation to 10,000 square feet. However, it is acknowledged that a different system of limitations should be devised which supports some neighborhood uses without excessive traffic and loading uses. Also, the location of NCD throughout the County should be re-examined.

- the issue of grandfathered existing businesses which are currently zoned residential.

Problems have arisen for those non-conforming businesses if they want to sell or expand. There has been a reluctancy to rezone these parcels to GCD or NCD because the categories are too broad and may allow undesirable uses, but the owner is still left with the problem of non-conformance. The creation of more sensitive neighborhood commercial areas may eliminate this problem.

- the Office Commercial District probably needs to be eliminated or reconfigured. There is no acreage zoned under this district, and office uses are usually found within other commercial or mixed use districts;
- businesses zoned according to use or some other system is an intriguing idea which should be explored. Perhaps other factors for consideration are traffic/truck trip generation, especially in neighborhood areas, environmental pollutant load, required parking spaces, etc;
- all definitions and concepts should use the most recent language and wording, and newer enterprises, such as home offices, should be considered for

inclusion. Some words, like "millinery," are now considered antiquated and should be updated;

- phrases like "businesses involving the rendering of personal services" are very vague, and such phrases should be examined and rewritten in all commercial districts;
- some forms of commercial use should be allowed in rural areas of the County but depending on the location, should conform to the area in terms of use, size, location on the site, and certain performance standards. As a general rule, commercial uses and structures should appropriately reflect their surroundings and context;
- technically speaking, the present commercial districts are actually mixed use, for they allow single and multi-family residential uses. The creation of true mixed use categories, and perhaps some exclusively commercial zones is recommended;
- in the revised ordinance, there must be an acknowledgment of existing highway commercial businesses, but it will be important to encourage more appropriate forms of commercial enterprises along the highway in the future. Some form of zoning should be placed to acknowledge but not encourage strip commercial development, per the policies of the Comprehensive Plan; and
- provisions should be made for home offices or "regional" home offices in single family and mixed use developments. Home offices could also be considered for use in accessory structures.

3.4.4 Industrial Zoning Districts

As with commercial zoning districts, the two industrial zoning districts will be evaluated as to their current use and functionality at the end of this section.

a. Industrial District

i. Description

The purpose of the Industrial District (ID) is to provide suitable areas for the formation and continuance of non-objectionable industrial operations and use of land significantly removed and buffered from residential and commercial areas and having adequate linkage to transportation facilities; and to discourage encroachment by residential, commercial, and other land uses clearly incompatible with the general industrial nature of such districts.

Setbacks within an industrial zone require that no industrial building or structure shall be closer than 200 feet to the perimeter of a residential zoning district or an existing dwelling. Performance standards are set forth in section 4.12.4 of the Development Standards Ordinance.

a. Light Industrial District

i. Description

The purpose of the Light Industrial District (LID) is to provide a suitable environment for and enhance the locational flexibility of uses generally classified as research and development, assembly, high technology production, precision manufacturing, and light industry by excluding heavy manufacturing and permitting only those cleaner industries and operations which tend to be less objectionable to the community. Other objectives include requiring high performance standards and tolerating minimal creation of air and water pollution, hazardous waste, and off-site nuisances.

No industrial building or operation in this district may be situated closer than 100 feet from the boundary line of any property in an existing residential zoning district or in cur-

rent residential use. Other requirements include: operations must be carried out within an enclosed building, all materials (with the exception of motor vehicles) must be stored within enclosed buildings or completely screened from adjacent properties and public or private roadways, any generation of potentially injurious or obnoxious condition must not be sufficient to create a nuisance beyond the property boundaries, and all activities and potential discharges must be in accordance with applicable local, state, and federal law.

ii. Current Use and Functionality

As with the commercial districts, the whole concept of industrial zoning districts needs to be reviewed and revised to allow greater use and flexibility. The use of industrial acreage should obviously support the overall goals and policies within the Comprehensive Plan. Given this premise, zoning requirements may be more or less based on environmental performance standards, transportation requirements and other factors which require a greater breakdown of category than "heavy and light." Also, the districts should reflect the variety of industries in all areas, from urban to rural. Business parks, office parks, cottage industries, and rural industries may all require separate categories or categories which encourage flexibility of uses.

3.4.5 Conservation Zoning Districts

a. Conservation Preservation District (CPD)

i. Description

It is the intent of the Conservation Preservation District (CPD) to protect and conserve sensitive environmental areas; discourage growth in areas which pose undue hazards to man; and maintain open space.

No conservation district shall be disturbed or altered in any manner with the exceptions of water related development activities for which valid permits have been issued by appropriate state and federal agencies having permitting authority over such activities. The County reserves the right to prohibit such activity where it is determined that the permitting of such activity is inconsistent with the adopted goals and regulations of Beaufort County aimed at preserving environmental quality. Also, no structures which impede natural tidal flow and have the effect of reducing the quantity and frequency of water reaching marsh areas will be permitted except as approved in conjunction with nature and related uses.

ii. Current Use and Functionality

This zoning district does not appear to contain great flaws, but it nevertheless requires a review of its effectiveness for its stated purpose. There is also a difference between conservation lands which are undevelopable and those developable but capable of supporting very limited uses. Special attention should be paid to the drafting of a zoning district which may encourage active conservation activities.

3.4.6 Overlay Zoning Districts

There are several overlay zones presently in the ordinance, each of which speaks to a particular preservation or special area concern. Each of these districts should be generally evaluated for their effectiveness for their stated purpose, and altered to implement the goals of the Comprehensive Plan.

a. Beach Development Overlay District (BDOD)

i. Description

The Beach Development Overlay District (BDOD) is established for the purpose of preserving native vegetation, maintaining dune stability, and assuring public access to beaches. Delineation of areas which fall under this designation are outlined in the Development Standards Ordinance.

It may not be necessary to keep this district in its present form, given the current state and federal regulations, unless Beaufort County wishes to have stricter measures in place and enforce them. There is a need to examine this district in light of the County's vision and goals, and to determine where state and federal regulations may overlap. Also, the goals for the County's Beachfront management Plan should be fully considered during the updating of this district.

b. Flood Hazard Overlay District (FHOD)

The Flood Hazard Overlay District (FHOD) is established for the purpose of protecting future development from the effects of rising tidal waters associated with probable future hurricanes and major storms. Delineation of areas which fall under this designation are outlined in the Official Flood Hazard Area Maps of Beaufort County.

There is a perceived need to be more scientific about this district in terms of developments around very low areas and beach areas. There are also problems with enforcement. The use of this district must be carefully coordinated with underlying densities, so that areas which are within more critical flood zones are not overly dense.

c. Highway Corridor Overlay District (HCOD)

The Highway Corridor Overlay District (HCOD) is established for the purposes of promoting safe and efficient highways in Beaufort County, to protect and preserve scenic vistas; and to protect the aesthetic and visual character of lands adjacent to highways. The criteria for the delineation of areas which may be zoned HCOD are outlined in the Development Standards Ordinance.

This district should contain more of an emphasis on truly sound site design and building placement, and on quality landscaping. The inclusion of architectural standards, lighting and sign standards should be individually debated per every planning area and major corridor.

d. Airport Overlay District (AOD)

The Airport Overlay District (AOD) is established for the purpose of protecting future development from the effects of aircraft noise and accident potential and for prevention of obstructions to air navigation. The Airport Overlay District consists of those areas designated on the Official Zoning Map of Beaufort County and specifically includes the over flight zones and approach corridors for the Marine Corps Air Station and the Beaufort County Airport on Lady's Island. The Hilton Head Airport is located within the jurisdiction of the Town of Hilton Head and is therefore not subject to this overlay district.

Beaufort County has recently modified the sections of this district pertaining to the MCAS-Beaufort. The MCAS developed an Air Installation Compatibility Use Zone (AICUZ) study and model land use ordinance for the Beaufort base in order to aid the County in this effort. Two major compo-

nents of the new ordinance focused on specific land use restrictions and noise attenuation regulations for new structures built within the noise footprint. The ordinance also mandates owner notification as the location of property within the district and special procedures regarding variances.

e. Historic Preservation Overlay District (HPOD)

The Historic Preservation Overlay District (HPOD) is established for the purpose of promoting the educational, cultural, and general welfare of the public through identification, preservation, protection, and enhancement of historic resources.

The Historic Preservation Overlay District consists of all structures, ruins, cemeteries, and other sites which have been identified by the Planning Board with assistance from appropriate persons or agencies as being of historical significance. These areas are designated on the Official Zoning Map of Beaufort County or listed in Section 4.16.8 of the Development Standards Ordinance.

f. U.S. Highway 278/U.S. Highway 278 Extension Corridor Overlay District (HECOD)

The Highway Extension Corridor Overlay District (HECOD) is established for the following purposes:

- to provide for the safe and efficient use of this highway;
- to minimize congestion and number of traffic conflict points;
- to enhance the quality of development;
- to protect and enhance the area's unique aesthetic character and natural environment and reduce unnecessary visual distractions; and
- to encourage the design of architecture, signage and lighting which is harmonious with the natural and man-made assets of the Lowcountry.

This overlay district generally extends 500 feet perpendicular to the right of way along the entire corridor within the County limits, and a specifically designated area of approximately 625 acres at the S.C. 170/U.S. 278 intersection in Bluffton Township.

Several amendments have already been proposed and approved for this district after its use over the last two years. The Corridor Review Board continues to refine the requirements and implementation procedures. The most recent proposed amendment concerned the addition of S.C. 46 and Burnt Church Road to the district.

g. S.C. Highway 170/U.S. Highway 278 Corridor Overlay District (HCOD)

The Highway Corridor Overlay District (HCOD) for the S.C. 170/U.S. 278 highway corridor is established for the following purposes:

- to provide for the safe and efficient use of this highway;
- to minimize congestion and the number of traffic conflict points;
- to enhance the quality of development;
- to protect and enhance the area's unique aesthetic character and natural environment and reduce unnecessary visual distractions; and
- to encourage the design of architecture, signage and lighting which is harmonious with the natural and man-made assets of the Lowcountry.

The Highway Corridor Overlay District for S.C. 170/U.S. 278 consists of all lands within the area between the right-of-way and a line

running parallel to the right-of-way on both sides of S.C. Highway 170/U.S. Highway 278 measured 500 feet perpendicular to the right-of-way, from the southern terminus of the highway in Beaufort County (at the New River Bridge) to the northern terminus at the municipal limits of the City of Beaufort.

As with the 278 Corridor ordinance, the Corridor Review Board for this road continues to make suggestions on how to improve the ordinance as it utilizes the ordinance.

h. Beaufort County River Protection Overlay District (BCRPOD)

The Beaufort County River Protection Overlay District (BCRPOD) is established for the purposes of protecting and conserving those bodies of water in Beaufort County designated Outstanding Resource Waters (ORW) under the *South Carolina Water Classifications and Standards Regulation 61-69, May 28, 1993* by:

- formally acknowledging that such waters are natural resources of great significance to the county, state, and nation;
- recognizing that the shoreline and adjacent lands are a valuable, fragile, and sensitive part of this estuarine system where human activity can have an immediate and adverse impact; and
- enhancing the ability of the shoreline and adjacent lands to withstand the continuing demands of human activity without degradation to the water quality, natural habitats or recreational value.

Outstanding Resource Waters (ORW) are those "freshwaters or saltwaters which constitute an outstanding recreational or ecological resource." Such waters may include, but are not limited to, waters known to be significant nursery areas for commercially important species, waters known to contain significant commercial or public shellfish resources, or waters used for or having significant value for scientific research and study.

This overlay district has been recently extended to all salt water bodies within the County regardless of current state designation. The effectiveness of this district should be monitored and reviewed on an annual basis so as to achieve the goals of this district for improved water quality.

Part
D

A Plan for the Future

Chapter 4

The Future Use of Land

Future Land Use

Vision

Beaufort County must preserve, protect and enhance the qualities and resources that foster a sense of community, make the County a desirable place to live, work and call home, while also becoming an increasingly valuable tourist destination.

The County must find a balance between both the private property rights and the rights of the neighbors and the community while preserving and enhancing the natural and cultural environment and quality of life of the community. In order to achieve this goal, the County must work toward increasing accessibility to the planning process for all citizens of the County and to manage growth for the mutual benefit of all citizens.

Future Land Use

Challenges and Policies

Issues

- ☑ Population growth trends
- ☑ Accommodation of growth and preservation interests
- ☑ Fostering a quality development ethic
- ☑ Limited land capacity
- ☑ The ability to assess and plan growth

Policies

1. maintain the distinction between rural and developing areas within the County
2. protect the character and quality of existing communities and ensuring that new development shares the characteristics of diversity and quality of life that makes Beaufort County unique
3. define and perpetuate an ethic of quality growth
4. foster and manage economic development
5. manage growth through infrastructure investment policies and plans
6. recognizing and accommodating constraints to growth.

4.1 Community Character

The citizens of Beaufort County enjoy an enviable quality of life and lifestyle, whether urban, suburban or rural. At the same time, many residents also enjoy the boom that new development has brought to the economy, and want to see that boom continue with a broader employment base of "higher than minimum wage" jobs. In order to achieve the resident's vision for their future, it is important to integrate new development into the County in a way that will protect the aspects of the County that people value, including:

- the quality of the waterways and therefore the health and continued existence of fish spawning areas, shellfish beds and shrimp;
- the quality of the natural environment;
- the history of the County evident in the landscape and scenic quality of the rural communities and towns;
- the stability of communities and the retention of land by residents; and
- the diversity of the communities in terms of age, income and race.

In deciding how and where to accommodate growth, the citizens of the County have expressed a wide variety of opinions about what growth means and what that growth will and should look like. These preferences about the visual qualities of Beaufort County are central to the Comprehensive Plan. Visual impressions are how the identity of a community and a region are communicated, remembered and valued. The choices that a community makes about its future are guided by the images people have of their community today with their expectations of how future development will look.

Concern about growth is often motivated by the need to protect the positive images of "what we have" and "what makes us special." Growth has the potential to mean a proliferation of large parking lots, chain stores and strip development. Suburban development patterns, trademark fast food and other commercial buildings, and uniform styles of residential architecture have led areas of South Carolina to begin to resemble "Anywhere, USA." A central theme of the Comprehensive Plan is to engender quality development that respects local values.

4.1.1 Shared Values

The citizens of Beaufort County have been very clear about what they do and do not

want to see in their future. They have described what they stand for, value in their local environment and hope to keep:

- the natural environment;
- the scenery of the Lowcountry;
- the expansive views of the marshes;
- the quality of the rivers;
- the diversity of the communities; and
- the small town atmosphere.

Underlying many of the values and concerns about growth in Beaufort County has been the fear of losing what makes the County distinct. It will not be enough, as with traditional zoning, to limit the size, scale and location of new development. In order to preserve local character and protect natural and scenic resources, the County will need a solid economy, environmental stewardship, and effective growth management.

This chapter provides a map and written plan that define a direction for the future use of land within the County. These land use recommendations are supported by subsequent chapters which detail approaches to the various aspects of future development. The Plan has been prepared after extensive study and citizen participation, the results of which can be found in the Appendices of this Plan.

4.1.2 Growth Management and Stewardship

Many communities throughout the country have found themselves faced with rapid growth and the need to make decisions about how to manage it. High amenity coastal communities like Beaufort County are especially affected by rapid growth rates. It is a challenge that will only accelerate as a burgeoning population moves into a very limited supply of developable coastal land.

The effects of rapid growth are typically an altered way of life, increasing traffic and other forms of crowding, increasing costs of infrastructure and government services, increasing property taxes, labor market shortages, and environmental degradation.

The response is often ambivalent because so many long term residents and newly arrived business associates stand to make sizable profits from the sale or development of their land. It is a classic situation, and one for which there are no easy solutions. Compromise is necessary, and it is essential that advocates of both growth and preservation find common ground, or at least middle ground, in mapping the future of their community.

The methods that other communities have adopted for management of growth and the sensible stewardship of their land include comprehensive planning, capital improvements planning (often part of comprehensive planning), impact fees, strong and effective zoning, performance standards, special overlay districts, growth boundaries, purchase and transfer of development rights, linkage and inclusionary housing programs, trust funds for special needs such as affordable housing, and development allocation systems (rate of growth ordinances).

No set of initiatives is immune from criticism, yet some combination must be adopted for a growth management program to work. If a community is to survive its own growth—if the goose is to survive the golden egg—some action in the form of a proactive growth management program will have to be taken. The result of effective action will pay off in the long run as the community acquires a reputation for a commitment to stewardship and quality growth.

4.2 The Challenges of Future Growth

Present development trends place the Lowcountry way of life in jeopardy. This Plan for Beaufort County seeks to accommodate growth in a framework that will preserve the area's unique character. It will encourage new home construction, job creation, expanded shopping opportunities, and other forms of development, while preserving open space, clean water, scenic vistas, and rural character. It is intended to protect these rural residents who have long-standing investments in the community. This Plan for Beaufort County also sets priorities on County spending so that growth does not outpace the County's ability to budget capital improvements.

Fulfillment of Beaufort County residents' vision for their future will require a change of course from current development trends to one that will be environmentally, fiscally and economically sustainable. This Future Land Use Plan charts such a course of growth management and stewardship.

The underlying strategy for growth management and stewardship is establishment of a flexible base density, as distinct from fixed densities attached to land use areas and zoning districts. This approach provides the basis for a system of standards, incentives and density transfers to determine residential development densities. Such an approach provides for moderate levels of development, while encouraging or discouraging further development depending on area, site, functional, or design characteristics.

Definition of Base Density

The Future Land Use Plan prescribes the orderly discontinuation of current zoning and adoption of a new, flexible zoning system. The new zoning system will be derived from a County-wide base density of one unit to three acres. The base density establishes a point from which, (a) greater densities in areas targeted for development will be achieved through incentives and performance standards, and (b) lower densities in rural areas will be achieved through density transfer and purchase programs and performance standards. The base density will apply in the following land use areas: Priority In-

vestment Areas, Transitional Investment Areas, Rural Investment Areas, and Military Planning Areas. The base density is a point from which to calculate actual density, and no subsequent reference to base density shall be construed to create a three-acre minimum or standard lot size.

4.2.1 Challenges

This strategy is based on the five following challenges facing Beaufort County:

Population Growth Trends

Over the Comprehensive Plan's 20-year planning horizon, more than 60,000 new residents are anticipated to move into Beaufort County. An overall density of one unit to 3 acres will easily accommodate this level of growth, recognizing that market trends will necessitate a concentration of some development in especially scenic and high amenity areas. While accommodating this magnitude of growth, it will also provide sufficiently low densities for effective growth management.

Accommodation of Growth and Preservation Interests

In the context of high growth rates and increasing demand for housing and services on the one hand and a strong public outcry for preservation and conservation on the other hand, this growth management strategy has adopted a middle ground density ratio of one unit to 3 acres. Provisions for density increases are outlined in this chapter as are provisions for reduced densities, the latter with the objective of deferring or deflecting growth in rural and transitional areas.

Fostering a Quality Development Ethic

Beaufort County's chief comparative advantage for its long-term future development is the quality of its environment. At this stage in the growth of the County it is essential to have a planning system in place that provides incentives for quality development through performance standards. Such standards can only be effective if base zoning densities are set at levels less than market driven densities, allowing the additional market increment to be obtained through quality development performance standards. The base density of one unit to 3 acres is calibrated to provide this quality increment. An effective quality development program will in turn attract development interests who are accustomed to higher long term profits associated with quality development. Such a program will thereby help to establish a self-sustaining ethic for quality development.

Limited Land Capacity

The inability of approximately 95 percent of the County's soils to contain effluent from septic systems with no environmental degradation at development densities of greater than one unit to 3 acres is a capacity issue. Low density maximizes the ability of the environment to absorb pollutants and sustain natural systems. Reduced density also minimizes the need for paved surfaces by reducing demand for intensive retail and service development and associated paved areas.

The Ability to Assess and Plan Growth

It is an objective of the County to facilitate growth in a rational manner, without resort-

ing to moratoria, development allocations, substantial new taxes to pay for unforeseen service and infrastructure costs, or other results of unplanned growth. A density of one unit to 3 acres will allow the County to thoroughly evaluate high density, high impact developments sufficiently in advance to assess their cumulative impacts. In this manner, the six overarching public policy goals set forth become achievable.

4.2.2 Foundation of the Plan

The Future Land Use Plan contains six public policy goals that together form a foundation for meeting the challenges that face Beaufort County:

Public Policy Goals

1. maintain the distinction between rural and developing areas within the County;
2. protect the character and quality of existing communities and ensure that new development shares the characteristics of diversity and quality of life that makes Beaufort County unique;
3. define and perpetuate an ethic of quality growth;
4. foster and manage economic development;
5. manage growth through infrastructure investment policies and plans; and
6. recognize and accommodate constraints to growth.

These goals form a foundation for achieving smart, balanced growth. Each is discussed in greater detail below.

a. Maintain the Distinction Between Rural and Developed Areas

To ensure the future economic viability and continued desirability of Beaufort County as a destination and a place to live and work, it is crucial to maintain a distinction between rural and developed areas for the following reasons:

i. Environmental Quality

Beaufort County's economy today is based primarily on tourism and retirement/second home developments. These sectors of the economy are very sensitive to the quality of the local waterways, fisheries and the natural environment. Thus, in order to protect the future viability of the tourism and second home industries, the County must protect the natural features, water quality and sensitive resources of Beaufort County, and preserve large areas of contiguous open space.

ii. Farming, Timbering and Fishing

Without protection for the rural areas of the County, the traditional sectors of the economy—farming, timbering and fishing—will be weakened, thus harming the local economy.

iii. Financing of Public Infrastructure

Continued sprawl will mean higher costs to the County for infrastructure such as schools, fire departments, roads, EMS, and the range of County services. Public infrastructure can be provided more efficiently and economically by directing most new development to specified Priority Investment Areas for which infrastructure is targeted.

iv. Evacuation

Emergency evacuation can be achieved most efficiently from developed areas that have adequate road capacity for local residents. The total time required for the safe evacuation of residents from a given area is critical in reducing the time required for advance warnings and therefore avoiding needless evacuations.

v. Heritage

The protection of the rural areas in the County is directly related to the preservation of Beaufort County's heritage and sense of place. The County's heritage and character is also directly linked to its economic vitality as a high quality tourism and retirement destination.

b. Preserve and Protect Existing Communities and Developing New Communities

Beaufort County's existing communities, such as Lady's Island, the Corner Community on St. Helena's Island, Dale, Sheldon, Okatie and Bluffton, are vital to the image that the citizens have about their county. Thus, in anticipating the impact of new development on the County, it is essential to protect the character and viability of the County's existing communities. They will therefore be recognized in the Comprehensive Plan as Community Preservation Areas, with their own unique future planning efforts. Existing communities provide:

- a sense of community for County residents, since each community has its own unique character;
- a traditional development pattern with clear distinctions between developed and rural areas; and
- a community in which a diversity of age, race and income levels are found.

c. Define and Perpetuate an Ethic of Quality Development

Cities and counties adopt various approaches in their efforts to attract development. These approaches are often an amalgam of public and private efforts rather than a concerted effort by all parties. Nevertheless, the resulting blend becomes perception, and perception becomes reality. One blend of efforts that produces clear and definite results can be termed a *quality development ethic.*

Several conditions are necessary to the formation of a quality development ethic. Among the most important are a broad advocacy of common themes, special historic or environmental features, willingness of lenders and developers to support creativity, and a fair and effective regulatory process. This Comprehensive Plan is written to articulate the first two of these, encourage the third, and establish a firm basis for the fourth.

Communities that are associated with a quality development ethic become attractive to developers who thrive on the challenges and opportunities present in such places. While the cost of doing business in such locales may be higher and the regulatory process somewhat stricter, the payoff in return on investment is predictably greater. The regulatory framework is also a form of insurance for investors and developers who have a long term interest in their projects, recognizing that subsequent development will add value to their investments rather than detracting from them.

d. Foster Sustainable Economic Development

Beaufort County has differentiated itself from other locations in order to attract business investment with an emphasis on quality development in a uniquely attractive environmental context. In addition to retail and service sector development associated with population growth and tourism, the County is also poised to attract knowledge-based businesses such as software, telecommunications, and market research firms.

Knowledge-based businesses provide economic diversification and higher wage employment than jobs traditional to the County. Such businesses tend to value attractive, high amenity environments, and niche marketing is essential to attract them. In many cases, such firms have branches or specialized offices rather than headquarters in such locations. As knowledge-based businesses become more differentiated from traditional service, retail, and manufacturing businesses, it is not only important for the County to market existing conditions, but essential to create and foster an enduring image of quality. The globalization of the economy has made this imperative as less skilled, labor-intensive employment is increasingly forced to compete with foreign labor markets.

In some cases, even industries such as tourism and retirement communities, normally major employers of local labor forces, are forced to recruit lower wage employees from the Caribbean and elsewhere. This is brought on by low wage labor shortages in the immediate area, and it creates a self-sustaining trend toward wage differentiation. As a result, the underemployed of Beaufort County face the long term risk of stagnant or downward wage pressures combined with an escalating cost of living.

Quality development is one of the few defenses against this form of socioeconomic polarization. As acknowledged in the Economic Development Chapter, a quality development ethic attracts businesses with knowledge-based jobs, development that requires more sophistication, and brings in longer term investment. As such, the Comprehensive Plan plays a crucial role in economic development by establishing superior, sustainable standards for development.

e. Manage Growth Through Infrastructure Investment Policies and Plans

New development places an increased demand on community services such as police, fire protection and emergency medical services, and on publicly built facilities such as schools and roadways, necessitating an increase in local taxes. In order for the County to keep pace with the increasing demands for infrastructure and services required by new development, it is necessary to plan both the timing and location of infrastructure investments and service availability. To achieve this goal, the County will prioritize and plan its capital investments to focus on target areas in which services can be provided most efficiently and effectively, thereby reducing the need for new or higher taxes.

f. Recognize and Accommodate Constraints to Growth

In addition to the desire to preserve community character, protect the environment, foster economic development, and minimize fiscal impacts, there are various *constraints* to growth that must be understood and evaluated as part of the comprehensive planning process. In addition to the environmental

constraints, others include cultural diversity, coastal geography, vulnerability to natural hazards, and the presence of military installations. Where such constraints can not be fully and adequately addressed through general land use policies, they have been treated with targeted programs.

Priority Investment Areas

Transitional Investment Areas

Rural Investment Areas

Future Land Use

The Plan

4.3 A Two-Stage Growth Management Strategy

As discussed in detail in the previous section, there are six overarching public policy goals addressed in the Future Land Use Plan and interwoven into other chapters of the Comprehensive Plan:

1. maintaining a distinction between rural and developing areas;
2. preserving and protecting communities;
3. encouraging quality development;
4. fostering sustainable economic development based primarily on a quality environment;
5. investment in infrastructure and services to minimize the cost of government while facilitating development to accommodate anticipated growth; and
6. recognizing and accommodating basic constraints such as the military and physical geography.

The Future Land Use Plan provides a growth management strategy intended to further these six goals. This strategy minimizes regulatory burdens by providing a two-stage framework for land development: a base density of one unit to 3 acres throughout the County coupled with a system of flexible performance standards and incentives to achieve higher or lower densities in locations appropriate for denser development on the one hand or preservation on the other.

As set forth in the subsequent section, the County-wide base density of one unit to 3 acres may be exceeded in urbanized and transitional areas through specific performance standards detailed in subsequently adopted amendments to the Development Standards Ordinance. Development at higher than base density will not be allowed in rural areas, except where such development provides significant contributions to the stock of affordable housing as needed in that area and does not cause other adverse impacts. Density bonuses will be given on a case by case basis in Rural and Transitional Investment Areas.

The parameters governing allowable density are likely to change over time. It is therefore essential to review and adjust such parameters on a periodic basis. For this purpose, an information system will be developed and maintained in order to provide an annual evaluation of the effectiveness of this plan and to make adjustments in performance standards and incentives as necessary to promote growth in some areas and defer or deflect growth in other areas. The information system will be in the form of a spreadsheet model relating population growth trends to housing demand in the county's six planning areas, and it will indicate the need to adjust performance standards and incentives to achieve overall target densities in the planning areas and in zoning districts as specified in the Development Standards Ordinance.

As an implementation mechanism for the six goals set forth in the Future Land Use Plan, the County will be divided into three major areas of investment and growth management. These investment areas are areas of the County where public sector investment in infrastructure and services will be concentrated. The timing of investment in these areas is phased in order between Priority Investment Areas, Transitional Investment Areas, and Rural Investment Areas. The boundaries of these areas will be reviewed on a five year basis in conjunction with the mandated updates to the Comprehensive Plan.

Areas

☑ ***Priority Investment Areas:*** The areas that will receive priority investment for publicly funded infrastructure including parkland, schools, roads and also receive priority for sewer and water service expansion;

☑ ***Transitional Investment Areas:*** The areas of the County that will receive moderate capital investment and/or are likely to become priority investment areas within a 10 to 15 year horizon are likely to experience growth pressure; and

☑ ***Rural Investment Areas:*** The areas that are intended to remain rural for the foreseeable future and will receive a limited amount of public capital investment and basic services (except for the Purchase of Development Rights and Open Space acquisition) during a 15 to 20 year horizon.

There are four additional land use categories which are not part of the Priority, Transitional or Rural Investment Areas, but will be considered separately regarding infrastructure investment and anticipated land uses. These categories include existing Planned Unit Developments, potential sites for incubator development, public parks and lands with conservation easements, and federally owned (military) property and County airports, which are shown on the Future Land Use map. Each of these land use categories is addressed later in this chapter.

4.4 Priority Investment Areas

4.4.1 Overview

Priority Investment Areas are those areas of the County in which capital investment by the County receives a higher priority. Prioritizing capital investment in these areas will have the following results:

- allow the County to make effective and efficient use of its tax dollars in targeting where and when services will be provided;
- allow the County to make up current deficits and preferably get ahead of the pressure for infrastructure and services from new development;
- allow the County to phase capital outlay costs for infrastructure such as paving roads and building schools and fire stations; and
- allow property owners to phase their development plans to coordinate with the provision of infrastructure and services.

Priority Investment Areas are designated based on the following criteria:

Criteria for Priority Investment Areas

1. the area already has a concentration of public infrastructure and may have excess capacity in a number of or all community services and infrastructure;
2. the area already has a concentration of homes and businesses which may not be fully serviced, causing health and/or safety issues;
3. areas in which development is anticipated to occur within a five year horizon based on pending and approved development plans; and
4. there are few environmental constraints for development.

In terms of servicing new development with infrastructure and County services, it is critical that the County make effective use of existing infrastructure and target expansion in a cost effective manner. This is apparent in providing public sewer, water, and road capacity, and providing access to schools, libraries, fire protection, police and emergency services.

a. Existing or anticipated access to public sewer and water.

In order to maintain affordable and effective sewage treatment options for County residents, population densities must be increased in the areas already serviced by sewer lines. This must also take place in the areas that are in close proximity to existing lines before service is expanded to other locations in some areas. As indicated in the Community Facilities Chapter, the cost of providing sewer service to the County's residents will increase with the necessity to move to tertiary treatment levels in some areas. Increased population densities will partially offset the increase in cost of upgrading the existing plants and building new plants to tertiary treatment levels in some areas. Tertiary treatment of sewage effluent may be necessary for several reasons:

- allows for unrestricted use of effluent for irrigation purposes which benefits the groundwater supply;
- lack of available dedicated spray irrigation sites which can handle future effluent loads;
- a decreased ability to spray effluent during the "wet" seasons;
- the most viable future disposal options are wetlands treatment and unrestricted spray irrigation, both of which require highly cleansed effluent; and
- the lack of other viable options for effluent disposal.

b. Existing or anticipated transportation capacity to accommodate growth.

As discussed in the transportation chapter, Beaufort has natural, geographic and environmental constraints to its existing road network and future capacity; for many areas such as St. Helena Island and Hilton Head, there is one way in and one way out. U.S. Highway 278 to Hilton Head is already congested, a trend that will continue as a result of sprawling development patterns. The County can mitigate these traffic impacts by:

- upgrading roads and planning and constructing new roads, a costly alternative;
- concentrating growth in or near existing communities and towns that are serviced by public transportation and have good road access (the expansion of public transportation depends on a concentration of potential riders);
- minimizing the number of vehicle trips per day that the average family has to make by ensuring that the growth areas have convenient access to schools, stores, services and employment centers through affective land use planning; and
- controlling access points to state highways and county roads.

c. Access to public services such as schools, libraries, fire protection, police and emergency services.

As detailed in the Community Facilities chapter of the Plan, the future public costs of providing schools, fire protection, police protection and emergency services can be reduced if the use of existing facilities can be maximized, and services can be provided to areas of concentrated development.

d. Few environmental constraints.

In addition to these economic imperatives, Priority Investment Areas are also located in areas with relatively few environmental devel-

opment constraints. As indicated in the Natural Resources chapter of the Plan, the Lowcountry of Beaufort County has a beautiful but fragile landscape. The ACE Basin in Sheldon Township; the May, Okatie, and Colleton Rivers and Chechessee Creek which are designated Outstanding Resource Waters by the State; and various areas of historic resources and endangered species will be threatened by the impacts of future development. The impacts of new development can be minimized if that development is located in areas that have a lower degree of environmental sensitivity and also have the infrastructure to accommodate it. The exception to this is in those areas of the County which are already developed, and have health and safety issues that require them to be placed into a Priority Investment Area.

4.4.2 Development Types

Included in the Priority Investment Areas of the County are:

1. ***Community Preservation Areas:*** existing towns, communities and neighborhoods of the County that have a distinct character, quality and sense of place;
2. ***Residential and Light Commercial Areas:*** areas of the County which can support new development through existing or anticipated infrastructure and services, and have a minimal impact on the scenic and environmental quality of the natural resources;
3. ***Regional Commercial:*** areas of commercial development that will have a regional draw and impact, and will contain larger, more intensive uses; and
4. ***Research and Development Districts:*** areas of non-polluting, clean industries; high-tech industries; and low- or no-waste producing industries.

4.4.3 Community Preservation Areas

a. General Description

The County today is made up of existing communities in a variety of sizes and land uses, each with a different character; for example, Dale in Northern Beaufort, Corner Community on St. Helena's Island, the neighborhoods in central Lady's Island, the intersection of S.C. 170 and U.S. 278 in Okatie and the neighborhoods surrounding the Town of Bluffton. These communities, whether towns, communities or just neighborhoods are recognized as important communities by this plan. They are important to the sense of place of the County; important places to live, work and call home.

In order to preserve and protect them in the changing environment of the County, each of these communities as indicated on the future land use map should prepare a more detailed community plan and design guidelines to guide its future growth and development. As the text for the guidelines is designed, during the implementation process the boundaries for the Community Preservation areas may change in size and location. Some parameters for these community plans are presented below, however, specific details must be defined for each individual community in a subsequent phase of this planning effort. In order to preserve and protect the Community Preservation Areas, a Planning Area should be designated around each Community Preservation Area to allow for community input in the refinement of the boundaries and development of any neighborhood plans. Also, municipalities adjacent to the Priority Invest-

ment Areas should be included as part of the more detailed community planning process.

b. Recommended Land Uses

Community Preservation Areas will continue to have all the various residential and commercial types of land use that are currently present, usually with traditional development patterns and with clear distinctions between developed and rural areas. These include the following patterns that are especially encouraged: residential, commercial, mixed use, diversity of residential opportunities, infill development, connected greenway systems, bicycle and pedestrian facilities, compatible small scale commercial development, civic and institutional uses.

c. Development Standards

Generally, future development in these communities should occur under the following conditions:

- new development should infill around existing homes with similar density and character;
- greenway buffers should be maintained between existing communities and new communities that may develop around them;
- the character of the existing streets should be maintained or enhanced;
- sewer hook-ups should be required before developing existing lots in a Community Preservation Area (see Community Facilities Chapter);
- new homes should meet the same setback lines as those existing, along with similar heights and dimensions;
- new homes should have complementary architecture;
- commercial nodes, whether neighborhood or larger scale commercial, should be maintained at existing commercial uses and expanded at the discretion of the neighborhood plan;
- all of the siting and design standards identified for new commercial development in the mixed use centers, for both neighborhood and village commercial should be applied as appropriate to new commercial development within the Community Preservation Areas; and
- new commercial uses should be maintained at a size and scale consistent with the surrounding neighborhood.

The majority of the existing communities in the County either are serviced or are targeted to be serviced by public water and sewer. This, however is not the case in Sheldon Township with the communities of Dale, Sheldon and Big Estate. Due to the problems with ground water and the soil capacity for septic systems throughout this area, small, appropriate technology sewage treatment systems should be built to service each of the three areas when this becomes reasonable. A public water system should be provided if and when water quality declines in these areas or the population density warrants it. Due to the problems with ground water and the soil capacity for septic systems throughout this area, small appropriate technology sewage treatment systems should be built to service each of these areas when this becomes reasonable.

4.4.4 Residential and Light Commercial Areas

a. General Description

Residential and Light Commercial Areas are those areas of the County in which new, large scale and infill development is encouraged. These will not be areas of homogenous development, either single use (residential) or of one size or scale. The Residential and Light Commercial Areas defined on the future land use map are areas that will, when built out, contain a number of existing towns and future communities and neighborhoods tied together by central shopping and employment areas. In order for new development to fit in with the old, and new communities to look like Beaufort County communities, specific performance standards will be prepared within the revised Development Standards Ordinance that will guide developers in the design of future projects.

These development plans should indicate in specific terms where the various land uses should be located within the matrix of residential neighborhoods. The goal in these areas is to allow for a variety of types of housing in diverse neighborhoods, all with easy access to local services, workplaces and shopping.

b. Recommended Land Uses

Residential and Light Commercial areas will have a mix of land uses, from residential to shops, services and businesses. These uses and the surrounding neighborhoods will also have varying densities and lot sizes. The residential neighborhoods would also include such commercial locations as neighborhood convenience stores, dry-cleaning outlets and small offices in central locations.

The village commercial uses such as hotels and motels, neighborhood grocery stores, gas stations, restaurants, or office buildings should be located in a central and easily accessible location that could service several neighborhoods. The village commercial area will have an emphasis on walkability, be serviced with sidewalks and bicycle lanes throughout, and have moderate speed traffic on the roads servicing the village center. Access from the surrounding neighborhoods is safe and easy on foot or by bicycle as well as by car.

c. Residential Development Standards

- base density of one unit per 3 acres;
- density increases on a site by site basis to 4 units per acre based on specific site design, development standards and mitigation techniques or transfer of development rights from rural sending areas;
- density increases up to 12 units per acre for developments that must meet tar geted needs for affordable housing as specified in the Affordable Housing Chapter, revised Development Standards Ordinance, or other ordinance implementing affordable housing policy;
- a mix of housing types and densities provided in each neighborhood;
- clustering and mixed use centers to minimize infrastructure and environmental impacts and promote access to service and facilities;
- integrated bike and pedestrian trails to link schools, shopping centers, village centers, government buildings, business parks services, libraries and parks;
- interconnected roads in a grid or modified grid pattern are encouraged, cul-de-sac streets and large, gated developments should be discouraged;

- variations in lot sizes and frontage dimensions allow a range of house sizes and costs along with variety in the streetscape;
- set asides for common green space or park land, or a fee to the County in lieu of providing land;
- maintenance of existing mature trees on site and provide street tree plantings;
- streets that encourage traffic calming and reinforce the neighborhood character;
- sewer and water hook-up to existing lines, or laying dry lines for ease of future hook-up;
- gated communities will be limited to those locations where they will not interfere with the interconnection of major streets or in areas where they do not limit access to waterfront locations; and
- affordable housing will be encouraged through density bonuses for up to twelve units per acre.

d. Mixed Use Development Standards for Neighborhood Commercial

Commercial development will be allowed on a limited basis in residential areas. The commercial uses should be of a size, scale and type that will serve the surrounding neighborhood, but not be of a size or type that create a negative traffic impact on the quiet and safety of the surrounding residential homes.

Recommended uses include:

- small-scale retail such as convenience stores, dry cleaning outlets, and delis;
- bed-and-breakfast establishments;
- small scale offices; and
- multi-use complexes limited in size, scale and design to those buildings that emulate the character of the surrounding residential neighborhood.

Scale and siting considerations:

- neighborhood commercial uses should be sited along major residential streets: if they are sited along state highways or designated evacuation routes, they should have no direct access curb cuts to those routes, but have access off a connecting street: this requirement is intended to minimize the proliferation of curb cuts along major routes within the County, maintaining critical road capacity (see Transportation Chapter for more information);
- commercial uses should be sited in nodes, however the size of these nodes should be limited to ensure their compatibility with the primary residential use of the neighborhood;
- neighborhood commercial uses should not exceed a scale that will cause levels of traffic which threaten the quiet and safety of the residential neighborhood;
- neighborhood commercial uses should not exceed a scale that requires parking out of scale and character with residential uses; and
- multi-use complexes should be designed to be compatible with buildings of residential size, scale and character, and may be composed of a variety of smaller buildings or designed as one articulated building.

Development Standards:

- commercial uses should be located in a building of the size, scale and architecture of the surrounding neighborhood;

- signage should be in keeping with the character of a residential neighborhood and directed to the pedestrian: e.g. small in size, direct lighting and located either on the building face or on a hanging sign perpendicular to the building;
- lighting should be of an intensity compatible with the neighborhood: e.g. low level and shielded from neighboring uses;
- parking lots should be reused and renovated where possible rather than demolished;
- parking lots should be landscaped with trees within the lot and trees and a landscape buffer should surround the lot;
- a portion of the parking requirement for the commercial use may be accounted for along the street frontages either as parallel or diagonal parking; and
- dumpsters should be screened and covered at all times.

The following uses and design considerations are generally incompatible with residential neighborhoods:

- drive-through restaurants;
- direct access of the commercial uses to state highways or designated evacuation routes;
- deeper facade setbacks from the street than surrounding residential homes;
- parking to the front and side of the building; and
- trailer storage or outdoor storage (unless storage of plants are related to a nursery or commercial greenhouse operation).

e. Mixed Use Development Standards for Village Commercial

While neighborhood commercial can service small scale commercial needs in the community, there is a need for a variety of larger village centers to service multiple neighborhoods within any area of the County.

Recommended uses include:

Village commercial areas, can provide locations for uses such as medium- to large-sized grocery stores, bars, restaurants, gas stations, small hotels, medium-sized offices and local hardware stores.

Scale and Siting Standards:

Village Commercial areas can be located in areas that meet criteria to be detailed in the revised Development Standards Ordinance including the following:

- the proposed area is located in close proximity to a sufficient number of existing or planned residential neighborhoods to support the planned level of commercial development;
- direct vehicular, bicycle and pedestrian access between the proposed village center and surrounding neighborhoods;
- be located in an area with existing or planned public and government facilities in order to create a true community center;
- have a mix of uses including an emphasis on affordable housing; and
- be located in an area of low environmental sensitivity that limits development impacts on existing natural and cultural resources.

Development Standards:

Development standards should be prepared for the village commercial area that include the following:

- building heights should not exceed three stories;
- facades should be set close to the street next to a sidewalk to reinforce village character;
- parking should be located to the side and rear of the buildings;
- signage should be restricted in size, number and location: wall mounted signs will reinforce a pedestrian village character and are therefore preferred;
- easy pedestrian and bicycle access should be provided between adjacent commercial uses and parking lots and those uses;
- existing historic structures should be reused and renovated where possible rather than demolished;
- parking lots should be landscaped with trees within the lot and trees and a landscape buffer around the lot: landscaping around the edges of the lot should be dense enough to provide a visual buffer to surrounding residential uses, and should, where possible be incorporated into the stormwater management plan for the site;
- dumpsters should be screened and required to be covered at all times;
- franchise architecture should be discouraged: franchises should locate in buildings designed to reflect the architectural character of the surrounding community; and
- residential apartments on the second floor of commercial uses should be encouraged as a way of providing affordable housing throughout the community (see Affordable Housing Chapter for more information).

The following uses and design are incompatible with village commercial areas:

- buildings that exceed three stories in height; and
- uses that require large acreage for parking.

A residential density of up to four units to the acre may be obtained in village commercial areas. An increase in density above four units to the acre may be achieved through the provision of affordable housing units for a portion of the residential units. Affordable housing units should be in the form of scattered sites, not as large, uniform complexes. Individual units may be sited on parcels as small as 1/8 acre in size with sewer hook-up.

The design standards for mixed use centers should have a high degree of flexibility in terms of development and design standards, but all approved development should be required to maintain a mix of civic, cultural, commercial, residential, recreational and educational uses where appropriate. The standards for mixed use centers which will be developed in the revised Development Standards Ordinance should also include guidelines for the optimum and maximum size and scale of new Mixed Use Centers, to ensure compatibility with existing communities throughout the County.

The mix of uses between residential and various intensities of commercial development will be essential in ensuring the functionality of the designed community. As such, there should be a balance between residential neighborhoods, small scale, neighborhood commercial, and large scale commercial uses. The siting and design standards for each of

these uses is critical to the design of the new community.

4.4.5 Regional Commercial

a. General Description

Along with the neighborhood commercial and village commercial uses within the existing Community Preservation areas and the Residential and Light Commercial areas, there is a need to accommodate a higher intensity of commercial use which, for the purposes of this plan is termed regional commercial. Regional commercial uses are those uses due to their size and scale that will attract shoppers and visitors from a larger area of the County and outside of the County. These uses are also less compatible with the village commercial scale due to the physical size of the buildings, the amount of parking required around the buildings and the amount of traffic that they generate.

Regional commercial nodes are designated in three areas:

- at the intersection of Highway 21 and 170 on Port Royal Island;
- atthe intersection of S.C. 170 and U.S. 278 in the Okatie Planned Unit Development plus additional property around the intersection; and
- in the existing commercial development area along U.S. 278 leading to Hilton Head.

These are all areas that have either already attracted this level and intensity of use, or have been approved for this type of development. These areas also have the existing road access to accommodate the traffic impacts, and due to their locations on major highways serve a large population both within and outside of the County.

b. Recommended Land Uses

The uses preferred in these locations are:

- those commercial uses which require large buildings (e.g. 45,000 to 80,000 sq.ft. of retail or more than 2 stories in height) or large parking lots surrounding the buildings;
- regional malls;
- multi-use complexes of retail and office space;
- multi-plex cinemas; and
- larger hotels and office buildings.

c. Development Standards

Development standards should be included in the revised Development Standards Ordinance for Regional Commercial uses including:

- off-road connections must be provided between adjacent parcels for auto and bike/pedestrian use;
- sidewalks and bike/pedestrian paths should be required to connect with residential areas;
- vegetated buffers should be located along roads, and between uses;
- parking lots should be landscaped with trees within the lot and trees and a landscape buffer around the lot including the frontage area along the road: landscaping around the lot should be composed of existing native vegetation where possible;
- native vegetation should be maintained where possible, particularly mature trees on the site (see Natural Resources Chapter for more information on significant trees); and

- develop and implement a stormwater management plan that cleans stormwater runoff on site (see Natural Resources Chapter for more information).

4.4.6 Research and Development Areas

a. General Description

Research and Development Areas are designated to provide a location for clean, non-polluting industries to locate in the County. Businesses such as these are extremely important to Beaufort County's economy, providing essential diversification for the existing base of tourism, retirement and second home service industry jobs and the military.

Four locations in the County have been defined specifically for Research and Development Areas. These sites have access to sewer hookups in the near future and have direct access to state highways. The sites are:

- in the existing park in the north central portion of Port Royal Island;
- in the existing park located at Yemassee;
- within the Regional Commercial designations along U.S. 278 in Southern Beaufort and the intersection of U.S. 21 and U.S. 17 on Port Royal Island; and
- on sites within the Residential and Light Commercial Areas meeting specific siting and development standards.

Apart from larger scale business development parks, the plan also designates two locations for business incubator parks: one to the west of the LOBECO Products plant at Dale and the second at the Corner Community on St. Helena Island. A business incubator park includes buildings that may accommodate small start-up businesses and these same companies as they grow and develop into independent businesses.

b. Recommended Land Uses

The recommended uses for these areas are:

- high-tech industries; and low or no-waste producing industries. These uses should not create significant amounts of traffic which may cause a health and safety issue for surrounding residential neighborhoods;
- uses in business incubator parks including small and "start-up" light-manufacturing and service industries and attendant services; and
- transportation-related, communication and wholesale uses are also recommended.

c. Development Standards

- sites should maintain as much existing vegetation as possible and minimize large expanses of maintained lawn area;
- sites must have on-site stormwater retention and an implemented management plan for cleaning stormwater on-site;
- adequate buffering must be provided between industrial and residential and commercial uses within the Residential and Light Commercial areas;
- signage located along the access road should be of moderate size, well landscaped and of the monument type;
- direct access must exist to a state highway or state secondary road;

- sufficient buffering from neighboring residential uses;
- a lack of environmentally sensitive areas on site or in the vicinity of the site that could be adversely impacted by the development; and
- sites should be serviced by water and sewer unless they are essentially dry uses.

Additional development standards relating to "smart sites" and environmental quality as set forth in the Economic Development Chapter should be developed for the Development Standards Ordinance.

4.5 Transitional Investment Areas

4.5.1 Overview

Transitional Investment Areas are areas within the County which are likely to become Priority Investment Areas within a 10 to 15 year horizon, and will therefore receive moderate capital investment from the County during the next 5 to 10 years. It is in these areas that developers and property owners may accelerate development by financing the full cost of their own infrastructure and service needs.

4.5.2 General Description

While new mixed use areas are encouraged primarily in the Priority Investment Areas, proposals for such denser development in the Transitional Investment Areas will be reviewed but under greater scrutiny. This increased scrutiny is achieved through:

☑ ***Variable review periods for Priority vs. Transitional areas:*** In the Priority areas, large residential subdivisions and mixed use developments will be by-right with design and performance standards. In the Transitional Areas, parcels which wish to increase density over the by-right amount and mixed use developments will continue to require the PUD process or enter into a Development Agreement with the County.

☑ ***Detailed site inventory and plan analysis:*** For the development of mixed use centers in the Transitional Areas, both the Planning Department and developers will be required to provide more detailed information for the evaluation of development impacts on existing infrastructure and services as well as the environment. This includes, on the Planning Department's part, a traffic model, wetlands and sensitive areas mapping, readily available information on existing facilities capacity, and development trends. On the part of the development applicant, increased information will be required such as a traffic study, a plan for the protection of water quality and existing conditions analysis on the site including wetlands delineation and the identification of

significant tree stands and existing site vegetation.

a. Recommended Land Uses

Similar to Priority Investment Areas.

b. Development Standards

The zoning density of Transitional Areas will be set at a base density (as defined in Section 4.2) of one unit per 3 acres, with increases in density on a site by site basis to 1 unit to the acre based the purchase of transferable development rights and density bonuses for specific site design and development standards. For higher density developments of over one unit to 3 acres, those new developments with residential or mixed uses will require a PUD process.

☑ In order to develop at a higher density in the Transitional Area prior to becoming a Priority Area, development in the Transitional Area will be required to pay up front for the full costs of bringing services and infrastructure to the new development such as:

- sewer infrastructure;
- road infrastructure;
- school construction; and
- fire, EMS, library, and parks services.

All the design standards and use restrictions which are in place in the Priority Investment Areas will also hold true for Transitional Areas. New developments will be required to meet the same design and development standards and face the same restrictions on commercial development.

4.6 Rural Investment Areas

4.6.1 Overview

Outside of the developed areas in the County lies the rural countryside that gives Beaufort County much of its character and sense of place. There are several issues relating to the future development of this area:

1. County residents repeatedly expressed the desire to protect this rural character and preserve their way of life without widespread suburban development and commercial strip development lining the highways.

2. The soils in Beaufort County are generally of limited to poor quality for accepting septic system effluent. Since the fiscal realities of the sewage treatment plants require concentrating future growth in the areas surrounding the plants and minimizing the expansion of the lines outside of the growth areas, the rural areas of the County will have to rely on septic tanks or other on-site appropriate technology for the foreseeable future. Soils capacity for septic systems in these areas average approximately one unit per 3 acres. While some soils have a higher capacity, most soils have a much lower capacity. As indicated in the Natural Resources Chapter, the issue with soils capacity for future development is the potential for direct impacts to surface and ground water as the soils capacity is exceeded by an increasing density of septic systems.

3. In order to protect the capacity of the existing roads and highways, curb cuts must be minimized; thus, retail commercial uses should be minimized, and other commercial uses restricted along the highways.

For these reasons, the Rural Service Areas and Resource Conservation Areas are recommended.

4.6.2 Rural Service Areas

a. General Description

As detailed earlier in section 4.2.2, to ensure the future economic viability and continued desirability of Beaufort County as a destination place and a place to live and work, it is crucial to maintain a distinction between rural and developed areas in the County. The reasons for this are based on environmental quality, farming, timbering and fishing, fi-

nancing of public infrastructure, evacuation, and heritage. In order to maintain the distinction between rural and development areas, the County must seek to discourage large scale and incompatible development in the rural areas—the issue is managing growth.

Rural areas within the County can be protected and preserved through the application of performance standards, transfer of development rights, purchase of development rights, voluntary conservation easements and other such mechanisms to achieve the previously described public policy goals.

b. Recommended Land Uses

Current zoning densities in rural areas are in fact urban densities. Preservation of these rural areas requires density reduction to appropriate rural levels. In order to achieve a compatible level of development in the rural areas, it will be necessary for the overall density of the development allowed under current regulations to be reduced.

Rural Service Areas will continue to have virtually all the various residential, commercial, and institutional uses that are currently present. These include single family and multifamily residential, light retail and service-oriented businesses, and institutional uses at a scale compatible with rural development patterns.

The base density (as defined in section 4.2) of the Rural Service Area will be set at a density of one unit per 3 acres, unless otherwise established through subsequent zoning. This essentially places all landowners in the County on a level playing field. Further density reductions in rural areas will be achieved through the use of the recommended target programs.

Rural areas should be given every advantage to stay in their present state and conversely, be faced with significant disincentives for developing ahead of the public's ability to pay for added infrastructure and services. In addition, the design and development standards for new developments should reflect the character of the rural areas.

Rural Service Areas will not be targeted with the development of public infrastructure, nor should they be provided with sewer service expansion. Withholding of infrastructure in the rural areas has the potential to reduce development pressures in rural areas by clearly stating the timing and location of public infrastructure within the County.

c. Development Standards

☑ The base density of Rural Service Areas will be set at one unit per 3 acres. Development in the rural service areas will be subject to the following:

- a base density of one unit per 3 acres unless otherwise specified in particular zoning districts;
- open space requirements as may be developed for the revised zoning ordinance;
- Transfer of Development Rights as may be developed for the revised zoning ordinance; and
- appropriate wastewater treatment.

Soils:

The cumulative capacity of soils in these areas to absorb septic system effluent is estimated at one septic tank per three acres (see Soils Map, Natural Resources chapter). Setting the density of residential development at this level will help to protect

the quality of the waterways in the County from potential septic contamination.

Clustering new residential homes will allow septic systems to be placed on the best soils available. In addition, as indicated in the Community Facilities chapter of the Plan, each home site should have two approved perc sites, one for immediate and one for future use.

Soils vary in their ability to filter wastes from the septic system effluent before it reaches the groundwater. In Beaufort County, a wide range of soils are commonly found within any parcel of land. By using common septic systems, the drainfields can be located on the best quality soils, providing the least potential for groundwater pollution. The total amount of land used for drainfields would remain the same. In order for shared systems to be permitted by SCDHEC, public or corporate ownership must be established and approved as part of their approval process.

Open Space:

When a parcel of land is developed under the cluster provision, a portion of the land remains as "open space." This open space will have the following characteristics:

- the open space land can be used for the following purposes: farming, forestry, nurseries, pasture, recreation and other uses which do not include the building of a permanent structure except those related to a farming enterprise;
- the open space can be dedicated to the County as a part of a public park or greenway, to a land trust, sold or leased to a farmer (or retained by a farmer or large landowner during the subdivision process), and/or held by a homeowner's association; and
- since the development rights conferred by zoning have been used by homes in the cluster, the open space can not be used for future development.

Since the allowable density of the site has been transferred to one portion and the remainder is open space, the open space no longer holds any development rights. This open space may be held by a private landowner, such as a farmer; by the homeowner's association; deeded by conservation easement to a land trust; or sold for a non-development use. In all cases, the open space parcel must have a development restriction entered on the deed.

Clustering of homes results in the preservation of open space and rural character and protects environmental quality:

- clustering development reduces subdivision road lengths, therefore reducing development costs and future road maintenance costs;
- clustering reduces impervious surfaces, resulting in decreased stormwater runoff;
- clustering reduces the removal of existing vegetation, resulting in decreased stormwater runoff; and
- clustering protects open space, providing possibilities for wildlife habitat and continued or future farming operations.

☑ In order to protect rural character and achieve the other benefits of clustering, a minimum of 50 percent of the site should be set aside as open space. The location of this open space on the site will be dependent on the significant resources of the site, such as

❶ ***Agricultural land and prime agricultural soils:*** In order to protect agricultural land or prime agricultural

soils, open space should, as much as possible remain in contiguous tracts and share a common boundary with contiguous blocks. This will ensure that the agricultural land set aside by clustering will remain available and viable for agricultural use. The preservation of open space is a key component of protecting the rural areas of the County.

2. ***Significant wildlife habitat:*** Areas of open space to be saved may take the form of large blocks if attempting to protect a particular habitat, or wind throughout the site if attempting to join wildlife corridors from off-site.

3. ***Mature forest stands, particularly live oaks:*** The open space should protect mature tree stands where they occur, and secondarily link them with adjoining open space belts.

4. ***Soils and wetlands:*** In many cases the most suitable soils will be used for septic system sites. Both homes and drainfields should be located as far as possible from concentrations of tidal and non-tidal wetlands.

5. ***Adjacent open space:*** Where open space has been preserved on an adjacent property, every effort should be made to connect open spaces into a network of greenways. and

6. ***Scenic views and water access:*** Where scenic views and access to the water are of critical importance, priority in preserved open space should be given to the areas containing scenic views.

4.6.3 Resource Conservation Areas

Resource Conservation Areas are those areas which are not accessible by land and are environmentally sensitive due to their soils and/or location. Resource Conservation Areas are primarily those areas which have the following characteristics:

- are barrier islands and islands within the major waterways of the County;
- have significant natural resources;
- have significant archaeological resources;
- are difficult to access; and
- pose a higher potential for water quality impacts from septic systems.

Due to their high sensitivity and poor access, the following restrictions apply:

- the density of these areas is limited to one unit per 10 acres;
- uses are limited to single family residential, park and recreation and government uses;
- generally clustering is not recommended;
- the removal of existing vegetation, particularly native vegetation should be minimized; and
- the maintenance of a 100 foot buffer along all waterways is critical.

Islands smaller than 10 acres will retain uses to be specified in the revised Development Standards Ordinance.

4.7 Other Land Use Categories

Other land use categories shown on the Future Land Use map include the following, which are generally self-explanatory:

a. Existing Planned Unit Developments

Existing PUDs approved by the County are shown on the Future Land Use map and uses in these areas are governed by the PUD agreement in effect upon approval.

b. Incubator Development

(see discussion of Research and Development Areas in this chapter and Chapter 9, Economic Development).

c. Parks and Conservation Easements

State and County parks and conservation easements obtained through the Open Land Trust and ACE Basin are shown on the Future Land Use map.

d. Military Property and County Airports

The location of military installations and County airports are shown on the Future Land Use map.

4.8 Targeted Programs

As noted earlier in this chapter, there are various constraints to growth that must be understood and evaluated as part of the comprehensive planning process. These include soil characteristics, wetland development restrictions, coastal geography, vulnerability to natural hazards, and the presence of military installations. Where such constraints can not be fully and adequately addressed through general land use policies, they have been treated through targeted programs. Each of these programs is described below:

4.8.1 Family Exemption

Family compounds are a development pattern that has evolved over the years in Beaufort County mostly in the rural areas. This plan facilitates the continued creation of family compounds for two reasons:

- preservation of a cultural pattern that is critical to our Lowcountry heritage; and
- provision of affordable housing in rural areas.

☑ So that families can continue to build in traditional, affordable patterns, the following patterns are recommended:

❶ Family members may subdivide or lease land in all residential zoning districts for additional dwelling units to an overall density of two units per acre through a simplified subdivision process. Subdivision will require that each new lot contain sufficient space for the repair or placement of septic absorption trenches or disposal areas. Subdivision regulations pertaining to families should do everything possible to allow families to build in traditional, affordable patterns, while also considering environmental constraints. For example, while setbacks from the OCRM critical line are necessary, setbacks between houses and minimum lot sizes may not be necessary, apart from meeting fire and other safety concerns.

❷ In drafting future regulations to implement this provision, the County should seek to prevent abuse by landowners who may utilize the exemption to sell portions of land outside the family. In keeping with this goal, the County should carefully define the word "family;" consider

provisions that discourage the immediate sale of subdivided parcels outside the family; and consider provisions that limit the density bonus of two units per acre to parcels of a certain maximum size.

4.8.2 Transfer of Development Rights

The County shall investigate the feasibility of a Transfer of Development Rights (TDR) program, and anticipates adoption of a program in the Development Standards Ordinance. The County may also develop other incentive programs to provide an array of options to developers and land owners.

The purpose of the TDR program shall be to contribute to the preservation of open space and to safeguard environmentally sensitive areas through the transfer of development rights from such areas to other areas more suitable for development. In the context of more restrictive zoning throughout the county, TDRs may also be used with other performance standards and incentives for expanded development rights otherwise consistent with the Comprehensive Plan.

Developers in the Priority and Transitional Areas can purchase development rights from designated sending zones in the rural areas to increase the number of units that they may build on their lands. Sending areas should be linked to specific receiving areas to minimize the massing of development in any particular area of the County.

In order to be successful, a TDR program must be designed to enable the landowner to realize reasonable profit from the sale of the development right, and the developer who purchased the right must be able to realize a profit from the construction of the unit within the development area. This includes requirements for a streamlined administrative process for transferring the rights from the seller to the buyer, density incentives for the developer, and assuring the availability of infrastructure and services for the development in the receiving area.

4.8.3 Purchase of Development Rights

Separately or in conjunction with the TDR program, the County will fully develop its Purchase of Development Rights (PDR) program. The purposes of a TDR program and a PDR program are identical, but a PDR program has some advantages including:

- ***accountability*** - funds can be targeted to protect those lands that are most important to preserve from a public perspective;
- ***certainty*** - once a program is established, public funding for the purchase of development rights will be more predictable than private demand for transferable development rights;
- ***flexibility*** - the needs of each eligible landowner can be addressed individually because each transaction involves a separate negotiation; and
- ***equity*** - unlike a TDR program, the amount paid under a PDR program is determined by the development value of the lands protected.

PDR programs have a singular disadvantage: there is never enough money in any one year to protect all of the land desired. For this reason, the available funds must be spent with great care.

Thus, the purchase of development rights will be governed by a set of criteria defined by County ordinance and governed by an ap-

pointed body designated by the County Council. The criteria should focus PDR program funds on removing development rights from critical rural parcels. Such parcels are large and strategically located; if developed, they can precipitate the development of surrounding rural lands. If protected, the same parcels can stabilize rural land values, perpetuate traditional rural land uses like forestry and agriculture, and help establish an edge between the County's rural and urban areas. Expenditures of PDR funds should be consistent with the County's Greenway and Open Space Acquisition Program, detailed in the Natural Resources chapter.

Once a PDR program is fully developed, there may be opportunities to obtain and utilize some state and federal monies to help achieve the program's purposes. But to protect significant amounts of rural land and give confidence to rural landowners with equity concerns, it will be necessary to establish a core of predictable local funding.

4.8.4 Conservation Easements

At present, voluntary easements have protected significant portions of the rural lands in the ACE Basin and some sites scattered throughout the County. This program should be further studied by County staff and coordinated with the efforts of the TDR and PDR programs and the Open Lands Trust. The Planning Board should review staff recommendations and consider such programs.

4.8.5 Development Agreements

The Development Agreement Act was adopted by the State of South Carolina in 1993, as a tool to give developers a vested right during the term of the agreement to proceed according to land use regulations in existence on the date of the agreement. The Act authorizes building agreements for long-term development of large tracts containing a minimum of 150 acres of highland. The goals of the Act are to encourage a stronger commitment to comprehensive and capital facilities planning, to ensure adequate public facilities are provided, and encourage efficient resource use thus reducing the development costs. The time frame for developing property under an agreement must be at least five years or more. Development Agreements must be consistent with the local comprehensive plan and land development regulations.

The County should utilize the full authority of the 1993 Act in development agreement negotiations. Any development agreement must be consistent with the provisions of the Comprehensive Plan and land development regulations which are implemented following plan adoption. Development agreements are discouraged in areas where development impacts may affect the provision of essential services and available infrastructure. The process by which the agreement is negotiated must be a public process to ensure that potentially affected citizens are notified and aware of any potential impacts.

4.8.6 Rural Business Option

At present, home occupations are allowed in all areas of the County. A home occupation is currently defined as "an occupation conducted in a dwelling unit by the resident family." It does not allow an out-building or accessory structure to be used for the business, no more than 25 percent of the floor area of the home, or more than two non-family employees.

In order to provide greater flexibility in the rural areas for small businesses to develop, the Rural and Transitional Areas will have an option for a rural business. Examples of rural businesses might include a small scale retail or wholesale nursery, water related products and services (crab pots, cast nets for small craft construction, a specialty food production center, or a recording studio).

The rural business should have the following features and constraints:

- ☑ the parcel that the business is located on must be owner-occupied;
- ☑ the business can be located in an accessory structure;
- ☑ the accessory structure must be compatible in size and design with rural outbuildings in the area;
- ☑ limits should be placed on the amount of outdoor storage allowed for the business;
- ☑ the number of employees allowed will be limited to minimize the traffic impact;
- ☑ uses with outdoor storage must be fenced and buffered with landscape plantings; and
- ☑ the home and business must be located on a minimum lot size.

As these recommendations for the Rural Business Option are implemented, consideration should be given to the allowance of structures associated with water resource-based industries (shrimping, crabbing, oystering, etc.). Development criteria should be thus implemented to ensure compatibility for such industries.

4.8.7 Special Overlay

a. Cultural Protection Overlay

The traditional cultural landscape and its physical setting on St. Helena Island is a treasure of national significance. As one of Beaufort County's last substantially rural Sea Islands and the center of its most notable concentration of Gullah culture, the island requires an additional level of development standards to protect this important resource. This is especially challenging given its geographic situation between major traffic generators.

Two tools proposed to protect the island are the Cultural Protection Overlay and the Public Market District. The Cultural Protection Overlay encompasses the entire island and acknowledges its historic cultural landscape and the sense of community that has existed on the island for 300 years. The Public Market District includes the existing commercial area around the Corner Community on U.S. 21. As the revisions to the Zoning and Development Standards Ordinance are developed, it will be necessary to fully evaluate what defines St. Helena Island as a significant traditional cultural landscape, as well as to assess the contribution of the Gullah culture, in order to develop specific provisions within the overlay district that will result in effective long-term protection for the culturally significant aspects of the island.

The following also apply to development on St. Helena Island in addition to the provisions set forth for Rural Service Areas:

- ☑ new closed-gated communities, which are antithetical to the cultural heritage of St. Helena Island, shall be discouraged;

☑ historic points of public access to the water and other locations on the island should be identified and protected by outright purchase or donation to the County, or by purchase or donation of easement to a local land trust; and

☑ the Development Standards Ordinance shall be amended to provide specific performance standards or incentives to carry out the intent of this section.

b. Public Market District

While the Rural Business Option remains valid for St. Helena Island and will provide a variety of opportunities for owner-occupied parcels, the existing Corner Community provides an opportunity for a mixed use district which can accept residential, commercial and incubator businesses in the context of an important cultural community.

In the Corner Community, a Public Market District will be established. Its purpose is to create a pedestrian-friendly commercial and community center that retains the character of a rural crossroads, with open green spaces, scenic vistas, a minimum of asphalt paving, preserved historic structures, and community gathering places. The boundaries of the actual district are not defined at this time, but will be designated as changes are made to the Development Standards Ordinance.

In order to minimize the traffic congestion along U.S. 21 and mitigate the need to widen the road, the community should consider planning a parallel route through the Corner Community that would serve as the Community's second street.

Provisions for the District are as follows:

- Uses permitted are neighborhood commercial, residential, and any manufacturing that is compatible with other permitted uses; accessory units are permitted.
- Commercial uses should be of a size, scale, and type that will serve people who currently travel nearby roads; but not of a size, scale, and type that will generate a substantial amount of additional traffic.
- To prevent new buildings from dominating the community's historic structures, the footprint of new buildings visible from the street can be no larger than 5,000 sq. ft., excluding porches; building height can be no greater than two stories.
- To slow traffic and create a pedestrian-oriented public space, commercial and manufacturing buildings on U.S. 21, Dataw Road, Martin Luther King Drive, and new roads must be set back at least 20 feet, but no more than 50 feet.
- To preserve the vista down Old Polawana Road, all buildings there must be set back an appropriate distance, with a vegetative screen that makes them invisible from U.S. 21.
- Parking in front of new commercial and manufacturing buildings must be limited to one row, perpendicular or parallel, parking lots must be in the rear of the buildings or, if that is not possible, along the side.
- To make home ownership more affordable and to make it easier to walk within the community, lots can be as small as 7,000 square feet (one-sixth of an acre) with two percolation sites; small lot frontages are encouraged.

- Existing historic structures should be rehabilitated rather than demolished or drastically modified; also, consideration should be given to revising the County's Historic Preservation Ordinance to provide protection for historic structures at the Corner Community.
- New buildings should relate in material, scale, and form to the traditional architecture of St. Helena Island, and their design should facilitate the creation of a pedestrian-friendly community center. A "voluntary design manual" should be written to encourage builders to use specific design elements such as traditional St. Helena building materials, porches, front entrances, front windows, etc.
- Parking lots should be screened with vegetation, smaller than required at peak demand, and broken into small areas wherever possible, parking lot surfaces should be permeable wherever possible; parking lots can be shared by more than one business, and on-street parking will count toward meeting commercial parking requirements.
- New streets should be laid in clear, direct patterns, and connect wherever possible with existing streets; new streets should be as narrow as possible, designed for slow speeds, and have a walking path along at least one side, new streets should remain unpaved until traffic volume necessitates paving.
- A walking path should be included as part of each newly developed property, paths should connect to paths on adjacent properties, paths can be permeable, including grass, but in areas that are primarily commercial they should be designed to accommodate wheelchairs and baby carriages.
- Consideration should be given to landscaping standards that are more stringent than the County's current tree ordinance; these might include requiring more native overstory streets in parking lots, larger tree protection zones, and the preservation, replacement, and planting of native overstory trees near roadways.
- Signs should be simple, clear, and of modest size and height; businesses located close together should coordinate their signs on a single panel; lighting should be low level, shielded from neighboring uses, and incandescent wherever possible.

The following restrictions will apply in the District:

- ☑ no "trademark" architecture for franchise businesses
- ☑ no drive-through restaurants
- ☑ no visible outdoor storage (unless of plants related to a nursery or commercial greenhouse operation) or trailer storage.
- ☑ access points to major roads must be no less than 500 feet apart, or one per lot; access points to minor roads must be no less than 200 feet apart, or one per lot.

c. Military Planning Area

With the anticipated growth for the Port Royal Island area comes a recognition that land use in the vicinity of the Marine Corps Air Station must be carefully monitored to ensure that future development is compatible with base operations. The Marine Corps Air Station is one of the top employers in the area, and the military presence, including Parris Island and the Naval Hospital, contributes over 50 percent of the economy north of the

1:235854

Legend

PRIORITY INVESTMENT AREAS
- Community Preservation
- Regional Commercial
- Research and Development
- Residential/Light Commercial

TRANSITIONAL INVESTMENT AREAS
- Transitional Areas

RURAL INVESTMENT
- Resource Conservation
- Rural Service Areas

CLASSIFICATIONS
- Incubator Development
- Park and Conservation Easements
- Military Property and County Airports
- Military Planning Areas
- Existing Planned Unit Development
- Class 1 Roads

N
W E
S

YEMASSEE
SHELDON
GARDENS CORNER
DALE
LOBECO
MCAS
LADY'S ISLAND
BEAUFORT
PORT ROYAL
PARRIS IS.
ST. HELENA ISLAND
HUNTING ISLAND
FRIPP ISLAND
PRITCHARDVILLE
BLUFFTON
MAY RIVER
HILTON HEAD ISLAND
DAUFUSKIE ISLAND
PORT ROYAL SOUND
ATLANTIC OCEAN

Beaufort County
Future Land Use
MAP 7

Prepared by Beaufort County GIS Department

Broad River. Over the past several years, the Beaufort County government has supported the plans and objectives of the Marine Corps Air Station (MCAS), and has worked in cooperation with the MCAS officials to ensure coordinated planning and development strategies. The MCAS-Beaufort has developed a program whose purpose is to achieve land use compatibility between the air station and the neighboring community, known as the Air Installation Compatible Use Zone or "AICUZ" program. The principal objectives of the program are to:

- ☑ safeguard the safety, health, and welfare of local civilians and military personnel by discouraging land development which is incompatible with aircraft operations;
- ☑ protect the Marine Corps investment in airfield facilities and maintain the operational capabilities of these facilities at MCAS Beaufort;
- ☑ reduce noise impacts generated by aircraft operations both on and around the air station; and
- ☑ inform the general public about the AICUZ program in conjunction with efforts to minimize noise and aircraft accident potential in the vicinity of the air station.

Beaufort County is working on its "AICUZ" ordinance to meet these objectives. To aid the County in this effort, the MCAS developed an AICUZ study and model land use ordinance for the Beaufort base in particular, which included a detailed analysis of aircraft noise, accident potential and land use compatibility, and potential solutions to incompatible land use problems. During the spring and summer of 1997, several meetings were held with the MCAS Community Liaison to discuss the adoption of a proposed Airport Overlay District Ordinance based on their model. Two major components of the proposed ordinance focused on specific land use restrictions and mandatory noise attenuation for new structures built within the boundaries of the designated flight zones. In the most recent amendment to the ordinance, noise attenuation standards were designated, but further restrictions on land uses were not addressed, save some restrictions on uses involving large concentrations of people.

The Military Planning Area designated on the Future Land Use Map is derived from the MCAS computer model. It encompasses the areas where noise impacts and the potential areas for accidents are most likely due to current aircraft operations and flight patterns. Within the Military Planning Area, new development is governed by the current Airport Overlay District in the Zoning and Development Standards ordinance.

To further support the objectives of the MCAS-Beaufort, the County should consider appropriate restrictions on land uses as recommended by the MCAS-Beaufort AICUZ Plan and Model Ordinance as revisions to the zoning ordinance are made. Land uses most appropriate for this area include low-density single-family residential, agriculture and open space, most recreational uses, industrial uses, and very limited commercial uses. In particular, the approach corridors for the main runway, which is utilized for approximately 85 percent of flight operations, should be especially protected regarding encroachment. The approach corridor to the northeast overlaying the Dale area is especially valuable to the Marine Corps, as it is the only approach corridor at any military air sta-

tion where night carrier landing flights may be simulated in complete darkness.

The base density of one unit per 3 acres applies in the Military Planning Area. It is recommended that density increases, with the appropriate performance standards, and targeted programs to no more than one unit per 2 acres overall. Significant efforts should be made by both the U.S. Marine Corps and the County to use the performance standards and targeted programs to deter the encroachment of any uses deemed incompatible with base operations.

4.9 Administrative Approach

4.9.1 The Need for New Administrative Procedures

The framework currently in place for development review is more suitable for a stable, rural county than the dynamic, rapidly changing community that Beaufort County has become. New administrative structures are needed to adequately assess the individual and cumulative impacts of development.

a. General Administrative Procedures

The County currently has several procedures to administer its Development Standards Ordinance, notably rezoning review, plan review and development permitting, variance review, and code enforcement. These procedures are typical for a County of this size and population, but as the rate of growth increases in the County, the procedures should be examined and strengthened to ensure that the goals of the Comprehensive Plan are fully realized.

The 1994 Planning Enabling Legislation speaks to the issue of plan implementation through the zoning codes. According to this Act, it is the responsibility of the Planning Board to prepare and recommend new ordinances and procedures, which include the following:

- zoning ordinances and maps;
- land development regulations;
- an official map showing the exact location of existing or proposed public streets, utility rights-of-way, and public building sites; and
- a landscaping ordinance.

The legislation also includes a number of innovative tools and techniques, such as floating zones, aesthetic ordinances and specialized design review. Among these techniques authorized for use, the Planning Board needs to consider such methods as special exceptions and special use permitting, impact assessment, more detailed design review (e.g. design review that considers the surrounding neighbor-

hood as well as the individual site being designed), in addition to a further streamlining of the review process itself. Specific and detailed amendments to the Zoning and Development Standards Ordinance will be drafted during the implementation phase. However, two structures in particular are emphasized here and are strongly recommended for adoption.

As part of the plan implementation process, these administrative procedures should be evaluated and modified by the Planning Board and County Council.

b. Impact Assessment

The Comprehensive Plan envisions the adoption of a Community Impact Assessment Report (CIAR) for all developments attaining certain thresholds to be determined during the implementation period.

The CIAR will require assessment of impacts from new development, including but not limited to: traffic, stormwater management, sewer and water, water resources, ecosystems, compatibility of design and landscaping with surroundings, historic and archaeological resources, and housing affordability.

The CIAR provisions will also create a definition for quality developments in various development categories, and will provide incentives and expedited review for such developments.

c. Design Review

In order to protect the character of Beaufort County's existing and new communities, regulating size, scale and location is not enough. Plans for new development should follow design guidelines specific to the character of each community.

A mechanism used in some communities is that of design review. Typically, a design review board is established, and development plans must be submitted to the board as a step in the approval process. Beaufort County currently has a design review board for two highway corridors and for historic preservation. The Planning Board should establish a committee to make recommendations for an expanded design review program.

The guidelines for development should function for several different scales of development. In some cases, small infill projects are to be encouraged to strengthen existing communities, in others new communities may be planned. The framework for design guidelines should be divided into three sections which function together: neighborhoods, streets and building lots. Each section should be composed of individual guidelines, each clearly articulated, justified and illustrated. Based on these guidelines, plan administrators and developers have a well documented and rationalized description of desirable development to guide their application and permitting decisions.

For example, a large and complex project would be guided first by the overall planning choices outlined in the *Neighborhoods* section: how uses can be mixed, how streets should be interconnected, how to locate public park spaces, etc. The next level of detail is addressed in the design of *Streets:* street width, on-street parking, building alignment and more. Finally, how buildings, landscaping and parking are located and designed is addressed in a final section on *Building Lots*.

The benefit of this type of hierarchy is that small landowners seeking to develop

a single parcel would not be encumbered by the full body of guidelines. They can simply refer to the *Building Lots* section. On the other end of the scale, major developers have a simple, clearly illustrated set of expectations to guide their work, beginning with *Neighborhoods* and working through streets to building lots.

This overall format for guidelines should be a constant throughout the County, while the individual details will differ according to the character and details of each region. The guidelines should be easy to use, clarify expectations and preserve local variations in character:

- maintaining connections between the buildings and the streets;
- designing new streets to accommodate walking and biking;
- locating and connecting public spaces to surrounding uses;
- locating adequate parking in areas which are easily accessible but that do not hinder pedestrian and bicycle traffic;
- landscaping and buffering requirements;
- requirements for protecting existing trees on the site;
- architectural guidelines where appropriate;
- parking lot design; and
- signage restrictions.

4.10 Future Distribution and Density of Population

The future distribution of population throughout Beaufort County is a matter of great concern to its residents, leaders, and investors. Up to this point, the chapter has discussed County-wide land uses in generic terms. This final section of the Future Land Use Plan examines growth trends and future densities to the year 2020 for each of the six planning areas. These figures are shown in Table 12.

The gross development density of land in Beaufort County in 1990, expressed as housing units per acre, was 0.05, or one unit to 20 acres. The density forecast for 2020 is 0.12, or about one unit to 8 acres. This density does not include most housing units used for seasonal occupancy and tourism; if these were counted, the effective density could be much greater.

Beaufort County currently has three urbanizing areas in addition to Hilton Head: Port Royal Island, Lady's Island and Bluffton Township. The Bluffton Planning Area is forecast to have accelerated growth, eventually surpassing Port Royal Island and Lady's Island planning areas in growth rate and total population. By 2020, gross population densities in all three of these areas are expected to be in the vicinity of *one unit to seven acres* or less.

The remaining three planning areas are currently rural, with St. Helena—including more densely developed areas of Dataw, Harbor, and Fripp Islands—falling in between the typical rural densities of Sheldon Township and Daufuskie on the one hand, and three urbanizing areas on the other. The population forecast for the St. Helena planning area suggests a gross density of over one unit to ten acres in 2020. This forecast highlights the need for targeted and concentrated incentives in St. Helena Island proper in order to retain its rural character. Such incentives must be given a high priority in view of the growth pressures created by development in the surrounding areas.

Sheldon Township and Daufuskie Island are forecast to have gross densities of one unit to 50 acres and one unit to 25 acres respectively. While these areas will re-

main generally rural during the forecast period, they may be subject to development pressures in selected areas. Retaining and reinforcing the rural character of these areas will require the use of targeted development standards and accompanying incentive programs, which will be provided in the subsequent revisions to the Development Standards Ordinance. The one unit to 3 acre base density in these planning areas will generally be a ceiling density, with development standards and incentives used to achieve lower densities in most instances. Higher densities will only be available on a site-specific basis for affordable housing and targeted economic development meeting predetermined criteria.

Development densities in the planning areas must be viewed in proper context to be understood. The concept of density can otherwise lead to confusion or misinterpretation. Density can be calculated in several ways and used for differing purposes. Gross density usually refers to area-wide density, such as over an entire planning area; however, it may also refer to the density for a specific site, such as a Planned Unit Development (PUD), before taking out undevelopable area. Net density refers to an adjusted measure of density, which subtracts undevelopable areas such as open water, wetlands, conservation areas, utilities, and roads.

The planning area densities cited above and in Table 12 are gross densities, and thus not comparable to the one unit to 3 acre base density measure described in this chapter. The latter refers to a net density average in developable areas; densities in particular zoning districts may vary, although such variation will most often occur through performance standards and incentives rather than formal limits. Generally, the one unit to 3 acre base density will net out all undevelopable areas within a particular site, tract, or zoning district to which the term is applied. Specific interpretations will be set forth in subsequent revisions to the Development Standards Ordinance.

It is clear from Table 12 that the gross densities forecast for 2020 fall far short of the one unit to 3 acre base density in the three rural planning areas. Nevertheless, specific sites within those areas may well achieve a one-to-three net density. As previously stated, the Comprehensive Plan envisions a system of performance standards and incentives that will keep rural areas at characteristically low densities. Moreover, it also envisions a system of priorities that will aid in the protection of the most ecologically valuable lands.

Preserving rural character, protecting environmental resources, and encouraging quality development in Priority Investment Areas will require a more sophisticated development review process than that currently in place. The Comprehensive Plan foresees the need for significant revisions to the Development Standards Ordinance that will provide for this and other needed growth management initiatives.

Table 12: **Projected Population Growth, Housing Units, and Densities to Year 2020**

Planning Area	1990 Population	Projected 2020 Population (1)	Population Increase	Annual Growth Rate	1990 Housing Units	2020 Housing Units (2)	Develop-able Area (Acres) (3)	1990 Net Density (4)	2020 Net Density (5)
Sheldon Township	3194	4250	1056	0.010	1261	1741	40632	0.03	0.04
Port Royal Island	40710	44046	3336	0.003	11408	12924	30819	0.37	0.42
Lady's Island	5046	12392	7346	0.030	2195	5534	12905	0.17	0.43
St. Helena Island	6579	16154	9575	0.030	3931	8283	23385	0.17	0.35
Bluffton Township	7084	47288	40204	0.065	3347	21622	53979	0.06	0.40
Daufuskie Island	118	240	122	0.024	132	187	5100	0.03	0.04
County Total	62731	124370	61639	0.023	22274	50292	166820	0.13	0.30

Notes:

(1) Projections are from the Demographics and Trends Chapter of the Comprehensive Plan.
(2) Calculated by adding existing housing units to projected population, divided by assumed 2.2 persons per household (extrapolated value).
(3) Net developable area is obtained by subtracting open water, wetlands, roads and other undevelopable areas from total planning area acreage.
(4) Obtained by dividing the 1990 housing units column by the developable area column.
(5) Obtained by dividing the 2020 housing units column by the developable column.

Part

E

Implementing the Plan

Chapter 5

Natural Resources

Natural Resources and Water Quality

Vision

"Beaufort County must preserve, protect and enhance the natural environment and fisheries."

Preserving and protecting the natural environment was a principal concern expressed by County residents during the public workshops. In fact, a large percentage of the people present at the workshops and responding to the survey identified protection of the environment, water quality and or wetlands protection as their issue of greatest concern.

During the two County-wide workshops held in October and November, 1995, 33 percent of respondents indicated a need to protect the environment and water quality either verbally or in writing (see Figure 16). A concern for protecting the environment was repeated during the planning area workshops where protecting the environment and water quality was identified as a goal in each district.

As such, documenting the condition of Beaufort County's natural resources is central in crafting the Comprehensive Plan. This includes not only assessing and quantifying the existing natural resources, but even more importantly, outlining clear guidelines that will protect and manage these natural resources.

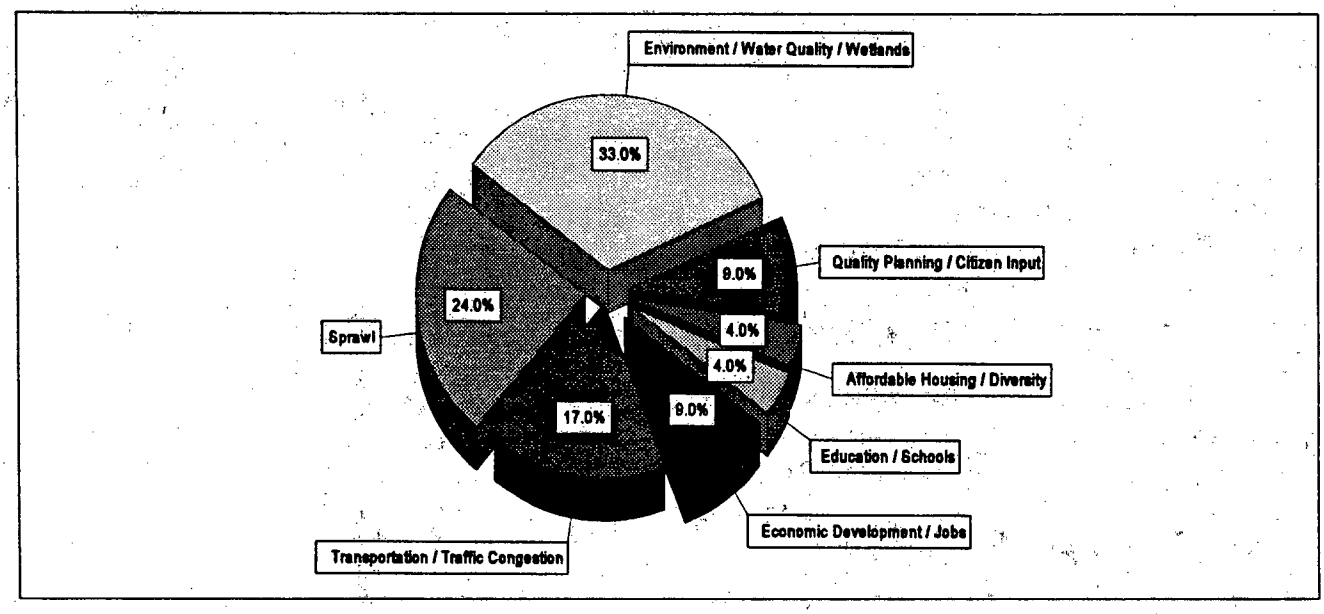
Vision Goals:

To achieve the vision of preserving, protecting and enhancing the natural environment and fisheries, Beaufort County must:

1. maintain the pristine waterways in the region;
2. maintain and improve the quality of surface waters;
3. maintain the quality of the wetlands;
4. manage finfish and shellfish resources;
5. protect the quality and quantity of its groundwater resources;
6. identify and protect areas of ecological significance;
7. conserve open space;

8. conserve existing stands of mature trees; and
9. minimize the visual impacts of timber harvesting activities.

Figure 16 : Issues of greatest concern as identified during the County-wide workshops.



Natural Resources and Water Quality

Technical Analysis

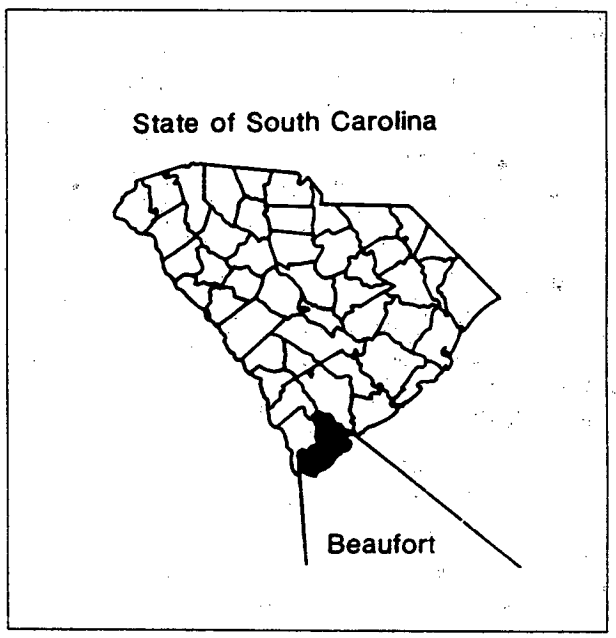
5.1 Geographic Setting / Climate

5.1.1 Geographical Setting

Renown naturalist Thomas Lovejoy described the Lowcountry of South Carolina as "a place where waters - fresh and salt - conspire with the land to create a swampy Eden."[1] Situated in the southeastern part of South Carolina and in the Atlantic Coastal Plain, Beaufort County contains approximately 468,000 acres (see Figure 17). Of that, 51 percent is open water, bays, or estuaries, and an additional 14 percent are freshwater wetlands. In the Lowcountry, the term "upland" is a relative and dynamic state, dependent on the season, the storms, and the tide.

Centered some 50 miles south of Charleston and 20 miles north of Savannah, the coastal setting of Beaufort County is framed between the Combahee River on the north, which flows into St. Helena Sound, and the New River to the South. The heart of Beaufort County is Port Royal Sound with many of its arterial rivers classified as Outstanding Resource Waters of the State.

Figure 17: Location map of Beaufort County.



1 "South Carolina's Wetland Wilderness: The Ace Basin," Tom Blagden Jr., 1992.

5.1.2 Climate

The climate of Beaufort County is subtropical, characterized by long, hot summers followed by short and relatively mild winters. Beaufort's precipitation rate averages 49 inches per year with July one of the wetter months and November one of the dryer. About 70 percent of the annual rainfall occurs during the April through October growing season. Average monthly precipitation and temperature data can be found in Table 13. The Sea Islands commonly have winter temperatures 3 to 5 degrees warmer and 30 to 40 additional frost-free days than the more inland areas.

Table 13: Average temperature and precipitation data for Beaufort County.

Month	Temperature						Precipitation				
	Average daily maximum	Average daily minimum	Average	2 years in 10 will have-- Maximum temperature higher than--	2 years in 10 will have-- Minimum temperature lower than--	Average number of growing degree days[2]	Average	2 years in 10 will have-- Less than--	2 years in 10 will have-- More than--	Average number of days with 0.10 inch or more	Average snowfall
	F	F	F	F	F	Units	In	In	In	Days	In
January----	61.1	38.6	49.9	79.6	16.4	118	3.3	1.6	4.9	5.5	([3])
February---	63.2	40.5	51.8	81.2	20.2	128	3.2	1.8	4.6	6.1	0.02
March------	68.7	45.7	57.1	86.5	26.3	249	4.4	2.2	6.6	6.7	0.00
April------	77.0	53.7	65.3	91.3	35.2	461	2.6	1.4	3.7	4.6	0.00
May--------	83.6	62.0	72.8	96.2	44.5	708	4.8	2.6	7.0	6.0	0.00
June-------	87.8	68.5	78.1	100.2	55.8	840	5.2	2.3	8.2	7.4	0.00
July-------	89.7	71.4	80.5	98.9	62.4	947	7.4	3.7	11.0	10.0	0.00
August-----	89.4	71.1	80.3	98.7	62.1	937	6.7	3.6	9.9	8.0	0.00
September--	84.6	66.6	75.6	94.5	51.7	759	4.8	2.5	7.2	6.4	0.00
October----	77.7	56.8	67.2	90.3	36.3	535	2.6	0.5	4.8	3.8	0.00
November---	68.8	45.6	57.2	83.9	23.2	244	1.6	0.5	2.7	3.2	0.00
December---	61.8	39.8	50.8	79.2	19.1	125	2.5	1.5	3.5	5.3	0.00
Year-----	76.2	55.1	65.6	[4]100.5	[5]12.5	6,296	49.1	40.1	58.0	75.7	0.03

[1]Recorded 7 miles SW. of Beaufort, Beaufort County, South Carolina, during the period 1949-72.
[2]A growing degree-day is an index of the amount of heat available for plant growth. Growing degree-days accumulate each day in the amount by which the average daily temperature exceeds the temperature below which growth is minimal for the principal crops in the area (50° F).
[3]Trace
[4]Average annual highest temperature.
[5]Average annual lowest temperature.

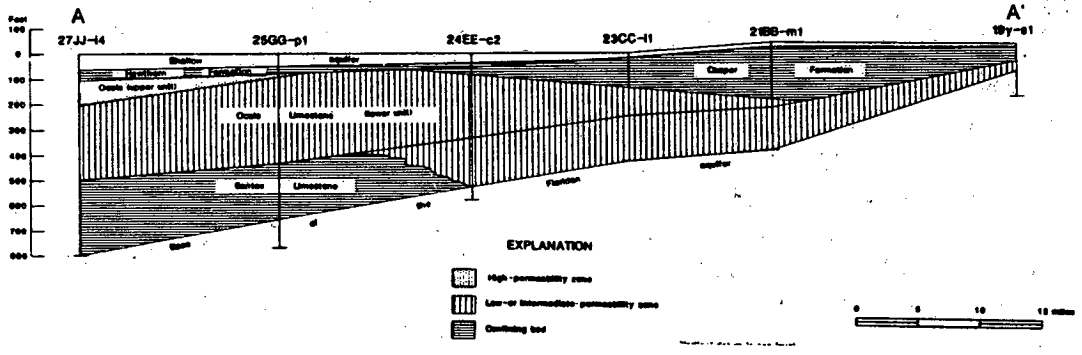
5.2 Geologic Processes of Coastal South Carolina

The geologic processes which shaped coastal South Carolina left three main geomorphic areas in the Beaufort region. These areas include the mainland, the coastal plain salt marsh estuary and the barrier islands.

5.2.1 Mainland Geology

The geologic profile of Beaufort County's regional area records many advances and retreats of the sea during which deposits of marine sediments have been repeatedly laid down and subsequently removed. The geo-

Figure 18: Geologic cross-section through Beaufort County.



Source: Soil Survey of Beaufort and Jasper Counties.

logic record presents seven distinct abandoned shoreline terraces in the region with the whole of Beaufort County sitting squarely on the Pamlico Terrace of South Carolina's lower Coastal Plain.[2]

Generally, the Coastal Plain's geology consists of unconsolidated to poorly consolidated alternating layers of sand, clay and limestone ranging in geologic age from Cretaceous to Recent. These sediments range in thickness from a thin edge along the fall-line in the central part of South Carolina, to about 3,500 feet thick along the coast near Beaufort. The sediments which exist around Beaufort were generally deposited during the advance and retreat of ancient seas. Along with these sediments are sediments which appear to represent deposition in near shore areas such as lagoons and estuaries from upland sources. Some sediments appear to represent depositions on river flood plains and deltas near the coast lines of the ancient seas. These sediments overlie a variety of crystalline and metamorphic strata which form the pre-Cretaceous under-layer of the region (see Figure 18). The specific characteristics of those soils found on the Pamlico Terrace are described in Section 3 of this chapter.

5.2.2 The Coastal Plain Salt Marsh Estuaries

Estuarine waters are a natural boundary between the land and the sea. It is here that the mixing of tidal and fresh water form brackish water. The most common estuary type found in Beaufort County is described geomorphically as the Coastal Plain Salt Marsh Estuary. These estuaries are characterized by the lack of a major river source but have a well defined tidal drainage network spread throughout the extensive coastal salt marshes. These estuary-marsh systems are typically interconnected with a labyrinth of tidal inlets. Water and material exchange between the estuarine system and the coastal ocean occur through narrow, tidal inlets which continuously change their configuration. Specific ecological characteristics of estuarine resources are discussed in Section 5.4 of this chapter.

5.2.3 Barrier Islands

There is perhaps no single geologic process so apparent to the sea island communities as that of the dynamic shaping of the barrier islands. Geologically, the islands and marshes are unstable due to the natural pressures of the tides, ocean currents and prevailing winds. Beach erosion—and its converse, accretion—occurs year-round, in all weather. Over time, these dynamic processes do more to shape the beaches than the sporadic storms that may cause a dramatic loss of beach front or dune damage.

The coastal edge of Beaufort County is made up of a series of sea islands, salt march estuaries, and the outlying barrier islands. The sea islands are typically more protected from offshore storms than the more outward lying barrier islands. In contrast, the barrier islands typically take the brunt of most offshore storms. Nationally, there are close to 300 barrier islands forming a broken necklace running parallel to the Atlantic and Gulf Coast. Beaufort County's major barrier is-

2 *Soil Survey of Beaufort and Jasper Counties*, Soil Conservation Service, 1980.

lands include Harbor, Hunting, Fripp, Hilton Head and Daufuskie Islands.

Although some of the larger barrier islands owe their origins to the melting continental ice sheets in the late Pleistocene Epoch 10,000 years ago, the major shaping of the islands today is largely due to *littoral drift*. Waves generally approach the beaches at an angle, with the water breaking over the sand and receding at right angles to the shore. As a result, the dislodged sand particles carried by the receding waves are transported down drift of its origin. The point at which these sand particles are dislodged is called *erosion*. Where these particles are deposited is called *accretion*.

In some parts of Beaufort's coastal edge, the erosion and accretion rates are dramatic. For example, the Hunting Island lighthouse constructed in 1874 had to be relocated after 14 years due to the high beach erosion rate and the advancing ocean. Having learned the lesson of the ocean's extreme erosion rate, the tower was relocated 1 1/4 miles from the shore. A century later and less than 400 feet from the structure, the ocean is again threatening the lighthouse—a testimony of the transient nature of barrier islands and the power of the sea.

5.3 Soils

This section first examines the general soil types found in Beaufort County and later summarizes soil suitability for individual sewage disposal systems. Due to the prevalence of residential development throughout the County, this section focuses on the soil suitability of individual sewage disposal systems and offers a scientific perspective on the sustainability of existing soils to assimilate septic wastes.

The 1980 Soil Survey of Beaufort and Jasper Counties, prepared by the United States Department of Agriculture, Soil Conservation Service (SCS) provides both the location and description of specific soil characteristics in Beaufort County. Typical of SCS soil surveys, this report identifies the suitability of existing soils for a myriad of uses including crops and pasture, woodland management and productivity, engineering, development, sewage disposal systems, recreation, and wildlife habitat. Although dated 1980, this study remains current since soils types do not change significantly over time.[3]

5.3.1 General Soil Types

The General Soil Map prepared by the SCS provides a broad perspective of the soils in Beaufort County. The map delineates areas aggregated from the more detailed soil survey which exhibit distinct patterns of soils, relief and drainage. It provides a basis for comparing the potential of large areas for general kinds of land use. This is valuable for identifying the best soils in the County for farming. Likewise, areas of the County having soils with distinct limitations for certain land uses, such as development, may be identified. Because of its scale, this general soils map is not intended for site specific planning. For site planning, the more detailed soil survey found within the same report is suggested.

The General Soil Map describes seven distinct soil associations found in Beaufort County. The specific properties of these soils are described in the following:

3 Letter from South Carolina State Soil Conservationist, 1997.

1. Santee: *Very poorly drained soils that have a loamy surface layer and clayey subsoil.*

These very poorly drained soils are found along the upper reaches of the New River in Southern Beaufort County. Frequently flooded, the water table is typically at or near the surface about six months during the year. Wetness is the main limitation to use of these soils for farming and for most other purposes.

2. Argent-Okeetee: *Poorly drained and somewhat poorly drained soils that have a loamy surface layer and a clayey subsoil.*

These are the soils which are characteristic of the Great Swamp region in the western portion of southern Beaufort County. Wetness and the excessive fines in the subsoil present severe limitations which are very difficult to overcome. Thus the potential for residential and other urban uses is very low.

3. Bladen-Coosaw-Wahee: *Poorly drained and somewhat poorly drained soils that have a loamy surface layer and a clayey subsoil, and somewhat poorly drained soils that have a thick sandy surface layer and a loamy subsoil.*

Areas of these nearly level soils are scattered throughout the northern part of Beaufort County. Wetness is the main limitation to use of these soils for farming and most other purposes.

4. Wando-Seabrook-Seewee: *Excessively drained, moderately well-drained, and somewhat poorly drained soils that are sandy throughout.*

These soils, ranging from excessively drained to somewhat poorly drained make up more than 30 percent of the soil types found in Beaufort County. Areas of these sandy soils are found scattered throughout the southern part of the County, Hilton Head Island, St. Helena Island, Lady's Island, and Port Royal Island. They are commonly the predominant soils on the uplands of the sea islands.

5. Coosaw-Williman-Ridgeland: *Somewhat poorly drained and poorly drained soils that have a thick sandy surface layer and a loamy subsoil, and somewhat poorly drained soils that are sandy throughout.*

Areas of these nearly level soils are scattered throughout Beaufort County. Most of these areas are on the sea islands or bordered on one or more sides with tidal streams or marshes. All of these soils have a seasonally high water table.

6. Fripp-Baratari: *Excessively drained and poorly drained soils that are sandy throughout.*

These soils were formed by windblown marine sediment with a long axis of ridges and troughs which parallel the coast line. The ridges and troughs lie on the more seaward sea islands and on the seaward side of Beaufort's barrier islands.

7. Bohicket-Capers-Handsboro: *Very poorly drained mineral and organic soils that are flooded daily or occasionally by saltwater, and adjacent upstream areas that are flooded occasionally by freshwater.*

This soil association makes up about 35 percent of Beaufort County. Most of these soils are covered by marsh grasses. Large areas in the more inland portions of the County were used for rice production during the 1800s. The soils in this area are not suited for tilled cultivation, pasture, woodland or urban/suburban uses. They are better suited to natural habitat for wildlife and serve as a natural barrier to tidal areas.

Source: Soils & Materials Engineering, Inc.
U.S. Soil Conservation Service

N
W E
S

Scale 1:240225

Beaufort County

Soil Suitability for Septic Systems

MAP 8

Legend

- County Boundary
- Class 1 Roads
- Few Limitations 1 / acre
- Marginal Limitations 1 / 3 acres
- Severe Limitations 1 / >3 acres
- Very Severe Limitations; None Recommended

Prepared By Beaufort County GIS Department

5.3.2 Soil Suitability for Septic Systems

Although the Soil Survey of Beaufort and Jasper Counties offers interpretive tables for a variety of uses, including soil suitability for individual sewage disposal or septic systems, the use of these tables are often too cumbersome for specific planning purposes. For this reason, a focused study was commissioned by the Beaufort - Jasper Sewer and Water Authority. This study, titled *Evaluation of Individual Sewage Disposal Systems in Beaufort County, South Carolina,* was conducted in 1985 by Soil and Material Engineers, Inc.

Of particular value in the report is the assessment and mapping of all areas of the County for their suitability for individual sewage disposal (ISD) systems. There are four suitability classes which are delineated on the maps accompanying this report. These suitability classes are:

- Class I - Areas with few limitations for ISD systems;
- Class II - Areas marginally suited for ISD systems;
- Class III - Areas with severe limitations for ISD systems; and
- Class IV - Areas with very severe limitations for ISD systems.

Criteria used in developing the suitability classes include: (1) topography, (2) soil characteristics, (3) depth to seasonal high water table, (4) flood prone areas, (5) proximity to surface water, (6) use of the Shallow Aquifer and proximity to drinking water supplies, and (7) estimated ISD system density. Soil characteristics were obtained primarily from the SCS soil maps.

In addition to identifying soil types, the SCS map units are also a function of topography, surface drainage, and flood prone areas. Depth to the water table was determined by consulting the SCS soil maps, topographic maps, flood-prone area maps, and boring and well records.

Sewering of some rural areas over time will result in disuse of septic systems in those areas. Section 4.4 of the Future Land Use Plan discusses the land use framework within which this is likely to occur.

a. Findings of the soil suitability class maps

i. Class I Areas

Class I areas contain the least amount of acreage in the study area. This area accounted for approximately 30,000 acres, equaling 5 percent of the County's upland area. Soil suitability for septic systems in Class 1 areas equal one septic system per acre.

ii. Class II Areas

Class II areas comprise approximately 113,000 acres or nearly 32 percent of Beaufort County. Marginal suitability means that all of the criteria are not totally favorable, but enough of them meet the EPA recommendations for ISD systems. Soil suitability for septic systems in Class II areas equal one septic system per three acres.

iii. Class III Areas

Class III areas cover approximately 45,000 acres or nearly 13 percent of Beaufort County. Severe limitations mean that very few of the suitability criteria are favorable. Placement of an ISD system in these areas requires special placement and design, in addition to necessary drainage. Soil suitability

for septic systems in Class III areas equal one septic system per area greater than three acres.

iv. Class IV Areas

Class IV areas comprise the greatest acreage in the County, accounting for approximately 168,000 acres. This equals nearly 47 percent of Beaufort County. Class IV areas are entirely unsuitable for ISD systems.

Although this study was conducted more than a decade ago, the limitations of the existing soils have not changed. Nor has there been much change in the type of ISD systems most commonly installed in residential areas. Septic systems with leaching fields continue to dominate the type of system utilized by residential homeowners.

A 1995 Systems Performance Survey conducted by the South Carolina Department of Health and Environmental Control (SCDHEC) on Individual Onsite Wastewater Treatment and Disposal Systems documented a 31 percent malfunction rate among those systems surveyed in Beaufort County. The report concluded that "the region with the greatest limitations for onsite treatment and disposal is the coastal plain."[4]

4 DHEC, *1995 Systems Performance Survey, Individual Onsite Wastewater Treatment and Disposal Systems, Final Report*, Division of Onsite Wastewater Management, 1995.

5.4 Beaufort's Resources

This section examines the natural resources of Beaufort County as documented by high altitude aerial imagery and specific resource reports. It begins with a discussion of the existing land cover of the County, examining the characteristics of the major categories. Sections of this chapter include uplands, estuaries, and sensitive ecological communities.

The figure below summarizes the relative land cover characteristics of Beaufort County as observed in 1988. Of the 467,878 acres which comprise Beaufort County, more than half is covered in tidal wetlands, estuaries or open water. Thirty-three percent or 155,146 acres were undeveloped, 9 percent were developed accounting for 43,309 acres, and almost 7 percent 32,440 acres were classified as forested wetlands. A more detailed breakdown of upland areas follow.

5.4.1 Land Cover and Environmental Characteristics

The 1988 LANDSAT high altitude aerial imagery compiled by the U.S. Geological Survey was used to quantify the resources of

Figure 19: Land Cover of Beaufort County, 1998 LANDSAT Data.

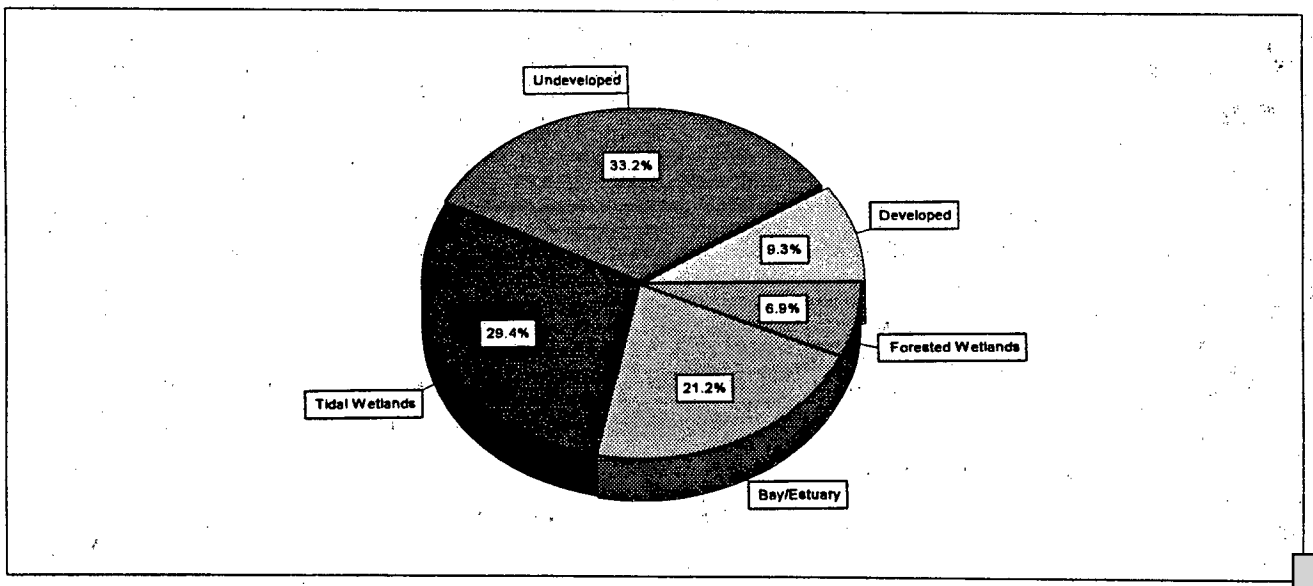


Table 14: Land cover by Planning Area.

Existing Land Use	Sheldon	Bft.Pt. Royal	Lady's Island	St. Helena	Bluffton	Hilton Head Is.	County Totals
DEVELOPED							
Residential	682	7,743	2,582	3,657	5,416	11,202	31,282
Mixed Urban	—	356	—	112	—	—	468
Commercial	97	4,836	179	76	288	881	6,357
Industrial/Commercial	—	20	—	—	—	—	20
Industrial	—	83	7	—	—	—	90
Other Urban	—	191	578	289	652	1,951	3,661
Transitional Areas	25	—	—	—	85	—	110
Transportation/Utility	197	198	165	133	98	242	1,033
Mines/Quarries	—	36	—	—	212	40	288
Total Developed Area	1,001	13,463	3,511	4,267	6,751	14,316	43,309
UNDEVELOPED							
Sandy Area	817	936	1,248	4,756	508	238	8,503
Cropland/Pasture	16,742	4,859	1,308	8,064	5,363	467	36,803
Orchard/Grove	75	93	—	80	90	—	338
Herbaceous Rangeland	8	82	87	119	474	116	886
Shrub/Bush	612	178	414	309	291	43	1,847
Upland Planted Pine	6,911	1,762	156	701	14,838	48	24,416
Evergreen Upland Forest	2,285	5,449	6,320	8,397	18,514	2,249	43,214
Deciduous Forest	2,602	—	—	—	4	—	2,606
Mixed Upland Forest	11,302	4,263	1,406	6,032	10,752	2,152	35,547
Forested Wetland	13,359	3,049	741	1,944	12,215	1,132	32,440
Beaches	—	—	—	701	56	229	986
Total Undev. Area	54,713	20,671	11,320	31,103	63,105	6,674	187,586
TOTAL Upland Area	55,714	34,134	14,831	35,370	69,856	20,990	230,895
Tidal Wetlands	31,898	16,175	12,942	32,133	40,283	4,142	137,573
Bay Estuary	11,128	17,745	11,685	12,927	30,316	10,797	94,598
Open Water	1,286	138	123	1,504	589	1,172	4,812
Total Tidal Area	44,312	34,058	24,750	46,564	71,188	16,111	236,983
TOTAL ACRES	100,026	68,192	39,581	81,934	141,044	37,101	467,878

Source: LANDSAT, 1988, with acreage calculations compiled by Beaufort County.



Beaufort County

Land Use\Land Cover

MAP 9

Prepared By Beaufort County GIS Department

Scale 1:237403

Beaufort County. This Land Use/Land Cover data provides the most recent and most accurate "snapshot" of environmental characteristics available to the County such as developed areas, undeveloped areas, wetlands and other environmental features unique to each planning area. Of particular importance are the wetlands, both tidal and nontidal, which exist in the County.

Table 14 is derived from the 1988 LANDSAT imagery and describes the composition of land cover for Beaufort County. This information includes developed areas, undeveloped areas, wetlands and other environmental features unique to each planning area. This data is valuable because it provides a generalized picture of land cover. New aerials are scheduled to be flown in 1998.

Land cover summaries focusing on the undeveloped portions for each planning area in the County are presented below. For discussions on developed lands, refer to the Existing Land Use chapter.

a. Sheldon Township

Acreage counted as cropland and pastures ran a close second to forested land in Sheldon Township in 1988. The third largest percentage of undeveloped land is forested wetlands, yet there were no beach areas in the township.

b. Port Royal Island

Of the 20,671 acres considered undeveloped in this planning district, 14,523 acres or 70.3 percent were allocated as forest or forested wetlands in 1988. The second highest land use was for cropland/pasture, with 4,859 acres or 23.5 percent. The remainder of the acreage was in orchards, herbaceous rangeland and sandy areas.

c. Lady's Island

Undeveloped land was recorded as 28.6 percent of the planning district, or 11,320 acres in 1988. Similar to other planning districts, most of the undeveloped acreage was found in forested areas, although Lady's Island exhibited fewer forested wetlands than any other planning district. There were no beach areas present, but a significant amount of sandy areas were found in this district.

d. St. Helena Township

The majority of land cover in St. Helena Township, 42 percent, was forest land. A significant percentage of the undeveloped land, 25.9 percent, was also found in cropland and pasture cover in this planning area. Of the County's beach areas, 71.1 percent were found within this district. Most of these beaches were located on Harbor, Hunting, and Fripp Islands.

e. Bluffton Township and Daufuskie Island

At 23.5 percent, these combined districts contained the greatest percentage of land devoted to upland planted pine than any other planning district. Forested uplands and wetlands occupied approximately 89.3 percent of the total undeveloped land in this area.

5.4.2 Upland Areas

The upland areas of Beaufort County totaled 49 percent of the County's total area, or 230,895 acres in 1988. This represented the total non-tidal upland areas of which 17.9 percent or 43,309 acres were developed, 14.5 percent or 32,440 acres were forested wetlands, 32.8 percent or 79,071 acres were in agriculture (includes planted pine), and

upland forests accounted for 33.7 percent or 81,367 acres.

a. Agriculture

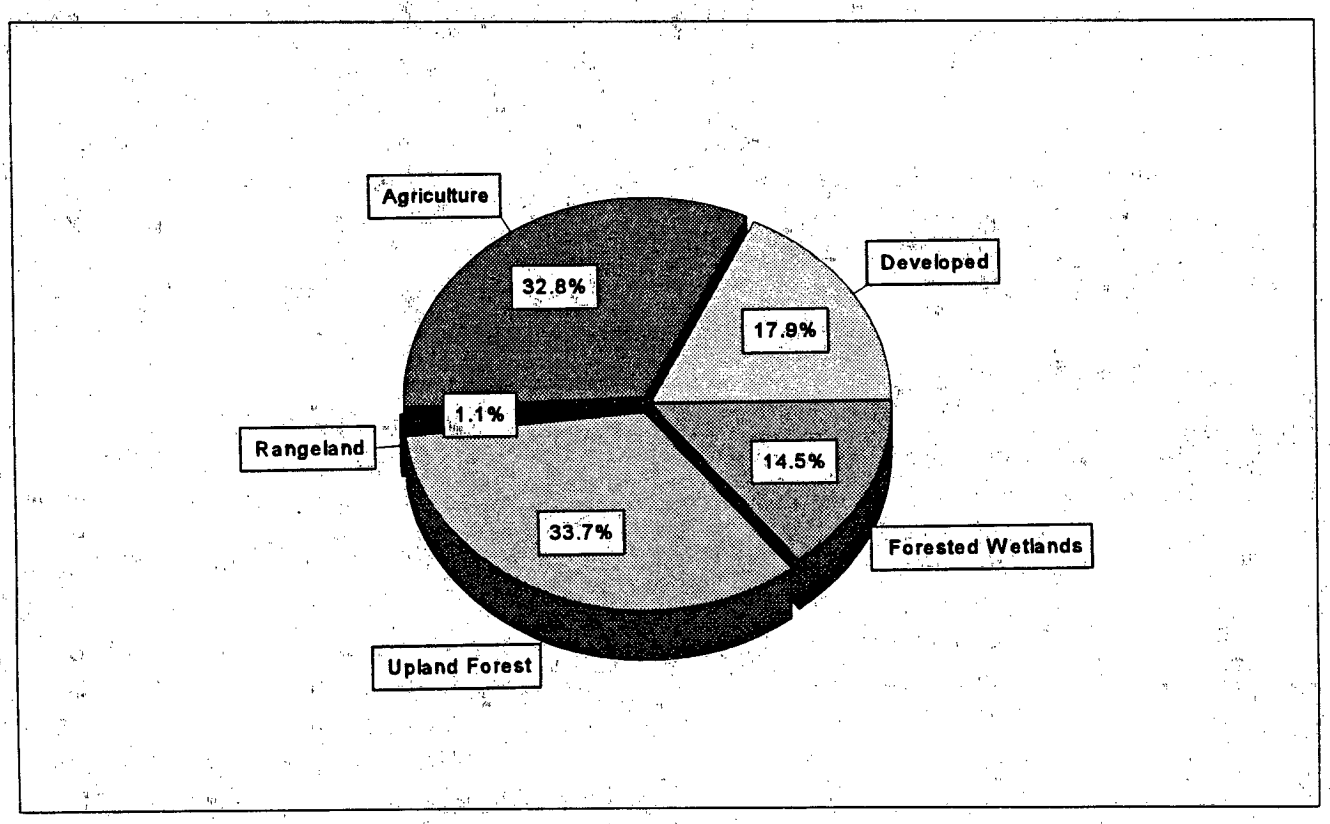
According to the Clemson Agricultural Extension Service, Beaufort County supported an agriculturally-based economy through the mid-1900s. The early colonists in Beaufort found the area almost completely wooded and densely populated with many species of wildlife. Lumber for ship building and the use of other forest products became a major industry of the settlers. In addition, many settlers became traders in furs and skins.

In 1680, rice was introduced into the region. By 1719, the colonists, merchants, traders and farmers had built up great wealth from rice production from the abundant resources available. Rice production continued in the area until two hurricanes in the late 1800s raged through the County, destroying most of the dikes and other water control devices necessary for the production of rice. The dikes, which had been predominately built by slave labor, were never replaced.

Indigo was introduced in the early to mid-1700s, providing a profitable crop until after the Revolutionary War when the English government removed their bounty on it. Sea Island long-staple cotton was introduced in 1785, soon becoming the next major cash crop. A superior type of cotton, it became a victim of the boll-weevil in 1813 and disappeared from production during the Civil War. Although cotton made a modest comeback in the 1880s, the boll-weevil again knocked it out of production by the 1920s.

Following the Civil War, the agricultural economy of Beaufort plummeted. Although a number of crops were grown, including

Figure 20: Land cover distribution in upland areas, 1988 LANDSAT.



Note: Refer to soils suitability for soils constraints



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Beaufort County

Development Constraints

MAP 10

Scale 1:244805

Legend

- Tidal Wetlands
- Non-Tidal Wetlands
- Ground Water Recharge Mounds
- Bay/Estuary/Open Water
- County Boundary
- Class 1 Roads
- Endangered Plant and Animal Species

Prepared By Beaufort County GIS Department

corn, tobacco, rice, potatoes, truck crops and livestock, none reached the prominence of the rice, indigo, or Sea Island long-staple cotton of previous years.

Truck crops were a large and profitable industry in Beaufort County during the early to mid-1900s, and today's agricultural production is based upon this agricultural sector. Although tomato crops are grown extensively on St. Helena Island, and there continues to be a scattering of truck crops and livestock raising operations, many of the County's large agricultural lands lie fallow. Forest management and production has again become the major agricultural activity in the County.

Today, Beaufort County farmers have expressed an interest in maintaining agriculture as a viable business and continuing to farm. Crops will continue to change, as they have historically, as the markets for specific products change. According to the Clemson Agricultural Extension Service, a contemporary form of agriculture in Beaufort County today is associated with growing and maintaining turf grass for sod and golf courses.[5]

Planted pine is also considered a form of agriculture. A description of this land use activity is contained in the following section on forestry.

b. Upland Forests

The upland forests in Beaufort County totaled 81,367 acres in 1988. With an additional 24,416 acres of planted pine, it brings the total forest cover to 105,783 acres. The forest areas have been classified into four distinct forest types: planted pine, evergreen upland forest, deciduous upland forest, and mixed upland forest. The relative percentages are presented in Figure 21.

In 1993,[6] a total of 128st were inventoried in Beaufort County, representing an increase of 21 percent in total forest cover from 1988. This change in land use reflected a notable shift in traditional agricultural uses with an increasing number of fields being converted to forest cover. The ownership patterns of these forest areas are presented in Figure 22.

c. Forestry Management

South Carolina's forest industry is an important component of the state's economy. This is particularly true in Beaufort County where an estimated 25 percent of the County's forest areas are in some form of a forestry management program. The South Carolina Forestry Commission is the lead agency designing, interpreting, monitoring, and updating forestry Best Management Practices (BMPs). Forestry BMPs give forest landowners guidelines to follow for practicing good stewardship on forestland.

The largest private forest industry organization in Beaufort County is Union Camp Corporation which currently manages over 27,000 acres in southern Beaufort County. Presently, the majority of their holdings are in some form of forestry management.

5 Personal conversation with Jack Keener, Director, Clemson Extension Service.

6 Forest Statistics for the Southern Coastal Plain, U.S. Forest Service, U.S. Department of Agriculture, 1993.

Figure 21: Forest type land cover distribution, 1988 LANDSAT.

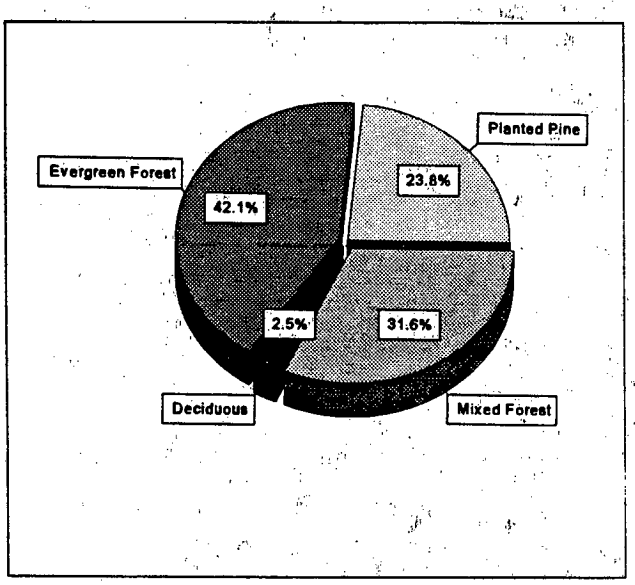
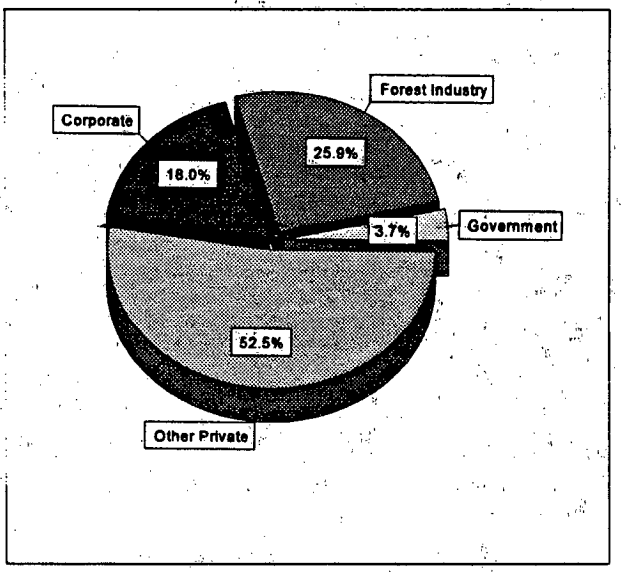


Figure 22: Forest ownership, US Forest Service, 1993.



5.4.3 Estuaries

The tidal estuaries of Beaufort County account for 232,171 acres or nearly 50 percent of the County. The majority of this area is comprised of tidal wetlands. This section provides an overview of the ecological significance of the County's estuaries and a brief summary of the commercial fishery activities which are dependent on the health of the estuary.

a. Ecological Significance

Acre-for-acre, estuaries represent the most productive biotic communities in the world. Beaufort County has one of the more productive estuarine resources in South Carolina with a more than a full third of statewide shellfish and finfish harvests coming from local estuaries. More than an important economic statistic, these resources represent a locally specific lifestyle and sense of place which has been a part of the Beaufort community since colonial times.

Estuarine waters are the dominant component and bonding element of the entire estuarine system, integrating aquatic influences from both the land and the sea. They support the valuable commercial and sports fisheries of the coastal area which are comprised of estuarine-dependent species such as menhaden, flounder, shrimp, crabs, and oysters. These species must spend all or some part of their life cycle within the estuarine waters to mature and reproduce. Most of the leading species in the commercial catch are dependent on the estuary.

This high productivity associated with the estuary results from its unique circulation patterns caused by tidal energy, fresh water flow, and shallow depth; nutrient trapping mechanisms; and protection to the many organisms. The circulation of estuarine waters transports nutrients, propels plankton, spreads seed stages of fish and shellfish, flushes wastes from animal and plant life, cleanses the system of pollutants, controls salinity, shifts sediments, and mixes the water to create a multitude of habitats. Some important features of the estuary include mud

and sand flats, eel grass beds, salt marshes, submerged vegetation flats, clam and oyster beds, and important nursery areas.

Secondary benefits of coastal estuaries include the stimulation of the coastal economy from the secondary activities required to service commercial and sports fisheries, waterfowl hunting, marinas, boatyards, repairs and supplies, processing operations, and tourist-related industries. In addition, there is considerable non-monetary value associated with aesthetics, recreation, and education. Man's historical development in the region has also been closely linked with the estuaries, evidenced by the concentration of local archeological resources by the waters edge (see Cultural Resources chapter).

In a study conducted by the National Marine Fisheries Service in 1970, a total of fifty-nine species of fish and eight species of macroinvertibrates (shrimp and crab) were collected in the combined samples from five tidal streams within the Port Royal Sound. The results of the survey offered a glimpse of the harvestable resources of the estuaries with a mean standing crop of 8,132 fish per acre. Of the fifty-nine species of fish documented in this survey, four of these species accounted for more than 95 percent of the total catch. Bay anchovy dominated the fish population and was followed in order of decreasing abundance by Atlantic silverside, stripped mullet, and silver perch.

b. Commercial Fisheries

In terms of regional and state-wide significance, Beaufort County boasts a full third of South Carolina's fisheries harvest.[7] Total landings county-wide are compared with percentages of the state-wide totals in Table 15.

i. Blue Crab

The blue crab (*Callinectes sapidus*) leads the list of economically important species in Beaufort's estuaries. In 1995, 3.2 million pounds of crab were harvested from the waters of Beaufort County. This accounted for nearly half of the state's total and represented a value of nearly $2 million.[8]

Similarly, the blue crab is also very important ecologically in the estuaries. Blue crab utilize all habitats in the Low Country's estuaries, from the deepest water to the marsh's edge and from the most saline to fresh water. Bivalves, crustaceans, and fish are its favorite foods. Blue crab themselves are important in the diets of striped bass, eels, and numerous other fish.

Although stocks appear to be thriving, there is concern that overfishing may occur. Shoreline development and contaminant-laden runoff will degrade important nearshore molting and foraging habitats of the blue crab.

ii. Shrimp

The estuaries throughout Beaufort County are known statewide for their quality and

7 South Carolina Department of Natural Resources, Division of Fisheries Statistics, 1995.

8 South Carolina Department of Natural Resources, Division of Fisheries Statistics, 1995.

quantity of shrimp. The shrimp fishery includes three species of native swimming shrimp; the brown, white, and less common pink varieties.

Although shrimp can migrate hundreds of miles seasonally in response to changes in water temperature, storms, currents and salinity, they rely heavily on the tidal wetlands and salt marshes for survival. Marine studies have shown a strong correlation between the quality of local intertidal wetland areas and shrimp yields.[9]

Today's shrimp harvests account for more than a third of the South Carolina state total. Nearly 2.4 million pounds of shrimp were harvested in 1995 representing a value of more than $7.7 million.[10]

iii. Clams and Oysters

Clams and oysters represent the largest shellfish resource in Beaufort County. A full quarter of the state's recorded oyster harvest come from Beaufort's estuaries valuing nearly $2 million to the local economy on an annual basis.[11]

These bivalves are typically very resilient to the wide swings of temperature, salinity, turbidity and dissolved oxygen which characterize their habitat. Clams and oysters are both filter feeders which rely on phytoplankton and zoo plankton as their primary food source. These filter feeders are ecologically important for their ability to transfer carbon and nitrogen to benthic food chains and through excretion and rapid recycling of particulate nitrogen as ammonia.

Table 15: Selected Commercial Marine Fisheries Landings, 1995.

Fishery	*Landings*	*Percent of State Total*	*Value*
Shrimp	2,351,518 lbs.(heads off)	34%	$7,701,578
Blue Crab	3,280,299 lbs.	47%	$1,958,488
Clams	5,085 (250) count bags	16%	$136,153
Oysters	23,050 US bushels	26%	$260,736
Finfish	72,266 lbs.	2%	$63,406

9 Estuarine adaptations of shrimp from *Estuarine Ecology*, Day et.al., 1989, p. 484.

10 South Carolina Department of Natural Resources, Division of Fisheries Statistics, 1995.

11 *Ibid.*

iv. Finfish

The 72,000 pounds of recorded finfish landings in Beaufort County accounted for 2 percent of statewide totals in 1995.[12] Although this represents a relatively low percentage of statewide finfish harvests, the value of County waters ecologically as finfish nurseries are recognized as significantly high by the state. In light of this high ecological value, four rivers in Beaufort County have been designated as Outstanding Resource Waters (ORWs) by the State. These include the Colleton, Okatee, and May Rivers along with Chechessee Creek.

5.4.4 Sensitive Ecological Communities

Ecological communities form a wonderfully varied and complex mosaic in the Lowcountry region of Beaufort County. The term "communities" infers the multiplicity of individual species which make-up the whole of a specific ecological community. The communities provide specific habitat where its members can forage for food, find shelter, and are able to reproduce and sustain viable populations. Maintenance of this habitat is fundamental to the survival of any species. When habitats are destroyed or suffer a negative impact, the species must either adapt, move on to seek out undisturbed habitat, or perish.

In an effort to protect the threatened and endangered species found in South Carolina, the South Carolina Heritage Trust Program was established in 1976. This is the first such program in the nation established to combat the loss of habitat by protecting critical sites through acquisition and other means.

a. Heritage Program Element Ranks

The South Carolina Heritage Trust Program assigns each species an "element rank" which consists of a combined global and state rank. The global rank reflects the rarity of the element throughout the world. The state rank reflects the rarity within South Carolina as established by the Heritage Trust Program.

i. Global Ranks

G1 = Critically impaired throughout its range due to extreme rarity (5 or fewer occurrences) or extremely vulnerable to extinction due to biological factors.

G2 = Imperiled throughout its range due to rarity (6 - 20 occurrences) or highly vulnerable to extinction due to biological factors.

G3 = Either very rare throughout its range (21 - 100 occurrences), with a restricted range (but possibly locally abundant), or vulnerable to extinction due to biological factors.

G4 = Apparently secure throughout its range (but possibly rare in parts of its range).

G5 = Demonstrably secure throughout its range (however it may be rare in certain areas).

ii. State Ranks

S1 = Typically 5 or fewer occurrences, very few remaining individuals, acres, or miles of stream, or especially vulnerable to extirpation in South Carolina for other reasons.

12 *Ibid.*

S2 =Typically 6 to 20 occurrences, few remaining individuals, acres, or miles of stream or very vulnerable to elimination in South Carolina for other reasons.

S3 = Typically 21 to 100 occurrences, limited acreage, or miles of stream in South Carolina.

S4 = Apparently secure in South Carolina.

S5 = Demonstrably secure in South Carolina.

"?" = Indicates uncertainty about the rank.

iii. Status

Each species is also assigned a legal status which pertains to the federal, regional, or state status of the species.

FE = Federal Endangered
FT = Federal Threatened
NC = National Concern (unofficial - plants only)
RC = Regional Concern (unofficial -plants only)
SE = State Endangered (official - animals only)
ST = State Threatened (official - animals only)
SC = State Concern
SX = State Extirpated
PE/PT/C = Proposed or candidate for federal listing

b. Endangered Plants

The Nongame and Heritage Trust Section of the South Carolina Wildlife and Marine Resources Department has identified 178 threatened and endangered plants in South Carolina.[13] There are three major listing categories: national concern (46 species), regional concern (36 species), and statewide concern (96 species).

Of the many plant species recognized by the state and federal government as rare, endangered or threatened, 54 sites have been documented within Beaufort County providing habitat for a total of 25 species. These plant species are listed in Table 16.

c. Endangered Animals

A total of 42 animal species have been identified by the Nongame and Heritage Trust Section as being threatened or endangered animals in South Carolina. Of these, more than 40 percent can be found in Beaufort County. Furthermore, 133 sites have been inventoried by the South Carolina Wildlife and Marine Resources Division, representing a total of 14 endangered, or threatened animal species within Beaufort County. These threatened or endangered animal species are presented in Table 17 along with corresponding status, global / state rank, and number of occurrences.

Like the threatened and endangered plant species, these sightings and number of occurrences are not entirely representative of each species. For example, Brown Pelicans have been seen much more frequently than the single occurrence reported in Table 17. This table simply offers insight into the range of species inventoried in the County by professional biologists. What is infinitely more important than the protection of a single species is the protection of the habitat upon which these species are dependent for their survival.

13 South Carolina Wildlife and Marine Resources Department.

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Scale 1:253517

Beaufort County

Natural Features

MAP 11

Legend

- Woodlands
- Sand/Mud Areas
- Swamps/Wetlands
- Nurseries/Orchards
- Cultivated Fields
- County Boundary
- Class 1 Roads
- Endangered Plant and Animal Species

Prepared By Beaufort County GIS Department

Table 16: Threatened and endangered plant species of Beaufort County.

Scientific Name	Common Name	Status	G/S Rank	Occurrences
Agalinis maritama	Salt Marsh	SC	G5/S?	1
Agarista populifolia	Carolina dog-hobble	SC	G4,5/S1	2
Agrimonia incisa	Incised Groovebur	NC	G3/S1	1
Aletris obovata	White colicroot	SC	G4,5/S?	1
Asclepias pedicellata	Savannah Milkweed	RC	G3/S1	2
Canna flaccida	Banana of the Everglades	SC	G5/S4	6
Cynanchum scoparium	Leafless Shallow-wort	SC	G4/S?	3
Cyperus distinctus	Marshland flatsedge	SC	G4/S1	1
Cyperus tetragonus	Piedmont flatsedge	SC	G4/S1	1
Epidendrum conopseum	Green-fly Orchid	SC	G4/S?	1
Eriochloa michauxii	Cupgrass	SC	G2/S?	1
Guara biennis	Biennial Guara	SC	G5/S?	1
Habenaria quinquesta	Long-horn Orchid	SC	G4,5/S?	1
Ipomoea macrorhiza	Large-stem Morning-glory	SC	G4,5/S	1
Lechea torreyi	Piedmont Pinweed	SC	G4,5/S?	1
Lindera melissifolia	Pondberry	FE	G2/S1	2
Lipocarpha micrantha	Dwarf Bulrush	SC	G4/S2	1
Litsea aestivalis	Pondspice	SC	G3/S3	5
Lyonia ferrugunea	Rusty Lyonia	SC	G5/S1	2
Muhlenbergia filipes	Bentgrass; Hairgrass	SC	G?/S?	1
Nyssa ogeche	Ogeechee Tupelo	SC	G4,5/S?	1
Pinckneya pubens	Hairy Fever Tree	SC	G3,5/S1	2
Psilotum nudum	Whisk Fern	SC	G5/S1,2	1
Quercus myrtifolia	Myrtle-leaf Oak	SC	G5/S?	2
Rhapidophyllum hystrix	Needle Palm	SC	G4/S?	3
Ruellia caroliniensis ciliosa	A. Petunia	SC	G5/S?	1
Sageratia minutiflora	Tiny-leafed Buckhorn	SC	G4/S2	7
Schwalbea americana	Chaffseed	FE	G2/S2	1
Syngonanthus flavidus	Yellow pipewort	SC	G5/S?	1
Thalia dealbata	Powdery Thalia	SC	G3,5/S?	1
Trillium pusillum	Least Trillum	SC	G3/S?	1

Table 1.7: Threatened and endangered animal species of Beaufort County

Scientific Name	Common Name	Status	G/S Rank	Occurrences
Caretta caretta	Loggerhead Sea Turtle	FT	G3/S3	8
Haliaeetus leucocephalus	Bald Eagle	FT	G4/S2	17
Hyla avivoca	Bird Voiced Treefrog	SC	G5/S5	1
Lasiurus intermedius	Northern Yellow Bat	SC	G4,5/S?	1
Limnothlypis swansonii	Swainson's Warbler	SC	G4/S4	1
Micrusus fulvius	Eastern Coral Snake	SC	G5/S2	1
Myotis lucifugus	Little Brown Myotis	SC	G5/S3	1
Neotoma floridia	Eastern Woodrat	SC	G5/S3,4	1
Pelecanus occidentalis	Brown Pelican	SC	G4/S1,2	1
Phoca vtulina	Harbor Seal	SC	G5/S4	1
Pseudotriton montanus	Gulf Coast Mud Salamander	SC	G5/S3,4	1
Sciurus niger	Eastern Fox Squirrel	SC	G5/S4	2
Sterna antillarum	Least Tern	ST	G4/S3	4

d. Habitats

Habitats are the places in which plants and animals feed, find shelter, reproduce and raise their young. Sustaining safe habitat is fundamental to the survival of any species. Habitats may be relatively small, well-defined areas such as the nesting and feeding area of an osprey pair, or may encompass large regions as is the case for many migratory species. Habitats vary in time, in response to seasonal or long-term changes in temperature, salinity, human impacts, and other variables. For example, the Loggerhead sea turtle depends on clear beach access at night to lay their eggs during a relatively brief period between mid-May and mid-August. Other species, such as the pondberry plant, require a relatively undisturbed habitat year-round.

Ecologists refer to some habitats as distinct ecological niches in which each species has developed specific adaptations to a particular set of conditions within that habitat. Some species adapt more easily to change than other species. Conversely, there are some species which are extremely sensitive to minor disturbances and losses of habitat. According to the South Carolina Wildlife and Marine Resources Department, the "direct loss of available habitat through man's activities into undisturbed areas is a primary reason for the population decline of many wildlife species in South Carolina."[14]

14 *South Carolina's Endangered Species Portfolio*, South Carolina Wildlife and Marine Resources Department.

5.5 The Changing Tides of Water Quality

Beaufort County, because of its unique sea island location, profusion of wetlands, and far reaching tidal waters, holds a direct connection between land and water. Because of this close connection, every action, whether boating, shrimping, fishing, building, planting, or simply driving has an impact on the estuaries and water quality of the County. What is surprising to many residents is the fact that land well removed from the shoreline still has a direct impact upon water quality found many miles downstream.

This chapter presents an overview of what is known about the County's water resources, ranging from ocean tides to surface and ground water quality and finally to a focused look at existing and historic impacts to water quality. Important background information is also presented from other coastal areas to help measure the potential impacts to County water resources from existing land uses and future development patterns.

5.5.1 The Tides

Beaufort County experiences a tidal displacement of approximately 7 to 8 feet, twice daily. The average tidal range is 7.5 feet with tides occasionally in excess of 9 feet. A tidal day is composed of two high tides and two low tides in the span of approximately 24.8 hours. With this kind of tidal surging, many people assume that the flushing capacity of these coastal waters is very high. However, studies have shown that local tidal hydraulics actually keep inputs in the system (such as pollutants or nutrients) for a period of approximately 50 days.[15]

15 Port Royal Sound Environmental Study, *A Tracer Simulation of Potential Solute Movement in Port Royal Sound*, 1972.

5.5.2. Surface Water

There is a direct association linking the quality of surface water and the land use activities along the shores, tributaries and watersheds in Beaufort County. Simply put, actions on individual properties have a potential impact to surface water quality miles away.

This section examines what is known about existing surface water quality. It presents an overview of water quality standards as established for marine waters and focuses on the existing water quality of the major watersheds of Beaufort County. These watersheds include:

- St. Helena Sound;
- Port Royal Sound;
- Calibogue Sound; and
- New River.

a. Existing Water Quality Information

The South Carolina Department of Health and Environmental Control (SCDHEC) has established a number of primary and secondary water quality stations throughout the tidal water bodies of Beaufort County. Currently there are nine primary stations which record water quality samples once a month. In addition, there are a series of secondary stations which augment water quality information during the summer months, primarily May through October. The information gleaned from these sampling stations provides SCDHEC with a basis for the management of shellfish harvesting areas in the County. By interpreting sampling data, watershed and water quality summaries can be developed for the Statewide Water Quality Assessment.[16]

What follows is a brief historical perspective on water quality and an overview of water quality standards. Also included are summaries of existing water quality from the three major watersheds of the County.

i. Historical Perspective

Prior to the mid-1800s, the effect of human activity on the local estuaries and water quality was limited to the effects of siltation from forest harvesting, runoff from agricultural areas, and the disposal of human wastes. During the last two decades, the enormous expansion in industrial activity, transportation, fishing intensity, and a significant increase in human population have all placed diverse and increasing pressures on these waters, affecting the natural processes of the estuaries.

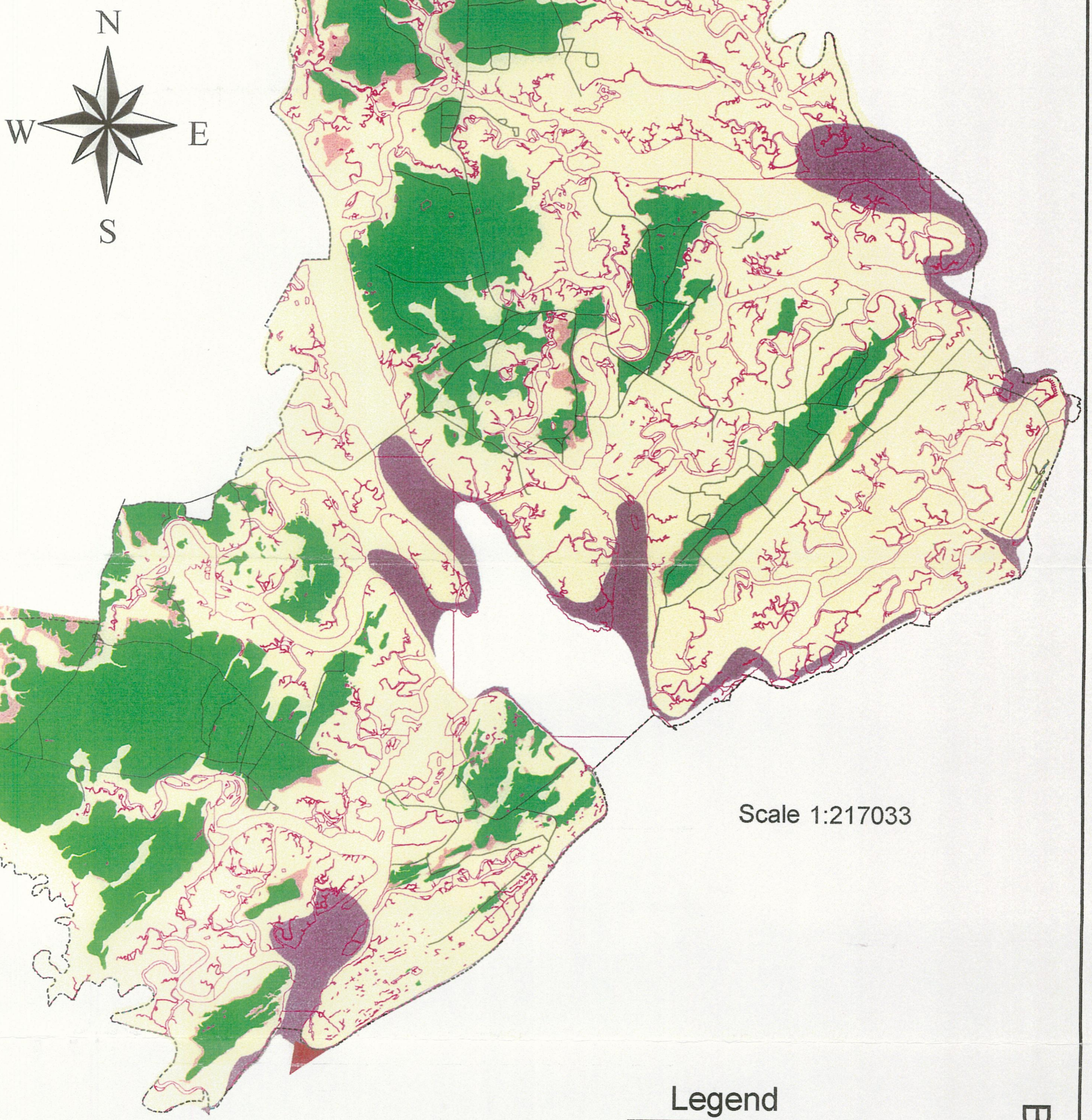
ii. Water Quality Standards

In general, the highest water quality standards for marine surface water bodies correlate to their ability to support and sustain a healthy shellfish and finfish population for harvesting. The water bodies of South Carolina have been classified based on the intended uses for each waterbody. These water-use classifications established by SCDHEC[17] are:

- *Class ORW*: "outstanding resource water" are freshwater or saltwater bodies which provide outstanding

16 A report to Congress by DHEC pursuant to Section 305 (b) of the Federal Water Quality Act, 1993.

17 As documented in *Watershed Water Quality Management Strategy*, SCDHEC, 1993.



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Legend

- Flood Zone A
- Flood Zone B
- Flood Zone C
- Flood Zone D
- Flood Zone VE
- County Boundary
- Class 1 Roads

Beaufort County

FEMA Floodplan

MAP 12

Prepared By Beaufort County GIS Department

recreational or ecological resources, or those suitable as a source for drinking water.

- *Class ORW*: "Outstanding resource water" are freshwater or saltwater bodies which provide outstanding recreational or ecological resources, or those suitable as a source for drinking water.
- *Class SA:* Tidal saltwater suitable for primary and secondary recreation, crabbing and fishing. These water bodies are protected for harvesting of clams, mussels, or oysters for human consumption. These water bodies are also suitable for the survival and propagation of a balanced indigenous aquatic community of marine fauna and flora.
- *Class SB:* Tidal water bodies suitable for the same uses listed in class SA. The difference between SA and SB are limitations placed on the dissolved oxygen (DO). Class SA waters must maintain daily DO averages not less than 5.0 mg/l, and Class SB waters maintain DO levels not less than 4.0 mg/l.[18]
- *Class SFH:* Shellfish harvesting water bodies are the highest quality tidal water designation. These tidal water bodies are protected for shellfish harvesting and are suitable for all uses listed in Classes SA and SB.

In terms of regional reference, Beaufort County lies wholly within the lower sub-basin in the Lowcountry region with contributing water bodies flowing out of Jasper, Hampton and Colleton Counties. This coastal system includes extensive swamps, inlets, tidal creeks, 15 rivers and three major sounds, including St. Helena, Port Royal, and Calibogue Sounds. These three sounds are recognized by the state as separate and distinct watershed basins, each with its own labyrinth of contributing watershed sub-basins. Brief descriptions of these watersheds follow with information regarding existing water quality where available.

b. St. Helena Sound

St. Helena Sound, part of the ACE Basin for its combining rivers of the Ashepoo, Combahee, and Edisto, is located in the north-eastern part of Beaufort County. There are currently 5 primary water quality monitoring stations within this watershed. The Combahee River, southernmost of the three major rivers which feed into it, demarks the County boundary. St. Helena Sound is classified as shellfish harvesting waters.

i. Existing Water Quality

Although much of the freshwater which drains into St. Helena Sound rates poor in water quality because of high pH levels,[19] this is typical of black water swamps and is not necessarily indicative of any one particular water quality problem. On the contrary, the ACE Basin is highly prized for its black water swamps and high quality natural environment by such organizations as The Nature Conservancy. Aquatic life, recreational uses, and shellfish harvesting are all fully sup-

18 "DO" refers to dissolved oxygen levels in natural and wastewaters. DO levels are dependent on the physical, chemical, and biochemical activities in the water body and is a key test in water quality analysis.

19 SCDHEC, *Statewide Water Quality Assessment*, FY 1992 - 1993.

ported in the Combahee River.[20] The term "supported" in the context of water quality, refers to a water's ability to support state designated uses. St. Helena Sound is listed as an "impacted water body" by SCDHEC, primarily for high nutrient levels that result from adjacent agricultural activities which enter in the form of nonpoint source pollution.[21]

c. Port Royal Sound

Port Royal Sound lies at the heart of Beaufort County with its wide tributary— the Broad River—as the major divider between north and south. There are currently three primary water quality monitoring stations in this watershed. The major rivers in the County which empty into Port Royal Sound include the Okatie, Colleton, Chechessee, Whale Branch, and Beaufort Rivers. Other rivers flowing into the Sound from Jasper County include the Coosawhatchie, Tulifiny, and Pocotaligo Rivers.

i. Existing Water Quality

Existing water quality varies dramatically across the tributaries of Port Royal Sound. Although both the Chechessee Creek and Colleton River are classified as ORWs of South Carolina, both suffer negative impacts from adjacent and upstream land uses.[22] In the Chechessee Creek, certain sections are closed to shellfish harvesting, and recreational uses are supported but threatened by a significant increase in fecal coliform. In the Colleton River, aquatic life uses are fully supported as are recreational uses. The majority of the Beaufort River, downstream of the USMC Air Station and urban areas of Beaufort and Port Royal remain closed to shellfishing as far as Bermuda Bluff due to treatment plant outfalls and/or nonpoint source pollution from agriculture. In Port Royal Sound itself, aquatic life, recreational uses, and shellfish harvesting are all fully supported although there are some areas which remain closed to shellfish harvesting.

d. Calibogue Sound

Calibogue Sound is located west of Hilton Head Island. The major rivers which flow into the Sound include the Cooper and May Rivers. Major creeks which also flow into the Sound include the Mackay, Skull, and Broad Creeks.

i. Existing Water Quality

The May River is classified as an ORW by the State and generally supports shellfish harvesting and recreational uses throughout.[23] Skull Creek, the Mackay River and parts of Broad Creek have been closed to shellfish harvesting.[24] Broad Creek, Calibogue Sound and the New River all suffer negative impacts due to nonpoint source pollution, in-

20 SCDHEC, *Statewide Water Quality Assessment*, FY 1992 - 1993.

21 *Ibid.*

22 *Ibid.*

23 *Ibid.*

24 *Ibid*

Item 15.

cluding urban runoff, agricultural and timbering activities. The Okatie River and Broad Creek have been recognized by Beaufort County's Clean Water Task Force as an area which has endured significant degradation due to nonpoint source pollution.

e. New River

The New River watershed, which includes the New River Estuary, is formed by the Great Swamp and Bagshaw Swamp. Tidally interconnected just to the south of Calibogue Sound, the New River flows into the Atlantic Ocean, forming the southern border between Beaufort and Jasper Counties.

i. Existing Water Quality

Numerous elevated levels of ammonia have been recorded in the New River.[25] In addition, recreational uses and shellfish harvesting activities are prohibited in the New River due to fecal coliform contamination. Turbidity has exhibited a significantly increasing trend, most probably originating from agriculture and urban runoff.[26]

A more detailed look at specific water quality impacts County-wide is presented in "The Impacts to Water Quality," section 6.

5.5.3 Ground-Water

Beaufort County derives much of its drinking water from ground-water sources.[27] Indeed all of Beaufort County north of the Whale Branch and most of the Bluffton area depend on ground-water sources for their everyday water needs. The Beaufort/Jasper Water and Sewer Authority (BJWSA) currently pumps 1 million gallons per day from its 6 wells to serve the 2,200 households in the Bluffton and Rose Hill area with their freshwater needs.[28] This ground-water pumping augments the 7 million gallons per day of treated surface water being supplied by BJWSA which is pumped from the Savannah River for most of its service area north of the Broad.[29] All ground-water resources are within the regional Floridan Aquifer.

a. Floridan Aquifer

The Floridan Aquifer is the major coastal-plain aquifer for southern South Carolina, Georgia, Florida, and eastern Alabama.[30] The aquifer is composed of two major limestone formations: the Ocala and the Santee, which range in geologic age from Paleocene through early Miocene, respectively.[31] The aquifer is generally unconfined in the

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25 SCDHEC, *Statewide Water Assessment*, FY 1992 - 1993.

26 *Ibid.*

27 South Carolina Water Resources Commission, Report Number 158, *Hydrogeology and Saltwater Contamination of the Floridan Aquifer in Beaufort and Jasper Counties, South Carolina*, 1989.

28 Personal communication with Dean Moss, Director of the BJWSA, 1996.

29 *Ibid.*

30 U.S. Geological Survey, *Hydrogeologic Framework of the Floridan Aquifer System*, 1986.

Beaufort Area, overlaid by unconsolidated sands and clays of varying permeability.

Studies have been conducted examining the ground-water hydraulics of the Floridan Aquifer. The term "ground-water hydraulics" refers to the movement of water through the subsurface. The geologic and hydraulic properties which are key to understanding how water moves through the Floridan Aquifer include hydraulic conductivity, transmissivity, and storage capacity.

A potentiometric map indicates the direction of ground-water flow and, in conjunction with other information, the rate of flow. The map indicates at what depth, relative to sea level, the top of the water table can be found. The detail of this map was gained from an intensive ground-water monitoring network of more than 240 wells. It is through the interpretation of maps such as this that determinations can be made identifying where significant areas of recharge occur and where cones of depression may cause problems for County residents with shallow wells. The potentiometric map of the upper unit of the Floridan Aquifer was prepared by the South Carolina Water Resources Commission in 1986. The contours on this map indicate the elevation to which water would rise in wells tapping into the aquifer.

b. Aquifer Recharge Areas

Aquifer recharge occurs as a direct result of rainfall entering the aquifer where the overlying confining unit is thin or absent. Because the Floridan Aquifer is generally unconfined throughout Beaufort, most of the upland areas of Beaufort County contribute some ground-water recharge to the underlying aquifers. The term "confined" and its converse "unconfined" refer to an aquifer's overlying strata or subsoil. If a relatively impervious soil such as clay overlays an aquifer, it is said to be confined. If the aquifer is overlaid, as in Beaufort's case, with sands and gravels, it is unconfined. This means that the rainwater percolates directly into the aquifer. The potential for ground-water contamination is greater in unconfined aquifers because of the uninterrupted percolation of rainwater through whatever is present on the ground's surface or in the subsurface.

As presented by the potentiometric map described above, there are some areas of the County which provide greater recharge due to localized soil and geologic characteristics.[32] Ground-water flow on the islands typically radiates away from the land masses toward the areas of discharge: the oceans, estuaries, and marshes.

Locally significant recharge occurs on the northern part of Port Royal Island, the northern part of Lady's Island, St. Helena Island, and on the barrier islands. The northern part of Hilton Head Island is possibly an area of recharge, but the effects of this are insignificant due to the dominating regional influence of the cone of depression centered in Savannah.

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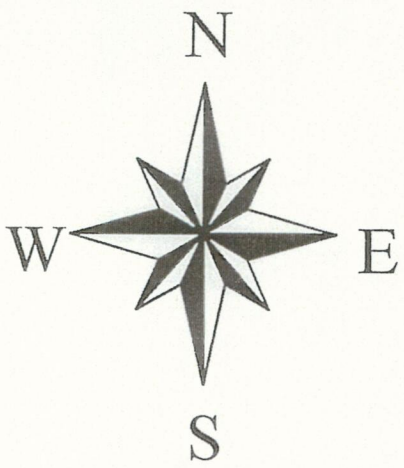
31 60 million to 200 million years ago.

32 SC Water Resources Commission, Report #157, Potentiometric Surface of the Floridan Aquifer, 1986.



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Beaufort County

Potentiometric Surface of Floridian Aquifer

MAP 13

Legend

- Potentiometric Contours
- Class 1 Roads
- County Boundary

Prepared By Beaufort County GIS Department

c. Cones of Depression

Hydraulic cones of depression are areas in which intense local groundwater withdrawal (pumping), causes the surface of the ground water table to form a conical depression. This cone of depression has its origin at the point of withdrawal (such as a pipe at the bottom of a well), and radiates out as it nears the surface. In some areas, such as Savannah and Charleston, these cones of depression are regional and may cover many miles and result in the lowering of the water table. Several studies conducted by the South Carolina Water Resources Commission and the U.S. Geologic Survey have indicated that the lowering of water tables will subsequently result in water quality problems due to salt water intrusion.[33]

Locally, there are two areas which indicate cones of depression. One is located on Hilton Head Island and the other is located west of Dale, just north of the Whale Branch River. Savannah's regional cone of depression continues to dominate the shifts in the local potentiometric groundwater surface. All of these cones of depression are caused by groundwater (pumping) withdrawal.

d. Groundwater Contamination

When groundwater becomes contaminated, pollutants follow the hydraulic gradient and adversely impact wells, streams, rivers, shellfish beds and other recreational waters. Due to the unconfined nature of the Floridan Aquifer, the risk in Beaufort County of groundwater contamination is very high.

In 1983, the Ground-Water Protection Division (GWPD) of SCDHEC prepared the study, *A Report to the General Assembly on Ground-Water Contamination in South Carolina*. This study contained an updated list of 154 documented cases of ground-water pollution. The activities were most often identified as causing impacts to ground-water included storage tanks and transmission lines, spills, wastewater pits, ponds and lagoons, and landfills.

In 1993, the GWPD reported 2,207 cases of groundwater contamination in their statewide inventory. The reported increase is attributed to: (1) an increase in facility monitoring efforts; (2) a more focused awareness on the unique nature of the state's groundwater resources; and (3) the enactment of underground storage tank control legislation.[34] The only site listed in this report which occurs in Beaufort County is the Wamchem site on Port Royal Island.

i. Saltwater Intrusion

There has been growing concern in Beaufort County over saltwater contamination of the dominant Floridan Aquifer. The region's proximity to large saltwater bodies and an increasing demand for groundwater has resulted in some wells in the County becoming brackish. Currently, saltwater is present in the aquifer beneath Port Royal Sound between Hilton Head Island and Parris Island. The saltwater is moving with the regional flow toward Hilton Head Island and the Savannah pumping center. Saltwater intrusion

33 South Carolina Water Resources Commission, *Water Use and Future Requirements, Hilton Head Island and Vicinity, South Carolina*, 1989.

34 Statewide Water Quality Assessment, FY 1992 - 1993, SCDHEC.

has occurred because the withdrawals of groundwater have caused water levels to decline over a broad area of the upper Floridan Aquifer, forming a regional cone of depression near Savannah and a localized cone of depression beneath Hilton Head. In 1984, the effects of Savannah's cone of depression extended beneath Hilton Head Island as far as Port Royal Sound causing a reversal in the groundwater flow in this aquifer. As a result, brackish water and saltwater in the aquifer beneath Port Royal Sound are moving slowly toward Hilton Head.[35]

The location and nature of the interface between saltwater and freshwater in the aquifer in and around Port Royal Sound and the Atlantic Ocean was investigated in 1984 by test drilling and sampling.[36] Brackish water was found at the top of the aquifer beneath Port Royal Sound less than two miles from Hilton Head.

The distribution of brackish water and saltwater in and around Port Royal Sound reflects the history of groundwater flow in the Upper Floridan aquifer. Records as early as 1899 indicate that freshwater was originally pumped from the top of the Floridan aquifer beneath Parris Island. These wells became "salty" after a few years of service and by 1916 freshwater was being carried to Parris Island by barge.[37] Pumpage on the island lowered water tables and reversed the direction of groundwater flow so that areas beneath the Sound and adjacent tidal flats and creeks where freshwater had previously discharged became areas of saltwater recharge.[38]

35 Water Resources Commission, *Hydrogeology and Saltwater Contamination of the Floridan Aquifer*, 1989.

36 *Ibid.*

37 *Ibid.*

38 US Geological Survey, Report 87-4285, 1987.

5.6 The Impacts to Water Quality

As a result of recent research, the impact of human activity on water resources is becoming more clearly documented. Thus, the effects of mistakes and mismanagement in other systems are becoming accessible to local policy-makers. Although water quality monitoring and specific research relating to water quality issues is scarce in Beaufort County, any local gaps in specific water quality monitoring and analysis can be inferred based on well developed models and water quality studies conducted in other coastal areas.

5.6.1 Point Source Pollution

The legal definition of "point source" in section 502(14) of the Clean Water Act states:

The term "point source" means any discernible, confined, and discrete conveyance, including but not limited to any pipe, ditch, channel, tunnel, conduit, well, discrete feature, container, rolling stock, concentrated animal feeding operation, or vessel or other floating craft, from which pollutants are or may be discharged. This term does not include agricultural stormwater discharges and return flows from irrigated agriculture.

In Beaufort County, as in all communities across the nation, all point source discharges require federal permits before discharging into federal waters. There are currently nine point source discharging permits issued in the County which have led to prohibited shellfish harvesting areas totaling 5,715 acres (see Table 18 and the shellfish harvest areas map).

Although some of the shellfish closures associated with these point discharges are considered purely "administrative,"[39] there

39 Administrative closures refer to those areas which are closed due to their proximity to point source discharges. These prohibited areas are not an indication of lesser water quality but rather "areas which have the potential for variable water quality."

remains the recognized potential for water quality degradation should an outfall exceed its permitted discharge.

5.6.2 Nonpoint Source Pollution

The most insidious of water quality impacts plaguing Beaufort County today is termed nonpoint source (NPS) pollution. Simply put, NPS pollution generally results from land runoff, precipitation, atmospheric deposition, drainage, and seepage. NPS pollution normally occurs during and after a rainstorm when pollutants are washed off the land in stormwater and sediment. Although nonpoint sources have been described in a number of ways, they are officially defined as sources of water pollution that do not meet the legal definition of "point source" in section 502(14) of the Clean Water Act.

In terms of existing regulations, the difference between point and nonpoint sources is that point sources are subject to the permitting requirements of the Clean Water Act. In contrast, nonpoint sources are not subject to federal permits and are usually addressed through voluntary programs.

A 1992 report to Congress by the U.S. Environmental Protection Agency (EPA) concluded that "nonpoint sources are responsible for between one-third and two-thirds of existing and threatened impairments of the states' water bodies."[40] Significant estuarine uses impacted by nonpoint source water pollution are presented in Figure 23.

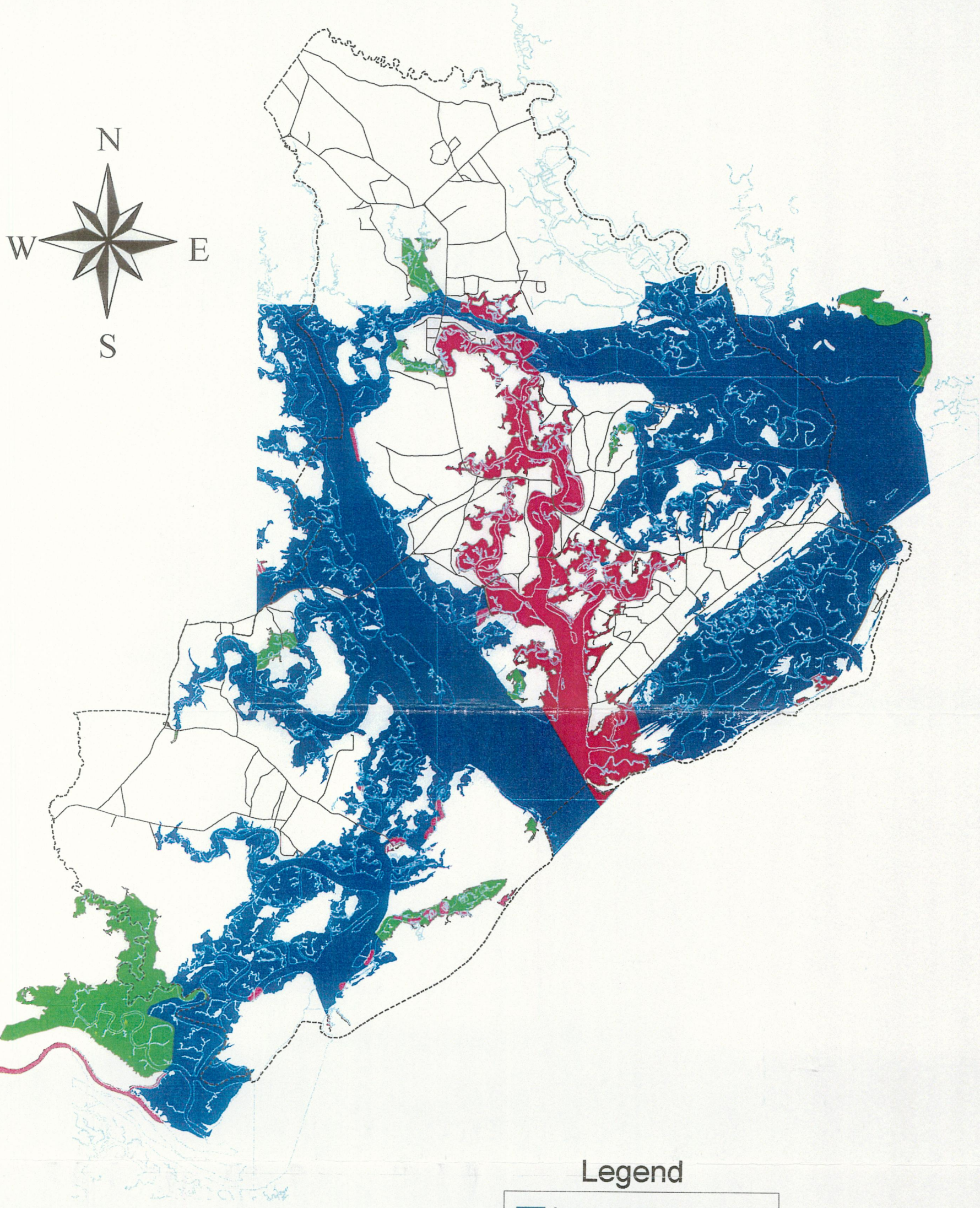
Wildlife, recreation, shellfishing and fisheries are those designated uses most affected by

Table 18: Point discharge locations and closed shellfish acreage.

Facility	*Waterbody Location*	*Closed Shellfish Acreage*
BJWSA Shell Point	Beaufort River	a
City of Beaufort	Beaufort River	a
Parris Island	Beaufort River	a
USMC Air Station	Albergotti Creek	a
Laurel Bay	Broad River	121
Lobeco Products	Campbell Creek	217
Davis Elem. School	Halfmoon Creek	393
Sea Pines PSD	Boggy Gut	561

a = The combined acreage of all facilities with this notation is 4,423.

40 U.S. Environmental Protection Agency, *Managing Nonpoint Source Pollution*, Final Report to Congress on Section 319 of the Clean Water Act, 1992.



Beaufort County

Shellfish Harvest Areas

MAP 14

Legend

- Approved Shellfish Harvest Areas
- Prohibited Shellfish Harvest Areas
- Restricted Shellfish Harvest Areas
- County Boundary
- Class 1 Roads

Scale 1:271352

Prepared By Beaufort County GIS Department

Figure 23: Estuarine uses impacted by NPS pollution, EPA, 1992.

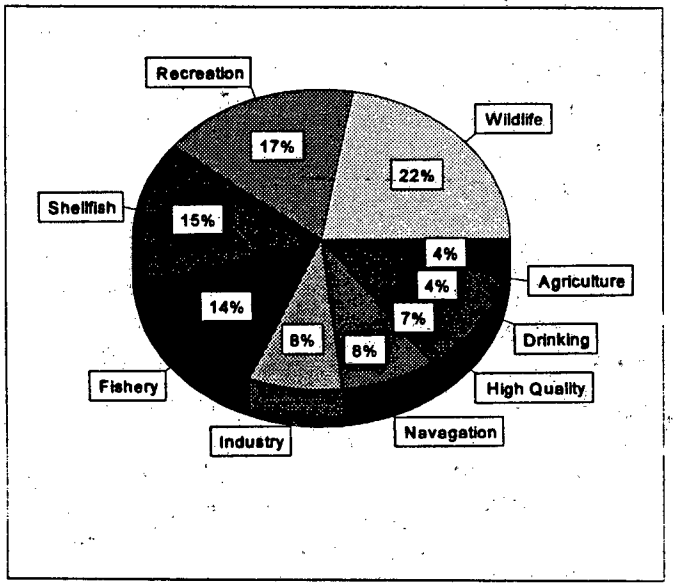
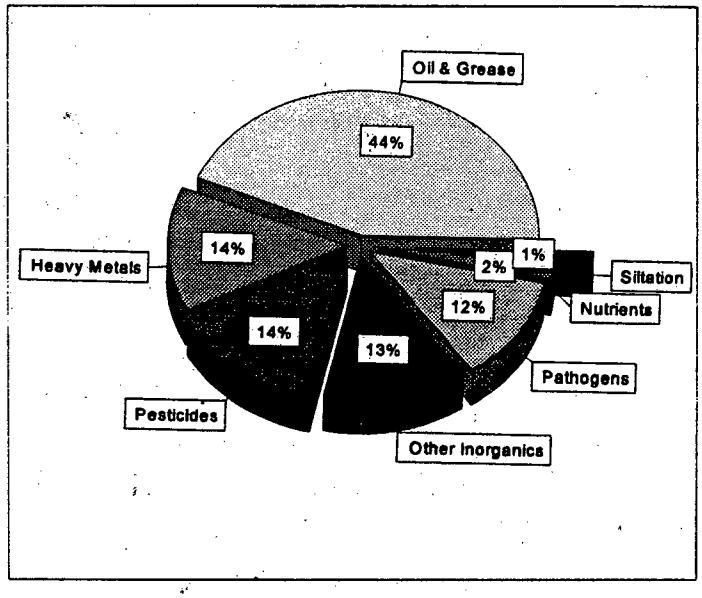


Figure 24: Primary NPS pollutants in coastal waters, EPA, 1992.



nonpoint source pollution within the nation's estuaries. Industry, navigation, high quality water, drinking water, and agricultural uses are affected to a lesser extent.

According to nation-wide studies conducted by the EPA, oil and grease constitute the primary pollutant affecting coastal areas.[41] Heavy metals, pesticides, other inorganics and pathogens impact about the same amount of coastal waters, while nutrients, siltation, and dissolved oxygen problems affect much less acreage (see Figure 24).

NPS impacts to water quality in Beaufort County are examined here under four primary categories. These include:

- development activity;
- agriculture and forestry;
- stormwater runoff; and
- marine activities.

Each of these impacts are discussed in the following sections to help characterize the cumulative impacts of nonpoint source pollution in the County today.

a. Development Activity

Existing development in both coastal and upland portions of Beaufort County has caused a number of direct and indirect environmental impacts to both surface and ground water quality. A distinction is made here between coastal and upland areas in order to underscore the importance of understanding that surface water impacts may occur miles from the nearest creek or river. When it rains, all parts of the County are inseparably connected in terms of water quality.

41 *Ibid.*

Development-related contributors to NPS pollution include, but are not limited to:

- failing septic systems;
- sedimentation caused by soil erosion from construction sites and areas devoid of vegetation;
- fertilizers and pesticides applied to golf courses and other landscaped areas;
- destruction or removal of near-shore and upland vegetation; and
- destruction or filling-in of wetlands.

The following are brief summaries of the these NPS pollution types evident in Beaufort County today.

i. Septic Systems

A typical septic system for a household of four discharges approximately 65,000 gallons per year to the soil. This results in septic systems being cited as "the leading source, by volume, of groundwater pollution."[42] Septic systems in Beaufort County are regulated by the SCDHEC according to state-wide criteria established by the State of South Carolina. Current regulations require only six inches of separation between the bottom of a septic leaching trench and the top of the water table.

As explained in the section on ground-water, the top of the ground-water table or potentiometric surface is very close to the ground's surface in the Lowcountry. This is no different from other coastal regions. For this reason, many coastal states have revised septic system standards because of the high risk of groundwater and surface water contamination from septic effluent. Since there is a lack of detailed local water quality information, the use of nationwide findings to assess the risk to local estuaries of pollution from inadequately functioning septic systems to local estuaries is warranted.

The EPA has cited septic systems and storage tank leaks as the biggest contributors to nonpoint source impacts specific to coastal areas nation-wide. Specific impacts to water quality caused by septic systems include the following:

- bacterial and nutrient pollution of surface and ground waters due to inadequate or failing septic systems; and
- nutrient pollution of the rivers and estuaries due to concentrations of "adequately functioning" septic systems serving high-density housing in close proximity to surface waters.

ii. Sedimentation and Soil Erosion

Soil erosion is an unavoidable risk associated with land development. If the eroding soil is not captured on-site, there will be subsequent sedimentation in receiving waters which cause serious problems for shellfish and other forms of aquatic life. By removing existing vegetation during development, soil material is loosened and exposed to stormwater runoff. Sediment which is transported to rivers and estuaries degrades aquatic ecosystems, reducing the value of habitats important for fish propagation and spawning. For this reason, on-site retention of sediment is

42 SCDHEC, *Assessment of Septic Tank Regulations in South Carolina and Southeastern States and their Potential Cumulative and Secondary Impacts to Coastal Waters*, OCRM, 1994.

encouraged or required in most developing coastal areas. This includes the use of silt fences, sediment traps, and stormwater management techniques. Specific impacts of sedimentation and soil erosion associated with site development include:

- erosion of fragile soils from residential construction and the removal of vegetation;
- changes in drainage patterns caused by re-grading operations; and
- altering the groundwater regime, affecting the survival of existing and new vegetation.

iii. Fertilizers and Pesticides Applied to Golf Courses and Other Landscaped Areas

The potential impacts to groundwater and surfacewater bodies from golf courses and other landscaped areas has caused concern among County residents. This concern centers on the application of fertilizers and pesticides and their impacts as non-point source pollution.

Golf courses and other landscaped areas can affect the environment in two ways:

- through the application of fertilizers and pesticides to turf or landscaped areas; and
- the loss of trees and native vegetation which leads to habitat loss and a potential increase in stormwater runoff.

Literature on the subject provides varying conclusions with respect to the impacts on natural systems. It should be recognized that the research on golf course impacts is still largely in its infancy. However, there are some areas of consensus. There seems to be consensus in the literature that well-managed golf courses are an appropriate land use in non-wetland areas, especially in areas where there has already been considerable disturbance of the natural system. There is also a general consensus that golf courses should not be located in ecologically sensitive areas.[43]

Research to date has focused largely on the impacts of toxic pesticides in aquatic systems. However, an equally serious issue for aquatic systems, particularly the Outstanding Resource Waters in Beaufort County is that of nutrient loading resulting in eutrophication. This area has not been well researched, with the measurement of water quality in past studies focusing on EPA standards for human consumption, not the more critical standards related to nutrient impacts.

Landscape and golf course managers have responded to these issues by implementing Integrated Pest Management (IPM) strategies to reduce fertilizer and pesticide application levels. While these methods have proven promising, a well crafted IPM program can be costly to implement due to the high level of skill and expertise required for staff.

The U.S. Golf Association and Audobon International have co-sponsored a certification program for golf courses to encourage environmental awareness. The Audobon Cooperative Sanctuary program certifies that already-established golf courses are managed so well that environmental quality improves.

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43 The Center for Resource Management, *Charting a Sustainable Future: Golf, Environmental Principles for Golf Courses in the United States*, 1996.

The Audobon Signature Cooperative Sanctuary program offers certification to new golf courses that utilize a series of principles from the beginning of the siting and design phase. The difficulty with these certifications lies in the fact that Audobon makes no site visits to verify compliance and relies instead on information provided by the golf course managers. Audobon International is not a part of the National Audobon Society, but an affiliate of the New York Audobon Society.

Given the imperfect status of research on the impacts of golf courses and large landscaped areas on water quality, care should be taken in siting golf courses in sensitive areas of the County. In addition, since a loss of trees and native vegetation leads to habitat loss and a potential increase in stormwater runoff, clearing restrictions should be established, particularly in the areas surrounding ORW's. This will ensure that both the amount and quality of stormwater runoff is regulated, maintaining the balance to the fragile aquatic ecosystem.

iv. Removal of Existing Vegetation

Another development impact contributing to nonpoint source pollution is the removal of existing vegetation. Without vegetation to help stabilize soil in place, the risk of sedimentation and erosion is much greater. Existing vegetation can remove sediment and sediment-attached phosphorus by filtration. Excessive removal of existing vegetation can also cause:

- loss of natural habitat and forested canopy; and
- destruction of the County's scenic quality and regional character.

v. Destruction of Wetlands

Coastal wetlands have extraordinary ecological value, yet impacts to these resources have increased as a result of growth and development. Tidal and nontidal wetlands provide many benefits important to a community's economic and environmental health. Destruction of wetlands can cause:

- reductions in nursery and spawning grounds for commercial fisheries;
- overall water quality degradation;
- increased risk of flooding;
- increased shoreline erosion; and
- loss of a river's natural banks and estuaries due to the construction of bulkheads, retaining walls and rip-rap walls.

b. Agricultural and Forestry Activities

Nonpoint source impacts have shifted from agriculture runoff from the impervious surfaces following Beaufort's boom in land development activity of the mid-1960s.

i. Agriculture Operations

Improperly managed agricultural operations continue to be the single largest source of NPS pollution problems in the nation.[44] cultural activities have lessened in Beaufort County, they still remain a potential source of NPS pollution if the operation is improperly managed. NPS pollution from farmland can be minimized if each landowner or manager adopt those practices that contrib-

44 US EPA, Final Report to Congress, 1992.

ute to the effective use of nutrients and minimize the loss of topsoil.

There exist a myriad of state and federal programs to financially assist the agricultural community in implementing agricultural Best Management Practices (BMPs). These BMPs are designed to effectively reduce nonpoint source pollution from agricultural operations. Because these programs are currently voluntary, incentives should be developed to increase the utilization of agricultural BMPs in the farming community.

ii. Livestock Operations

Improperly managed livestock operations can cause nonpoint source water pollution in at least two ways. Improper manure storage and utilization can contaminate water, while livestock grazing can cause serious soil erosion that later results in sedimentation and water pollution.

In Beaufort County, manure from livestock can impair both ground and surface water if it is not properly managed. By leaching into groundwater or running off into surface waters, animal manure can contaminate drinking water with nitrates and cause eutrophication of ponds, lakes and estuaries. Excessive eutrophication and releases of ammonia from urine are well-documented as having adverse effects on fish.[45] In addition, bacteria from animal manure has resulted in the closure of shellfish beds.

iii. Forestry Operations

The forestry resources of Beaufort County have long been recognized by several of the country's major paper industries. However, the harvesting of forests can cause significant increases in the amount of nonpoint source pollution washing offsite. Harvesting, when done without regard to season, soil type, or type of equipment, can damage the site productivity, retard regeneration and increase erosion and silting of receiving waters. For this reason, forestry BMPs have been developed locally in partnerships between state and private forestry managers to minimize nonpoint source water pollution resulting from forestry operations.[46]

Forestry BMPs are site specific techniques for protecting water quality which have been established for silvicultural practices and related activities associated with managing, harvesting and regenerating forests. BMPs have been designed at the state level in cooperation with state officials, private industry, conservation groups and landowners.

Although many of the larger timber industries in Beaufort County such as Union Camp promote the use of forestry BMPs for all of their forestry operations, these techniques are strictly voluntary. Unfortunately, indiscriminate harvesting of forestry resources on smaller properties without the use of BMPs can also lead to nonpoint source pollution.

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45 "*Managing Nonpoint Source Pollution*," Final Report to Congress, EPA 1992.

46 South Carolina Forestry Commission, 1997.

c. Stormwater Runoff

Stormwater runoff refers to the concentrations of rainwater formed during and after a storm event which carry pollutants from the land into receiving waters. It is this simple effect of stormwater runoff which hydrologically connects all parts of the County with the estuaries. Specific impacts of stormwater runoff include:

- increased levels of freshwater runoff through storm drains into estuaries, causing salinity levels to drop; and
- deposition of nutrient-laden sediment and other forms of pollution to rivers.

The amount of stormwater run-off from new development can be reduced by a number of methods. As Beaufort County develops a NPS pollution control program, choices must be made in determining which in a series of stormwater BMP options can reliably achieve water quality goals.

A BMP typically provides a structural device that temporarily stores or treats stormwater runoff from impervious surfaces to reduce flooding, remove pollutants, and/or provide amenities.[47]

It is important to recognize that no single type of BMP is ideally suited for every situation. Each technique contains various performance, maintenance and environmental advantages and disadvantages.

Not all urban BMPs can reliably provide high levels of removal for both particulate and soluble pollutants. BMPs which can consistently achieve moderate to high levels of removal for both particulate and soluble pollutants include wet ponds, artificial wetland marshes, sand filters, and infiltration devices.

d. Marinas and Boating Activities

Marinas have been identified as sources of NPS pollution in Beaufort County. Currently, the SCDHEC has closed 1,135 acres of shellfish harvesting areas which correspond with 19 marinas in the County.

Marine activities which can cause nonpoint source water pollution include dredging, recreational boating, jet skis, and marinas.

Recreational boating is placing strains on the County's water quality. Strict enforcement of holding tank pumping regulations along with expansion of pump-out facilities are vital to the protection of water quality. Requiring shared dock facilities, especially for new cluster developments, will reduce negative environmental and aesthetic impacts caused by the proliferation of individual docks.

i. Public Boat Launch and Waterfront Access

The County's existing public boat launch and waterfront access programs are designed to ensure adequate and fair public access to community water resources. However some developments, such as gated communities, have preempted public access to the water in some areas. This has consequently overloaded the remaining water access points in the County.

47 Metropolitan Washington Council of Governments, *A Current Assessment of Urban Best Management Practices: Techniques for Reducing Nonpoint Source Pollution in the Coastal Zone*, 1992.

5.6.3 Monitoring Water Quality for NPS Pollution

Quantifying nonpoint source pollution is very difficult without numerous automated water quality monitoring locations. Water quality monitoring stations tracking NPS must be automated in order to capture the "first flush" or first 1/2 inch of rain fall after storm events. Although some counties have invested in automated stations, the fiscal limitations of implementing such a monitoring strategy render them infeasible for most local governments. For this reason, interpolation of the data from other areas has become much more valuable to local jurisdictions wishing to develop strategies to minimize NPS. To this end, a model has been developed in the Coastal region, which tracks NPS pollutant loadings based on adjoining land use.

a. USES Study

The *Urbanization and Southeast Estuaries System* (USES)[48] study was the first of its kind to measure the impact of upland development in coastal South Carolina. In this study, the highly urbanized Murrells Inlet was compared with a pristine reference coastal area, North Inlet.

The USES report indicates significant amounts of nonpoint source pollutant loading in the form of of polycyclic aromatic hydrocarbons (PAHs) and coliform bacteria into watersheds adjacent to upland development. PAHs are indicative of fossil fuel combustion. Coliform bacteria are indicative of failing septic systems. Both pollutants adversely affect the living marine resources of estuaries and human health. The results of the USES project has increased the understanding that urban runoff has upon estuarine systems.

The results of the USES study are directly applicable to Beaufort County and supports policies developed in this plan for future land uses. The similarities between Murrels Inlet and Broad Creek in Hilton Head Island clearly illustrate what can happen to coastal tributaries that are negatively impacted by intense development and unchecked NPS pollution. The results of this study, in part, prompted the formation of the Clean Water Task Force, a local citizen group.

b. Clean Water Task Force

The Clean Water Task Force (CWTF) is a group of Beaufort County citizens dedicated to furthering the partnership of State and County officials working to protect local water quality. The objective of the CWTF is to encourage the cleanup of polluted County waters and identify the necessary actions to prevent additional pollution associated with growth.

In February of 1997, the Clean Water Task Force released a report entitled, *A Blueprint for Clean Water: Strategies to Protect and Restore Beaufort County's Waterways*. This document assessed the current state of water quality in Beaufort County, and made a series of far-reaching recommendations in the form of:

- *immediate actions* which can be implemented within 3 months;

48 National Marine Fisheries Service, *Urbanization and Southeast Estuaries Systems,* Interim Report and Proposal to Sea Grant Consortium, 1996.

- *intermediate actions* which may take a year or longer to put in place; and
- *long-term actions* which could take up to three years to realize.

Many of the recommendations are included in this plan.

5.6.4 Vegetated Buffers as a Tool for Protecting Water Quality

There is substantial agreement in the scientific community about the value of using vegetation to buffer valuable aquatic resources from the impacts of human uses on the land. Vegetated buffers—including woody vegetation—have a variety of benefits not all directly attributed to water quality:[49]

- provide protection from streambank erosion;
- remove sediments and nutrients from stormwater runoff;
- reduce downstream flooding;
- provide protection from increases in water temperature, critical for many aquatic species; and
- provide food and habitat for wildlife.

While the value of buffers is generally accepted, the effectiveness of the buffer is dependent on both its width and the composition of its vegetation. Generally, the widest range of benefits are achieved when the buffer is a naturally forested area. However, the width of the buffer is critical to its effectiveness, since buffers that are too small may still place water quality at risk.

a. Buffer Width Criteria

Buffer width should be based on four criteria:

- ***value of the resource:*** smaller buffers are adequate when the water quality is low and there is no desire to improve it. Conversely, if the water quality is high and the goal is to maintain that quality, the buffer width should be larger.
- ***site, buffer and watershed traits:*** conditions such as slope, soil depth and erodibility, and vegetation type all influence the effectiveness of a buffer.
- ***intensity of adjacent land use:*** when the intensity, density, magnitude and/or impervious surface of the adjacent developed area is high, the buffer width should be increased accordingly.
- ***desired buffer functions:*** if the buffer should achieve all of the benefits, including habitat protection, then the width should be increased accordingly. In this respect sustainability is a key issue, since narrow buffers can become overwhelmed with sediments and may fail; wider buffers will provide a greater area for sediment trapping. While McCutcheon et al., determined that a 50 to 70 foot vegetated buffer is necessary to remove approximately 80 percent of the sediment, nutrients and metals commonly found in urban runoff in Charleston, SC,[50] they did

49 A.J. Castelle, et al., *Wetland and Stream Buffer Size Requirements: A Review,* 1994.

50 S.C. McCutcheon, et al., 1996. *Evaluation of Vegetative Filter Strips to Control Urban Runoff into Charleston Harbor and Other Waters.*

not study the long term sustainability of the buffer, nor the requirements for removal of more than 80 percent of the sediments. If more than 80 percent removal of sediments is the goal, as is recommended for ORW waters, buffer widths must be increased.

b. Fixed and Variable Width Buffers

There are two principal methods for defining buffer widths in the regulatory process:

- setting a fixed distance from the streambank of waterbody; and
- defining a variable width depending on the specific natural and/or man-made features defined in the previous section.

Each approach has its benefits and drawbacks.

The fixed width buffer is the easiest to implement and administer, providing a level of certainty for both the plan reviewer, code enforcement officer and the property owner. However, since the set width is often based on political compromise and not necessarily pollutant removal capability, it may be more than adequate in some locations, while being inadequate for protection in others. In programs across the country, fixed buffer widths generally range from 20 to 300 feet or more. However, when a fixed buffer width is used, a 100-foot wide buffer is generally recommended as a minimum width to provide water quality protection.[51]

Variable width buffers should be based on a series of science-based criteria defined from the criteria in (a) above. Since variable width approaches are based on individual site conditions and development plans, they require more extensive site evaluation and investigation, and thus are more costly to implement. In addition, since the width of the buffer changes from site to site, a variable width buffer program can also be more difficult to monitor and administer.

51 Schueler, Tom, "The Architecture of Urban Stream Buffers," *Watershed Protection Techniques,* Vol. 1, No. 4, 1995.

5.7 Current Regulatory Framework

The impacts to natural resources from development are many and varied. Correspondingly, there exist a variety of agencies and programs at all levels of government to control, manage, and regulate various impacts. Existing programs have derived much of their statutory authority and funding from the state and federal levels and have focused on specific types of impacts to both ground and surface waters. This section provides a brief overview of the existing regulations which effect the natural resources of Beaufort County.

5.7.1 Federal Programs

In the last decade, Congress has passed numerous acts for the protection of coastal areas. Strategies to minimize impacts of development and changes in land use on coastal areas have been developed specifically to protect natural resources.

Existing federal programs which provide some form of regulation or guidance specific to coastal areas include the Coastal Zone Management Act, the Clean Water Act, Endangered Species Act, Coastal Barrier Resource Act, and wetlands protection laws. These acts and regulatory mechanisms are briefly described below.

a. Coastal Zone Management Act (16 U.S.C.A.§§ *1451 to 1462*)

The Coastal Zone Management Act was passed by Congress for the purpose of encouraging and assisting the states in developing and implementing coastal zone management programs. The Act provides matching grants to coastal states for developing and implementing their management programs. The Act requires each state to develop and implement management measures for nonpoint source pollution with the goal of restoring and protecting coastal waters. Critical coastal areas were to be identified "within which any new land uses or substantial expansion of existing land uses shall be subject to management measures." These management programs are to include the "provision of technical and other assistance to local governments and the public." Types of assistance include: "developing ordinances and regulations, technical guidance,

modeling to predict and assess the effectiveness of such measures, training, financial incentives, demonstration projects, and other innovations to protect coastal water quality and designated uses."

Although the Act is not regulatory per se, it has effectively provided the funding mechanism for numerous states, including South Carolina, to develop their coastal regulatory programs.

b. Coastal Barrier Resource Act

The Coastal Barrier Resource Act was enacted by Congress to limit private and public development funding within high risk coastal hazard areas. In effect, this legislation bars the use of federal funds for development actions and prohibits the issuance of new federally-subsidized flood insurance in these areas.

c. Rare and Endangered Species Act (16 U.S.C.A. §§ 1531 to 1544)

The Rare and Endangered Species Act of 1973 has been the most significant legislation for preserving species in danger of extinction. The Act protects only those species that have been listed by the Secretary of the Interior as either "endangered" or "threatened." Endangered species include "any species which is in danger of extinction throughout all or a significant portion of its range." Threatened species include "any species which is likely to become an endangered species within the foreseeable future throughout all or a significant portion of its range." As of February 1991, there were 450 species listed as endangered in the United States, and another 155 listed as threatened.

The Act protects endangered and threatened species from both federal action and a limited number of private actions. With respect to federal actions, the Act requires all federal agencies "to insure that actions authorized, funded, or carried out by them do not jeopardize the continued existence" or "result in the destruction or modification of habitat of such species." Thus any project which incorporates federal funds would fall under the Act.

With respect to private actions, the Act is not quite so strict. Section 9 of the Act regulates private actions by making it illegal for any person to sell, import, export, or transport any plant or animal species listed as endangered. Endangered fish or wildlife are also protected by the prohibition on "taking" them, defined as "harass, pursue, hunt, shoot, wound, kill, trap, capture, or collect, or to attempt to engage in any such conduct." It is also illegal to remove or damage endangered plants from federal lands or from any other property, if it is done in knowing violation of any state law or regulation including state criminal trespass law.

i. National Wildlife Refuge System

Under this program the U.S. Fish and Wildlife Service acquires migratory wildlife habitats for inclusion in the National Wildlife Refuge System. Acquisitions are funded in part by revenues obtained from the sale of duck stamps. There are several properties in northern Beaufort County which are part of the National Wildlife Refuge System. These are located within the ACE Basin.

d. Water Pollution Control Act

The Federal Water Pollution Control Act of 1972 (P.L. 92-500), commonly known as the Clean Water Act, set goals for water quality by stating as national purpose that the surface waters of the nation shall be fishable and swimmable, and the freshwater supplies drinkable by 1980. Section 208 of this Act

authorized funds for planning grants for states and/or area-wide regional planning agencies to undertake research and to develop comprehensive water quality management programs.

This original Act established two primary goals: 1) to eliminate the discharge of pollutants into navigable waters by 1985, and 2) to attain water quality which provides for the protection and propagation of fish, shellfish, and wildlife, and provides for recreation in and on the water by 1983. To actively pursue meeting those goals, the federal government adopted a national policy that "... areawide waste treatment management planning processes be developed and implemented to assure adequate control of sources of pollution in each state" (Section 101(a)(5)). This effectively gave South Carolina the authority to establish and revise water quality standards, and the task of developing a State Water Quality Management Plan (WQMP).

The Clean Water Act also stipulates that stormwater runoff that may be ultimately covered by Phase II of a jurisdiction's National Pollutant Discharge Elimination System (NPDES) Stormwater Program is subject to Section 6217 of the Coastal Zone Act Reauthorization Amendments of 1990 (CZARA).

This subpart provides procedures for carrying out the environmental review process for the issuance of new source NPDES discharge permits authorized under Section 306, Section 402, and section 511(c)(1) of the Clean Water Act. It is the intent and purpose of the NPDES to reduce and, over time, eliminate wastewater discharges into the surface waters of the United States. The stormwater program is a two-phase program. Under phase 1, NPDES permits are required to be issued for municipal storm sewers serving populations greater then 100,000 people, and for stormwater discharges associated with industrial activities such as certain types of marinas.

e. Wetlands Protection Laws

i. Section 404 of the Clean Water Act:

Wetlands are regulated and protected under Section 404 of the Pollution Control Act, enacted in 1972. While this program is jointly administered by the EPA and the U.S. Corps of Engineers, the Corps bears the day-to-day administrative responsibilities for the program, reviewing permit applications, issuing permits and taking action against violators. The Act authorizes EPA to prohibit or restrict the use of a wetland as a site for any discharge if it is determined that the discharge will have an adverse effect on municipal water supplies, shellfish beds and fishing areas, wildlife, or recreational areas.

ii. "Swampbuster" provision

The "swampbuster" provision of the Food Security Act of 1985 is a predecessor to other federal wetland protection programs. This provision seeks to discourage the further conversion of wetlands for agricultural purposes by making any person who produces crops on wetlands converted after December 23, 1985 ineligible for most federal farm benefits.

5.7.2 State Initiatives and Regulations

a. Ocean and Coastal Resource Management (OCRM) Regulations

The South Carolina Coastal Zone Management Act was passed in 1977 by the General Assembly of South Carolina to provide for the protection and enhancement of the

State's coastal resources. This legislation created the South Carolina Coastal Council which was given the task of "protecting the sensitive and fragile areas in the coastal counties and promoting sound development of coastal areas." The South Carolina Coastal Zone Management Act was amended by Act 181 of 1993 which merged the Coastal Council with the SCDHEC, forming the Office of OCRM.

b. Department of Health and Environmental Control (SCDHEC)

South Carolina's Department of Health and Environmental Control is responsible for establishing water quality standards and classifications used to regulate water quality and protect the State's water resources.

c. South Carolina Water Quality Management Plan

As referred previously under the federal Water Pollution Control Act, South Carolina has been given the authority to develop a State Water Quality Management Plan (WQMP) to actively pursue meeting federal water quality goals. The State WQMP identifies areas where effluent limitations are not sufficient to meet standards. It also establishes total maximum loads of pollutants, sets water quality standards, and carries out water quality planning and management requirements established in Section 208 of the Clean Water Act.

Although South Carolina is responsible for developing a statewide WQMP, it may designate Section 208 planning agencies. The Lowcountry Council of Governments (LCOG) has been designated as the 208 planning agency for the region including Beaufort, Colleton, Hampton, and Jasper Counties.

d. Wetlands Protection Programs

South Carolina has no specific legislation authorizing a statewide wetlands protection program. The primary mechanisms for wetlands protection in South Carolina are existing federal and state regulatory programs for the discharge of dredged or fill material into waters of the United States and activities in critical areas in the coastal zone (see section on wetlands protection under federal programs section).

e. The Nongame and Endangered Species Conservation Act

In response to the federal Endangered Species Act, the South Carolina legislature passed the Nongame and Endangered Species in 1974. This Act contains provisions similar to the federal such as research, listing criteria, management and law enforcement. The State Act also established a nongame program for "species in need of management." These are species in South Carolina which need conservation assistance but may not be on the federal list.

f. The Heritage Trust Act

A complimentary Act to the Nongame and Endangered Species Act, the Heritage Trust Act was passed by the South Carolina State Legislature in 1976. This Act gave the S.C. Wildlife and Marine Resources Department the authority to conserve plants and to acquire habitat for its natural areas program. In 1978, the State's Nongame and Endangered Species section merged with the Heritage Trust section. The combined programs are now administered by the Nongame and Heritage Trust Section of the South Caro-

lina Wildlife and Marine Resources Department.

5.7.3 Local Programs

a. Conservation Preservation District

The Conservation Preservation District was established for the purposes of protecting and conserving sensitive environmental areas, maintaining open spaces, and discouraging growth in areas which pose undue hazards to development. Areas included in this district are all wetlands (tidal and nontidal) delineated on Official Zoning Maps or areas harboring facultative wetland plants. Also in this district are all lands designated as wildlife refuge, bird sanctuary, or open land trust.

b. River Protection Overlay District (*DSO Section 4.25*)

The River Protection Overlay District was originally established for the purposes of protecting and conserving those bodies of water in Beaufort County designated as ORWs by the State. The River Protection Overlay District was recently revised to include all rivers and creeks in the County.

This district requires that a buffer strip of existing or planted vegetation be maintained, extending 50 feet landward from the OCRM Critical Line. Setbacks are also established for all land uses, as well as provisions for enhanced stormwater management.

c. Tree Protection Standards *(DSO Section 5.2.7)*

It is the expressed intent of these tree protection standards that all site planning and design for development of land be undertaken with a survey of trees on the property and that the final placement of buildings, structures, roads, utilities, and other features minimizes the removal of existing trees on the property.

Natural Resources and Water Quality

Policies

This section addresses a variety of topics of which are instrumental in shaping future development and water quality protection strategies as Beaufort County enters a new millennia. The policy implications of the issues covered in this chapter are presented in this section by topic. Each topic has a corresponding policy statement with associated action items crucial to meeting the goals articulated by citizens in the County vision statement.

- Policy 1: Improve and maintain the quality of County surface waters.
- Policy 2: Protect and maintain the quality of groundwater resources.
- Policy 3: Protect connected areas of open space County-wide.
- Policy 4: Protect areas of ecological significance.
- Policy 5: Protect the visual and environmental quality of the County by promoting forest stewardship.

Surface Water Quality

Policy 1: Improve and Maintain the Quality of County Surface Waters

The most important issue conveyed during the public workshops was protecting and improving the quality of water bodies in Beaufort County. High quality surface water bodies—both fresh and tidal wetlands, creeks and wetlands—are essential to the protection of the local seafood industry and also to the continued attractiveness of Beaufort County as a tourism destination and retirement and second home location.

Crafting an implementation program to achieve the established goal of maintaining and improving the quality of County surface waters is dependent on major strategies. These include:

1. reducing nonpoint source pollution;
2. protecting tidal and non-tidal wetlands;
3. developing an integrated stormwater management system;
4. developing a comprehensive onsite disposal system management strategy;
5. centralizing wastewater treatment;
6. developing a County-wide boating impact management plan; and
7. providing more rigorous monitoring and enforcement.

Policy 1.1: Develop strategies that minimize nonpoint source pollution to maintain the high quality of surface and ground water in the region.

In Beaufort County, the finfish and shellfish industry is most susceptible to impacts from NPS pollution. For this reason, experts recognize NPS pollution as the primary detriment to surface water bodies in coastal areas. Recent findings by the U.S. Environmental Protection Agency confirm that "NPS pollution caused severe damage to aquatic communities nationwide and has destroyed the aesthetic values of many of our treasured recreational waters." Detailed findings contained in the Urbanization in Southeast Estuarine Systems (USES) project indicate significant NPS loadings of polycy-

clic aromatic hydrocarbons and coliform bacteria associated with urbanization.

Because NPS pollutants come from so many sources, solutions must be multi-faceted, interrelated and depend on each other for overall success. Critical implementation measures include the following actions.

Actions

☑ *1.1.1 Promote a citizen/government education partnership by4 developing Special Area Management Plans (SAMP) for Port Royal and St. Helena Sounds.*

A critical component of any NPS pollution reduction strategy is developing educational partnerships between the regulatory agencies and an informed citizenry. The SAMP program offers a superior vehicle for meeting this objective in that this partnership is already recognized by state and local officials. This program needs to make clear the NPS pollution linkage across jurisdictional boundaries between land use changes on private property and the cumulative effect it has on receiving waters.

☑ *1.1.2 Require a vegetative buffer along all waterways and tidal wetlands of the County.*

As described in section 6.4, buffers can be regulated on either a fixed or variable width basis. While the fixed buffer is the easiest and most cost effective to implement and enforce, the variable width buffer provides flexibility to treat various sites on an individual basis.

If the County elects to enact a fixed buffer width, current research on reducing NPS pollutant loadings from shoreline runoff indicates that a buffer of no less than 100 feet is required to provide effective river protection. This translates to a buffer that is perhaps three to five mature tree widths from the waterfront.

There are numerous ways to design a development that will minimize the potential for negative impacts to existing waterways. Obviously, every waterfront property differs in specific site characteristics. It is possible to utilize more rigorous performance standards for encroachments within the minimum buffer. In some jurisdictions, a variable width buffer is used which adjusts buffer widths from 50 to 200 feet, dependent on adjacent soils, slope and vegetation characteristics, the intensity of the proposed development, the value of the resource, and the desired functions of the buffer.

Stormwater mitigation Best Management Practices (BMP) are generally not recommended as a substitute for reducing buffer width since the BMP will only address water quality, not the four other benefits of a buffer:

1. flood control;
2. erosion control;
3. protection from water temperature increases; and
4. wildlife habitat area.

Policy 1.2: Develop an integrated stormwater management program to maintain the high quality of surface waters.

Stormwater runoff refers to the concentrations of rainwater formed during and after a storm event which carry the sediment from the land into receiving waters. It is this simple effect of stormwater runoff which hydrologically connects all parts of the County with the estuaries.

Specific impacts of stormwater runoff include:

1. increased levels of freshwater runoff through storm drains into the estuaries, which causes salinity levels to drop; and,
2. deposition of nutrient-laden sediment and other forms of pollution to the rivers and estuaries of the County.

Both of these impacts will affect marine life, particularly fish spawning areas and shellfish beds.

As Beaufort County develops an integrated stormwater management program, choices must be made in determining which stormwater Best Management Practice (BMP) options can reliably achieve water quality goals. A BMP typically is a structural device that temporarily stores or treats stormwater runoff from impervious surfaces to reduce flooding, remove pollutants, and/or provide amenities.[52] It is important to recognize that no single type of BMP is ideally suited for every situation and that each technique brings with it various performance, maintenance and environmental advantages and disadvantages.

Not all urban BMPs can reliably provide high levels of removal for both particulate and soluble pollutants. Some of the more critical stormwater management considerations are presented in the following action items.

Actions

☑ *1.2.1 Adopt Best Management Programs for the cleansing and retention of stormwater on site.*

Due to the flat topography of the Lowcountry, opportunities for the design and implementation of regional stormwater facilities are cost prohibitive. For this reason, adopting BMPs which retain and cleanse stormwater on-site is a much more cost-effective method. On-site BMPs which consistently achieve moderate to high levels of removal for both particulate and soluble pollutants include wet ponds, artificial wetland marshes, sand filters, and infiltration.

☑ *1.2.2 Develop Countywide standards which enhance the quality of stormwater runoff to pre-development levels.*

Current stormwater management standards address only the quantity of stormwater to be retained or detained, not the *quality*. In order to be effective in reducing nonpoint

52 Metropolitan Washington Council of Governments, *A Current Assessment of Urban Best Management Practices: Techniques for Reducing Nonpoint Source Pollution in the Coastal Zone*, 1992

source pollution, the quality of stormwater must also be regulated.[53]

☑ *1.2.3 Develop standards which reduce the amount of impervious surfaces.*

One of the greater impacts of development on surface waters is the amount of impervious surface created which causes increases in stormwater runoff. Impervious surfaces are those areas in a development which are impervious to water infiltration. These include rooftops, concrete or paved areas, driveways and roads. Developing standards to reduce the amount of impervious surfaces typically result in significant savings in development costs.

Impervious surfaces can be reduced on both a site-by-site and County-wide basis. Reducing impervious surfaces on-site is achieved by:

- minimizing the overall width of paved roadway surfaces;
- encouraging cluster subdivisions which utilize shorter lengths of roadway; and
- where feasible, incorporating paved sidewalks into parking lots rather than around them.

Reducing impervious surfaces County-wide can be achieved by:

- concentrating development in existing and new communities (as recommended in the Future Land Use Chapter), thus minimizing the overall amount of roadway required to surface development.

☑ *1.2.4 Develop standards to increase the area available for on-site filtration.*

Along with developing standards to reduce the amount of impervious surfaces (see Action item #1.2.3), it is necessary to develop standards to increase the area for on-site filtration. This is typically achieved by requiring a certain amount of dedicated open space.

☑ *1.2.5 Develop "anti-degradation" plan for managing new development impacts.*

"Anti-degradation" refers to the net impact of runoff from new development on existing water bodies. Specifically, anti-degradation attempts to improve the post development water quality and runoff to pre-development levels. In some jurisdictions, a net reduction of 5 to 15 percent below pre-development levels is not uncommon.[54]

Evaluating pre-development conditions on a site-by-site basis is the most important factor when devising a plan that will achieve anti-degradation. For example, it is not unreasonable to assume that a net improvement of stormwater runoff can be achieved on sites that are being re-developed from commercial, industrial, or even agricultural land uses. The improvement in stormwater runoff is achieved by the pollutant removal capabilities of the stormwater BMPs that will be used on-site. Yet it is unrealistic to assume that anti-degradation is achievable in all development scenarios. For example, if the pre-

53 Metropolitan Washington Council of Government, *Controlling Urban Runoff: A Practical Manual for Planning and Designing Urban BMPs*, 1987.

54 Camp, Dresser, and McKee, 1997. Personal communication.

development conditions are that of a forested site or mature grasslands, any form of development will result in an impact to overall water quality, regardless of which BMPs may be used. In summary, an anti-degradation program should be applied on a site-by-site basis.

Policy 1.3: Promote centralized wastewater treatment and improved septic tank design as a necessity in many areas to effectively protect the quality of coastal waters and to support fisheries.

☑ *1.3.1 Direct new development to designated Priority Investment Areas, serviced by sewage treatment.*

New development should be encouraged within designated Priority Investment Areas which are serviced by public sewer facilities. In addition, areas containing sub-standard individual septic tank systems should be connected to public sewer. These actions can effectively reduce the potential for negative impacts from septic systems in areas less suited for development and where soil capacity is limited and may affect sensitive estuaries.

☑ *1.3.2 At the point of a plant expansion or construction of a new regional plant, an effluent disposal study should be conducted by BJWSA in conjunction with the County Planning Department, to determine the best method of sewage effluent disposal.*

Growth and surface water pollution from nutrients such as nitrogen is a growing concern among the citizens of the County, prompting a shift from secondary to tertiary wastewater treatment. Secondary treatment facilities which the County has relied on in the past contain a number of issues (see Community Facilities Chapter for more information):

- many of the County's shellfish areas are closed for harvesting due to the proximity of secondary treatment wastewater effluent outfalls;
- parcels suitable for dedicated land application sites are limited and in high demand; and
- additional sewer discharge sites in the County's rivers should not be permitted.

The capital implications of going to tertiary treatment demand coordination between directed growth and the economic feasibility of public facilities.

☑ *1.3.3 Identify Future Preferred Sites for Land Application and Disposal.*

Recognizing that land disposal sites for wastewater effluent are becoming more scarce, the county should work with BJWSA and identify potential future sites for land application.

Policy 1.4: Develop strategies to minimize boating impacts on County waterways.

With the growing number of recreational boaters in the County and a growing number of transient boaters utilizing the Intracoastal Waterway, actions to protect the surface waters from the negative impacts of boats are necessary.

The cumulative effects of intensive boating activity can be significant. Boats can be a direct source of pollutants such as polycyclic

aromatic hydrocarbons, oil, hydraulic fluid, fecal coliform, and others. Boat wakes can cause accelerated bank erosion, which can negatively affect intertidal oyster beds. Boating activity can also stir up contaminated sediments which can pose a threat to a creek's biota. For these reasons, the following Actions are recommended.

Actions

☑ *1.4.1 Develop a Boating Impact Management Plan.*

The County, in coordination with the City of Beaufort, the Town of Port Royal, and the Town of Hilton Head Island should evaluate the current level of impact of boating activity in Beaufort County's major waterways. Based on this inventory, a management plan can be prepared which will address present and anticipated impacts such as speed reduction and stationary or mobile pumpout facilities.

☑ *1.4.2 Develop a boater education and outreach program.*

A boater education and outreach program through the use of flyers, posters, and news media can educate the public about the adverse impacts of boating. It can encourage safe boating practices such as a reduction in speed and the use of available marine pumpout stations.

Policy 1.5: Strengthen the Existing River Protection Overlay District.

The existing River Protection Overlay District (RPOD) extends 1500 feet from the Critical Line along all water bodies defined by the South Carolina Office of Ocean and Coastal Resource Management (OCRM). The Overlay District also includes a 50 foot buffer requirement, and setbacks of from 50 to 150 feet depending on land use. In order to meet the County's goals of water quality protection, the RPOD should be strengthened.

Actions

☑ *1.5.1 Retain the 1,500 foot River Protection Overlay District (RPOD).*

The RPOD is an important first step in the County's water quality protection program.

☑ *1.5.2 Restrict intensive uses and develop impervious limits for the RPOD.*

☑ *1.5.3 Restrict the clearing of existing native vegetation with a goal of no more than 30% of a site being cleared during construction.*

Standard site clearing requirements for a single family home including the access drive are approximately 7,000 square feet.

☑ *1.5.4 Establish criteria for the siting of golf courses near sensitive ecological areas and along ORW waters which will effectively protect water quality.*

Groundwater Quality

Policy 2: Protect and Maintain the Quality of Groundwater Resources

Policy 2.1: Protect the County's Ground-water Resources.

With the increasing demands placed on the County's groundwater resources, and the increasing occurrence of groundwater contamination, the County must become more proactive in ensuring that its groundwater resources are protected through rigorous protection of aquifer recharge areas and the management of on-site disposal systems.

The major groundwater resource of the region is the Floridan aquifer. Although more shallow surface aquifers exist in the County, it is this deeper Floridan which offers a protected water source due to the unique characteristics of the overlying aquatards which serve as confining units. However, these overlying confining units, specifically the cooper marl, are thin and non-existent in parts of the County (see map on page 235 for the locations of these areas). It is in these areas that significant groundwater recharge occurs and the risk of groundwater contamination exists. Because of the higher risk of groundwater contamination in these areas, special management standards should be developed which minimize the risk of groundwater contamination.

In areas outside of these aquifer recharge sites, the flowpath of groundwater flows laterally due to the predominant high water table perched over the more impervious aquatards. These groundwaters typically discharge to surrounding surface waters or simply pond where positive drainage is lacking. The high water table plagues the efficiency of conventional On Site (septic) Disposal Systems(OSDS), often resulting in system failures and contamination to both groundwater and nearby surface waters.

Actions

☑ *2.1.1 Develop special management and development standards for areas of significant groundwater recharge.*

☑ *2.1.2 Require Integrated Pest Management Practices (IPMPs) for all golf courses.*

The Professional Golf Association (PGA) and the Golf Course Superintendents Association is a strong proponent of IPMPs for golf course management. The reduction in fertilizer and pesticide use inherent in IPMPs result in a decreased danger of potential surface and groundwater contamination from the high use of pesticides and fertilizers often associated with golf courses.

Policy 2.2: Promote the use of more effective Onsite Disposal Systems (OSDS).

Actions

☑ *2.2.1 Develop septic system density standards for areas outside of sewer service areas.*

Because the majority of soils in the County exhibit limitations for individual septic systems, septic densities outside of sewer service areas should be modified (see also Chapter 11, Community Facilities). In order to reduce the pollution hazard to ground and surface water, densities must be responsive to the assimilative capacity of existing soils. The majority of upland soils in the County exhibit a gross capacity for no more than one septic system per three acres. Permissible development densities outside of sewer service areas should reflect this environmental constraint.

☑ *2.2.2 BJWSA should investigate the use of alternative systems which may serve cluster developments and multiple households.*

Due to the limiting nature of existing soils to accommodate individual septic systems, alternative systems such as artificial wetlands treatment systems or de-nitrification facilities should be investigated as a means of serving multiple households. While effluent disposal would still need to be addressed, such systems would allow the use of cluster developments and reduce the risk of ground water contamination and/or non-point source pollution.

Resource Protection

Policy 3: Protect Connected Areas of Open Space County-wide.

Policy 3.1: Target and Protect Significant Open Space.

To protect the environmental, visual, surface and ground-water quality of the existing resources, the County will target the existing open space areas county-wide.

A key aspect of protecting environmental quality and the quality of surface and ground waters is the protection of open space. To a significant degree, the existing rural character of Beaufort County is due to large tracts or assemblages of land which are currently undeveloped. With mounting development pressure, the County must formulate and implement a comprehensive strategy to conserve open space.

Actions

☑ *3.1.1 Develop a comprehensive Greenway and Open Space Acquisition Program.*

An effective County-wide strategy to protect open space requires a three-part process:

❶ identify and prioritize parcels for acquisition;

❷ identify state and federal funding mechanisms which can be used to leverage local dollars; and

❸ develop a stable source of local funding either through a dedicated Open Space Bond or a dedicated open space millage or other funding mechanism (see Parks and Recreation Chapter 7 for more information).

☑ *3.1.2 Coordinate local open space acquisition efforts with local land trusts and conservation organizations.*

Key to developing a Countywide Greenway and Open Space Acquisition Program is coordination of County efforts with existing land trusts, conservation and historical organizations. Active land trust, conservation and historic preservation representatives should be recruited for participation on citizen advisory committees to the County.

☑ *3.1.3 Publicize and educate local land owners on the tax benefits of placing properties, or portions of properties, under conservation easement.*

Parcels placed under conservation easement can benefit from reductions in federal inheritance taxes and capital gains taxes. In addition, parcels placed under conservation easement may benefit from a reduction in local land taxes.

☑ *3.1.4 Delineate and adopt Rural Service Area boundaries recommended by the Future Land Use Plan.*

A cornerstone to conserving open space Countywide is to delineate Rural Service Areas and associated Priority and Transitional Investment Areas where development should be encouraged. Priority Investment and Transitional Areas must have the infrastructure available, such as sewer service, public water and transportation capacity, to accommodate development.

☑ *3.1.5 Require minimum parkland set-asides for new developments.*

Each new development in Beaufort County should be required to contribute to the recreational and parkland needs of the growing population of the County. This can be accomplished through the subdivision process with requirements for parkland acreage set asides per new unit or a fee-in-lieu of actual acreage. A standard for acreage is 5 acres per-100 residential units (see Parks and Recreation Chapter 7 for more detail).

☑ *3.1.6 Revise the definition of open space to exclude golf course fairways.*

The intent of open space requirements in the DSO is to encourage the protection of sensitive areas, such as existing wetlands and habitat areas, and retain existing vegetation from on site development as a strategy to protect water quality. Since the development of golf course fairways typically require intense modification of existing topography and removal of natural vegetation, the current DSO should be revised to exclude golf course fairways from its open space requirements. Partial open space credit can be assigned to those areas outside the fairway which meet the following criteria:

1. maintain existing vegetation;
2. restore areas with native/natural vegetation; and
3. natural areas are contiguous and connected.

Policy 3.2: Continue to Protect Significant Trees and Strengthen the County's Tree Protection Standards.

To stem the continuing loss of significant trees and tree stands, the County should strengthen its tree protection standards.

Recent clearing activity in the County has alerted the public to the deficiencies in existing tree protection regulations. To stem the continuing loss of significant tree stands, the

County should implement the following actions:

Actions

☑ *3.2.1 Develop an inventory of existing live oaks and mixed hardwood communities.*

Integral to protecting significant trees in the County is developing and maintaining an inventory of the existing resources. The public can become involved in developing and maintaining a Countywide inventory by sponsoring special events to document significant trees and awarding plaques to recognize outstanding specimens in the region.

☑ *3.2.2 Define criteria for "significant" tree status and establish standards for the protection of these trees on development sites.*

The definition of a "significant" tree in the County may be based on both species and caliper sizing characteristics. These should at a minimum include mature live oak and other hardwoods in the County.

Establishing standards for the protection of significant trees on development sites is an important aspect of implementing a tree protection strategy. Developers should be notified during the plan review and permit review process of the status of trees on-site and the penalties of removing them. Several communities have gone so far as to post price-tags on vegetation intended for protection, as a reminder to heavy equipment operators of the cost of careless errors. Developers should be required to submit a tree protection plan with their permit and/or development application and code enforcement officers should be trained in evaluating effective tree protection on site.

☑ *3.2.3 Strengthen and enforce existing regulations to hold both the landowner and the contractor liable for noncompliance.*

One of the more frustrating aspects of any protection program deals with the timely enforcement of standards established by the community. Holding both the landowner and contractor liable for noncompliance with County policy sends a clear message that the community is serious about protecting trees.

Policy 4: Protect Areas of Ecological Significance.

Policy 4.1: Protect Areas of Ecological Significance from the Negative Impacts Associated with Development.

The County will protect those areas in the County which provide habitat for threatened or endangered plant and animal species from the negative impacts of development.

The South Carolina Natural Heritage Program has identified many County sites that harbor threatened and/or endangered plant and animal species. Despite this inventory, confidentiality issues require regulators to strike a careful balance between protecting and compromising these resources. The County should take the following actions to protect these resources:

Actions

☑ *4.1.1 Develop and maintain a Resource Atlas in the County Planning Department.*

Key to protecting significant habitats which harbor threatened and endangered plant and/or animal species is the development and maintenance of a resource atlas which documents the distribution of resources. This is important to assist both planning staff and County residents in identifying resource concentrations.

☑ *4.1.2 Develop a voluntary program for landowners to assist in managing threatened and endangered resource(s).*

By working with State and private conservation organizations, the County should develop a voluntary program for landowners to assist in managing habitat areas which harbor rare and endangered species. This is an important educational aspect of protecting resources, which would enable landowners to become more aware of resources and provide them with information regarding general habitat requirements.

☑ *4.1.3 Identify priority areas of ecological significance and target those areas for open space acquisition through voluntary donation, conservation easement, or public purchase.*

Often the best protection for certain sensitive resources is to purchase the site outright or work with the landowner to purchase development rights or establish a conservation easement. Identifying and targeting priority areas is closely related to open space action *3.1.2*, encouraging coordination between the County and existing land trusts and conservation organizations.

Policy 4.3: Protect Wetlands from Development impacts to Maintain the High Quality of Surface and Ground Waters in the Region.

Coastal wetlands have extraordinary ecological value. Tidal and nontidal wetlands provide many benefits important to a community's economic and environmental health. These benefits include:

- providing nursery and spawning grounds for commercial fisheries;
- improving water quality;
- providing flood protection;
- preventing shoreline erosion control; and,
- providing recreation and aesthetics.

The Lowcountry's fishing industry counts on wetland estuaries to provide nursery and spawning grounds for 60 to 90 percent of commercial fish catches. In addition, wetlands are critical to the survival of a wide variety of animals and plants.

One of the most important values of wetlands is their ability to help maintain and improve the water quality of Beaufort's estuaries. Wetlands do this by removing and retaining nutrients; processing chemical and organic wastes; and reducing sediment loads to receiving waters.

Wetlands help protect adjacent properties from flood damage by acting as a natural sponge. Wetland vegetation helps slow the

speed of flood waters and reduces the water's erosive potential.

Wetland plants are important in protecting against erosion because they increase the durability of the soil with their roots. In addition, they dampen wave action and reduce current velocity through friction.

In practice, Beaufort County typically defers wetland protection to the U.S. Army Corps of Engineers or the State OCRM. Although federal and state guidelines and regulations aim to protect tidal and nontidal wetlands, Beaufort County can employ a number of local strategies to strengthen wetland protection. These strategies include the following set of actions.

Actions

☑ *4.3.1 Develop a County-wide set of base maps, indicating the extent of wetlands.*

Beaufort County should develop and maintain wetland base maps to facilitate property review by applicants and planning staff. This would enable both residents and planning staff to quickly determine the extent of wetlands on specific properties.

☑ *4.3.2 Subtract wetland areas from development density calculations in the current DSO.*

The existing Development Standards Ordinance density calculations for wetlands on specific properties fail to subtract unbuildable wetland areas from the gross acreage. The end result is a density which may be higher on the remaining buildable portions of the property than the carrying capacity for the site.

☑ *4.3.3 Provide opportunities for wetland mitigation.*

Wetland experts have long recognized that not all wetlands exhibit the same functional abilities. For example, a degraded wetland offers far different ecological values than does an undisturbed, pristine wetland system. For this reason, opportunities for wetland mitigation should be provided as a means of balancing land development and growth with protecting valuable wetlands.

☑ *4.3.4 Require a minimum buffer from nontidal and tidal wetlands.*

Wetland buffers, in which no clearing of existing vegetation is permissible, are an effective water protection technique due to their simplicity, low cost, ease of implementation and high level of capability to protect resource waters.[55] A buffer network acts as the "right-of-way" for wetlands and functions as an integral part of the wetland's ecosystem. Maintaining vegetative buffers around wetlands are recognized as one of the most effective protection mechanisms to preventing degradation to these systems. Current research indicates that a minimum, no-clearing buffer of 100 feet from nontidal and tidal wetlands offers the best protection for surface water quality. Buffer width can

55 Center for Watershed Protection, *Invisibility of Stream/Wetland Buffers: Can Their Integrity be Maintained?*, Vol. 1, Number 1, Feb. 1994.

be varied depending on slope, the presence of hydric soils and the presence of rare and endangered species.

☑ *4.3.5 Specify monetary sanctions for non-compliance with wetlands protection measures.*

Monetary sanctions if implemented in a timely and efficient manner can dramatically modify routine noncompliance. It is recommended that monetary sanctions against both landowners and contractors be exacted for maximum effectiveness.

☑ *4.3.6 Prohibit the use of existing wetlands for stormwater cleansing and management.*

Stormwater Methodology, Section 5.4.3.2 of the DSO states that "[t]he use of wetlands for storing and purifying runoff is strongly encouraged." However, current research indicates that using existing wetlands for stormwater management is extremely detrimental to wetland systems. Stormwater should be treated before it enters wetland systems.

☑ *4.3.7 Require existing wetlands to be identified and mapped as part of the development application process.*

Currently the County does not require the identification of existing wetlands within the preliminary development application (section 7.5.2.3 of the DSO). Requiring the identification of wetlands at this preliminary juncture would save considerable time and effort on the part of the applicant and plan reviewer in identifying this major design and development constraint.

Policy 5: Protect the visual and environmental quality of the County by promoting forest stewardship.

Forest stewardship is the active management of forests and related resources which keeps land in a productive and healthy condition for present and future generations and increases the economic and environmental benefits for those lands.

Responsible forest management offers economic, environmental, and visual benefits to the landowner and all citizens of the County. Recognizing that forest use is a desirable land use which enhances water quality and scenic beauty, the County is committed to promoting forest stewardship and preventing the loss of forest land to other uses.

If not properly done, timber operations can contribute to nonpoint source pollution. Even though forestry contributes a small part to the total problem of degrading water quality, timber harvesting, site preparation, and road construction can ultimately impair water quality.

As a strategy to protect the County's water quality and scenic resources, the following Action Items are recommended:

Actions

☑ *5.1 Require the issuance of permits for timber harvesting activities.*

The County should become proactive in requiring permits, through an expedited permit process for timber harvesting activities.

The County currently requires a five day notification for any harvesting activities. Working with OCRM would aid in code enforcement as well as provide an opportunity for the promotion of forestry best management practices.

☑ *5.2 Educate landowners, loggers and foresters about BMPs and permit requirements.*

Landowners, loggers, foresters, and the forest industry should be the focus of an educational program, promoting the use of BMPs and notification requirements. Written announcement of notification requirements should be sent to all forest landowners and forest-based businesses operating in the County. The South Carolina Forestry Commission offers a courtesy BMP consultation before harvesting.

☑ *5.3 Provide incentives to maintain land in forest use, and require permits for conversion of forests to other uses.*

Promote the Agricultural Use Value Assessment for forestry as a tax incentive to maintain forest land. Development permits with erosion and sediment control plans, should be required for all land clearing done for the purpose of converting forested land to non-agricultural land uses.

☑ *5.4 Educate citizens on agricultural activities in the County.*

The County, in cooperation with Clemson Extension, S.C. Forestry Commission, S.C. Forestry Association, Beaufort Soil and Water Conservation District, Beaufort County Farm Bureau, and landowners should develop a brochure of information about agriculture, (including silviculture, agronomy, animal husbandry, mariculture, and seafood harvesting) in the County.

☑ *5.5 Encourage the use of forest Best Management Practices (BMPs) for all timber harvesting activities.*

Forestry BMPs are site specific techniques for protecting water quality which have been established for silvicultural practices and related activities associated with managing, harvesting and regenerating forests. BMPs have been designed at the state level in cooperation with state officials, industry, conservation groups and landowners.

Silvicultural activities which follow Best Management Practices, including recommended guidelines for streamside management zones, should be exempt from additional buffer requirements. The County should develop a Memorandum of Understanding with the South Carolina Forestry Commission and South Carolina Forestry Association to develop and promote non-regulatory BMPs.

☑ *5.6 Encourage prompt reforestation.*

The visual impact of timber harvesting can be limited by prompt establishment of a new forest stand. Prompt reforestation also contributes to long-term forest productivity and conservation of forest resources. Reforestation can be encouraged after final harvest by planting or seeding within two years, or by planned natural reforestation methods within five years.

☑ *5.7 Require a minimum forested buffer along major public road frontages (US and SC Highways and other public paved roads) adjacent to timber harvesting activities.*

Forested buffers maintained along road frontages minimize the visual impact of timber harvesting activities and provide stormwater runoff protection. Land owners should be informed about the benefits of conservation easements for these buffers.

References

Soil Survey of Beaufort and Jasper Counties, South Carolina, United States Department of Agriculture, Soil Conservation Service, in cooperation with South Carolina Agricultural Experiment Station and South Carolina Land Resources Conservation Commission, 1980.

Blagden, Tom, Jr., *South Carolina's Wetland Wilderness: The Ace Basin*, Westcliffe Publishers, Inc. Englewood, Colorado, 1992.

Cooke, C. Withe. 1936. *Geology of the Coastal Plain of South Carolina*. United States Department of the Interior, Geologic Survey, Bull. 867.

Cronin, Eugene L., "The Role of Man in Estuarine Processes," Chesapeake Biological Laboratory, National Resources Institute, published in *Estuaries,* American Association for the Advancement of Science, Washington DC, pp. 667 - 689, 1967.

Day, John W., et al, *Estuarine Ecology*, Wiley-Interscience, New York, 1987.

Evaluation of Individual Sewage Disposal Systems in Beaufort County, South Carolina, Soil and Material Engineers, Inc. Report #4485-021, 1985.

Metropolitan Washington Council of Governments, *Controlling Urban Runoff: A Practical Manual for Planning and Designing Urban BMPs*, Department of Environmental Programs, 1987.

United States Environmental Protection Agency, *Managing Nonpoint Source Pollution*, Final Report to Congress on Section 319 of the Clean Water Act (1989), 1992.

South Carolina Department of Health and Environmental Control (SCDHEC), *Assessment of Septic Tank Regulations in South Carolina and Southeastern States and their Potential Cumulative and Secondary Impacts to Coastal Waters*, Office of Ocean and Coastal Resource Management (OCRM), August, 1994.

South Carolina Department of Health and Environmental Control (SCDHEC), *Stormwater Management and Sediment Control Handbook,* Office of Ocean and Coastal Resource Management (OCRM), 1997.

South Carolina Water Resources Commission, *Port Royal Sound Environmental Study*, the State Printing Company, Columbia, SC, 1972.

South Carolina Water Resources Commission, *Water-level Measurements and Potentiometric Maps for 1991 - 1993*, Open-file Report 43, March 1994.

South Carolina Water Resources Commission, *Ground-water Conditions in the Lady's Island and St. Helena Island Area*, Report Number 147, 1985.

South Carolina Water Resources Commission, *Hydrogeology and Saltwater Contamination of the Floridan Aquifer in Beaufort and Jasper Counties*, Report Number 158, 1989.

South Carolina Water Resources Commission, *Water Use and Future Requirements Hilton Head Island and Vicinity*, Report Number 168, 1989.

South Carolina Department of Parks, Recreation & Tourism, South Carolina Coastal Council, *South Carolina Public Beach and Coastal Access Guide*, no date (about 1990).

McHarg, Ian L, *Design with Nature*, Doubleday/Natural History Press, New York, 1969.

Metropolitan Washington Council of Governments, *A Current Assessment of Urban Best Management Practices: Techniques for Reducing Nonpoint Source Pollution in the Coastal Zone*, 1992.

Metropolitan Washington Council of Governments, *Controlling Urban Runoff: A Practical Guide for Planning and Designing Urban BMPs*, 1987.

U.S. Geological Survey, *Ground-water flow and Saltwater Encroachment in the Upper Floridan Aquifer*, Beaufort and Jasper Counties, South Carolina, Water Resources Investigations Report 87-4285, 1988.

U.S. Geological Survey, *Saltwater Movement in the Upper Floridan Aquifer Beneath Port Royal Sound*, Prepared with South Carolina Water Resources Commission, Open-file Report 91-483, 1993.

Wastewater Treatment and Disposal for the Bluffton Service Area, no date.

Chapter 6

Cultural Resources

Cultural Resources

Vision

The County must maintain its historic resources, rural areas and unique scale and character.

Cultural Resources

Technical Analysis

6.1 Introduction

Beaufort County is one of America's historic and cultural treasures, a place where history and tradition are reflected in a vibrant landscape that provides a tangible link between past, present and future generations. Beaufort's attractiveness as a place to live and work, as a destination for visitors, and consequently its economic well being, are directly related to its historic character and unique quality of life.

The County has a diverse wealth of historic resources including buildings, structures and landscape features. Two of the four National Historic Landmark Districts in South Carolina, the Beaufort Historic District and Penn Center are located in Beaufort County. Fifty-six individually listed properties and districts are listed in the National Register of Historic Places. In addition to those in the National Register are hundreds of buildings and sites of historic and architectural importance.

As important as individual historic sites and districts are, Beaufort County's national significance and its highly recognizable sense of place is defined by the broader historical, cultural and natural contexts into which these resources are interwoven. Beaufort County is a community where an extensive collection of historic buildings survives in the midst of substantial vestiges of local cultural traditions, familiar rural and urban places, and a dominant natural setting that is an integral part of both our history and our present day success.

Because of this, Beaufort's historical and cultural significance cannot be defined purely by its tangible historic buildings and districts. Consideration must be given to the interrelationship between these resources and their environmental and cultural context. St. Helena Island is an excellent case in point. To recognize only the scattered historic buildings related to its plantation era and postbellum African-American history without an understanding of the underlying Gullah culture, misses perhaps the key element of the island's significance. Likewise, to view all of that without recognizing and interpreting the more recent industrial farming traditions leaves out an important dimension.

There are also recognizable traditional features of Beaufort County that are important to consider in the planning process, even though surviving present day

examples might not individually be historic. Tree canopies, for example, are a traditional and often historic feature of the Lowcountry that result from the interaction of people and nature. A tree canopy that is less than fifty years old, the commonly used benchmark for assessing historic significance, can still contribute to the traditional character of the community.

There are other sites that may not presently meet the eligibility requirements of the National Register of Historic Places that should be preserved because they contribute substantially to the community character. The Woods Memorial Bridge, one of the few surviving swing bridges along the Intracoastal Waterway in South Carolina is an example of this. Another less tangible aspect of historic Beaufort County, but an equally important character defining cultural element, is the traditional interaction between its residents and its waterways. While much of the built environment associated with the maritime history has been lost, there are still many docks, boats and buildings of a newer vintage that reflect this important part of the County's history.

From both a preservation planning and a community planning perspective, this complicates what in many communities is a straightforward assessment of what is historic and what is not. As Beaufort County plans for the preservation of its historic character, innovative tools must be sought. There are a number of available sources, including the National Parks Service Preservation Assistance Program, the National Register program Bulletins and the Preservation Forum program of the National Trust for Historic Preservation, that provide guidance in assessing and preserving such things as "cultural landscapes," "traditional cultural properties," and "rural landscapes." These and others may be applicable to the Beaufort County situation.

The Beaufort County Vision Statement states that the County must maintain its historic resources, rural areas and unique scale and character. In County-wide workshops and meetings, a consensus of participating citizens identified maintaining the distinct Lowcountry rural and cultural character, as one of two main issues. Citizens also identified the importance of maintaining the cultural diversity and unique architecture of the Lowcountry. The protection of the built environment, archaeological sites and historic landscape is vital in maintaining this vision and should be integrated into all aspects of local government land use planning.

6.2 Resource Identification

6.2.1 Historic Survey

Until recently, information regarding the historic built environment in Beaufort County was limited, since a comprehensive survey of the historic resources in Beaufort County had not been completed. In 1996, the City of Beaufort and Beaufort County were awarded a $36,000 matching grant from the S.C. Department of Archives and History to complete a much needed survey of cultural resources.. The grant was awarded to the City with the County Historic Preservation Planner designated as the grant administrator. The City, County and Town of Port Royal all contributed to the matching funds for the project. The entire County, except for Hilton Head Island, the military installations at Parris Island and the Marine Corps Air Station, and Bluffton (surveyed in 1994), were surveyed.

The survey, completed in 1998, was entirely focused on above ground resources. This survey was of above ground resources. Sites traditionally thought of as archaeological sites such as military earthworks, certain marine resources, and ruins were recorded when they were identified. While all buildings that met the criteria of the project were surveyed, special emphasis was placed on historic landscape features and structures such as cemeteries, Civil War earthworks and other military sites, roads, allees, gardens, plantations and farmsteads, industrial sites, railroad resources, maritime related sites such as docks, wharves, shipbuilding sites and food processing plants, phosphate mines, pecan and fruit groves, ruins, fire towers, bridges, praise houses, and historic view corridors. Public meetings were held throughout the County to acquaint the public with the survey and to seek information.

Using the survey information, priorities should be established for the systematic evaluation and designation of significant historic resources through thematic, district and multiple property National Register nominations and local designations. Concurrently, the identification of historic resources at risk, from such threats as incompatible development, should be undertaken along with analysis of mitigation strategies.

6.2.2 Archaeological Identification

At present, over 1700 archaeological sites have been identified in Beaufort County. The pre-historic sites include Native American shell rings, burial sites, shell middens, seasonal habitations, and Yemassee towns. Included among the historic sites are plantations, maritime sites, Revolutionary and Civil War sites, slave rows, urban building sites, and tabby ruins, among others.

There are several mechanisms by which archaeological sites are identified. A number of existing federal laws require that archaeological and historic sites be considered during any federal related undertaking. These laws include the National Historic Preservation Act of 1966, Executive Order 11593, The National Environmental Policy Act of 1966, and the regulations and policies promulgated by the Department of the Interior and the Advisory Council on Historic Preservation. In addition, state laws including the S.C. Coastal Zone Management Act of 1979, the Water Resources Planning and Coordination Act of 1967, the South Carolina Mining Act of 1990, and certain South Carolina Department of Health and Environmental Control waste management facilities regulations, have requirements concerning the identification and protection of archaeological resources. Frequently, surveys that will identify archaeological sites are conducted to meet the requirements of these laws. The Beaufort County Archaeology Ordinance requires that copies of these reports be submitted to the County Planning Department staff for permanent retention.

Beaufort County passed a comprehensive Archaeological and Historic Impact Assessment Ordinance in December, 1995. This ordinance requires that any proposed development in Beaufort County be assessed for its potential impact on archaeological sites in the County. If a survey is required more sites will normally be identified. Copies of the survey report must be provided to the County Planning Department staff. To assist the planning staff in determining the exact location of identified archaeological sites, Beaufort County signed an Access and Use Agreement with the S.C. Institute of Archaeology and Anthropology that enables the County to access, through the County GIS system, information stored in digital format at the Institute. Another resource to assist in the identification of archaeological sites is the *Cartographic Survey of Historic Sites in Beaufort County*, a document produced by a grant from the S.C. Department of Archives and History in 1992.

6.3 Existing Ordinances

6.3.1 Historic Preservation Overlay District

In April 1990, the Beaufort County Council passed an Historic Preservation Overlay District ordinance that was designed to provide for the preservation and protection of historically and architecturally significant structures and sites and to preserve the cultural and historic heritage of Beaufort County. The ordinance establishes an Historic Preservation Review Board to review all projects that will affect historic properties and to issue or deny a Certificate of Appropriateness according to the criteria established in the Secretary of Interior's Standards for Rehabilitation. The Board is also charged with identifying historic sites and structures and keeping a register of all historically designated properties. So far the Ordinance has proven to have some weaknesses that need to be addressed regarding jurisdiction, enforcement power, procedures, and review standards. At present, the only properties designated as historic are those that are listed in the National Register of Historic Places.

6.3.2 Archaeological and Historic Impact Assessment Ordinance

In addition to the federal and state laws listed above, the Beaufort County Archaeological and Historic Impact Assessment Ordinance is another means of protection for archaeological sites. The ordinance requires that all developments in the County must be assessed to determine what affect the development will have on archaeological resources. Developers must provide information regarding the development site. After conducting document searches, consultations with compliance archaeologists and other research, the Planning Director and Preservation Planner will determine whether or not a survey of the property will be required. All reports, maps or other information resulting from any survey will be provided to the County. After reviewing this information, the County, working with the developer, will devise a mitigation plan for the treatment of any identified archaeological resources. This plan will be included in a Memorandum of Agreement (MOA)

to be signed by the developer and the County. The Beaufort County Ordinance is designed to address those projects that are not covered by federal or state laws.

6.4 Planning Efforts

6.4.1 Public Involvement

While Beaufort County has three active private historic preservation groups, the Historic Beaufort Foundation, the Port Royal Historical and Preservation Society, and the Bluffton Historical Preservation Society, and a strong public preservation ethic, the majority of county residents are not involved with or aware of historic preservation issues. More citizens need to be involved if the historic and cultural resources are to be preserved.

6.4.2 Preservation Mechanisms

A number of potential tools to protect historic resources such as easements, covenants, grants and tax incentives should be utilized. Easements and covenants are usually held by non-profit preservation and conservation organizations. Grants for historic properties are available from the State Historic Preservation Office, the National Trust for Historic Preservation and other organizations. South Carolina has enabling legislation that allows local governments to freeze property tax assessments at pre-rehabilitation levels on historic buildings that have recently been rehabilitated. Often taxes increase after rehabilitation thus discouraging owners from doing the work. The tax provision has been used in other localities in South Carolina with success. There are also federal tax incentives available for rehabilitated income producing properties.

Beaufort County is currently exploring several methods of working with developers including a performance zoning system, transfer of development rights (TDR), and purchase of development rights (PDR); each of these strategies is discussed in the Future Land Use Chapter. Historic and archaeological sites should be considered in developing guidelines for any of these methods included in the Zoning and Development Standards Ordinance. Such measures have worked to protect historic properties in other locations.

6.4.3 Emergency Management Planning for Cultural Resources

A major natural disaster, such as a hurricane, could have a devastating impact on Beaufort County's historic resources.

When Hurricane Hugo struck the coast of South Carolina in 1989, historic buildings and sites in Charleston and the surrounding area were severely damaged by wind damage and flooding. Government officials and private property owners had great difficulty in determining the appropriate procedures for weatherizing and stabilizing damaged buildings, where emergency funds could be acquired, finding qualified workman, and other related problems.

However, in areas of the city that had been surveyed, the buildings were quickly appraised for damage and help arrived faster and more efficiently. FEMA regulations concerning rebuilding historic properties were easier to deal with in the surveyed area because historic properties were identified. In areas that had not been surveyed, valuable time was lost simply trying to locate historic properties. The lack of a disaster preparedness plan could result in the permanent loss or destruction of many of the County's important historic resources.

6.5 Specific Resource Conservation

6.5.1 Gullah Culture

The Gullah are a community of African-Americans who live along the Atlantic coast on the Sea Islands of South Carolina and Georgia. Comprised of descendants of slaves brought from West Africa, Gullah communities continue to thrive on the Sea Islands today. The unique Gullah culture, language, religion, customs, folklore, foods, arts and architecture all have their roots in Africa. Today there exists a strong movement to preserve and maintain the Gullah culture, language and customs on St. Helena Island, Daufuskie Island and other places. However, modernization and encroaching development continue to threaten the Gullah way of life.

6.5.2 Beaufort Historic Landmark District

The Beaufort National Historic Landmark District (NHL) is one of only four NHL districts in South Carolina. Others include the Penn Center on St. Helena Island and the City of Charleston. The Beaufort NHL is important for its collection of 18th, 19th and 20th century buildings that have both historic and architectural significance. The historic integrity of the District is threatened by the increased traffic, caused by increased development and tourism, that passes through on U.S. 21. As traffic increases, concern regarding the capability of the Woods Memorial Bridge to handle this traffic also increases. Traffic problems on both the Beaufort and Lady's Island side of the Beaufort River have inspired calls to replace the bridge. Due to contemporary bridge design and the needs of the Intracoastal Waterway, the consequences of a new bridge at this location would have a devastating effect on the NHL District.

6.5.3 Sheldon Church Road

Sheldon Church Road runs from U.S. 17/21 to near the Town of Yemassee. The oak-canopied road has a long and important history in Beaufort County. Of particular importance is the fact that the Old Sheldon Church Ruins are located

on the road. As traffic has increased in the County, the road has seen an increase in its usage, especially by cars and large trucks taking a short cut to Interstate 95. The continued increase in traffic, the speed of the vehicles and the weight of trucks can cause damage to the fragile ruins by vibrations and pollution. In addition, the ruins are a major point of interest to tourists. The only available parking is a pull off on the side of the road creating a dangerous situation for those getting in and out of vehicles as traffic goes by a high rate of speed.

6.5.4 Public Infrastructure Improvements

Public infrastructure can have dramatic direct and indirect impacts on cultural resources. Infrastructure improvements should be designed so that they do not adversely impact on the County's historic resources, the traditional character of its communities and rural areas, and its cultural patterns. Perhaps no issue illustrates this as clearly as the proposed widening of U.S. 21 and the frequently discussed replacement of the Woods Memorial Bridge, and the potential long term impacts such actions would have on the Beaufort National Historic Landmark District.

6.5.5 Roads Leading Into Historic Areas

Roads leading into historic areas can dramatically affect the appearance and feel of the area. For this reason, development that adversely affects historic buildings, destroys tree canopies, and has incompatible new construction should be avoided. The Bluffton Historic District has three roads leading into the district, S.C. 46, S-163 and S-13. All three of these roads have been designated as S.C. Scenic Highways by the SCDOT, however this designation offers no protection at this time. Beaufort County has added S.C. 146 and S-163 to the U.S. 278 Corridor Overlay District to provide review of new construction, landscaping and signage.

On St.Helena Island, Penn Center located on Martin Luther King Drive (S-45) is a National Historic Landmark District, and the Corner Community located at the intersection of U.S. 21 and S-45, is an historic crossroads with several National Register listed properties located there. U.S. 21 has been designated by SCDOT as a S.C. Scenic Highway, however this designation offers no protection at this time. Overlay districts that would help protect the historic and cultural environment of Bluffton and the Corner Community have been proposed but no action has been taken on their implementation.

Cultural Resources

Policies

- Policy 1: Identify and inventory existing above ground historic resources located in Beaufort County.
- Policy 2: Identify the County's pre-historic and historic archaeological sites.
- Policy 3: Revise and update the Beaufort County Historic Preservation Ordinance.
- Policy 4: Protect Beaufort County's diverse pre-historic and historic archaeological sites.
- Policy 5: Expand efforts to involve the public in historic preservation.
- Policy 6: Develop and promote the mechanisms for public and private partnerships to preserve and protect historic properties.
- Policy 7: Include historic resources in the County emergency management planning.
- Policy 8: Preserve the unique Gullah culture on Beaufort County's Sea Islands.
- Policy 9: Maintain the historic character of the Beaufort National Historic Landmark District.
- Policy 10: Create a safer Sheldon Church Road and protect the Sheldon Church ruins.
- Policy 11: Design public infrastructure improvements so that they do not adversely impact cultural resources.
- Policy 12: Protect the entrance roads into historic areas from incompatible development.

Resource Identification

Policy 1: Identify and inventory existing above ground historic resources located in Beaufort County.

The impact from development pressures placed on the County's historic resources has become increasingly evident over the last ten years. There has never been an historic survey to identify and record the built environment of Beaufort County. This could be accomplished with cooperation from the local preservation organization, City and County governments.

Actions

☑ *1.1 Develop a County-wide inventory of cultural resources that will be available to the public on both a hard copy and on a computer database.*

☑ *1.2 Using the survey information, establish priorities for the systematic evaluation and designation of significant historic resources for future preservation planning.*

☑ *1.3 Using survey information, evaluate roads in the County and work with the S.C. Department of Transportation to designate any eligible road as a South Carolina Scenic Highway.*

Policy 2: Identify the County's pre-historic and historic archaeological sites.

A key to protecting the County's pre-historic and historic archaeological sites will be to identify the sites through surveys required by federal, state, and local laws and regulations. The planners will be assisted in reviewing proposed development applications by utilizing the County GIS system and the data from the South Carolina Department of Archaeology and Anthropology to locate potential sites.

Actions

☑ *2.1 Monitor all development in Beaufort County and to acquire archaeological survey reports when appropriate.*

☑ *2.2 Investigate methods of financing archaeological surveys including private sources.*

Regulations

Policy 3: Revise and update the Beaufort County Historic Preservation Ordinance.

The current ordinance was written without the benefit of a historic survey. It was designed to provide for the preservation and protection of historically and architecturally significant structures and sites. However, as written, the only resources that are protected are those currently listed in the National Register of Historic Places. In order to better protect our built environment, the Beaufort County Historic Preservation Ordinance must be revised and linked to the historic survey.

Actions

☑ *3.1 The Historic Preservation Review Board should form a working committee to advise the Planning Department in revising sections of the ordinance.*

☑ *3.2 Revise the ordinance to create a register of local historic significance to include sites that may not be eligible for National Register status.*

☑ *3.3 The ordinance should be strengthened in the following areas:*

1. Define what resources and actions are under review board jurisdiction.
2. Revise the administrative procedures that are to be followed by the applicant and the review board.
3. Set penalties for non-compliance.
4. Set policies and penalties for demolition by neglect.
5. Develop qualifications for review board membership.
6. Address historic landscapes.

Policy 4: Protect Beaufort County's diverse pre-historic and historic archaeological sites.

Actions

☑ *4.1 Enforce the Beaufort County Archaeological and Historic Impact Assessment Ordinance.*

☑ *4.2 Beaufort County should become a signatory to any MOA signed between federal or state agencies and developers that deals with archaeological sites located in the County.*

Planning Efforts

Policy 5: Expand efforts to involve the public in historic preservation.

It is important to involve as many of Beaufort County's citizens in the effort to protect cultural resources. Through the three existing historic preservation organizations, the County can encourage strong citizen participation and support for historic preservation throughout the County.

Actions

☑ *5.1 Work with local preservation organizations to find ways to raise public awareness.*

☑ *5.2 Establish a speakers bureau to give presentations to organizations, civic clubs, etc.*

☑ *5.3 Work with schools to establish programs on historic preservation.*

☑ *5.4 Work with local media to publicize historic preservation.*

Policy 6: Develop and promote the mechanisms for public and private partnerships to preserve and protect historic properties.

A number of tools such as easements, covenants, grants and tax incentives are available to protect historic resources. These mechanisms can be used to foster public and private partnerships to preserve and protect historic properties.

Actions

☑ *6.1 Encourage organizations and individuals to work together to establish covenants and easements on historic properties.*

☑ *6.2 Work with County Council and the municipal governments to pass legislation to freeze property tax assessments at pre-rehabilitation levels.*

☑ *6.3 Promote and encourage the use of federal, state and private organization grants.*

☑ *6.4 Encourage the use of federal tax incentives for income producing historic properties.*

☑ *6.5 Establish a low interest loan pool to stimulate private investment in historic low-income neighborhoods and deteriorated properties.*

☑ *6.6 Establish a grant-in-aid program to assist with stabilization, emergency repairs and repairs to low-income housing.*

☑ *6.7 Assist local preservation organizations in supplementing revolving funds used to purchase and rehabilitate historic structures for public use.*

☑ *6.8 Develop guidelines to encourage developers to engage in the protection of historic and archaeological sites through any future performance zoning system, TDR program, or PDR program adopted by the County.*

Policy 7: Include historic resources in the County emergency management planning.

Actions

☑ *7.1 Work with the County Emergency Management Department and Building Codes to develop a plan for protecting historic resources during and after a natural disaster.*

☑ *7.2 Establish a procedure with the S.C. Department of Archives and History that will expedite emergency financial and technical assistance available to property owners.*

☑ *7.3 Design and distribute a brochure outlining emergency management procedures for historic properties.*

☑ *7.4 Use the information in the Beaufort County Historic Survey in planning for a natural disaster.*

☑ *7.5 Review FEMA policies and past actions with regard to natural disasters affecting cultural resources.*

Specific Resource Conservation

Policy 8: Preserve the unique Gullah culture on Beaufort County's Sea Islands.

Actions

☑ *8.1 Maintain the rural character by preserving traditional land use patterns and density of the Sea Islands.*

☑ *8.2 Preserve the built environment associated with the Sea Islands culture.*

☑ *8.3 Explore options to increasing traffic such as ferry service to disperse, contain, or minimize impacts.*

Policy 9: Maintain the historic character of the Beaufort National Historic Landmark District.

Increased traffic through the Beaufort Historic Landmark District threatens the integrity of this district. The U.S. Army Corps of Engineers conducted a study on the bridge that recommended the replacement of the bridge. This could have significant impacts on the District.

Actions

☑ *9.1 Work with the SCDOT, and all other relevant federal and state agencies, to ensure that they are aware of the communities' concerns regarding the replacement of the Woods Memorial Bridge.*

☑ *9.2 Explore alternative routes to Lady's Island and beyond that would bypass the City of Beaufort.*

☑ *9.3 Encourage the use of alternative U.S. 21 for all traffic going to the outer islands.*

Policy 10: Create a safer roadway on Sheldon Church Road and protect the Sheldon Church Ruins.

Actions

☑ *10.1 Work with the S.C. Department of Transportation and Beaufort County to reduce the speed limit and allowed tonnage on Sheldon Church Road and to designate the road as a South Carolina Scenic Highway.*

Policy 11: Design public infrastructure improvements so that they do not adversely impact cultural resources.

Actions

☑ *11.1 Work with Beaufort County Engineering and Public Works Departments, and with all other infrastructure providers, to lessen any adverse impacts on cultural resources.*

Policy 12: Protect the entrance roads into historic areas from incompatible development.

Actions

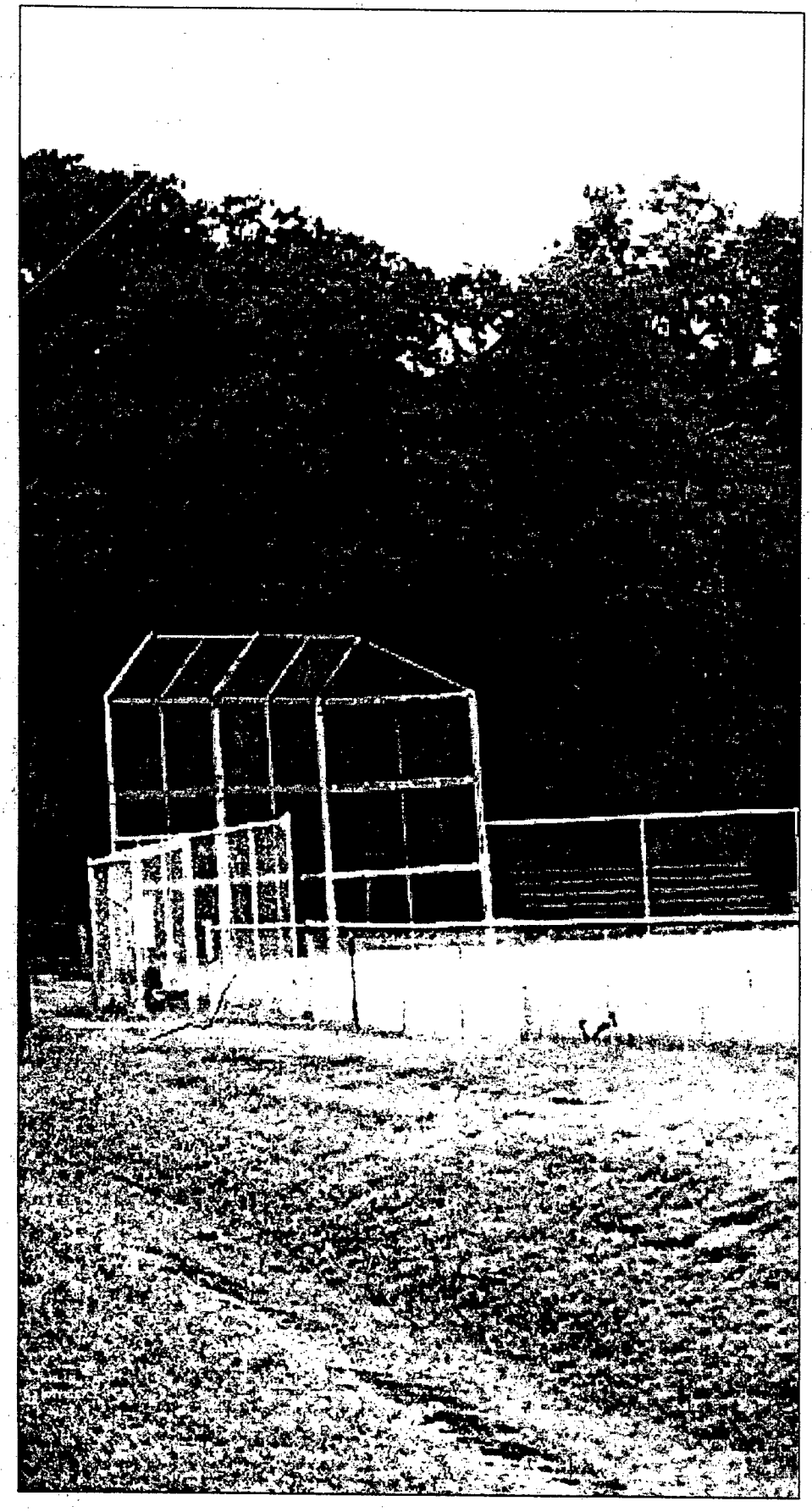
☑ *12.1 Encourage the Town of Bluffton to adopt a local Bluffton Historic Overlay District ordinance.*

☑ *12.2 Work with the SCDOT to determine ways to help preserve the historic and cultural aspects of the designated S.C. Scenic Highways that lead into the Town of Bluffton.*

☑ *12.3 Work with the community to establish the Corner Community Public Market District on St. Helena Island.*

☑ *12.4 Work with the SCDOT to designate Martin Luther King Jr. Drive (S-45) as a S.C. Scenic Highway and determine ways to use the designation to help preserve the historic and cultural aspects of the Corner Community and Penn Center.*

☑ *12.5 Work with the SCDOT to determine ways to help preserve and enhance the historic and cultural aspects of U.S. 21 on St. Helena Island and the Corner Community. Traffic calming measures at the intersection of U.S. 21 and Martin Luther King Jr. Drive are encouraged.*



Chapter 7

Parks, Recreation and Open Space

Parks, Rec. & Open Space

Vision

Beaufort County will develop and maintain parks which are accessible and available for all residents, help to conserve and sustain the County's natural beauty, and offer opportunities for active recreation, passive enjoyment, and educational improvement.

Future development in Beaufort County, particularly in identified growth areas, will recognize the importance of parks, recreation, and open space in the County's quality of life by integrating well-designed parks, recreation facilities, and preserved open spaces.

Beaufort County will offer personal enrichment for all residents through recreation programs which help to increase physical fitness, mental acuity, and educational awareness.

Beaufort County will maintain its stunning beauty for future generations by preserving open space along waterway corridors and by protecting the County's unique natural resources.

Vision Goals:

1. Parkland—Provide sufficient amounts of various parkland types to meet the needs of residents.
2. Recreation Facilities—Provide adequate recreation facilities to meet the needs of residents.
3. Recreation Programs—Encourage participation in recreation programs.
4. Open Space Preservation and Greenways—Preserve Beaufort County's quality of life through appropriate land use, environmental protection, and open space preservation.
5. Maintenance and Security—Maximize the useful life of facilities and minimize safety hazards.
6. Financing and Budgeting—Provide adequate funding to sustain a high-quality parks and leisure services department.
7. Administration and Organization—Provide recreation services for all residents as effectively as possible.

Parks, Rec. & Open Space

Technical Analysis

7.1 Introduction

The *Beaufort County Parks, Recreation, and Open Space Plan* presents the ideas for taking the existing parks, recreation, and open space system and moving forward into the next century. The following chapter is a summary of the *Beaufort County Parks, Recreation, and Open Space Plan*. The subject of parks, recreation, and open space is a single chapter of the Comprehensive Plan, yet the topic incorporates eight distinct elements, each of which must be examined to address working of the entire system. Therefore, the structure of the Parks, Recreation, and Open Space Chapter differs slightly from other chapters of the Comprehensive Plan.

The chapter begins with visions for the entire parks, recreation, and open space system in the County. The goals, technical analyses, policy statements, and action items are grouped into the eight separate elements of the parks, recreation, and open space system in Beaufort County:

1. Parkland
2. Recreation Facilities
3. Recreation Programs
4. Open Space Preservation and Greenways
5. Public Relations and Communications
6. Maintenance
7. Financing and Budgeting
8. Administration and Organization

Goals were defined through extensive analysis of the existing parks, recreation, and open space system; meetings with members of the Department of Parks and Leisure Services (PALS) advisory board and staff; information and responses from various public forums; and from the survey of Beaufort County residents. One or more policies are recommended to achieve each goal, and specific action items are presented to implement each policy. Each action item includes a brief description of why the specific action item is recommended. The *Beaufort County Parks, Recreation, and Open Space Plan* provides more detailed information on each subject.

7.2 Parkland

7.2.1 The Need for Parkland

Parks come in different sizes, contain different facilities, draw users from areas of different size, and meet different recreation needs. Beaufort County contains three distinct park types (see Table 19).

Appendix A of the *Beaufort County Parks, Recreation, and Open Space Plan* contains a complete listing of parks and recreation facilities by planning area. In the mid-1970s the Beaufort County government had the foresight to acquire approximately 312 acres of land on the central portion of Port Royal Island. Burton Wells Central Park is approximately 95 percent undeveloped. The park's significant natural features include large wooded areas of Loblolly Pine, Pond Pine, Longleaf Pine and hardwoods; large floodplain and low-lying wetland areas; a wooded stream corridor and ponds; hydric soils; some scattered open field areas; and significant amounts of dry developable uplands. A small area in the northeast portion of the park has the following recreation and support facilities:

- two regulation-sized baseball fields—both lighted and fenced with benches and bleachers— which are used for organized competition;
- one regulation-sized football field, which shares one of the existing baseball outfields;
- one basketball court;
- one volleyball court;
- an informal parking area which can accommodate approximately 45 cars;
- several small pieces of play equipment;
- a restroom facility building; and
- two press boxes.

The need for both parkland and recreation facilities is determined by establishing guidelines for different park types and recreation facilities according to the current and future population. The suggested amount for each type of parkland in Table 1 was determined by modifying national standards from the National Recreation and Park Association (NRPA) to reflect current conditions in Beaufort County. The complete parkland analysis is contained in Appendix B of the *Beaufort County Parks, Recreation, and*

Table 19: Beaufort County park types.

Park Type	Purpose	Size	Service Radius	Suggested Amount
Neighborhood Park	serve the surrounding neighborhood - sometimes best located near an elementary school - play equipment, basketball courts, tennis courts usually available	5-15 acres	1-1/2 miles	2 acres/ 1,000 residents
Community Park	serve a larger area than neighborhood parks - include a wider variety and greater number of facilities - often serve a municipality and surround a junior or senior high school - usually include a playground, hard surface courts, picnic tables and several athletic fields	25+ acres	5 miles	8 acres/ 1,000 residents
County Park	largest service area - may include large areas preserved in a natural state, specialized facilities such as recreation centers, and complexes of fields and courts.	75+ acres	entire county or large part	5 acres/ 1,000 residents

Source: URDC; adapted from National Recreation and Park Association guidelines

Open Space Plan and is summarized as follows.

7.2.2 Analysis of County Parkland

Burton Wells is the only park in Beaufort County which has the capability to function as a County park, and only about 20 acres of the park are currently developed. Using the suggested guideline of 5 acres per thousand population, Beaufort County should have approximately 496 acres of County parkland to accommodate its 1995 population of 95,278—about 476 more acres than are currently developed. By the year 2020, a total of 842 acres of County parkland will be required to meet the needs of the projected population of 168,336—822 acres more than are now available. If the available 294 acres of Burton Wells are developed, an additional 162 acres of County parkland are needed to meet current needs, plus an extra 365 acres to meet the County's needs by the year 2020.

The parkland analysis also concludes that Beaufort County should have seventeen more community parks and seven more neighborhood parks than currently exist in order to meet the needs of current residents (see Table 20). By the year 2020, an additional 18 community parks and 17 neighborhood parks would be needed to accommodate anticipated population growth (see Table 21). However, Beaufort County does not have to be responsible for providing all of the neighborhood and community parks indicated by the parkland analysis for two reasons:

a. County Parks

In practice, County parks often serve as community and neighborhood parks for people living within the respective service radius of the County park—5 miles for community park needs and 1½ miles for neighbor hood park activities. Therefore, developing the recommended County parks will help to meet some of the need for neighborhood and community parks.

b. Neighborhood Parks

Neighborhood parks and, in some cases, community parks, are often provided by developers of gated communities for the exclusive of development residents. Much of the need for additional neighborhood parkland is the result of significant projected population in-

Table 20: Community and neighborhood parkland needs, 1995.

PLANNING AREA	COMMUNITY PARKLAND			NEIGHBORHOOD PARKLAND		
	CURRENT ACREAGE	SURPLUS/ (DEFICIT) ACREAGE	NUMBER OF PARKS NEEDED[a]	CURRENT ACREAGE	SURPLUS/ (DEFICIT) ACREAGE	NUMBER OF PARKS NEEDED[a]
Northern Beaufort	0.0	(27.6)	1	12.8	7.3	0
Port Royal Island	107.5	(223.3)	9	83.6	27.8	0
Lady's Island	10.0	(38.3)	2	5.0	(4.7)	0
St. Helena	24.0	(39.0)	2	11.0	(1.6)	0
Southern Beaufort, excluding Hilton Head Island	30.0	(49.0)	2	0.0	(15.8)	2
TOTAL, excluding Hilton Head Island	171.5	(377.2)	15	112.4	13.0	2
Hilton Head Island[b]	0.0[c]	(35.0)[c]	1[c]	0.0	(20.0)	5
BEAUFORT COUNTY TOTAL	171.5	(412.2)	16	112.4	(7.0)	7

Sources: URDC, Recreation and Open Space Plan, Town of Hilton Head Island (October, 1995)

a - The number of needed parks is calculated using an average of 25 acres for a community park and 10 acres for a neighborhood park.
b - Information taken from Town of Hilton Head Island plan. Park definitions and guidelines differ from Beaufort County Parks, Recreation and Open Space Plan.
c - Includes "community Parks" and "recreation complexes" as defined in the Hilton Head Island Plan.

Table 21: Additional community and neighborhood parkland needs, 1995 - 2020.

PLANNING AREA	COMMUNITY PARKLAND			NEIGHBORHOOD PARKLAND		
	CURRENT ACREAGE	SURPLUS/ (DEFICIT) ACREAGE	NUMBER OF PARKS NEEDED[a]	CURRENT ACREAGE	SURPLUS/ (DEFICIT) ACREAGE	NUMBER OF PARKS NEEDED[a]
Northern Beaufort	0.0	(34.0)	0	12.8	4.3	0
Port Royal Island	107.5	(244.9)	1	83.6	(4.5)	0
Lady's Island	10.0	(89.1)	2	5.0	(19.8)	2
St. Helena	24.0	(105.2)	2	11.0	(21.3)	2
Southern Beaufort, excluding Hilton Head Island	30.0	(350.2)	12	0.0	(95.0)	8
TOTAL, excluding Hilton Head Island	171.5	(823.4)	17	112.4	(136.3)	12
Hilton Head Island[b]	0.0[c]	(55.0)[c]	1[c]	0.0	(40.0)	5
BEAUFORT COUNTY TOTAL	171.5	(878.4)	18	112.4	(176.3)	17

Sources: URDC, Recreation and Open Space Plan, Town of Hilton Head Island (October, 1995)

a - The number of needed parks is calculated using an average of 25 acres for a community park and 10 acres for a neighborhood park.
b - Information taken from Town of Hilton Head Island plan. Park definitions and guidelines differ from Beaufort County Parks, Recreation and Open Space Plan.
c - Includes "community Parks" and "recreation complexes" as defined in the Hilton Head Island Plan.

creases in Southern Beaufort County, both in the Bluffton area and on Hilton Head Island. In addition, much of the anticipated future development is expected to be in the form of gated communities, such as Sun City and the Union Camp development, which will provide neighbor hood parks for residents. The County should develop the 2 additional neighborhood parks to meet current needs (see Table 20). Population projections indicate a need for 12 additional neighborhood parks to meet anticipated needs by 2020 (see Table 21). Future residents of gated communities will continue to have at least a portion of their neighborhood park needs met by parks and recreation facilities provided within the gated development.

The number and approximate suggested location for all recommended County parks and for the community and neighborhood parks to meet current needs are illustrated on the Parks, Recreation, and Open Space Plan maps in this chapter.

7.3 Recreational Facilities

7.3.1 The Need for Recreational Facilities

The inventory of recreation facilities is included with the parks inventory in Appendix A of the *Beaufort County Parks, Recreation, and Open Space Plan*. The recreation facilities analysis—Appendix C of the Parks Plan document—concludes that Beaufort County, excluding Hilton Head Island, needs a variety of recreation facilities to meet the current needs of residents, including three baseball fields, seven Little League/softball fields, 19 tennis courts, six soccer/football fields, 12 tennis courts, 2.6 miles of biking/walking/jogging trails, and five swimming pools (see Table 22).

The facilities to be developed as part of the parks and recreation bond refinancing will address several of the current needs, including the need for swimming pools. By the year 2020, the County will need an additional facilities to accommodate anticipated population growth (see Table 23), including 18 more baseball fields, 17 more Little League/softball fields, 31 more tennis courts, and three more swimming pools.

7.3.2 Recreation Center

In addition to parks and outdoor recreation facilities, the PALS system includes the following 13 recreation centers which address leisure service needs on a more localized basis:

- Agnes Major Community Center (Northern Beaufort);
- Booker T. Washington Community Center (Northern Beaufort);
- Dale Community Center (Northern Beaufort);
- Bladen Street (Port Royal);
- Green Street Gym (Port Royal);
- Live Oaks Park/PALS Central Office (Port Royal);
- Mink Point Gym/old Battery Creek High School (Port Royal);
- Seabrook Community Center (Port Royal);
- Broomfield Complex (Lady's Island);
- Scott Recreation Area (St. Helena);

- Seaside Community Center (St. Helena);
- Bluffton Center (Southern Beaufort);
- Creation Station (Southern Beaufort);

The County has made a large investment in the centers, but previous budget constraints and staff reductions have reduced the effectiveness of the centers and hampered staff efforts to provide quality programs. Adequate staff and support services are critical to the success of recreation centers.

Table 22: Selected recreation facility needs, 1995.

FACILITY	PORT ROYAL ISLAND	LADY'S ISLAND	ST. HELENA	NORTHERN BEAUFORT	SOUTHERN BEAUFORT (EX. HHI)	BEAUFORT COUNTY (EX. HHI)	HILTON HEAD ISLAND[B]	BEAUFORT COUNTY TOTAL
Baseball field	-3	-1	0	2	-1	-3	-6[c]	-9
L.L./softball field	-2	0	-1	-1	-3	-7		-7
Basketball court	-12	0	-3	0	-4	-19	-3	-22
Soccer/football field	-2	-1	-1	-1	-1	-6	-5[d]	-11
Outdoor volleyball court	-18	-2	-2	0	-3	-25	-4	-29
Golf course holes	-3	0	-1	0	-1	-5	0	-5
Tennis court	-3	0	-4	-2	-3	-12	-3	-15
Swimming (pools)	-2	0	-1	0	-1	-4	-1	-5
Bike/walk/jog paths (mi.)	8.2	-2.4	-3.1	-1.4	-3.9	-2.6	1.0[e]	-1.6
Nature/hiking trail (mi.)	-0.5	-0.1	4.8	-0.1	17.8	21.9	-0.6[e]	21.3
Horseback trail (mi.)	-2.2	-0.3	-0.4	-0.2	4.5	1.4	-1.4[e]	0.0
Boat ramps	-11	1	3	2	7	2	-10[f]	-8
Campsites	-66	-10	187	-6	-16	89	47[f]	136
Picnic tables	-254	-38	-38	-19	-66	-415	-28	-443

Sources: South Carolina Recreation and Participation Study, 1994; Beaufort County PALS; URDC

a - County totals may differ from the sum of the planning areas due to rounding. Negative numbers indicate facility deficits (needs). Positive numbers indicate facility surpluses.

b - Hilton Head Island facility needs are the "adjusted need" taken from the Recreation and Open Space Plan, Town of Hilton Head Island (table 6, page 34), except as noted. In addition to the facility needs analyzed below, the Hilton Head plan identifies a current need for 2 community centers, 8 playgrounds, and 2 handball/racquetball courts.

c - The Hilton Head Island plan combines the need for baseball and softball fields into a single need for 6 fields.

d - The Hilton Head Island plan identifies separate needs for 2 football fields and 3 soccer fields.

e - The Hilton Head Island plan identifies a need for 8 "Multi-Use Trails" but gives no indication of desired length. The Hilton Head Island plan does not identify needs for nature/hiking trails or horseback riding trails. Indicated needs for all three trail types are derived using the procedure in the Beaufort County Parks, recreation, and Open Space Plan.

f - The Hilton Head Island plan does not include boat ramps or campsites in its facility analysis.

Table 23: Additional selected recreational facility needs, 1995-2020.[a]

FACILITY	PORT ROYAL ISLAND	LADY'S ISLAND	ST. HELENA	NORTHERN BEAUFORT	SOUTHERN BEAUFORT (EX. HHI)	BEAUFORT COUNTY (EX. HHI)	HILTON HEAD ISLAND[B]	BEAUFORT COUNTY TOTAL
Baseball field	-1	-2	-2	0	-13	-18	-9[c]	-27
L.L./softball field	0	-2	-3	0	-12	-17		-17
Basketball court	-2	-4	-6	-1	-25	-38	-2	-40
Soccer/football field	-1	-2	-3	0	-12	-18	-2[d]	-20
Outdoor volleyball court	-2	-3	-4	0	-18	-27	-2	-29
Golf course holes	0	-1	0	0	-2	-3	0	-3
Tennis court	-1	-4	-5	0	-21	-312	-3	-34
Swimming (pools)	0	-1	0	0	-2	-3	0	-3
Bike/walk/jog paths (mi.)	0	-2.5	-3.3	-0.3	-14.8	-20.9	-5.8[e]	-26.7
Nature/hiking trail (mi.)	-0.1	-0.2	0	0	0	-0.3	-1.1[e]	-1.4
Horseback trail (mi.)	-0.1	-0.4	-0.5	0	0	-1.0	-2.3[e]	-3.3
Boat ramps	-2	-2	-1	0	-10	-15	-18[f]	-33
Campsites	-4	-10	0	-1	-60	-75	0[f]	-75
Picnic tables	-18	-43	-55	-5	-251	-372	-275	-647

Sources: South Carolina Recreation and Participation Study, 1994; Beaufort County PALS; URDC

a - Negative numbers indicate facility deficits (needs). Zero (0) indicates that existing facilities will be sufficient to meet projected needs in 2020. Facility needs are in addition to facilities noted in Table 4 to meet current needs. County totals may differ from the sum of the planning areas due to rounding.

b - Hilton Head Island facility needs are the "adjusted need" taken from the Recreation and Open Space Plan, Town of Hilton Head Island (table 6, page 34), except as noted. The time horizon for the Hilton Head Island plan is 2015. In addition to the facility needs listed below, the Hilton Head plan identifies a current need for 7 playgrounds.

c - The Hilton Head Island plan combines the need for baseball and softball fields into a single need for 9 additional fields between 1995 and 2015.

d - The Hilton Head Island plan identifies a separate need for 2 soccer fields.

e - The Hilton Head Island plan identifies a future need for 26 "Multi-Use Trails" but gives no indication of desired length. The Hilton Head Island plan does not identify needs for nature/hiking trails or horseback riding trails. Indicated needs for all three trail types are derived using the procedure in the Beaufort County Parks, recreation, and Open Space Plan.

f - The Hilton Head Island plan does not include boat ramps or campsites in its facility analysis.

7.4 Recreation Programs

Recreation programs are the core of the PALS service. In 1995, the department ran 145 programs, including a summer camp attended by almost 700 children. Recreation programs involve any of 11 different activities:

- arts and crafts;
- clubs, hobbies and special interest groups;
- dance;
- drama;
- language arts and mental activities;
- music;
- outdoor recreation and camping;
- service activities;
- social recreation;
- special events; and
- sports and games.

Thirty-one percent of the programs offered by the department are in Arts and Crafts while 28 percent were devoted to Sports and Games. Appendix D of the *Beaufort County Parks, Recreation and Open Space Plan* contains a detailed description of recreation program categories and the department's offerings.

Recreation programs may be widely attended, such as the summer camp, or may have as few as 5 participants or less. Many other organizations throughout the County help to meet the need for recreation programs. Private clubs and gated developments provide opportunities for productive use of leisure time. Some organizations, such as the YMCA, are "semipublic" in nature—open to the general public with conditions, such as membership requirements. Recreation programs and leisure service activities in general are often a secondary part of an organization's mission, such as therapeutic recreation in hospitals. The military installations in Beaufort include a complete effort devoted to Morale, Welfare, and Recreation (MWR). The department's mission of "leisure services" suggests a strong role in coordinating a unified service delivery system.

Recreation programs are often initiated by a small but enthusiastic group of participants with a unique interest. The PALS mandate is to serve the public, and its programs should have the broadest public appeal possible; such as programs which appeal to a wide age group, or are appealing to a specific target group. Nevertheless, PALS by its nature

has the expertise to operate many recreation programs, some of which may only appeal to a limited audience. The plan strongly supports the concept of offering programs on a self-sustaining basis. However, the plan also recognizes and supports the concept of offering programs for a clearly defined public or social purpose (e.g. helping children after school, basic swimming and water safety) even if the program is operated at a deficit.

7.5 Open Space Preservation and Greenways

Beaufort County has permitting authority for subdivisions and land developments. The County Zoning Ordinance establishes a River Protection Overlay District for most waterways. The County should be commended for recognizing the importance its waterways and enacting regulations to safeguard the water from the adverse effects of development. The *Beaufort County Comprehensive Plan* provides detailed recommendations for enhancing and strengthening the County's valuable natural resources. Open space preservation is a key consideration in the County's future land use, and greenways will have a significant impact on the quality and future enjoyment of the County's remarkable natural features.

7.5.1 Greenways

Beaufort County is blessed with abundant open space in sprawling woods, farmlands, stream valleys, wetlands and waterways—major natural features that offer wonderful opportunities for setting aside corridors of open space for greenways. The concept of greenways has been around for a long time, but only within the past few decades has the concept gained public acceptance. Many greenway projects are already completed throughout the United States, including the Canopy Roads Linear Parkway in Florida and the Florida Trail.

a. The Definition of a Greenway

Greenways are natural areas that often follow linear landscape features such as rivers, streams, highlands, and even abandoned railroads. Greenways are not necessarily parks or public land but can be publicly or privately owned, and may be open or closed to public use. Parts of a greenway may be a scenic resource or an important wildlife habitat owned and maintained by a private landowner, with no public access. A greenway can be protected in many ways, both publicly and privately.

Greenways are usually linear strips running through urban, suburban, and rural areas that protect water quality, floodplains, wetlands, wildlife habitat, scenic vistas, historic and cultural resources, and recreational uses. A greenway along a stream includes the con-

tinuous vegetated buffer zones on each side from the stream's origin in the uplands to its mouth. "Buffers," suggested above and required in the Beaufort County zoning ordinance, should be vegetated and wide enough to provide for water quality and flood protection, as well as to provide for appropriate activities in the corridor (i.e. recreation and wildlife habitat). One of the most important functions of greenways which is already recognized in Beaufort County is water quality protection and enhancement through the control of nonpoint source pollution (e.g., sediment) and protection of natural resources.

An important part of the greenway concept is the idea of linkage or connectivity. Greenways can link communities, parks and other large natural areas. Some greenways have trails which are protected pathways for recreation and transportation. Trails within greenways may enable people to be within walking distance of pleasant natural areas; to walk, bicycle, or ride a horse away from noisy, dangerous roads; and to travel without cars to schools, community centers, shopping centers, stores and parks. Where trails are paved, people with unique circumstances can travel or exercise safely. Greenways along waterways may offer trails that provide access for active and passive recreation. Greenways with or without trails can provide movement corridors for wildlife. The term "greenway" does not necessarily denote a defined trail or even recreational use. Portions of many greenways focus strictly on the environmental protection and restoration element.

A network of greenways is unlikely to be owned and managed by one agency or organization. Greenways usually consist of many parts owned and maintained by a variety of different entities, including governments, private organizations, civic groups, and individual landowners. Creating a greenway system depends on the cooperation of all members of the community. One of the most valuable features of greenways is that they grow from true partnerships, with many members of the community working together to realize a shared goal for maintaining a high quality of life.

b. Greenway Planning

Greenway planning requires local (municipal and County) conservation action rather than relying solely on state or federal acquisition and management. Greenway planning is based on the belief that the cooperation of all levels of government, private groups and landowners is the best way to achieve coordination and consistency in corridor conservation and management. Greenway planning emphasizes the protection, preservation and enhancement of natural, cultural and recreational resources through a variety of conservation measures, including less-than-fee acquisition, various land use controls, cooperative landowners agreements, use of tax incentives, and assistance from both the government and private sector. The greenway planning process assumes that a relatively small percentage, if any, of a landscape area will be in public ownership and that private landowners will play a major role in the stewardship of the area.

c. Why Protect Streams, Rivers and Their Corridors?

Stream water quality is critically important because a stream is often a water supply source for residential, agricultural, commercial and industrial purposes. Surface waters are the major source of drinking water in many states. The corridors along streams and rivers contain wetlands and vegetated areas that absorb and filter pollutants and sediments, preventing pollution from reaching the water. Corridors are also major habitats

and corridors for plants and animals and prime recreational areas for people, often providing outstanding scenic views or containing significant archaeological, historic, and cultural resources .

d. Benefits of Greenways

Greenways offer many environmental, economic and cultural benefits:

1. Flood Protection and Groundwater Recharge—When greenways are located in floodplains, floodwaters cause little or no damage and can percolate into underground aquifers, thus recharging groundwater reserves.

2. Water and Air Quality and Erosion Protection—The vegetation in a greenway serves as a buffer, helping to purify polluted air and to absorb pollutants in stormwater runoff, thus keeping streams and rivers cleaner. The vegetation also helps to reduce or prevent erosion and to increase runoff absorption.

3. Economic Development—Recent studies in Boulder, CO and Seattle, WA have shown that greenways have increased the value of nearby properties and are beneficial to a local economy because they attract upscale businesses, sportsmen, and tourists. Studies also prove that land near or adjacent to greenways have higher land values than land further from the greenway.

4. Alternative Transportation—Greenways which link communities and commercial areas encourage people to travel without motor vehicles, thus reducing traffic congestion on roadways. A greenways master plan can be an important element of compliance with the Clean Air Act of 1991.

5. Community Pride—Greenways can protect scenic areas and increase people's awareness and appreciation of the outdoors, thus generally enhancing quality of life and building community pride.

6. Maximum Use of Restricted Land—Greenways often utilize land unsuitable for development because of environmental or regulatory constraints, such as floodplains and steep slopes.

7. Historic and Cultural Resource Conservation—Greenways enhance and conserve historic sites by protecting land adjacent to the sites. Greenways in richly historical areas protect the area's heritage and maintain its rural character.

8. Recreation—Greenways provide open space and recreational opportunities within a short walk of every citizen's home. Greenways increase recreational opportunities and provide more varied opportunities for citizens to enjoy the outdoors.

9. Wildlife Conservation—Some scientists believe that greenways allow certain species of wildlife to move safely between habitat areas; travel which is essential for the successful propagation of many species. In addition, greenways in stream corridors and wetlands generally contain a high diversity of species.

7.6 Public Relations and Communications

In most analyses of communities, parks and leisure services are usually given secondary consideration. In contrast, Beaufort County's estuarine environment, scenic vistas, water resources, and coastal location make parks and leisure services major factors in creating high quality of life in the County. The County should enhance the community presence of parks, recreation facilities, and open spaces to capitalize on one of the County's strongest living attractions.

The PALS Department currently uses traditional print methods of disseminating program information: newspapers, flyers, and brochures. Distribution through the recreation centers helps to ensure that information reaches the home. Nevertheless, calls to the central office daily indicate that many residents are still confused or completely unaware about PALS and the valuable service the department provides.

7.7 Maintenance

Maintenance is the most important factor in determining the useful life of parks and recreation facilities. After parks are developed and facilities are installed, regular maintenance helps prolong use and postpone costly replacement. Conversely, lack of maintenance is usually responsible for safety hazards and replacement or loss of use. Security is often linked to maintenance, since vandalism also decreases facility life and use.

7.7.1 Maintenance Personnel

The PALS staff includes 12 maintenance personnel assigned as follows:

- one working supervisor;
- two to turf management (e.g., seeding, fertilizing, irrigating, mowing;
- two to St. Helena/Lady's Island (Broomfield Center, Lady's Island Park, St. Helena Park, Waterslide, Seaside Center, Scott Center, Coosaw Center, and St. Helena Gym);
- two to Beaufort/Port Royal (Basil Green, Mets Field, Boundary St. tennis courts, Green St. Gym, Green Street pool, Bob Jones Complex, Southside Park, Bruce Edgerly Field, and the PALS central office);
- two to Burton/Shell Point/Dale (Burton Wells, Seabrook Center, Dale Park, Booker T. Washington Center, Shell Point Park, Shell Point Field, Agnes Major Center); and
- two to Hilton Head/Bluffton (Barker Field, Bluffton Center, M.C. Riley, Creation Station).

Considering the small staff size, PALS does an excellent job of maintaining County parks and recreation facilities. The job of the PALS parks maintenance staff is hampered by the large size of the County. Simple jobs may take several hours simply because of travel time, particularly in the case of the supervisor and the two staff assigned to turf management, all of whom are responsible for the entire County. PALS has a maintenance schedule and established procedures for safety inspections although reports indicate that maintenance and repairs are severely backlogged to the point of limiting the use of some facilities.

Maintenance is not exclusively a County concern. Other organizations in the County, some of which own and operate recreation fa-

cilities, are conscious of the need for proper maintenance within limited fiscal resources. A close working relationship through the Council of Recreation Providers can help all entities with personnel, equipment, and materials to maintain land and facilities in desirable condition.

7.8 Financing and Budgeting

Local governments are continually being asked to "do more with less." Parks and leisure services are often not viewed as essential, and are among the first services to be curtailed. In 1996, Beaufort County provided some needed funding for parks and leisure services through the traditional mechanism of bond refinancing. Continuous pressure to curtail expenses requires careful financial planning using both traditional and innovative financing techniques.

Financing a parks and leisure services program generally involves four major functions:

7.8.1. Administration

General administration, supervision and direction normally requires approximately 9 to 12 percent of the total park and recreation budget.

7.8.2 Recreation Programs

Effective recreation programs need leadership and supplies, which normally require 35–40 percent of the total budget.

7.8.3 Maintenance and Operation

The continual care of parks, indoor and outdoor recreation facilities and open space areas requires day-to-day maintenance and operation which typically consumes 30 to 35 percent of the total budget.

7.8.4 Capital Improvements

Investments in land acquisition and park facilities may either be minor or major capital improvements and should consume 16 to 24 percent of the total budget. Minor capital improvements, such as replacing or upgrading facilities or making small improvements to existing facilities, are normally financed with 8 to 12 percent of the annual operating

budget. Major capital improvements are large expenses typically funded by long-term loans or municipal bonds. Amortizing major capital improvements normally consumes an additional 8 to 12 percent of a local park and recreation budget.

The PALS approved budget for FY 1998 reflects higher than typical expenditures on programs and lower than typical expenditures on maintenance and capital improvements (Table 24). The analysis in Table 24 calls for an increased share of funding for maintenance and capital improvements.

Table 24: PALS approved budget FY 1997-1998.

EXPENSE		EXPENSE CATEGORY					TOTAL
LINE	DESCRIPTION	ADMIN.	PROGRAMS	MAINTEN.	CAPITAL		
					MAJOR	MINOR	
64310	PALS Central Administration	$222,974				$5,000	$227,974
64311	PALS Summer Program		$262,055				$262,055
64312	Green Street Pool (PALS)		$36,768	$1,000			$37,768
64313	Hilton Head (PALS)		$302,496	$18,000	$40,709		$361,205
64314	PALS Bluffton		$225,059	$6,000		$13,500	$244,559
64315	PALS Facilities Maintenance			$459,389	$13,500		$472,889
64316	PALS Athletic Programs		$429,933		$12,680		$442,613
64317	PALS Recreation Center Programs		$424,669		$25,000		449,669
TOTALS		$222,974	$1,680,980	$484,389	$91,889	$18,500	$2,498,732
Suggested Allocation		9-12%	35-40%	35-40%	8-12%	8-12%	100%
Actual FY 1998 Budget Allocation		8.9%	67.3%	19.4%	3.7%	0.7%	100.0%

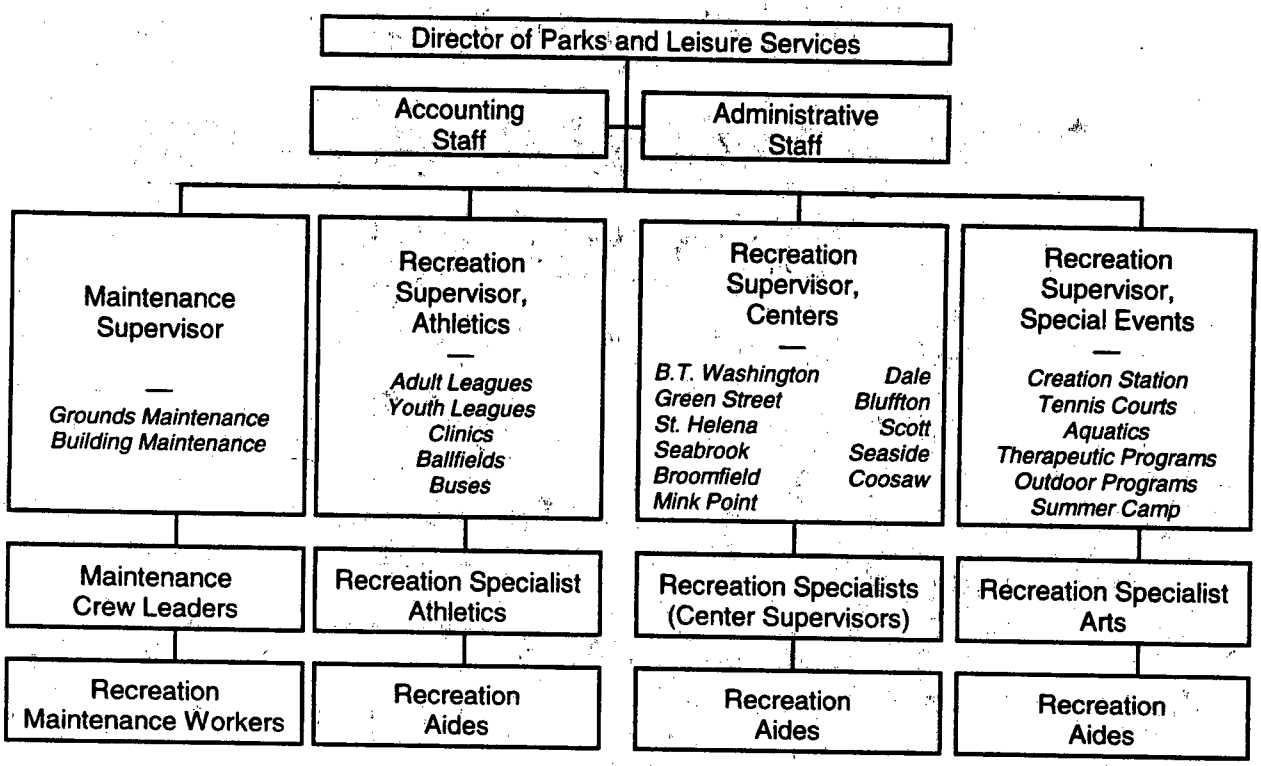
Note: Table 6 does not account for the closing of the Green Street pool or the impact of the approved bond refinancing.

Sources: PALS, URDC.

7.9 Administration and Organization

The PALS structure as of Spring 1995 (Table 25) is characterized by four supervisors heading separate functions and reporting to the director. Office support staff (accounting and administrative) also report to the director. The structure of functional supervisors reporting to the director is acceptable if the supervisors exercise some authority and provide strong leadership for their respective divisions.

Table 25: Former organizational structure.



Parks, Rec. & Open Space

Policies

- Policy 1: Make the best use of existing parks.
- Policy 2: Develop additional County, community and neighborhood parks to meet current and future recreation needs and to serve different geographic areas.
- Policy 3: Make the best use of existing recreation facilities.
- Policy 4: Provide adequate staff and support to help the recreation centers grow into thriving, viable community activity centers.
- Policy 5: Provide recreation facilities on publicly accessible lands to operate needed programs.
- Policy 6: Work with other recreation providers to promote the use of existing programs and to make the best use of existing community resources.
- Policy 7: Develop new programs through PALS by considering the benefit of each program to residents and the cost of providing the program.
- Policy 8: Use the County's land development regulations to preserve and protect streams, water bodies, tidal wetlands, freshwater wetlands, aquifers, and valuable wildlife areas.
- Policy 9: Encourage other agencies, organizations and landowners to help preserve land in the County.

- Policy 10: Develop greenways as a means of preserving valuable land and allowing people to enjoy the County's natural beauty.
- Policy 11: Recognize Parks and Leisure Services as a strong component of Beaufort County's quality of life.
- Policy 12: Maintain parks and recreation facilities at an acceptable level.
- Policy 13: Work with other groups to maintain parks and recreation facilities as appropriate.
- Policy 14: Use traditional and innovative financing techniques to fund parks and leisure services equitably throughout the County.
- Policy 15: Revise department structure and procedures to increase efficiency and to make the best use of community resources in a coordinated leisure service delivery system.
- Policy 16: Establish planning as an important, continuous activity in guiding the department.
- Policy 17: Recognize the importance of attracting and maintaining high-quality staff.

Parkland

Policy 1: Make the best use of existing parks.

The need for new parks assumes that existing parks are used optimally. If existing parks are not used to the fullest, new parks will have to be developed to meet community needs, often at greater expense. The parkland analysis inherently assumes optimal use of existing parks. However, existing parks are never used to the fullest, not only in Beaufort County but in most other park systems nationwide. Improvements to existing parks at all levels—County, municipal, and school district—will help control the need for new parklands.

Actions

☑ *1.1 Make improvements to existing parks and recreation facilities.*

Suggested improvements are provided in Tables 26 through 30. The County should consider developing a site plan for parks where major improvements are suggested. Suggested improvements are included in the Capital Improvements Program.

☑ *1.2 Review existing parks and facilities for compliance with the requirements of the Americans with Disabilities Act (ADA) and consumer safety regulations.*

The ADA requires public parks and recreation facilities to meet certain accessibility standards for the disabled. In addition, consumer safety regulations mandate certain safety precautions for recreation facilities, particularly playground equipment. The department should carefully review existing parks and facilities for compliance with both mandates to reduce safety hazards and liability exposure.

☑ *1.3 Work closely with the Beaufort County School District and its staff to increase the quality and consistency of youth recreation opportunities and to permit the greatest possible use of schools.*

The two driving forces in the County's park and recreation system are the County and the School District. Each has a significant role to play in helping to enhance Beaufort County's quality of life, and it is imperative that the two organizations work closely and

Table 26: Suggested park improvements, Northern Beaufort County Planning Area..

Park	Improvements
Parks	
Agnes Major Community Center	➢ Site improvements (formalized parking, signage, grading, drainage)
	➢ New baseball field, basketball court and tennis court
	➢ Playground improvements
Booker T. Washington Community Center (Jenkins Community Center)	➢ Site improvements (formalized parking, signage, grading, drainage)
	➢ Playground improvements
Combahee Boat Landing (Steel Bridge)	➢ Additional picnic areas
Dale Community Center	➢ Site improvements (formalized parking, signage)
	➢ New multi-use trail
	➢ Playground improvements
Paige Point Boat Landing	➢ Additional picnic tables
Sugar Hill Boat Landing	➢ Additional picnic tables
Wimbee Creek	➢ Formalized parking
Schools	
Davis Elementary	➢ Playground and ballfield improvements

Source: URDC, 1997

cooperatively to make the greatest use of resources. Quality recreation programs and facilities, including the new swimming pools to be developed at proposed new schools as part of the parks and recreation bond refinancing, should be available to all residents throughout the County.

Currently, the School District is represented on the PALS Advisory Board. Staffs of the two agencies cooperate on some operating items on an informal basis such as maintenance. However, cooperation between PALS and the School District is not mentioned in the PALS mission or goals. The impetus for strong cooperation should come from the top of the organizations. The PALS Director and the Superintendent of Schools should consider serving as co-chairs of the Council of Recreation Providers, which is discussed under the *Administration and Organization Section*. Both leaders could appoint high level staff persons to work together and be responsible for organizing council meetings and activities and implementing council programs and recommendations.

☑ *1.4 Work closely with local churches, the military's Morale, Welfare, and Recreation (MWR) personnel, and other organizations to share parks and recreation facilities and make the maximum use of existing resources.*

Table 27: Suggested park improvements, Port Royal Island Planning Area.

Park	Improvements
Parks	
Arthur Horne Nature Park	➢ Signage and bridge improvements
	➢ Additional picnic tables
	➢ Promotion as a wildlife education center
Basil Green Sports Complex	➢ Site improvements (drainage, roof repair on eqpt. booth)
Bob Jones Field	➢ Site improvements (formalized parking, lawn repair)
	➢ New backstop
Broad River Boat Landing/Fish Pier	➢ Support improvements (new restrooms, trash receptacles)
Bruce Edgerly Ballfield	➢ Support improvements (restroom and lawn repairs, new water fountain)
	➢ New trail and playground equipment
Burton Wells Central Park	➢ Site improvements (paved entry and parking, drainage)
	➢ Master plan for park development
City Swimming Pool	➢ Replace as planned through bond refinancing, keep the pool within the city
City Tennis Courts (Bladden St.)	➢ Support improvements (repairs to building, bleachers, lawn, court surface)
	➢ Site improvements (landscaping, new signage, restrooms, formalized parking)
Depot Street Park	➢ Additional picnic tables, grills, benches, and landscaping
Old County Courthouse Courtyard	➢ Enhanced landscaping
Grays Hill Boat Landing	➢ Formalized parking
	➢ Additional trash receptacles
Green Street Gym	➢ New indoor basketball goal
	➢ Outdoor basketball court resealed and painted
	➢ Upgraded playground equipment
	➢ Additional landscaping
Live Oaks Park	➢ Upgraded ballfields (regulation size)
(Port Royal Field, PALS office)	➢ Site improvements (lawn repairs, formalized parking)
	➢ New walking trail
Low Country Technical College Gym	➢ County should offer financial help to implement school's master pal in return for opening gymnasium (now abandoned) to the public.
Met Field (National Street Field)	➢ Support improvements (security lighting, fence repair)
	➢ Site improvements (lawn repair, formalized parking)
	➢ Landscaping to buffer neighboring homes
	➢ Upgraded ballfield (to regulation size)

Park	Improvements
Parks	
North Street Tot Lot	➢ Paved entryway with new trail
	➢ Support improvements (fountain repair, security lighting, additional seating)
Parris Island Boat Landing	➢ Additional picnic tables, benches, trash receptacles
Port Royal Boat Landing	➢ Trash receptacles
Seabrook Community Center	➢ Site improvements (drainage, formalized parking area)
Shell Point Park	➢ Site improvements (formalized parking, signage, landscaping)
Southside Park Tennis Courts	➢ Formalized parking
	➢ Support improvements (picnic tables, grills, trash receptacles)
Municipal Facilities	
Bay Street Battery Park, Beaufort	➢ Support improvements (safety fence, walks, more benches)
Calhoun Thomas Park, Beaufort	➢ Lawn repair
	➢ Support improvements (sidewalk repair, new benches, trash receptacles)
Carteret St. Mini Park, Beaufort	➢ Support improvements (signage, landscape lighting)
Casablanca Park, Port Royal	➢ Upgraded play equipment and ballfield
	➢ New trail
	➢ Support improvements (restrooms., security lighting)
Cravin Street Park, Beaufort	➢ Additional benches and signage
Dowling Park Pond, Beaufort	➢ Signage
	➢ New dock and walkway around pond
	➢ New wetland plantings and shade trees
Hermitage Parkway, Beaufort	➢ Support improvements (benches, better landscaping)
Horse Hole Park, Beaufort	➢ Site improvements (landscaping to buffer neighboring homes, formalized parking)
	➢ Support improvements (picnic tables, grills, trash receptacles)
Kate Gleason Mem. Park, Beaufort	➢ Trails
Little Park, Beaufort	➢ Drainage improvements
Logan Park, Beaufort	➢ Fence along Depot and North Streets
	➢ Trash receptacles
Morris St. Playground, Beaufort	➢ Playground improvements
	➢ Support improvements (benches, picnic tables, signage)
	➢ New picnic pavilion on existing concrete pad
Naval Hospital Park, Port Royal	➢ Fulfill plans to improve parking, add an historic shrimp boat and water feature, and enhance landscaping
New Castle St. Pgd., Beaufort	➢ Support improvements (walkway, signs, gates, repairs to fountain)
	➢ New concrete pad for basketball court
	➢ Tree replacements

Park	Improvements
Pigeon Point Boat Landing, Beaufort	➢ Site improvements (formalized parking, enhanced landscaping)
	➢ Signs
Pigeon Point Park, Beaufort	➢ Walking trail picnic tables and benches
	➢ Improved landscaping
	➢ Playground equipment
The Point Pond, Beaufort	➢ Clean and dredge pond
	➢ New walkway around pond; signage
Sands Beach Area, Port Royal	➢ Formalized parking
	➢ Trash receptacles
Seafarers Park, Port Royal	➢ Additional walkways
Wilson Park, Beaufort	➢ Site improvements (entrance, formalized parking)
	➢ Support improvements (signage, benches, trash receptacles)
Woodward Apts./Senior Citizens Center	➢ New senior center (remove existing structures)
Beaufort	➢ Formalized parking area
Schools	
Battery Creek Elementary	➢ Updated playground equipment
	➢ New walking trails and picnic tables
	➢ Enhanced landscaping
Beaufort Elementary	➢ Playground improvements
	➢ Upgraded ballfield
	➢ Walking trail/link to recreation and parking areas
Beaufort High	➢ Tennis courts
Broad River Elementary	➢ Playground improvements
	➢ Upgraded ballfield
	➢ New walking trail
Mossy Oaks Elementary	➢ Landscaping to buffer adjoining homes
	➢ Walking trail, picnic tables, benches
Old Battery Creek High/Mink Point Gym	➢ Support facilities (picnic tables, trash receptacles, water fountain)
Robert Smalls Middle	➢ Walkway to fields and courts
	➢ New tennis court nets
Shell Point Elementary	➢ Playground improvements
	➢ Upgraded ballfield

Source: URDC

Table 28: Suggested park improvements, Ladys Island Planning Area.

Park	Improvements
Parks	
Broomfield Complex	➢ New picnic pavilion (replace existing one)
	➢ Playground equipment
	➢ New fence around ballfield
	➢ Support improvements (picnic tables, water fountains)
	➢ Site improvements (grading, drainage, formalized parking)
	➢ Repairs to basketball backboard and bleachers
Schools	
Lady's Island Elementary	➢ New lights and poles for basketball court
	➢ Drainage improvements to football field
	➢ Enlarged basketball court (from half court to full court)
	➢ Add bleachers
Lady's Island Middle	➢ Upgraded baseball field (to regulation size)
	➢ Add multiuse trail

Source: URDC

Table 29: Suggested park improvements, St. Helena Planning Area.

Park	Improvements
Parks	
Bermuda Bluff Boat Landing	➢ Formalized parking
Capers Boat Landing	➢ Formalized parking
Johnson Creek Boat Landing	➢ Formalized parking
Scott recreation Area	➢ Playground improvements
	➢ New multiuse trail around site
	➢ Formalized parking
	➢ Expanded building
Seaside Community Center	➢ Add basketball court, baseball field, and tennis courts
	➢ Formalized parking
Station Creek Boat Landing	➢ Formalized parking
St. Helena Park	➢ New multiuse trails
	➢ New Little League fields
	➢ New picnic pavilion and water fountains
	➢ Two new tennis courts (in planning)
Waterslide Park	➢ Demolish waterslide park and reuse site for recreation purposes
Schools	
Old St. Helena Elementary School Gym	➢ Continue county lease from school district
	➢ New picnic area
	➢ New outdoor basketball court
St. Helena Elementary	➢ Additional playground equipment

Source: URDC

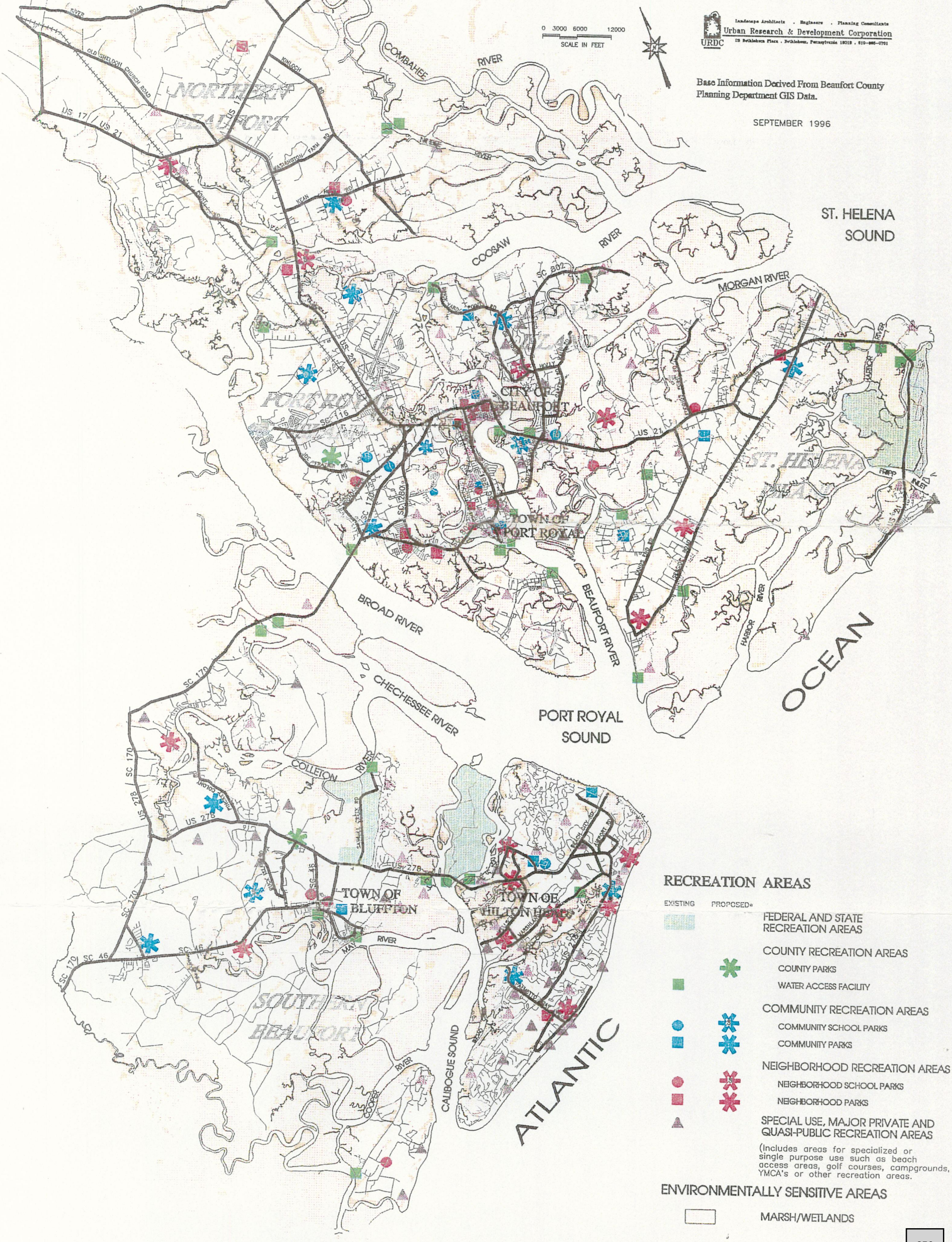
Table 30: Suggested park improvements, Southern Beaufort County Planning Area.

Park	Improvements
Parks	
All Joy Boat Landing	➢ Support improvements (benches, trash receptacles)
Barker Field	➢ Site improvements (drainage, paved and expanded parking, paved road)
Bluffton Boat Dock & Boating Ramp	➢ Additional parking
Bluffton Center	➢ New football goalposts
	➢ New walkway to facilities
	➢ Gym roof repairs
	➢ Drainage improvements
Buckingham Landing	➢ Additional parking
	➢ Trash receptacles
	➢ New benches
C.C. Haigh Jr. Boat Landing	➢ Support improvements (picnic tables, grills, trash receptacles)
	➢ Landscaping
Daufuskie Park	➢ Baseball field, two basketball courts, picnic area, playground, restrooms, and support facilities (in planning)
Edgar Glenn/Chechessee River Boat Landing	➢ Additional trash receptacles
H.E. Trask Sr. Boat Landing	➢ Support improvements (picnic tables, grills, trash receptacles)
	➢ Landscaping
Hilton Head Park (Old Courthouse Annex)	➢ Site master plan needed
Lemon Island Roadside Park	➢ Site improvements (signage, formalized parking)
	➢ Support improvements (picnic tables, grills, trash receptacles)
Pope Avenue Beach Access	➢ Public restrooms
Municipal Facilities	
Crossings Park	➢ Phase 1 development (in planning): 3 baseball/softball fields, 1 soccer field, playground area, picnic shelters, meadow, press box/concession stand
Island recreation Center, Town of Hilton Head	➢ Support improvements (better access, additional trash receptacles)
Mary Fields Elementary (Daufuskie Elementary)	➢ Playground improvements
Old M.C. Riley Elementary	➢ Site master plan needed

MAP 15

PARKS, RECREATION & OPEN SPACE PLAN

Beaufort County Comprehensive Plan
Beaufort County, South Carolina



RECREATION AREAS

EXISTING PROPOSED*

- FEDERAL AND STATE RECREATION AREAS
- COUNTY RECREATION AREAS
  - COUNTY PARKS
  - WATER ACCESS FACILITY
- COMMUNITY RECREATION AREAS
  - COMMUNITY SCHOOL PARKS
  - COMMUNITY PARKS
- NEIGHBORHOOD RECREATION AREAS
  - NEIGHBORHOOD SCHOOL PARKS
  - NEIGHBORHOOD PARKS
- SPECIAL USE, MAJOR PRIVATE AND QUASI-PUBLIC RECREATION AREAS

(Includes areas for specialized or single purpose use such as beach access areas, golf courses, campgrounds, YMCA's or other recreation areas.

ENVIRONMENTALLY SENSITIVE AREAS

- MARSH/WETLANDS

*NOTE: The locations of the proposed recreation areas are

MAP 16

PARKS, RECREATION & OPEN SPACE PLAN

PORT ROYAL ISLAND PLANNING AREA

Beaufort County Comprehensive Plan
Beaufort County, South Carolina

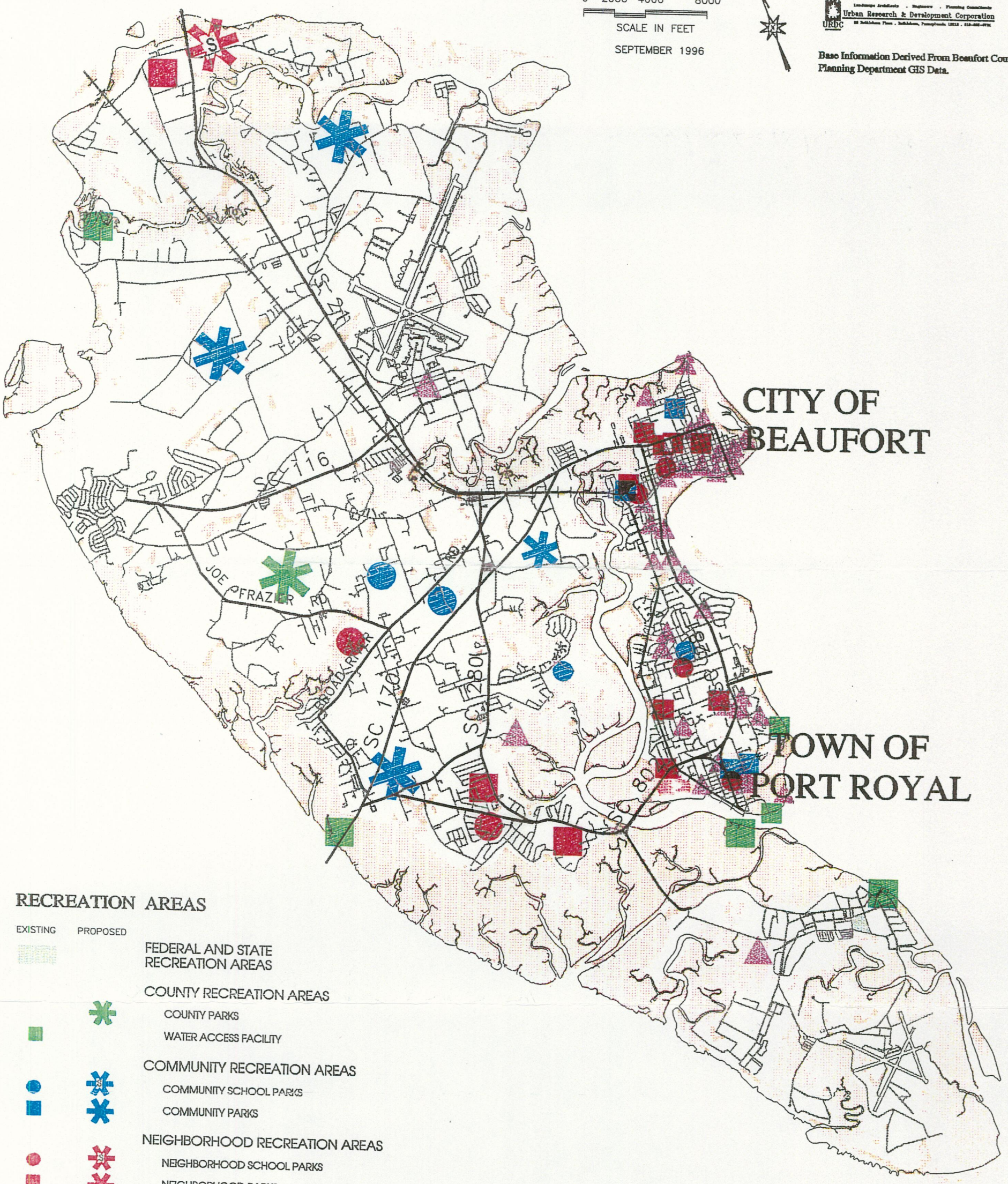
0 2000 4000 8000

SCALE IN FEET

SEPTEMBER 1996

Urban Research & Development Corporation

Base Information Derived From Beaufort County Planning Department GIS Data.



RECREATION AREAS

EXISTING PROPOSED

FEDERAL AND STATE RECREATION AREAS

COUNTY RECREATION AREAS

- COUNTY PARKS
- WATER ACCESS FACILITY

COMMUNITY RECREATION AREAS

- COMMUNITY SCHOOL PARKS
- COMMUNITY PARKS

NEIGHBORHOOD RECREATION AREAS

- NEIGHBORHOOD SCHOOL PARKS
- NEIGHBORHOOD PARKS

SPECIAL USE, MAJOR PRIVATE AND QUASI.PUBLIC RECREATION AREAS

(Includes areas for specialized or single purpose use such as beach access areas, golf courses, campgrounds, YMCA's or other recreation areas.

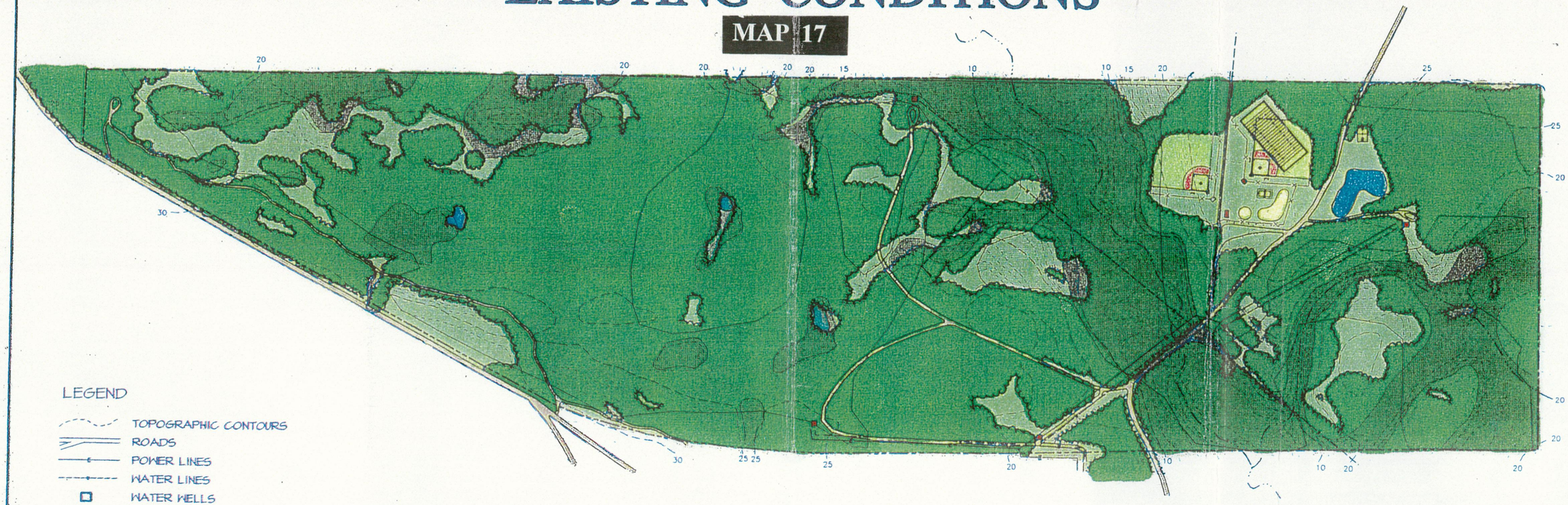
ENVIRONMENTALLY SENSITIVE AREAS

MARSH/WETLANDS

*NOTE: The locations of the proposed recreation areas are generalized. Specific sites will be selected in the future.

EXISTING CONDITIONS

MAP 17



LEGEND

- TOPOGRAPHIC CONTOURS
- ROADS
- POWER LINES
- WATER LINES
- WATER WELLS
- PONDS
- WATERWAYS
- EXISTING FLOODPLAIN OR LOW WET AREAS TO REMAIN
- HYDRIC SOILS
- WOODLANDS

Burton Wells Central Park

BEAUFORT COUNTY, SOUTH CAROLINA

0 100 200 400
SCALE IN FEET

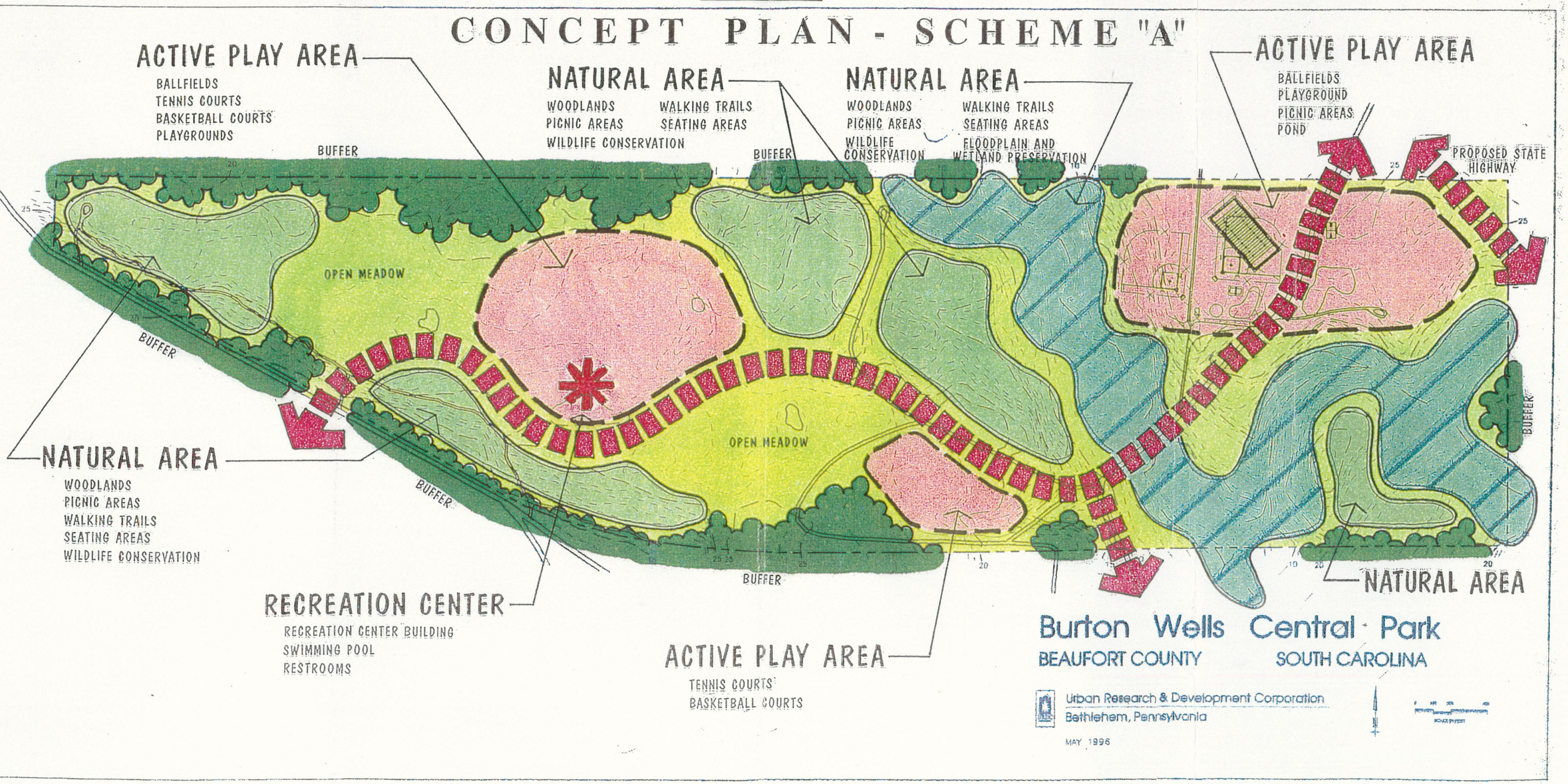
Beaufort County Parks and Leisure Services Department

Urban Research & Development Corporation
Bethlehem, Pennsylvania

SEPTEMBER 1996

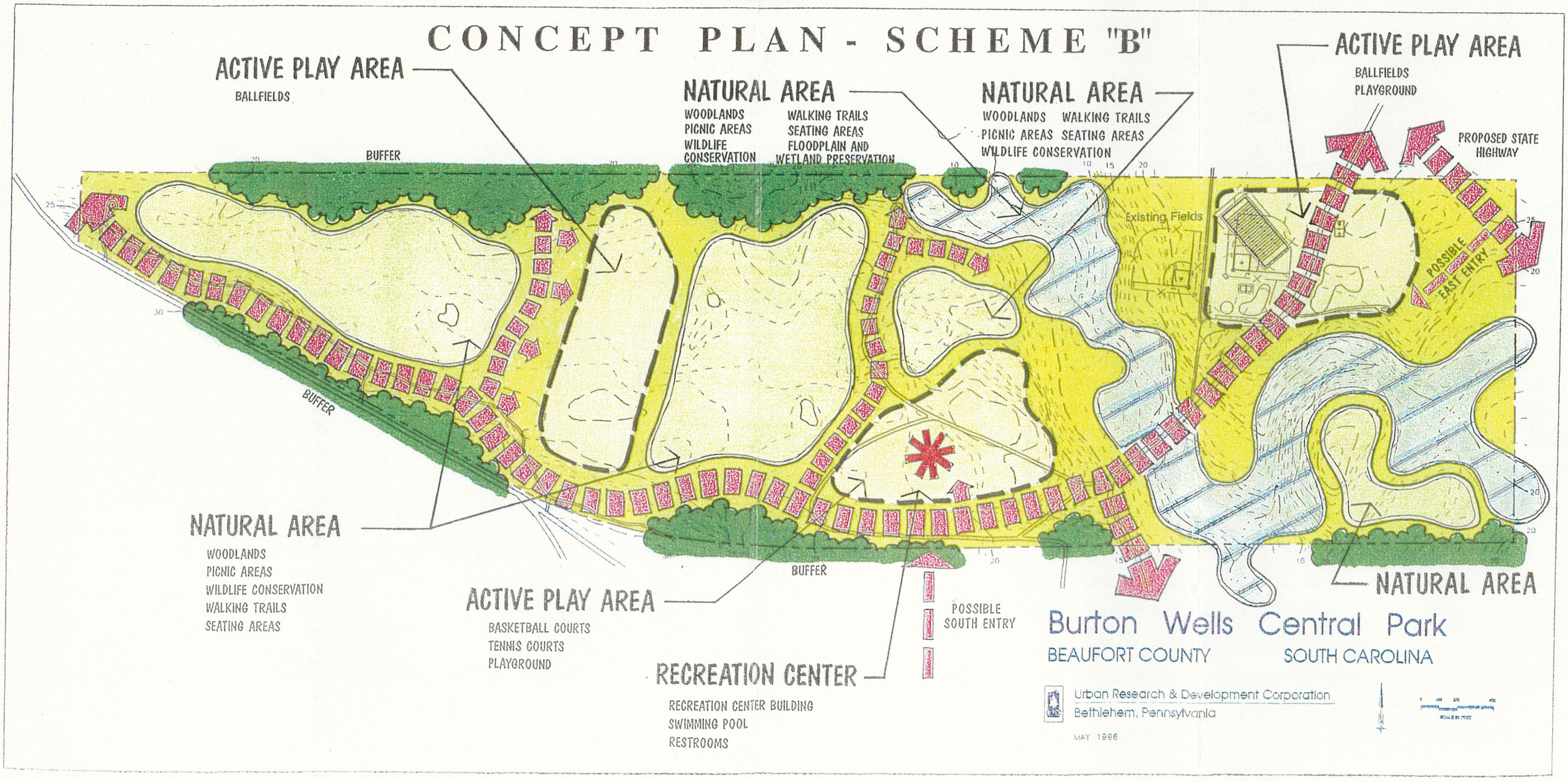
MAP 18

CONCEPT PLAN - SCHEME "A"



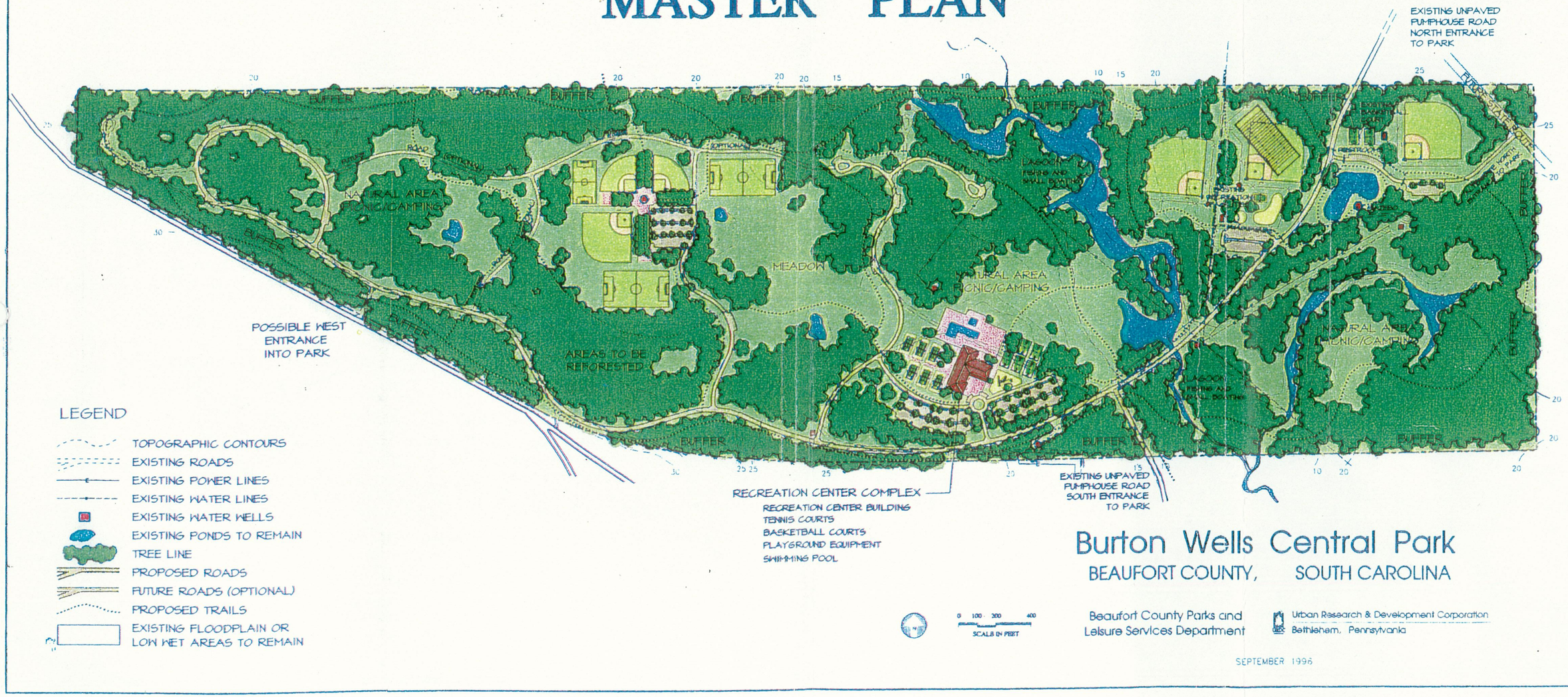
MAP 19

CONCEPT PLAN - SCHEME "B"



MAP 20

MASTER PLAN



LEGEND

- TOPOGRAPHIC CONTOURS
- EXISTING ROADS
- EXISTING POWER LINES
- EXISTING WATER LINES
- EXISTING WATER WELLS
- EXISTING PONDS TO REMAIN
- TREE LINE
- PROPOSED ROADS
- FUTURE ROADS (OPTIONAL)
- PROPOSED TRAILS
- EXISTING FLOODPLAIN OR LOW WET AREAS TO REMAIN

Burton Wells Central Park

BEAUFORT COUNTY, SOUTH CAROLINA

0 100 200 400
SCALE IN FEET

Beaufort County Parks and Leisure Services Department

Urban Research & Development Corporation
Bethlehem, Pennsylvania

SEPTEMBER 1996

Nonprofit organizations and public agencies outside of County government often have recreation facilities and programming expertise which can be an integral part of a unified recreation delivery system. Beaufort County is fortunate to have three military installations which have the support of an entire department devoted to recreation. Military personnel are very cooperative and serve on the current PALS board—a strong working relationship which has in the past and should continue to help meet the leisure time needs of both base personnel and County residents. Churches and other private nonprofit groups are also a valuable community resource which can contribute resources to help meet community needs. Military and private nonprofit groups should become strong, active participants in the Council of Recreation Providers.

☑ *1.5 Provide air conditioning in all gymnasiums.*

Beaufort County is often hot and humid from mid-spring to mid-fall. Indoor, active recreation programs often take place in gymnasiums which are not air conditioned. The higher heat indoors plus the humidity can create a health hazard for active sports, such as basketball and volleyball. The County should begin a long term capital improvement program to provide air conditioning in all gymnasiums.

Policy 2: Develop additional County, community, and neighborhood parks to meet current and future recreation needs and to serve different geographic areas.

The parkland analyses indicate a need for additional County, community, and neighborhood parks to meet current recreation needs. The County—in cooperation with other providers, where appropriate—should provide additional parks to meet identified needs.

Actions

☑ *2.1 Develop the remainder of Burton Wells Central Park according to the site master plan.*

Burton Wells Central Park is largely undeveloped (See Existing Conditions map) and could meet a variety of recreation needs for residents. Two concepts (Concept A and Concept B maps) were explored for the future development of Burton Wells. Placement and configuration of the recreation areas in each concept depends on the alignment of the principal road. In Concept A, the east-west road passes through the center of the park. In Concept B, the east-west road passes along the southern boundary of the park with two secondary roads extending northward into the park. The recommended site plan for the park (Master Plan map) is based on Concept A and incorporates the following design objectives, presented in four major subject areas:

Recreation Programs and Facilities

- Provide opportunities for a wide variety of leisure activities for different age groups and families in a natural setting.

- Provide complementary water-based and land-based leisure opportunities in one location.

- Emphasize athletic, picnicking, special events and nature-oriented opportunities at the park.

•Provide indoor leisure opportunities.

Natural Resource Protection

•Provide for appropriate activities in wooded areas to preserve one of the park's major natural features and allow people to enjoy the wooded environment.

•Provide opportunities for walking and jogging in a natural setting.

•Incorporate water as a major natural resource in the park.

•Use naturally forested buffers.

•Design the layout of each use to respect the topography, trees, water features, flood-prone and wetland areas, and other unique natural features on the site.

Operation, Security, and Maintenance

•Develop and implement a formal County policy for security at the park.

•Design the park so that all developed portions of the park can be observed from a vehicle.

•Provide systematic maintenance management, staffing, and scheduling at the park.

•Provide clean, attractive, and safe grounds, structures, and landscaped areas for convenient and enjoyable public use through an efficient and economic maintenance program.

•Develop a Burton Wells Central Park Maintenance Management Program in accordance with the adopted park master plan. (The *Beaufort County Parks, Recreation, and Open Space Plan* provides additional information and sample standards for a comprehensive maintenance management program.

Support Facilities and Services

•Provide adequate, well-maintained, and convenient parking, lighting, restrooms, and other conveniences to help ensure a pleasant visit to the park.

Using the design guidelines and recommended park master plan, the County should make further development of Burton Wells Central Park a high priority in parkland development. Burton Wells Central Park will serve not only the population of the Port Royal Island area but the population of the entire County. Future uses are planned to complement the existing recreation system in Beaufort County and accommodate the recreation needs of the residents now and in the future. The site master plan includes the following nine major elements:

a. Recreation Center Complex

An indoor recreation facility building in the lower-central portion of the park should include a gymnasium, a fitness/weight-lifting room, classrooms, locker rooms, and administrative offices. Other site amenities include parking for approximately 250 cars, six tennis courts to be located on the west side of the building, a playground area for small children on the east side of the building, six basketball courts located north of the playground, and an area for a future 50-meter pool, bathhouse, and lawn area north of the building overlooking the scenic landscape.

b. Extension of Existing Recreation Area

Additional facilities include one baseball field, one soccer field, and one basketball court on the opposite side of pumphouse road from the existing recreation facilities in

the northeastern portion of the park (The soccer field should share the baseball outfield.); two parking areas for the basketball court and for the ballfields (approximately 50 parking spaces); a restroom facility between the basketball courts and the ballfields; and new paving for the main parking area near the existing recreation facilities (approximately 85 parking spaces).

c. Ballfield Complex

The complex should include two Little League fields, one intermediate baseball field and one soccer field, all built to regulation size. A parking area of approximately 100 spaces should be located in the southeast quadrant of the complex and be very accessible to all fields. One concession stand/restroom facility should be central located among the fields, and a tree buffer should be maintained between the parking areas and the fields.

d. Natural Areas

The site plan retains the park's natural characteristics as much as possible. Picnic areas are included, with single or double picnic tables at about 50 foot intervals. Campsites and RV parking are permitted in certain areas. Parking is allowed along the circulation road near each table or in a nearby lot. A naturally forested buffer should be maintained between the park and adjoining neighborhoods as well as between picnic areas and campsites.

e. Lagoons

Two lagoons along the existing creek corridor in the eastern portion of the park will enhance the water environment of the park. Local, state and federal approvals will be needed to create the lagoons by damming the creek. Picnicking, fishing, and small boating activities are encouraged in the lagoon area. Areas around the lagoons are retained in a natural state.

f. Open Meadow Area

A clearcut open meadow area will add to the park's enjoyment and reduce maintenance expenses by requiring less frequent mowing. The multi-purpose field can be used for informal play area.

g. Reforestation Area

Approximately 20 acres of land in the western portion of the site was recently clear-cut and should be reforested. Native trees and other plantings should be used to retain the scenic character of the area. The County should use proper timber management practices in this area and the entire park.

h. Vehicular Circulation

Extend Pumphouse Road westward through the park. Maintain north and south entrances into the park along Pumphouse Road, and explore a possible west entrance into the park along Route 40. Consider a link to the proposed thoroughfare in northeastern portion of the park if and when the proposed highway is constructed. All vehicular access to the park should be limited to designated entrances. The northern portion of the park may require additional roads when the park is more developed. Bollards and chains should be used to control vehicular access through park.

i. Trails

The plan includes a loop trail around the entire park which can be used for walking, jogging and bicycling. The lagoon areas offer

an opportunity for a nature trail. Major activity nodes in the park should be linked with trails. Paved walkways should be provided in high-traffic areas, such as the recreation center and ballfields. Gravel and woodchips can be used in low use areas.

Burton Wells Park is located in the flight approach corridor for the main runway at the Marine Corps Air Station (MCAS). Beaufort County recognizes the air station as a vital part of the local economy and wishes to limit incompatible development around the air station through strong land use controls. To aid in identifying and guiding surrounding development, the MCAS has developed an Air Installation Compatible Use Zone (AICUZ) study and model land use ordinance which includes a detailed analysis of aircraft noise, accident potential, land use compatibility, and potential solutions to problems of incompatible land use.

Beaufort County is considering amendments to the Airport Overlay District Ordinance, based on the AICUZ model, which would regulate land uses and mandate noise abatement for new structures within designated flight zones. The County and MCAS have specifically discussed potential uses at Burton Wells Park, which lies within an existing flight zone, because the MCAS discourages facilities which promote a high concentration of public assembly (e.g., churches, schools, theaters, apartments). MCAS and County staff have determined that all proposed uses for Burton Wells are appropriate, including the ballfields, PALS administration building, playgrounds, and natural areas. The MCAS discourages swimming pools, amphitheaters, and other large permanent structures for public assembly within the park and supports the plan to locate the proposed PALS swimming pool at the school outside the flight zone.

☑ *2.2 Develop at least one additional County park (See Beaufort County Parks, Recreation, and Open Space Plan map) in the Bluffton area of Southern Beaufort County to serve existing residents and to meet the demand expected from the large amount of residential development approved in the area.*

Bluffton Township is expected to experience tremendous population growth in the next 10–20 years. The parkland analysis identified a need for approximately 162 acres of County parkland in addition to the full development of Burton Wells. A new County park to help meet the park and recreation needs of current and future residents should be a high priority for parkland development. (Note: In addition to the full development of Burton Wells and the recommended new County park, the County should develop a third County park—approximately 300-400 acres, also located in Southern Beaufort County—to meet anticipated demand by the year 2020.)

☑ *2.3 Develop new community parks and neighborhood parks to meet current needs identified in the parkland analysis (Beaufort County Parks, Recreation, and Open Space Plan map with insert for Port Royal Island).*

Beaufort County should have an additional 17 community parks and three neighborhood parks to meet current demand (Table 20). The need for some community parks and neighborhood parks will be met through additional County parkland. The County should identify the service area population for each County park as it is developed—including the completion of Burton Wells Central Park. Part of the recommended analysis

is to determine the degree to which new County parks will meet the need for community and neighborhood parks. The need for community and neighborhood parks identified in Tables 2 and 3 should be reduced based on the service area population of new County parks.

☑ *2.4 Require developments to provide a minimum of 10 acres of usable, active parkland and associated recreation facilities per 1,000 projected new residents to meet the recreation needs of development residents.*

Mandatory land dedication, or fee in lieu of land, is becoming more and more popular as a tool to help municipalities meet the need for public parks and recreation services. In Beaufort County, residential development is expected to thrive in the coming decades, creating a greater demand for public services. Many of the developments are gated, which restricts access to internal facilities by the general public. The Beaufort County Development Standards Ordinance (DSO) should be revised to require developers to provide recreation land and facilities to help meet the needs of new residents. Indeed, most developers recognize the value of high quality parks and recreation facilities in marketing new development and accelerating absorption.

If less than 10 acres per thousand residents is provided, the developer should pay a fee to the County in lieu of land equal to the fair market value of an amount of land needed to meet the ten acres per thousand standard. The amount of the fee can be established in any of several different ways. The simplest method is to estimate the average value of an acre of land prior to the construction of improvements and to convert the required amount of land per dwelling to an equivalent dollar value. The County Council should periodically update the established land value to reflect inflation and other increases in land prices. Another method is to establish a value based on an independent appraisal of each specific parcel done at the time of application. The fee should permit the County to acquire enough land to meet the recreation needs of new residents which the developer is not addressing.

☑ *2.5 Explore any and all opportunities to use land for park development, recreation facilities, and open space preservation.*

In addition to acquiring land, many other techniques are available to make land available for public parks and open space without having the County purchase the land. Tools such as conservation easements, right of first refusal, fee in lieu of land from developments, land donations, and other techniques are explained more fully in an appendix to the *Beaufort County Parks, Recreation, and Open Space Plan*. The County should constantly look for creative ways to obtain access for public recreation or open space.

Utility rights-of-way offer a great opportunity to establish trail links and greenways because the land is already an undeveloped, linear corridor of preserved open space. Power line easements, gas line easements, and abandoned railroad rights-of-way can be used for recreational purposes within utility company policies. Examples of possible trail links include the abandoned railway through the Del Webb property in Southern Beaufort County and the railway through the Northern Beaufort County and Port Royal Island planning areas to the Town of Port Royal. The County should work with utility companies and developers wherever possible to explore recreational use of existing and future rights-of-way.

☑ *2.6 Consider parks and recreation uses as possible reuses of land which becomes available.*

Parks and recreation facilities are excellent reuse projects. For instance, the County recently demolished the former waterslide on St. Helena Island and plans to redevelop the property as a passive roadside park. Parks and recreation facilities should be considered not only as reuses of public land but as possible reuses of well-suited private lands on which the former use has declined.

Recreation Facilities

Policy 3: Make the best use of existing recreation facilities.

Similar to the need for new parks, existing recreation facilities may have unused capacity. Greater use of existing facilities may help to offset the need to develop costly new facilities.

Actions

The action items for Policy 3 are the same items cited for Policy 1. The policies are repeated for information only. Refer to Policy 1 for more detailed discussion of each action and specific suggested facility improvements.

☑ *3.1 Make improvements to existing parks and recreation facilities.*

☑ *3.2 Review existing parks and facilities for compliance with the requirements of the Americans with Disabilities Act (ADA) and consumer safety regulations.*

☑ *3.3 Work closely with the Beaufort County School District and its staff to increase the quality and consistency of youth recreation opportunities and to permit the greatest possible use of schools.*

☑ *3.4 Work closely with local churches, the military's Morale, Welfare, and Recreation (MWR) personnel, and other organizations to share parks and recreation facilities and make the maximum use of existing resources.*

☑ *3.5 Provide air conditioning in all gymnasiums.*

Policy 4: Provide adequate staff and support to help the recreation centers grow into thriving, viable community activity centers.

The recreation centers are a valuable asset in meeting leisure needs of residents, particularly in a large County like Beaufort, where

distance can be a barrier to participation. Professional staff, properly trained, provide leadership and vision for each center, similar to the function the PALS Director plays for the entire department.

Actions

☑ 4.1 *Develop a staffing plan for each recreation center.*

Staffing is the most critical aspect of operating a recreation center. Staff salaries and related costs can consume 75 percent or more of a center's operating budget. Staffing levels, staff competence, and customer service directly relate to the public use and acceptance of a recreation center.

The number and type of staff for a recreation center depend on the nature of the services provided, the population being served, and the type of center. PALS should develop a staffing plan for each individual center based on the hours of operation; degree of customer satisfaction desired; budget constraints; level of supervision; control, and maintenance; demand/need for a full-time staff presence; purpose of the facility; and safety and liability. The plan should consider:

- full-time/part-time
- hours of operation
- benefits
- overtime
- training
- use of volunteers
- contracted labor (for maintenance and programming)
- job sharing
- cross-training
- pay options (e.g., flat rate, hourly, percent of program revenue, commission)
- Recreation centers must have sufficient qualified staff to provide quality recreation programs which meet the needs of residents. Currently, some centers may have only one staff person available at certain times. If the person is required to do something off-site, the center must close. Centers should be open at all times during established hours so that residents can depend on the center as a community resource. The possibility of evening programming, which may be desirable to serve specific needs in selected areas, requires an even greater staff commitment.

All too often, budget constraints dictate parks and recreation staffing levels. Ideally, the service philosophy for a center should drive the staffing level. The answer to the question, "What do we want to accomplish at this center?" should determine the answer to the question, "How much staff do we need at this center?"

☑ 4.2 *Provide professional recreation leadership for each center.*

In the past two years, several Center Directors have gone on to other positions, and the leadership positions were filled by having recreation aides act as Center Directors. The position of Center Director requires leadership and organization skills and a higher level of technical recreation programming skills than the position of Recreation Aide. In some cases, a Recreation Aide may demonstrate complete competence as a Center Director. In other cases, the aide may be

unable to provide the program leadership needed to make the center work well.

A Center Director plans, organizes, and directs the operation of the recreation center. The position requires administrative, supervisory, and professional recreation skills. The Center Director is responsible for the center's budget, staff, public relations, facility maintenance, and security. The precise job description for a Center Director will depend on the service philosophy and objectives of the individual center. Sample tasks might include:

- Plans, organizes, coordinates, and implements a wide variety of recreation programs
- Responsible for scheduling, registration, and promotion
- Recruits and trains volunteers
- Plans / implements special events
- Coordinates programs of the Parks and Leisure Services Department
- Organizes and manages a neighborhood advisory committee
- Supervises program staff
- Supervises custodial staff
- Develops annual budget
- Maintains accurate financial records
- Oversees capital and operating budget
- Recommends capital improvements
- Meets regularly with community groups
- Promotes center
- Speaks before community groups
- Secures sponsorships for programs and events
- Prepares reports, grants, and other written materials as required

As a policy, the County should fill the position of Center Director with people who have:

- Effective oral and written communication skills.
- Completed a college level program in recreation, the arts, physical fitness, and/or business management.
- One to three years experience in community recreation, fitness, or art centers.
- Demonstrated knowledge, skills, and abilities in the sample tasks listed above.

☑ *4.3 Recognize each center as an individual activity center charged with meeting the recreation needs of residents in a sub County service area.*

Each center should be given the responsibility to meet recreation needs within its service area. The County is too large and the staff too small to operate an effective County-wide recreation system from a single, central office. The basic structure of a decentralized system—the centers—is in place. To be effective, the recreation centers must be given the responsibility, the resources, and the accountability to function as vital community activity centers.

☑ *4.4 Consider consolidating centers to assemble the resources necessary to make the recreation centers viable community centers.*

In order to provide the resources necessary to make the recreation centers work effectively, the County may have to consolidate some centers, combining staff and enlarging service areas. The department should study each center's activities, service area, and staff-

ing to determine if some centers might be consolidated. A thriving community center to which residents must travel a few miles is a greater community asset than a languishing neighborhood center which is located nearer to its service population.

☑ *4.5 Increase communication between individual centers and between the centers and the central office through computer connections and on-site visits by the director.*

Communication is essential for a decentralized system to work effectively. Computers, faxes, modems, and greater use of the telephone can help to reduce the need for Center Directors to spend time traveling to the central office. Instead of daily trips, the Center Director might only need to travel to the central office weekly or bi-weekly for a Center Directors' staff meeting. Stronger communications procedures will also help Center Directors stay abreast of developments in the recreation and parks field and foster the exchange of program ideas among centers.

☑ *4.6 Survey the recreation needs and desires in each center's service area.*

Beaufort County has an incredibly diverse population. Residents comprise a wide range of cultural, social, economic, and ethnic backgrounds. The recreation needs and desires of County residents are as diverse as the residents themselves. Each center should survey neighborhood residents to determine the needed and desired recreation programs. The County should provide clerical staff, postage, and any other materials to support each center's determination of needs.

☑ *4.7 Develop programs and facilities to meet the needs in the service area based on the results of the survey and other resident input.*

Each Center Director should develop programs and facilities to meet the needs of the center's service area based on surveys, program feedback, and other means of resident input. The central office should provide support for the programs identified by the individual centers.

☑ *4.8 Develop active recreation, socialization, and information programs for senior citizens at appropriate recreation centers.*

Some centers may serve a large population of senior citizens. As the County strengthens the recreation centers through Policy 2.2, active recreation, socialization, and information programs for seniors should be a high priority. The County should also look for program opportunities for both seniors and youth simultaneously. The wisdom and experience of seniors combined with the enthusiasm and curiosity of youth can enrich the lives of all participants.

☑ *4.9 Develop a system of accountability so that the Center Directors have sufficient direction and support from the central office with adequate flexibility and resources to develop facilities and programs to meet recreation needs in their specific service area.*

A decentralized system must have procedures which delegate authority and require accountability. The department should develop procedures for program development and reporting which are not too cumbersome but which enhance communication between the central office and the centers. Issues concerning the decentralized system of centers

should be a primary topic of staff meetings. Center issues can become so diverse that the department may wish to consider two sets of regularly scheduled staff meetings: one for central office and one for Center Directors.

Policy 5: Provide recreation facilities on publicly accessible lands to operate needed programs.

Recreation facilities must be available in sufficient quantity and of sufficient quality to operate recreation programs for the residents of Beaufort County. Facilities should be accessible to the public rather than located within the gates of a private community.

Actions

☑ *5.1 Develop additional recreation facilities according to the analysis summarized in Tables 22 and 23.*

The County should use the recreation facilities needs analysis (Appendix C of the *Beaufort County Parks, Recreation, and Open Space Plan*) to guide the development of new recreation facilities through a well-defined and funded capital improvements program. New facilities are part of the recommended Capital Improvements Program.

☑ *5.2 Consider establishing Beaufort County as a model for golf skills development.*

The need for a public golf course cited in the facilities analysis raises the question of the public sector competing with the private sector. Although many places throughout the country support both public and private golf courses, the abundance of private golf courses in Beaufort County presents an opportunity to implement the concept of golf skills development as an alternative to a complete, 18-hole public course. Essentially, the County would meet the need cited by developing a driving range and an 18-hole short ("Chip and Putt") course to develop golf skills. One impediment to increased golfing is beginners' intimidation and anxiety about being slow on the course. A smaller facility would enable the County to help educate golfers and increase confidence. Private clubs and courses might provide clinics or other training in conjunction with the County, because the private courses will gain from faster play, more golfers with more confidence, and the rapidly expanding women's golf market.

☑ *5.3 Develop fitness trails along the water, which recognize both the current movement in physical fitness and Beaufort County's water resources.*

Beaufort County's water resources—shoreline, rivers, and marshlands—offer one of the most beautiful recreational settings in the country. Trails and pathways are less intense than other recreation facilities. Jogging along the water is already a popular pastime in the County. Fitness trails would provide an added dimension to enhance fitness and wellness among walkers and joggers. Trails are included in the Capital Improvement Program.

☑ *5.4 Work with SCDOT to replace the boat landing when the U.S. 17 bridge over the Combahee River is widened.*

Reportedly, the boat landing where U.S. 17 crosses the Combahee River is a popular launching site which would be eliminated un-

der current SCDOT plans to widen the bridge. The department should work with SCDOT to find a suitable replacement site close to the current landing.

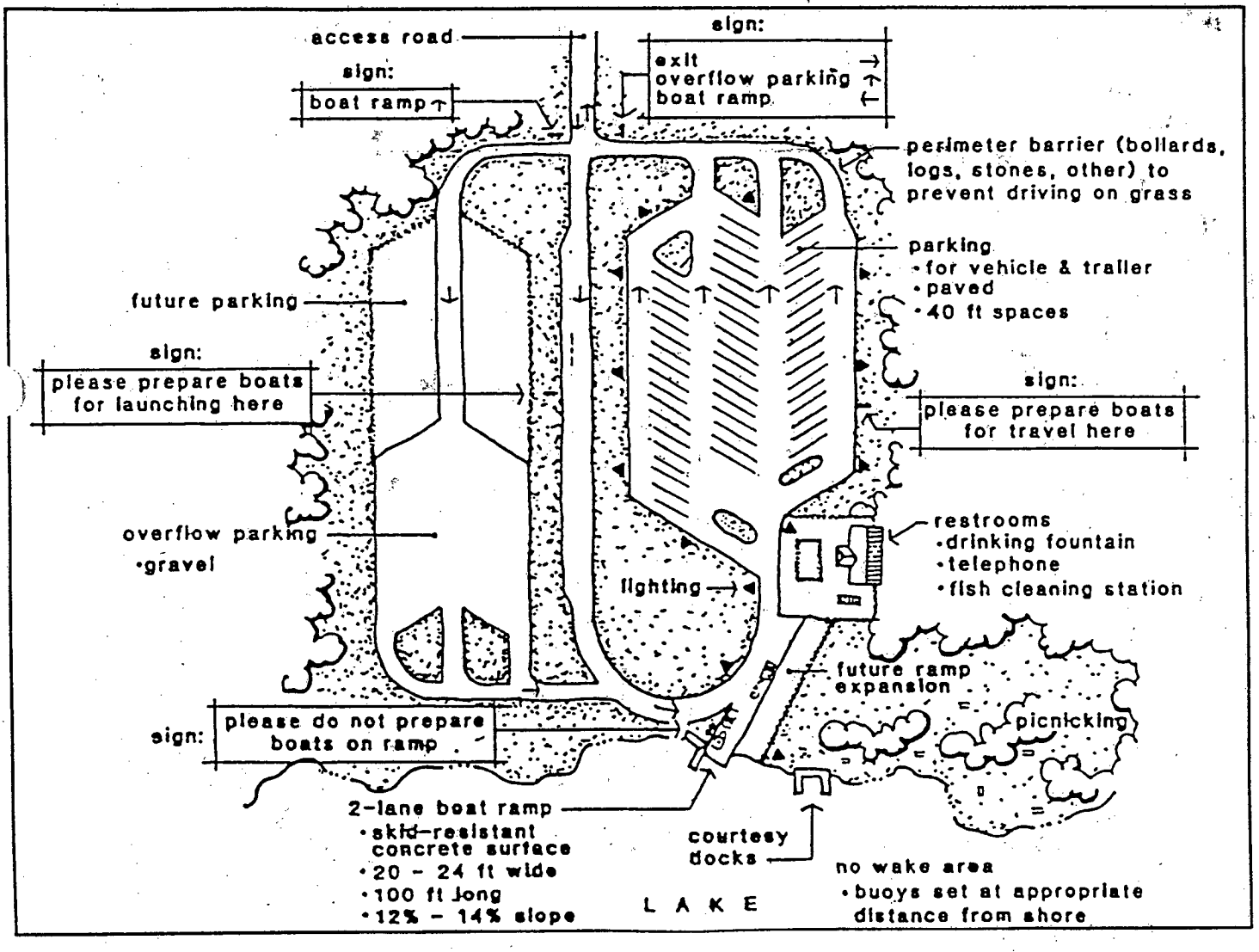
The Combahee River is part of the ACE Basin, the area drained by the Ashepoo, Combahee, and South Edisto rivers. The ACE Basin has been recognized as a significant natural resource in the state of South Carolina. The basin has been designated a National Estuarine Research Reserve to help preserve and study the unique and fragile ecosystems which occur in the areas where fresh water rivers flow into the sea. The area from U.S. 17 to the coast is part of the basin. Therefore, in addition to the funding sources discussed in the Financing and Budgeting section, some funding through ACE Basin sources may help to defray the cost to reestablish the landing near to its current location. Major partners in the ACE Basin's resource protection effort include:

- Audubon Society
- Ducks Unlimited Foundation
- National Oceanic and Atmospheric Administration
- National Wildlife Federation
- Nature Conservancy
- Quail Unlimited
- South Carolina Coastal Council
- South Carolina Heritage Trust
- South Carolina Land Resources Commission
- South Carolina Wildlife Federation
- South Carolina Wildlife and Marine Resources Dept.
- Trust for Public Lands
- U.S. Fish and Wildlife Service

☑ *5.5 Maintain the County's strong commitment to public waterway access by conducting a detailed study of engineering and maintenance improvements needed at the County's 33 public boat landings.*

Public access to water is a significant issue in Beaufort County. The County has acquired and/or developed thirty-three boat landings in various states of condition. Some landings are reportedly in poor condition, which can pose a safety hazard and liability exposure for the County. In addition, vandalism statewide has become such a problem that the state no longer funds nor builds amenities at boat ramps, such as restrooms and fish cleaning areas. The department should study all County boat landings to determine which landings should be improved and which should be discontinued or replaced. The boat landings which the County retains should be improved to include amenities such as parking, fish cleaning facilities, rest rooms, and landscaping (Figure 20). The improvements recommended in the study should be incorporated into the County's Capital Improvements Program.

Figure 25: Boat ramp prototype.



Recreation Programs

Policy 6: Work with other recreation providers to promote the use of existing programs and to make the best use of existing community resources.

Many organizations have an interest in recreation. Some groups provide recreation programs as a primary activity, such as the YMCA. Others are involved in recreation as a secondary activity, such as the school district or social service agencies. Private and commercial organizations provide recreation programs for members only or to make a profit as a business. One of the primary purposes of the Council of Recreation Providers discussed in the *Administration and Organization* section is to encourage all recreation providers to work together, finding ways to help each other increase program participation for the benefit of Beaufort County residents.

Actions

☑ *6.1 Work with the school district staff to develop programs—both within the curriculum and extra-curricular—which educate residents about the value of parks and recreation, particularly passive and noncompetitive activities.*

Many people simply do not understand the value of parks and recreation. Constructive use of leisure time is one of the most powerful influences in life. The school district is both the leader in public education in Beaufort County and a major provider in parks and recreation. Together, the department and school district can help residents understand the value of recreation, which will encourage more participation in recreation programs throughout the County.

☑ *6.2 Work with the Beaufort County Arts Council to enhance programs in both fine arts and performing arts.*

The Beaufort County Arts Council was developed to promote both fine arts (e.g., painting, sculpture) and performing arts (e.g., music, dance, drama). The Arts Council should be an active participant in the Council of Recreation Providers. The department should work closely with the Arts Council to sponsor and promote programs which encourage the use and appreciation of artistic talent.

☑ *6.3 Establish a nature center.*

Beaufort County has enough high-quality water ecology—both salt water and fresh water—that the County should establish a nature center. Other prime natural resources can be included, such as vegetation and wildlife, especially birds. Creation Station provides some nature programming, as does the Museum of Hilton Head Island, particularly during South Carolina's annual celebration of Coast Weeks during September and October. The Arthur Horne Nature Park is full of plants and wildlife and contains a walkway and pavilion. However, a fully functional nature center, such as the Tugaloo Environmental Education Center in Oconee County, is larger and more extensive than any of the three existing sites. A nature center should also be centrally located to the population served.

Nature centers are often established through foundations, private funding, and school district partnerships and operated through fees, charges, sometimes limited public funding, and private support. The Council of Recreation Providers should explore the possibility of partnerships between the County, school district, ACE Basin supporters, and others to establish a center to showcase the County's tremendous natural resources. The center should be located in the ACE Basin to help support and promote National Estuarine Research Reserve activities. A nature center is a capital improvement. However, the center should not be included in a Capital Improvement Program until the project itself and the extent of required County financing are better defined.

☑ *6.4 Whenever possible, contract with other capable entities to meet the need for recreation programs.*

The County should maintain information about all recreation programs offered by other entities and refer inquiries appropriately instead of trying to meet all recreation program needs within the department's resources. Program requests and information can be funneled through the Council of Recreation Providers.

☑ *6.5 Work with the Technical College of the Lowcountry and USC–Beaufort to develop educational and program opportunities, such as internships in the college's Tennis Management Program or development of a new Maintenance Management Program.*

Local post-secondary educational institutions provide an opportunity to develop training programs which support recreation and parks. The County should work with the local colleges to develop internships which provide students with valuable experience in parks and recreation and provide the department with needed workers.

☑ *6.6 Coordinate and provide needed support services for the many festivals and community events sponsored by other recreation providers.*

Many organizations in the County conduct festivals for a day, weekend, week, or even longer— especially in the summer. The County also operates special festivals and events, which take a lot of staff work and resources. Instead of offering additional festivals, the County should work with other festival providers to offer needed support services. Organizations and facilities involved in offering festivals and other special events are discussed in the *Community Facilities* section of the comprehensive plan.

☑ *6.7 Establish and promote sea kayaking as a tourist attraction.*

Unlike regular kayaking, which is done primarily for challenge and sport, sea kayaking is done almost exclusively for nature touring along tidal creeks. The creeks and rivers through wilderness settings so close to the sea make Beaufort County an ideal location for sea kayaking. The private sector could provide kayaks, guides, and tours. The County should assemble an advisory group of sea kayakers to determine the feasibility of establishing Beaufort County as a premier location for sea kayaking.

☑ *6.8 Use the Council of Recreation Providers to continue working with social service agencies to develop recreation programs which help address social concerns—such as substance addiction, teen pregnancy, and others—and therapeutic recreation which is part of long-term physical recovery programs.*

Recreation skills are vital to make the best use of uncommitted time. Without supervision or viable alternatives for their time, some people slide into harmful activities, such as drugs, alcohol, or premature sex. Recreation can help address such social concerns by offering alternatives for at-risk populations, such as teens.

In addition, recreation is often a key element of physical rehabilitation. The department recently began working with social service agencies to address social needs through recreation, as appropriate. Agencies specifically concerned with social and rehabilitation issues should be part of the Council of Recreation Providers to strengthen recreation as a tool to help address community needs.

Policy 7: Develop new programs through PALS by considering the benefit of each program to residents and the cost of providing the program.

PALS provides many recreation programs directly. Recreation programs can become expensive because of the staff resources needed and the limited market for some programs. On the other hand, PALS as a County agency has a mandate to serve the people of Beaufort County, particularly in areas where private sector alternatives are not available. Furthermore, developing recreation and other leisure programs requires creativity, which is difficult to quantify. The department should continue to develop new programs carefully, clearly identifying the program benefits and exploring creative methods to help finance the program.

Actions

☑ *7.1 Develop programs for children during after school hours.*

One of the many side effects of the dramatic increase in two-income families during the past decades has been an increase in the number of children who are unsupervised during the late afternoon hours. Recreation programs during these hours would provide safe, productive ways for children to spend the hours before parents return from work. "Latchkey" children should be a major target for youth recreation programs.

☑ *7.2 Carefully consider both immediate and future staffing requirements in any decision to initiate new programs.*

Recreation programs require staffing, which can be expensive. Immediate staffing requirements are always considered prior to starting a program. However, without a commitment to future staffing, a popular, useful program may be discontinued after a short period of time—perhaps as little as one season. To maintain program continuity, future staffing requirements should be considered before any new program is instituted.

One of the primary goals of the Council of Recreation Providers is to maximize the participation in all recreation programs, regardless of provider. For instance, a program provided through the Girl Scouts or YMCA may be meeting the need targeted by a program which the County is considering. Rather than duplicating services and hiring additional staff for a program which may be discontinued quickly, the County should work through the Council of Recreation Providers to match the need with the existing programs. County resources may be better used in staffing a program of unique, long-term interest to a broader audience.

☑ *7.3 Establish swimming/water safety classes as a top priority program as new pools are built.*

Many residents of Beaufort County are reportedly unable to swim. Although surprising for a coastal, water-rich area like Beaufort, the problem can be traced to the lack of available, publicly accessible swimming facilities. The recently-approved County bond refinancing includes four new pools, which will increase the availability of swimming facilities to the general public. As new pool facilities are developed, the department should work with the school district, the County Department of Social Services, and other organizations as appropriate to develop swimming and water safety classes as quickly as possible.

☑ *7.4 Conduct a study of transportation in the County to identify resources which might be used to support recreation programs, particularly in rural areas.*

Beaufort County is so large that simply getting to recreation sites can be a significant deterrent to participation. Other transportation resources may also be available. The department should identify potential transportation resources and work with transportation providers to see if transportation arrangements can be made to allow more participation in recreation programs. Among other objectives, the study should (1) identify vehicles belonging to the County or nonprofit organizations which are unused for a portion of the day and (2) explore options for providing transportation through partnerships, fees, alternative funding, and other tools in a coordinated system. Public transportation alternatives in the County are discussed further in the *Transportation* section of the comprehensive plan.

☑ *7.5 Consider all skill levels when developing programs so that residents can learn new skills, become more proficient, and continue the activity as desired, regardless of age or skill level.*

One of the joys of recreation is continuing to learn and perfect skills. As we age, our physical and mental capacities change. Recreation providers should attempt to offer programs of varying skill levels for popular activities so that participants can enjoy the activity regardless of age or proficiency.

☑ *7.6 Work with local waterway management persons and organizations to implement a variety of techniques to increase boating safety throughout the County.*

Boating is a major activity in Beaufort County, since a large part of the County is water. The advent of new watercraft, such as jet-skis, and more powerful engines has increased the popularity of water-related recreation activities. The department, in conjunction with the County taking responsibility for County boat ramps, should work with waterway managers can promote increased safety through the proposed Council of Recreation Providers. One source of information is the handbook, *Guidelines for Multiple-Use Waterway Management*, developed by URDC for the National Water Safety Congress.

Open Space Preservation and Greenways

Policy 8: Use the County's land development regulations to preserve and protect streams, water bodies, tidal wetlands, freshwater wetlands, aquifers, and valuable wildlife areas.

Local land use regulations are among the most powerful land preservation tools. South Carolina permits land use regulation at the County level, and Beaufort County has development regulations which include some provisions for resource protection.

Actions

☑ *8.1 Review and modify the River Protection Overlay District.*

The County zoning ordinance contains provisions of a River Protection Overlay District. The district is designed to limit and control development near waterways designated as Outstanding Resource Waters by the state.

Strategies for land preservation change over time. The current River Protection Overlay District applies to only nine waterway segments which have been designated Outstanding Resource Waters. The district should include all waterways in the County. Setback requirements from the waterway can vary depending on the importance of the waterway. Minimum buffer widths should be set at 100' or a variable width program adopted (see Natural Resources Chapter).

☑ *8.2 Develop a strong working relationship with the Beaufort County Planning Department.*

The Parks and Leisure Services Department and the Planning Department have a common interest: preserving Beaufort County's quality of life through appropriate land use, environmental protection, and open space preservation. The depart-

ments should work together to develop a strong working relationship similar to that recommended earlier between PALS and DPW. The two directors should meet to discuss ways in which the departments can work together in land and open space preservation.

Policy 9: Encourage other agencies, organizations, and landowners to help preserve land in the County.

Beaufort County is not the only entity concerned with land preservation issues. Land preservation efforts should be coordinated to gain the greatest benefit from the resources of all concerned entities.

Actions

☑ *9.1 Support the Beaufort County Open Land Trust, the Lowcountry Open Land Trust, and other nonprofit organizations concerned with land preservation.*

The Beaufort County and Lowcountry Open Land Trusts are the stewards of various parcels throughout the County which are to be preserved as open space. Other areas in Beaufort County should also be preserved. Open space is a critical component of the character and environment in Beaufort County. The department should meet with the open land trusts and develop strong working relationships to actively support each other's efforts. For instance, when a land donation is available, the department and trusts should discuss the best use of the land. If the parcel should be preserved in open space, the land can be deeded to a trust. If the parcel is suitable for recreation, the land can be deeded to the County.

☑ *9.2 Prepare a Stream Corridor Protection Handbook oriented toward landowners, developers, and their advisors.*

Many landowners and developers are unaware of the importance of waterways. The County planning department and PALS should prepare an eye-catching, easy-to-read handbook explaining the importance of waterway corridors and the need to respect both the landowner *and* the land in making development decisions.

☑ *9.3 Encourage and support stream clean-up programs.*

Local service groups, citizens' organizations, homeowners' associations, and other community groups are a valuable source of labor and stewardship of community assets, particularly natural features. The County, through PALS and the planning department, should promote the concept of stream and river clean-up programs and provide technical assistance and support to organizations that develop such programs.

☑ *9.4 Utilize the Department of Agriculture's Best Management Practices and other methods to correct stream bank and tributary gully erosion problems.*

The federal Department of Agriculture endorses farm management strategies known as *Best Management Practices* which help meet a variety of agricultural, land preservation, pollution control, and other community objectives. Ground cover and check dams are two of the many methods to preserve the integrity of

streams and gullies. *Best Management Practices* should be incorporated into a stream preservation program operated by the County or other civic-minded organization. Pertinent information on the County's natural features can be taken from the appropriate sections of the comprehensive plan.

Policy 10: Develop greenways as a means of preserving valuable land and allowing people to enjoy the County's natural beauty.

Greenways provide many benefits to Beaufort County, including land preservation, natural resource conservation, recreation, and transportation. Benefits and concepts of greenways are presented in the technical analysis.

Actions

☑ *10.1 Encourage the use of greenway planning principles where possible to enhance the preservation and enjoyment of Beaufort County's natural assets.*

Two types of greenways are suggested for Beaufort County: County-wide greenways, which follow major waterways in the County, and local greenways, which follow other important waterways. The following Greenway Location Planning Principles illustrate other locations in which greenways should be considered:

- Locate greenways along natural areas such as streams, wetlands, floodplains and edges of waterways.
- Incorporate places with attractive views within greenways.
- Place greenways along man-made linear corridors, such as utility easements, utility rights-of-way, abandoned railroad beds and underground pipelines.
- Locate greenways along highway and street rights-of-way.
- Provide greenways which incorporate parks, schools, urban pedestrian ways and plazas, especially in urban centers with limited parking, traffic congestion and dense development.
- Incorporate existing pathways, bike routes, trails, and sidewalks into proposed greenways.
- Use greenways as buffer areas between different types of land uses.
- Interconnect and loop greenways, forming a network for walkers, bicyclists, and others.
- Minimize road crossings, especially along highways with high traffic volumes and fast-moving traffic. When necessary, consider using streets with limited traffic as part of a greenway.
- Use greenways to preserve significant farmlands and protect heritage landscapes containing historical, cultural, and natural resources linked by a common theme.

☑ *10.2 Work with the Historic Beaufort Foundation, the Beaufort County Planning Department, the two open land trusts (Beaufort County and Lowcountry), the Greater Beaufort Chamber of Commerce, the Hilton Head Island Chamber of Commerce, and other organizations to encourage the preservation, restoration,*

enhancement, and promotion of the County's historic landmarks and areas.

Historic preservation should be represented on the Council of Recreation Providers. The County should develop strong working relationships with organizations concerned with historic preservation. Targets for preservation should include:

- historic Sites (locations of significant structures, events, occupations or activities, including landscapes and gardens);
- historic Buildings (individual structures or complexes of structures);
- historic Structures (anything man-made with historic significance, including buildings and appurtenances); and
- cemeteries (ownership, location, gravestone inscription inventory).

The *Beaufort County Comprehensive Plan* includes a chapter on *Cultural Resources* which contains more specific information about potential preservation targets.

☑ *10.3 Work with local tourism authorities to promote ecotourism.*

Ecotourism is the recent national movement which recognizes the importance of controlling the amount and effects of visitation on tourist attractions. One of the key concepts of ecotourism is sustainability—the capacity to accommodate tourism at a level which does not threaten the quality or condition of the attraction. Beaufort County's outstanding natural, scenic, and cultural assets should be appreciated and promoted but must also be preserved for the enjoyment of future generations and the integrity of the County's unique character. Tourism officials, the hospitality industry, and the County should all work together to attract appropriate levels of visitation, capital, and other economic resources to Beaufort County without endangering the condition of the County's outstanding natural assets.

☑ *10.4 Work with the City of Beaufort, Town of Port Royal, the Palmetto Conservation Foundation, and other interested parties to explore the feasibility of establishing a Beaufort County Greenways Commission to develop a coordinated system of greenways throughout the County.*

The Palmetto Conservation Foundation is conducting a study of potential greenways in the City of Beaufort. The County should use the City's study as a catalyst to explore interest in forming a commission to study, promote, and recommend greenways throughout the County. The commission should start by studying corridors which might be considered as potential greenways.

Public Relations and Communications

Policy 11: Recognize Parks and Leisure Services as a strong component of Beaufort County's quality of life.

PALS offers public facilities and services which add significantly to the quality of life in Beaufort County. The County should make a strong effort to strengthen the presence of the department and the awareness of the professional services which the department provides for County residents.

Actions

☑ *11.1 Develop a comprehensive public relations and communications program.*

Coinciding with the structural reorganization, the Department of Parks and Leisure Services should prepare a comprehensive approach to strengthen its identity within the County. The department should project a positive image, consistently reinforcing the importance of parks and recreation in the lives of Beaufort County residents. A comprehensive program should address three distinct and important subjects:

- Image and presence within the County—What do residents think of the department and its work? How well is the department known?
- External communications—How well does staff communicate with others outside the department—other departments, other agencies, current users ("customers"), and potential users?
- Internal communications—How well does the staff communicate with each other?

☑ *11.2 Develop efficient methods of communication and document distribution.*

Currently, staff from each community center drive to the central office to pick

up mail. Depending on distance and traffic, the round trip can take up to 3 hours. Often, the Center Director is the only person working in the center, which means the center is closed for several hours during the day while the Center Director gets the mail. Computer linkages between the central office and community centers, direct mail delivery, and other methods of communication should be used to increase the length of time services can be offered to residents.

☑ *11.3 Write regular parks and recreation columns for the Island Packet and Beaufort Gazette.*

Newspapers are an effective method of distributing public information. Advertising is expensive and newspapers have space to fill. Regular columns are one way of filling space without the expense of advertising. On the other hand, regular columns require a long-term commitment, adherence to deadlines, and a talent for journalistic writing with an interesting style. The department should consider approaching the papers about the possibility of writing a regular column on parks and recreation in Beaufort County. If the department cannot provide the service, the County should consider writing a broader County government activities column which might feature a different agency each week over a one or two month cycle. Recreation and parks would then be the subject of one column every four to eight weeks.

☑ *11.4 Consider mailing information about recreation programs directly to households.*

Direct mail to households is expensive but is also the most effective way to put information directly into the hands of residents. For one or two mailings per year, perhaps for catalogs of major program offerings, the department should explore the possibility of direct mail. Since one focus of the department is full use of programs offered by others, the department should explore a unified catalog listing programs by many providers and for which the providers share the cost of printing and mailing.

Maintenance and Security

Policy 12: Maintain parks and recreation facilities at an acceptable level.

Maintenance is a critical element of parks and recreation services because proper maintenance can extend the life of parks and recreation facilities, postpone costly replacements, and reduce safety hazards and liability. Different levels of maintenance require different resource commitments. In the long term, the most efficient maintenance policy is to clearly define the desired level of maintenance at each location and determine the manpower and funding needed to achieve the desired level.

Actions

☑ *12.1 Develop and use park maintenance standards.*

Parks and recreation facilities can be maintained at varying levels. A higher quality of maintenance will prolong useful life but requires more funding for staff, equipment, and materials. Lower maintenance levels are less expensive but parks fall into disrepair, facilities become safety hazards, and equipment does not perform as well or as often. Standards for park maintenance help to ensure that parks can and will be maintained as desired. Maintenance standards have a direct effect on both operating and capital expenses because they clearly define the consequences of various funding levels for County decision-makers. Maintenance standards also quantify performance of County workers and help managers assess productivity and plan work assignments. Established standards also help efficiency by clearly defining the level of care required for outside maintenance contracts. Sample maintenance standards are presented in the full *Beaufort County Parks, Recreation, and Open Space Plan* document.

☑ *12.2 Implement an objective capital projects program and capital equipment replacement program.*

Capital projects are major, expensive, long-term projects whose long life expectancy permits financing through bonds, such as park development and land acquisition. Major capital projects are often

decided on the basis of community needs and desires. Capital equipment is smaller items, such as cars or tools, which have a shorter life expectancy (3–5 years) and which should be financed through an annual capital budget. Capital equipment replacement should be based on life cycle costing. Samples of both programs are presented in the full *Beaufort County Parks, Recreation, and Open Space Plan* document

Policy 13: Work with other groups to maintain parks and recreation facilities as appropriate.

Maintenance is a concern of any organization with sites, buildings, or facilities. Pooling maintenance resources can save time and money for all effected organizations. The Council of Recreation Providers (discussed later) will be a valuable forum for finding and developing cooperative maintenance arrangements.

Actions

☑ *13.1 Work with the School District to maintain fields and other recreation facilities at school sites.*

Schools, which are discussed in greater detail in the *Community Facilities* portion of the Comprehensive Plan, are a major focus of community events and recreation activities. Community use of school facilities should be encouraged as much as possible. As part of the strong working relationship between the department and the School District discussed earlier, staffs should assist each other in maintaining fields and other recreation facilities at school sites. A good example of the cooperation between the County and School District is that some of the pools proposed in the bond refinancing approved in 1996 are additions to proposed new schools, thus reducing the cost of the pool to the County and providing a significant amenity to the schools.

☑ *13.2 Combine resources with other recreation providers, such as the school district, to jointly purchase expensive, labor saving equipment needed for high quality field maintenance and used on a seasonal basis.*

Specialized maintenance equipment, such as an aerator, is often too expensive for one agency to purchase and is needed only on a seasonal basis. The County should discuss joint purchasing with the school district and other agencies. Each agency would contribute a portion of the purchase price, and each agency would be able to use the equipment to fulfill its maintenance obligations.

☑ *13.3 Carefully consider future maintenance costs and manpower requirements in any decision to add new parks and/or recreation facilities.*

Parks and recreation facilities must be maintained to avoid safety hazards and prolong useful life. Immediate maintenance requirements are sometimes not considered prior to acquiring a new piece of equipment or developing a new park. Future, long-term maintenance requirements are almost never considered. Without a long-term commitment to maintenance, a park or piece of equipment will become a safety hazard, opening the County to significant liability. To properly maintain parks and facilities,

future maintenance staffing requirements should be considered before any new park is developed or new equipment acquired.

☑ *13.4 Require a developer or homeowners' association to be responsible for maintenance and improvements of recreation facilities within gated communities.*

The County should not be responsible for maintaining parks and recreation facilities which are located within developments and generally not available to the public—especially in gated communities, which specifically restrict public access. The developer or homeowners' association should be held responsible for maintenance and improvements to a development's recreation amenities.

Financing and Budgeting

Local governments are continually being asked to "do more with less." Parks and leisure services are often not viewed as essential, and are among the first services to be curtailed. In 1996, Beaufort County provided some needed funding for parks and leisure services through the traditional mechanism of bond refinancing. Continuous pressure to curtail expenses requires careful financial planning using both traditional and innovative financing techniques.

Policy 14: Use traditional and innovative financing techniques to fund parks and leisure services equitably throughout the County.

Financing parks and recreation requires an aggressive program to make the best use of limited public financial resources. County funding, bond financing, state and federal grant and loan programs all help to sustain the parks and recreation function.

Actions

☑ *14.1 Fund multiyear, objective capital improvements and capital equipment replacement programs.*

Developing capital project and capital equipment replacement programs, discussed earlier, will not support the parks and leisure services system. The County government must provide adequate funding or the programs become nothing more than mathematical exercises. Parks and leisure services should be a high priority in the County's budgeting process. Recommended improvements are included in the proposed Capital Improvements Program.

☑ *14.2 Aggressively seek state and federal grants to support parks and leisure services.*

The department should apply for any and all available discretionary funding in addition to the entitlement funds re-

ceived from state and federal sources. Available programs include:

- Watercraft Recreation Fund—administered through the state Department of Natural Resources to help fund local water access; Beaufort County has used the fund in the past;
- Park and Recreation Development Fund—administered through the state Department of Parks, Recreation, and Tourism; funding for planning, development, or rehabilitation of parks and recreation facilities; 20 percent local match required; Beaufort County has received approximately $50,000 per year from the fund; current funding is approximately $2.4 million statewide;
- Recreational Land Trust Fund—small grants (maximum $25,000 per year) to buy public parkland; 50 percent local match required;
- Simms Act—approximately $260,000 available statewide; grants of $5,000 to $100,000 to develop National Recreation Trails; 50 percent local match required; and
- Legacy Trust Fund—state fund provides grants to local governments and nonprofit organizations for conservation, historic preservation, and outdoor recreation projects; 50 percent local match required; maximum grant of $500,000; FY 1996 funding: $2.3 million statewide.

☑ *14.3 Continue to use bond financing to support major capital improvements and land acquisition.*

Beaufort County should be commended for having the foresight to approve the 1996 bond refinancing and earmark the funds for parks and recreation improvements. In the future, the County should use refinancing of existing bonds and the issuance of new bonds to support major capital improvements. Bonds are often the only way to finance large capital improvements, and the County should continue to use bonds as a financing mechanism within the bounds of fiscal responsibility.

☑ *14.4 Develop a gift catalogue with separate financial accounting to encourage residents to support public parks and recreation.*

Gift programs establish community support for public projects because residents can have a concrete role in developing their community. Gift programs have been used to fund a wide spectrum of public improvements throughout the nation, including parks and recreation, public safety, public health, libraries, historic sites, and even general government. A gift catalogue for parks and recreation in Beaufort County would permit all residents, regardless of income, to help improve the County's parks. To be successful, a parks and recreation gift catalogue should:

- include a wide variety of possible improvements, such as land parcels, small facilities (e.g., benches, water fountains), large facilities (e.g., ball fields, courts), services (e.g., construction assistance, program leadership, fundraising assistance), and landscaping (e.g., trees, shrubs);
- offer interesting gift possibilities;
- be well-publicized;
- provide various options for recognition (e.g., gifts, site markers); and
- Produce results (e.g., set deadlines for donations, then build).

☑ *14.5 Distribute recreation resources fairly to all areas of the County.*

Public services, such as recreation and parks, should be provided on the basis of need, yet the County must provide fair and equitable service to all geographic areas of the County, as well. Beaufort County has a wide range of economic strata within its borders—from the rural poverty of Northern Beaufort to the resort wealth of Hilton Head Island. The disparity in income precludes even a grossly approximate distribution of recreation services based on tax revenue generated. Population is a more even-handed measure of distribution, since all residents should have some level of recreation service. Although a precise distribution of resources for any County service is impractical, population can be used to generally identify the areas where parks and recreation services should be concentrated.

Administration and Organization

Policy 15: Revise department structure and procedures to increase efficiency and to make the best use of community resources in a coordinated leisure service delivery system.

The department recently functioned without a director for more than a year. Organizationally, the lack of department leadership reduced the strength of the division leadership. The recent hiring of a new director and executive assistant gives the department an opportunity to reorganize, clearly define a structure, and strengthen the department's primary elements: parks and recreation.

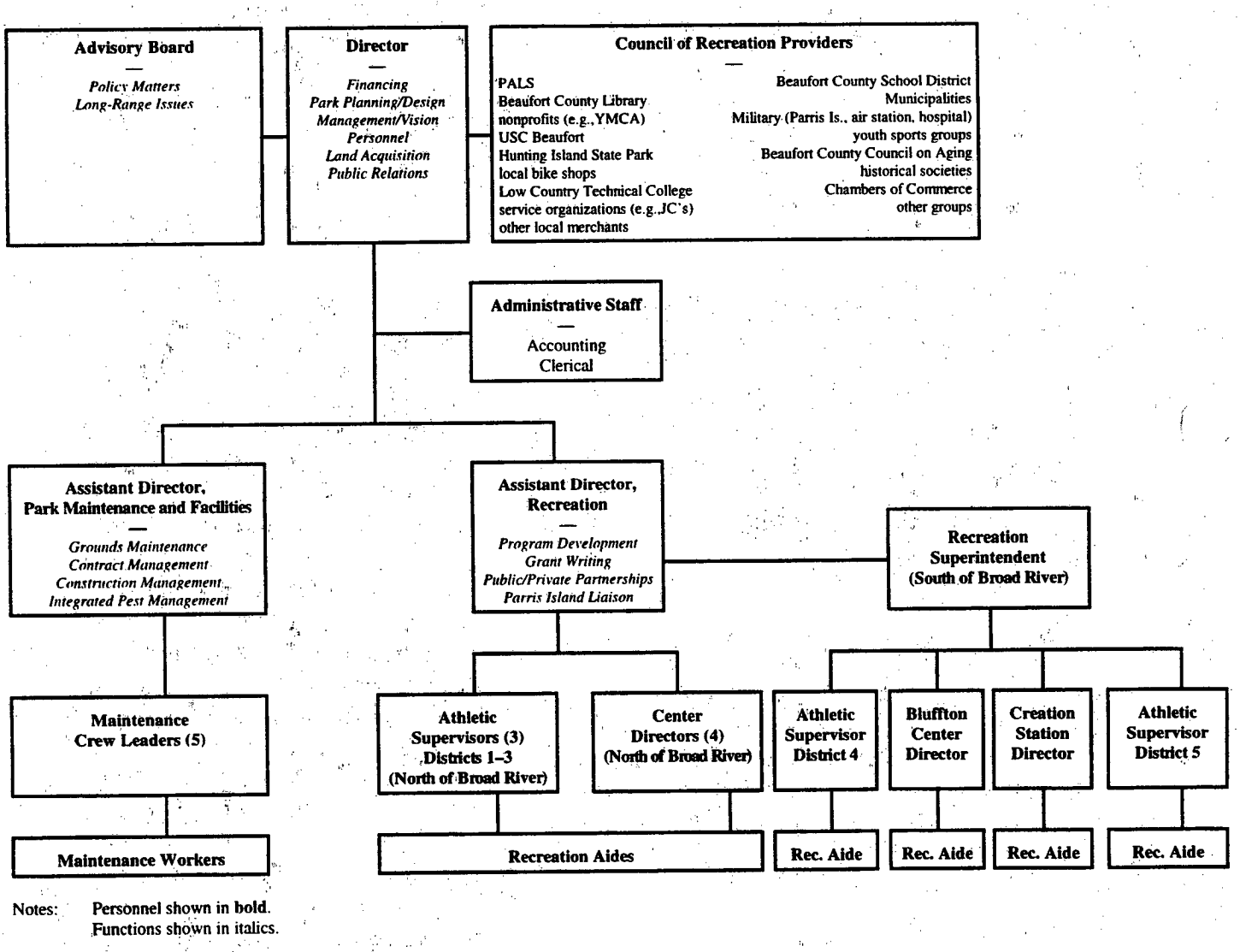
Actions

☑ *15.1 Continue to strengthen the department through reorganization to streamline decision making and increase accountability and responsibility of department staff.*

The former department structure (Table 25) placed responsibility at a middle level with little or no accountability because of the lack of a strong director with leadership and vision. The department has taken some reorganizational actions under the new director which strengthen the organization by establishing strong leadership, greater levels of responsibility, and opportunities for increased staff accountability. The department is moving toward a streamlined, well-defined structure (Figure 26), and will become stronger as staff understand and work effectively within the new organization. In addition to the more efficient use of staff, the revised structure provides focused attention on recreation facilities and programs south of the Broad River.

☑ *15.2 Maintain and strengthen the PALS Board as the link between*

Figure 26: Evolving organizational structure.



Notes: Personnel shown in **bold**.
Functions shown in *italics*.

PALS and both the community and County Council.

The PALS Board plays a vital role content and delivery of parks and leisure services in Beaufort County. The board advises the department and County on many vital issues which the community, as the beneficiary of PALS service, should understand. Board members are the voice of the residents they represent in reviewing and advising the department and County on issues of:

•**Policy**—Policy should be planned action, not reaction. The PALS Board reviews and recommends changes to department policy.

•**Budget**—The PALS Board reviews needs and suggests priorities for short- and long-term maintenance/operations and capital expenses.

•**Finance**—The PALS Board reviews policies on fees and charges. Board members often have access to information about alternative financing sources, such as agencies granting gifts and endowments.

•**Program**—The PALS Board evaluates and recommends the goals for programming, serves as a buffer between the staff and special interest groups, and provides a medium for community reaction to programs.

•**Land Acquisition/Facility Development**—PALS Board members offer advice which helps to shape County decisions on acquiring land and developing recreation facilities recommended in the *Beaufort County Parks, Recreation, and Open Space Plan*.

•**Legislation**—Board members often help to foster legislation at all levels through contact with political and agency personnel. The board can also protect staff from political involvement.

•**Education**—Board members set the professional tone of the department by educating themselves about the delivery of parks and leisure services and by learning about the experience of others through publications, conferences, and workshops. Board members also encourage the professional development of staff through training sessions, courses, conferences, and workshops.

•**Public Relations**—In addition to the programs and actions of the staff, the image of parks and leisure services is also molded by the words and deeds of PALS Board members. Public relations is, generally, the art of attracting attention, and board members help create the department's image through contact with fellow board members, County Council, friends, and neighbors.

☑ *15.3 Consider rewriting the department's mission/vision to elevate the quality of parks and recreation services.*

The beautiful natural features of Beaufort County and its prime east coast location provide an opportunity to elevate parks and recreation throughout the County to a higher level of quality. However, words alone will not make the transformation. The County and recreation providers must be willing to commit human and fiscal resources to reach the vision. The County's recreation community, through the Council of Recreation Providers discussed below, should consider whether the resources and commitment can be made to elevate the quality of services for Beaufort County residents.

☑ *15.4 Continue to work closely with the Department of Public Works (DPW) to clearly define maintenance responsibilities for public parks, public buildings, and County boat ramps.*

The DPW maintains some of the County's parkland and has primary responsibility for maintaining public buildings. PALS also has maintenance personnel. The maintenance responsibilities for both departments must be clearly delineated and agreed to ensure the most efficient use of County staff. In early 1996, the two departments began regular weekly meetings to strengthen communication between the departments and to foster a strong, cooperative working relationship among all staff. The close working relationship between the two departments should continue. Issues to be considered should include specific maintenance responsibilities for each County physical asset, including buildings and grounds. The plan supports the concept of PALS taking responsibility for all County boat ramps.

☑ *15.5 Formalize decision-making whenever possible.*

Decisions within an organization can affect more than just the decision-maker. The communication so critical to an organization's work must have clear channels to be efficient and effective and to ensure that decisions are made on the basis of well-defined community needs or technical merit. Formal lines of communication and decision-making must be clearly understood by all department staff.

☑ *15.6 Upgrade the department's computer capabilities in scheduling, program registration, coordination of center activities, and communication between centers and the central office.*

Computers continue to become faster and more powerful tools to help manage data and information. The department's computer system should be examined regularly to identify ways in which computerization can enhance department functions. Communication between the central office and the community centers is one area which needs immediate attention. The results of the computer study should be incorporated into the County's Capital Improvements Program.

☑ *15.7 Strengthen the Council of Recreation Providers by establishing regular meetings, agendas, and activities which include the County, municipalities, schools, semipublic (e.g., YMCA), private, and commercial recreation providers.*

The department's initial efforts at developing a Council of Recreation Providers have been well-received. The council should be expanded and formalized, bringing together a variety of recreation personnel on a regular basis. Cooperative efforts in recreation help providers to share current experiences and other useful information, avoid duplication of services and programs, support each others' efforts and programs, hear speakers or vendors, increase the participation of all entities, including local municipalities, and provide a forum for discussing the concerns of the recreation community. The department should continue to increase the number of participating providers and activities in order to help develop a unified, Countywide recreation delivery system.

☑ *15.8 Whenever possible, contract with other capable entities to meet the*

need for recreation facilities and services.

One of the most important elements of an effective recreation system is many participants working together for a common goal. The County cannot—and should not—be expected to directly provide all the facilities to meet the public's recreation needs. Whenever possible, the County should support recreation programs and services provided by others.

The practice of outside contracting is sometimes seen as losing control over an area for which an agency is responsible. Contracts should include minimum standards which a contractor must meet in such areas as programming and maintenance. Contract standards are a proven method of maintaining a desired level of service at the lower costs which outside contractors are often able to achieve.

Policy 16: Establish planning as an important, continuous activity in guiding the department.

Planning is the tool of vision. Managers must look ahead to direct a staff and help an organization thrive. Unfortunately, the planning function is often lost amidst the frantic pace of daily operations. The department must make a conscious effort to make the time to develop sound plans, programs, and budgets.

Actions

☑ *16.1 Examine the status of plan implementation annually, stressing goals, measures of achievement, and direction for the future.*

The *Beaufort County Parks, Recreation, and Open Space Plan* is a tool to help manage and improve services in Beaufort County. To be useful, the plan must be used. The plan should be used as a constant reference for staff to implement policy and achieve goals. In addition, the department should annually examine and document progress in implementing the plan's recommendations. The documented progress can be one focus of the workshop with County Council discussed below.

☑ *16.2 Conduct a major update to the plan every 5–6 years.*

Effective planners and managers recognize that change is inevitable. Circumstances in Beaufort County will change, which will render some current recommendations impractical, infeasible, or even counter productive. Annual progress reviews will recognize changes in the County's parks and recreation situation and adapt department policies and actions accordingly. As a rule, changes will accumulate to the point where the County should conduct a major update to the plan every 5–6 years.

☑ *16.3 Present the department's goals, accomplishments, and needs to County Council— preferably in a workshop session—at least once a year.*

Many public agency staff at all levels of government treat elected officials as adversaries with whom they must fight for every dollar of appropriation. The more effective approach is to recognize that elected officials and staff are working for the same purpose: to provide quality services to the public as effectively and effi-

ciently as possible. The department should be proud of the County's parks and recreation accomplishments and should help keep elected officials well-informed and educated about the importance of parks and recreation. The department should establish a close working relationship with Council members and take every opportunity to meet with Council, both formally and informally, to discuss the County's park, recreation, and open space needs. The staff should organize an annual field trip with County Council and the PALS board to help the decision makers better understand the recreation system by seeing sites first hand.

☑ *16.4 Hold an annual recreation retreat.*

Retreats infuse energy and creative thinking into a program by getting key people together for a day or week end to think about issues outside the frazzled world of daily operations. Retreats can be attended by staff, board members, County Council, the Council of Recreation Providers, or other people in and out of County govern ment, depending on issues to be explored. Vendors may be invited to explain products or services which may be of use to the department. Retreat programs may include presentations from recreation professionals from other municipalities, counties, or states who have successfully dealt with issues pertinent to Beaufort. One of the most important current issues which might be explored in an outside retreat setting is the community centers: defining service areas, clientele, purpose, facilities, improvements, program planning, service delivery, transportation, and other issues. A professional facilitator can greatly enhance the value of a retreat and help decision makers understand the "big picture."

Policy 17: Recognize the importance of attracting and maintaining high-quality staff.

Personnel expenses are the largest category of most organizations. The benefits of staff improvements—through training, education, and incentive programs—are often difficult to quantify. However, staff morale, creativity, and resourcefulness are the qualities which set some departments apart. The department is the staff, and sound investments in employee development are usually well worth the price.

Action Items:

☑ *17.1 Continue to hold staff meetings at regular intervals to increase staff awareness of all department activities.*

Several other recommendations have identified the importance of communication to an effective organization. Regular staff meetings provide an opportunity to pass appropriate information as quickly as possible.

Staff meetings should also be used to increase staff awareness of all department activities; solicit staff ideas for new programs, improvements to existing programs, and solutions to existing challenges; improve efficiency and morale; and help employees think and work as a team, which is particularly important when department activities are scattered throughout the County. Staff meetings should be used to improve communication between all levels of supervi-

sion, from department director to Center Directors.

☑ *17.2 The director should periodically visit each community center and other remote sites to provide support and guidance to staff.*

Beaufort is a large County with recreation sites relatively far apart. In many cases, staff of the outlying sites are physically far from the central office, which breeds a feeling of isolation and lack of guidance and assistance. By personally visiting each site regularly, the director can better understand the needs of each center and provide needed support and guidance for staff.

☑ *17.3 Consider establishing regular meetings for Center Directors.*

The importance of the centers and Center Directors was established earlier. The centers and Center Directors are an important enough component of the department that the director should consider establishing regular meetings of the Center Directors to deal exclusively with center issues. The meetings could be in addition to regular staff meetings—with Center Directors attending both meetings—or staff meetings could be held with central staff only and Center Director meetings with Center Directors only. In the latter case, the Assistant Director for Recreation should serve as an information link between staff meetings and Center Director meetings.

☑ *17.4 Develop a strong, organized volunteer recruitment and recognition program.*

Volunteers are a valuable community resource which can add tremendous capacity to a parks and recreation system. Properly prepared, volunteers can perform maintenance, operate programs, gather information, perform clerical functions, and many other tasks which would otherwise not be accomplished. A strong, successful volunteer program requires a paid staff person dedicated to the recruitment, training, management, placement, and recognition of volunteers. The military installations and Hilton Head Island provide a strong base of potential volunteers. The County should establish a Volunteer Coordinator position to develop and implement a program.

☑ *17.5 Encourage staff to attend appropriate seminars, short courses, and other forms of employee education and development.*

Professional development is an important investment for the County because employees are challenged to continue learning and become more productive. Upper level staff currently receive occasional training, but the entire staff should be offered the opportunity for professional development. Attendees should provide reports on recent courses or conferences at staff meetings. Also, to maximize the benefit of training expenses, staff who attend training sessions should work with the director to provide the training to other staff members as appropriate.

☑ *17.6 Monitor salaries periodically, comparing department levels with other service industries in Beaufort County.*

Salaries are always a concern in public service because labor costs are often the largest component of any department's

budget while voters are wary of any increases in public expenses. Nevertheless, the County has much to offer and can attract qualified, conscientious personnel. Fairness in salaries can be demonstrated by periodically surveying salaries in other service indus tries. While the County cannot always match outside salaries, most employees recognize and will respond favorably to fair treatment.

Chapter 8

Transportation

Transportation

Vision

Beaufort County should establish a pattern of land use and development that maintains the maximum long-term capacity and safety of the County's roadway system, and creates a transportation system that incorporates equally safe and efficient alternative modes of travel, such as bus service, ridesharing, bikeways, walking trails, rail, air travel facilities, water taxis and ferry service.

Goals:

- ☑ Goal 1: Create an effective transportation Planning Program: Commit to funding and maintaining a County-wide transportation planning program to insure the efficient coordination and implementation of transportation system improvements and programs for all modes of travel.
- ☑ Goal 2: Create a Transportation Planning Position: Establish a Transportation Planning position to place more emphasis on future access and mobility through review and preparation of traffic impact studies, review of site plans, providing TMODEL2 travel demand projections, and securing appropriate levels of ISTEA funding.
- ☑ Goal 3: Regional Planning Process: Actively participate in the Lowcountry Council Of Governments (LCOG) regional planning process to insure that County, Hilton Head Island and all other municipality decisions consider and are coordinated and compatible with transportation decisions made in neighboring jurisdictions.
- ☑ Goal 4: SCDOT/County Coordination: Maintain close coordination with SCDOT regarding reauthorization of the Intermodal Surface Transportation Act, innovative

funding sources, and implementation of the National Highway System program. Also coordinate land use and access decisions with SCDOT on a weekly and definitely a monthly basis.

☑ Goal 5: Promote Mixed Land Use: Promote mixed-use development in established and planned communities to reduce the impact of home-to-work commuter travel via single occupant vehicles and to eliminate the dependency upon motor vehicles.

☑ Goal 6: Adjacent Jasper County Coordination: Promote and maintain close coordination with Jasper County officials and staff regarding the impact of land use development and access decisions on shared roadway corridors and the need to coordinate SCDOT support.

☑ Goal 7: Annual Training: Commit to an annual training program to insure that staff turnover or terminations do not jeopardize technical aspects of the transportation planning program. All engineers and planners involved with the site plan review process should be considered for traffic impact study training. Those responsible for travel demand projections using TMODEL2 would receive additional computer modeling training.

☑ Goal 8: Promote Scenic Roads: Work with state and local officials to establish a scenic and entry corridor roadway program, and related design standard to aid in the preservation of trees and other aesthetic elements.

☑ Goal 8: Promote Walkways and Bikeways: Promote a state and local program of walking trails and bike lanes and bikeways to serve existing and planned communities and schools as a safe and efficient alternative to motor vehicle travel and coordinate with a similar County-wide plan.

☑ Goal 9: Commit to Mass Transportation: Commit to a regional public mass transportation system by participating in the 1997 Comprehensive Plan developed by the Lowcountry Regional Transportation Authority (LRTA) so that a viable alternative form of transportation is available especially for those who do not own private vehicles.

☑ Goal 10: Explore Alternative Modes of Transportation such as Ferry, Water Taxi and Rail Services.

☑ Goal 11: Emergency Evacuation Coordination: With increased population density using a roadway system constrained by Lowcountry environmental features, commit to a roadway improvement program which is coordinated with emergency evacuation requirements for all jurisdictions on evacuation routes and which seeks to protect the capacity of the National Highway System corridors utilized in emergency evacuation.

☑ Goal 12: Adopt Traffic Calming: Apply mobility management techniques to integrate motor vehicle traffic flow with pedestrian and bicycle movements in existing and planned neighborhoods and on roadway corridors which directly serve these neighborhoods. (Traffic calming is a holistic, integrated traffic planning approach that seeks to maximize mobility while reducing the undesirable effects of the mobility).

☑ Goal 13: Monitor Peak Period Traffic Situation: Commit to a travel demand modeling and an annual traffic count program to insure that peak and off-peak period traffic operational efficiency (degree of traffic congestion) is monitored, and a strategy to deal with emerging congestion is developed and implemented.

☑ Goal 14: Preservation of Corridor Traffic Capacity: Consider the advance purchase of right-of-way for future roadway and grade separated interchanges and land access management techniques to enhance peak period traffic flow; i.e., capacity along major highway corridors. Also, promote the use of frontage roads and plan for intersection improvements with permitting of new developments on all roads and streets.

☑ Goal 15: Develop Corridor and Sub-Area Plans: Utilize corridor overlay districts in combination with conceptual corridor and sub-area land use and access plans to guide land development and site access decisions and to protect corridor capacity, especially when parallel corridors cannot be constructed. A sub-area is defined as a smaller area of the County, which may only involve several intersections but requires special attention due to focused traffic impact created by new development, especially in Priority Investment Areas.

☑ Goal 16: Traffic Impact Studies: Monitor projected traffic impact associated with new and redevelopment projects by holding developers responsible for having traffic impact studies performed per County guidelines, perhaps as part of a community impact assessment report. Traffic impact fees could be considered if and when appropriate.

☑ Goal 17: Develop Paving Program for Dirt Roads: Commit to developing a prioritized list of dirt roads to be funded each year for paving; with special consideration to dirt roads adjacent to water. Paving funds should be directed to Priority Investment Areas except for specific safety and flooding problem areas.

☑ Goal 18: Interconnected Road Network: Promote the design and construction of interconnected roads and streets between developments and frontage roads parallel to major highway corridors to preserve long-term road network capacity.

☑ Goal 19: Appropriate Road Design Standards: Develop and implement flexible road and street standards as appropriate for rural, suburban, and urban areas as part of the Development Standards Ordinance.

Transportation

Technical Analysis

8.1 Introduction

Using available data, workshop, and meeting information, this section describes technical findings and issues related to each current mode of transportation in Beaufort County. Since the roadway system is the dominant mode of travel—and will remain so in the foreseeable future—it is discussed in more detail than other modes of travel.

The identification and open discussion of these technical issues is important, because the County-wide roadway system is being increasingly threatened by traffic related to emerging new mainland development, adjacent Jasper County development, and the build-out of Hilton Head Island. By understanding the complexity of these issues, an effective strategy can be developed and implemented to avoid serious and costly traffic congestion on a very constrained roadway system, which lacks a freeway or limited access highway system.

Item 15.

8.2 Streets and Highways

8.2.1 SCDOT Functional Classification of Countywide Road System

The existing Beaufort County roadway system, as classified by SCDOT, is illustrated in Figure 27: SCDOT Functional Classification - Existing Roadways. This functional classification of County roads and streets recognizes that these facilities represent an integrated system according to the traffic service provided. The SCDOT Highway Design manual describes each functional classification as follows:

- **Interstate** - A system of Interstate and National Defense Highways (freeways) designed and constructed to provide the movement of major traffic volumes between and within states - with full control of access and therefore termed freeways;

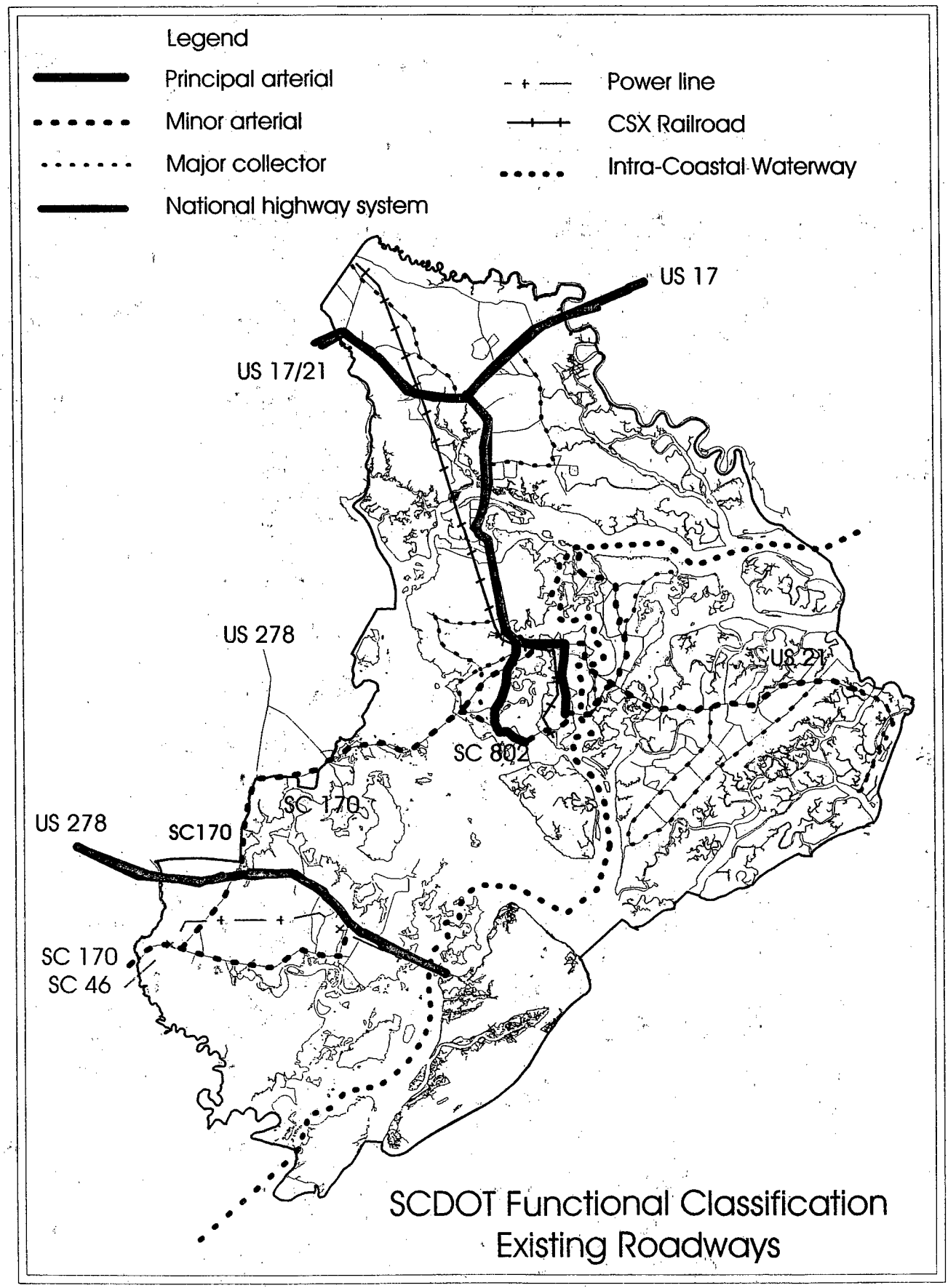
  Note: There are no Interstate System freeways in Beaufort County. The nearest Interstate route is I-95, which is a few miles to the west in Jasper County via U.S. 17, U.S. 21, U.S. 278 and S.C. 170.

- **Principal Arterial** - Serves major communities and major activity centers and higher traffic volumes and serves major portion of traffic volumes entering and leaving Beaufort County;
- **Minor Arterial** - Interconnects with and augments principal arterial systems and distributes traffic to small communities and geographic areas;
- **Collector** - Provides land access and traffic circulation within neighborhoods, commercial and industrial areas; distributes and collects trips between arterial and local streets; and
- **Local** - Provides direct access to adjoining land; provides access to higher functional classifications; discourages through traffic.

Note in Figure 27 (SCDOT Functional Classification - Existing Roadways), the following issues regarding the SCDOT classification system:

a. S.C. 170/U.S. 278, which connects Beaufort County north of the Broad River with Port Royal,

Figure 27: SCDOT functional classification - existing roadways.



Beaufort, Bluffton, Hilton Head Island, and Jasper County is classified as only a minor arterial roadway. Yet it serves major communities and high traffic volumes;

b. Most County roadways are designated as Federal (U.S.) State (S.C.) Primary or State (S.C.) Secondary, although all the Secondary roads have not been classified by function. Roads are classified by function primarily for administration of maintenance and operational activities; and funding improvements to the roadway system;

c. Another important issue is the fact that the U.S. Congress has adopted a nation-wide system of roadway corridors designated the National Highway System (NHS). This NHS designation is intended to upgrade existing roadways to supplement the Interstate System. The purpose of the National Highway System is to provide an interconnected system of principal arterial routes which will serve major population centers, international border crossings, ports, airports, public transportation facilities, and other intermodal transportation facilities and other major travel destinations; meet national defense requirements; and serve interstate and interregional travel. The National Highway System will consist of the following:

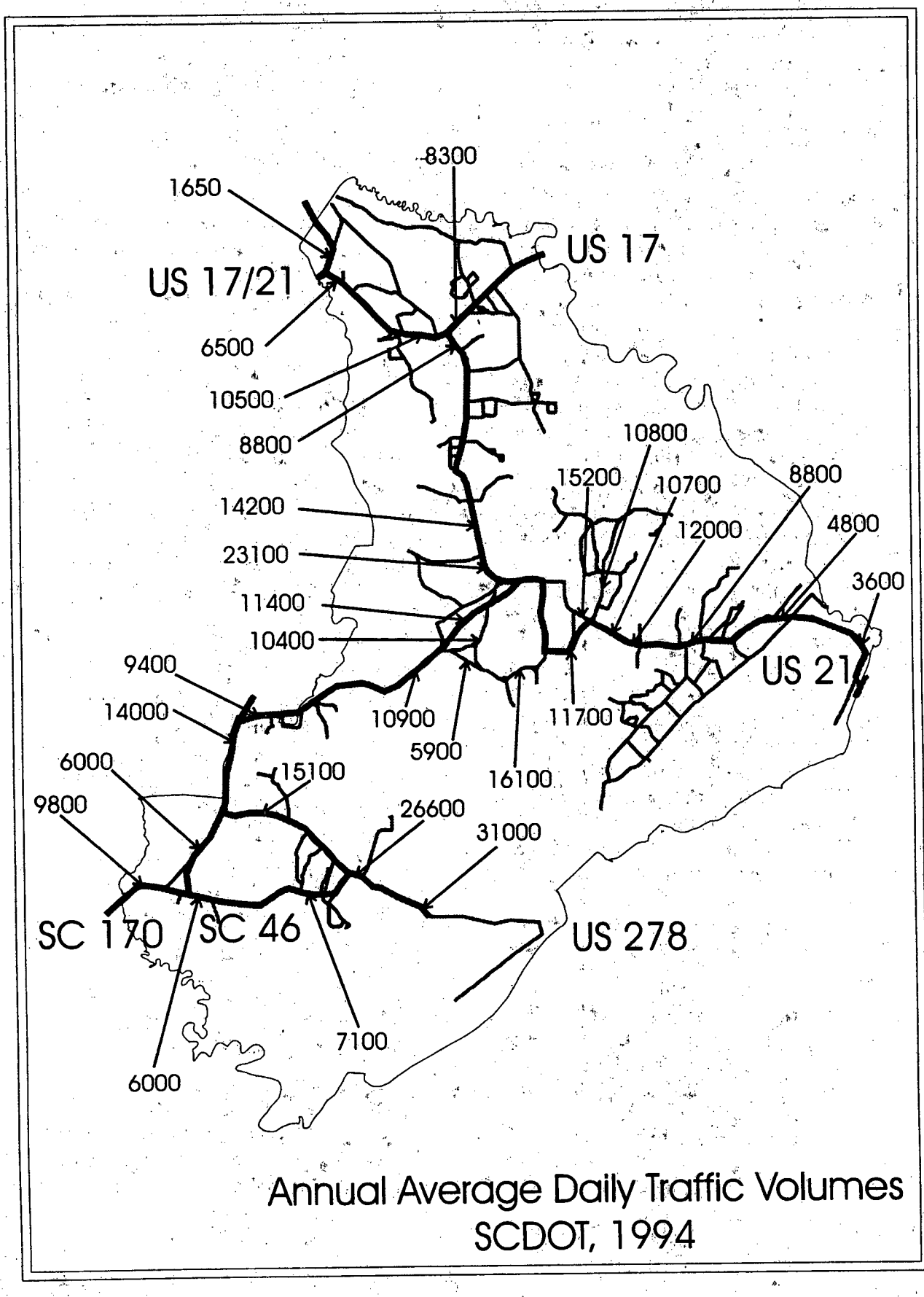
- highways designated as part of the Interstate System;
- other urban and rural principal arterials and highways (including toll facilities) which provide motor vehicle access between such an arterial and a major port, airport, public transportation facility, or other intermodal transportation facility;
- a strategic highway network which is a network of highways which are important to the United States strategic defense policy and which provide defense access, continuity, and emergency capabilities for the movement of personnel, materials, and equipment in both peace time and war times; and
- major strategic highway network connectors which are highways that provide motor vehicle access between major military installations and highways which are part of the strategic highway network.

While Beaufort County has no Interstate roadways, the I-95 corridor is located to the west in Jasper County. SCDOT has designated three corridors, U.S. 21, U.S. 17 and U.S. 278 as the NHS in Beaufort County. Note in Figure 27 there is no NHS link between the City of Beaufort and U.S. 278, and that the U.S. 21 NHS stops at S.C.280 in Beaufort. The intent of the NHS is to preserve long-term corridor capacity, therefore it is important that access points along the corridors be managed and the number of traffic signals minimized. Such access management decisions can impact land use density and uses along corridors, which are designated NHS corridors. To preserve corridor capacity, the County needs to develop more detailed conceptual corridor plans as the Comprehensive Plan is implemented.

8.2.2 1994 Annual Average Daily Traffic

Figure 28 (Annual Average Daily Traffic Volumes SCDOT, 1994) shows the most current and available 1994 annual average daily traffic volumes for all the major

Figure 28: Annual average daily traffic volumes SCDOT, 1994.



SCDOT traffic count stations. The 1994 data was used because it was the most recent data available at the time of this planning study. The highest daily volumes occur on the bridge, which connects Hilton Head Island to the mainland (31,000 vehicles per day). The second highest daily volumes occur on U.S. 278 east of Burnt Church Road (26,600 vehicles per day), and the third highest daily volumes occur on U.S. 21 south of the U.S. Marine Corps Air Station (23,100 vehicles per day).

Since the County does not have its own program to generate daily traffic counts, it is important that the SCDOT program be utilized to maintain the changes in annual traffic volumes on key road links. Should SCDOT reduce this count program for any reason, the County would need to perform its own daily counts to insure such information is available. Because Beaufort County does not require that traffic impact studies be prepared for private development projects, SCDOT is the only source of traffic data available, which enables traffic volumes using the roadway system to be monitored.

8.2.3 1990 to 1994 Annual Growth Rate in Annual Average Daily Traffic (AADT) Volumes

Table 31 (Annual growth rate of AADT, 1990 - 1994) illustrates how the reported SCDOT AADT volumes for key road links have changed between 1990 and 1994. For each road link, the four-year and one-year rate of change in volumes has been indicated. Such past trend data does not mean that the same trends will continue into the future as these volume changes can shift dramatically due to new development traffic served by specific road links.

These four year data, indicates that the two most rapid growth rate road links, (between 1990 and 1994), were on S.C. 170 west of Pritchardville and south of McGarvey's Corner. Next highest was S.C. 802, north of U.S. 21 on Lady's Island, at 10.9 percent per-year. It should be noted that four consecutive years of growth rates in excess of 0.5 percent is serious and can lead to significant roadway deficiencies on S.C. 170 if sustained for a long period of time.

While S.C. 802 on Lady's Island is the third highest road link, it is interesting to note that U.S. 21 on St. Helena Island near Martin Luther King Boulevard ranked fourth highest with an 8.9 percent annual increase in traffic volumes. This high growth rate conflicts with a lower growth rate on U.S. 21 west of S.C. 802 which reflects only 0.5 percent per year growth rate—a 16th ranking.

Although AADT volume data are important, it is significant to note that in a tourist-oriented area, traffic volumes at any given highway location fluctuate in a reasonably consistent manner. For example, in any given 12-month period daily volumes will vary by month of the year, by day of the week, and by hour of the day. This fluctuation pattern will repeat itself consistently year to year.

8.2.4 Seasonal Variation in Traffic Volumes

In order to understand the variation in daily traffic volumes between annual average monthly and daily volumes on the U.S. 278 corridor, data developed by Wilbur Smith Associates for the April 1991, Transportation Plan Update is shown in Figure 29 (Monthly Traffic

Table 31: Annual growth rate of AADT, 1990 - 1994.

Route	Count Location	1990 AADT	1994 AADT	4 Year Increase	4 Year % Change	Annual % Change	Rank
46	Bluffton	6,379	7,100	+721	+11.3	+2.8	12
170-46	South Pritchardville	6,051	9,800	+3,749	+62.0	+15.5	2
170	South McGarvey's Corner	3,019	6,000	+2,981	+98.7	+24.7	1
278	Intracoastal Waterway	22,977	31,000	+8,023	+34.9	+8.7	5
278	East Burnt Church	21,225	26.600	+5,375	+25.3	+6.3	8
278	East McGarvey's Corner	13,384	15,100	+1,716	+12.8	+3.2	11
170-278	South CEC	12,572	14,000	+1,428	+11.4	+2.8	12
170	Broad River	8,625	10,900	+2,275	+26.4	+6.6	7
802	East of 170	4,807	5,900	+1,093	+22.7	+5.7	10
21	West of 802	13,728	15,200	+1,472	+10.7	+2.7	13
21	East of 802	10,484	10,700	+216	+2.1	+0.5	16
802	North of 21	7,525	10,800	+3,275	+43.5	+10.9	3
21	St. Helena MLK	6,490	8,800	+2,310	+35.6	+8.9	4
21	South of 116	18,742	23,100	+4,358	+23.3	+5.8	9
21	North of 116	12,912	14,200	+1,288	+10.0	+2.5	14
21	South of 17	6,680	8,800	+2,120	+31.7	+7.9	6
21/17	West of 21	9,697	10,500	+803	+8.3	+2.1	15
17	East of 21	8,913	8,300	-613	-13.8	-3.4	17

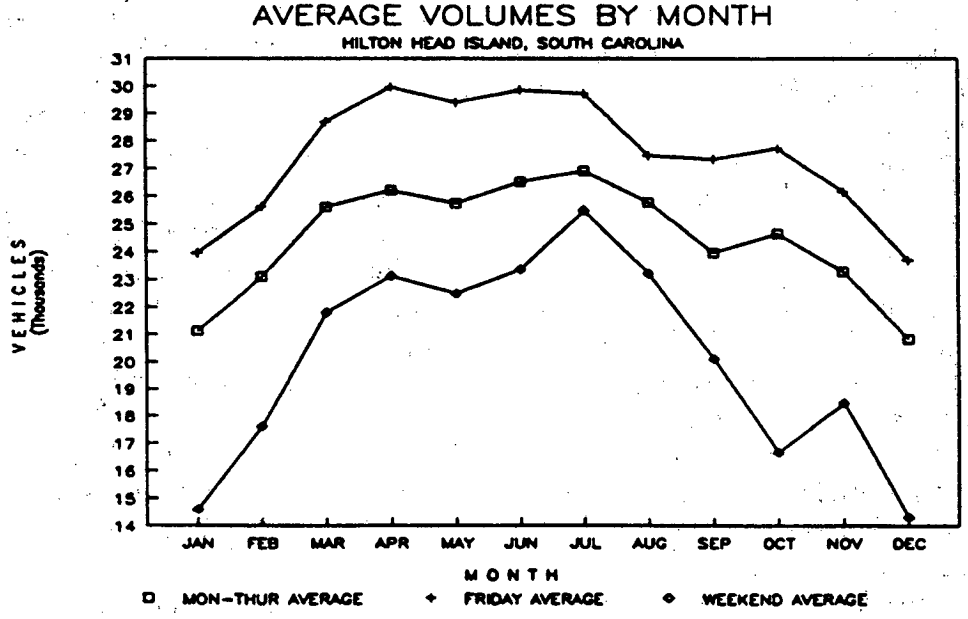
Figure 29: Monthly traffic variations.

U.S. 278 AT INTRACOSTAL WATERWAY

12 MONTHS ENDING MARCH 31, 1990

MONTH	DAY OF WEEK							MONTHLY AVERAGE
	MON	TUE	WED	THU	FRI	SAT	SUN	
JAN, 90	19,355	21,460	21,791	21,898	23,948	17,063	12,135	19,781
FEB, 90	22,714	23,128	23,400	23,164	25,624	20,014	15,210	21,893
MAR, 90	25,283	25,615	25,829	25,706	28,694	24,096	19,525	25,080
APR, 89	25,888	25,150	26,474	27,306	29,965	25,338	20,900	25,677
MAY, 89	25,159	25,175	25,916	26,661	29,406	25,261	19,960	25,368
JUN, 89	26,178	25,918	26,797	27,109	29,846	26,691	20,030	26,241
JUL, 89	26,902	25,402	27,700	27,612	29,717	29,797	21,150	26,805
AUG, 89	24,803	26,289	26,173	25,762	27,462	26,724	19,715	25,391
SEP, 89(1)	23,248	23,696	24,182	24,680	27,319	22,706	17,484	23,463
OCT, 89	24,250	24,097	24,816	25,377	27,712	22,242	17,401	23,527
NOV, 89	23,329	23,365	24,550	21,885	26,136	20,897	16,038	22,374
DEC, 89	17,951	20,403	22,220	22,791	23,699	15,866	12,743	19,194
DAILY AVERAGE	23,755	24,142	24,987	24,996	27,461	23,058	17,691	23,733

(1) EXCLUDES 9-19-24 (TUESDAY THRU SUNDAY) - HURRICANE HUGO TRAFFIC IMPACT AND MALFUNCTION ON 9-19



WILBUR SMITH ASSOCIATES

Variations). For this location—between the mainland and Hilton Head Island—it indicates that some months (e.g., January, February, and December) are significantly below the average daily traffic volume whereas other months (September, October, and November) are close to the monthly average traffic volume. These data reflect a tourist season—which extends from March to November—where the average daily traffic volumes each month range from 22,000 to 26,000 vehicles per day at this location.

This permanent count station data also reveals the trend with a very developed Hilton Head Island and sparsely developed mainland in 1989 to 1990. As the mainland develops to higher densities with more permanent residents, future seasonal variations will reflect more interaction between the mainland and Hilton Head Island areas of activity. This impact of mainland development is now being compounded by new development such as Sun City Hilton Head and Okatie Center near the U.S. 278/S.C. 170 interchange at McGarvey's Corner. This new development will generate additional daily traffic every month of the year. This not only will intensify tourist season traffic on corridors like U.S. 278 and S.C. 170 but it will also intensify traffic flow between the mainland and Hilton Head Island and other destination points like downtown Beaufort and Hunting Island State Park.

It is not financially feasible to design roadway facilities for seasonal peak traffic flow, yet it is important that tourist traffic be safely and efficiently accommodated. This important objective can be achieved through the application of transportation system management techniques such as interconnected traffic signals and land access management techniques which include the construction of additional roads to provide alternatives to corridor access routes. In addition, it is important to monitor changing Countywide traffic flow conditions during the tourist season and to better anticipate the impact of land use decisions through improved transportation planning, analysis and evaluation techniques.

8.2.5 Road Link 1994 AADT Volume-to-Capacity Ratios

Having established the 1994 AADT daily traffic volume situation, it is relevant to compare the daily volumes on an average day to the capacity of key roadway links. This indicator is the volume-to-capacity (V/C) ratio, which reflects the basic operating characteristics of the roadway network. A deficiency reflects the need to widen a roadway, whereas excess capacity indicates that upgrading is not currently justified.

Table 32 (Roadway Segment Level of Service Definitions) describes V/C ratios as a function of Level of Service (LOS), i.e. the degree of traffic congestion. For the rural areas in Beaufort County, LOS C is acceptable, with LOS D applicable in the more urbanized areas.

Table 33 (1994 AADT Volume-to-Capacity Ratio) summarizes the volume-to-capacity ratios using the 1994 AADT volumes with Level of Service C highway capacities. The volume-to-capacity ratios raise the following planning issues based on Level of Service C criteria.

Eight road links exceed LOS C criteria with four 15 percent or more in excess of this degree of congestion.

- U.S. 21 West of S.C. 802 on Lady's Island: 1.60 but subject to

Table 32: Roadway level of service definitions.

ROADWAY SEGMENT LEVEL OF SERVICE DEFINITIONS

Level of Service	Description	V/C Ratio
A	A condition of free flow, with low volumes and high speeds. Traffic density is low, with speeds controlled by driver desire, speed limits, and physical road conditions.	Less than 0.600
B	A condition of stable flow, with operating speeds beginning to be restricted somewhat by traffic conditions. Drivers still have reasonable freedom to select their speed and lane of operation.	0.600-0.699
C	A condition of stable flow, but speed and maneuverability are more adversely affected by higher traffic volumes. Most drivers are restricted in their freedom to select their own speed, change lanes, or pass.	0.700-0.799 Maximum for rural areas areas
D	Conditions approach unstable flow, with tolerable operating speeds being maintained though considerably affected by changes in operating conditions. Fluctuation in volume and temporary restrictions may cause substantial drops in operating speeds. Drivers have little freedom to maneuver, and comfort and convenience are low, but conditions can be tolerated for short periods of time.	0.800-0.899 Maximum for urbanized areas
E	Represents operation at speeds lower than in Level D, with volumes at or near the capacity of the highway.	0.900-0.999
F	Represents forced-flow operations at low speeds, where volumes are below capacity. Speeds are reduced substantially and stoppages may occur for short or long periods of time because of the downstream congestion. In the extreme, both speed and volume can drop to zero.	1.000 and Greater

SOURCE: KELLERCO 1997

Table 33: 1994 AADT volume-to-capacity ratio.

Number	Route	AADT Count Location[1]	1994 AADT	Type Roadway	Daily Capacity At LOS C	Volume to Capacity Ratio	Comments
1	S.C. 46	Bluffton	7,100	2-lanes rural	9,500	0.75	Exceeds LOS C
2	S.C. 170	South of McGarvey's Corner	14,000	2-lanes rural	9,500	1.47	Exceeds LOS C
3	U.S. 278	East of S.C. 46	31,000	4-lanes divided	25,000	1.24	Exceeds LOS C
4	U.S. 278	East of McGarve's Corner	15,100	4-lanes divided	25,000	0.60	
5	S.C. 170-S.C. 278	South of CEC[2]	14,000	2-lanes	9,500	1.47	Exceeds LOS C
6	S.C. 170	At Broad River	10,900	2-lanes	9,500	1.15	Exceeds LOS C
7	U.S. 21	West of 802 at Lady's Island	15,200	2-lanes	9,500	1.60	Exceeds LOS C, but subject to diversion to U.S. 21 Bus
8	U.S. 21	East of 802 at Lady's Island	10,700	2-lanes	9,500	1.13	Exceeds LOS C
9	S.C. 802	North of U.S. 21 at Lady's Island	10,800	2-lanes	9,500	1.14	Exceeds LOS C
10	U.S. 21	St. Helena at MLK Blvd	8,800	2-lanes	9,500	0.93	
11	U.S. 21	South of S.C. 116	23,100	5-lanes undivided	22,000	1.05	Exceeds LOS C
12	U.S. 21	North of S.C. 116	14,200	4-lanes divided	25,000	0.57	
13	U.S. 21	South of U.S. 17	8,800	4-lanes divided	25,000	0.35	
14	U.S. 21-U.S. 17	West of U.S. 21	10,500	4-lanes divided	25,000	0.42	
15	U.S. 17	East of U.S. 21	8,300	2-lanes	9,500	0.87	

1 See Figure 2 for location
2 CEC: Career Education Center

diversion to U.S. 21 Business as an alternative route.

- S.C. 170 South of McGarvey's Corner: 1.47
- S.C. 170/U.S. 278 South of CEC: 1.47
- U.S. 278 East of S.C. 46: 1.24
- S.C. 170 at Broad River: 1.15
- S.C. 802 North of U.S. 21 at Lady's Island: 1.14
- U.S. 21 East of S.C. 802 at Lady's Island: 1.13
- U.S. 21 South of S.C. 116: 1.05

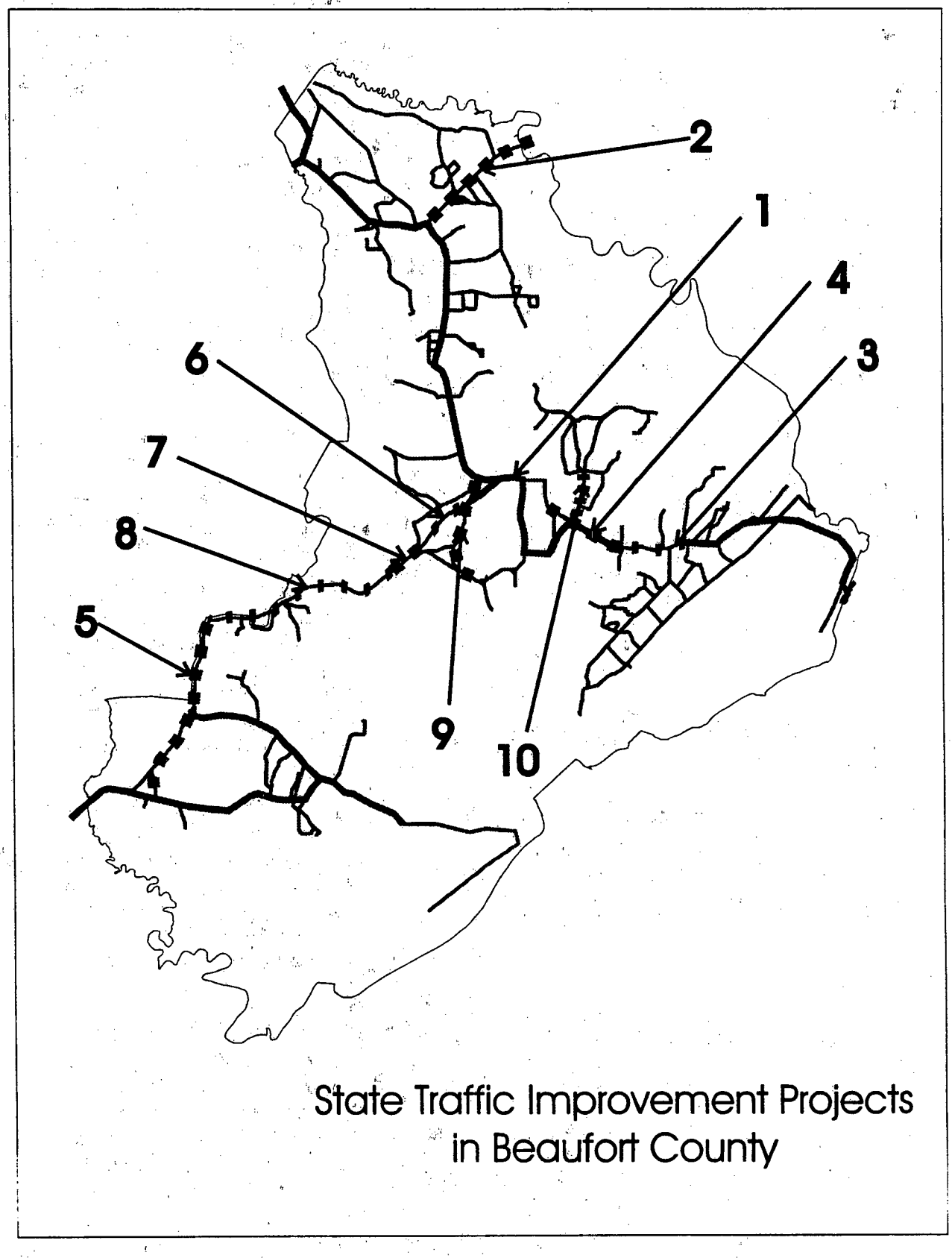
This magnitude of roadway system deficiencies—especially on the two lane roads—illustrates the emerging problem of travel demands exceeding available capacities and the obvious need for widening some existing roads and construction of new roads to supplement the countywide roadway system. Without needed roadway improvements, the existing level of operating efficiency will deteriorate which will result in significant congestion.

8.2.6 Programmed Roadway Improvements

SCDOT State Transportation Improvement Program (STIP) project activity is summarized below and illustrated in Figure 30 (State Traffic Improvement Projects in Beaufort County).

- ***Project 1:*** Install a 20 interconnected signal system in the City of Beaufort with funding anticipated by 2001.
- ***Project 2:*** Widen two lane U.S. 17 E/W to a four lane divided roadway with median at wetlands. Progress on this project will depend on the Federal Highway Administration (FHWA), the Environmental Protection Agency (EPA), and U.S. Army Corps of Engineers requirements regarding wetlands and other issues.
- ***Projects 3/4:*** These two U.S. 21 projects initially involved the proposed widening by SCDOT of the existing two-lane road to a four-lane flush/median roadway. Project 3 extended from the Woods Memorial Bridge to Chowan Creek Bridge. Right-of-way plans were completed but citizen opposition delayed the project until a special sub-area study resolved this issue. SCDOT agreed to the following U.S. 21 project:
- Three lanes between Woods Memorial Bridge and Youmans Drive;
- Four lanes divided from Youman's Drive to the east end of Chowan Creek Bridge;
- Conduct a study to re-align U.S. 21 with S.C. 802 so as to bypass the existing U.S. 21/S.C. 802 intersection. Project 4, east of Chowan Creek Bridge on St. Helena Island has been delayed pending a more detailed study of the corridor to the east;
- ***Project 5:*** Widening the two lane high volume section of S.C. 170/U.S. 278—between the Career Education Center and McGarvey's Corner—to a four-lane divided road with a median is currently the number one priority in the County. SCDOT staff is responsible for the design plans with right-of-way acquisition to be achieved in 1997. Construction will require two to two and one-half years. This project will incorporate access management techniques to minimize the number of at-grade intersections.

Figure 30: State traffic improvement projects in Beaufort County.



It is also complicated because the roadway corridor's western edge serves Jasper County and the eastern edge serves Beaufort County;

- ***Projects 6:*** These two projects involve S.C. 170 between the Career Education Center and S.C. 280 on Port Royal Island. Project 6 will upgrade a two-lane roadway to a four-lane divided median roadway with curb, gutter, and sidewalks between S.C. 802 and S.C. 280. The environmental assessment is currently in process, but funding is available only through preliminary engineering;
- ***Projects 7 and 8*** represent widening of the S.C. 170 corridor, between the Career Education Center and S.C. 802, from two lanes to four lanes as two specific segments with the median type depending upon wetlands and large trees impacted. The environmental assessment is currently in process by an SCDOT consultant. Included will be an entirely new four-lane bridge to replace the existing two-lane bridge over the Broad River. Funding is available only through preliminary engineering;
- ***Project 9:*** This project will upgrade a two-lane roadway to a five-lane (flush median) roadway on S.C. 280 with curb and gutter and sidewalks—with Oextra pavement width for bicycles; and
- ***Project 10:*** This project involves widening S.C. 802 North of U.S. 21 to three lanes. The Environmental Assessment Study is underway; no funding has been identified.

8.2.7 Emergency Evacuation Routes

A new emergency evacuation plan was developed by the Beaufort County Emergency Management Department in August 1996.

Figure 31 (Emergency Evacuation Routes) indicates the current southern and northern evacuation routes in Beaufort County. This roadway network is constrained by Lowcountry water features which makes it difficult and costly to construct new bridges or to significantly widen corridor roadways to enhance evacuation route capacities. This problem was evident in July of 1996, when a major evacuation was made for Hurricane Bertha during the peak tourist season. It was reported that 70 percent of the 80,000 to 100,000 people on Hilton Head Island heeded the daytime call to evacuate as the hurricane headed toward the Island.

The U.S. Corps of Engineers is currently performing a Beaufort County area evacuation study with a completion date by the year 2000. The transportation element of the study is expected to be available in 1998. The last evacuation study done by the U.S. Corps of Engineers was in 1985 and the model only included Beaufort County. The new analysis will extend well past Beaufort County—into Jasper, Hampton, Colleton, Allendale, Bamberg, Barnwell, Orangeburg and Aiken Counties—which is termed the conglomerate area. The SCDOT role in these analyses is best explained by the fact that SCDOT will update the computer evacuation model each year for Beaufort County's Emergency Management Department. The computer model will use either today's updated population or a projected population. While the computer model makes many assumptions in achieving an evacuation plan, evacuation times are very much a function of how it is actually managed and who specifies when an evacuation is necessary.

Figure 31: Emergency evacuation routes and issues.

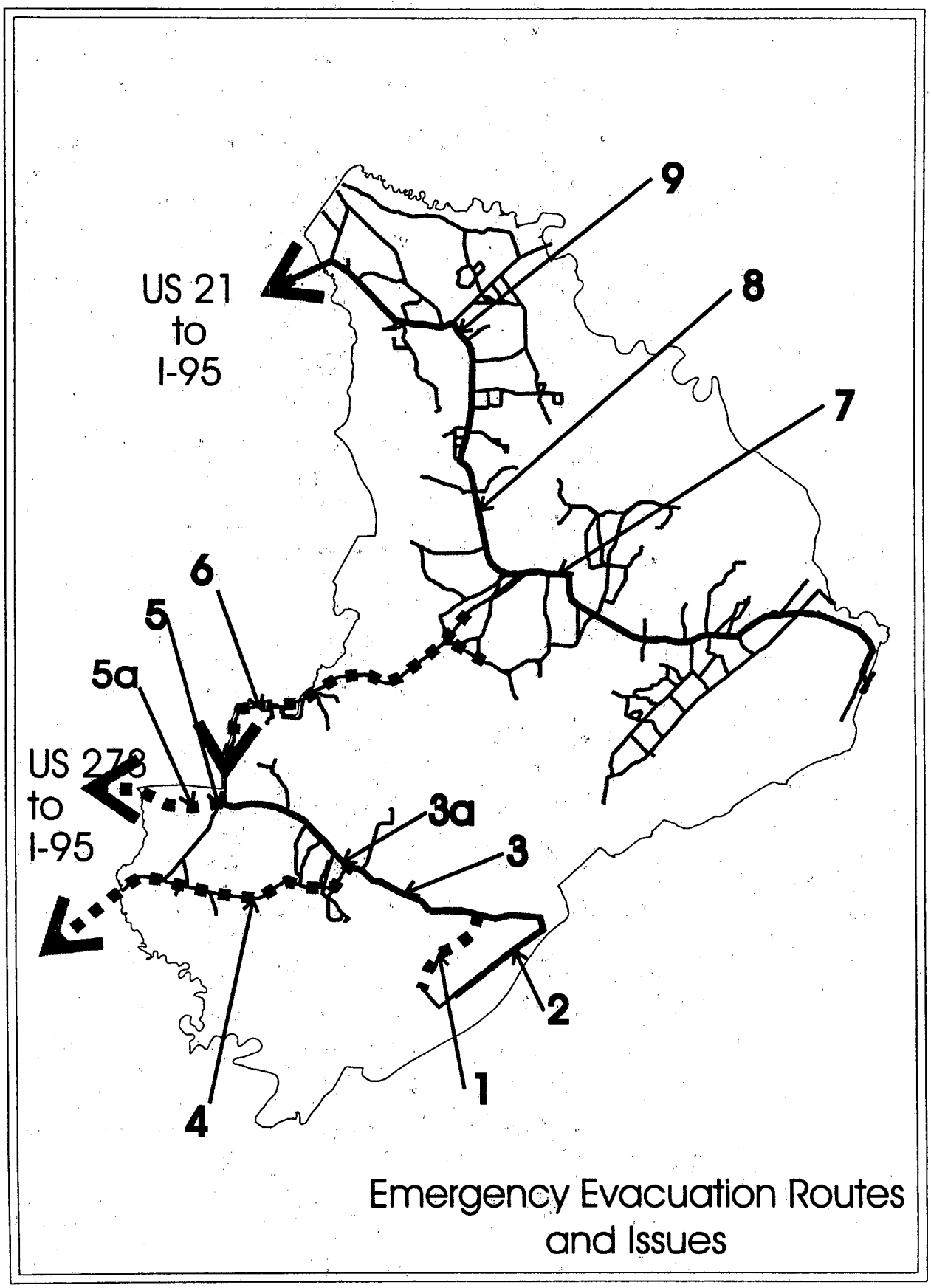


Figure 31 (Emergency Evacuation Routes) indicates that with only two evacuation routes for the coastal population—U.S. 278, which in 1997 was extended directly to I-95 and U.S. 21—there are many issues of concern.

1. Hilton Head Island evacuation/fire emergency traffic will soon be aided by having an alternative toll road corridor, in the Cross Island Parkway to reduce travel times within the island's roadway system. Tolls would be free during an evacuation. Yet even with the toll road, two existing toll road lanes would need to merge with two exiting lanes on U.S. 278 before entering Beaufort County.

2. A new Hilton Head Island signal system on U.S. 278 in Beaufort County—installed in 1996—will improve the peak period efficiency of this corridor through central control during an evacuation.

3. During an evacuation, U.S. 278 in Beaufort County between S.C. 46 and the Hilton Head Island Bridge is converted to three outbound and one inbound lane which requires significant personnel due to the wide median and frequent intersections. The two emergency exit lanes—which are normally the two westbound lanes—were built two feet higher than the two eastbound lanes to reduce the chance of high water blocking two of the three evacuation lanes.

- evacuation lanes from Hilton Head Island Bridge

  ///// median

- evacuation lane (reversed) to S.C. 46
- to Hilton Head Island lane

3a. At the U.S. 278/Burnt Church, at-grade intersection, evacuation traffic splits between S.C. 46 and U.S. 278, making this a very critical control point.

- evacuation lanes from Hilton Head Island Bridge

  ////// median

- evacuation lane; left turn to S.C. 46 (reversed)
- to Hilton Head Island lane

4. S.C. 46 is only a two-lane roadway and penetrates downtown Bluffton. A significant number of temporary personnel are needed for local traffic control.

5. At the existing grade-separated, partial interchange at U.S. 278/S.C. 170 (McGarvey's Corner), a serious constraint point is developing even with traffic utilizing the S.C. 46 corridor. This constraint has emerged due to new Sun City and Okatie Center development project traffic which will place additional demands on not only the interchange ramps but also on the U.S. 278 corridor.

5a. Complicating the situation is the fact that U.S. 278 has been extended to I-95 in Jasper County as a controlled access major arterial highway. The use of U.S. 278 extended through Jasper County will require additional personnel to direct evacuation traffic with the I-95 ramps being the next constraint point. Currently, when evacuations occur Hilton Head Island residents and tourists are assigned to the U.S. 278 corridor, and Sun City Hilton Head residents are assigned to the S.C. 170 (south) corridor.

6. With new U.S. 278 corridor evacuation capacity via the extension to I-95, and classification of U.S. 278 as a National Highway System corridor, it is possible that an upgraded S.C. 170 corridor between the City of Beaufort and

McGarvey's Corner would not exceed the U.S. 278 extension capacity for evacuation traffic. This new evacuation corridor would provide for an alternative to U.S. 21 (north), but would be practical only after it is upgraded from Broad River to U.S. 278 as a four lane divided roadway.

7. The U.S. 21 route is constrained by the two lane Woods Memorial Bridge into the City of Beaufort and the numerous signalized intersections within the City limits. The City's signal system is not centrally controlled. S.C. 802 represents a less direct alternative route across the McTeer Memorial Bridge.

8. Gray's Hill on U.S. 21 is the point of highest elevation on the evacuation roadway system and is therefore least subject to flooding; i.e., roadway closure.

9. While the four-lane divided and flush median roadway along the U.S. 21 corridor offers significant evacuation capacity—and rural intersections minimize conflict—the at-grade intersection at U.S. 17 constrains evacuation capacity with single lane U.S. 17 westbound and U.S. 21 northbound approaches. Upgrading this at-grade intersection at Gardens Corners to a grade-separated U.S. 21/U.S. 17 interchange will help to alleviate such constraints. Note on the SCDOT Functional Classification of Existing Roadways figure that U.S. 21 north of S.C. 280 is on the National Highway System as is U.S. 17. This classification will help to preserve long term corridor capacity for evacuations.

10. General evacuation issues include:

- some hotel patrons do not have their own vehicles to use for evacuation;
- nursing homes present special problems for relocating the elderly, bedridden, and hospital patients; and
- evacuation times are very much a function of how the process is actually managed, who announces the evacuation and when it is announced, and the magnitude, direction, and speed of the storm.

8.2.8 Shared Roadway Corridors

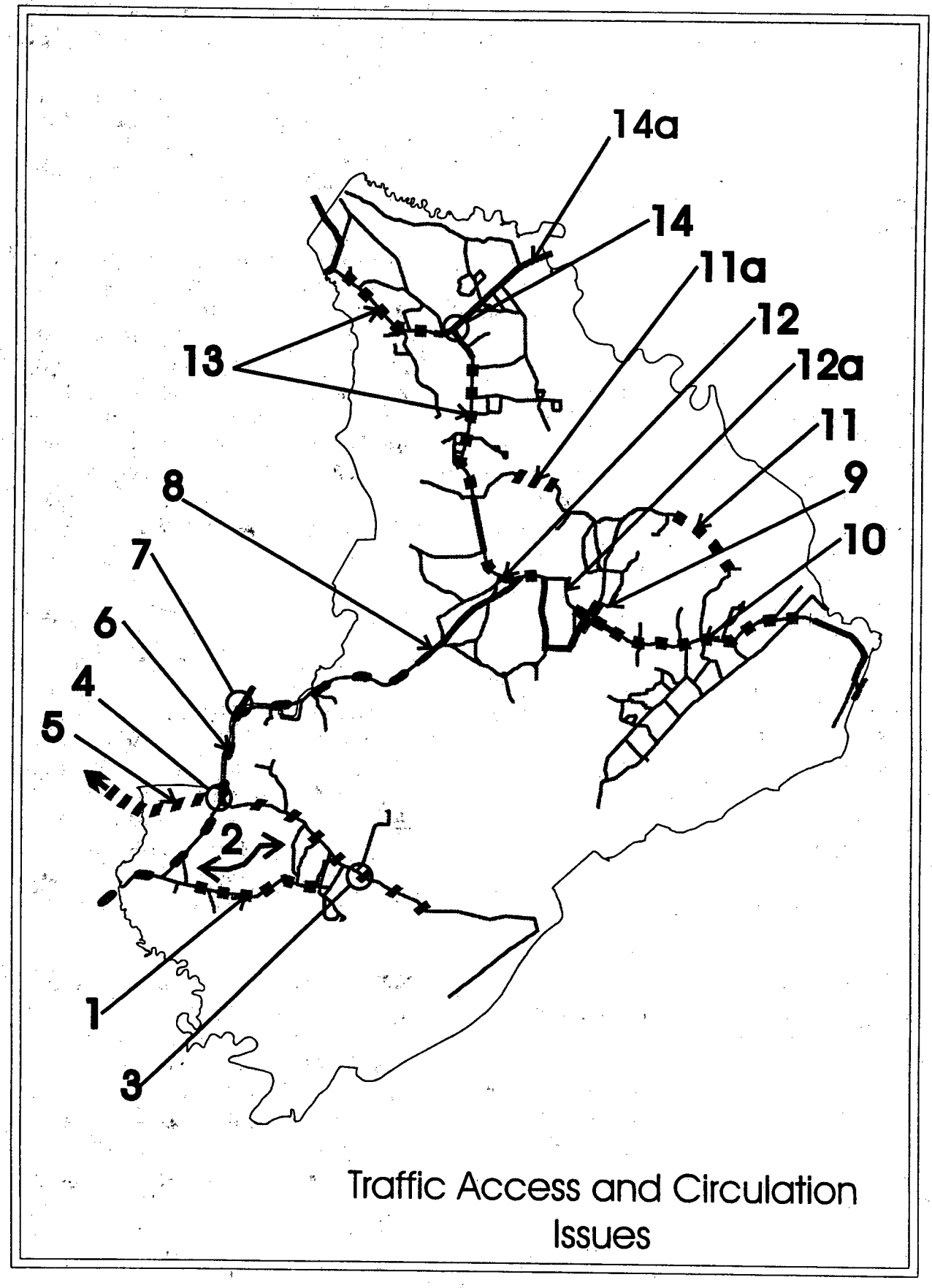
Since Beaufort County and Jasper County boundaries are located adjacent to the S.C. 170 and U.S. 278 corridors east and south of the Career Education Center, it is very important that immediate short and long term access and land use decisions be coordinated by Beaufort and Jasper County staff in addition to coordinating with SCDOT. The shared use of such important roadway corridors—as well as the very critical S.C. 170/U.S. 278 grade-separated interchange—raises the issue of coordinating land use decisions with programmed roadway improvements. If this is not done, new development traffic from one County will impact a roadway in the adjacent County and accelerate the need for roadway improvements. This shared facility situation can lead to very controversial issues if not openly discussed as part of a comprehensive planning process.

8.2.9 Traffic Access and Circulation Issues

Figure 32 (Traffic Access and Circulation Issues) illustrates the location of various traffic access and circulation issues throughout Beaufort County described below:

1. Need to carefully upgrade S.C. 46 corridor to safely serve increasing local traf-

Figure 32: Traffic access and circulation issues.



fic—assuming an alternative Bluffton Bypass is available.

S.C. 46 is a two–lane road with a tree canopy and large trees adjacent to the road which makes it difficult and controversial to widen from 2 to 3 lanes to serve increasing local traffic volumes. Alternative traffic calming techniques need to be evaluated to serve increasing local traffic and yet save tree canopied sections along this roadway.

2. Need to provide alternative S.C. 46 corridor via Buckwalter Tract through negotiations with Union Camp Corporation.

Union Camp's Buckwalter tract master plan effort represents an excellent opportunity to provide a new, controlled access highway corridor through this tract as an alternative to the existing S.C. 46 corridor. This new roadway would serve both through traffic between Savannah and Hilton Head Island, emergency evacuation traffic, and also provide a bypass to Bluffton.

This new roadway would provide a high capacity controlled access connection between S.C. 170 and U.S. 278 and is therefore a long term roadway issue which needs to be resolved in conjunction with master planning for the Buckwalter tract.

3. Need to upgrade U.S. 278 Corridor West of Hilton Head Island as an element of the National Highway System.

The AADT volumes on U.S. 278 are already approaching 30,000 vehicles per day. To avoid necessary corridor congestion, plans for widening to six lanes need to be conceptually developed between Hilton Head Island and S.C. 46. SCDOT access management techniques need to be considered on this section of the U.S. 278 corridor to minimize the number of traffic signals, and crossroad traffic; and to create local access parallel to U.S. 278. This plan should be coordinated with land use and Development Standard Ordinance revisions instituted by the County.

4. Constrained U.S. 278/S.C. 170 Interchange Capacity at McGarvey's Corner serves two very important roadway corridors.

This "partial" grade separated interchange serves both north/south and east/west corridors. Its long-term capacity is vital to safe and efficient long-term corridor access and mobility in southern Beaufort County. Site plans and traffic impact studies for new development proposed adjacent to this interchange therefore need to be carefully evaluated to insure site generated traffic does not jeopardize access to and from this very important interchange.

5. Extended U.S. 278 Corridor to I-95 is a critical Element of the National Highway System.

The extension of U.S. 278 to I-95 is a critical enhancement to Beaufort County's roadway system. However, its long term ability to serve Beaufort County's future peak period traffic is a function of how well others—Jasper County and SCDOT officials—manage access along this major arterial controlled access corridor.

Since at-grade intersections—and possibly traffic signals—may be allowed up to every 1,500 feet; this will be a controlled-access corridor and not a limited-access freeway. It will therefore have less capacity to serve future Beaufort and Jasper County traffic than a freeway even though it is part of the National High-

way System. To insure long term corridor capacity, Beaufort County should support any regional efforts by Jasper County to manage corridor access.

6. Need to conduct access management study on critical S.C. 170/U.S. 278 Corridor between Career Education Center (CEC) and McGarvey's Corner Interchange.

As the only north/south corridor in southern Beaufort County, S.C. 170/U.S. 278 requires the development of an access management plan to preserve long-term access efficiency during peak travel periods. Currently this corridor is being designed by SCDOT as a variable median width, four-lane divided roadway. Since the northern portion is shared on the west side with Jasper County, close coordination is required with Jasper County and SCDOT to achieve long term peak period travel efficiency and safety. This corridor is currently designated with an overlay district in both Jasper and Beaufort Counties. The overlay district provides guidelines for shared corridor decisions.

7. Develop plan with SCDOT and Jasper County to jointly plan future land use from the Broad River to the McGarvey's Corner interchange in an effort to secure sufficient land for construction of a new S.C. 170/U.S. 278 Interchange as appropriate near the Career Education Center intersection, and to include a future extension west to I-95 through Jasper County.

Potential new development near the intersection of U.S. 278 and S.C. 170 could limit construction of an interchange appropriate to manage anticipated traffic volumes in this area. Therefore, a planning effort should be initiated for the phased construction of an appropriate interchange south or west of the Career Education Center (CEC). In addition, this interchange design should also account for very long-term access to I-95, and should consider the land use and development patterns of the surrounding area. This would be in addition to the U.S. 278 corridor which was recently extended to I-95.

8. SCDOT design of critical S.C. 170 between CEC and Port Royal needs to respect rural entry corridor characteristics.

This corridor—which connects northern and southern Beaufort County—has a designated overlay district along its length. SCDOT is currently in the process of having this road redesigned as a variable median four-lane divided roadway. This corridor will be a high capacity highway with controlled access and it also will act as an important entry corridor between northern and southern Beaufort County. Design elements should consider rural roadway characteristics such as limiting curb cuts and strip commercial development and preserving trees, scenic views and historic features.

Public access for boating is considered to be important near the Broad River Bridge.

9. New Bypass for key Intersection on Lady's Island will enhance the Community Preservation Area.

The at-grade intersection of U.S. 21/S.C. 802 on Lady's Island represents a critical crossroads since it will need to safely and efficiently serve increasing development and tourist traffic destined for Lady's, St. Helena, Dataw, Harbor, and Fripp Islands. SCDOT plans to study a Bypass alignment between U.S. 21 and S.C. 802, which will divert through traffic

from this intersection, and thereby enhance local traffic circulation.

10. Long Term Role of U.S. 21 Corridor East of Lady's Island needs to be carefully assessed.

This corridor serves St. Helena, Fripp, Harbor, Dataw Islands, and Hunting Island State Park. Besides accommodating increasing growth traffic, this two-lane road serves fire and emergency vehicles and is the only emergency evacuation route for hurricanes. It also serves as a bicycle and walking link for neighborhoods along the corridor. More than any other corridor in the County, it mixes slow-moving local side street traffic with faster-moving tourist traffic. This mix creates potential motor vehicle conflicts which do not exist on any other corridor in the County; i.e., airport, tourist, commercial, emergency evacuation, and local traffic. Due to the complexity of this corridor situation, a study needs to evaluate various options which can be implemented to achieve both safe and efficient movements for various modes of travel and to protect the rural lifestyle.

11/11a. Few options exist for additional Lady's Island Bridge connections to Port Royal Island.

These two issues refer to two possible future bridge connections which would improve access from Lady's Island to Port Royal Island as possible alternatives to the constrained U.S. 21 corridor. Either one—if not both of these bridges—would reduce peak period traffic on portions of the U.S. 21 corridor and at the intersection of S.C. 802 and U.S. 21. Such connections would provide alternative emergency evacuation access for Lady's Island and all the areas to the east. Bridge connection 11 would cross Jack's Island as it links Lady's Island to Port Royal Island north of the U.S. Marine Corps Air Station. Bridge connection 11a would use Eddings Point Road; cross Coosaw Island and use Brickyard Point Road to move the connections to bridge connection 11.

12. U.S. 21 Strip Commercial Development in Beaufort Impacts Long Term County Access.

This heavily traveled section of U.S. 21 in the City of Beaufort already serves daily traffic volumes as high as 33,000 in 1994. The five-lane section without a median only provokes strip commercial development and excessive left turn movements. This tends to contribute to accidents and constrains long term roadway capacity for traffic moving between the City and County. Beaufort County should support any efforts by the City to re-plan this corridor to improve its long-term capacity.

12a. Realignment and upgrade of Woods Memorial Bridge impacts channel and Beaufort Historic District.

A 1994 study by the U.S. Army Corps of Engineers indicated that traffic disruptions caused by opening the swing bridge could be relieved by replacing the bridge with a fixed span on a new alignment which would require a change in the channel. Such a re-alignment would begin at the signalized intersection in downtown Beaufort's Historic District. So long as traffic delays associated with the bridge openings can be tolerated and alternatives are available via other less direct routes—or a new bridge crossing is provided—re-alignment of the Woods Memorial Bridge is not necessary. This issue will need to be discussed again when this Comprehensive Plan is updated and the peak period traffic situation and bridge crossing situations are re-assessed.

13. Develop Access Management Plan for U.S. 21 North of Beaufort as an Element of the National Highway System.

As the only north/south highway corridor in northern Beaufort County, this corridor has already been widened to a four-lane divided median section and a five-lane flush median section. In order to protect this National Highway System corridor investment and its peak period capacity, every effort should be directed to introducing coordinated access management and land use planning techniques—especially on the five-lane flush median section. County land use and zoning standards should support the discouragement of strip commercial development. The five-lane flush median section should be re-planned to introduce a raised median and discourage continued strip commercial development. This would preserve its long-term corridor capacity especially for emergency evacuations, create an aesthetic corridor, and avoid the need to construct costly alternative new highway corridors in the future.

14. Beaufort County should also encourage SCDOT to develop plans for a Grade Separated Interchange at the Intersection of two National Highway System Corridors, U.S. 21 and U.S. 17, at Gardens Corner.

This very important long-term intersection needs to be planned as a grade separated interchange before adjacent commercial development limits its design—or makes the acquisition of critical right of way too costly. With corridor access management policies applied to both the U.S. 21 and U.S. 17 corridors, it is important that this intersection be upgraded to a safe and efficient grade separated interchange.

14a. Develop U.S. 17 Corridor Access Management Plan between U.S. 21 and Colleton County.

As the critical National Highway System section between Beaufort County and the City of Charleston, access management and land use planning techniques are needed to preserve long-term roadway capacity and safety.

8.2.10 Assessment of 2020 Land Use Plan Using TMODEL2

In order to evaluate the ability of an upgraded and expanded roadway system to serve projected traffic caused by anticipated development, TMODEL2 travel demand analysis was performed as documented in Appendix 1. This analysis represents the beginning of a technical process—to be continued by County staff and coordinated with the Town of Hilton Head Island—to better understand the relationship between land use and traffic decisions. The findings documented in Appendix 1 indicate that even with the future thoroughfare plan adopted as illustrated in Figure 41, there will be potential deficiencies. In addition to preserving corridor capacity and neighborhoods, special studies need to be performed throughout the County as part of a continuing effort to provide a safe and efficient roadway system for the traveling public.

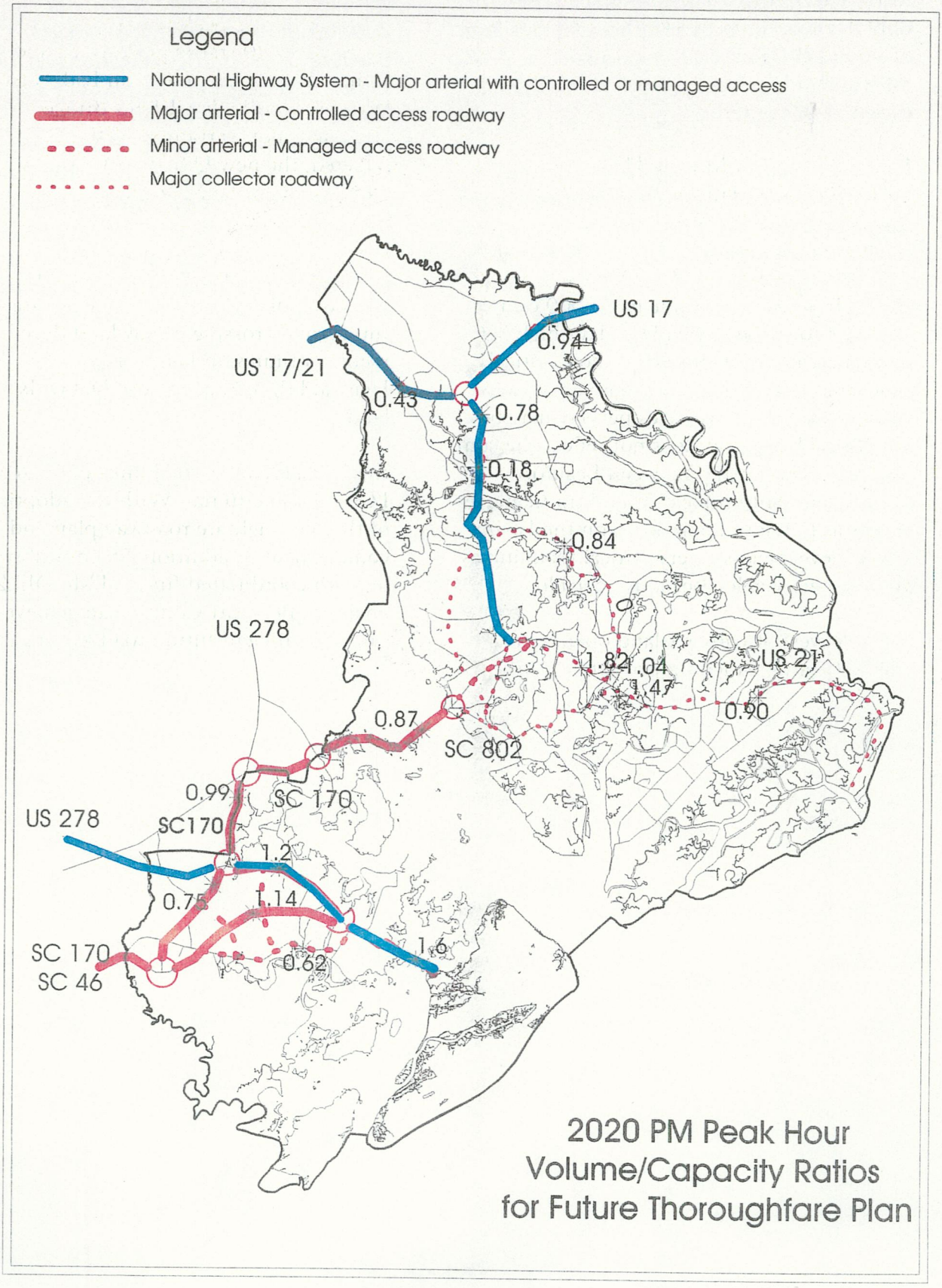
In order to document year 2020 roadway deficiencies, it was necessary to compare 2020 to 1994 daily volumes as shown in Table 34 (2020 AADT V/C vs. 1994 V/C Ratio). Roadway deficiencies were considered to occur if the Vehicle to Capacity (V/C) ratio exceeded 1.0.

This figure also compares 2020 to 1994 V/C ratios to indicate how the future thoroughfare roadway plan shown in Ap-

Table 34: 2020 AADT V/V vs. 1994 V/C ratio.

Number	Route	AADT Count Location	2020 AADT	Road-way Type	Daily Capacity At LOS C	2020 V/C Ratio	Com-Ments	1994 V/C Ratio	Com-Ment on 1994 – 2020 Change
1	SC 46	Bluffton	10,600	3-lanes	17,000	0.62		0.75	
1a	Bluffton Bypass		36,500	4-lanes divided con-trolled access	32,000	1.14	Exceeds LOS C		NEW facility
2	SC 170	South of McGar-Vey's Corner	37,700	6-lanes divided con-trolled access	50,000	0.75	Exceeds LOS C	1.47	Defi-cient LOS elimi-nated
3	US 278	East of SC 46	80,000	6-lanes divided con-trolled access	50,000	1.6	Exceeds LOS C	1.24	Defi-cient remains even with im-prove-ments
4	US 278	East of McGar-Vey's Corner	62,400	6-Lanes divided con-trolled access	50,000	1.2	Exceeds LOS C	0.60	Defi-Cient LOS elimi-nated
5	SC 170-US 278	South of CEC	49,400	6-lanes divided con-trolled access	50,000	0.99	Exceeds LOS C	1.47	Defi-cient LOS elimi-nated
6	SC 170	At Broad River	43,500	6-lanes divided con-trolled access	50,000	0.87		1.15	Defi-cient LOS elimi-nated
6a	N. E.	Loop Road	11,800	3-lanes	14,000	0.84			New facility
7	US 21	West of SC 802	30,900	3-lanes	17,000	1.82	Exceeds LOS C but sub-ject to diver-Sion To US 21 bus	1.60	Defi-ciency remains; diver-sion needs to be pro-moted
8	US 21	East of SC 802 At Lady's Island	14,100	4-lanes divided managed access	30,000	1.47			
9	SC 802	North of US 21 at Lady's Island	17,600	3-lanes	17,000	1.04	Exceeds LOS C	1.14	Defi-ciency remains but loop road alterna-tive exists
10	US 21	St. Helena at MLK Blvd	15,300	3-lanes	17,000	0.90		0.93	
11	US 21	South of SC 116	27,000	5-lanes undi-vided managed access	25,000	1.08		1.05	LOS Defi-ciencies stabi-lizes with access manage-ment
12	US 21	South of US 17	23,500	4-lanes divided managed access	30,000	0.78		0.35	
13	US 21/ US 17	West of US 21	13,000	4-lanes divided managed access	30,000	0.43		0.42	
14	US 17	East of US 21	28,200	4-lanes divided managed access	30,000	0.94		0.87	

Figure 33: 2020 PM peak hour volume/capacity ratios for future thoroughfare plan.



pendix 1, Figure 41 (Future Thoroughfare Plan) serves the projected 2020 travel demand using TMODEL2. These results indicate that only five road links exceed the rural area level of service (LOS) C criteria calculated as a V/C ratio and only two are 15 percent or more in excess of this criteria.

Figure 33 (2020 PM Peak Hour Volume/Capacity Ratios for Future Thoroughfare Plan) shows road link V/C ratios for the future thoroughfare plan network. U.S. 278—east of S.C. 46—operates at a 1.60 V/C ratio due to the high projected volume of 80,000 even if widened to six lanes divided. This high V/C ratio indicates that this is the most critical road link in all of Beaufort County. Even though the 80,000 vehicles per day may be too liberal because it does not reflect the complex interrelationship between Beaufort County and Hilton Head Island traffic movements as buildout approaches on the Island, this is nevertheless a very critical road link as there are no viable alternative corridors.

U.S. 21 west of Lady's Island operates at a 1.82 V/C ratio, which indicates that traffic diversions need to be promoted to use both the new loop road and the U.S. 21 Business route through the City of Beaufort during peak traffic periods. Based on 2020 traffic projections and assumed land development on Lady's Island a second Lady's Island Bridge crossing is not warranted. When constructed, the new U.S. 21/S.C. 802 Bypass alignment being studied by SCDOT should provide sufficient capacity on key road links. This does not mean that later (i.e. post 2020) travel demand analyses will not indicate a need to re-evaluate this second crossing if new land development continues on Lady's Island, St. Helena, Fripp, Harbor, and Dataw Islands.

In summary, a few road links now exceed LOS C ratio criteria. With the adoption of the thoroughfare roadway plan and commitment to additional technical studies with coordinated future TMODEL2 analyses, Beaufort County can achieve a safe and efficient future roadway system.

8.3 Public Transportation - Lowcountry Regional Transportation Authority (LRTA)

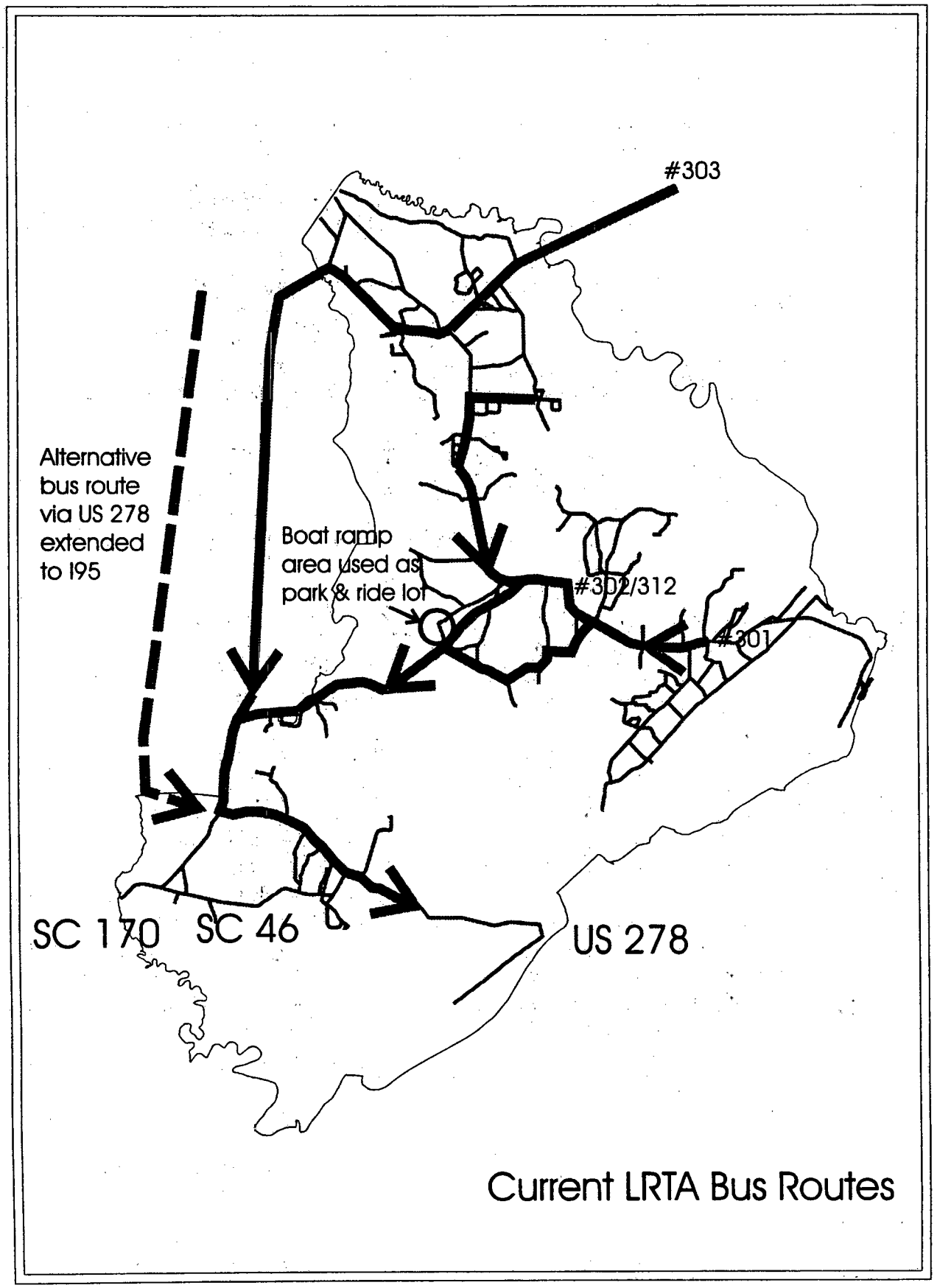
The Lowcountry Regional Transportation Authority (LTRA) provides commuter service along ten routes, which link residents of Allendale, Beaufort, Colleton, Hampton and Jasper Counties with employment opportunities on Hilton Head Island. The agency also provides limited demand response and local circulation service with Beaufort County and will soon be the Medicaid Title XIX non-emergency medical transportation provider for Beaufort, Colleton, Hampton and Jasper Counties. Current bus routes within Beaufort County are shown in Figure 34 (Current LRTA Bus Routes). Note that with the recent opening of the new highway between I-95 and U.S. 278 bus service is currently provided via an alternative I-95 route.

8.3.1 Current Transit Operations on Key Highway Corridors

As Figure 34 illustrates, LRTA operate four bus routes (303, 309, 302, 301) in Beaufort County, using U.S. 21 and S.C. 170 for daily access. S.C. 170 is critical, as it is the only means of access between Beaufort, Port Royal, St. Helena and Hilton Head Island. Emerging employment opportunities—at Sun City Hilton Head and Okatie Center—will provide new employment opportunities and significantly reduce travel times for LRTA riders who would otherwise travel to Hilton Head Island.

It should be noted that S.C. 170 is a high volume two-lane roadway south of

Figure 34: Current LTRA bus routes.



the Broad River. Until such time as this corridor is actually widened to a four-lane median divided roadway, buses providing service between north and south Beaufort County will experience increasing delays during peak hour traffic periods.

While there is no formal ridesharing (van and carpool) program in Beaufort County, a park and ride lot has been informally created in a boat ramp area on the west side of S.C. 170 on the Beaufort/Port Royal side of the Broad River Bridge.

The bus maintenance facility is located at Bluffton and a new headquarters building has been built at Bluffton. To reduce operating costs, bus drivers take the buses home each day. All eight buses arrive at the old courthouse annex in Hilton Head at approximately 7:30 AM; and leave at 5:30 PM.

8.3.2 Clemson Bus Ridership Survey

A July 1994 survey of LRTA riders by Clemson University indicated that most of the LRTA riders had jobs in the Hilton Head Island service and trade sectors. About half of the riders were employed in resort hotels or motels; and approximately 40 percent worked in other types of business such as construction or restaurants, and the remainder worked in private homes. Most riders used the LRTA service five days a week for over eleven months of the year.

The average distance from a rider's home to their bus stop was just under two miles, and almost two-thirds of the riders walked or bicycled to their stop. Riders boarded the buses as early as 4:15 AM to reach Hilton Head Island by 7:00 AM. The buses provided stops an average of about one-third of a mile from the rider's place of work. The average one-way bus trip time was seventy minutes (70) on Route 302, ninety minutes (90) on Routes 303, 308 and 309, one hundred minutes (100) on Routes 301, 310 and 312, and two hours (120 minutes) on Routes 307, 311, and 320. Once the riders left the buses, the average waiting time before starting work was 50 minutes. After work, the average waiting time before boarding a bus home was approximately one hour. The riders arrived back home at night as late as 8:00 PM. Improvements riders' would most like to have provided in the LRTA system included: 1) reductions in travel and waiting times, and 2) less crowding on the buses.

Average LRTA bus ridership per month for the Beaufort routes as compared to other routes is illustrated in Table 35 (LRTA Bus Rider Allocation by County, 1994). Table 36 (LTRA Passenger-Mile Allocations by County, 1994) indicates the rider miles for the same routes. Beaufort County routes accounted for 37.2 percent of the average monthly ridership and 28.8 percent of the rider miles in 1994.

8.3.3 1997 LRTA Comprehensive Plan

The LRTA retained the firm of Day Wilburn Associates Inc. of Atlanta to perform a study which would 1) assess overall needs in the five county service area, 2) determine the services required to meet these needs, and 3) to develop a short-term (1998-1999), mid range (2000-2002) and long range (2003-2007) action plan.

Due to the diversity of the study area, ranging from rural sections with stable or

Table 35: LTRA bus rider allocation by County, 1994.

County	Route	Average Ridership Per Month	Percent of System Total
Allendale	311	2437	11.6%
Beaufort*	301	1691	
	302	1499	
	303	923	
	308	63	
	309	1804	
	312	1857	
	Total	7837	37.2%
Colleton	320	2362	11.2%
Hampton	307	2941	
	310	2138	
	311	495	
	320	342	
	Total	5916	28.1%
Jasper*	303	708	
	308	1829	
	Total	2537	12.0%
Area Total		21089	100.0%

*Bus rider numbers for Beaufort and Jasper do not include service contract riders.

SOURCE: JULY 1994 SURVEY

Table 36: LTRA passenger-mile allocation by County, 1994.

County	Route	Average Ridership Per Month	Average Distance (Miles)*	Rider Miles	Percent of System Total
Allendale	311	2437	71	173,027	15.8%
Beaufort**	301	1691	45	76,027	
	302	1499	35	52,465	
	303	923	37	34,151	
	308	63	8	504	
	309	1804	40	72,160	
	312	1857	43	79,851	
	Total	7837		315,226	28.8%
Colleton	320	2362	65	153,530	14.0%
Hampton	307	2941	60	176,460	
	310	2138	53	113,314	
	311	495	63	31,185	
	320	342	41	14,022	
	Total	5916		334,981	30.6%
Jasper**	303	708	56	39,648	
	308	1829	43	78,647	
	Total	2537		118,295	10.8%
Area Total		21089		1,095,059	100.0%

* Average distance is the average of the distances to the Hilton Head Annex from the most distant stop and the least distant stop in-the-county for that bus route.

** Passenger-mile numbers for Beaufort and Jasper do not include service contract riders.

SOURCE: JULY 1994 SURVEY

decreasing population to urban areas experiencing explosive growth, a key issue during the study was future growth and resulting shifts in travel patterns. Provision of public transportation services under the Family Independence Act, more commonly referred to as the Welfare Reform Act, has implications on efficient vehicle utilization and service coordination. The likely designation of portions of Beaufort County as an urbanized area following the 2000 census was also considered, since that classification will permit LRTA to pursue new funding sources.

This four-phase study resulted in many important transit program recommendations for Beaufort County which are summarized below.

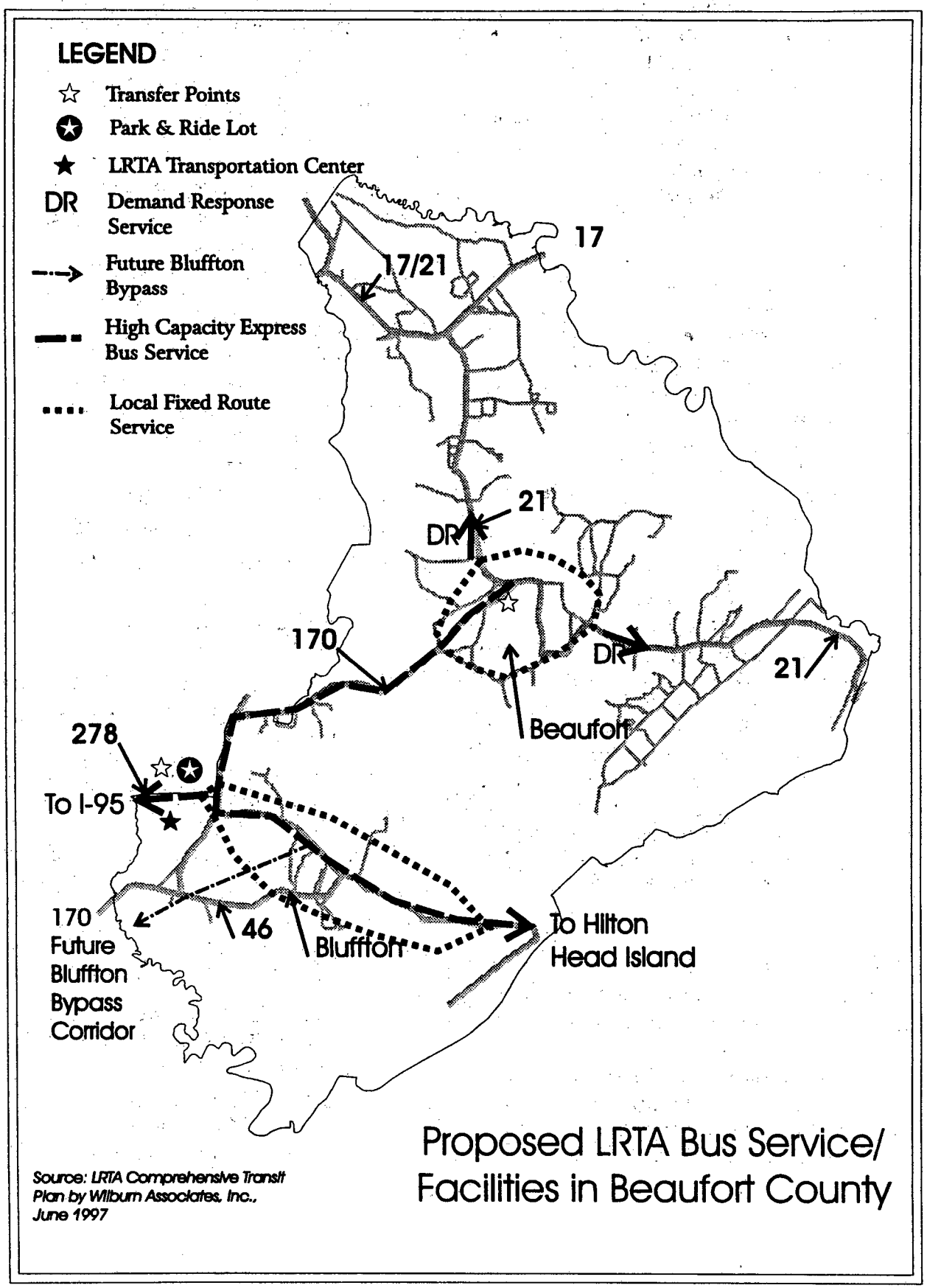
Proposed LRTA Bus Service Facilities: Figure 35 (Proposed LRTA Bus Facilities in Beaufort County) highlights plan recommendations which could greatly benefit transit service.

- *High Capacity Express Bus Corridor:* The S.C. 170 and U.S. 278 corridors were identified where full-sized buses would provide express service with a minimal number of stops at major generators and feeder bus facilities. Both corridors would terminate at Hilton Head Island. *Note:* A new Bluffton Bypass corridor—which is a recommendation developed in the Beaufort County Comprehensive Planning process—is also shown in Figure 35 because it will introduce a new high capacity express bus corridor option when completed.
- *Transfer Centers:* To serve commuters from outlying areas, transfer points were recommended as shown in Figure 35; to include the LRTA Transportation Center in Jasper County.
- *Park and Ride Lots:* A new park and ride lot has been indicated where the two high capacity express bus corridors converge. *Note:* This does not mean that if funds were available, other park and ride lots would not be constructed such as at the Broad River Bridge or at the western terminus of the Bluffton Bypass.
- *Local Fixed Route Service:* Preliminary small bus routing plans were developed to serve Sun City, Bluffton and other generators along the U.S. 278 corridor. Other local small bus service routes were developed for Beaufort and Port Royal.
- *Demand Responsive Service:* Service would be provided to outlying areas such as St. Helena and north Beaufort County along U.S. Route 21. This "dial-a-ride" service would serve off peak trips in rural areas on a demand responsive basis with 24-hour advance notice.

It should be noted that efficiency of the high capacity express bus corridor plan will be very much a function of the ability of Beaufort County to minimize unnecessary future peak period traffic congestion on the S.C. 170 and U.S. 278 corridors. The fact that these are the only two major highway corridors in southern Beaufort County to serve long range highway and transit demand is a critical issue. To avoid unnecessary congestion on these two high capacity corridors, land development access points needs to be managed and the number of access points minimized. Strip commercial development should be avoided so as to minimize unnecessary left turns along these corridors. If such corridor access management techniques are not instituted, the benefits of long term express bus service will not be achieved due to delays caused by congestion.

Since express bus service will be an important element of Beaufort County's long range transportation plan, every ef-

Figure 35: Proposed LRTA bus facilities in Beaufort County.



fort should be made to plan for the integration of express bus service along not only the U.S. 278 and S.C. 170 corridors, but also along the U.S. 21 corridor on St. Helena/Lady's Islands and the U.S. 21 corridor north of Beaufort. Such corridors should be considered high priority facilities for the receipt of available transit funds. Such action by the County should be coordinated with transit priorities in Beaufort, Port Royal and Hilton Head Island.

Alternative Fixed Guideway and Ferry Service: Figure 36 (Future LRTA Ferry-Fixed Guideway Facilities in Beaufort County) highlights plan recommendations regarding future fixed guideway i.e., light rail service and ferry service. While the report indicates such facilities are not currently feasible, such elements of a long range LRTA Plan need to be incorporated into the Beaufort County Plan. With a limited number of highway corridors serving Beaufort County, there will come a time when future travel demand will create so much congestion that these alternatives will be feasible. Note in Figure 36 that the fixed guideway corridor and the future Bluffton Bypass will converge making the area west of Pritchardville conducive to a major mixed use activity area with fixed guideway service to Savannah. For this reason long term transfer points and a park and ride lot west of Pritchardville to the LRTA Transit Plan.

Figure 37 (Future LRTA Rail Passenger Service Via Existing Rail Lines) indicates LRTA plan recommendations for future rail service.

Transit Role In Planning Process: It should also be noted that both the ferry service and fixed guideway system are very much related to land use density, which is located convenient to alternative modes of transportation such as ferry terminals and rail stations. A commitment by Beaufort County to such long-term facilities brings with it a commitment to promote ridership on such systems through land use density and access decisions.

In applying the public transportation section of the Beaufort County Comprehensive Plan, consideration should be given to but not limited to the following transit criteria in the site plan review process and highway corridor designs construction process. As Beaufort County urbanizes, these transit criteria will become more and more appropriate and will change to met local needs.

a. New Private Development Projects Should Incorporate Transit Elements

- curb radii and roadway widths suitable for buses;
- circulation patterns which separate transit vehicles from parking maneuvers;
- bus pullouts so that loading and unloading does not block through traffic;
- load/unload zones in highly visible locations close to building entrance;
- amenities for waiting patrons, such as covered shelters, water fountains and benches;
- sidewalks connecting buildings with load and unload zones and the adjacent roadway network;
- facilities for bicyclists, including paths, storage areas and shower/change facilities;

Figure 36: Future LRTA ferry-fixed guideway facilities in Beaufort County.

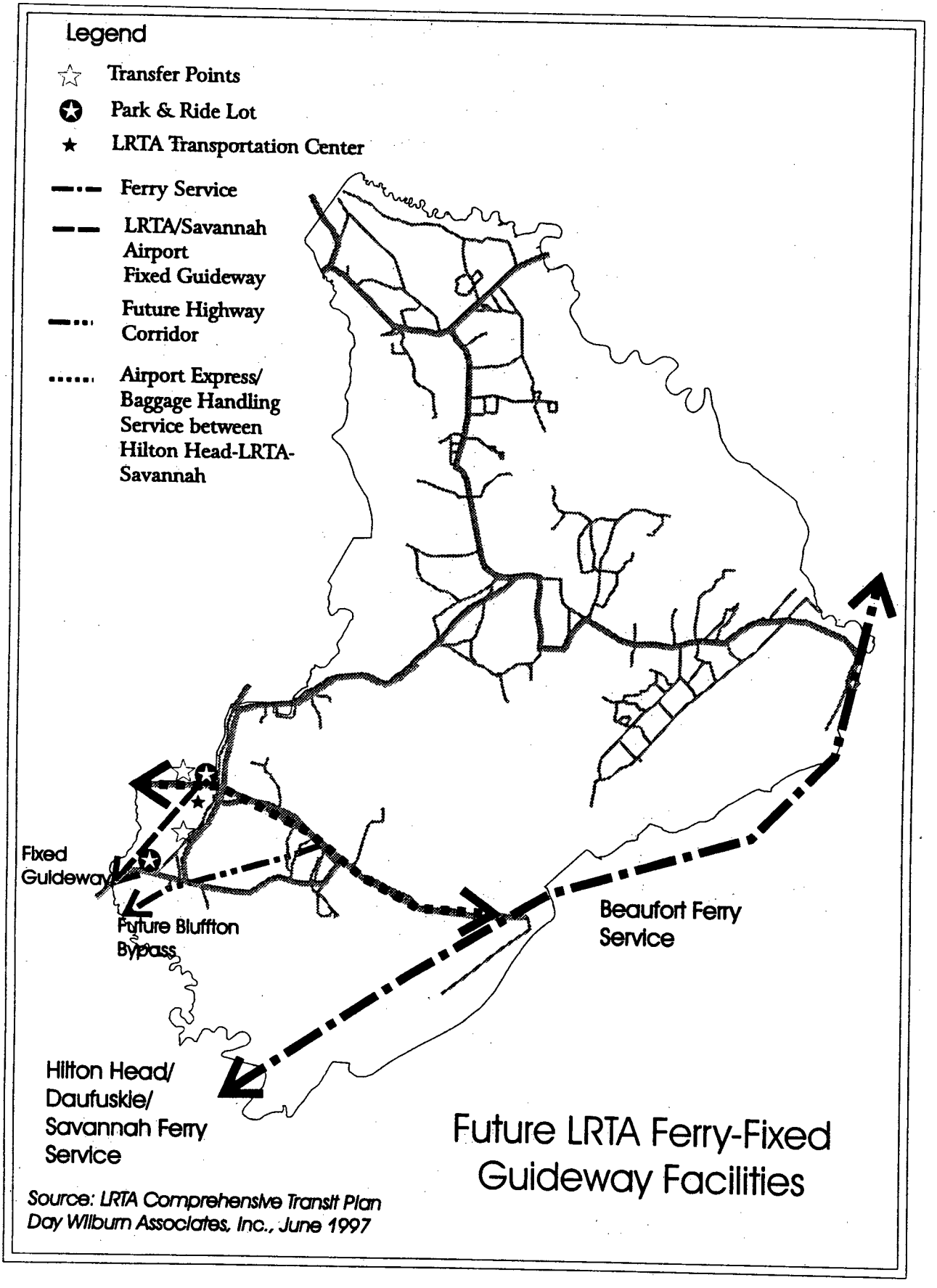
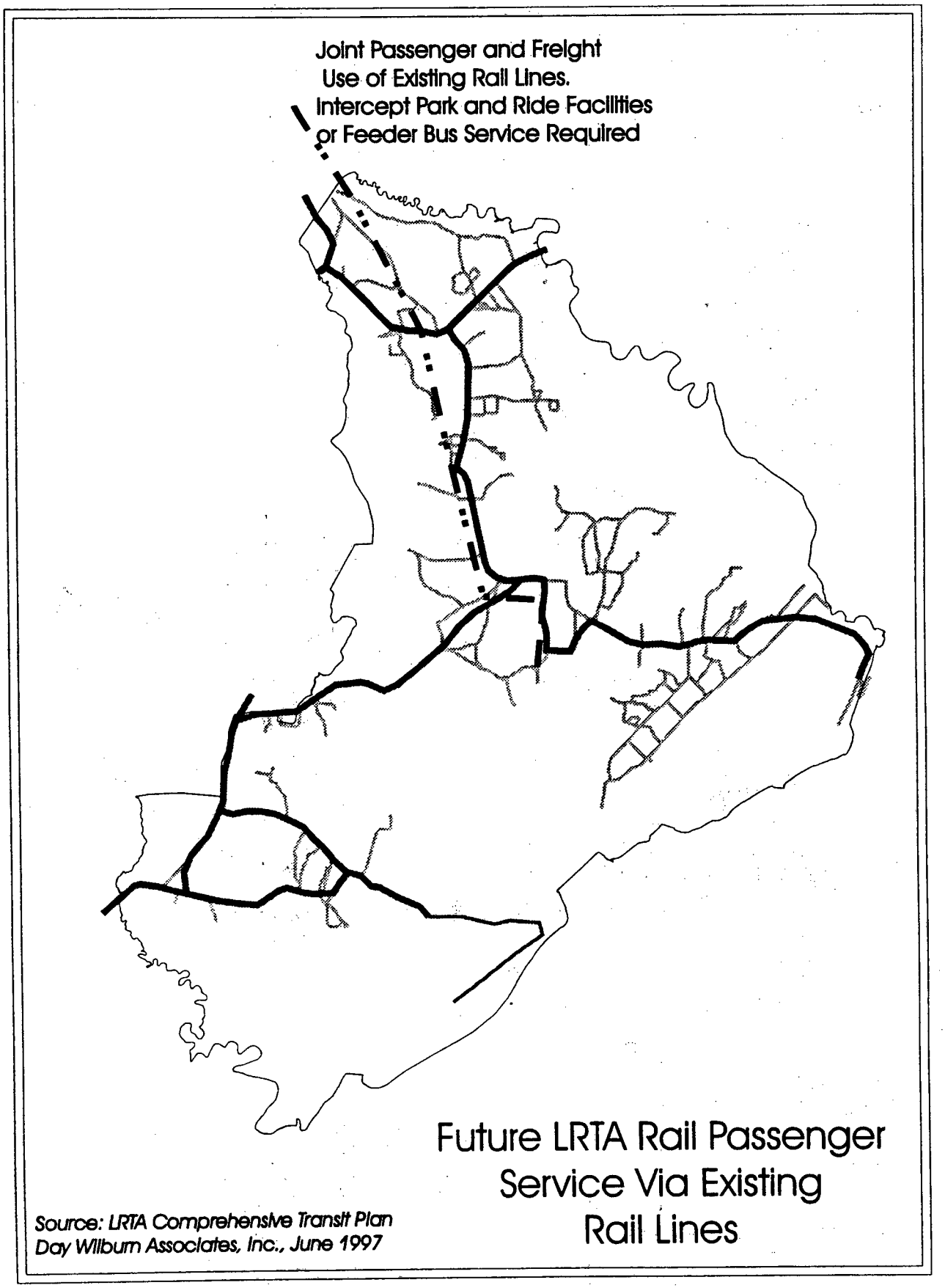


Figure 37: Future LTRA rail passenger service via existing rail lines.



- providing space for transit system information displays in highly visible locations; and
- general design elements which promote transit, bicycling and walking such as high densities and attractive landscaping.

b. Incentives To Promote Transit Utilization

To facilitate the incorporation of these and other elements, the County should establish incentives for developers, such as:

- reduced on-site parking space requirements for new developments;
- reduced set back requirements;
- higher floor area to site size ratio;
- tax incentives;
- streamlined permitting process, particularly for mixed use developments; and
- assistance in determining the market and financial feasibility of transit related components.

Transit friendly elements should also be considered in public projects such as new roadway construction or widening projects. These include:

- roadway design elements suitable for negotiation by transit vehicles on all roadways;
- on-street bus pullouts at major activity centers;
- signal preemption capabilities;
- sidewalks in developed areas to improve accessibility and mobility; and
- bicycle facilities, such as lanes, paths or improved shoulders to improve accessibility and mobility.

c. Establish Highway Corridors With Transit Service

Finally, corridors and areas should be prioritized based on current transit services, planned service improvements and anticipated development patterns. This prioritization would determine which locations receive the greatest dedication of limited resources in promoting and incorporating transit friendly elements. Suggested high priority locations in Beaufort County include:

- U.S. 278 between I-95 and Hilton Head Island;
- S.C. 170 between Beaufort and U.S. 278; and
- U.S. 21 between Beaufort and Yemassee.

8.4 Intracoastal Waterway

The Intracoastal Waterway (see Figure 27) passes through Beaufort County and therefore contributes to cruising along the east coast from Florida to New England. Beaufort area waterway related accommodations are available at the following marinas:

- Lady's Island;
- City of Beaufort, downtown;
- Dataw Island;
- Fripp Island;
- Port Royal Island; and
- Hilton Head Island.

One important issue related to the waterway is the impact that waterway traffic has on the frequency with which the Woods Memorial Bridge span is opened, thus causing traffic on U.S. 21 to stop until waterway traffic has passed. This interruption for routine waterway traffic is compounded by additional closures for mechanical problems or barges hitting the bridge. In effect, the two lane Woods Memorial Bridge operation and increased waterway traffic related to population growth in the area will lead to more frequent bridge span openings and possibly more bridge accidents or mechanical failures. A 1994 study by the U.S. Corps of Engineers indicated that a fixed span bridge could be built on a new alignment. If bridge span openings and related traffic impact issues continue to occur and conditions worsened due to increased traffic volumes, they can be discussed again when this Comprehensive Plan is updated.

A second issue raised at public meetings and related to the Intracoastal Waterway is the creation of a Bypass waterway to the east to allow through boats to avoid the Woods Memorial Bridge during the peak boating season.

8.5 Railroad Facilities

Beaufort County's closest passenger rail service is AMTRAK which runs two trains daily between Savannah and Charleston. The AMTRAK station is located in Yemassee, almost 30 miles northwest of the City of Beaufort via U.S. 21.

The only active rail facility in Beaufort County is the CSX freight line which extends from Yemassee to the port at Port Royal (see Figure 27). Increased port activity will place more emphasis on this spur line from Yemassee. Historically, cargoes have ranged from bananas, frozen produce, clay slurry, and timber products. In 1993, 62 vessels were served but with more new customers and new ships expected, there is a potential for the creation of long term industrial and warehousing development along this spur line. Increased rail line activity may create a problem since the rail line is so close to the U.S. 21 highway corridor just south of the U.S. Marine Corps Air Station. Roadway widening may be constrained by the rail facility within this section of U.S. 21.

If this rail line is ever abandoned it is important that the right-of-way be utilized for other modes of transportation; i.e., bikeway, roadway, future light rail or bus-way.

Existing and planned low density development patterns along the CSX freight line are not conducive to passenger rail service linking residential areas in the north to Beaufort, Port Royal and Lady's Island. In addition existing and planned development densities are also low making the feasibility of shared passenger/freight rail service in this corridor very unlikely in the foreseeable future. Nevertheless coordination between LRTA's Comprehensive Transit Program and Beaufort County's Economic Development Program will insure that this existing rail corridor can be effectively utilized in the future to enhance economic development activity in nearby industrial parks with direct access to the Port Royal Ports Authority facilities. Rail passenger service on this corridor would require both public and private financial support because of the financial risks of providing such service in the immediate future.

8.6 Power Line and Abandoned Railway Right of Way

A very important power line right-of-way is located in southern Beaufort County (see Figure 27). Since this right-of-way extends from S.C. 170 through the vacant Union Camp Buckwalter tract and then east along the U.S. 278 corridor toward Hilton Head Island, it represents an excellent opportunity for building a parallel roadway system adjacent to this right-of-way with crossroads traversing the power line. Shared and coordinated power line right-of-way is complex but has been achieved in other jurisdictions.

In addition, the abandoned railway right-of-way West S.C. 170 at Pritchardville has the long term potential for a light rail corridor linking the LRTA Transportation Center at McGarvey's Corner to the Savannah Airport. Higher land use in this corridor may make light rail feasible by 2020. Higher density development in key locations can make light rail service more financially feasible, probably as a public/private partnership.

8.7 Lady's Island Airport

Access to the airport is through the City of Beaufort across the Woods Memorial Bridge via U.S. 21 or through the Town of Port Royal via S.C. 802. Unlike the other County airport located on Hilton Head Island, this airport serves only private planes.

As the area population increases, airport expansion issues have been raised, such as the following:

- Extending the runway to the south would require relocating U.S. 21 (closing the section of U.S. 21 adjacent to the runway and building a new section of U.S. 21);
- Extending the runway to the north will probably impact the wetlands and require mitigation;
- Impact of expansion related air traffic on local residents;
- Benefits to the City of Beaufort and Town of Port Royal of having commuter airline service;
- Related capital improvements include a new parallel taxi-way and new instrument approaches;
- Long term peak period access delays to/from the airport via more heavily traveled S.C. 802, U.S. 21, and U.S. 21 Business.

It should be noted that the Lady's Island airport may not be as convenient to emerging growth areas in the future as traffic volumes increase on highway corridors which provide airport access.

8.8 Ferry and Water Taxi Service

Both Daufuskie and St. Helena Islands have significant access constraints for residents who wish to work on Hilton Head Island. One means of enhancing employee access is to utilize ferry service.

Ferry service to many other areas throughout the County may also be feasible as well as beneficial to many segments of society.

8.8.1 Daufuskie Island

This 5,145 acre island is west and adjacent to Hilton Head Island. Since there is no roadway bridge connecting the two islands, all construction equipment and supplies arrive by barge. Residents, school children and employees utilize existing ferry service to reach Hilton Head Island or private boats to reach the mainland and Hilton Head Island.

Three types of ferry operations provide access for Daufuskie Island:

1. Tourist Ferries: Two tourist ferries operate seasonally and charge fares significantly higher than what could be regularly afforded by many of the Daufuskie Island residents.

2. Private Resort Ferries: Three major resort communities operate ferries for property owners, school children, medical access, and guests. There has been some accommodation of the other Island residents if a family member works at the resort.

3. Public and School Ferry: This ferry was originally set up to transport school children to Hilton Head. It now carries the general public also during weekdays and on a reduced schedule when school is out of session. It is funded under contract by Beaufort County, the County Board of Education, and the South Carolina Department of Transportation. The ferry boat leaves Haig Point at 6:30 A.M. and returns at 3:30 P.M.

In the past, new development of this barrier island has not been encouraged. While bridge access is still not desired,

there has been recent interest in Island residents, business, and developers pooling resources to enhance Island accessibility and to benefit from the 30,000 to 40,000 annual visitors from Savannah and Hilton Head Island. As new employment opportunities emerge on the mainland in Beaufort County, access needs for Daufuskie Island residents and businesses will shift—to some extent—to these new opportunities which are significantly more distant than Hilton Head Island from Daufuskie Island.

8.8.2 St. Helena Island

St. Helena Island—unlike Daufuskie Island—is connected to the City of Beaufort by a swing span bridge and to the Town of Port Royal by a high level bridge with bike lanes. A large number of these St. Helena Island residents commute daily to hotel, food service, landscaping or other jobs on Hilton Head Island. The St. Helena Island residents have the option of either driving, car pooling or riding on the LRTA bus. This work trip can be very time consuming due to peak period congestion—especially during the peak tourist seasons.

St. Helena is located directly across Port Royal Sound from Hilton Head Island—a distance of about 1/10th that of land travel. Ferry service coordinated with bus transit would greatly shorten travel distances and eliminate the need for private vehicle use and associated parking. As with Daufuskie Island residents, new employment opportunities for St. Helena residents are emerging on the mainland along U.S. 278 at McGarvey's Corner. This will make even more employment opportunities available with shorter work trip travel times than currently exist between St. Helena and Hilton Head Islands.

8.8.3 Passenger Ferry Feasibility Study

In order to assess the feasibility of passenger ferry service for the residents of these two islands, in 1995 SCDOT retained Wilbur Smith Associates to evaluate three options with the following conclusions:

Option 1: Continue Existing Service

It was recommended that the existing service continue at a minimum because it at least provides some access to Daufuskie Island residents. However, it is so limited in its schedule that it is ineffective in providing regular access especially for Daufuskie Island residents who want to work off-Island.

Option 2: Regional Ferry Service

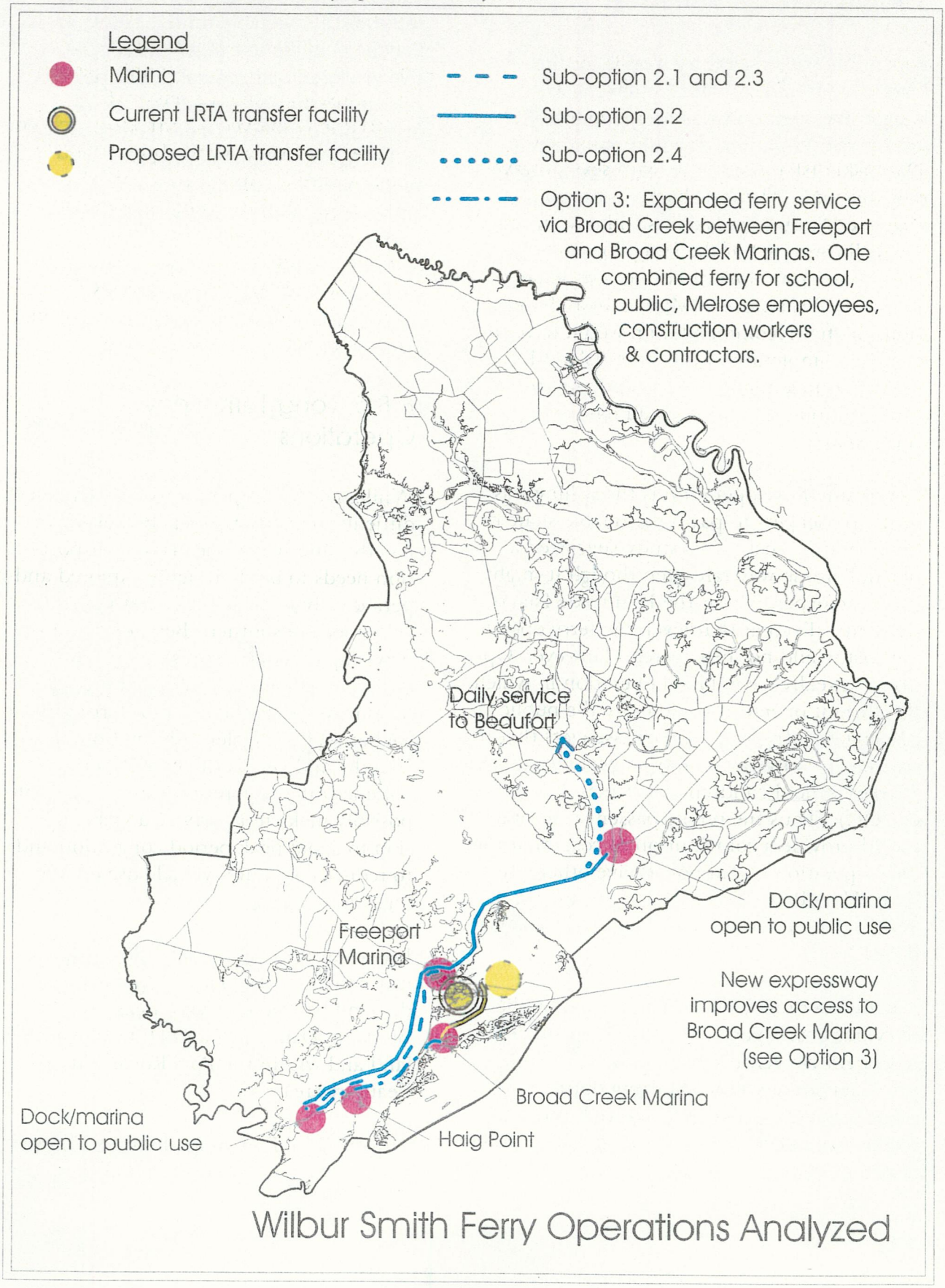
The creation of a regional public ferry system is an expensive solution to the Daufuskie and St. Helena residents travel dilemma because it would require the purchase of additional ferry boats even though there appears to be sufficient vessel capacity with existing ferries (see Figure 38: Wilbur Smith Ferry Operations Analyzed).

Option 3: Expanded Existing Service

It was recommended that steps be taken to expand ferry service to Daufuskie Island using the existing ferry operator and to provide supporting ground public transportation on Daufuskie Island and Hilton Head Island.

In addition, Daufuskie Island ferry service was evaluated.

Figure 38: Wilbur Smith ferry operations analyzed.



Source: Daufuskie Island and St. Helena Island Public Transportation Needs Assessment Study and Plan. May 1995. Prepared for SCDOT by Wilbur Smith Associates

8.8.4 Daufuskie Passenger Ferry Service

Expanding passenger ferry service for the Daufuskie Island residents under the existing Haig Point operation was recommended for further consideration. It could provide the Daufuskie Island residents with several travel time options. The drawback to this option is that the Daufuskie residents will have to wait until all (or most) of the Haig Point non-property owner ferry operations are consolidated out of the Broad Creek Marina area. In addition, the full recommendation would have to wait for completion of the Cross Island Expressway since the ferry schedules and the Hilton Head bus schedules would have to be coordinated.

Key to any ferry operation is the willingness of the passengers to pay a reasonable share of the operating cost. This study suggested a five dollar one-way fare even though it might seem too expensive for the Daufuskie Island residents. Even at that level, the ferry operating cost would not be covered. However, Option 3 is really a combined operation in which the current operator would carry the public passengers along with other passengers that it has to carry anyway (company plantation employees, school children, construction workers, etc.). Thus the public passenger revenue would provide a contribution to costs that the ferry operation would not receive otherwise. Since Haig Point's operating costs are not known, the actual fare would have to be negotiated.

The manner in which the school and public ferry has been operating is a good example of a cooperative venture between government and the private sector. Starting out as a school ferry, the operation evolved into a contractor-operated public ferry through the sponsorship of Beaufort County and the South Carolina Department of Transportation. The operation was limited in scope because of the available funds. However, it may be possible to extend the cooperative venture to all general public passengers to use the same vessels as the plantation employees, contractors, school children, property owners/guests, and even other plantation operators. A recommended Wilbur Smith implementation schedule was developed for a consolidated ferry operation with emphasis on the need to relocate the LRTA transfer facility in 1999 near the Hilton Head schools.

8.8.5 Long-Term Ferry Operations

While new ferry operations may remain difficult to justify financially, nevertheless this alternative means of transportation needs to be thoroughly explored and periodically re-evaluated. With new development in southern Beaufort County new employment and residential construction will emerge which will reduce in some respects the need for ferry service between St. Helena and Hilton Head Island. And yet, as the U.S. 278 traffic volumes intensify, future travel times will possibly make ferry service a viable option to avoid peak period congestion and to reduce commuter vehicle use on key highway corridors.

It may also become feasible to institute water taxi service to accommodate lower demand between activity areas such as Bluffton, Daufuskie, and Hilton Head Island and within the Port Royal, City of Beaufort area.

The 1997 LRTA Comprehensive Transit Plan recommends consideration of future

water taxi service linking Beaufort, Port Royal, Hilton Head Island, Daufuskie Island and Savannah. Ferries currently operate to many of these locations, but are operated by resorts or as excursions catering to tourists. While visitors would constitute a large percentage of a waterborne public transit service, it must be reliable and economical for use by local residents for commuting, shopping and other trip purposes.

Due to its nature, water taxi service is probably feasible only with private sector participation or operation.

8.9 Walk and Bicycle Facilities

Separate bicycle and pedestrian circulation facilities such as walking trails and bikeways essentially do not exist in Beaufort County except for the excellent facilities on Hilton Head Island. The Town of Port Royal recently won a South Carolina Governor's Council Community Award for its walking trails and boardwalks. Future Town plans call for a four mile trail to connect old Port Royal with the McTeer Bridge area. This effort by the Town and the program on Hilton Head Island illustrate how the County could plan a coordinated walk/bicycle system which would expand the Port Royal as well as City of Beaufort facilities to achieve a more comprehensive network. Such a system of safe, continuous and convenient walk and bicycle facilities would provide a viable alternative to motor vehicle travel on local streets and highways as well as being a major recreational amenity. With additional support facilities— such as employee showers and bike racks for storage—such a system in the moderate Lowcountry climate would provide an alternative to the use of motor vehicles for trips to work. The provision of such facilities—especially between established and planned communities— promotes tourist, recreational and work trips and thus eliminates short motor vehicle trips from local roads. The Countywide system should be coordinated with state bike routes as well as LRTA's Transit service and park and ride facilities.

8.10 Public Beach and Boat Landing Access

The principal public beach except for the public beaches on Hilton Head Island is the 5,000 acre Hunting State Park located 16 miles east of the City of Beaufort. Facilities such as family campsites and cabins are provided. The only access to Hunting State Park is two lane U.S. 21 which requires that beach traffic pass through Beaufort, Port Royal, Lady's Island, and St. Helena Island. Beach traffic is therefore added to local and tourist traffic which also must use this same corridor. As the regional and permanent local population increases, beach visitation will increase creating more vehicular traffic on U.S. 21.

Boat landings are currently dispersed throughout the County adjacent to S.C. 170, or with direct access to similar corridors. As corridor traffic volumes increase, safe ingress/egress needs to be evaluated or the boat landings will need to be relocated. See the Parks, Recreation and Open Space Plan for the location of existing boat ramps accessed via major highway corridors.

8.11 Park-and-Ride Lots

Park-and-ride lots are usually located at the intersection of key crossroads or grade separated interchanges to allow drivers and passengers to park their car and transfer to another mode of travel—usually public transportation. It may also be a location where commuters congregate to establish car pools or van pools.

While no specific County or SCDOT park-and-ride lots exist along key commuter corridors such as S.C. 170 or U.S. 278, there is currently informal park-and-ride activity at the Broad River bridge boat ramp on S.C. 170. As corridor traffic volumes intensify during peak travel periods, a program for such facilities needs to be developed and coordinated with the LRTA bus service and ridesharing programs.

The 1997 LRTA Comprehensive Transit Plan recommends important park-and-ride lots and related facilities, which would support Beaufort County patrons. In particular, a Transportation Center west of McGarvey's Corner on U.S. 278 to serve express/local bus routes and a park-and-ride lot at the I-95 Yemassee interchange for fixed bus route service among other locations.

Beaufort County may also want to work with LRTA regarding a future park-and-ride lot southwest of Pritchardville were light rail service ever instituted along the power line right-of-way.

Transportation

Policies

- Policy 1: Adopt New Roadway Classification and Systems Map and SCDOT Right-of-Way Policy.
- Policy 2: Adopt and implement a Comprehensive Future Thoroughfare roadway plan.
- Policy 3: Adopt a policy for bikeways and trails for walking coordinated with the Parks and Recreation Plan.
- Policy 4: Actively participate in the implementation and planning for LRTA efforts to improve public transportation.
- Policy 5: Encourage waterborne transportation as an alternative mode of future transportation policy, and coordinate with LRTA.
- Policy 6: Adopt a policy to monitor federal programs: ISTEA, NHS, and funding sources.
- Policy 7: Commit to a traffic calming program for roadway projects.
- Policy 8: Commit to coordinating land use planning decisions with access decisions.
- Policy 9: Promote a policy of regional cooperation regarding comprehensive planning.
- Policy 10: Create a coordinated emergency evacuation and transportation planning program.
- Policy 11: Establish a County transportation planning program.
- Policy 12: Initiate administrative/staff actions to develop a transportation planning program.

Roadways

The capacity of Beaufort County's roadway network is being increasingly threatened by traffic related to emerging new mainland and adjacent Jasper County development. In some counties—which have extensive Interstate highway systems and expandable major arterial highway systems—the additional traffic from such growth can be accommodated by the construction of new roads and interchanges. Beaufort County unfortunately has no Interstate or limited access highway system and a very constrained major arterial highway system due to the Lowcountry water features.

This means that it is difficult and costly to construct new highway corridors. Some existing corridors will need to be upgraded using access management techniques into controlled access facilities approaching National Highway System capacity. In other words, Beaufort County will need to take its emerging transportation problems very seriously as land use decisions are being made. In addition, critical shared roadway corridors like U.S. 278 and S.C. 170 present enormously complex decisions not only for (a) land use type/density; (b) control of strip commercial development; and (c) roadway funding but also for emergency evacuation plans. Making the situation even more critical is the difficulty for an alternative transportation system such as bus service to serve the movement of employees among such dispersed employment opportunities. The short-range dependency upon a non-freeway highway system could also impact economic development opportunities.

In summary, the roadway system will be the dominant mode of travel in Beaufort County for the foreseeable future. While alternative modes of travel such as improved bus service will emerge, it is most likely that the magnitude of future transit ridership will do little to reduce future peak period traffic congestion. This is not to say that transit bus service is not a critical element of the future transit system, but rather that it should not be considered as a means for significantly reducing peak period traffic congestion in such a rural high growth County.

In addition to having to place so much emphasis on the roadway system to serve resident as well as tourist travel demand, the County lacks an administrative process for monitoring the degree to which peak period traffic congestion is occurring at key intersections and on key road

links. This has occurred for two basic reasons:

- no traffic impact studies are required as part of the developer site plan submissions process; and
- transportation planning has not yet been designated as a staff position in the Engineering or Planning Departments.

As peak period and tourist seasonal traffic problems occur more frequently on the mainland and especially along U.S. 278—the only corridor serving Hilton Head Island—the need for both traffic impact studies, technical transportation planning staff, and related programs is vital if a safe and efficient transportation system is to be in existence 20 to 30 years from now. In order to insure that emerging transportation problems do not degrade future County-wide access and mobility—especially for emergency evacuations—the following policies and strategic action items are recommended.

Policy 1: Adopt New Roadway Classification and System Map and SCDOT Right-of-Way Policy.

In order to better understand the interrelationship of various roadways throughout Beaufort County, a revised existing roadway classification system was developed as shown in Figure 39 (Functional Classification Future Roadway System). Such a roadway system firmly establishes the role of key roadway links and intersection interchanges; and, when updated, over time it will aid in decisions regarding such issues as new traffic signal system installations; shared roadway corridors; and access through Jasper County to the I-95 corridor. This global County-wide perspective is important for making short term decisions which may have long term implications. As new roadway system elements such as programmed roadway improvements, designated truck routes, and scenic roads are adopted, such information can be incorporated into this plan.

The functional classifications utilized in Figure 39 conform to the rural classifications and design criteria contained in the South Carolina Department of Highways and Public Transportation Highway Design Manual dated September, 1991.

As a general guideline, the following right-of-way should be provided for new and upgraded roadways.

- two and three lane major collector roads: 80 to 110 feet;
- three lane minor arterial roads: 90 to 110 feet;
- four lane divided minor arterial roads: 110 to 120 feet;
- four lane divided major arterial roads: 150 to 230 feet; and
- six lane divided major arterial roads: 150 to 170 feet.

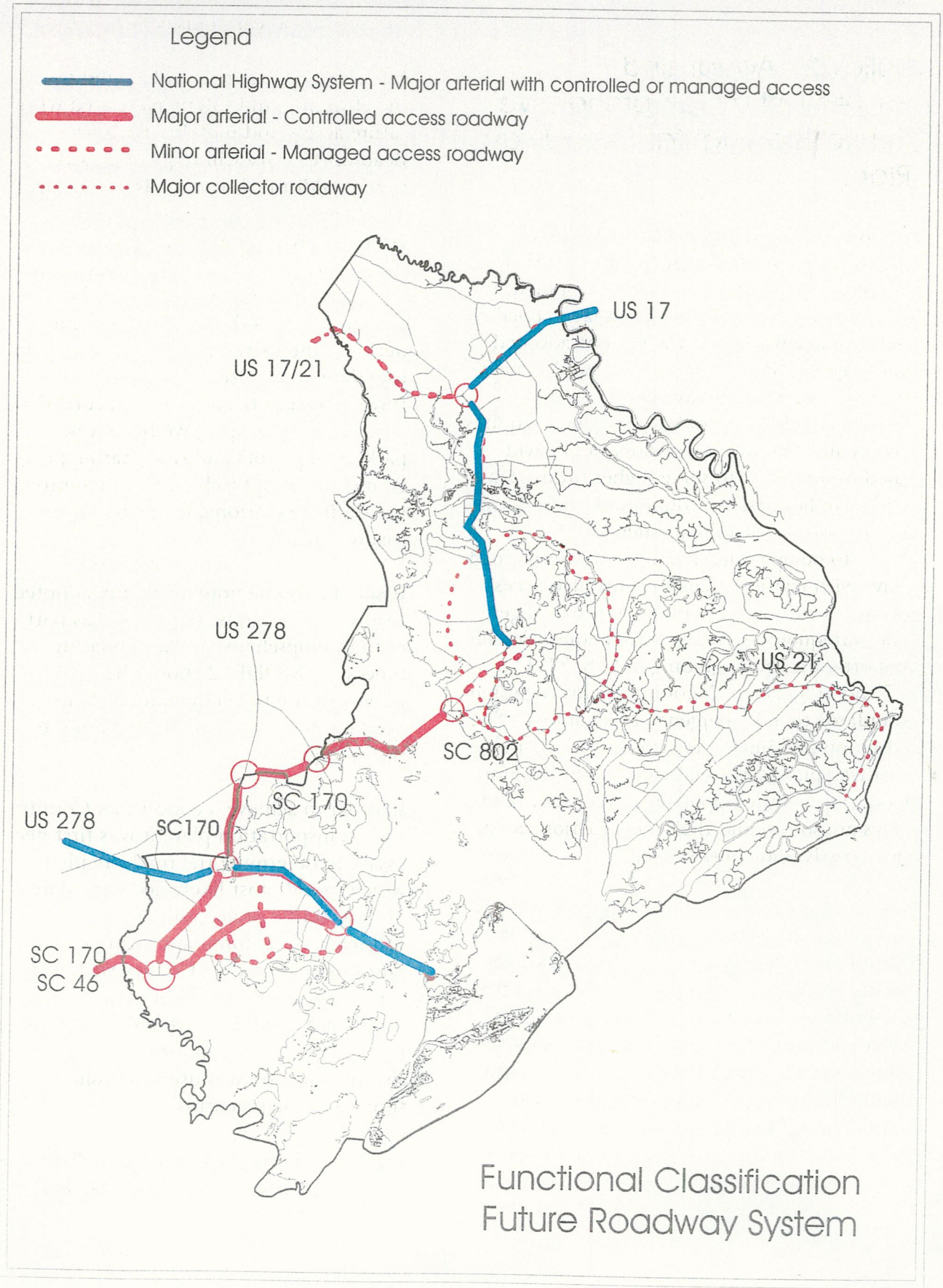
Actions

☑ *1.1 Adopt a County-wide roadway functional classification system.*

☑ *1.2 Maintain an official County-wide Roadway System Map.*

The County should maintain an official County-wide roadway system map, updated each year, to establish a basis for technical discussions with SCDOT adjacent county officials/staff; and residents. *Note:* This map is not intended to be an

Figure 39: Functional classification future roadway system.



official map per South Carolina planning legislation.

Policy 2: Adopt and Implement a Comprehensive Future Thoroughfare Roadway Plan.

In order to insure that sufficient long-term highway capacity is available when land is approved for development or redevelopment in 20 to 30 years, it is important that a conceptual County-wide roadway plan be adopted and implemented. This will insure that new roadway corridors are available for construction when adjacent land development requires access and that other corridors can be widened or upgraded to serve higher future daily and peak-hour traffic volumes. It will also allow important corridors—such as S.C. 170—to be upgraded from major arterial roadways with traffic signals to controlled access corridors with grade-separated interchanges and infrequent at-grade intersections. Equally important is the upgrading of U.S. 21, U.S. 17 and U.S. 278 to National Highway System standards to aid emergency evacuations. The adoption and implementation of a long-range roadway plan is especially critical in Beaufort County since the opportunities for new roadways are so few and their construction can be both costly and controversial.

By adopting a future roadway plan, residents, landowners, developers, and neighboring County officials will realize that the Beaufort County roadway system needs to be upgraded as traffic generated by new development places additional demands on the transportation system. It is also important to have efficient highway corridor access during peak commuter and tourist periods because regional and local transit (bus) service will need to use the same highway system. In other words, if highway corridors become congested, other travel modes such as buses, van pools, and car pools will be delayed.

It is also important to understand that the efficiency and safety associated with future access and mobility within Beaufort County will require construction of additional new roads and bridges. The benefits of a complete and integrated roadway system can only be realized when future travel demand created by new development is safely and efficiently accommodated. As development densities intensify in the County and surrounding areas, alternative modes of travel—such as fixed route and rural dial-a-ride demand responsive bus service, park-and-ride lots and ride sharing programs—will need to be integrated into the traffic operational elements of the roadway plan.

It should also be noted that any adopted roadway plan can be re-assessed as part of the Comprehensive Plan updating process. TMODEL2 should be used to project future travel demand and the need for new or modified road links as time progresses.

In order to achieve a conceptual County-wide transportation plan, it was first necessary to determine the roadway plan which would most likely accommodate 20-year traffic projections since highways will remain the dominant form of transportation in Beaufort County within this time frame. Since the County intends to install and maintain TMODEL2 for future travel demand and roadway analysis, this software was used to evaluate three land use scenarios.

Figure 40 (Future Thoroughfare Plan) illustrates recommended elements of the

Beaufort County Thoroughfare Plan for the future. This plan recognizes the need to account for additional year 2020 road links and river crossings by recommending a northern loop road around the center of Beaufort in combination with a new bridge to Lady's Island. While land is still available for this loop road, it is important that it be included in the Comprehensive Plan—especially for additional emergency evacuations from Lady's Island and St. Helena Island. The loop road concept also will relieve future traffic impact at the very critical at-grade intersection of U.S. 21 and S.C. 802 on Lady's Island. In addition, the S.C. 802 corridor on Lady's Island should receive traffic calming techniques to reduce traffic speeds via this new loop route. Table 37 prioritizes technical study elements of the thoroughfare lane. Table 38 lists needed highway improvement projects.

Another new roadway is the major arterial through the Buckwalter Tract, with a directional partial interchange on U.S. 278 to aid with emergency evacuation traffic. This new road link also provides an alternative to the very critical S.C. 170 U.S. 278 interchange at McGarvey's Corner.

Very long-term access between the S.C. 170/U.S. 278 interchange south of the CEC and the I-95 corridor should also be planned in conjunction with Jasper County to account for the time when the new U.S. 278 extension to I-95 becomes too heavily traveled. This future I-95 access route would also benefit long-term emergency evacuations.

b) Perform Additional Sub-Area Studies

Seven important technical studies are recommended to further refine technical elements of the Comprehensive Plan. The additional details provided by such studies are critical because they will help to insure that plan goals are achieved; especially along key highway corridors.

Study A:

Monitor SCDOT study of re-alignment options for S.C. 802 and U.S. 21 to:

1. Create an alternative corridor for through traffic on U.S. 21 to the south via S.C. 802 between St. Helena and Port Royal islands.

2. To enhance access to the Lady's Island Village Center.

This re-alignment will better facilitate peak period traffic being diverted to S.C. 802 and U.S. 21 business and therefore reduce future congestion in the vicinity of Lady's Island Village Center.

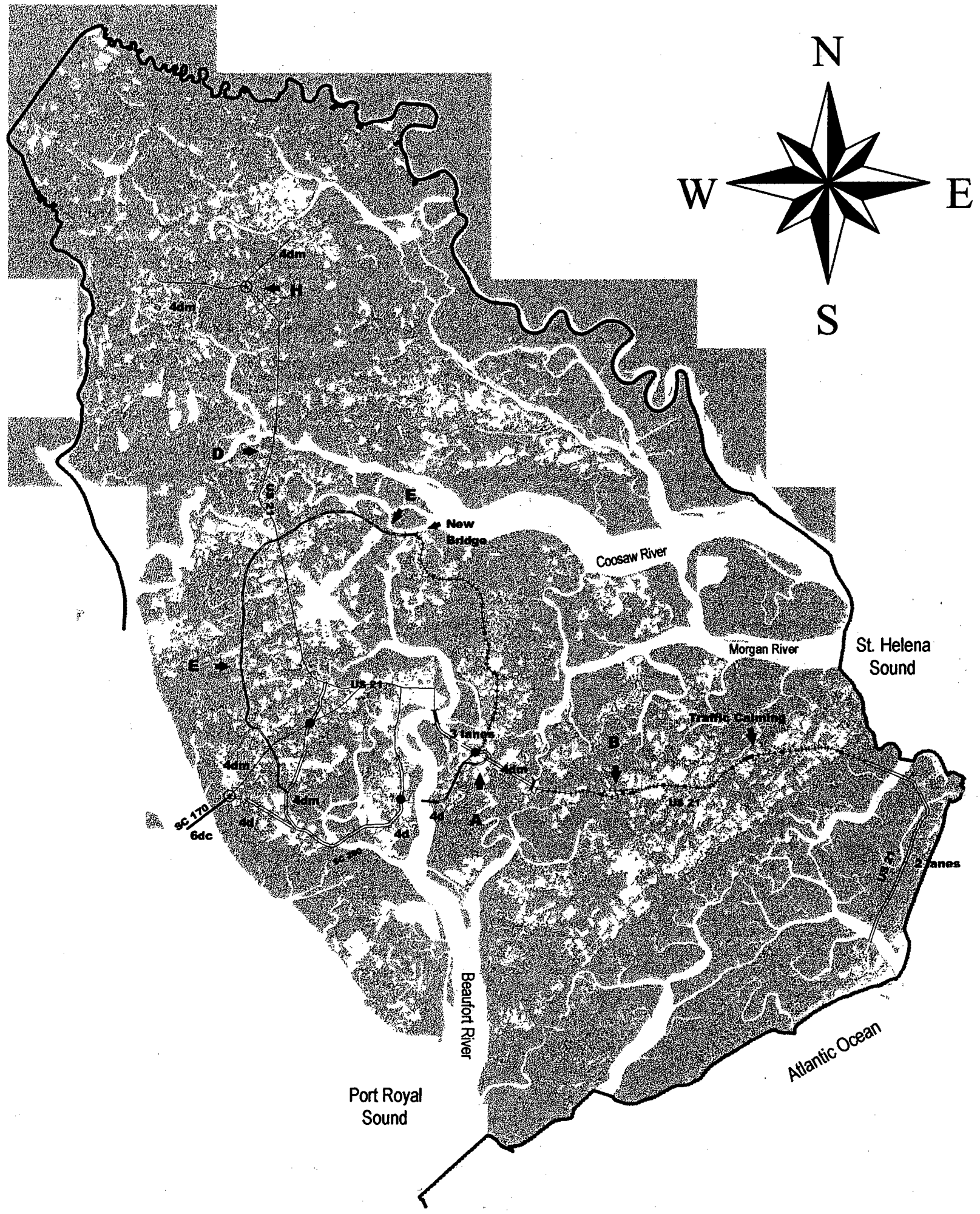
Adopt a re-alignment plan as an element of an enhanced Lady's Island Village and Community Preservation Area plan and include as an amendment to the Comprehensive Plan.

Study B:

Study in detail re-alignment options for U.S. 21—on St. Helena Island at Martin Luther King Boulevard—to enhance the Public Market District and incorporate traffic calming techniques on remaining portions of U.S. 21. This will provide for safer integration of local, commuter, and tourist traffic. Once completed as a conceptual plan, this study should be include as an amendment to the Comprehensive Plan. Traffic calming techniques would involve roundabouts primarily to regulate speeds and to promote safer pedestrian/bicycle conditions.

Northern Beaufort County Transportation Plan

MAP 21



Legend

- County Boundary
- Major Arterial Highway (Existing)
- Minor Arterial Highway (Existing)
- Major Collector (Existing)
- Traffic Calming (Proposed)
- Major Collector (Proposed)
- Grade Separated Interchange (Existing)
- Signalized Intersection (Existing)
- Bridge

6dc	six-lane divided roadway with controlled access
4dc	four-lane divided roadway with controlled access
4dm	four-lane divided roadway with managed access
4d	four-lane divided roadway
P&R	Park and Ride

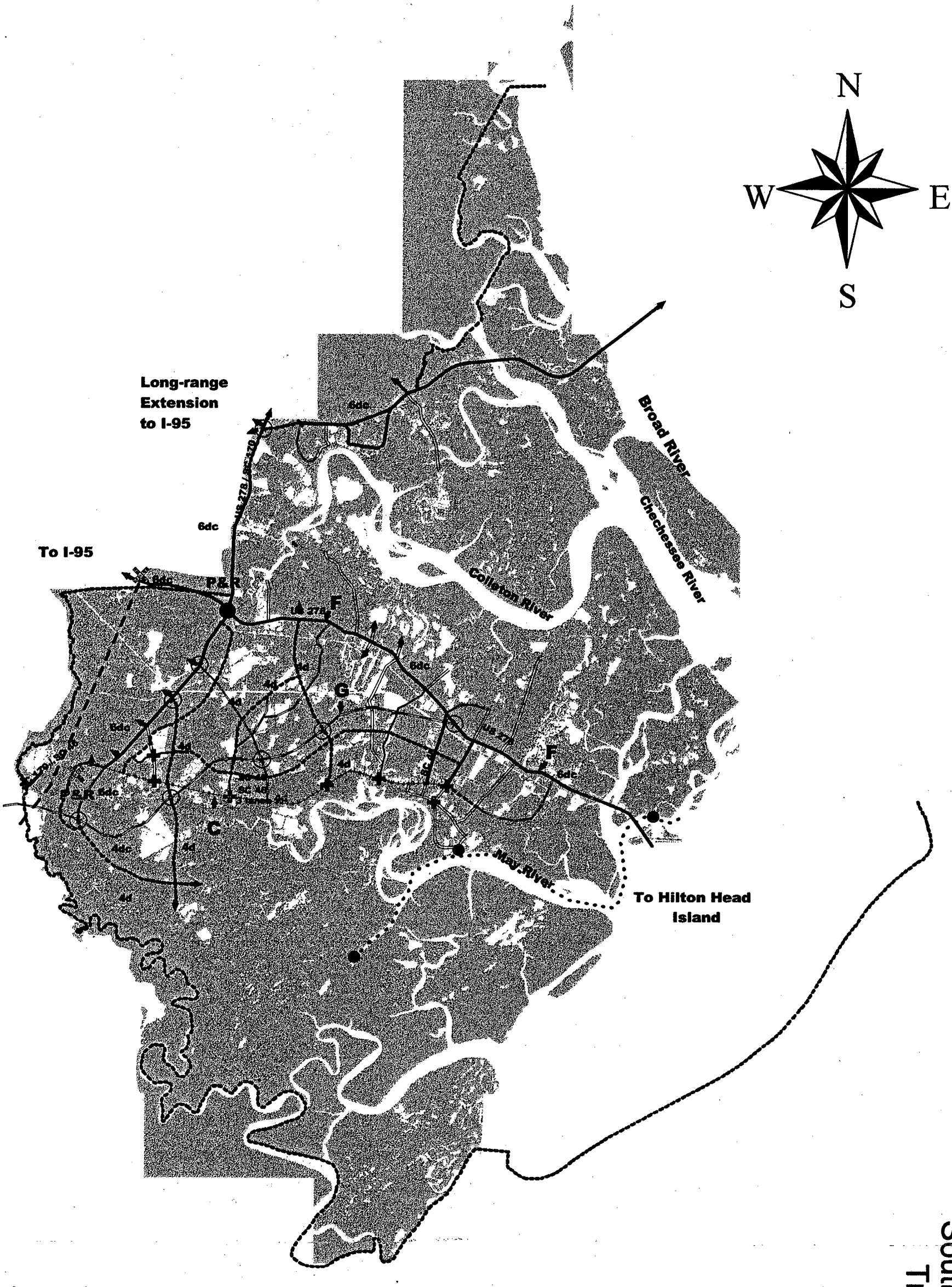
A	Study re-alignment of US 21 and 802 as part of detailed study of Lady's Island village center.
B	Study re-alignment and traffic calming on US 21 to create commercial/village center on St. Helena.
D	Study US 21 North; five-lane flush median section to reduce potential impact of commercial strip development.
E	From US 17, via US 21, to City of Beaufort and develop corridor access management plan; particularly in the five-lane flush median section.
H	Finalize US 21/US 17 SCDOT Interchange plan

Prepared By Beaufort County GIS Department

Prepared By Beaufort County GIS Department

Southern Beaufort County Transportation Plan

MAP 22



Legend

- County Boundary
- Light Rail Corridor (Proposed)
- Major Collector (Proposed)
- Limited Access Highway (Proposed)
- Ferry Service (Proposed)
- Minor Arterial Highway (Proposed)
- Major Arterial Highway (Proposed)
- Traffic Calming (Proposed)
- Major Arterial Highway (Existing)
- Major Collector (Existing)
- Minor Arterial Highway (Proposed)
- ✚ Roundabout (Proposed)
- Light Rail Station (Proposed)
- ⊛ Grade Separated Interchange (Proposed)
- Grade Separated Interchange (Existing)
- ● Signalized Intersection (Existing)

C Study SC 46 for traffic calming projects to reduce through traffic impact in Bluffton.
F Develop US 278 access management plan to insure long-term capacity.
G Develop preliminary alignment and controlled access for Bluffton Bypass.

6dc six-lane divided roadway with controlled access
4dc four-lane divided roadway with controlled access
4dm four-lane divided roadway with managed access
4d four-lane divided road
P&R Park and Ride

Table 37: Prioritized list of technical studies to supplement the thoroughfare plan.

STUDY	STUDY DESCRIPTION	PRIORITY FOR TECHNICAL STUDY	TIMEFRAME FOR CONDUCTING/ COMPLETING STUDY	PRELIMANARY ESTIMATE	COMMENTS
G	Preliminary Alignment for Bluffton Bypass	1st	1998-1999	$	SCDOT led study with Beaufort County and Union Camp Master Plan Participation
A	U.S. 21/S.C. 802 Realignment Study on Lady's Island	1st	1998-1999	$	SCDOT led study as a follow-up to the U.S. 21 corridor study. Time is important due to the upgrade of potential new and redevelopment on this realignment
F	U.S. 278 Access Management Plan Between S.C. 46 and Bridge to Hilton Head Island	1st	1998-1999	$ Staff Plus Consultant	•Beaufort County led study with SCDOT participation to develop a conceptual corridor plan to guide long range access and land use decisions to preserve corridor capacity •Consultant support with TMODEL2 modeling
E	Loop Road Alignment and Access Management Study	2nd	1999-2000	$ Staff Plus Consultant	SCDOT led study with Beaufort County participation. Due to rural nature of this alignment land use/access decisions would be aided by TMODEL2 analyses; and consultants
B	U.S. 21 realignment and Traffic Calming Study on St. Helena Island	2nd	1999-2000	$ Staff Plus Consultant	Beaufort County led study with SCDOT participation to develop long range U.S. 21 corridor plan to guide land use and access decisions; aided by TMODEL2
C	S.C. 46 Traffic Calming Project at Bluffton	2nd	1999-2000	$ Staff Plus Consultant	Beaufort County led study with SCDOT participation to develop localized S.C. 46 corridor plan; aided by TMODEL2
D	U.S. 21 North Flush Median Access Management Study	2nd	1999-2000	$ Staff Plus Consultant	Beaufort County led study with SCDOT participation to develop corridor plan to avoid impact of strip commercial development; aided by TMODEL2
H	Finalize U.S. 17/U.S. 21 Interchange Design	1st	1998	Not Applicable	In process study by SCDOT needs to be finalized to aid in interim land use/access decisions near interchange
I	Calibrate TMODEL2 for both Beaufort County and Hilton Head Island	1st	1998	$ Staff Plus Consultant	To achieve maximum benefit of TMODEL2 coordinate both County and Town analyses

Table 38: List of roadway construction projects in the thoroughfare plan.

NUMBER	PROJECT DESCRIPTION	ROADWAY IMPROVEMENT
1	U.S. 278 from S.C. 170 at McGarvey's Corner to Hilton Head Island	Widen U.S. 278 from 4 lanes divided to 6 lanes divided with access management to achieve a controlled access facility
2	S.C. 46 from S.C. 170 to U.S. 278 (via new connector road between Burnt Church Road and U.S. 278)	Upgrade from 2 lanes to 3 lanes (at intersections) with traffic calming techniques
3	S.C. 170 from McGarvey's Corner south to Bluffton Bypass	Widen from 2-lane to 6-lane divided with access management to achieve controlled access facility. Do phased construction from 2 lanes to 4 lanes divided to 6 lanes divided
4	S.C. 170 from McGarvey's Corner north across Broad River to Port Royal	Widen from 2 lanes to 6-lane divided with access management to achieve controlled access facility. Do phased construction from 2 lanes to 4 lanes divided to 6 lanes divided
5	Bluffton Bypass from S.C. 170 to U.S. 278	Construct 4-lane divided controlled access Bluffton bypass and supplemental roads and interchanges as phased development plan in conjunction with Buckwalter tract master plan. Location of the Bluffton Bypass interchange with U.S. 278 is critical
6	New loop roadway from S.C. 170 to Lady's Island	Construct three lane controlled access loop roadway from S.C. 170 north across U.S. 21; then north of the U.S. Marine Corps Air Station across Brickyard Creek to Lady's Island via a new bridge
7	U.S. 17 from Gardens Corners to Colleton County	Widen from 2-lane to 4-lane divided managed access facility
8	Gardens Corners U.S. 17/U.S. 21 interchange	Construct grade separated interchange at U.S. 17/U.S. 21
9	U.S. 21 from Lady's Island to Harbor Island	Upgrade two-lane road to include traffic calming techniques and a bypass east of Frogmore

Study C:

Study the S.C. 46 corridor in the Bluffton area to utilize traffic calming techniques to create safer and more phasing aesthetics. This is particularly important prior to construction of a Bluffton Bypass when S.C. 46 is used as a shortcut route to U.S. 278/S.C. 170 to travel south towards Savannah. When completed, the results of this study should be incorporated as an amendment to the Comprehensive Plan to guide land development/access decisions along S.C. 46 in the Bluffton area. Traffic calming techniques would involve roundabouts and other techniques necessary to reduce vehicular speeds and to promote safer pedestrian/bicycle conditions. Every effort should be made to preserve existing trees and tree canopies.

Study D:

Study the U.S. 21 north, five-lane flush median section to reduce impact of existing/anticipated strip commercial development and achieve National Highway System standards in this Primary Investment Area., Adopt conceptual corridor plan as an amendment to the Comprehensive Plan.

Since Beaufort County currently has no freeway (i.e., limited access corridors), the intent is to utilize access management techniques to upgrade critical corridors to higher standards. This is also the case with the very critical S.C. 170 and U.S. 278 corridors in southern Beaufort County. In northern Beaufort County, U.S. 21 north of the City of Beaufort also needs access management to prevent unnecessary future congestion—especially along the five–lane flush median corridor which tends to promote strip commercial development.

Study E:

In order to protect the long-term capacity of the proposed three-lane loop roadway around the north and west side of the City of Beaufort, an access management and alignment plan should be developed. This will insure that the number of at-grade intersections will be minimized and access to any commercial development will be managed to insure that the long term safety and efficiency of this new corridor is protected from unnecessary congestion. This plan should be an adopted future amendment to the Comprehensive Plan. This planning effort is important because it will allow the County to locate an important loop roadway in a rural area prior to new development being built, rather than trying to retrofit to new road through existing development.

Study F:

This section of the U.S. 278 corridor is on the National Highway System. Projected by 2020 to serve 70,000 to 80,000 vehicles per day, it is also the most critical road link in Beaufort County. A corridor access management plan should therefore be developed to include new roads parallel to the U.S. 278 wherever possible. This study will insure that this very important corridor will not need to be unnecessarily widened beyond six lanes after the year 2020.

This corridor plan should also be adopted as an amendment to the Comprehensive Plan.

Study G:

Beaufort County should request that SCDOT develop a preliminary alignment

and controlled access plan for the Bluffton By-pass to include future interchange configurations, and roadway corridor right-of-way requirements in conjunction with master plan efforts by the Union Camp Corporation.

Study H:

Beaufort County should request that SCDOT finalize the plans for the U.S. 21/U.S. 17 interchange to insure that local land use and access decisions do not jeopardize this important interchange.

Study I:

The County needs to install and calibrate the TMODEL2 program to allow both Beaufort County and Hilton Head Island analyses to be performed on a coordinated basis in the future.

Actions

☑ *2.1 Adopt/Implement functional road classification roadway plan.*

☑ *2.2 Implement elements of the thoroughfare plan.*

☑ *2.3 Use SCDOT access and roadside management standards when reviewing site plans, which require access to the major highway system.*

☑ *2.4 Implement sub-area Studies A, B, C, D, E, F, G and H with local citizen involvement, as public participation is critical to effective solutions being developed.*

☑ *2.5 Secure budget funding and the necessary personnel to implement the TMODEL2 computer program.*

☑ *2.6 Conduct mapping of right-of-way as a priority for implementation and encourage the development of a plan for proactive acquisition of right-of-way. (also see Action 11.13)*

Bikeways and Trails

Policy 3: Adopt a Policy for Bikeways and Trails for Walking coordinated with the Parks and Recreation Plan.

The key to making bicycle and walking popular in Beaufort County—as an alternative to travel by private motor vehicle—is to create an infrastructure of separate and shared bicycle facilities, sidewalks, and walking trails. Unlike some areas with a more extensive roadway system, Beaufort County's options are constrained by:

- water, which means that bicyclists must utilize roadways rather than having parallel off-road bikeways; and
- significant distances between mixed use and urbanized areas which make an extensive Countywide bicycle and walking system financially impractical.

Before a bicycle and walking plan can be successful it needs the following elements:

1. Roadway facilities which are safe for shared bicycle use; i.e., with bike lanes and sidewalks, or as an alternative, cooperative use of available off-road but parallel right-of-way to build bikeways and walking trails.

2. Implementation of phase one of a bicycle and walking route system will promote interest in this alternative travel mode for trips to schools, neighborhoods, retail centers, beaches, and recreational areas.

3. Supporting amenities to make the use of such facilities safe and convenient such as rental bicycles, signs, maps, police surveillance for security and bike racks for storage.

To achieve these elements, the following actions are recommended:

Actions

☑ *3.1 Develop a County bikeway and walking trail system linking the Town of Port Royal, the City of Beaufort, Lady's Island activity areas, and established/planned walking trails and sidewalks.*

☑ *3.2 Consider bikeway and walking elements in roadway and lane use plans along and adjacent to the U.S. 21 corridor which connects Lady's Island and St. Helena's commercial area at Martin Luther King Blvd. Since U.S. 21 is the only roadway corridor for through and local traffic and is subject to relatively high speed traffic due to its design, an off–road bicycle and walking trail system is considered to be the best solution.*

☑ *3.3 Coordinate bikeway and walking trail planning with highway planning efforts throughout the County, and with the Park and Recreational program to avoid unnecessary long-range problems.*

☑ *3.4 Emphasize walking trails and bicycle facilities for existing and planned schools to make this a safe and convenient alternative to motor vehicle travel by parents or students. Involve students, parents and the elderly in this element of neighborhood planning.*

Public Transportation

Policy 4: Actively participate in the Implementation and Planning for LRTA Efforts to Improve Public Transportation.

Since the LRTA has now developed a 1997 Comprehensive Transit Plan for Beaufort County and the the Lowcountry, the following recommendations are made to insure key elements of the plan are implemented.

1. Cooperate fully and financially to aid LRTA in providing safe, convenient, efficient, and flexible bus service to existing and emerging residential, commercial, and industrial areas of the County—with service coordinated with Hilton Head Island and Jasper County, particularly.

2. Incorporate transit elements into the highway planning process so that transit service will remain efficient as peak period traffic volumes increase. This would include bus pull-out lanes, park-and-ride lots to intercept patrons for line haul movement along corridors like U.S. 278 and transfer centers.

3. Provide bike racks at designated bus stops, especially in villages and major activity areas.

4. Provide for bicycle transport on buses, to allow bicycle trips in connection with bus travel especially along the U.S. 21 corridor between the City of Beaufort, Town of Port Royal, and Hunting Island State Park.

5. Work with LRTA to adjust bus service to meet inter-city bus service from Beaufort County to Savannah and Charleston.

6. Encourage LRTA to provide demand responsive service to new communities near population concentrations in the Town of Port Royal and the City of Beaufort to insure an alternative mode of travel is available for persons who do not own motor vehicles.

- Work with LRTA to provide routes and schedules which are flexible enough to provide frequent enough service to Priority Investment Areas centers so as to

encourage ridership among seniors, youth, and tourists; and

- Identify bus shelter sites/stops in new communities so as to facilitate future bus service when it is provided.

7. Work closely with LRTA long range planning to co-ordinate land use decisions with future light rail, water taxi and ferry service to insure that ridership helps to make such facilities financially feasible.

Actions

☑ *4.1 Support and help to Implement the LRTA Transit Plan through 2007.*

☑ *4.2 Promote and financially support the LRTA service as an aid to those persons who depend on this form of transportation to gain employment; and as an alternative to highway travel.*

☑ *4.3 Coordinate fixed route bus service with taxi/demand responsive service.*

☑ *4.4 Coordinate bus service with airport and ferry/water taxi service.*

☑ *4.5 Consider the advantages of convenient transit service in making land use decisions so as to locate higher density residents/commercial areas, i.e. Priority Investment Areas on routes to be served by frequent bus service.*

Policy 5: Encourage Waterborne Transportation as an Alternative Mode of Future Travel Policy and coordinate with LRTA.

Beaufort County should encourage waterborne transportation by considering it as an alternative mode of travel, which will become more financially feasible in the future. This would include water taxis within developed areas like Port Royal, City of Beaufort, and Lady's Island, and between Daufuskie Island, Bluffton, and Hilton Head Island. Promote private excursion ferry as well as public ferry service for travel between major activity, employment, and tourist areas when feasible; and coordinate this service with other surface transportation.

Actions

☑ *5.1 Promote and consider financial support of water taxi service linking Port Royal, the City of Beaufort, Lady's Island with Hilton Head Island, Bluffton, Daufuskie Island and Savannah as demand for this service materializes through LRTA efforts.*

☑ *5.2 In making land use decisions, consider the long-term benefits of having employment and research and development opportunities convenient to waterborne transportation to reduce roadway travel.*

☑ *5.3 Promote through LRTA private/public funding for ferry service to meet travel demand for which water taxis would not be practical.*

☑ *5.4 Monitor waterborne technology through LRTA, which may become available to satisfy travel demand between Lowcountry employment/residential/tourist concentrations.*

☑ *5.5 Form a task force to study the feasibility of ferry service for enhanced employment access, automobile re-routing, and tourism.*

Funding Sources

Policy 6: Adopt a Policy to Monitor Federal Programs: ISTEA, NHS, and Funding Sources.

In 1991, the Federal Government enacted the Intermodal Surface Transportation Efficiency Act (ISTEA). This Act established the policy to develop a National Intermodal Transportation System, which is economically efficient and environmentally sound; and consists of all forms of transportation in a unified, interconnected manner; including transportation systems of the future. This system also includes a National Highway System (NHS) which consists of the National System of Interstate and Defense Highways and those principal arterial roads which are essential for interstate and regional commerce and travel, national defense, intermodal transfer facilities, and international commerce and border crossings.

ISTEA created opportunities for local government to participate in the regional and local highway planning process through such agencies as SCDOT and the LCOG. This includes funding not only for highways, but non-motorist means of travel such as public transit, bicycle, airport, rail, ferry, and transportation terminal types of projects. This Act essentially changed the rules for transportation project funding. Since the great era of American highway construction is over and it is more difficult to obtain funds for new construction, there is a need to make more efficient use of the existing transportation infrastructure; and also to benefit from new technology.

Actions

☑ *6.1 Seek Federal funds for ALL ELIGIBLE transportation projects through the new ISTEA legislation.*

☑ *6.2 Work closely with SCDOT to utilize innovative funding procedures to achieve and maintain a safe and efficient transportation system.*

☑ *6.3 Work closely with SCDOT as the National Highway System portion of the new ISTEA legislation is implemented and principal arterial highway corridors are upgraded.*

Programs

Policy 7: Commit to a Traffic Calming Program for Roadway Projects.

Beaufort County's combination of local residents with retirees and tourists creates a unique mix of travel demand elements all sharing a fairly constrained roadway system surrounded by water and wetlands. At times this integration of different travel demand generators creates conflicts which will be unsafe and controversial. It may not only involve vehicular-to-vehicular conflict—dealing with excessive speeds and accidents—but it may also involve emergency vehicles or other travel modes such as buses, bicycles, and pedestrians. To aid in the resolution of these types of problems in specific subareas such as Bluffton, Lady's Island, and St. Helena, practical traffic calming techniques should be included in the transportation planning program. Where applicable, this will serve to equalize the use of minor arterial and major/minor collector streets regarding the shared use by motor vehicles, bicycles, pedestrians, and buses.

Traffic calming techniques would include the following types of actions:

1. to reduce motor vehicle speed:

- speed humps (carefully located and infrequently spaced);
- rumble strips;
- diagonal traffic diverters at intersections;
- cul-de-sac streets; only in subdivisions when environmental circumstances are involved;
- geometric design changes such as chokers, chicaines or semi-diverters to change curb lines, and curb radii; and
- roundabouts.

2. to change the psychological feel of a street through design or re-design;

3. to increase incentives to use public transit or ridesharing;

4. to discourage use of private motor vehicles by using parking restrictions, higher parking fees, or similar actions;

5. to encourage mixed use development;

6. to encourage residents to organize travel more efficiently; and

7. to create strong, viable, and compact communities.

Actions

☑ *7.1 Commit to including traffic calming as an element of the County-wide Transportation Planning Program.*

☑ *7.2 Consider traffic calming projects, along with other regular highway planning projects, when assessing needs and establishing funding sources.*

☑ *7.3 Work closely with local neighborhood and community leaders in identifying and evaluating various traffic calming techniques and in the resolution of any design modifications with SCDOT.*

Policy 8: Commit to Coordinating Land Use Planning Decisions with Access Decisions.

Since the roadway system in Beaufort County is so limited—and additional roads and bridges will be costly and possibly difficult to approve for environmental reasons—land use decisions should very much respect this fact. This means that the indiscriminate approval of too much land use density accessed at critical locations on the highway system may create serious long term safety problems traffic congestion, restrict future roadway widening, or make roadway widening very costly. It is therefore important that land use type and density decisions consider the long range role of the nearby or adjacent highway facility, and possibly long term transit service. It is equally important to locate mixed use development projects convenient to facilities which offer multi-modal transportation service, or adjacent/near to existing towns and cities. Such coordinated land use decisions will aid in reducing peak period home-to-work trips on high volume corridors which must also serve local retirement and tourist traffic and thus delay the construction of new high capacity parallel roadway facilities in the future.

Such land use actions are particularly appropriate to the U.S. 278 corridor from Jasper County to Hilton Head Island and on S.C. 170 from McGarvey's Corner to the Town of Port Royal. In the long term, it is equally critical on the U.S. 21 corridor from Beaufort north to U.S. 17, as well as along the U.S. 17 corridor to Charleston.

Actions

☑ *8.1 Recognize the fact that the County-wide roadway system's long term capacity is constrained and therefore carefully consider land use decisions for projects primarily served by this roadway system.*

☑ *8.2 Utilize the TMODEL2 software to evaluate the future traffic impact of updated Comprehensive Plans, proposed land use/roadway projects, alternative scenarios, before approval.*

☑ *8.3 Designate any new roads through Rural and Transitional Investment Areas as limited access facilities accessible only at planned locations, and carefully plan land uses along these new corridors.*

Policy 9: Promote a Policy of Regional Cooperation Regarding Comprehensive Planning

Since Beaufort County and Hilton Head Island are dependent on adjacent Jasper County for access to the I-95 Interstate System, it is essential that shared County issues be discussed—not only with Jasper County and Hilton Head Island officials—but regional agencies such as LCOG and LRTA. This regional process will insure that the conflicting issues be fully discussed long before action or funding is necessary. It may also expose issues of concern with other adjacent counties besides Jasper County. This will allow issues to be resolved and alliances to be built so that important long term regional goals can be achieved—regarding not only highway projects and facility operating efficiency but also transit (bus service), rail, airport, bicycle, pedestrian, water taxi and ferry facilities which play a regional role in the transportation system.

Actions

☑ *9.1 Actively Participate in the LCOG and LRTA Decision Making Process.*

Policy 10: Create a Coordinated Emergency Evacuation and Transportation Planning Program

Because of Beaufort County's limited and non-freeway roadway system in combination with increasing population and tourist activities, it is important that transportation planning efforts incorporate emergency evacuation plans.

Actions

☑ *10.1 Coordinate Emergency Evacuation Modeling by SCDOT with County transportation planning and TMODEL2 Travel Demand Modeling to verify the additional demand associated with an evacuation.*

☑ *10.2 Account for roadway design elements to aid evacuations as part of the highway planning effort.*

☑ *10.3 Install very visible road signs at key intersections to aid motorists during evacuations.*

☑ *10.4 Distribute pamphlets in hotels, newspapers, real estate offices, etc., to better educate the public—especially new residents and visitors—regarding key elements of the evacuation plan.*

☑ *10.5 Work closely with Jasper County and SCDOT regarding*

evacuation requirements for roadways and other facilities beyond Beaufort County.

Policy 11: Establish a County Transportation Planning Program.

The previous functional roadway classification system can be developed to guide capital expenditure decisions made by Beaufort County and SCDOT officials but significant other commitments in Priority Investment Areas will need to be made to a transportation planning program. This would include both policy and staff actions.

Actions

☑ *11.1 Commit to Funding and Maintaining a Transportation Planning Program as a Major Element of Comprehensive Plan Implementation.*

Commit to funding and maintaining a Countywide Transportation Planning Program to insure the efficient coordination and implementation of transportation improvements and programs for all modes of transportation within and adjacent to Beaufort County. This would include highways (whether Federal, State, County or Local), rail, transit (bus service), bikeways and walkways, ferry and water taxi service, private and commercial air travel, and ride sharing programs to include park-and-ride lots. This program will deal with day-to-day transportation issues and insure that the transportation element of the Comprehensive Plan is implemented.

☑ *11.2 Refine County's Site Plan Review Process.*

Refine the County's site plan review process to insure that more coordination is achieved between the SCDOT access permitting process and the County's site plan approval process. This would be accomplished by meeting with the SCDOT staff, particularly the District Traffic Engineer, on a regular basis. These meetings would provide better understanding of the long range implication of land use and access decisions made by County officials and staff. Such coordination would also allow the impact of Hilton Head Island land use and access decisions regarding the County road network (especially on the U.S. 278 corridor) to be better understood.

When dealing with shared access or land use decisions, this coordinated site plan review process should most importantly also include Jasper County staff.

☑ *11.3 Actively Participate in LCOG/LRTA Programs.*

Actively participating in the LCOG/LRTA regional planing process insures that County transportation programs are compatible and that these programs are also compatible with programs being implemented in neighboring counties like Jasper. It would be beneficial to Beaufort County if Hilton Head Island was also a participant in the LCOG process.

☑ *11.4 Commit to Funding and Maintaining a TMODEL2 Travel Demand Modeling Program.*

Commit to a jointly funding a Beaufort County/Hilton Head Island TMODEL2 travel demand modeling program to include shared staff, annual calibration and the assessment of proposed new developments and re-developments. TMODEL2 would also be used for future Comprehensive Plan updates and special sub-area analyses within communities (towns and cities) or on islands like Lady's Island and —if requested—St. Helena Island.

Since traffic impact studies are not required by Beaufort County as part of the site plan review process, there is no way of monitoring how land use and access decisions are contributing to future congestion on key corridors or at key intersections. There are several ways to achieve a better understanding of the time frame for future congestion or the need for additional improvements to alleviate congestion. Option A is considered the preferred option.

Option A:

Require that traffic impact studies be prepared for all new and redevelopment projects according to adopted County criteria. The County staff and/or consultants would review these results and, for the larger projects, compare the long-range results to the County's TMODEL2 findings or alternative sub-area analysis. This option allows developers to report on project traffic impact and the County to respond by review of their findings—and comparison to an internal travel demand model or similar sub-area analysis. This process may be included in the Community Impact Assessment Report Recommendations contained in the Future Land Use Chapter.

Option B:

Require that no new traffic impact studies be prepared for all new and redevelopment projects, but rather use the County's TMODEL2 and other analysis techniques to assess traffic impact and required roadway improvements. This option places the County in the position of directly making traffic impact projections and it would raise potential issues of conflict of interest—especially on large complex projects.

While this approach is used in states where the travel demand modeling process is well established and staff experience is at a high level is present, this is not the case in Beaufort County where the modeling process is just being introduced.

Option C:

A compromise and preferred approach would be for the County to perform—for a fee—traffic impact studies for the smaller, less complex and controversial projects. Private developers would be responsible for traffic impact studies for the larger, more complex projects.

TMODEL2 can be used by the County to assess long-range issues or sub-area impact issues.

☑ *11.5 Commit to Annual Technical Training for Staff.*

Conduct annual training courses for TMODEL2 application and to aid traffic impact and access and circulation elements of the site plan review process.

☑ *11.6 Retain Consultants for Complex Technical Support.*

Retain transportation planning firms to review traffic impact studies, master plan studies, or travel demand modeling studies—prepared by private developer con-

sultants—for large and complex tracts. This is very important for tracts which directly or indirectly impact key highway corridors and evacuation routes such as U.S. 278, S.C. 46, S.C. 170, S.C. 802, U.S. 21 or U.S. 17. The consultants could also aid in negotiating the final access plan with the developer. One reason consultants would be helpful is that there may be technical differences between TMODEL2 runs by the County staff and traffic projections done by private developer traffic consultants.

☑ *11.7 Maintain Close SCDOT Liaison for Funding Road Improvements to upgrade access within Priority Investment Areas.*

Assign a staff person to maintain close coordination with SCDOT regarding innovative highway funding procedures and the National Highway System program—should it become more active after 1998 through the updated ISTEA program.

☑ *11.8 Request Reasonable Modifications to SCDOT Roadway Design Standards.*

Work closely with SCDOT to introduce more creative roadway design elements to protect existing trees and to enhance the safe and efficient flow of non-vehicular traffic; e.g., pedestrians, and bikes. Traffic calming techniques should be considered when applicable and roundabouts should be considered in lieu of traffic signals on all but the highest volume corridors.

☑ *11.9 Promote Mixed Land Use Projects to Reduce Travel Demand on Roadway System.*

Promote mixed use development in established and planned communities to reduce home-to-work commuter travel via single occupant vehicles. Mixed-use development incorporates through zoning revisions—of sufficient density in combination with residential and commercial use—so as to enable residents to walk, bike or use transit to reach many destination. Such mixed-use projects are also important because they provide the opportunity for increased transit ridership, which reduces the need to subsidize transit service.

☑ *11.10 Create a Beaufort Area Transportation System (BATS) Advisory Highway Corridor Task Force to Protect Corridor Capacity, Aesthetics, and Investment.*

The County should request that BATS create an Advisory Highway Corridor Task Force of business and community leaders (with staff assistance provided by Beaufort County) to monitor vital highway corridors such as S.C. 170, U.S. 278, U.S. 21, U.S. 17, and S.C. 46, as well as the construction of new roadway corridors and river crossings (bridges). Besides highway design elements, the Task Force would monitor evacuation planning procedures and plans, aesthetics, public boat ramps, public viewing areas, park–and–ride facilities, ride sharing programs, and access management strategies to enhance corridor capacity and infrastructure investment. Related corridor amenities such as bikeways, walking trails, and intermodal transfer facilities related to rail–ferry–water taxi service would also be included in the Task Force's advisory role. The Task Force would also assist BATS in the development of conceptual corridor plans as an element of overlay districts. This Task Force would be an advisory group to BATS and

aid in the complex multi modal transportation planning process, including technical liaison with LRTA and LCOG.

☑ *11.11 Consider Creation of a Scenic Roads Program Coordinated with the County's Cultural Resource Efforts.*

Work with SCDOT and other agencies to develop a scenic roads program for such corridors as S.C. 170 from Broad River to S.C. 46 and on S.C. 46 from S.C. 170 to U.S. 278. Consider other corridors like Old Sheldon Church Road. Promote the Sea Island Parkway as a scenic roadway and bikeway.

☑ *11.12 Promote a Walking Trail and Bikeway System.*

Promote walking trails and bike paths/bikeways in existing and planned communities linked to a long-rang countywide plan so as to provide a convenient alternative to motor vehicle travel. Coordinate this plan with any state plan which is being or has been developed.

☑ *11.13 Commit to Funding the Advance Purchase of Right-of-Way for Roadway Corridors and Interchanges.*

With the aid of SCDOT, consider the advance acquisition of right of way and land access management techniques along vital highway corridors such as S.C. 170, U.S. 278, U.S. 21, and U.S. 17 or the Bluffton Bypass to insure long term preservation of peak period capacity and the ultimate construction of grade separated interchanges.

☑ *11.14 Develop and Adopt Conceptual Corridor Plans for Key Corridors.*

Develop detailed conceptual corridor land use and access plans for the S.C. 170 corridor—from Broad River to S.C. 46—and adopt as a later element of the Comprehensive Plan to guide land development and site access decisions. This would strengthen overlay district regulations. Also apply this technique to the following corridors:

- U.S. 278 between Mainland Bridge to Hilton Head Island and S.C. 170 at McGarvey's Corner;
- U.S. 21 north for five lane flush and median sections, or areas where strip commercial development is anticipated;
- new loop road north and west of Beaufort County;
- U.S. 21 on St. Helena Island as a means to introduce traffic calming measures; and
- Bluffton Bypass coordinated with the Union Camp Master Plan.

The Corridor Overlay Districts should be reevaluated to determine if the buffers and setbacks will remain intact when the roads are widened.

☑ *11.15 Develop and Adopt a Sub-area Plan for Lady's Island and St. Helena Island.*

Develop a detailed sub-area land use and access plan for Lady's Island and St. Helena Island to establish a firm understanding of the long term implication of build-out densities on the limited road network and the need for additional off-island access—especially for emergency evacuations.

☑ *11.16 Incorporate Detailed Conceptual Corridor Plans into the Overlay District Process as Studies are Completed; and Include them in the Adopted Comprehensive Plan Document.*

Incorporate conceptual corridor plan elements into the overlay district process as technical studies are completed to graphically illustrate access and circulation elements. This will guide the decision making process in critical corridors, and involve SCDOT land owners and citizens in the conceptual planning process.

Most corridor traffic studies focus on the linear highway and tend to emphasize the need for future traffic operational efficiency along the corridor. Comprehensive plans—on the other hand—usually indicate conceptual land use and highway corridor actions, specific details are usually lacking.

In order to bring more detailed criteria into the planning process, conceptual corridor plans should be advanced beyond linear highway issues and global comprehensive planning issues by focusing on the sub-area surrounding the corridor. This allows elements of the comprehensive plan to be better defined—especially with respect to local land use developments and traffic circulation. It will therefore enhance linear corridor operations by indicating the need for alternative access routes—to the dominant traffic corridor—and by showing how to protect key intersections from commercial driveway encroachment.

☑ *11.17 Pursue Innovative Funding for Transportation Improvements.*

Discuss with SCDOT FHWA official procedures for the future widening and construction of roadways such as the one-cent local sales tax proposal conceived in 1996. Such actions will avoid (1) excessive traffic volumes on inadequate roadways, and (2) unsafe roadway conditions caused by road funds not being available for many years. Apply this same innovative funding approach to all other modes of transportation.

☑ *11.18 Administer Traffic Impact Study Review Process.*

If and when adopted, provide technical review of traffic impact studies prepared by others; or perform traffic impact studies and coordinate findings with TMODEL2 analyses.

Policy 12: Initiate Administrative/Staff Actions to Develop a Transportation Planning Program.

Actions

☑ *12.1 Establish a County Transportation Planner Position.*

Create a Transportation Planner staff position in the Engineering or Planning Departments to be responsible for the following functions in Beaufort County and coordination with similar functions on Hilton Head Island:

1. Aid in implementing the transportation element of the Comprehensive Plan.

2. Administer application of the TMODEL2 travel demand model as a planning tool for land use and

transportation planning decisions in Beaufort County and coordinate with Hilton Head Island application of the same model.

Note: It is possible that this staff position could administer the TMODEL2 application in both Beaufort County and Hilton Head Island, with the jurisdictions sharing the cost.

3) Review all site development plans submitted in Beaufort County for traffic impact, access, and circulation requirements using TMODEL2 and other techniques. Coordinate findings with the engineering and land use planning consultants.

4. Act as liaison with SCDOT's staff, particularly the District Traffic Engineer in the Charleston office, with respect to access permits and site plan reviews, and apply access and management standards developed by SCDOT and Access Management Guidelines for Activity Centers (NCHP Report 348) as developed by the Transportation Research Board, National Research Council, Washington, D.C.

5. Coordinate quarterly meetings with LCOG, Jasper County, Hilton Head Island municipalities and communities in Beaufort County, and other agencies such as LRTA, or committees such as BATS to discuss transportation issues of mutual interest.

6. Aid in the drafting and application of Traffic Impact Study guidelines should this type of technical study be required of private developers.

7. Act as liaison between SCDOT and the Emergency Management Department regarding transportation planning studies for emergency evacuation and related transportation improvement programs, to enhance the safety and efficiency of evacuations.

8. Act as liaison between the BATS Committee, Corridor Task Force and SCDOT, Hilton Head Island, and local communities regarding multi-model transportation issues and programs. This would include LRTA transit studies, and service, as well as ferry operations, airport–rail facilities. As they develop in the future, also included would be bikeway systems and water taxis.

9. Develop an annual average day traffic monitoring program to determine the change in peak hour volumes and intersection levels of service; i.e., efficiency as a comparison to previous years and as input to the TMODEL2 calibration process.

This program would be accomplished by conducting 6-9 A.M. and 4-7 P.M. turning movement counts on a typical weekday and a typical Saturday between 11 A.M. and 2 P.M. during both peak and off-peak tourist periods. The turning movement counts would be made at the following locations, with counts grouped on the same day so as to capture sub-area circulation patterns. The count locations should be adjusted for new loop road and Bluffton Bypass road links.

Group 1:

- U.S. 21/S.C. 802 Lady's Island
- S.C. 280 Port Royal
- U.S. 21/S.C. 280 Beaufort

Group 2:

- U.S. 21/S.C. 170
- U.S. 170/S.C. 280
- S.C. 170/S.C. 802

Group 3:

- U.S. 21/U.S. 17 Gardens Corners
- U.S. 21/S.C. 116

Group 4:

- U.S. 278/S.C. 170 CEC
- U.S. 278/S.C. 170 Interchange Ramps
- U.S. 278/Burnt Church Road
- S.C. 170/S.C. 46

Such data, once collected, tabulated, and analyzed, would reveal the following for peak and off-peak traffic conditions:

- changing traffic patterns/volumes
- change in degree of peak hour congestion
- need for intersection improvements to improve operating efficiency
- provide a basis for making short-term, five-year traffic projections, and to verify the need for short-term improvements.

☑ *12.2 Promote and Sustain Interdepartmental Coordination.*

Promote and sustain close coordination between County staff members of the Engineering and Planning Departments—plus the emergency management department of evacuations—to insure immediate, short– and long–term transportation issues are discussed on a routine basis. This will insure that cost effective solutions are developed, implemented, and coordinated with all the necessary agencies and adjacent counties.

☑ *12.3 Promote and Sustain Adjacent County Coordination.*

Critical to the issue of County staff coordination is the need to focus on any shared roadway corridor issues with Jasper County officials with respect to the S.C. 170/U.S. 278 corridors. This could best be accomplished by frequent meetings with the Jasper County staff to discuss the impact of land development decisions along shared roadway corridors

☑ *12.4 Implement a Capital Improvement Program.*

☑ *12.5 Establish a new county Council appointed Committee to serve as the main recommending entity for the County's transportation planning program.*

Appendix 1: Assessment of 2020 Land Use Plan Using TMODEL 2

Beaufort County acquired travel demand computer software called TMODEL2 as part of this 1997 Comprehensive Planning process. This is the same model which was used by the same consultant to perform a growth capacity analysis in 1997 for the Town of Hilton Head Island.

If both the County and Hilton Head Island agree to jointly use TMODEL2 for future travel demand projections, land use and transportation decisions would be based on very accurate and compatible information.

TMODEL 2 Assumptions

The Beaufort County model was calibrated to 1995 conditions, and the County land area was sub-divided into 81 separate traffic analysis zones (TAZ) by the consultant. The County staff provided the distribution of land use information by TAZ for both existing and future (2020) conditions. After initial TMODEL2 runs to evaluate three alternative (2020) land use/roadway networks, a preferred 2020 land use plan and roadway network was selected by County staff and advisors. It was then necessary to re-run the preferred plan by making a final distribution of anticipated 2020 land use by TAZ to re-confirm the adequacy of the future roadway network. The County staff was responsible for assigning future household and job information to each respective TAZ so as to represent an anticipated 2020 land use/density situation. Table 39 illustrates the 2020 land use anticipated County wide as compared to the 1995 situation.

Besides the future land use two important future roadway corridors and one re–alignment were incorporated into the 2020 TMODEL2 analysis for this preferred plan.

Table 39: 2020 land use anticipated County-wide as compared to 1995.

	1995	2020	25 Year Change
Household Jobs	25,281	64,185	38,904
Retail	6,943	16,907	9,964
Non-retail	10,922	24,253	13,331

- a new four-lane divided controlled access Bluffton Bypass corridor extending from a new grade separated interchange at U.S. 278 southwest through the Buckwalter tract to a new grade separated interchange at S.C. 170/S.C. 46 located southwest of Pritchardville;
- a new three-lane roadway on the west side of the City of Beaufort extending from S.C. 170 north and then east across U.S. 21 and north of the Marine Corps Air Station over a new bridge across the Beaufort River to Lady's Island. This new roadway, when completed, would create an entire "loop" roadway around the City of Beaufort in combination with existing S.C. 802; and
- re-alignment of U.S. 21 and S.C. 802 on Lady's Island to create a village bypass. This re-alignment study should be conducted by SCDOT as a follow-up to the current U.S. 21 widening project.

The two new highway corridors will enhance peak period sub-area circulation by providing additional roadway capacity and viable alternatives to serve increased traffic created by anticipating new development. The Bluffton Bypass will provide an alternative to existing two-lane S.C. 46, which currently allows through traffic to penetrate local streets within downtown Bluffton. The re-alignment of U.S. 21 and S.C. 802 on Lady's Island enhances the development of the Lady's Island village by creating a safer and more efficient local roadway network. All three 2020 roadway plan improvements will significantly improve future emergency evacuations. Besides these important highway corridor improvements, access management control should be included to protect long-term highway corridor capacity.

TMODEL Results

The maps on pages 482 and 484 illustrate all the key elements of the future Beaufort County 2020 thoroughfare plan roadway network, including additional sub-areas studies. It is important to understand that this was a 2020 analysis with *all* the new road links, realignments and grade separated interchanges constructed. In other words, this analysis does *not* account for new road links in the plan but *not* actually constructed by 2020. The TMODEL2 results reflect a complete 2020 road network being constructed and the land use density being distributed as assumed throughout the 81 TAZ's.

During interim years between now and the year 2020, Comprehensive Plan updates or other TMODEL2 growth capacity analyses performed by the County—and coordinated with Hilton

Head Island analyses—will enable road network modifications and the impact of shifts in County—or also adjacent Jasper County and Hilton Head Island - land development to be re-evaluated. It should also be noted that traffic projections have only been made for the year 2020, with additional new development after 2020 the AADT volumes on various road links would be higher than projected in this analysis. This means that while a four-lane divided roadway may be sufficient in 2020, a six-lane road may be warranted. This is especially critical in Beaufort County where the roadway system is so constrained by water features 10 or 20 years later.

Applying TMODEL2 software to the preferred 2020 land use plan and Future Thoroughfare Plan, 2020 roadway network resulted in the Average Annual Daily Traffic (AADT) volumes. Since TMODEL2 projects future weekday PM peak hour volumes on roadway corridors will by 2020 represent 8.5 percent of daily 24-hour volumes. Peak hour factors usually range from 8 to 10 percent of daily volumes.

Note the following regarding the relevance of the projected 2020 AADT volumes.

Critical Roadway System Issues in 2020

Based on the projected 2020 AADT volumes, there are several road links and grade separated interchanges which are critical to not only safe and efficient 2020 peak period operations, but are even more critical post 2020, as new development continues to occur in not only Beaufort County, but neighboring Jasper County. The Critical Roadway System Issues map indicates these critical locations.

1. Roadway Links in Excess of the Capacity Provided by Basic Four-Lane Divided Roadways System

1a. U.S. 278 (National Highway System) corridor between Hilton Head Island and S.C. 170 at McGarvey's Corner. These traffic projections are considered to represent the "worse case" scenario and are dependent on coordinated modeling with Hilton Head Island growth strategies. Later plan updates will probably reflect U.S. 278 corridor volumes which could be as much as 10,000 vehicles per day lower than in this analysis. The highest projected AADT volumes occur on U.S. 278 at 80,000 with vehicles per day (VPD) at the Hilton Head Island Bridge to 62,400 east of McGarvey's Corner. The section of U.S. 278 between S.C. 46 and the bridge to HHI is particularly critical since there are no roads parallel to U.S. 278 to provide for an alternative route to U.S. 278. There is not even a system of service roads adjacent to U.S. 278 for local traffic to use in lieu of the U.S. 278 corridor. The 80,000 vehicles per day demand is more than the capacity of a six-lane divided corridor with parallel service roads. Freeways or controlled access roadways usually serve such high volumes. This high volume in 2020 reflects 1) the lack of any alternative roadway corridor and 2) the travel demand interaction between Hilton Head Island and developing Beaufort and Jasper counties to the west. In view of the high 2020 volumes, future right-of-way for an eight-lane U.S. 278 corridor may

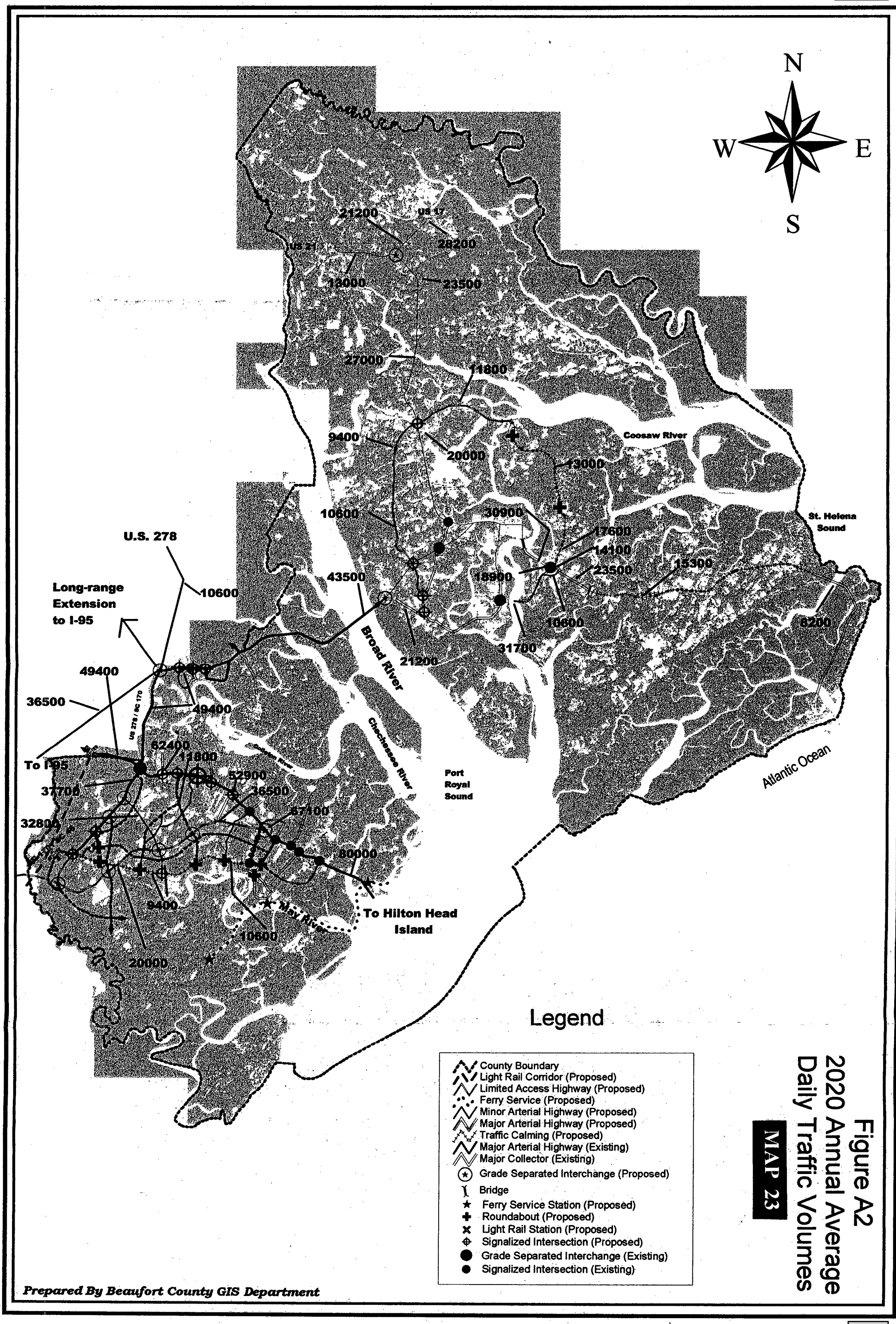


Figure A2
2020 Annual Average
Daily Traffic Volumes

MAP 23

Prepared By Beaufort County GIS Department

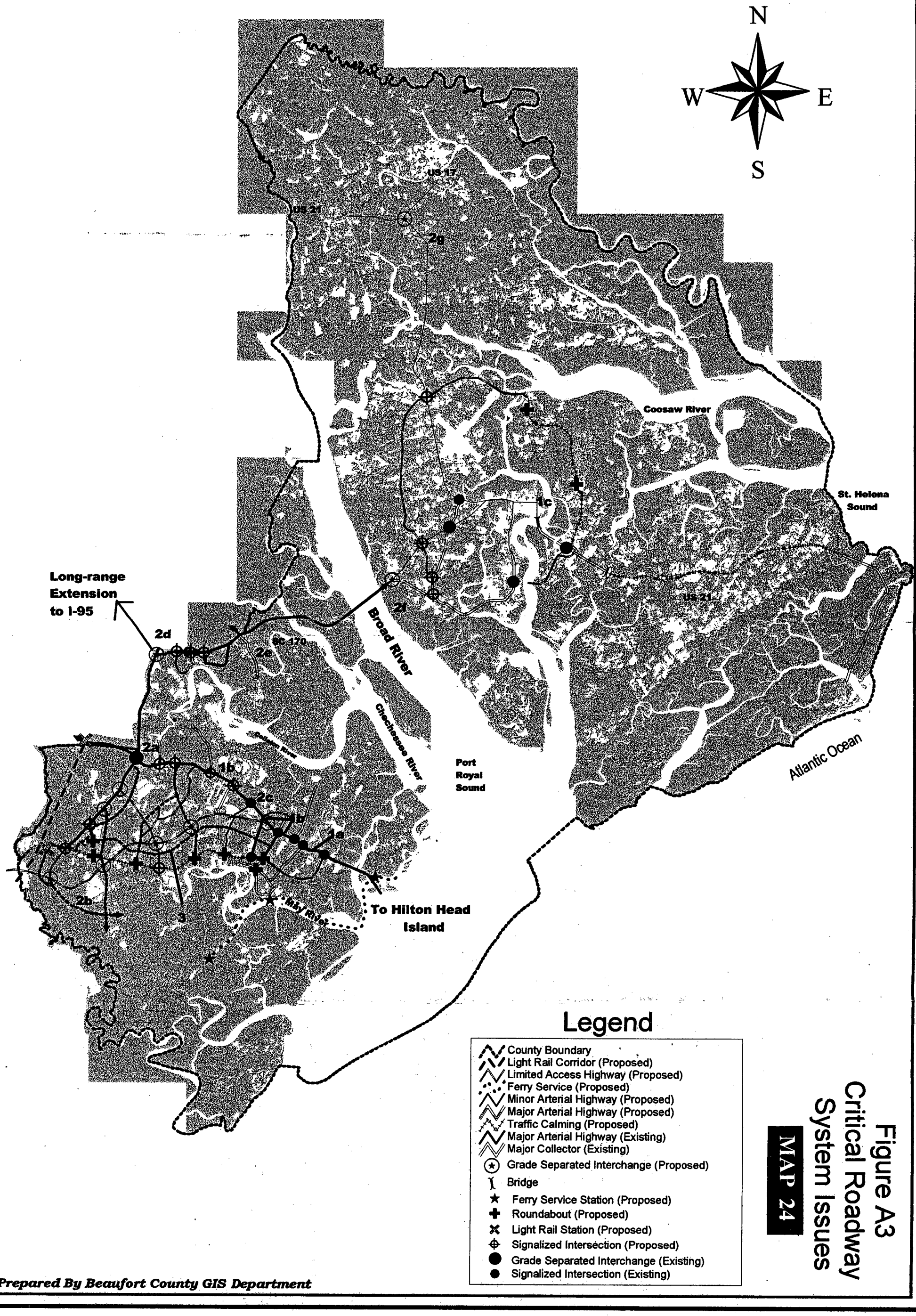


Figure A3
Critical Roadway System Issues

MAP 24

Prepared By Beaufort County GIS Department

be essential for long-range planning. A more detailed sub-are a "traffic study" and "worse case" access management plan is also essential to protect long-term U.S. 278 corridor capacity.

lb. The second highest projected "worse case" AADT volumes occur from S.C. 46 to McGarvey's Corner at 67,100 to 52,900 to 62,400 vehicles per day. These volumes exceed the practical capacity of a six-lane divided highway corridor, but benefit due to traffic using S.C. 46 and the new Bluffton Bypass. As with road link 1a, a detailed sub-area traffic study and access management plan is essential to manage long-term corridor capacity and the need to add additional lanes if AADT volumes approach eight-lane needs post 2020, between S.C. 46 and McGarvey's Corner.

1c. U.S. 21 between the City of Beaufort and Lady's Island reflects a 2020 AADT of 30,500 vehicles per day on this to be constructed 3-lane roadway through the commercial village. This volume is well in excess of the capacity of a three-lane road. With drawbridge openings, traffic will be diverted to the designated alternative route (U.S. 21 Business) and this would tend to reduce the amount of daily traffic through the village center.

This high 2020 travel demand on U.S. 21 (30,500) is why the alternative S.C. 802/U.S. 21 routing should be promoted along with construction of the Lady's Island Village Bypass which, would serve at a minimum 10,600 vehicles per day.

2. Critical Locations for Future Grade Separated Interchanges or Upgraded Interchanges.

2a. Critical to the long-term efficiency of this roadway system is the upgrading of the McGarvey's Corner interchange (2a) to the extent possible through widening both the U.S. 278 and S.C. 170 roadways. Adjacent new development will either eliminate modification of the existing interchange to a full grade separated (no ramp traffic signals) interchange or make the upgrade very expensive.

2b/2c. Critical to the long-term efficiency of the new Bluffton Bypass corridor (3) are two new grade separated interchanges at the terminus points with S.C. 170 (2b) and U.S. 278 (2c). The U.S. 278 interchange is more of a directional "Y" type design to accommodate two merging corridors. These three future interchanges create a triangular roadway system linked to neighboring Jasper County which support three important highway corridors: S.C. 170, U.S. 278 and the Bluffton Bypass which allows for minimal traffic on existing S.C. 46 through Bluffton.

2d/2e. While the 2020 AADT volumes on the S.C. 170 corridor from McGarvey's Corner north toward the City of Beaufort can be served by a four-lane divided controlled access type faculty with few signalized intersections, these are three locations where future interchanges should be planned. Two interchanges (2d/2e) involve Jasper County cooperation. The 2d interchange at the Career Education Center is very critical because short-term it will serve the S.C. 170 corridor as well as a Jasper County corridor but

long-term this interchange would provide a second access corridor to I-95 through Jasper County.

While not as critical as interchange 2d, interchange 2e should be planned because of the potential for Jasper County land development to the north accessed via Snake Road. Should significant new development occur to the north of S.C. 170, it may well create sufficient travel demand to place an at-grade intersection in an over capacity situation post 2020. With the S.C. 170 corridor alignment so constrained, there are few options to upgrade an at-grade intersection at this location so the advance purchase of right-of-way would be appropriate.

2f. A future grade separated interchange (2f) at the intersection of S.C. 170 and S.C. 802 is necessary to accommodate the convergence of these two important corridors before new adjacent development makes such a solution impractical.

2g. With both the U.S. 17 and U.S. 21 corridors on the National Highway System, a future interchange would be planned at their intersection, location 2g.

In summary, these future grade separated interchanges are so critical to the long-term efficiency of the Countywide road networks that the advance purchase of right-of-way should be considered in combination with the donation of right-of-way when related to specific site developments. Otherwise right-of-way acquisition will be more expensive in the future or to expensive or controversial to acquire which could preclude an interchange ever being built.

Summary

The TMODEL 2 analysis used in this Comprehensive Planning process is a very important planning tool for Beaufort County and every effort needs to be made to coordinate future updates with Hilton Head Island—using TMODEL2 on a combined basis. The reason a commitment needs to be made to this continuing analysis process is two-fold.

1. "Actual" land use development between now (1997) and 2020 will probably be significantly different than assumed in this preferred plan due to changing market conditions and other factors.

2. For funding and other reasons roads may not be widened or new roads built as assumed for the 2020 density making the future road network less capable of serving new development traffic.

By using TMODEL2 on future Comprehensive Plan update—and for large or critically located site plans—it will be possible to re-evaluate land use and transportation strategies and polices to insure that long-term, i.e. post 2020, traffic conditions will not become intolerable or too expensive to solve.

Chapter 9

Economic Development

Economic Development

Vision

The County's vision for economic diversification can be encapsulated as the following:

Achieve incremental, yet meaningful, growth in the number of high paying jobs available to County residents, and increase the capacity of County residents to fill these openings successfully. While diversifying the economy, preserve the quality of life that is the County asset most cherished by both businesses and residents, and the comparative advantages that have contributed to the strong growth of the existing economic base of the community (e.g. hospitality industry, the military).

The rapid increase in sophistication and globalization of the U.S. economy demands that areas with a limited economic base (such as Beaufort County) diversify. In Beaufort County, both citizens and economic development professionals agree on the need for economic diversification defined as the expansion of the number of high-paying jobs available to County residents. Within a County that has the advantages of a beautiful physical setting and high quality of life, there are defined sub-areas in which income differentials resulting from little or no availability of jobs— outside the retail and service industries— constrain residents' ability to enjoy the quality of life that they might otherwise enjoy.

Initiatives to promote economic diversification in the County have been constrained to a degree by a lack of certainty about the impacts of such a strategy. The programs and community energy to move quickly toward economic diversification appear to be present. The difficulty has been in getting agreement on what form of diversification is desired, and in charting a course to overcome the fear of losing the most important County asset (the quality of life) in trying to add the asset of a diversified economy.

General Economic Development Goals

The following goals should be pursued in order to implement the Economic Development Vision Statement:

1. Create a new public/private organization under the auspices of the Economic Development Board, with

broad-based, Countywide membership, equipped with resources necessary for success; to serve as an advocate, implementor, and be accountable for economic development initiatives County-wide; and to establish clear channels of communication to ensure the cooperative participation of citizens, private business, and local governments in economic development efforts.

2. Delineate a clear work plan of policies and action items to guide the progress of implementation of these policies and action items.

3. Adopt comprehensive job creation strategies, especially for the manufacturing, commercial and retail sectors. These strategies should focus equally upon: attraction, expansion/retention of existing businesses and encouraging new business start-ups.

4. Continue to take a leadership role in developing regional strategies with the surrounding counties and the Lowcountry Council of Governments.

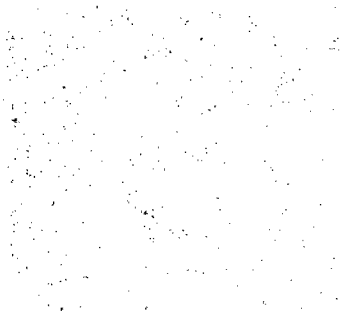
5. Increase the number of jobs available in sectors of the County economy in which (a) the County has a general locational advantage or technical comparative advantage, and (b) average wages paid are above the current average wage rates of the County (i.e. wages provided by targeted industries).

6. Create conditions that allow, and programs that enable, the expansion of employment and entrepreneurial opportunities for County residents.

7. Create 5,000 jobs within a ten year period with seventy-five percent of the goal, or 3,750 jobs to be in light- manufacturing, distribution and high-technology categories, and the remaining twenty-five percent), 1,250 jobs to come from commercial and service sectors, including selected job growth in the hospitality industry.

Economic Development

Technical Analysis



9.1 Introduction

9.1.1 Background

Since 1994, the Beaufort County Council and the Beaufort County Economic Development Board have planned and taken strategic steps to make the County more competitive in its efforts to create new jobs for County residents. These steps were designed to improve efforts to recruit new businesses and expand existing businesses.

The leading examples of these efforts are:

- the establishment of the Beaufort Industrial Park as a "regional park" to greatly increase tax and financing incentives to attract new businesses and expand existing County businesses;
- the completion of sewer installation in the Beaufort Industrial Park, resulting in the attraction of two new companies in three years;
- the combination of new marketing programs with the other actions listed here which have generated a high level of interest from new "prospects;"
- the appropriation of funds for the "Educational Infrastructure/ Training-Retraining Capacity Improvement" Program at the Technical College of the Lowcountry, USC-Beaufort, and the County library system;
- the adoption of a mission statement that proposed a focus on incremental job growth in targeted business categories;
- the broadening of the membership base of the Development Board and the creation of the Economic Development Partnership and Film Marketing Organization; and
- the organization of a successful effort to obtain meaningful amendments to the most sweeping Economic Development legislation ever passed by the SC legislature, the Rural Development Act of 1996.

To build upon recent initiatives and to further address weak wage rate patterns and underemployment, the County and the Economic Development Board were awarded an Economic Diversification Grant by the U.S. Department of Defense (DoD) to develop a broad-based economic diversification strategy as an element in the County Comprehensive Plan.

The text that follows summarizes the recommendations of the DoD funded economic diversification strategy. This summary is derived from a larger multi-chapter document that will be an appendix to the Comprehensive Plan. Policy recommendations were based upon results of public participation sessions, technical analyses, and opinion surveys. Recommendations seek to build upon ongoing efforts and increase public and private input in planning and on-going policy/program development.

9.1.2 Overview of Remaining Sections

Section 9.2 outlines current demographic and economic conditions and trends in the County. Work force issues are presented in Section 9.3. These sections create the foundation for a discussion of locations for economic growth in Section 9.4. Section 9.5 then presents organizational recommendations for implementation of The Economic Development Plan. This chapter concludes by delineating the specific policies and action items needed to implement this plan.

9.2 Existing Demographic and Economic Conditions and Trends

2.1 Population Growth & Characteristics

As discussed in the Demographics and Trends Chapter, there is a wide disparity in the various population estimates that have been generated for Beaufort County, as shown by Table 40. The Bureau of Economic Analysis estimates constitute the low end of the range (e.g., estimated 114,200 persons in 2020), the Lowcountry COG—the median or baseline (at approximately 168,000 persons in 2020), and the State Data Center—high end (projection of 219,000 persons by 2010). All estimates and projections agree that the County has grown and will continue to grow at a rate faster than the Lowcountry and the State.

Comparative data also indicates that the County population growth in the recent past has exceeded that of the nearby Savannah metropolitan area (i.e. Bryan, Chatham, and Effingham counties). Between 1990-1995, Beaufort County population grew at a 14 percent rate compared to the Savannah metropolitan area's 8 percent population growth rate. This pattern is expected to continue in the future.

Population is not expected to grow evenly across County subareas, however. From 1990 to 2020, population in Northern Beaufort (i.e. Sheldon, Lady's Island, Beaufort-Port Royal, and St. Helena planning areas) is expected to increase by 38 percent, but the expected increase in Southern Beaufort (Hilton Head Island, Bluffton, and Daufuskie planning areas) is much higher at 188 percent. While the Hilton Head Island planning area has been primarily responsible for the recent strong population increases in Southern Beaufort, 51 percent of the future growth (e.g., 1995 to 2020) in the area is expected to occur in the Bluffton planning area.

Table 40: Comparison of Population Estimates and Projections 1980-2020.

	Issuing Agency/ Firm							
Year	Planning Board	State Data Center	Target 2010 Group	Lowcountry COG	SC Dept. Commerce	BEA	Claritas	DERIVED AVERAGE
1980	65,364		65,200		65,364	67,560	65,362	65,872
1985		83,800				80,200		82,000
1990	86,425	104,900	85,813	86,425	86,425	87,100	86,425	89,073
1995	102,843	127,100			107,006	91,600	98,829	105,476
2000	109,125	151,400	136,490	109,124		96,800	110,452	118,899
2005		179,600				101,600		140,600
2010	138,375	219,000	166,250		182,100	106,300		162,405
2020	168,325					114,200		141,263 ****

**** Average is low due to absence in this year of "high" projections by State Data Center and State Dept. of Commerce

Source: Beaufort Co. Planning Board; SC State Data Center; Lowcountry COG; SC Dept. of Commerce; Bureau of Economic Analysis; Target 2010; Claritas, Inc.

Census data indicates that the County population has become less radically diverse, relatively speaking, as the "White" population grew 12 percent between 1990 and 1994, compared to 8 percent growth in the "Black" population. Within the racial distribution of the County, however, consideration of lifestyle segmentation data obtained from Claritas, Inc. reveals significant class differences across subareas of County population (i.e. Northern Beaufort compared to Southern Beaufort). As a technical note, Claritas' PRIZM database classifies all United States census tracts into one of 67 lifestyle "clusters," which themselves make up 15 lifestyle "groups," based on the demographic and spending characteristics of who lives there.

While more detail on the analysis is provided in the main body of the report, the following examples are illustrative of overall findings regarding the wide geographic "gap" between lifestyle clusters:

The data indicate that in Beaufort County as a whole, the most common "lifestyle cluster" is comprised of households characterized by (for instance): blue-collar jobs, a particularly strong orientation towards religion, and relatively low retail expenditures. This lifestyle cluster accounts for some 21 percent of all County households. A closer look at the numbers reveals, however, that the households in this cluster are far from equally distributed across the County, as 88 percent of the total cluster households, in fact, reside in Northern Beaufort.

This situation is reversed for the third-most prevalent "lifestyle cluster," making up 12.3 percent of the County's households. Households in this cluster have a tendency to be "educated, upscale, married executives and professionals... {with} multiple incomes...and life centers around family and outdoor activities..." These households represent only 2.7 percent of the nation's households. Fully 95 percent of this cluster's households within Beaufort County reside in Southern Beaufort.

9.2.2 Income

As shown on Table 41, Beaufort County has a higher per-capita income and higher median household income than the rest of the Lowcountry (Hampton, Colleton, and Jasper counties), the State, or the Savannah metropolitan area. There is a far higher percentage of all Beaufort County households (as of 1995) earning over $75,000, at approximately 15 percent, than comparable data for the reference areas shown on Table 41.

It is notable that median and per-capita incomes in Beaufort County, while higher than those in the rest of the Lowcountry, the State of South Carolina, and the Savannah MSA, have grown at a slower rate than in these reference areas over the 1989-1995 period.

Trends vary significantly at the sub-county level, as shown by Table 42 and 43. These income differentials are the most significant indicator of the need for diversification in the County economy, as they are a result of the differences in education levels. Table 42 shows that 1995 per-capita income in Northern Beaufort is almost 30 percent lower than that for the County as a whole, and is less than half the per-capita income for Hilton Head Island households. As shown by Table 43, the per-capita and median incomes in the Sheldon "Census Division" (equivalent to the Sheldon planning area) are in fact lower than the average for the "least developed" coun-

Table 41: Summary Income Data.

Key Summary Variables	Comparative Areas		
	Beaufort County	Other Lowcountry 1/	State of SC
Per Capita Income			
*1989	$15,240	$8,711	$11,890
*1995	$19,153	$11,130	$15,755
% Change 1989-1995	25.7%	27.8%	32.5%
Median Household Income			
*1989	$30,671	$19,456	$26,316
*1995	$34,747	$22,260	$31,640
% Change 1989-1995	13.3%	14.4%	20.2%
1995 Median Household Wealth	$59,925	$63,546	$62,576
1995 Hhold Income Distribution (%)			
Less Than $10,000	12.1%	22.0%	14.6%
$10,000-$19,999	14.2%	23.4%	16.5%
$20,000-$24,999	7.8%	8.9%	8.4%
$25,000-$34,999	16.1%	12.9%	15.1%
$35,000-$49,999	17.5%	16.2%	17.7%
$50,000-$74,999	17.2%	11.9%	16.8%
$75,000-$99,999	7.2%	2.9%	6.3%
$100,000+	7.7%	1.8%	4.5%

1/ Aggregated Totals for Hampton, Jasper, and Colleton Counties

Source: Basile Baumann Prost and Associates; Claritas, Inc.

Table 42: Summary Income Data for Subareas within Beaufort County.

Key Summary Variables	Comparative Areas			
	Hilton Head Island	Southern Beaufort 1/	Northern Beaufort 2/	Beaufort County
Per Capita Income				
*1989	$25,285	$22,995	$10,926	$15,240
*1995	$31,252	$28,165	$13,424	$19,153
% Change 1989-1995	23.6%	22.5%	22.9%	25.7%
Median Household Income				
*1989	$43,099	$40,264	$25,632	$30,671
*1995	$48,229	$44,575	$29,380	$34,747
% Change 1989-1995	11.9%	10.7%	14.6%	13.3%
1995 Median Household Wealth	$96,439	$89,882	$41,775	$59,925
1995 Hhold Income Distribution (%)				
Less Than $10,000	7.2%	8.2%	15.5%	12.1%
$10,000-$19,999	8.5%	10.6%	17.3%	14.2%
$20,000-$24,999	5.8%	6.4%	9.0%	7.8%
$25,000-$34,999	12.4%	13.4%	18.5%	16.1%
$35,000-$49,999	17.9%	17.6%	17.5%	17.5%
$50,000-$74,999	22.8%	21.1%	13.9%	17.2%
$75,000-$99,999	11.1%	10.0%	4.7%	7.2%
$100,000+	14.4%	12.6%	1.8%	7.7%

1/ Includes St. Helena, Sheldon, and Beaufort-Port Royal census divisions
2/ Bluffton census division--includes Hilton Head

Source: Basile Baumann Prost and Associates; Claritas, Inc.

Table 43: Summary Income Data for Subareas within Northern Beaufort.

Key Summary Variables	Comparative Areas				
	St. Helena Census Division	Sheldon Census Division	Northern Beaufort 1/	Least-Dev'd Counties 2/	Beaufort County
Per Capita Income					
*1989	$13,310	$7,419	$10,926	$8,653	$15,240
*1995	$17,043	$9,720	$13,424	$11,506	$19,153
% Change 1989-1995	28.0%	31.0%	22.9%	33.0%	25.7%
Median Household Income					
*1989	$27,554	$13,031	$25,632	$19,547	$30,671
*1995	$30,909	$16,424	$29,380	$23,426	$34,747
% Change 1989-1995	12.2%	26.0%	14.6%	19.8%	13.3%
1995 Median Household Wealth	$81,080	$56,818	$41,775	$61,353	$59,925
1995 Hhold Income Distribution (%)					
Less Than $10,000	19.0%	32.1%	15.5%	22.1%	12.1%
$10,000-$19,999	15.7%	23.4%	17.3%	21.6%	14.2%
$20,000-$24,999	7.1%	7.5%	9.0%	8.7%	7.8%
$25,000-$34,999	12.8%	11.7%	18.5%	14.6%	16.1%
$35,000-$49,999	14.8%	11.7%	17.5%	15.2%	17.5%
$50,000-$74,999	16.5%	8.0%	13.9%	11.9%	17.2%
$75,000-$99,999	7.3%	3.6%	4.7%	3.7%	7.2%
$100,000+	6.7%	1.9%	1.8%	2.4%	7.7%

1/ Includes St. Helena, Sheldon, and Beaufort-Port Royal census divisions

2/ As classified in the Rural Development Act--includes Allendale, Bamberg, Barnwell, Chester, Clarendon, Colleton, Dillon, Edgefield, Hampton, Jasper, Lee, Marlboro, Marion, McCormick, Orangeburg, and Williamsburg Counties

Source: Basile Baumann Prost and Associates; Claritas, Inc.

ties in South Carolina as defined by the Rural Development Act of 1996, and less than half the related income measures for the County. There are, likewise, substantial differences in the distribution of household income, by age of householder, within the County. Younger householders (i.e., aged 35 to 44) have the higher incomes in northern Beaufort; older households (i.e., 55 and up) have higher incomes in Southern Beaufort.

9.2.3 Retail Sales

The high overall growth in income has motivated strong increases in retail sales. Total retail sales in Beaufort County has clearly served as a catalyst for the rapid increase in retail space in the County, as they have increased approximately 86 percent over the 1987-1995 period (see Table 44). Also in this time-frame, the County has increasingly become the "retail core" for the Lowcountry (defined as Beaufort, Hampton, Colleton, and Jasper counties), as Beaufort County has increased its share of total Lowcountry retail sales from 65 percent in 1987 to 73 percent in 1995.

However, the Lowcountry region's share of State sales has remained constant, due to slow growth of sales in Hampton, Jasper, and Colleton (actual declines, unadjusted for inflation, have been recorded for Hampton County). The Lowcountry has also not "gained share" with respect to other coastal counties in the State (e.g. the Charleston and Myrtle Beach areas), and has only gained moderately in comparison to retail sales volume in the Savannah metro area. Though a direct empirical relationship cannot be made between sales and expenditure volumes in the County, Lowcountry, and surrounding areas (e.g. Charleston, Savannah metropolitan areas) without more detailed analysis, there does appear to be significant leakage of regional retail sales.

This growth, however, like high incomes, has not been spread equally across the County. Southern Beaufort (including Hilton Head) represented 52 percent of total consumer expenditures for the County in 1995, compared to Northern Beaufort's 48 percent. Hilton Head Island alone was responsible for 43 percent of household purchasing power (i.e. the total amount of expenditures by households for all major types of retail goods) in the County. Almost 82 percent of the total expenditures of Southern Beaufort households are concentrated on Hilton Head Island. Within Northern Beaufort, the degree of concentration of sales in one planning area is similar. The Beaufort-Port Royal area represents 68 percent of the total sales in Northern Beaufort. St. Helena and Sheldon Census Divisions represent only 15 percent of total County sales combined.

9.2.4 Labor Force Characteristics

Beaufort County has an apparent competitive advantage to the State, the Lowcountry region, and Savannah MSA in terms of labor participation rate (Beaufort's is higher); employment by occupation (Beaufort's is more weighted towards the executive/administrative and technical positions that pay higher wages), and travel time to work (Beaufort's is shorter on average, though the County does have a relatively high percentage with commutes to work of an hour or more).

As with population and income, however, the disparity between County areas (north and south) is evident in this data. While the County as a whole records higher labor force statistics than the

Table 44: Percent Change in Retail Sales by Major Store Type and Share Change. 1987-1995

Jurisdictions	Food	Eating and Drinking Places	General Merchandise	Furniture/ Home Furnishings	Automotive	Drug	Other 2/	TOTAL
Beaufort County	44.3%	117.0%	294.7%	3.3%	114.4%	93.0%	75.2%	86.3%
Colleton County	31.0%	49.6%	263.3%	-30.9%	75.5%	16.6%	15.3%	40.3%
Jasper County	22.2%	70.0%	18.6%	-90.9%	-80.1%	44.9%	12.1%	2.4%
Hampton County	47.7%	150.3%	29.6%	170.7%	-31.6%	134.0%	34.0%	36.3%
Lowcountry Totals	40.5%	105.2%	256.2%	-1.4%	85.2%	68.7%	51.0%	66.6%
---Change in Beaufort Co. Share of Lowcountry	2.7%	5.8%	10.8%	4.7%	15.7%	14.4%	16.1%	11.8%
Other South Carolina Coastal								
Charleston Metro	29.9%	62.2%	87.2%	74.8%	51.4%	124.3%	66.0%	58.2%
Myrtle Beach Metro	43.8%	118.9%	153.1%	36.1%	-38.0%	62.5%	94.9%	76.4%
Subtotal, Other Coastal Metro	34.0%	84.4%	105.7%	59.8%	48.0%	104.6%	75.4%	63.8%
---Change in Lowcountry: Coastal Metro Ratio	4.9%	11.3%	73.1%	-38.3%	25.2%	-17.6%	-13.9%	1.7%
Other South Carolina								
Metro SC Counties	66.9%	128.5%	108.1%	118.5%	85.1%	113.1%	91.4%	92.2%
Non-Metro Counties	18.6%	14.2%	48.4%	-15.1%	0.1%	25.4%	2.6%	10.3%
---Change in Lowcountry Share of Non-Metro	18.5%	79.6%	140.1%	16.2%	85.1%	34.5%	47.2%	51.1%
South Carolina	48.3%	88.3%	91.7%	65.7%	56.7%	77.8%	57.7%	62.9%
---Change in Lowcountry Share of SC	-5.2%	9.0%	85.8%	-40.5%	18.2%	-5.1%	-4.3%	2.3%
Other Georgia Coastal								
Savannah Metro	22.7%	52.7%	97.6%	62.8%	47.8%	99.9%	68.6%	57.2%
---Change in Lowcountry: Savannah Metro Ratio	14.5%	34.3%	80.2%	-39.4%	25.4%	-15.6%	-10.5%	6.0%

1/ Not adjusted for inflation

2/ "Other" would include apparel expenditures, as well as expenditures on miscellaneous retail goods

Source: Basile Baumann Prost and Associates, Inc.; Sales and Marketing Management

State, the Lowcountry region, and the Savannah MSA for all employment variables, Sheldon division in Northern has a higher unemployment rate, lower labor participation rate, a higher percentage of adults without a high school diploma, and a longer trip to work than the population in the counties defined as the "least developed" in the State by the State's Rural Development Act.

9.2.5 The Economic Base

The need for diversification of the economic base, so widely accepted now by the residents and economic development professionals of Beaufort County, is readily apparent when time series data comparing the manufacturing sectors at the State and County levels is considered. The County has experienced a significant decline in manufacturing employment base from the 1950s to the present. Increased diversification would make the County economy stronger and more resilient in periods of economic recession.

If one were to look simply at total numbers of jobs in the Beaufort County economy over time, one would wonder what the problem with the County's economy could possibly be. Beaufort County's economic base, in relation to the State, has grown in size over the past half-century. The County job base grew 13 times over from 1951 to 1993, while the State job base increased just 3 times. Beaufort had 2.4 percent of the State's jobs in 1993, compared to 0.6 percent in 1951. (NOTE: Data does not include governmental or farm employment).

The future is likely to hold more job growth. Conservative estimates from the Bureau of Economic Analysis indicate that the County job base is expected to grow by 14 percent (21 percent not counting expected federal government employment decrease) from 1995 to 2020.

This County job base, however, has increased primarily through the expansion of low-wage employment opportunities concentrated in a few sectors of the economy. Seventy-three percent of the non-governmental, non-farm jobs added to the County base over this period were in the Services and Retail Trade sectors. The tourism base of the County is a primary driver of much of this Services and Retail Trade sector growth. Tables 45 through 47 illustrate the importance of the tourism sector to the region and County. The expenditure impact of tourism for the Lowcountry region (including Beaufort, Jasper, Colleton, and Hampton Counties) was nearly $1.4 billion in 1994-1995, with $472 million in payroll committed to industry workers. These totals rank the region third (behind the Grand Strand in Myrtle Beach and Charleston) in capturing the tourist dollar that comes to South Carolina.

Growth in the Services and Retail Trade sectors is projected to continue to increase in the future. As is the case for other Lowcountry counties, over 90 percent of total net job growth in the future for Beaufort County (according to the Bureau of Economic Analysis) is expected to occur in just three sectors of the economy: "finance, insurance, and real estate;" "retail trade;" and "services."

In the South Carolina economy in 1951, of 397,343 jobs, 55 percent were manufacturing, and manufacturing was 60 percent of payroll. Beaufort County formerly had manufacturing strength comparable to the State's. Forty-three percent of the County's jobs and 41 per-

Table 45: Consumption Impacts of Tourism (in millions of dollars) by State Region of South Carolina: 1994-1995.

		Expenditure		Jobs		Payroll		Total	Percent
Region	Counties	Direct	Total	Direct	Total	Direct	Total	Taxes	State
I	Grand Strand	$2,025	$3,848	62,132	95,783	$741	$1,312	$153.5	35.0%
II	Charleston	$822	$1,562	25,221	38,881	$301	$533	$62.3	14.2%
III	**Lowcountry**	**$729**	**$1,385**	**22,367**	**34,482**	**$267**	**$472**	**$55.3**	**12.6%**
IV	Santee Cooper	$208	$395	6,382	9,838	$76	$135	$15.8	3.6%
V	Pee Dee	$218	$414	6,689	10,311	$80	$141	$16.5	3.8%
VI	Capitol City	$604	$1,148	18,532	28,569	$221	$391	$45.8	10.4%
VII	Thoroughbred Country	$72	$137	2,209	3,406	$26	$47	$5.5	1.2%
VIII	Old 96 District	$96	$182	2,946	4,541	$35	$62	$7.3	1.7%
IX	Olde English District	$188	$357	5,768	8,892	$69	$122	$14.3	3.3%
X	Upcountry	$820	$1,558	25,160	38,786	$300	$531	$62.2	14.2%
	TOTAL STATE	$5,782	$10,986	177,406	273,489	$2,116	$3,746	$439	100%

* Direct impact is equivalent to the dollars intially spent and the employment resulting where those sales occur
** Total impact includes indirect impact (the impacts of successive rounds of sales and employment)
*** Includes state and local taxes

I. Includes Georgetown and Horry counties
II. Includes Charleston and Dorchester counties
III. Includes Beaufort, Jasper, Hampton, and Colleton counties
IV. Includes Berkeley, Calhoun, Clarendon, Orangeburg, and Sumter counties
V. Darlington, Dillon, Florence, Lee, Marion, Marlboro, and Williamsburg counties
VI. Lexington, Newberry, Richland, and Saluda counties
VII. Aiken, Allendale, Bamberg, and Barnwell counties
VIII. Abbeville, Edgefield, Greenwood, Laurens, and McCormick counties
IX. Chester, Chesterfield, Fairfield, Kershaw, Lancaster, Union, and York counties
X. Anderson, Cherokee, Greenville, Spartanburg, Oconee, and Pickens counties

Source: Basile Baumann Prost and Associates, Inc.; South Carolina Department of Parks, Recreation, and Tourism

Table 46: Percent Change of Tourism Consumption Impacts by State Region of South Carolina: 1994-1995.

Region	Counties	Expenditure		Jobs		Payroll		Total
		Direct	Total	Direct	Total	Direct	Total	Taxes
I	Grand Strand	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%	35.0%
II	Charleston	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%
III	**Lowcountry**	**12.6%**	**12.6%**	**12.6%**	**12.6%**	**12.6%**	**12.6%**	**12.6%**
IV	Santee Cooper	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%	3.6%
V	Pee Dee	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%	3.8%
VI	Capitol City	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%	10.4%
VII	Thoroughbred Country	1.2%	1.2%	1.2%	1.2%	1.2%	1.3%	1.3%
VIII	Old 96 District	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%	1.7%
IX	Olde English District	3.3%	3.2%	3.3%	3.3%	3.3%	3.3%	3.3%
X	Upcountry	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%	14.2%
	TOTAL STATE	100%	100%	100%	100%	100%	100%	100%

I. Includes Georgetown and Horry counties
II. Includes Charleston and Dorchester counties
III. Includes Beaufort, Jasper, Hampton, and Colleton counties
IV. Includes Berkeley, Calhoun, Clarendon, Orangeburg, and Sumter counties
V. Darlington, Dillon, Florence, Lee, Marion, Marlboro, and Williamsburg counties
VI. Lexington, Newberry, Richland, and Saluda counties
VII. Aiken, Allendale, Bamberg, and Barnwell counties
VIII. Abbeville, Edgefield, Greenwood, Laurens, and McCormick counties
IX. Chester, Chesterfield, Fairfield, Kershaw, Lancaster, Union, and York counties
X. Anderson, Cherokee, Greenville, Spartanburg, Oconee, and Pickens counties

Source: Basile Baumann Prost and Associates, Inc.; South Carolina Department of Parks, Recreation, and Tourism

Table 47: Percent Change in Consumption Impacts of Tourism by State Region of South Carolina: 1993-1995.

		Expenditure		Jobs		Payroll		Total
Region	Counties	Direct	Total	Direct	Total	Direct	Total	Taxes
I	Grand Strand	10.4%	10.4%	10.4%	10.4%	10.4%	10.3%	10.4%
II	Charleston	3.4%	3.4%	3.4%	3.4%	3.4%	3.5%	3.3%
III	**Lowcountry**	**3.1%**	**3.1%**	**3.1%**	**3.1%**	**3.1%**	**3.1%**	**3.2%**
IV	Santee Cooper	6.1%	6.2%	6.1%	6.1%	5.6%	6.3%	6.0%
V	Pee Dee	5.3%	5.3%	5.3%	5.3%	5.3%	5.2%	5.1%
VI	Capitol City	4.3%	4.4%	4.3%	4.3%	4.2%	4.3%	4.3%
VII	Thoroughbred Country	-2.7%	-2.8%	-2.7%	-2.7%	-3.7%	-2.1%	-1.8%
VIII	Old 96 District	2.1%	1.7%	2.1%	2.1%	2.9%	1.6%	2.8%
IX	Olde English District	4.4%	4.4%	4.4%	4.4%	4.5%	4.3%	5.1%
X	Upcountry	8.8%	8.7%	8.8%	8.8%	8.7%	8.6%	8.7%
	TOTAL STATE	6.7%	6.7%	6.7%	6.7%	6.7%	6.6%	6.7%

I. Includes Georgetown and Horry counties
II. Includes Charleston and Dorchester counties
III. Includes Beaufort, Jasper, Hampton, and Colleton counties
IV. Includes Berkeley, Calhoun, Clarendon, Orangeburg, and Sumter counties
V. Darlington, Dillon, Florence, Lee, Marion, Marlboro, and Williamsburg counties
VI. Lexington, Newberry, Richland, and Saluda counties
VII. Aiken, Allendale, Bamberg, and Barnwell counties
VIII. Abbeville, Edgefield, Greenwood, Laurens, and McCormick counties
IX. Chester, Chesterfield, Fairfield, Kershaw, Lancaster, Union, and York counties
X. Anderson, Cherokee, Greenville, Spartanburg, Oconee, and Pickens counties

Source: Basile Baumann Prost and Associates, Inc.; South Carolina Department of Parks, Recreation, and Tourism

cent of the payroll came from the manufacturing sector in 1951.

By 1993, though its prominence in the State economy had declined (as everywhere), 28 percent of State employees still worked in manufacturing, and the sector's payroll was 36 percent of the total payroll. The foreign investment associated with the manufacturing jobs Statewide, have lowered unemployment rates, tripled quantity of goods exported, and caused the average annual wage at the state level to increase by over one-third in the last decade. In Beaufort County, though, manufacturing was only 4.5 percent of employment and 5.5 percent of the payroll in 1993, preventing it from easily attracting its "fair share" of this foreign investment.

Thus, while the fact that overall growth in the County job base exceeds that of the State by a wide margin is a positive thing, there must be a renewed focus on the quality of the jobs created so that this level of economic activity may provide the momentum that can be leveraged for economic diversification.

Any discussion of the economic base of Beaufort County and the Lowcountry in general must include the impacts of military and civilian employment. In 1995, the number of civilian and active military jobs (less recruits) was 10,027 at the three military facilities in the County, the Marine Air Station, Parris Island Training Depot and the Naval Hospital. These jobs represent 22.3 percent of the Beaufort County employment base and 32 percent of Northern Beaufort County.

The number of civilian jobs in 1995 at all facilities was 4,005. These employment figures represent 37.1 percent and 62.9 percent of the total annual payroll in the County as a whole and Northern Beaufort County, respectively.

The efforts by the community to protect the employment base of the region have been successful through several rounds of Base Closure activity over the last several years. Most recently, the County and City of Beaufort have addressed the long term needs of the Air Station by proposing revised ordinances to limit encroachment in the over-flight areas around the Air Station.

9.2.6 Targeted Business Analysis

Targeted business analysis provides economic developers an opportunity to locate (i.e. "target") potential business industries that are best and least suited for recruitment and retention, by tracing trends in industry employment over time for the smaller, "base" economy (i.e. Beaufort County) in relation to larger reference areas. In the case of Beaufort County, an evaluation of the employment in the County versus other counties, the State, and nationwide averages indicates that there are several industries that can be considered likely "growth prospects" for local economic developers. It should be stressed that these types of analyses measure only past trends, and therefore are limited in their ability to fully capture all of the opportunities that an increasingly diverse, global economy might produce.

Given these caveats, below are the summary results for two distinct types of targeted business analysis: the Location Quotient Analysis and the Shift-Share Analysis.

a. Location Quotient Analysis

Location quotient analysis, based on analysis of business and employment trends for the 1987-1993 period only, indicated that "export" industry sectors (i.e., the foundation of the County economic base when compared to the State and the United States) were the following economic sectors:

- Agriculture/Forestry/Fisheries;
- Construction;
- Retail Trade (not normally considered as part of "export" base);
- Finance, Insurance, and Real Estate; and
- Services (represents almost 45 percent of total basic employment).

Technical note: the share of total jurisdictional employment, for these sectors is greater in Beaufort County than at the national level.

Beaufort County retains competitive advantage in the same sectors, when compared to the economic bases of the State, other South Carolina coastal counties, and nearby counties in the Savannah metropolitan area. In comparison with the rest of the Lowcountry, comparative advantage is only lost in agriculture/forestry/and fisheries.

b. Shift-Share Analysis

Shift-share analysis is a more detailed process, and can reveal (in the case of Beaufort County) trends to the two-digit SIC level.

The Bureau of Labor Statistics classifies industrial sectors in the United States economy by one-digit, two-digit, three-digit, or four-digit SIC ("standard industrial classification") codes. One-digit codes represent the broadest SIC groups, i.e. "Manufacturing." A two-digit SIC code, as dealt with in this analysis, would be (for instance) a sub-industry within the broader "Manufacturing" class, e.g. "Printing and Publishing." Two-digit SIC code information is the most detailed data available for Beaufort County, while data at the State and United States level go into further detail, i.e. three- and four-digit SIC codes.

More detailed shift-share analysis reveals a significant comparative advantage for Beaufort County in the following "strong sectors." Strong sectors in general are defined as those in which employment for the 1987-1993 analysis period has grown at the County, state, and national level. Particularly positive growth prospects are indicated by an asterisk, and in these cases employment growth at the County level has been particularly strong.

Services

- Health Services (e.g. home health care)
- Social Services
- Amusement/ Recreation Services (e.g. tourism-related)
- Auto Repair Services
- Membership Organizations (e.g. foundations, clubs)
- Agricultural Services (e.g. agricultural suppliers)
- Hotels and Other Lodging Services
- Motion Pictures
- Business Services
- Legal Services
- Personal Services

Manufacturing

- Rubber/Fabricated Rubber Products/Miscellaneous Plastics Products*

Transportation, Communication, and Utilities

- Trucking and Warehousing
- Water Transportation (including barge operations, sea cargo, excursion boats)

Wholesale Trade

- Wholesale Trade-Durable Goods (includes auto parts and supplies, lumber and construction materials, apparel goods)
- Wholesale Trade-Non-durables (includes food products, paper and paper products, professional and commercial equipment e.g. photographic equipment, office equipment, computer equipment)

Finance, Insurance, and Real Estate

- Depository Institutions/Banking

Retail

- Food Stores
- General Merchandise Stores
- Apparel and Accessory Stores

Further analysis indicates that, while not as cost-effective as targeting to "strong" performers, targeting recruitment and expansion efforts to the following "constrained" sectors could serve as a secondary goal of economic development activity. Constrained sectors are those for which, while employment growth at the County level is still positive, trends at either the state or national level are negative.

Manufacturing

- Printing and Publishing
- Apparel (severely constrained at State and U.S. level, however)

Finance, Insurance, and Real Estate

- Insurance

Construction

- Special Trade Contractors
- Heavy Construction

For all other industry sectors that could be analyzed (given available data for two-digit SIC codes), employment was either not been growing at the County level though strong elsewhere (i.e., a "lagging" sector) or was declining in all relevant areas (i.e., a "poor" sector).

c. Conclusions

Beaufort County is not a manufacturing center and will not be one in the future with the implementation of this plan. The Economic Development Plan recommends new directions for business attraction programs and the plan outlines a strong business attraction program built upon these points:

Strategies are built upon strengths of the region, namely high development standards, conservative public fiscal policy, a high living standard, and superior quality of life.

The program seeks out high technology and other light manufacturers that seek higher amenity surroundings, the marketing programs developed use high amenity surroundings as a point of "competitive advantage" to attract highly selected firms.

The program is not built upon traditional "heavy" manufacturing trends analysis, because "heavy" manufacturing is not a targeted business category. Beaufort County is charting a new course, with the attraction of:

- additional clean light-manufacturing (that is technology-based)
- distribution and assembly firms
- high technology and other manufacturers that are information-based

Attraction strategies supported by needed "infrastructure" and current and future County policy in these areas:

- development and planning of high quality (Research and Development) business parks;
- education and training programs to expand job opportunities for residents of Beaufort County; and
- financing assistance specifically targeted to meet needs of higher technology firms.

The location quotient and shift-share analyses are of limited value to Beaufort County. They provide economic development marketers only with "a place to start" in terms of targeting industry. Obviously, it is likely, given past trends, that efforts to attract either companies that are members of either "strong" or "constrained" industry sectors are a good beginning point. The limitations of the analysis as a dictator of policy, however, must be understood.

Other factors, in addition to historic performance of manufacturing categories, are more important to technology-based attraction strategies.

- One factor is the high locational advantage Beaufort County has based upon its high quality of life, significant opportunities for unique residential development and high marks as a place to live.
- Also, the County maintains unique world-wide visibility in the business community, primarily resulting from its reputation as a high quality tourist destination and second-home location.

This visibility provides the County with the opportunity to market itself to CEOs across a broad spectrum of business. The target industries (i.e. those that demonstrate superior job growth trends locally) in the County economy thus have the capacity to change quite rapidly, based on the location or relocation of just one new facility. There should be careful monitoring of all new capital and labor investments at the County, state, and national levels to identify potential new growth clusters and allocate or reallocate resources to capitalize on the opportunity.

Also, new industries, such as eco-tourism and aquaculture offer opportunities for Beaufort County although they don't show up in the location quotient analysis because they are either too new or unclassifiable. The County, as a result of its many environmental assets (36 percent water, numerous rivers and inlets with shellfish beds, the ACE Basin, Hunting Island, Pinckney Wildlife Refuge) and natural strengths of its resident labor force in these areas, has obvious comparative advantages in these evolving industries that should not be ignored.

For Beaufort County, a balanced approach, including supply-side strategies (such as land and infrastructure improve-

ment, speculative construction, etc.) and demand-side strategies (such as strategically targeted training and technical assistance), both pursued through an aggressive marketing and promotion campaign integrated with regional efforts, should prove to be the most rewarding to the County.

9.3 Work Force Issues

9.3.1 Training and Education

Like many areas in the country, Beaufort County has work force deficiencies that will need to be addressed over time if it is to expand job opportunities for County residents.

Some remedies will need a longer time frame to solve, others require short-term actions. The Plan proposes to create 5,000 new jobs over the next 10 years, to fill many of these jobs (in light-manufacturing, distribution and assembly) with County residents requires continued, but expanded use of existing "pre-employment" training programs like the state Special Schools Program, housed at the Technical College of the Lowcountry, and other State programs, including more effective use of Private Industry Council programs.

Higher-technology job skills will require expanded support in training programs and general education from the University of South Carolina-Beaufort Campus, the New River Campus planned for Southern Beaufort County, the Technical College of the Low Country electronics and computer programs, Career Education Center programs, and Beaufort County School District policies, programs and course work.

This expanded support is very achievable, and each of these institutions has taken certain steps in this direction on its own. A degree of joint planning and expanded policy making in this specialized area is needed to expand the impacts of all programs in concert with the County High Technology Business Attraction Program, supported by the High Technology Business Council.

As a beginning point, the Economic Development Plan recommends:

One, the creation of an Education and Training Partnership to improve and insure greater support for technology-based job creation goals. The Partnership should, it is recommended, be made up of each level of education and training represented in the public and private sectors of the County (and region).

Two, all forms of job creation require easy access to higher education to maintain "cutting edge" capacities and to provide opportunities close to home for meeting the continuing higher education needs of learning intensive higher technology firms. The expansion of the USC-

B program at its planned New River Campus should include curriculum support for the education needs of higher technology firms.

Three, specialized research and support programs linked to the University of South Carolina System. Technology-based firms require access to research facilities, and students who can gain invaluable work experience while going to school.

The labor data reviewed in Section 2 indicate the comparably high percentage of residents working in "service" occupations and low percentage in "operator/fabricator/laborer" and "technician" jobs in the County. This results in part from a cycle operating in the region in which the needed supply of workers for these positions is diminished, as these workers are forced to move outside of the region for employment. The resulting absence of high-paying jobs has made it difficult for the County to retain many of its youth that either have developed, or have the greatest opportunity to develop, the skills needed to fill highly skilled technical positions.

The research institution around which the County could build the training and research capacity that might support expanded and more extensive high-tech clusters in the nearer-term has not developed to date. The examples of the Research Triangle in North Carolina and the Huntsville, Alabama research park show that, even in the presence of such institutions, these clusters take a long time to fully develop. Significant "front-end" time, and significant capacity building, that is well within the reach of the educational institutions in the County, is needed before the region could meet all of the employment needs of a large number of higher technology firms. However, the region is well suited to attract, and is currently attracting, high technology firms in the five to fifty employee range. It is reasonable to project that this trend will continue and in fact add to the general capacity of the region to produce educational and training programs incrementally over the next decade.

The public, business community, and County government have demonstrated the willingness to help fund incremental improvements in the high-technology and educational infrastructure of the County. There is also a strong public concern and commitment to retention of existing businesses, as evidenced by involvement in the School District's "School to Work" program and the Technical Colleges' ACCLAIM project. The population itself can serve as a resource, as a high number of skilled retirees with managerial experience in manufacturing, finance, insurance, real estate and other growing industry sectors reside in the County.

Plans for expansion of the development of the new USC-B campus at the Okatie site in Southern Beaufort County and expansion of four-year programs has the potential to provide a public research partner for interested private corporations over the long term.

Also, the early successes of the Department of Social Services' regional job placement efforts as sanctioned under the Family Independence Act (Welfare Reform Act) and rising enrollments and placement at the University of South Carolina at Beaufort, the Technical College of the Lowcountry and the Career Education Center can also serve as a foundation on which to build coordination of existing efforts and develop strategies for new ones.

More importantly, the policy decisions made as a result of the Comprehensive

Plan process (i.e. a focus on targeted industries; provision of additional land for development of more marketable business parks) will serve to provide the assurances of (a) need for specific training programs and (b) adequate enrollment in those programs that could make expansion of existing education and training programs (Technical College of the Lowcountry, Career Education Center, USC-Beaufort, and private providers) viable.

9.4 Locational Factors

9.4.1 Commercial Development (Retail and Non-Retail)

Beaufort County does possess a vast reservoir of vacant zoned acreage to address the anticipated demands of commercial growth into the future. There are numerous existing and planned locations along well-traveled routes (e.g. U.S. 278, S.C.170, and U.S.21) that are well-positioned to capture not only tourist traffic but serve the majority of projected resident demand.

Retail and non-retail space has, not surprisingly, developed to serve the sources of demand, and (as seen in Section 1) this demand is primarily in Southern Beaufort County, and on Port Royal Island. Hilton Head currently has an estimated 3 million square feet of retail space and community malls, such as Coligny Plaza and Shelter Cove, which draw shoppers primarily from Southern Beaufort and the island itself. The two Hilton Head Island factory outlet centers located on U.S. 278 (second opened summer of 1997) also draw shoppers from the entire region. The City of Beaufort and the Town of Port Royal represent the other concentration of retail space in the County, with about 1 million square feet in major centers that include Beaufort Plaza, Ribaut Square and the 200,000-square-foot Cross Creek Shopping Center. The County market for commercial land continues to respond positively to the strong growth of a population with disposable income and the demonstrated propensity to spend it. Vacancy rates are low in existing retail centers.

Development and speculation continues to concentrate south of the Broad River. Some commercial land prices south of the Broad are $100,000 and up per acre. The planned retail development at Okatie Center (1.2 to 1.5 million square feet at build out, with a supermarket and restaurants in the first phase), combined with the recent construction of a 50,000-square-foot center near S.C. 46 and S.C. 170, will further limit flow of shoppers from south of the Broad to north of the Broad River. Commercial nodes are also planned in many of the PUDs found south of the Broad River, and such development will further limit the amount of new retail space along major arterials

that could be supported by the expected growth.

The lower level of expenditures, more moderate population growth from a smaller base, and access constraints are likely to limit the viability of large-scale commercial expansion north of the Broad River (and particularly north of the Whale Branch) in the foreseeable future.

9.4.2 Manufacturing/ Warehouse/Distribution Space

Beaufort County does have land resources available for manufacturing growth, but very little that competitively meets the needs of high-technology firms that we seek to attract to Beaufort County. There is at present a reservoir of vacant zoned acreage (including large portions of the Beaufort Industrial Park and the Yemassee Industrial Park) in Northern Beaufort to which future commercial and industrial growth may be directed.

The existing business park sites in Northern Beaufort County have significant locational value, with access to interstate travel, port access at the Ports of Port Royal, Savannah and Charleston, rail service, and gas, water and sewer service (at both Yemassee and the Beaufort Industrial Park).

The existing parks in Northern Beaufort County, however, require continued improvements, specifically more modern signage, expanded maintenance strategies and more aggressive marketing, park planning and development strategies.

When one considers the very low percentage of County employment in the manufacturing sector, it is not surprising that the County has an average of only three sales of land for industrial use annually. The slow pace in installing sewer at the Beaufort Industrial Park, training and access limitations, and the memory of past battles, have hampered industrial speculation. The pace of land sales in the Beaufort Industrial Park, until 1996, can be mostly attributed to a lack of sewer service to the Park and a lack of a clear consensus about businesses suitable for recruitment to the County, among other factors.

The absence of support facilities for the industries that might consider increasing their presence in the area also constrains the capacity to build supplier linkages and develop industrial clusters (for instance, there is no machine shop). There is a lack of abundant "affordable" housing (i.e., housing for the lower-middle to middle income bracket) that could constrain the County's ability to attract or retain workers that could serve as a foundation for economic diversification driven by higher-wage manufacturing-related jobs.

There is also strong and growing competition from counties in the region, as well as from the Savannah area, in terms of the quantity of land being marketed for commercial and industrial development. These parks, in some cases, have more infrastructure, a higher quality appearance and better access. Examples include:

- Savannah: The 1,800-acre Crossroads Business Park on I-95, along with the mixed-use development (hotel, golf course and 350,000-square-foot maritime center) planned for Hutchinson Island; reported plans for a 300-acre high-end research park near the Skidaway area.
- Jasper County: Smaller industrial areas in place, developing 300-acre

parks at Cherry Point and Ridgeland (with I-95 access); business park on SC 141.

- Hampton County: Five-County Lowcountry Industrial Park; four years old with 500 of 1,000 acres zoned for development.
- Colleton County: 1,000-acre industrial area near airport with 400 acres available.

Also, while state regulations are common across counties, other counties in the Lowcountry region do have significantly fewer development regulations, and more pressing need to build their tax bases, than does Beaufort County. The provisions of the state's Rural Development Act do, all other things being equal, have the capability of making neighboring counties more attractive as a result of the higher incentives that might be offered.

In general, Beaufort County is considered a superior location by many commercial developers and manufacturers; however, the County needs to improve existing business parks and identify new ones to maintain competitive edge.

9.4.3 Residential Development

Significant residential development has occurred throughout the County in recent years in response to significant population growth. Much of the development, however, has been "high-end," creating a shortage of housing across the complete spectrum of demand.

South of the Broad River, major developments include Sun City Hilton Head, Belfair Plantation, the Okatie Community, and the continued buildout of Moss Creek, Rose Hill and Colleton Plantations. Residential uses are also being contemplated for portions of the Union Camp property along U.S.278 (e.g., Meggett, Buckwalter tracts). About 69 percent (or 12,200) of the 17,800 housing units already approved for construction in the coming years are found south of the Broad River, with over 8,000 units in Sun City Hilton Head alone.

Popular developments are also concentrated north of the Broad on Lady's Island such as Newpoint, Pleasant Point and Bluff Farm. Nearby Dataw Island (part of the St. Helena planning area) is almost built out, and there are plans for additional development on Harbor and Fripp Islands. Major residential communities in the Beaufort-Port Royal and Sheldon planning areas include Habersham Plantation, Bull Point and Brays' Island.

9.4.4 Assessment

Beaufort County has a unique set of locational advantages for selected job growth, most of which are tied to its amenities and quality of life. The County has significant international marketing exposure and the second largest tourist economy in the State, with increasing visitation and hotel occupancy driving room tax revenues up. High international name recognition and broad positive experience with the County primarily due the appeal of the County as a second home and vacation destination creates distinct markets for a large number of business leaders and individuals in professional occupations. A steady stream of prospects, including several high technology firms with the capacity for significant job creation, have come forward in the last two years, drawn by these factors, and the following additional factors:

a. Commercial

The preponderance of retail space under construction and planned for Southern Beaufort, in particular, is likely to address much if not all of even the dramatic population growth projected for that area. If market forces push for additional space, informational resources must exist upon which to review these rezoning requests.

b. High Technology and Light Manufacturing

While zoned acres must be improved to an extent and marketed to the level at which they will appeal to a broader spectrum of targeted users, options must be made available to allow the County to compete for that segment of the market that will not consider locating industry in the long-established areas—especially high amenity desiring high technology firms. Beaufort County cannot afford, due to increasing competition, to be put at a competitive disadvantage in terms of attracting the prospects needed for economic diversification.

c. Residential

The Economic Development Plan should support and follow the recommendations of the Future Land Use Plan. Commercial development should be integrated into neighborhoods where possible and viable, in order to provide the mix of housing opportunities that will be attractive to "amenity seeking" high-technology and light-manufacturing firms.

9.5 Organizational Recommendations

9.5.1 The Concept of the Local Economic Development Organization

Local development organizations have proved to be excellent vehicles for economic and community development due to their inherent strengths. These organizations commonly promote selected incremental job growth to benefit County residents, work to attract investment in economic development from within and outside of the community, display a generally higher level of commitment, have the unique ability to serve socioeconomic diverse client populations, and pursue a more comprehensive approach than most local government agencies.

Economic development organizations that are neither wholly public nor wholly private, but a combination or "public-private partnership," have the capability to draw on the financial and technical resources of both the public and private sectors. While this form of organization may raise concerns as to accountability, a variety of controls can be placed over an economic development organization to ensure accountability and responsibility to the public interest in Beaufort County. These include: funding controls, program controls, policy controls, control over the actual tools used in economic development, and the designation and tracking of benchmarks.

The type of work done by different economic development organizations reflects different foci, or problem areas, which stakeholders view as priorities. The range of program focus areas pursued by local economic development organizations includes activities that are location-specific, project-specific, sectoral in nature, or multi-purpose.

Funding for public-private partnerships commonly comes from membership fees, government subsidies, corporate and foundation grants, and project-generated revenues. Many organizations involved in economic development create revenue-generating subsidiaries to maintain their project development and operating budg-

ets. Common revenue-producing endeavors that economic developers have made available include development consulting, project and property management, and technical assistance.

Economic development organizations commonly draw on local resources such as retired business executives, universities, banking institutions, utility companies and large corporations to assist in the development and execution of economic development strategies.

9.5.2 Application of the Concept to the County

Despite the existence of an Economic Development Corporation in the County, primarily as a financing mechanism, the efforts of the County Economic Development Board, and the efforts of multiple entities in business retention and labor force training, there has to date been no single group in the County empowered with the financial resources, and broad-based membership/capacity to work for economic development.

The reason for the absence of an organization with this objective to date has been the absence of a plan to carry out broad community economic development goals. Based upon survey responses and public meeting input, there is consensus to proceed with programming that creates needed jobs, while not jeopardizing quality of life in the process. There is a strong core of local and State resources available to support an expanded job creation program, such as:

a. Development Board Personnel

Development Board staff project development and loan packaging support will be critical to the success of these efforts. The staff has significant experience in dealing with new and existing state, local, and federal financing resources, as well as lender/investor financing resources.

b. Supportive State Legislation

The 1996 South Carolina Rural Development Act has provided significant financing resources and expanded New Jobs Tax Credits that can be used to finance building construction, site improvements, and on-going training needs of higher-technology firms that the County is targeting for growth.

c. The Jobs-Economic Development Authority

The programs of the Jobs-Economic Development Authority (JEDA) provide funding assistance for business expansion (e.g. low-interest loans, export assistance programs), and augment incentives for business attraction (e.g. tax credits)).

d. Loan and Grant Programs

There are existing loan and grant programs, including the State Community Development Program, Farmers Home Administration and Small Business Administration loans and guarantees and the Lowcountry Council of Governments (Economic Development Administration-funded) business loan program (that serves portions of Beaufort County).

e. The Service Corps of Retired Executive Programs

The retired executives in SCORE (Service Corps of Retired Executives) provide

a reservoir of technical expertise that can be relied on by business start-ups for assistance in developing business plans, as well as for advice on timing and nature of expansion.

f. Support from Local Utilities

The Palmetto Economic Development Corporation, SCANA, South Carolina Electric and Gas, and the Palmetto Electric Cooperative can be called upon for additional marketing assistance and financial incentives for business recruitment.

g. Citizen Support and Involvement

Citizen support and active involvement adds much leverage to "homegrown" economic development projects, such as the Food Processing Small Business Incubator on St. Helena Island. The County Economic Development Board has actively participated in planning and financing the project, including receiving a grant from state sources that the County "passed-through" to the project, that represents one-quarter of the project's funding.

In order for an economic development organization to succeed in this County, clearly defined lines of communication between government, private sector business and citizens must be established. A new inclusiveness is called for, as Beaufort County's residents, businesses, and government entities must "speak with one voice" in order to effectively attract business to the community, as well as effectively grow business "from within." This "voice" will of course not be arrived at without extensive discussion and debate. This discussion and debate however must take place before specific policies are established or defined initiatives undertaken. The private sector could then be reasonably confident that its efforts to relocate or expand, if they stayed within the parameters established by these policies, would be welcomed.

Economic Development

Policies

- Policy 1: Encourage expansion of existing businesses and creation of home-grown businesses.
- Policy 2: Capitalize on opportunities to preserve and enhance the tourism sector in the County.
- Policy 3: Refine and focus business attraction efforts.
- Policy 4: Focus recruitment efforts on attracting quality jobs that do not compromise the quality of life cherished by area businesses and residents.
- Policy 5: Explore the proactive provision of additional facilities and services to encourage industry clustering.
- Policy 6: Further develop the skills of the labor force to meet the needs of the changing workplace and economy, with special attention to downward wage pressures.
- Policy 7: Work to extend educational infrastructure to enhance business/attraction and retention efforts.
- Policy 8: Moderate pressure to increase expansion of commercial space and maximize sales productivity of existing retail.
- Policy 9: As desired by citizens, limit manufacturing growth when possible to established business and industrial parks to maximize existing investment; where market realities demand, however, establish the flexibility to provide for alternative sites (for targeted business categories) within areas targeted for growth elsewhere (i.e. outside of already developed areas).
- Policy 10: Work simultaneously to address other physical factors (e.g. transportation and affordable housing infrastructure) that limit available locations.

- Policy 11: Establish a single entity empowered to pursue economic development with broad-based representation. This organization should be a new public/private organization, with County-wide membership, equipped with resources necessary for success. This organization will become an element of the present Beaufort County Economic Development Corporation.
- Policy 12: Establish separate subcommittees committed to facilitating business attraction and retention—update and extend marketing materials (see Exhibit 5-A).
- Policy 13: Expand current cooperation with neighboring counties.
- Policy 14: Refine and expand ongoing efforts to strengthen relationships with regional, state and national economic development organizations.
- Policy 15: Acknowledge and support the role played by Community Development Corporations (CDC's) in economic development and housing production.

Business Retention and Expansion

The subheadings below group recommended policies and action items into the broad policy areas of "existing business retention/expansion; "business attraction;" "workforce," training, and education; "locational factors for economic growth"; and "organizing for economic development, "corresponding to the order in which these policy areas were addressed in the preceding sections.

Policy 1: Encourage expansion of existing businesses and creation of homegrown businesses.

The economic development initiatives that have received the most widespread support in citizen surveys were retention and expansion of existing businesses. Clearly defined initiatives such as a One-Stop Business Program and the "Incubator without Walls" training program will make the County economy a more fertile ground for the small business start-ups that research indicates are the source of over 95 percent of the jobs in the nation.

Actions

☑ *1.1 Create One-Stop Business Program.*

A One-Stop Business Program has two basic missions: (1) provision of information about sites, incentives, and services; (2) coordination of the development procedures process, maintaining the intent and integrity of processes, but working to streamline, and increase the visibility of, those processes where possible.

The Program will be designed to encourage business expansion by acting as a clearinghouse for information and services. The Center Program could provide a central location at which prospects could learn about development opportunities, and at which developers could obtain information regarding the development review process.

The Economic Development Board commits itself to work with the County Council to plan and implement this recommendation. It will serve as a convener of the parties and accept a leadership role in implementation once this recommendation is accepted by the County Council.

It is suggested that a position be added that would provide a facilitator tasked with describing the spectrum of County-related review procedures. The position would provide a contact point for projects that require it, or a contact point for engineers/architects representing a business or proposed development.

Through the "Incubator without Walls" program, seminars could be held under the One-Stop Business Program for interested start-up businesses, focusing on strategies and business management "classes" on a regular basis.

Businesses could also monitor (via computer) projects of specified size and character (see "Future Land Use") that are undergoing the review process; the updates on status should be provided by development review staff.

☑ *1.2 Establish an "Incubator Without Walls" training program, involving highly specialized and concentrated business planning services and training, through the Existing Business Council of the Economic Development Corporation.*

The primary objective of this program is to increase general survival rates for all new and expanding businesses. The Existing Business Council will include all public and private development organizations that provide services to start-up businesses and to expanding businesses, such as: the Beaufort County Economic Development Board, the Small Business Development Center, SCORE, the Gray Eagles, etc.

To the extent possible, the services of the program will be concentrated in targeted commercial redevelopment areas within areas targeted for growth, as recommended by the Comprehensive Plan.

Key participation should be sought from a mixture of private and public programs and resources, including the Small Business Development Center, the Technical College of the Lowcountry, the Gray Eagles, and other small private small business consultants, business educators, business persons, and the Economic Development Board/Economic Development Corporation.

The program will develop a special focus upon support for "high technology" business start-ups that are part of the High-Technology Business Initiative of the Economic Development Corporation.

Program participants will come from the High-Technology Business Incubator Program to be located in a Southern Beaufort County business park, with specialized needs in the area of new product commercialization, marketing strategy development, and venture capital financing.

Key program support will be in the following areas: extension of business planning services, provision of business financing assistance (identification of venture capital resources), and technical assistance to local firms on an as-needed, on-call basis.

Policy 2: Capitalize on opportunities to preserve and enhance the tourism sector in the County.

Actions

☑ *2.1 Establish closer coordination between the Economic Development Corporation and Chambers of Commerce efforts, with the Chambers retaining tourism marketing functions.*

☑ *2.2 Focus efforts on promoting and extending heritage tourism and eco-tourism resources.*

While most attention must focus on small business, the largest single employer in the County is the tourism industry. Its viability must be enhanced not only to preserve the "core" of the County economy while diversification proceeds, but to create opportunities for correlated spin-offs/start-ups in an industry in which competitive advantage clearly exists.

☑ *2.3 Explore joint tourism and business recruitment marketing strategies with the two County Chambers of Commerce.*

☑ *2.4 Explore co-marketing of these resources with the SC Heritage Corridor.*

☑ *2.5 Create specific marketing material for tourism in Southern Beaufort County (focus on Bluffton area) and Northern Beaufort County (focus on unincorporated areas) with key themes (e.g., "The Beaufort County You Never Knew Existed").*

☑ *2.6 Explore (in conjunction with the County Transportation Plan) ferry and water taxi service as a means of expanding the quality of tourist choices in the County, promoting appreciation of water resources, and reducing traffic congestion.*

Business Attraction

Policy 3: Refine and focus business attraction efforts.

Business attraction efforts in the County should concentrate on targeting marketing efforts and economic development infrastructure investment (e.g. physical and educational environment) to target industries as indicated by both analysis and prospect interest levels. Given these factors, efforts should focus on attracting those industries whose location in Beaufort County will not, while enhancing economic diversity and raising average wage levels, compromise quality of life for existing residents or businesses.

Actions

☑ *3.1 Task the Business Recruitment Committee of the Economic Development Board/Economic Development Corporation with strategy implementation.*

☑ *3.2 Establish recruitment targets based upon a targeted business analysis and current performance from the "strong sectors," and establish new economic sectors, primarily high-technology sectors build upon the County's existing strengths.*

The Targeted Business Analysis has identified the following "strong sectors":

- Wholesale Trade [Durable Goods (e.g. lumber and other construction materials; computer software and peripherals; sporting and recreational goods/ supplies)]
- Transportation, Communication, Utilities [Motor Freight/ Warehousing (e.g. courier services, storage)]
- Services [Health Services (e.g. nursing facilities); Social Services (e.g. residential care)]
- Manufacturing (Printing/ Publishing; Rubber/ Plastics)

The existing strengths of the region include high acceptance/desirability as a place to live, high quality of housing choices and opportunities for unique new construction locations, high development standards, significant cultural and recreational opportunities, pre-employment

training, and aggressive tax financing incentives.

☑ *3.3 Strengthen emerging partnerships in training and education to promote specialized training and education needs of specific high technology clusters.*

☑ *3.4 Target identified high technology and light-manufacturing economic sectors that tend to have high amenity locational requirements (high general and specific quality of life, including significant residential choices, cultural activism, etc.). Sectors to consider will include:*

- Telecommunications - research and development, software, assembly, distribution
- Electronics - research and development, assembly, distribution
- Medical Equipment - research and development, assembly
- Information Technology - research and development, software, hardware
- Biotechnology - research and development, gene research

☑ *3.5 Maintain flexibility to "re-focus" targeting efforts based on (a) spin-off opportunities as a result of "clustering;" (b) technological change across all industries; (c) the attraction of a "core" industry in any given "cluster" or industrial sector.*

☑ *3.6 Adopt a "Smart Site and Building Program," based upon specific site and building needs of technology-based firms chosen for attraction.*

☑ *3.7 Create a subcommittee of the Economic Development Corporation to implement the "Smart Site and Building Programs."*

☑ *3.8 Incorporate the "Smart Site and Building Program" into the "High Technology Business Incubation" program that encourages small new business start-ups.*

As a part of this initiative, the County should target high technology firms for inclusion in the "Incubator Without Walls" program, which links these programs together. Also the County should design financing programs to encourage start-up of high-technology businesses, specifically, the Venture Capital Club Program and "written-down" incubator rentals and services.

☑ *3.9 Expand and refine the current County Council/Economic Development Board marketing strategy.*

These expanded efforts will be accomplished through the expanded membership of the Economic Development Corporation. Also, strategies should expand activity to include more specific high-technology and light-manufacturing attraction activity, film attraction, and the promotion of the new program for existing businesses the "Incubator Without Walls" program.

More specifically, the "Business is A Pleasure" marketing program and new marketing material should be emphasized and specifically designed to attract targeted clean, technology-oriented firms. This new marketing material

should be built upon the concept that the County is a highly desirable place to live and to do business, and written to address the interests of these kinds of firms with a high concern for quality of life of the communities that they inhabit.

Other types of strategies include:

- Continue to develop marketing strategies and material through a partnership with the private sector and the County Council, including fund-raising.

  Over the last two years, three pieces were developed: (1) a large "show" booklet that describes both the technical resources the County offers a business and quality of life; (2) an informational brochure, designed as a companion to the "show" booklet or as a free standing source of more detailed information; and (3) a marketing brochure promoting Hiltech Park and Hilton Head Island Airport to compatible high-technology firms.

- Plan and develop new Beaufort Industrial Park and Yemassee Industrial Park brochures jointly with Park Board of Directors, the Economic Development Board/Economic Development Corporation, SCE&G and others.
- Develop an Existing Business Expansion Incentives and Programs brochure. Plan and develop a brochure with Palmetto Electric, SCE&G and others, that highlights: incentives for job creation, financing (that will also be used in "Incubator Without Walls" program to assist existing businesses).
- Plan and carry out expanded reports to the public as to successes, using the Web Site, a newsletter or other written material.
- Update and extend existing demographic profile information provided in general County brochure, produce hard bound version and a CD-ROM based system, which will allow all businesses inside and outside the county to receive a complete package of "financing and tax incentives," information on GIS-based maps about sites and roads, water, sewer and other basic infrastructure. All information will be in a CD-ROM format, or in print form.
- Fund and develop specific materials for each major targeted location for growth (e.g. along the lines of existing Hiltech Park brochure) where not in existence or already funded (e.g. Beaufort Industrial Park).
- Seek participation of regional Chambers of Commerce, other local and regional tourism organizations and the State Film Office to plan and implement a marketing program promoting the region specifically for film attraction (e.g. photo layouts with information on staff accommodations and other local resources, a "Procedures Manual," etc.).

☑ *3.10 Based on the existing brokers' cooperative network, develop a comprehensive loose-leaf file of available commercial and industrial property and space with an electronic (i.e. GIS) keyed master map available to identify each site. Use profile information as basis for beginning to track market trends over time.*

☑ *3.11 Continue planning for implementation of regular quarterly business recruitment events in the County.*

It is recommended that this activity become the primary function of the Economic Development Board/Economic Development Corporation's Business Recruitment Committee. The Committee should capitalize upon the "draw" of existing sports and various other events County-wide, at several times a year, to invite leading business prospects to the County, in order to market the County as a business location. Specific activities might include visits to sites; short programs explaining incentives, work force skills information, and educational system details; "tours" of existing businesses; and enjoyment of local events, and local activities, including great restaurants, golf, boating, visits to historic sites, "hosting" by local dignitaries, tours of housing, retail areas, and general County tours.

☑ *3.12 Continue planning for an expanded Internet Home Page to market the County worldwide. Use Home Page to create 24 hour a day access to the EDC.*

Other strategies to utilize new technologies include:

- Establish electronic linkages to Chambers of Commerce, the Homebuilders Association, USC-B, the Technical College of the Lowcountry, the S.C. Department of Commerce, the National Council for Urban Economic Development, etc.
- Plan and implement "on-line" Discussion Forums on Economic Development Corporation activity and issues.
- Continue development of an interactive database for "user tailored" data requests.
- Continue planning for a CD-ROM based interactive data disk to be used for recruitment.
- Establish a One-Stop Business Program link on the Economic Development Corporation's Home Page.
- Evaluate the feasibility of creating a "profit center" for the Economic Development Corporation through marketing Web Site links to local businesses and organizations to offset the costs of future site updates and additions.
- Establish presence on IEDN (Interactive Economic Development Network) community site selection service.
- Develop linked home pages for each targeted growth node (e.g., Beaufort Industrial Park, Buckwalter Tract), Port Royal Port, and area municipalities —possible to scan in material from existing brochures.
- Make all of the other information that is available at the One-Stop Business Program available in electronic form.
- Over the longer term, seek to develop a supplier database (i.e., small businesses) that can be used to generate lists for prospect inquiries, with embedded web site links for further information.

Policy 4: Focus recruitment efforts on attracting quality jobs that do not compromise the quality of life cherished by area businesses and residents.

Business recruiting efforts of the Beaufort County Economic Development Board/Economic Development Corporation should be focused upon those businesses that seek out high quality surroundings.

Actions

☑ *4.1 Develop an acceptable but more specific definition of "clean" businesses (in conjunction with larger EDC membership) to firmly establish subcategories of SIC clusters to target.*

Begin by narrowing choices to sectors identified as "strong" or "constrained" by targeted business analysis; allow flexibility to target those industry clusters that may emerge based on recruitment success.

Compare wage rates provided by specific business types to impact on quality of life of those businesses.

☑ *4.2 Assist the Business Recruitment Committee with development of a position statement outlining targeted industries.*

☑ *4.3 Assist in targeting these defined categories and publicize efforts to do so (newsletter; public forums).*

Efforts to achieve this action item could include:

- cooperation with the Business Attraction Subcommittee in their and efforts; and
- monitoring bench marking indicators from the citizen viewpoint through various mediums.

☑ *4.4 Work with the Existing Business Council to extend the geographic and programmatic scope of the ACCLAIM project.*

Policy 5: Explore the proactive provision of additional facilities and services to encourage industry clustering.

Recruitment policies should be based upon the clustering of firms with similar support and supply requirements would that expand opportunities for recruitment.

Actions

☑ *5.1 Establish the feasibility of, and develop "investor attraction proposals" for, the speculative development of manufacturing buildings, incubator space, and commercial structures in targeted areas.*

Develop "smart" buildings in "smart" parks [e.g. controlled and uninterrupted power sources, extra ceiling space to allow for high capacity heating and air conditioning systems and high-speed communications installation (ISDN)].

☑ *5.2 Explore potential market support for a machine shop, and other "supporting infrastructure" for existing industry.*

The responses from the Existing Business Survey administered by the Economic Development Board in 1996 provide a starting point for this future research endeavor.

☑ *5.3 Explore the potential for a local and regional investor partnership to investigate the market support for, and evaluate the development feasibility for, a Film and Sound Stage to expand motion picture and other media activity in the County.*

Beaufort County is fast becoming a "mature" film location, with a growing and very strong reputation for excellent working relationships with film companies.

Beaufort County has carved out a niche in the film industry that is available for very selective marketing—to judiciously expand movie, advertising (still and TV) activity, and other general photographic activity (catalogs, magazines, and other publications).

One way to move the County into the next level of activity is to explore the feasibility of the attraction of investors and users to a Film and Sound Stage. It is recommended that the Development Board through its State Film Office contacts conduct such an analysis. This activity will require specialized assistance; it is recommended that the County and private sector be considered as sources of contributions.

The County Film Office has begun the necessary "support" activities required to succeed at the next level of Film related activity. It has begun cataloging "shoots" (locations), housing for film staff, service availability (catering, security, set and electrical technicians, lighting, sound recording, entertainment, etc.)

As proof of its strength as a competitor for high quality films, late in 1996 Beaufort County was selected as the primary United States location for the filming of the film "Beach Music" over stiff competition.

Beaufort County has attracted 14 major films (in whole or in part) over the past decade, with the pace picking up considerably since 1993/1994. Such recent films as "The Prince of Tides," "Jungle Book," and "Forrest Gump" have convinced many production companies, large and small, that the County is a "production friendly" location for high quality productions.

Film industry activity in Beaufort County has traditionally yielded a large economic multiplier, and has become increasingly frequent in recent years. A potential film studio (in Mount Pleasant, S.C.) may, however, provide it with an emerging comparative advantage in attracting companies interested in filming along the Carolina coast. The evaluation of the feasibility of the development of a "unique" Film and Sound Stage is required if Beaufort County wishes to move into the next level of film activity.

A Beaufort County facility should build upon the County's unparalleled reputation in the Southeast for simplicity and lack of "red tape" in conducting film-related activity. Beaufort County is known for professional and expeditious processing. This is an incalculable advantage to film production companies who, like all companies, see time lost as money lost.

☑ *5.4 Encourage speculative development of additional business incubators.*

The Economic Development Board should explore establishing high-technology business incubation centers in selected locations around the County, and explore the possibility of an eco-tourism and retail incubator in Sheldon Township, focusing on the assets of the ACE Basin.

☑ *5.5 Based on availability of funding and demonstrated impact of the EDC's efforts, increase organizational staff and funding and pursue:*

- business/recruitment and financial packaging; and
- marketing and fundraising activities.

Workforce Issues

Policy 6: Further develop the skills of the Beaufort County labor force to meet the needs of the changing workplace and globalizing economy, with special attention to downward wage pressures.

Building a 21st century workforce to complement recruitment and retention/expansion efforts will require leveraging existing resources at the regional and state level, along with concurrent improvement in local capacity. Only a close partnership between state, regional, and local providers will effect the desired change.

Actions

☑ *6.1 Expand linkages with/cooperation of all public and private sector groups/agencies (e.g., Technical College of the Lowcountry, the Beaufort County School District, USC-B, the Career Education Center, and private businesses who train large numbers of their own employees).*

☑ *6.2 Use the "JOBS" forum as the primary tool to expand linkages. The primary purposes of the Forum will be to maximize program planning resources, program impacts, and to explore strategic planning and potentials for program expansion.*

☑ *6.3 Enhance and continue to publicize (along with Business Attraction Subcommittee) partnerships at the State level with programs like the South Carolina Special Schools pre-employment training program.*

☑ *6.4 Participate in expanded visitation to existing businesses led by the Existing Business Council.*

☑ *6.5 Develop a consolidated informational brochure (e.g., "Beaufort County: Training You for Your Future"); distribute in packets*

to prospects as well as to area high schools, following up with targeted visitation using volunteers from TLC and from area businesses, perhaps as part of ongoing ACCLAIM efforts).

☑ *6.6 Identify and secure funding for purchase and/or obtain grant to develop interactive job search, career evaluation, and training software.*

Utilize area media and business community to augment database of job openings; maintain database for the One-Stop Business Program

☑ *6.7 Based on demand, identify public funds to make all Statewide training programs available to County residents, and place conditions on the trainee's acceptance of funds, e.g., minimum time that he/she must look for a job opening in Beaufort County before pursuing opportunities made possible by the training elsewhere.*

☑ *6.8 Pursue funding from Federal and State grants, as well as from private foundations, to provide a subsidy equal to or greater than the minimum wage to trainees, thereby encouraging program completion at the local level.*

Policy 7: Work to extend educational infrastructure to enhance business attraction and retention efforts.

Workforce needs of technology-based firms require close planning and coordination among all providers of education and training.

Actions

☑ *7.1 Expand efforts to link the County educational infrastructure formally to economic development planning and program implementation by taking these steps.*

Invite the Beaufort County School Board Chairperson and School District Superintendent as well as the leaders of the Technical College of the Lowcountry, USC-Beaufort, and the Career Education Center, to become members of the Economic Development Corporation.

Include these entities as active participants in business recruitment and work force programs.

☑ *7.2 Encourage and support the expansion of USC-Beaufort campus development in the Okatie area.*

The creation of a four-year campus, with a research faculty, is a necessary first step in building the strength in higher educational offerings that has always been present in areas where "clustering" of high technology manufacturing and service sector industries has occurred.

A four-year campus in the area would also provide area youth with the opportunity to "stay home" and complete their education to enable them to secure employment in the region.

☑ *7.3 Continue to provide County funds to University of South Carolina-Beaufort (USC-B), the Technical College of the Lowcountry*

(TCL), and the Career Education Center (CEC) on an as-available, as-needed basis.

Funds provided the TCL during the last fiscal year helped to preserve the six existing departments (industrial technologies, business, general education, development education, continuing education, and nursing) at the college.

Continued County funding could enable TLC to institute and develop offerings like "computer repair" and "bio-medical equipment repair" that, while providing needed training in future "growth industries," might not initially meet the enrollment criteria for securing state funding.

Strategic (shared) funding by the County (and other sources) for specific training needs of "targeted," "high-technology" firms for recruitment could foster a broadened partnership between USC-B, the Technical College, the business community, and the County.

☑ *7.4 Creation of "JOBS" Forum.*

Create an advisory body, made up of all public and private employee training providers, those with an interest in work force availability, including the hospitality industry, manufacturers, and service providers, and education providers.

The "Forum" will function as an element of the Economic Development Corporation, its general mission will be to bring greater focus to work force training issues, needs, solutions and resources in the region.

The "Forum" will endeavor to be a positive factor in developing "positive" solutions to meet labor force availability and labor force training needs by looking to other communities for solutions.

The "Forum's" primary objective will be to be a catalyst for constructive, creative adoption of strategies to meet the needs of employers and employees.

☑ *7.5 Support ACCLAIM project.*

The ACCLAIM project, currently focused in Northern Beaufort, serves as a means to channel citizen energy and organizational expertise (i.e. Technical College of the Lowcountry and other Economic Development organizations) at the grassroots, neighborhood level to facilitate bricks and mortar projects that can build momentum for economic development "from the ground up." Maximizing this initiative will build momentum (through increase in basic job skills and available facilities) for later diversification into more specific efforts to promote the expansion of micro-enterprise and incubator concepts.

☑ *7.6 Continue to support the St. Helena Incubator at the Corner Community.*

The incubator project could be an ideal initiative for facilitating economic growth while limiting the physical impact of that growth on the sensitive St. Helena area. The planned uses (e.g. processing of local specialty foods and crafts) will build on "homegrown" skills, and much of the necessary funding has been secured. The project may serve not only to encourage similar projects in both Northern and Southern Beaufort, but may help to attract additional funds for similar initiatives Countywide. The County and the Development Board should continue to

support projects, such as the Food Processing Small Business Incubator on St. Helena Island. The County Economic Development Program has actively participated in planning and financing the project—including receiving a grant from state sources that the County "passed-through" to the project, that represented approximately one-quarter of the project's cost.

Locational Factors for Economic Growth

Policy 8: Moderate pressure to increase expansion of commercial space and maximize sales productivity of existing retail.

Recruitment and retention strategies, and related investment, should focus to the extent feasible on encouraging commercial and light industrial growth in areas of pre-existing growth or in transitional areas. Specific transportation and housing initiatives, however, must be pursued to enhance the attractiveness of employers in such locations to not only the employers, but to the employees themselves.

Actions

☑ *8.1 Conduct small-area redevelopment planning for mature commercial areas (in conjunction with the areas targeted for growth in the Future Land Use element).* Plans should address physical (e.g. vehicular and pedestrian access) and market issues (e.g. mix of existing retail, available market niches) and provide recommendations on funding and implementation of specific measures to rectify existing problems.

☑ *8.2 Conduct a comprehensive survey of all major retail space in the County. Classify each by major center and by type, condition, vacancy rate and rent structure.*

☑ *8.3 Implement a targeted business recruitment and revitalization redevelopment program for selected existing commercial areas. Use information from an existing business inventory, shoppers surveys and merchant interviews to "shape" the program.*

☑ *8.4 Use inventory process to conduct limited intercept survey and*

merchant interview work that will provide information for targeted retail revitalization through re-merchandising and/or re-tenanting.

☑ *8.5 Implement a targeted retail and commercial businesses recruitment program for existing commercial areas. Using existing businesses, shoppers surveys and merchants survey information to focus retention/enhancement efforts in both major centers and local shopping districts (e.g., Cross Creek, Port Royal, City of Beaufort, City of Bluffton, Public Market District on St. Helena).*

☑ *8.6 Act to target limited retail growth into nodes on Lady's Island and in Sheldon Township and/or locations identified via the shopper intercept survey.*

☑ *8.7 All existing commercial businesses should be considered for a special exception or rezoning designation so as to eliminate the current non-conforming status on some commercial properties.*

Policy 9: As desired by citizens, limit manufacturing growth when possible to established business and industrial parks to maximize existing investment; where market realities demand, however, establish the flexibility to provide for alternative sites (for targeted business categories) within areas targeted for growth elsewhere (i.e. outside of already developed areas).

Recruitment should be limited to areas with required infrastructure (water, sewer and transportation access).

☑ *9.1 Improve and/or promote available sites in targeted growth areas to address needs of the targeted high technology job creation.*

- market available infrastructure and amenities of existing and planned future business clusters; and
- emphasize buildout of Beaufort Industrial Park for light industrial/manufacturing uses; emphasize locating distribution/warehousing concerns at Yemassee Park in the far north of the County with better rail and interstate access.

☑ *9.2 Identify sites in Southern Beaufort County that will provide those involved in high technology*

business recruitment with high amenity and planned sites.

- identify multiple areas of sufficient size (100+) acres and access to allow marketing to large users and/or "clusters" of smaller users;
- draft and implement defined restrictions on the types of businesses that will be allowed to locate in these areas, and
- support attractions and start up of technology-based businesses through the High-Tech Incubator and "Incubator Without Walls" program.

Policy 10: Work simultaneously to address other physical factors (e.g. transportation and affordable housing infrastructure) that limit available locations.

Successful business recruitment and expansion programs need to address external factors. The most significant external factors are affordable housing, and adequate transportation linkages.

Actions

☑ *10.1 Work with neighboring counties to ensure that projects enabled by Rural Infrastructure Fund provisions benefit the entire region (including Beaufort County) to the extent possible.*

☑ *10.2 Implement the recommendations of the Transportation chapter of the Comprehensive Plan.*

☑ *10.3 Increase the availability of affordable housing stock in recognition of its' impact upon the hospitality industry, continued strong military presence in the County, to support attraction of new firms and encourage diversity in the work force.*

To support the endeavor for more affordable housing, the Economic Development Board should:

- adopt the goals of the Affordable Housing component of this Comprehensive Plan; and implement designated action items;
- establish a joint work program with the Economic Development Corporation to plan, and fund affordable housing strategies for the County.
- increase availability of affordable housing to support attraction of new firms and work force diversity; and
- continue to support the development of a permanent "public-private" development process that will address current and future military housing needs of all military facilities and families in Beaufort County.

☑ *10.4 Continue to support "ride-sharing, van-pooling" and other transportation issues that tend to restrict a portion of the work force who want to make the transition to higher paying manufacturing jobs.*

Continue to meet with the Regional Transportation Authority to discuss overall Economic Development Plan recommendations, specifically linkages to existing and planned business parks in

Northern and Southern Beaufort County, and a planning role for the Authority in redevelopment planning of existing commercial areas.

Identification of "market" issues that would address ridership issues and perhaps address the need to reduce traffic in new planned commercial areas and in existing business areas.

☑ *10.5 Support the evaluation of the feasibility of "light-rail" and other mass transportation solutions, that may be used to gain greater work force access into and out of the County; and improved access from regional and County airport facilities to County hotels, shopping, recreational activities, and other forms of ground transportation for tourists (See Transportation Chapter for discussion of mass transit recommendations).*

☑ *10.6 Explore the impact of greater presence of Child Care, located closer to business and industrial parks upon work force availability.*

Determine if a lack of availability is a factor, by quantifying space available and cost of existing Child Care services (public and private).

Meet with the County Department of Social Services Director and other groups to gain input.

Organizational Recommendations

Policy 11: Establish a single entity empowered to pursue economic development with broad-based representation. This organization should be a new public/private organization, with County-wide membership, equipped with resources necessary for success. This organization will become an element of the present Beaufort County Economic Development Corporation.

Actions

☑ *11.1 Establish a County-wide Economic Development Corporation.*

This entity will serve as an advocate and implementor for economic development initiatives County-wide.

It should function as be a clear channel of communication for economic development policy among citizens, private business, the County Council and other local governments in economic development efforts.

☑ *11.2 Identify funding sources for a County-wide Economic Development Corporation (EDC).*

☑ *11.3 Include the existing Economic Development Board in a leadership role, with the Economic Development Partnership, and the Film Marketing Organization.*

Economic Development Board members will play a leading role in policy planning and implementation for these key organizations. The executive director of the Economic Development Board should be

installed as the executive director of the EDC.

In exercising leadership, the Economic Development Board should undertake the following:

- continue and expand fundraising initiatives of the existing Economic Development Partnership
- focus on recruitment of key groups for membership, examples of which include:

  i. community groups and organizations

  ii. landowners

  iii. businesses - hospitality, service, manufacturing and retail

  iv. Planning Board and Quality Growth Committee

  v. financial community

  vi. education and training providers

  vii. utilities

  viii. Chambers of Commerce

  ix. commercial, industrial and residential real estate

- produce monthly newsletter for widespread distribution;
- distribute beyond just group of interested prospects, to business community and civic groups/homeowner associations; and
- issue press releases regularly regarding activity.

Policy 12: Establish separate subcommittees committed to facilitating business attraction and retention—update and extend marketing materials (see Exhibit 5-A).

Actions

☑ *12.1 Establish a Citizens Advisory Council to the Economic Development Corporation.*

Target the existing memberships of identified community-based organizations and representative individuals.

Target utility companies (e.g. Palmetto Electric, SCE&G), hospitals (Beaufort Memorial, Hilton Head), and the Industrial Park Association for membership.

Preserve and enhance linkages to current role of area Chambers by forming a Tourism Promotion subcommittee, and target the existing Restaurant Association and Hospitality Association for additional membership.

☑ *12.2 Establish a Business Recruitment Committee.*

It is recommended that this activity become the primary function of the Economic Development Corporation's Business Recruitment Committee. This committee should continue planning for implementation of regular quarterly business recruitment events in the County as

well as, provide formal presentations and tours of area business parks, and provide an overview of incentives available to targeted businesses.

☑ *12.3 Establish an Existing Business Council as a sub-entity under the "umbrella" of the EDC.*

An existing Business Council should consider the following tasks:

- include, at a minimum, most large employers (50+), SBDC (USC-Beaufort), Technical College of the Lowcountry, Career Education Center, Department of Social Services personnel into membership;
- develop a one-page "business retention" survey to assess "threat" of relocation;
- conduct targeted visitation of largest employers (50+);
- distribute promotional material; publicize the one-stop center;
- describe Internet site and evaluate interest and resources to establish linkages—identify assistance for development of the linkages, if required;
- solicit direct participation on Business Council, if a firm has no representative;
- continue with the "Development Projects Tours" program of the Development Board, expand to include the ED Corporation, and plan for tours at least on a quarterly basis;
- involve elected officials and the media on tours;
- include commercial, residential, industrial and community projects; and
- coordination of tours with local/regional TV, radio and press; with coordinated appearances on TV/radio (by businesses and EDC members) and news stories about each tour.

☑ *12.4 Establish a Financing subcommittee to the Existing Business Council.*

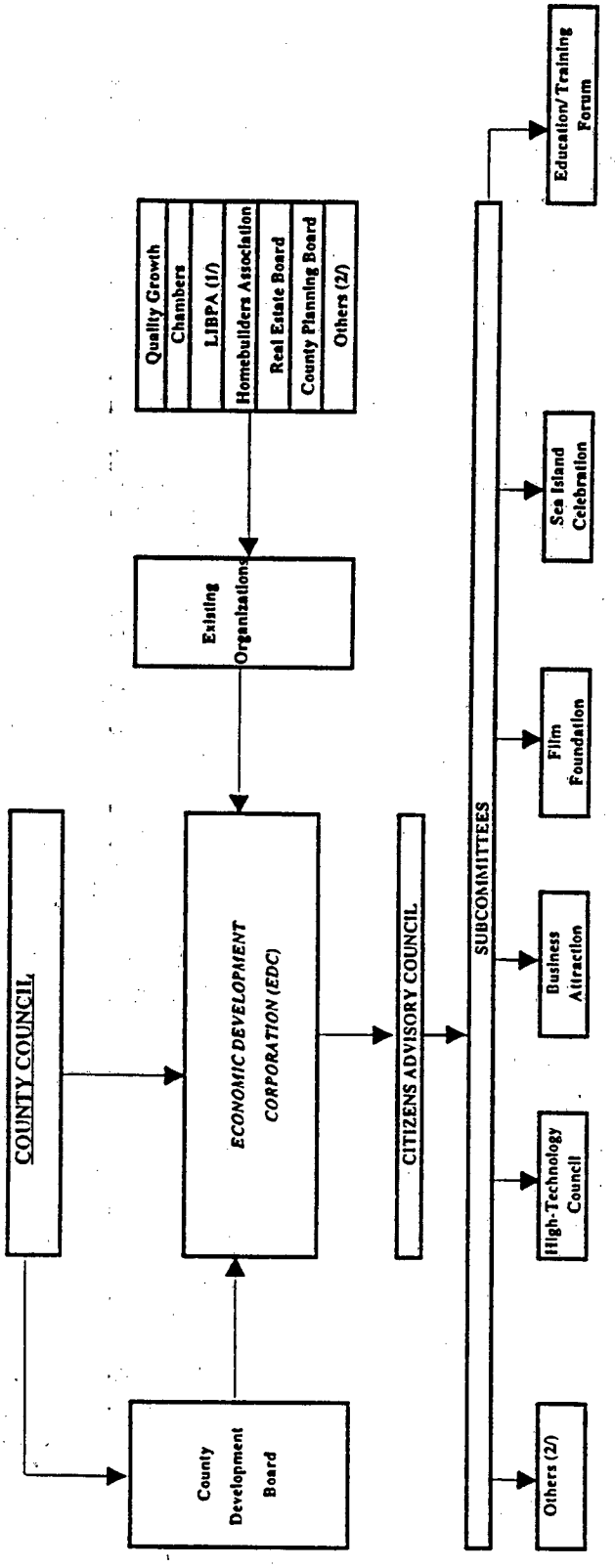
Such an entity should undertake the following to assist the Existing Business Council:

- implement a County-wide business loan program;
- expand the existing loan guarantee programs in Beaufort and Port Royal;
- work with local lenders to create a set-aside commitment loan program;
- extend current, then expand access to and availability of venture capital;
- establish firm linkages with local (e.g., BSBIC) and State level (e.g., EDI, CCIC, Emergent Business Capital, etc.) resources;
- create of a "Venture Capital Club" to expand access to local venture capital; and
- incorporate access to regional and state venture capital sources, PIN (Private Investors Network), Southeast Network, and major regional private funds as part of the computer capacity of the One-Stop Center.

☑ *12.5 Establish an Export Assistance subgroup to access assistance to allow local businesses to expand their markets.*

The key functions of this group would be to improve ease of access to, and fre-

Figure 40: Recommended Organizational Structure: Beaufort County Economic Diversification Strategy.



1/ Lady's Island Business and Professional Association
2/ this is not an exhaustive list; it is only representative of the type of groups and organizations that will be asked to participate

Source: Basile Baumann Prost and Associates, Inc.

quency of usage of, existing programs, with a focus on JEDA's Export Working Capital program and SBA programs through SBDC. Also the group could work to incorporate easy access to databases detailing export opportunities (e.g., SC TradeMarket, NETWORK) in the One-Stop Business Program.

☑ *12.6 Establish a Labor Force Training Subcommittee to the EDC.*

This subcommittee should work to recruit members from area businesses (with a focus on manufacturing, high-tech, health services and business services), as well as faculty/administrators from area educational institutions (e.g. USC-Beaufort, the Technical College of the Lowcountry, Beaufort County School District and the Career Education Center).

☑ *12.7 Formulate a list of action items and designate benchmarks (i.e., indicators) to be used to measure progress towards implementation of those specific action items, and the Corporation's overall effectiveness.*

To measure progress, the Corporation should:

- examine the current Development Board benchmarks, revise, modify or leave as is;
- maintain detailed information on business starts;
- track jobs created/retained versus total expenditures for organization;
- track investment generated and/or funds leveraged versus expenditures;
- track wage level of jobs created versus County, State average; and
- develop organizational capacity or university linkages to perform economic impact analyses on major projects prior to occurrence.

☑ *12.8 Develop strategies to fund additional Economic Development Corporation staff positions, including exploration of joint public and private funding sources, "performance-based" incentive pay, and joint staffing alternatives with the Lowcountry Council of Governments and other organizations.*

Additional staffing is suggested in two areas of activity:

- marketing program including fund raising, and implementation of planned and recurring business recruitment events, such as the Sea Island Celebration; and
- existing business services, to give greater attention to the needs of existing businesses, packaging of financial incentives, assistance with permitting processing, and other development-related processing tasks.

Policy 13: Expand current cooperation with neighboring counties.

Beaufort County should continue to play a leading role in regional economic development efforts. The Beaufort County Executive Director of Economic Development is currently Chairman of the five-County organization. Successful job creation strategies are often built upon joint efforts by groups to meet the needs of firms looking at our entire area. Work requirements are usually by work-

ers coming from as far away as 30-35 miles each way.

Actions

☑ *13.1 Expand the scope of the regional initiatives under the mantle of the 5-County Regional Economic Development Alliance.*

☑ *13.2 Develop regional marketing strategies.*

☑ *13.3 Maintain detailed information on regional parks; and establish web site linkages and referrals.*

☑ *13.4 Integrate Rural Infrastructure Act projects and local sales-tax funded and projects recommended by the Comprehensive Plan.*

Policy 14: Refine and expand ongoing efforts to strengthen relationships with regional, state and national economic development organizations.

Effective County economic development efforts are based upon support and cooperation among state, regional and local economic development organizations. Beaufort County needs to continue to build strong working relationships at all levels of government and the private sector.

Actions

☑ *14.1 Continue to strengthen the reinvigorated relationship with South Carolina Department of Commerce and the South Carolina Economic Development Association.*

The Economic Development Corporation should sponsor a "Legislative Forum" for state Economic Development agency directors, and state legislators to meet with the EDC to explore ways these agencies and the legislature (including new legislation) may be better utilized to promote the economic development goals of the Comprehensive Plan.

☑ *14.2 Develop expanded linkages with the Council for Urban Economic Development (CUED); the National Association of Installation Developers (NAID); and the National Association of Industrial and Office Parks (NAIOP).*

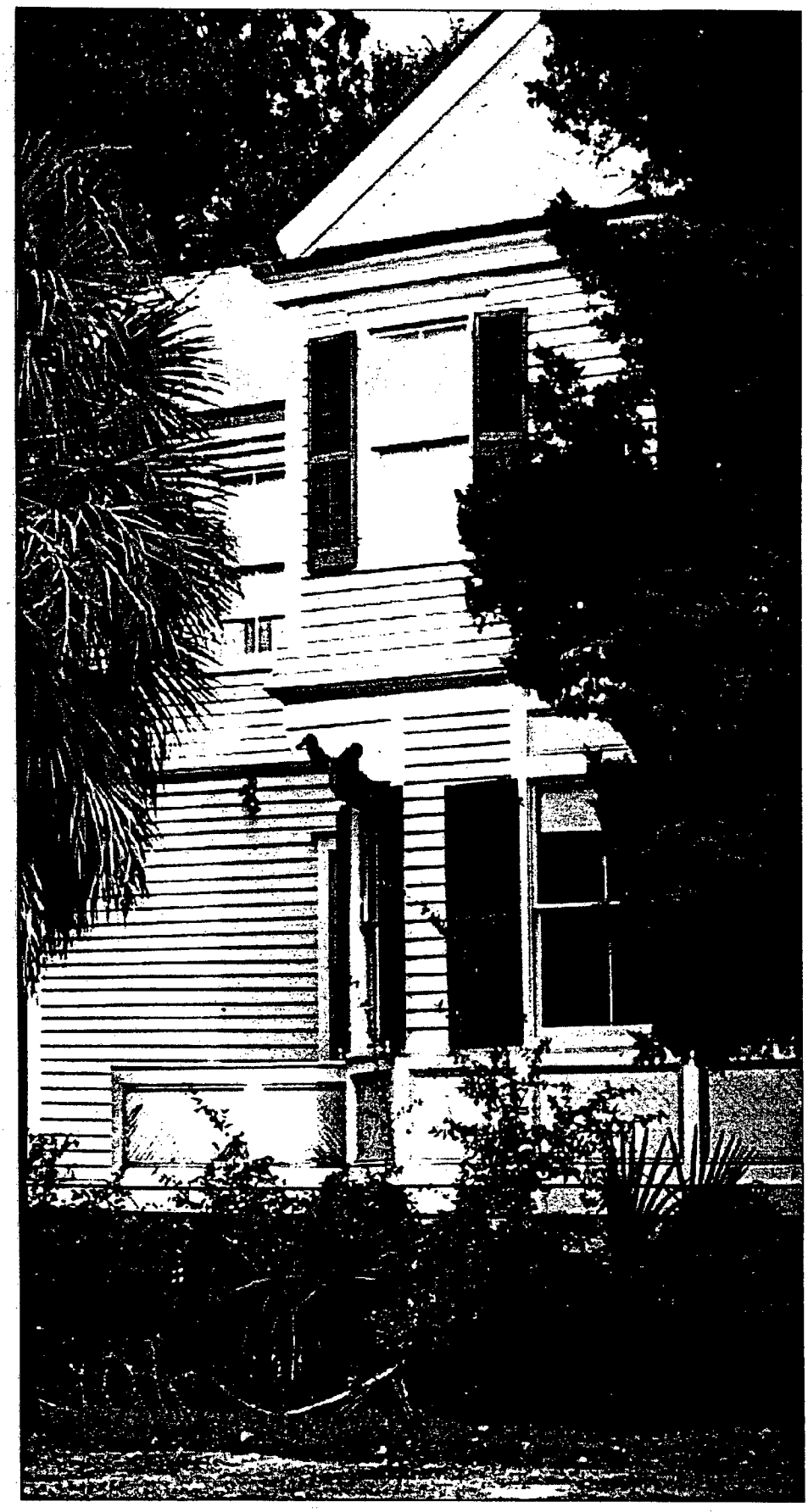
☑ *14.3 Refine and Expand the "Development Tours" Program to include regional, state and national economic development organizations, elected officials and others during the "Legislative Forum" (Action Item 5.4.1), and at other times, including business recruitment events.*

☑ *14.4 Continue with "Development Projects Tours" Program of the Economic Development Board, expand to include the new Economic Development Corporation and all its*

members, and continue to plan for them on at least a quarterly basis.

Involve elected officials and media on tours. Include commercial, residential, industrial and community projects that are of interest. Also, continue to explore coordination of tours with local/regional TV, radio, and press; with "coordinated" appearances on TV/radio and news stories about each tour by EDC and Development Board members.

Policy 15: Acknowledge and support the role played by Community Development Corporations (CDC's) in economic development and housing production.



Chapter 10

Affordable Housing

Affordable Housing

Vision

Maintain and enhance the diversity of Beaufort County by providing the opportunity for people of all income levels to live and work in the County.

GOALS:

1. Create a public/private/community consensus and alliance to develop affordable housing, with a target to be determined to the Affordable Housing Task Force for new affordable housing units by the year 2020.
2. Leverage resources for the private market to develop and maintain affordable housing.
3. Encourage a variety of housing types to accommodate the full variety of income, age, and cultural groups in the community.
4. Foster affordable housing opportunities convenient to job centers and military installations.

Affordable Housing

Technical Analysis

10.1 Introduction

10.1.1 Defining the Issue

The purpose of this chapter is to articulate a generally acknowledged need to provide housing opportunities for Beaufort County residents at all income levels. Solutions are proposed to make housing affordable to the range of income and age groups in the community, including military personnel and employees of the rapidly growing resort and retirement industries.

Beaufort County offers a high quality of life to both its year-round and seasonal residents. The coastal beauty and temperate climate have attracted large numbers of new residents and visitors, which in turn have made the service sector (including restaurants, shops, and hotels, etc.) one of the larger employers in the County. Yet, for a growing number of the County's residents, including many of those who work in the service and military sectors, this coveted lifestyle is becoming more elusive. The County's popularity has created a building and land value boom that has driven housing prices ever-upward.

The issue of affordable housing has grown as a problem even as the County itself has prospered. As the County's demographic base has moved from a rural farming to a tourism/resort economy, it has seen a great influx of wealthier residents. This new population has driven up land and housing prices, which in turn has diminished the ability of many lower-paid members of the workforce to obtain homes near their places of work. As the County grapples with other issues relating to this rapid growth—sprawl, increasing congestion on the County's roads, diversification of the economic base—there has been a growing recognition that Beaufort County must address a related issue: providing opportunities to create affordable housing for the County's less affluent population, including young people just starting out, single-parent households, and young professionals.

The issue of affordable housing in resort areas like Beaufort is a question of trade-offs. While some community residents may resist the costs of affordable housing incentives (usually in the form of dollar or density bonuses), the costs of not providing solutions can be much higher. Numerous resort towns across the country have already learned that the impacts of trying to conduct business without an accessible base of employees will ultimately result in higher traffic, higher labor costs, and a loss of resident diversity—in-

cluding families who have lived in Beaufort County for generations. Without affordable housing, Beaufort County may even decrease its drawing power to those new residents and tourists who prefer locations where the area is "more real" and the vacation experience more unique. Perhaps more pressing, for one of the County's major employers, the United States military, the continued viability of a Beaufort County location rests on the ability of the service personnel and civilians employed by the military to find adequate housing within a reasonable commuting distance (defined as a 20- to 30-minute travel time). And finally, Beaufort County's ability to attract new businesses and quality jobs to the area rests on the ability of these employers to secure housing for their employees. In the "Target 2010 Plan," affordable housing was *not* articulated as a key issue, yet the effects of a lack of affordable housing near the main employment centers *were* a critical issue.

10.1.2 What is Affordable Housing?

As demand for property rises, property values escalate, making it increasingly difficult for lower and moderate income households to find housing that is affordable at their income levels. It is essential for the County to document this process and meet the challenges it presents.

When discussing affordable housing, it is useful to clearly define the population that this type of housing serves. Federal income guidelines are as follows:

- *Very low income:* up to 50 percent of the area median income;
- *Low income:* 51 percent to 80 percent of the median income; and
- *Moderate income:* 81 percent to 120 percent of the median income.

Housing costs (rent or mortgage payment, utilities, and other related housing expenditures) are typically calculated at no more than 30 percent of gross monthly income (for purposes of qualifying for a mortgage or obtaining various housing subsidies). The 1995 median household income in Beaufort County was $34,700[1], which translates to the following affordable housing populations:

- *Very low Income:* up to $17,400;
- *Low Income:* up to $27,800; and
- *Moderate income:* up to $41,600.

The income levels further translate into these affordable housing costs:[2]

- *Very low income:* up to $440/month, or $52,00 sales price;
- *Low income:* up to $700/month, or $83,000 sales price; and
- *Moderate income:* up to $1,040/month or $125,000 sales price.

When these incomes are weighed against housing prices, only those households of moderate income could afford the area's me-

1 The figures presented here would be significantly lower were Hilton Head excluded.

2 Assuming utilities, taxes and related costs of 6 percent of the total household income; a 10 percent down payment; and 8 percent interest on a 30-year mortgage.

dian priced home, which was $112,000. In this context, the primary indicator of the need for affordable housing is the prevalent cost of different types of housing, which are as follows, including land cost:[3]

- Average value manufactured home: $34,000;
- Average value multi-family home: $109,000; and
- Average value single-family home: $155,000.

It is useful to consider how the gap between household income and housing prices varies across the County. As Table 48 shows, the gap is higher in the southern part of the County, and narrower in the northern part. Excluding Hilton Head, the 1995 median income was *approximately* $26,000 (compared to close to $35,000 when Hilton Head is included), which translates into the following *approximate* affordable housing populations and housing costs (again excluding Hilton Head):

3 Source: 1990 U.S. Census of Population and Housing; note that these costs are not available below the County level.

Table 48: Maximum affordable housing by Planning Area.

Planning Area	Median Household Income	Income			Maximum Monthly Payments			Maximum Housing Cost		
		Very low	Low	Moderate	Very Low	Low	Moderate	Very Low	Low	Moderate
Daufuskie Island	$45,974	$22,987	$36,779	$55,169	$460	$736	$1,103	$68,898	$110,237	$165,356
Bluffton Township										
Tract 21	$25,574	$12,787	$20,459	$30,689	$256	$409	$614	$38,326	$61,322	$91,983
Tract 22	$45,947	$22,974	$36,758	$55,136	$459	$735	$1,103	$68,858	$110,173	$165,259
Sheldon Township	$13,257	$6,629	$10,606	$15,908	$133	$212	$318	$19,867	$31,788	$47,682
Lady's Island	$37,099	$18,550	$29,679	$44,519	$371	$594	$890	$55,598	$88,957	$133,435
St. Helena Island										
Tract 11	$18,217	$9,109	$14,574	$21,860	$182	$291	$437	$27,301	$43,681	$65,522
Tract 12	$40,060	$20,030	$32,048	$48,072	$401	$641	$961	$60,035	$96,057	$144,085
Port Royal										
Town of Port Royal	$24,142	$12,071	$19,314	$28,970	$241	$386	$579	$36,180	$57,888	$86,832
City of Beaufort	$26,468	$13,234	$21,174	$31,762	$265	$423	$635	$39,666	$63,466	$95,198
Gray's Hill, etc.	$24,167	$12,084	$19,334	$29,000	$242	$387	$580	$36,218	$57,948	$86,922
Laurel Bay	$27,356	$13,678	$21,885	$32,827	$274	$438	$657	$40,997	$65,595	$98,392
Burton Area	$23,998	$11,999	$19,198	$28,798	$240	$384	$576	$35,964	$57,543	$86,314
Parris Island	$22,150	$11,075	$17,720	$26,580	$222	$354	$532	$33,195	$53,112	$79,668
Marine Corps Station	$23,156	$11,578	$18,525	$27,787	$232	$370	$556	$34,702	$55,524	$83,286

10.2 Needs Assessment

10.2.1 Supply of Affordable Housing

The supply and character of Beaufort County's housing stock has changed rapidly as the County has moved from a farming-based economy to that of a resort destination for vacationers and retirees. In 1990, the County had 46,000 housing units; 23,000 were single-family detached. More than half (54 percent) of the total units were built between 1970 and 1984, and nearly two-thirds (62 percent) of the County's householders moved into their units between 1985 and 1990.[4] In contrast, 24 percent (or close to 7,400) of the occupants moved into their units in 1970 or earlier. Beaufort County ranked fourth in the State in population growth between 1980 and 1990, and first from 1990 to 1996.[5]

The residential real estate market is extremely strong; several projects are offering lots at upwards of $100,000 (e.g., Oyster Factory). Since a developer can sell homes for much more than $100,000, there is simply no incentive to build lower-cost housing. As the County continues to develop, the opportunities to assemble tracts of inexpensive land to build inexpensive homes (those that sell for less than $100,000) will diminish even more. In late 1996, the County's multiple listing service showed a total inventory of 100 single-family homes and townhouses priced at less than $80,000, while there were 150 homes priced at greater than $80,000.

The lack of affordable housing stock is growing more pronounced. The vast majority of housing constructed over the past ten years consists of single-family homes on large lots. Of the 4,688 housing units given building permits in the County between 1984 and 1995, only 261 have been multi-family—only 5 percent of the new building permits. Because of the economies of scale that

4 The 1990 U.S. Census of Population and Housing shows that 18,932 of the County's 30,712 occupied housing units became occupied between 1985 and March 1990.

5 Source: State Data Center from data supplied by the U.S. Bureau of Census.

can be realized in multi-family housing, particularly the defraying of infrastructure and land costs, it tends to be more affordable. For example, the 1990 census data show that the average value of a multifamily home was 42 percent less than an average single-family home. The current development pattern is not conducive to the creation of affordable housing for singles and newly-formed couples moving to the County in response to military transfers or the growth of service sector jobs.

In many rural areas, including Beaufort County at the present time, manufactured housing provides an outlet for the need for affordable housing. In the 1990 Census, manufactured homes accounted for 14 percent of the County's housing stock. While some areas of the County (such as Sheldon) indicated on the Resident Survey that manufactured home development should be encouraged, there are many reasons which argue against manufactured homes[6] as an affordable housing policy solution.

The rapid depreciation of manufactured homes means that they do not represent the long term investment of more permanent structures and have the stigma of "disposable homes." As such, owners may not maintain them as well as more permanent forms of housing and they are more likely to be subject to abandonment; leading to visual blight and a negative impact on surrounding property values. Manufactured homes may also lead to visual blight because their lack of garages or other storage space often force owners to resort to outdoor storage. Furthermore, the rapid depreciation of manufactured homes means that owners do not acquire equity as they would with more permanent forms of housing that would retain value or even appreciate over time.

Combined with the relatively high financing rates associated with manufactured homes, the depreciation of such housing may actually perpetuate poverty in the long run. Finally, manufactured homes are actually dangerous; they can be a hazard during hurricanes, both to the inhabitants and to others - not only do manufactured homes tend to sustain severe damage during hurricanes, they can often turn into shrapnel that is likely to cause harm to other structures. Tellingly, the vacancy rate for manufactured homes is much higher than those for either single-family homes or multi-family units.[7]

Although manufactured homes do have some advantages - they are very affordable, financing is easily obtained, and often are the only affordable interim housing available in a tight housing market - the advantages are outweighed by the significant drawbacks discussed above. Manufactured homes represent a stop gap solution at best.

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6 The discussion of mobile homes does not extend to more permanent manufactured housing that is assembled off site but is anchored to a foundation on site and is not distinguishable from housing built on site. Such manufactured housing does not have the disadvantages attributed to mobile homes, and may in fact be an appropriate solution for building affordable housing.

7 The vacancy rate for manufactured home rentals is 9 percent, compared to 3 percent for multi-family rentals and 5 percent for single-family rentals. Source: CPC/Foresite, "Rental Housing Market Analysis."

10.2.2 The Need for Affordable Housing

Housing need is created by both low incomes and high costs of housing. Between 1980 and 1990 Beaufort County ranked fourth in the State in terms of population growth, and the U.S. Census Bureau estimates that, from 1990 to 1996, it was the fastest growing County in the State.[8] The decade from 1980 to 1990 was also the County's busiest decade of housing production, with nearly half of the residential structures built during this time.[9] The overall population of the County has grown from approximately 51,100 in 1970 to 65,400 in 1980 to 86,400 in 1990.[10] By 2000, the County Planning Board estimates that it will reach 109,000, a doubling of population in 30 years.

Increasing property-sales-to-assessment ratios have prompted upward reassessments in 1988, 1990, and 1995.[11] Beaufort County's per capita income has consistently ranked up to 20 percent above the state average since 1980, and the 1990 U.S. Census of Housing and Population counted median household income at $34,500. Yet, nearly a third of the County's households earned less than $20,000.[12] Beaufort County also experienced an increase of 10.8 percent in persons with incomes below poverty level between 1979 and 1989. This is above the statewide increase of 3.5 percent over the same time period and is all the more striking given the County's relative affluence.

There are clear signs of the present and growing affordable housing problem:[13]

- The first indication is how much very-low-income households spend on shelter costs. Housing policy experts use 30 percent of gross monthly income as the maximum shelter cost for housing to be affordable. Of the County's 3,125 census-specified owner-occupied households earning less than $20,000, about 56 percent pay 30 percent or more for housing costs.[14]

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8 Source: State Data Center from data supplied by U.S. Bureau of Census.

9 Source: 1990 U.S. Census of Housing and Population.

10 Source: Chapter 2, Demographics and Development Trends.

11 Source: Interview, Bernice Wright, tax assessor.

12 Source: 1990 U.S. Census of Population and Housing.

13 Another, less reliable indicator of the need for affordable housing is the number of substandard units in an area. Substandard units are defined by HUD as those units lacking either a complete kitchen or complete plumbing facilities for the exclusive use of the household. In Beaufort County, 200 units lacked complete kitchens and 210 lacked complete plumbing facilities (source: 1990 US Census of Population and Housing). Although there is probably a high degree of duplication between the two figures, even assuming 50 percent redundancy, these statistics clearly illustrate a housing rehab need of at least 300 units.

14 1990 U.S. Census of Population and Housing shows that there are 3,125 specified owner-occupied housing units whose occupants earn less than $20,000. Of these, 1,743 pay 30 percent or more in monthly owner

- A further indicator of affordable housing need is the waiting list for subsidized housing. The Beaufort Housing Authority is mandated to work solely with the very-low-income population. In 1995, it had 290 units of public housing and about 500 Section 8 units. At the same time, it has a waiting list of 100 qualified applicants for public housing and another waiting list 400 names long for Section 8 housing. Due to government funding constraints, little funding is anticipated from the Federal government to alleviate this need.[15]

Three primary population groups are affected by the lack of affordably priced housing: (1) lower-ranking military personnel at Beaufort County's military installations; (2) retail/service sector employees related to Beaufort County's tourism trade, largely in the southern part of the County. Together these population segments account for over half of the County's employment base;[16] and (3) the rural poor. The housing needs of each are described in more detail below.

a. Military

Recent scrutiny of the nation's military bases under the Base Closure and Realignment Act (BRAC) has focused attention on the lack of affordable housing for military personnel in Beaufort County. The lack of affordable housing was specifically identified as a "potential detriment to the military value of bases in Beaufort County" in a 1995 report for the Military Enhancement Committee (MEC), an ad hoc committee of government and civic leaders who worked to keep the County's bases active. Beaufort County's bases escaped closure in the round of base closures during the early 1990s, but present trends toward military downsizing and base realignment could leave Beaufort's bases vulnerable to closure if, among other factors, affordable housing solutions are not developed. Nearly a quarter of the County's 1990 employment base was military. Military payroll accounts for a third of the total annual payroll in the County and more than half that of Northern Beaufort County. Military family housing inventory in the Beaufort County area totals 1,560 units. Nearly 71 percent are located at Laurel Bay housing complex, with the remainder on Parris Island and at the Naval Hospital.

The housing directors of Beaufort County's[17] military bases report waiting lists of approximately 700 people, for which the time on the waiting list can exceed a year. While these people are currently living in private housing stock (including manufactured homes, apartments and single-family homes) throughout the County, the majority of the service members on the lists consist of lower-ranking enlisted people, nearly all of whom have housing allowances at the very-low or low income levels. For example, an E-5 level

costs as a percentage of rent.

15 Source: Interview with Ed Boyd, Executive Director of the Beaufort Housing Authority, 9/13/1995.

16 Source: 1992 Economic Census.

17 Source: Interviews with Rose Raber, Donna Gribbs and Mary Ellen Smith, military housing directors September 1995.

service person (such as a mechanic) with dependents has a housing allowance of $469 per–month (significantly below the threshold of affordability).

Despite the present trends of national military downsizing, the Beaufort military is seeing a modest increase. The Sixth Marine Corps Headquarters relocated to Parris Island from Atlanta in July of 1996, and the possibility exists that additional Navy Squadrons could be reassigned to MCAS Beaufort by the year 2000. While large, sustained increases in military demand are unlikely, even a slight increase will exacerbate the housing shortage. The military has recently received $14 million from Congress to build 140 single family housing units, through military construction.

b. Tourism-Related Employment

In 1991 the tourism industry generated more than 12,000 jobs and an annual payroll of $110 million.[18] Nearly half (47 percent) of all County jobs are service- or retail-related, and for the most part these jobs are not high-paying (the average retail salary was about $12,600).[19]

Increasing housing prices are driving the working population farther away from the employment centers, adding to the congestion on the County's roadways and the pressure for sprawl development. In the 1996 Resident Survey,[20] the bulk of residents paying less than $250 a month for housing were shown to live north of the Broad River. The survey also revealed that most of these residents are satisfied with their commuting distances to work and do not choose to live closer to their jobs; even though it may mean a longer commute to work, there is a common perception that one can get "more house for one's money"[21] in the northern part of the County and parts of Jasper and Hampton Counties. However, as resort/retail development supplants affordable housing in the northern portion of the County, service sector workers will very likely be increasingly unwilling to commute further distances (sometimes over an hour) for minimum wage jobs.[22] Hilton Head businesses are already feeling the effects of increased development and job opportunities throughout the rest of the County, and several businesses have begun to offer hiring bonuses and at least one restaurant has leased employee housing close to work.[23] Thus,

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18 Source: Greater Beaufort Chamber of Commerce, from Bessent Hammack and Ruckman, Inc. report, "Affordable Housing Action Plan for Beaufort County."

19 Source: 1992 Economic Census.

20 Source: Land Ethics, Inc. July 8, 1996 report, "Summary of Results of Public Participation."

21 Source: Interviews with Hilton Head Planning Department and Beaufort-Jasper Realtors Association.

22 A recent study entitled "Coastal Zone Rural Economic Development Through Enhanced Linkages to a Resort Growth Center: The South Carolina Low-Country and Hilton Head Island" cited survey results indicating that most riders on LRTA buses spent 4.5-6 hours riding or waiting for the bus (Research Report 95-1, January, 1995, Mark S. Henry, Professor, David Barkley, Professor, Department of Agriculture and Applied Economics, and Kerry R. Brooks, Associate Professor, Department of Planning Studies.)

the provision of affordable housing is critical to develop and maintain a diverse economy. It is also critical for managing traffic and sprawl patterns of development.

c. The Rural Poor

Beaufort County, particularly Sheldon Township, Port Royal Island and St. Helena's Island, contains rural enclaves inhabited by the descendants of freed slaves and other communities which preceded the recent influx of vacationers and retirees. Many of the rural poor live in family compounds on what is known as "heirs property," property with no clear title which has been inhabited by a family for decades. However, as property throughout the Beaufort County becomes increasingly expensive, these traditional settlements may be lost. In order to preserving the County's traditional rural communities, it is critical that housing remain affordable for these residents.

23 Tilly Lavenas, "Labor Shortage Severe on Hilton Head," *Beaufort Gazette*, April 17, 1996.

10.3 Impediments to the Creation of Affordable Housing

There are formidable obstacles to developing affordable housing in Beaufort County: high land costs, lack of infrastructure, a desire for lower not greater density, lack of an articulated affordable housing policy, and a fragmented housing implementation network.

10.3.1 High Property Value

The least expensive land in the County is in rural areas (Sheldon land sells for $2,000 to $5,000 an acre),[24] while land closer to the water is predictably more expensive (land on the outer islands starts at $80,000 an acre). In some developments, the cost of a lot can be 50 percent of the housing price.[25]

10.3.2 Lack of Infrastructure

Water and sewerage, more particularly lack of central systems, not only drive up

24 Source: Interview with Jerry Marlow, President, Beaufort County Realtors Association, September 1995, and BBP interview with Stanley Bond, Bond & Associates.

25 Proof of rising land values is found in rising property assessments. The entire County is currently undergoing a new property assessment (which will be finished by December 1997 and will go into effect for 1998). South Carolina has a new law that requires reassessment every five years. However, prior to this change in law, the County was required to reassess whenever the annual assessment ratios submitted to the state fell below 80% or above 105%. In recent years, this occurred in 1982, 1988 and 1995, always with sales exceeding assessments. Source: Phone interview with Bernice Wright, 9/13/95.

the cost of construction, but also control the allowable density. For example, in areas zoned Development District (DD) a density of four units to the net acre is permitted without central sewerage systems, but a density of eight units per net acre is permitted with sewer and water facilities. About 40 percent of the County relies on septic tank systems. Much concern has been voiced about the pollution effects of septic tank systems (see Natural Resources Chapter).

The Beaufort Jasper Water and Sewer Authority (BJWSA) provides water and sewerage to most of the County that has water and sewerage service (except the Town of Hilton Head).[26] It acts both as a wholesaler to the City of Beaufort and various developers and as a retailer of surface water. The rates are within the top 25 percent in the state, but are in line with those of other coastal communities. The BJWSA is not dependent upon tax or other revenue allocation from Beaufort County. It relies upon sales revenues for operating and some capital expenditures. Further, new infrastructure is paid for by the developer, who is assessed a "capacity fee" to cover the cost of the infrastructure. Thus, the present system adversely impacts the developability of affordable housing, because the developer has additional costs which must be amortized in the project.

10.3.3 Concentration of "Master Builders"

The manner in which infrastructure is provided also means that development of a particular tract will have the effect of spurring additional growth in an area, solely because there is infrastructure. This in turn creates a major incentive to assemble large tracts of land—so that a single master builder can avoid competition and recapture the entire added value generated by new infrastructure. This has the net effect of leaving large developers with major sites able to control the development in an area. For example, the BJSWA estimates the Del Webb Sun City project infrastructure costs have totaled approximately $14 million, to serve a projected 8,000 housing units development, none of which is directed at the affordable housing market.

10.3.4 Lack of Comprehensive Housing Agency

The management and development of affordable housing is currently handled by a patchwork of government entities such as the Beaufort Housing Authority and the housing directors at the military bases. Various entities have recognized the need for affordable housing, ranging from the County to the Hilton Head Planning Board to the Military Enhancement Committee (MEC) and Lowcountry Regional Transportation Authority (LRTA). A "Hilton Head Affordable Housing Study" was released in November 1996. While it now has a Countywide board and mandate, the Beaufort Housing Authority, for example, works almost exclusively with the very-low-income population. While there have been various ad hoc alliances and groupings, no formal coordinating entity exists.

26 Source: Interview with Ed Saxon, BJWSA, 9/10/95.

10.3.5 Potentially Conflicting Density Goals

The County is presently engaged in this comprehensive planning process in large part because it is concerned about managing growth. There is a strong public sentiment to preserve open space. In fact, some of the recommendations of the Target 2010 project included decreasing densities and increasing lot sizes. This policy could further inhibit the construction of affordable housing because a developer will not be able to obtain the economies of scale or density incentives needed to construct housing which sells for less than $100,000.

10.3.6 Controversy

In an affluent community such as Beaufort County, the citizenry may view the County's efforts to foster the creation of affordable housing as an unnecessary expense or as a form of government intervention. Existing residents often see affordable housing as adding "fuel to the fire" with regard to unwanted growth, even though in most cases growth is driven by the second-home and retirement housing industry, not housing supply per se.[27] An anti-growth sentiment also makes affordable housing efforts vulnerable to public opposition due to their high visibility and need for public support.

27 Source: Urban Land Institute, "Strategies for Developing Affordable Housing in Amenity Towns" ULI research, working paper 645, August, 1995.

10.4 Conclusions

Beaufort County is an affluent County, yet there is much more it can and should do to help its lower-and moderate-income populations. The rapid growth and development of the County and the influx of wealthy second homeowners and retirees is driving up the cost of housing and restricting the ability of many County residents to afford homes near where they work.

❶ Lower-paid members of the workforce, especially those in the tourism industry, are finding it necessary to live at increasingly greater distances from their places of work;

❷ over 600 members of the military and their families are on waiting lists for on-base military housing; and

❸ the rural poor often unable to afford adequate housing.

Losing any of these population groups would severely cripple Beaufort County.

☑ The tourism industry could not function without the lower-paid service employees, who may simply leave the County altogether if their commutes become too long;

☑ the military payroll accounts for a third of Beaufort County's total annual payroll; and finally,

☑ the rural poor, living for generations in family compounds, represent the history and diversity of the County and should not be displaced.

To ensure the County's continued prosperity, diversity and desirability, the County must take an active role in encouraging affordable housing. Without an assertive effort to create affordable housing, Beaufort County could lose its military bases, its tourism industry, and its rural poor. Some of the recommendations set forth in this chapter can be easily implemented now, while others will require additional time to secure funding, required approvals, etc. However, a Beaufort County commitment to addressing the affordable housing problem is vital *before* it seriously weakens the area's economic base. If the need for affordable housing is addressed, Beaufort can remain a wonderful place to live, work and raise children for residents of all income levels.

There are ways to overcome the hurdles listed in the technical analysis, and thus create and maintain a better quality of life for all of Beaufort County's residents, not just the wealthiest. For the County to encourage the creation of affordable housing, it must be pro-active. It must develop an affordable housing mandate, and provide the right mix of persuasion, incentives and know-how to respond to opportunities as they arise. Given the relatively young age of most of the County's housing stock, this will generally entail regulatory changes (i.e., in the zoning ordinance or land/unit set-asides) for new development, rather than rehabilitation of existing housing stock. As it develops these new regulations, the County should foster a dialogue both with the development community and the citizenry. The following policies should structure the County's efforts to foster affordable housing.

Policy 1: Create a public/private/community consensus on the importance of developing affordable housing.

Policy 2: Leverage resources.

Policy 3: Encourage a variety of housing types, with the goal of accommodating the full variety of income, age and cultural groups in the community.

Policy 4: Promote affordable housing to meet the growing needs of the military.

Policy 5: Foster a variety of affordable housing opportunities near or convenient to job centers and community facilities.

Policy 6: Be sensitive to aesthetics, open space and natural resources.

Community Consensus

Policy 1: Create a public/private/community consensus on the importance of developing affordable housing.

This encompasses both a need to address the issue at the County level and to allay potential concerns of local residents. There may be resistance to a stated goal of creating affordable housing— either due to growth/sprawl concerns or a "not-in-my-backyard" sentiment. The County may be able to address resident concerns through public education and consensus-building. While the County has a high median income, there are many people who cannot afford the affluent lifestyle of a resort/retirement community, including most of those in the military, those working in stores and restaurants which comprise much of the County's economic base, single parents, young working professionals, Native Islanders, and people just starting out in life, including the children of long-term residents seeking to stay in the County. Further, the ability to provide affordable housing will very likely affect the County's ability to attract and retain new employers.

Action

☑ *1.1 Institute a joint task force of Beaufort County and the Beaufort County Housing Authority (BCHA).*

The "Affordable Housing Task Force" would be comprised of major employers, citizens, the military, private developers, County government and lenders, and representatives from the City of Beaufort, the Town of Port Royal, the Town of Bluffton, the Town of Hilton Head, and the Lowcountry Council of Governments. The Task Force should be coordinated with the Council Committee on Human Resources, which has recently improved lines of communication among all agencies and reworked the makeup of the Housing Authority. The responsibilities of the Task Force would be to:

1.1.1 Establish and monitor goals (annual number of units produced/households to be assisted) addressing County-wide housing needs for very low, low and moderate income housing.

1.1.2 Frame issues and support County efforts to foster affordable housing.

1.1.3 Develop and implement outreach strategies to make affordable housing acceptable to County residents.

1.1.4 Ensure representation of all constituencies, including the military, on affordable housing issues.

1.1.5 Develop a pro-active approach to project development by identifying sites for affordable housing and recruiting developers with incentive packages.

1.1.6 Prepare and present to the County Council, Planning Board, and the public, annual reports of progress, activities and recommendations developed by the Task Force.

1.1.7 Develop a method of monitoring those developments that receive incentive packages through the Task Force to ensure that their affordable targets are met.

☑ *1.2 Develop a common implementation strategy among the various entities that have jurisdiction over affordable housing to ensure that the regulatory process is adequately addressed and to streamline and coordinate various approvals.*

☑ *1.3 Establish an affordable housing program to serve as both an advocate for the creation of affordable housing and as a resource to developers.*

Assign a full-time Affordable Housing Coordinator, funded jointly by the County and BCHA, whose responsibility would be to ensure the efficient coordination and implementation of affordable housing development. This would include a broad array of policy, financing and implementation aspects. The specific task of the affordable housing program would include:

1.3.1 Develop and coordinate financing programs—which will evolve over time in response to State/Federal funding sources, legislation and County resources; public/private partnerships can also be a source of financing.

1.3.2 Serve as liaison between State and Federal funding sources and developers—recognizing that the pipeline of affordable housing dollars is modest and therefore few developers will have significant prior experience working with these programs.

1.3.3 Assist affordable housing developers with regulatory reviews—which could be accomplished in part through interagency meetings, and in part by the Affordable Housing Coordinator acting as "project developer."

1.3.4 Create mechanisms to promote affordable housing—such as the zoning incentives discussed in this Chapter which will require follow-up work by the Housing Coordinator with regard to covenants and other guarantees that affordable housing will be successfully maintained over time.

☑ *1.4 As an alternative to a formal program, the County might empower an existing entity to undertake the above. Specifically, the County might:*

1.4.1 Broaden the mandate of an existing County agency, such as the Economic Development Board (because housing often proves to be a major part

of attracting or retaining employment opportunity) or

1.4.2 Consider broadening the mandate of the Beaufort County Economic Development Corporation, a quasi-public entity, to act as a development partner with for-profit developers, and to use its not-for-profit status to confer tax abatements or other incentives.

☑ *1.5 The Task Force should immediately determine an appropriate number of affordable housing units, and then adopt that number as their goal.*

☑ *1.6 The Affordable Housing Task Force should fully investigate the possibility of Beaufort County's being a guarantor for limited recourse loans made available for investors prepared to enter the affordable housing market.*

Community Resources

Policy 2: Leverage resources

Public organizational resources, funds and in-kind contributions such as land can and should be used to help create affordable housing; but it is unrealistic to rely solely on existing Federal and State housing programs to meet the County's affordable housing needs. These resources must be augmented with private investment. A way must be found for the private sector to participate in the creation of affordable housing—so as to tap private market forces rather than the taxpayers' dollars.

Actions

☑ *2.1 Investigate and pursue Federal and State programs, ranging from South Carolina's Housing Trust Fund, to State Housing Finance and Development Authority tax exempt bond financing, to Federal low-income housing tax credits.*

The Affordable Housing Task Force and the Affordable Housing Coordinator should make the Legislative Delegation aware of the financial needs of the County and encourage the Delegation to lobby for funds from these and other sources (such as military housing programs). The County should dedicate staff resources to assist developers in accessing these programs.

☑ *2.2 Utilize public land to create affordable, mixed-income housing by making the land available to private developers and recruiting them with incentive packages.*

This is a particular strategy for meeting the housing needs of military personnel; and military base land could be made available for affordable housing construction. The County could include "swaps" of publicly-owned land in exchange for affordable housing on other sites. The County could also create a land-banking program to ensure that specific sites are set aside County-wide for small ten- to twelve-unit affordable housing clusters. It should be noted that Housing Authority funding applications are held in greater stead when the land is already publicly owned.

☑ *2.3 Explore density bonuses as a way to leverage significant private investment in affordable housing. The following variations should be considered:*

2.3.1 *Inclusionary zoning* allows a density bonus for affordable housing where water and sewer are available. In effect, a developer would thus receive a density bonus for a set aside for affordable housing, typically at a 5 to 20 percent level; within a residential development.[28]

2.3.2 *Voluntary linkage* programs are similar to inclusionary programs in that developers are awarded a density bonus in exchange for building affordable housing. However, rather than requiring a set aside for affordable housing, linkage programs provide density bonuses for residential or commercial developments if the developer agrees to either build affordable housing off-site or contributes to a housing trust fund.

2.3.3 *Mandatory linkage programs* require commercial and residential developers to offset the adverse impacts of their projects on the availability of affordable housing by building such housing or contributing to a housing trust fund. A formula is used to calculate the appropriate number of units or cash contribution required for a specific project.

☑ *2.4 Create a multi-interest housing consortium of lenders, employers and others.*

Such consortiums have been very effective in many areas at producing affordable housing through Community Development Corporations and other for-profit and not-for-profit builders. Clearly, the area's financial institutions will be key players in such a consortium, either to satisfy Community Reinvestment Act (CRA) obligations or to maintain the region's economy. However, other interests should also be involved.

☑ *2.5 Explore other public/private partnerships to ensure that each public dollar spurs additional investment of private capital.*

Hilton Head Island resorts are one potential source of private funds; because Hilton Head serves as a major job center, it will feel the burden of a lack of affordable housing for its service sector work force especially as the northern part of the County develops. The relatively higher prices of land and level of development on Hilton Head as compared to the rest of the County will continue to make development of sufficient affordable housing difficult on the island.

Although Hilton Head Island's recently-completed report on affordable housing focuses primarily on addressing Hilton Head's affordable housing needs on-island, it does recognize that the existing shortage of affordable housing on Hilton Head Island may be mitigated by off-island affordable development. Therefore,

28 Hilton Head Island's affordable housing report recommends a similar program on the Island, and inclusionary zoning has created literally thousands of affordable housing units without any government funding in other high growth areas.

the Town may be willing to make certain types of on-island development contingent on providing affordable units, land or funds off-island or to allow developers receiving a density bonus to provide the affordable units off-island. A consortium of resort employers is another possibility; in some resort towns, employers have formed consortiums to build, buy or rent housing for seasonal employees rather than confront labor shortages.

Housing Variety

Policy 3: Encourage a variety of housing types, with the goal of accommodating the full variety of income, age and cultural groups in the community.

While many of the County's newer residents are relatively affluent retirees, the County is also seeing an increase in families drawn by the quality of life in the Lowcountry who may not have the resources of the retirees. There are also affordable housing needs created by the United States military and retail/service sector employees. Further, the rich and diverse cultural heritage of the Lowcountry is a valuable resource. County policy should also address a variety of housing types, including higher-density development such as townhouses and rental apartments.

Actions

☑ *3.1 Develop policies and regulations which allow the continuation of "family compounds" (a.k.a. "Heirs Property").*

Specifically, develop flexible zoning regulations which allow the establishment and continuation of small businesses within the family compounds while still protecting natural resources. The County should help retain, bolster and enhance native sea-islander communities which precede Beaufort County's popularity as a vacation and retirement destination.

☑ *3.2 Amend the zoning ordinance to allow accessory and "caretaker" units, consisting of no more than one rental unit in a large house or on the same property as the main home where sufficient infrastructure exists or where the acreage is adequate insofar as meeting the intent of the underlying zoning.*

Accessory units can also provide added security in second-home communities, and can provide a source of revenue for seniors, who often find housing costs a burden. They can provide nearby housing for care givers.

Furthermore, accessory housing can provide affordable housing interspersed

throughout communities. For this very reason, however, the accessory housing ordinance should be crafted to assure that the accessory units are compatible with their single-family neighbors. The accessory ordinance regulations should include a requirement for the owner to reside on the premises so as to provide supervision, minimum and maximum unit sizes, so as to assure adequate but not out-of-scale housing, and design guidelines to assure that the property maintains its single-family visual character.

Meeting the Needs of the Military

Policy 4: Promote affordable housing to meet the growing needs of the military.

The military is one of the County's major employment bases, and keeping military installations in the County is partly contingent on meeting their housing needs. Currently, there are approximately 600-700 military personnel on the military waiting list for on base housing, and the possibility exists that up to five additional Navy Squadrons will be stationed in the County; the thousands more families and individuals that the new Squadrons would bring will increase the demand for affordable housing near the military bases. The overall strategy in the immediate term should be to target all of the above-referenced action items to the needs of military personnel in order to deal with the existing unmet need and additional need to the extent that additional squadrons are stationed in Beaufort County.

Actions

☑ *4.1 Ensure that the military is represented on the Affordable Housing Task Force and set as the first agenda item of Task Force establishing housing for the military.*

☑ *4.2 Encourage developers to build new units convenient to the military bases when assisting the developers in obtaining access to Federal and State housing programs.*

☑ *4.3 Immediately target land convenient to the military bases for public acquisition through land swaps for other publicly owned land and land-banking. This public land should be utilized to create affordable, mixed-income housing geared toward military personnel.*

☑ *4.4 Prioritize land convenient to the military bases and within the Priority Investment Areas for rezoning to allow inclusionary developments: a density bonus in exchange for a set-aside of 5 to 20 percent of the units for affordable housing.*

☑ *4.5 Consider the requirements of new units built as a result of a mandatory linkage program to be targeted to military families.*

Incentives for the Private Sector

Policy 5: Foster a variety of affordable housing opportunities near or convenient to job centers and community facilities.

Part of the challenge of affordable housing involves commuting distance to work—whether it be a military service member being unable to find affordable housing close to the base, or a Hilton Head employee who cannot afford to live there or even nearby. To help address community distance as well as traffic and sprawl development patterns, affordable housing should be promoted in areas convenient to major employment centers (the County's military installations, Hilton Head or the City of Beaufort), and along major routes providing vehicular and public transportation to these centers. Priority should be given to affordable housing in Priority Investment Areas, which will have greater access to public facilities and transportation.

Actions

☑ *5.1 Investigate and consider higher-density residential prototypes in connection with affordable housing, but consistent with the Future Land Use framework.*

While development in Beaufort County probably will continue to remain largely single-family homes (based on both market factors and the County-wide sentiment to avoid high-density growth), nearly 50 percent of the resident survey respondents still indicated that townhouse development should be encouraged. Thus, in Priority Investment Areas where suitable site-specific conditions exist (i.e., negative impact on scenic views, traffic conditions, water and sewer, etc.), the County should consider more affordable, multi-family housing prototypes. The Affordable Housing Task Force could assist with such determinations.

☑ *5.2 Target expedited review and approval to developers of affordable housing projects with sites and building programs consistent with all of the planning, aesthetic and environmental considerations raised in this plan and located in Priority Investment Areas.*

For developers, lengthy review and approval processes translate into increased costs. They must continue to pay carrying costs on land even if they are not able to develop it due to pending zoning or permitting approvals. Thus, if the County were to try to prioritize permitting, County Council approvals and other required regulatory approvals (obviously within the legal authority to do so) for qualified projects in development areas, it would remove some of delays and could encourage more developers to include an affordable housing component in their projects. (As noted, the Affordable Housing Coordinator and Task Force would both play key roles in expediting projects.)

☑ *5.3 Target financing and other incentives for the private market to create and maintain affordable housing in designated areas.*

These could include areas close to employment centers, military bases and sites along major public transportation routes, but always for areas where the infrastructure can support added densities and consistent with the Future Land Use framework. The precise financing and incentives will, as noted, vary widely from year to year, depending on changes in State and Federal programs and legislation.

Environmental Compatibility (and Development Standards)

Policy 6: Be sensitive to aesthetics, open space and natural resources.

Care must be taken to preserve the natural beauty of the County; the housing needs of the low-income population cannot ignore the other mandates of the Comprehensive Plan. Affordable housing definition is lower cost housing, yet, it need not and should not detract from the natural or built environment of the County. Recognize that while the affordable housing need is much the same in all of the planning areas, it cannot be equally addressed without doing injustice to other compelling planning and development issues and priorities.

Actions

☑ *6.1 Develop design standards, guidelines, etc., that are flexible enough to encourage the creation of affordable housing, but do not ignore other Comprehensive Plan goals.*

These include clusters which entail reduced development costs for roads, parking, etc; neotraditional design concepts which further entail enhanced community interaction; and encouraging apartments above businesses in mixed use areas.

☑ *6.2 Adopt policies that encourage, where possible, affordable housing to be interspersed throughout communities rather than concentrated in isolated areas.*

Scattered affordable units mixed in with market rate units are generally more attractive than high-rise type affordable developments, and tend to create a more positive image. The land-banking policy described earlier would relate to this objective, for instance. The Affordable Housing Task Force should adopt a "scatter" policy in all of its policy and site reviews, especially where discretionary actions (for funding, zoning, or technical assistance) is involved.

☑ *6.3 Select priority projects mindful of aesthetic as well as environmental issues. "Aesthetic" considerations include preservation of scenic views or corridors and building prototypes consistent with the historic context of the development or surrounding areas.*

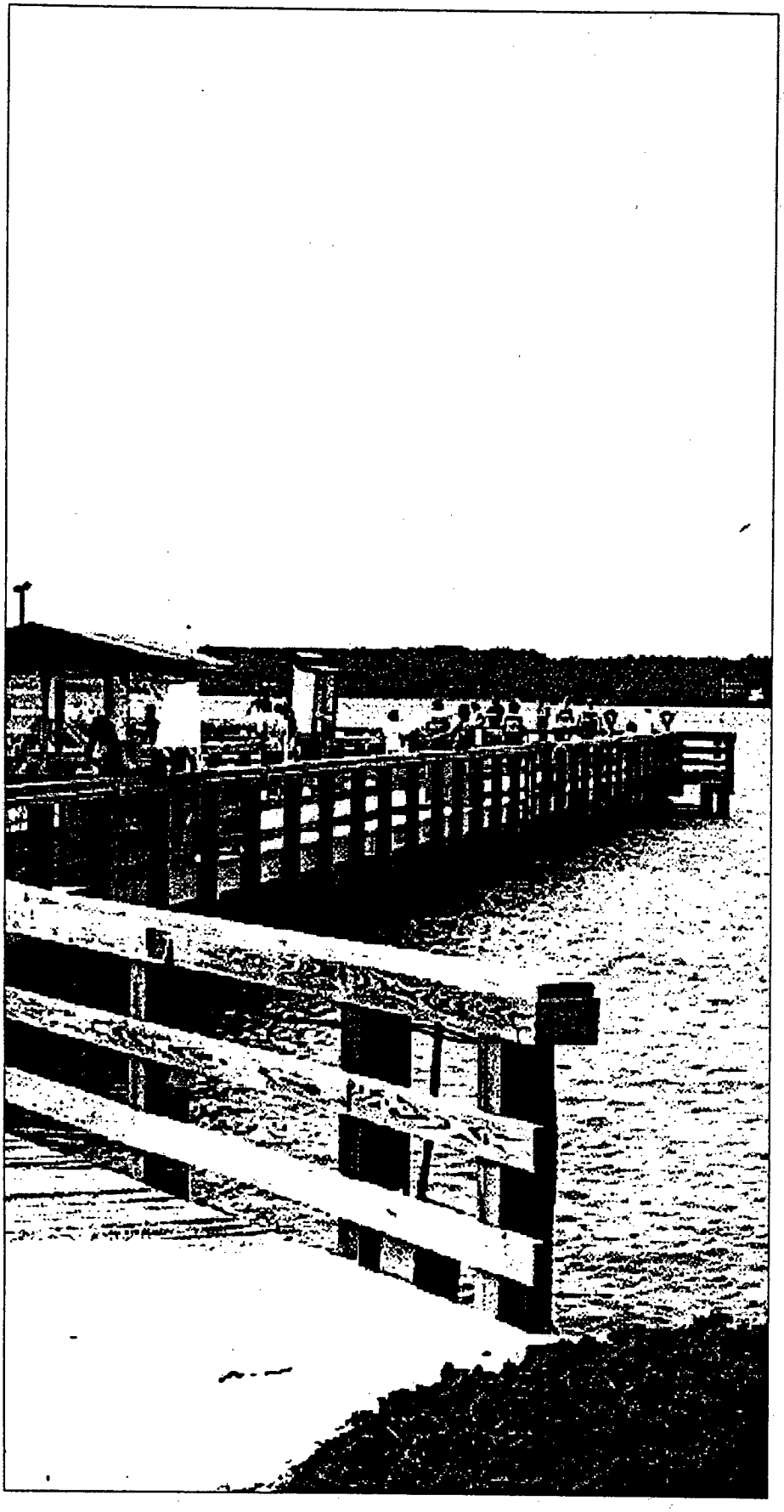
☑ *6.4 Form a work group on the interests shared by affordable housing and conservation advocates. This work group should integrate the agendas of the two interests, minimize conflicts, and find constructive ways to meet the goals of both affordable housing and conservation.*

☑ *6.5 Vary any density bonus by planning area, giving lower densities in Transitional Investment Areas, higher densities as appropriate in Community Preservation Areas, and higher densities in the Residential and Light Commercial Areas.*

Note, however, that the bonus may be as great or greater than in the lower-density areas: a 100 percent density increase from one unit per two acres to one unit per acre is a substantial incentive, for instance. The affordable housing needs in the Rural Service Areas would be addressed through the Family Exemption program, exemptions for small parcels, and density bonuses awarded on a case by case basis.

☑ *6.6 Explore incentives for historic preservation of and aesthetic improvements to rural affordable housing in the Transitional and Rural Investment Area.*

☑ *6.7 Ensure that density bonuses are always within the capacity of public facilities and infrastructure. Under no condition should affordable housing provide an excuse to override or circumvent the public policy goals of this plan or its Future Land Use framework.*



Chapter
11

Community Facilities

Community Facilities

Vision

Community Facilities should be expanded to meet the existing and growing needs of the community while protecting the public health, safety and welfare of the citizens. The need for facilities and services will be determined by community desire, public and environmental health and safety requirements, and whether the area is urban, suburban or rural.

Goals

Wastewater Management

1. Coordinate the extension of public sewer and water facilities with the County's three Investment Areas as identified on the Future Land Use Map.
2. Ensure that County water resources are protected from wastewater pollution.
3. Provide cost-effective non-polluting wastewater management solutions for Beaufort County residents outside the Priority Investment Areas.
4. Develop a plan and written agreement which provides for the cooperative implementation of the Comprehensive Plan and the regional "208" water quality management plan involving Beaufort County and the Beaufort Jasper Water and Sewer Authority(BJWSA).

Water Supply, Treatment, and Distribution Plan

1. Provide a safe and cost-effective public water supply in areas targeted for growth and development. Provide a safe, reliable and adequate supply of drinking water for the citizens of the County outside the Priority Investment Areas.

Solid Waste and Recycling

1. Provide cost effective and efficient solid waste collection, recycling and disposal County-wide.

2. Increase citizen and business participation in the County's recycling program.

Fire Protection Plan

1. Provide an equivalent degree of fire protection to citizens and their property throughout the County.
2. Implement measures that will help citizens and businesses obtain lower Insurance Services Organization (ISO) ratings over time.

Emergency Medical Services Plan

1. Provide the best immediate patient care and medical transportation available.
2. Achieve a five minute response time County-wide.

Governmental Facilities

1. Strengthened and enhanced the general operations of the Beaufort County government in order to provide adequate administrative services for the growing needs of the community.

Educational Facilities

1. Ensure the highest quality educational outcomes in a changing world for all students by providing a challenging multi-cultural curriculum, effective personnel and excellent facilities.

Libraries

1. Make services and information accessible to all County residents within a reasonable distance of home or workplace, or through extension services.
2. Provide County residents with computerized access to information.

Cultural Facilities

1. Encourage cultural facilities to be accessible to all County residents within a reasonable distance of their home or workplace.

Sheriff's Department

1. Provide an adequate level of law enforcement protection to all citizens of Beaufort County.

Emergency Management Department

1. Develop a regional evacuation plan and written agreement for cooperation with surrounding counties.
2. Protect the major evacuation corridors throughout Beaufort County to ensure long-term capacity.
3. Continue coordination endeavors with local agencies and organizations to ensure maximum efficiency in emergency evacuations.

Community Facilities

Technical Analysis

11.1 Introduction

One of the most important elements within the planning process as mandated by the State Enabling Legislation is the provision of community facilities. The legislation defines community facilities as those structures, organizations and systems associated with the transportation network; water supply treatment and distribution; sewage system and waste water treatment; solid waste collection and disposal; fire protection; emergency medical services; general government facilities; education facilities; libraries; and other cultural facilities. Included in this definition are the Sheriff's Department and the Emergency Management Department, which oversees emergency evacuation and hazardous materials disposal activities. Community facilities include all facilities operated by government agencies or authorities, and nonprofit organizations that contribute to the provision of public services.

This chapter of the Comprehensive Plan focuses on those community facilities and attendant services provided by Beaufort County and other pertinent local agencies as defined in the State Legislation. However, due to its complexity, the analysis of the transportation network is contained within a separate chapter. Also, it should be noted that many County agencies and departments will be affected by the increasing growth within the County. These other agencies and departments are not addressed within this comprehensive plan analysis. However, it is recognized that the growth management policies herein will indirectly address their concerns, as all functions of County operations are commonly affected. It is recommended that these agencies and departments utilize the policies and action items where appropriate in their future fiscal and program planning.

11.2 Wastewater Management

11.2.1 Background/Existing Conditions

One of the most critical elements in a growth management program is the coordination of wastewater management services with future land use goals and objectives. This first vision goal stands over and is intimately tied to each of the other vision goals stated above. This section will examine the existing conditions of wastewater management within the County with regards to the vision goals, and gives the rationale behind the subsequent set of policies and action items.

Wastewater treatment services in the unincorporated areas of Beaufort County are currently provided by the Beaufort Jasper Sewer and Water Authority via five wastewater treatment plants, and approximately ten independent wastewater treatment facilities. These independent facilities include plants at: Callawassie Island, Moss Creek, Pleasant Point, Harbor Island, Burton Mobile Home Park, two plants operated by the Beaufort County Board of Education, Lobeco Products and the Howard Johnson Motel on U.S. 21. Public sewer service is currently available to approximately 15 percent of the unincorporated population of the County, with the remainder of the County residents utilizing individual septic systems (See the water and sewer service area map for the delineation of sewer facilities within the County).

The Beaufort Jasper Sewer and Water Authority (BJWSA) is a Special Purpose District independent from Beaufort County created in 1954 by the State Legislature. The Authority was initially charged with the development of a long-term, reliable supply of water for Beaufort and Jasper Counties. In 1972, the Legislation was amended to include the responsibility of wastewater treatment. Financing for the Authority is based on revenue bonds, as they do not have the power of taxation. The BJWSA has, since 1987, utilized impact fees to assist in financing the construction and extension of infrastructure. These fees are charged to developers as part of any new development.

The relationship between Beaufort County and the BJWSA is addressed by Section 208

of the Federal Clean Water Act 1972, which requires the development of water pollution abatement plans and the designation of planning, management and service agencies to implement those plans. The Lowcountry Council of Governments (LCOG), has been designated as the Water Quality Planning Agency for Beaufort, Colleton, Hampton, and Jasper counties. LCOG prepares and revises the Lowcountry Areawide Water Quality Management Plan which provides the regional framework and policies for all management and service agencies with the region. Management agencies are political entities which own, operate, or maintain a public wastewater collection or treatment facilities, or have these services provided by another agency. Service agencies design, construct, own operate and maintain wastewater collection or treatment facilities. Some management agencies are also service agencies.

The South Carolina Department of Health and Environmental Control (SCDHEC) recognizes the Beaufort County Council as the management agency for the unincorporated areas of the County and for the Town of Bluffton. The BJWSA is the designated service agency for most of the unincorporated areas of the County. The municipalities within the County, as well as the military installations, function as management or service agencies independent from Beaufort County within their incorporated boundaries.

As part of its management responsibilities, Beaufort County must approve the location of new treatment facilities, and ensure compliance and consistency regarding location, operation and maintenance of treatment facilities with the Lowcountry Areawide Water Quality Management Plan and any local plans, especially the Comprehensive Plan. Likewise, after the adoption of the Comprehensive Plan, it is crucial that Beaufort County ensure that the Plan is reviewed and recommendations for revision as amendments to the document are presented to the LCOG Water Quality Advisory Committee and the LCOG Board of Directors for review and approval.

Two of the goals for wastewater management essentially outline the necessity for water pollution abatement strategies. The following narrative discusses the current conditions regarding the collection, treatment and disposal of wastewater in order to provide an understanding of these goals.

11.2.2 Regional/Sub-Regional Wastewater Treatment Facilities

The Beaufort Jasper Water and Sewer Authority (BJWSA) and other major utilities utilize two basic methods for the disposal of treated wastewater: direct discharge to surface waters and wetlands and land disposal. Surface water disposal of sewage effluent is limited to certain areas of the County, generally in the Port Royal Island area. Land disposal occurs across the rest of the County.

Currently, there are six wastewater treatment plants that directly discharge to surface water in Beaufort County: BJWSA/Shell Point, City of Beaufort, Marine Corps Air Station, USMC Laurel Bay, and USMC Parris Island. All but Laurel Bay discharge into the Beaufort River and its tributaries. Surface water discharges rely upon the assimilative capacity of the receiving water to prevent undesirable pollution. The streams and rivers in Beaufort County, essentially being tidal estuaries, are not particularly suited for wastewater discharges. SCDHEC has recently expressed the concern that persistent low dissolved oxygen levels in the Beaufort River are related to the major wastewater discharges that occur there. (See the Natural Re-

sources Chapter for a detailed discussion of surface and groundwater capabilities).

Most of the effluent in Beaufort County is disposed of by land application. The first spray irrigation system was begun in 1960 on Hilton Head Island, and by 1980, all wastewater on Hilton Head Island was being disposed of through spray irrigation. There are several benefits to this method of disposal: the use of treated water for irrigation reduces the demand on the natural water resources, and land disposal keeps the effluent away from delicate surface waters. Golf courses are the most common location for spray effluent disposal. The requirements for golf course disposal include treatment of the effluent to a secondary level, a 100 foot setback from any residential structure, and the design of the course to accommodate the effluent.

Many soils in the undeveloped areas of Beaufort County are marginal at best and will be difficult to permit for even the lowest rate of spray. According to the general manager of the BJWSA, the best soil types for effluent disposal are Wando and Seabrook. Currently in Beaufort County, according to the calculations from the state soils maps. There are approximately 20,000 acres of Seabrook soils and 29,300 acres of Wando soils. SCDHEC will permit a rate of no more than two inches per week of secondary treated effluent to be sprayed on Wando or Seabrook soils. Given this standard, the effluent produced by one household requires 0.15 acres of land for disposal.

As the County begins to implement growth management strategies, it is critical that the disposal of effluent, especially by land application, is considered in this process. For example, an impediment to spray irrigation in Beaufort County is the amount and frequency of rainfall, which makes the year-round application of effluent often difficult. This is especially true for disposal on golf courses, where play may be interrupted due to excessive moisture, and incoming effluent is therefore often not desired. The BJWSA is considering four alternatives to address this persistent concern:

a. Acquire dedicated spray disposal sites to ensure the long-term ability to continue effluent disposal.

Such sites could be coordinated with the greenways recommended in the Park and Recreation Plan as areas used to buffer suburban and rural development. Other alternatives include pine plantation areas in Southern Beaufort County or sod farms on St. Helena's Island. For this concept to be successful, the BJWSA must hold a ninety-nine-year easement on the land or have fee simple ownership, Wando or Seabrook soils are the most desirable, and the application must be of a high quality secondary treated effluent and sites must be within reasonable distance of treatment plants.

b. Develop systems for wetlands disposal of effluent.

A treatment level somewhat above secondary is required. Under this alternative, the effluent is slowly released into the wetlands, and as the effluent travels through the natural water course, the wetlands act as a natural filter prior to the effluent being released into the river. This option requires a complex and detailed plan be approved by SCDHEC to ensure the protection of the wetland area. The BJWSA has obtained a permit for wetland disposal in the Great Swamp adjacent to the New River. Other wetland areas in the County could be considered for this type of disposal.

c. BJWSA should evaluate all treatment plant discharges on a site by site basis and if determined necessary, upgrade wastewater treatment plants to accommodate tertiary treatment.

Tertiary effluent is classified as "unrestricted" by SCDHEC, which would enable the BJWSA to spray it anywhere, even on front lawns. This alternative is expensive due to the capital and operating costs of upgrading the plants to process a minimum of one million gallons per day. The benefits to the environment and having an unrestricted source of irrigation water must be balanced with the financial reality of tertiary treatment. Concentrating density in Priority Investment Areas will make the cost of retrofitting existing plants or constructing new tertiary treatment plants more economical.

d. Obtain alternative wet-weather discharge permits from SCDHEC to nearby rivers.

This option is difficult to permit by SCDHEC and requires a tertiary treatment. Also, SCDHEC will not allow this option in Southern Beaufort County.

11.2.3 Temporary or Package Wastewater Treatment Facilities

Package treatment plants are temporary facilities which are permitted in the absence of local or regional sewer service. These facilities normally service a small geographic area or single development where septic tanks will not work. A package plant is typically one which is designed to be constructed on site of prefabricated materials or one which is constructed completely or partially elsewhere and then delivered and completed on the site. They require the same approvals from SCDHEC as large plants for discharge into surface waters or for land disposal.

Most of the package treatment plants currently operating in Beaufort County were constructed between 1950-1986 by private developers. These plants have generally experienced problems because of age and inconsistent maintenance. There are many situations in which small plants are desirable; all well–designed plants will work with proper maintenance. Small plants properly constructed may be the only solution for sewage disposal in areas where the installation of regional sewer is too costly. Community Preservation areas are appropriate locations for these systems. If regional service becomes available, these systems should be removed from service within a reasonable period of time and flow diverted to the permanent facility where the sewage can be more efficiently treated to a higher quality.

11.2.4 Individual On-Site Septic Systems

Individual on-site septic systems in Beaufort County are the most common method of sewage disposal outside the urban areas. Conventional on–site septic systems have been used in South Carolina since the 1950s. This method of disposal in rural areas is initially the least expensive to the homeowner and the developer, but potentially has the most negative impact on the environment. The National Oceanic and atmospheric Administration (NOAA) and the SCDHEC identifies septic systems as one of the five major pollution sources responsible for shellfish area closures.

The impact on water quality from poorly functioning and improperly sited septic sys-

tems has become a significant issue in many coastal areas, especially in counties more developed than Beaufort County where the cumulative impact of these systems within sensitive watersheds has caused measurable declines in water quality. Barrier islands are one of the most difficult locations to site septic tanks due to limiting soil conditions such as coarse permeable sands and high water table yet these are the most sought after locations for development (see the Natural Resources Chapter for a further discussion on the cumulative impacts of septic systems).

SCDHEC currently evaluates all requests for individual wastewater treatment facilities and issues the appropriate approval permits. Factors which are evaluated to determine the appropriateness of a proposed system include, density, separation between leach field and ground water, distance from surface water, loading rate, soil types and operation and maintenance of the system. Although the permitting of these systems is regulated by SCDHEC, oftentimes systems are approved in areas that are questionable as adequate sites.

Many of the soils in Beaufort County have severe limitations for septic tanks. The U.S. Soil Conservation Service report indicates that 60 percent of the County is considered "unsuitable or has severe limitations" for the installation of individual sewage disposal systems. Alternative systems are often permitted in areas with severe limitations when conventional wastewater systems can not be permitted. Since 1995, 70 percent of the permits issued in coastal counties have been for alternative systems, this is a 20 percent increase since 1985.

The average septic system for a four bedroom single family residence discharges approximately sixty-five thousand gallons of sewage per year into the soil. The most common types of septic systems used in the County are the conventional shallow and ultra shallow systems. A 1996 septic systems performance survey conducted by SCDHEC's Division of Onsite Wastewater Management concluded that the more severe the type of soil conditions are, the greater the risk of premature failure of subsurface disposal systems. Impacts from malfunctioning septic tanks are a water quality and public health concern. These systems tend to operate efficiently when sited on Wando or Seabrook soils with a six inch stone base.

According to SCDHEC, the failure rate on the conventional systems is 15 percent, while the ultra shallow systems fail at a rate of 24 percent. Failure is defined by SCDHEC when sewage is surfacing in the yard or into the residence. Seepage of partially treated sewage into ground water or adjacent surface waters is not considered by SCDHEC to be indicative of a failing system, and yet, this is precisely the problem that SCDHEC should be addressing. It should be noted that SCDHEC does not monitor failing systems in the County, so there is little official documentation regarding areas of the County with failing systems.

The most typical problems encountered in Beaufort County regarding septic tanks is that many lots are approved by the County which are actually too small to properly accommodate the septic tank over time, generally those lots which are 1/3 to 1/4 acre in size. In many areas, these lot sizes are not only too small for treatment, but they would generally not allow for a replacement site should the approved system fail at a later date. In conversations with the septic tank haulers in Beaufort, they have indicated that the most common cause of malfunctioning systems is lack of proper maintenance. Proper disposal of septage by the haulers was a concern of the County Council. At the request of Council, when Cherry Point Waste-

water Treatment Plant was built, BJWSA installed one of the only septage disposal facilities in the State. This facility is extensively used by the septic tank haulers.

11.3 Water Supply, Treatment, and Distribution Plan

11.3.1 Background/Existing Conditions

Water services in Beaufort County are currently provided by approximately sixteen public and private agencies, including six governments, four public service districts, and six private water companies. Although the County has a variety of different water retailers, virtually all of them utilize the same source of water, the Savannah River, as distributed by the Beaufort Jasper Water and Sewer Authority (BJWSA), which maintains all water transmission lines. The result is an expanding regional water system.

Government water service providers include: the Beaufort Jasper Water and Sewer Authority (BJWSA), the City of Beaufort, the Town of Port Royal, the Federal government (military bases), the Beaufort County School District, and the State government (Hunting Island State Park).

Public service districts include: Broad Creek, South Island, Hilton Head Island Public Service District 1, and Fripp Island Public Service District. Private water companies servicing the County are: Water Oak Utilities, which serves Moss Creek; Melrose Company and Haig Point on Daufuskie Island; Harbor Island Utilities; and Callawassie Utility Company. *(See the water and sewer service areas map for the delineation of water facilities).*

Following its creation in 1954, the BJWSA began developing a project to utilize water from the Savannah River as a primary source. Prior to the Authority's creation, Floridan aquifer wells had served as the County's water source. By 1965, construction was complete, and water distribution was begun to the military bases, Beaufort, and Port Royal.

Between 1966-1975, water was extended along U.S. Highway 21 onto St. Helena Is-

land and into Shell Point and Burton. Construction of water (and sewer) systems, begun in 1956, continued on Hilton Head Island. During the decade between 1976-86, BJWSA extended water onto Lady's Island, St. Helena Island, and into Gray's Hill and developed a Floridan aquifer water system in Bluffton. During the same period, private water (and sewer) systems were built in Moss Creek, Rose Hill, Pleasant Point, and begun on Daufuskie Island.

In the last ten years, the BJWSA has acquired the Rose Hill water system, expanded the Bluffton system, developed a water system for Okatie and begun planning and engineering for a Hilton Head/Bluffton surface water main and for a Northern Beaufort County water main.

11.3.2 Water Supply, Treatment, and Distribution Plan

In the immediate future, the BJWSA will continue its planning and engineering activities to develop southern and northern Beaufort County surface water mains. The demand for water service will increase, especially south of the Broad River and on Lady's Island, where growth and development are projected to occur at the most rapid rates.

Concern with water quality in the rural areas must be addressed. Inadequate water quality in some areas and the increasing salinity levels of existing wells present additional demands on water service providers. In Dale, the majority of the existing water systems are very small and are comprised of one or two wells and small hydropneumatic tanks. Hydropneumatic tanks and small wells do not lend themselves to providing fire protection and therefore would not be suitable for expansion into a regional system. Fire protection is also a concern in the rural areas. If BJWSA installs water lines in rural areas, the lines should be sized sufficiently for fire protection. Although this is an excellent practice, it can encourage more intensive development in the rural areas as a result of available water capacity.

Map 25
Water & Sewer Service Areas

This map was not available
at printing time.

To obtain a courtesy copy of this map,
please call (843) 470-2724
or send the below printed form.

Our apologies for the inconvenience.

(Cut at this line)

Please send a courtesy copy of Map 25 (Water & Sewer Service Areas) of the Beaufort County Comprehensive Plan to:

Name: _____

Street/POB Address: _____

City/State/Zip: _____

Phone Number: _____

Mail this form to: **Beaufort County Planning Department**
Post Office Drawer 4665, Beaufort, SC 29901-1228

11.4 Solid Waste and Recycling

11.4.1 Background/Existing Conditions

The Beaufort County Public Works Department manages solid waste collection and disposal within the County. Solid waste management consists of three separate activities: collection, recycling and disposal. Public collection of solid waste is handled by County public works staff through a system of nine compactor centers and two unstaffed, non-compactor convenience drop-off centers located throughout the County. Solid waste collection is separated into three distinct disposal categories: household solid waste, bulky items, and yard waste. The County finances the operational costs, compactor or container rental, and hauling charges of all convenience drop-off centers.

In addition, eight local private companies provide residential and commercial collection of solid waste for Beaufort County residents and businesses. These services are provided on a monthly or quarterly fee basis and offer an alternative for residents residing in the unincorporated area of the County and on Hilton Head Island for collection of household-generated solid waste. The Town of Hilton Head Island uses a combination of a County-financed drop-off center located within the incorporated town limits and private fee-based collection companies.

Beaufort County has a different procedure for handling recycling collection. Curbside and convenience drop-off center collections are both used to facilitate residential recycling efforts within the County. Nine types of recyclable material are collected from the unincorporated residential areas of the County on a weekly basis. Four additional fiber commodities are collected curbside on a monthly basis. Cardboard and limited aluminum and steel food and beverage container recycling is available at six of the convenience drop-off centers. Recycling is not available to all business and commercial activities; yet, they generally generate the highest quality and quantity of recoverable commodities.

Limited commercial composting, chipping and shredding of yardwaste and land clearing debris are available through disposal sites in Beaufort and Jasper County. Yard waste represents one component of the waste stream that citizens could inexpensively process at home. Composting as an alternative to disposal should be encouraged but is not widely incorporated in Beaufort County's solid waste management system.

The disposal of solid waste for Beaufort County is currently at Hickory Hill landfill, a privately owned landfill, located in Jasper County. The disposal of construction and demolition material is diverted to one of the two construction and demolition landfill sites utilized by the County. One is located in Beaufort County, the other in Jasper County. The County underwrites the cost of all disposal regardless of the generator.

A recent analysis of the current solid waste management system identified some duplication of services and associated costs. The current system could be improved by combining both solid waste and recycling services into a similar collection system. Most of the existing convenience drop-off centers, located outside Priority Investment Areas, need redesigning to improve ingress/egress and traffic flow. Some convenience drop-off centers are insufficient in design based on their high volume of use. Other low-volume usage convenience drop-off centers operate on a cost-effective basis. Reconditioning or, in many cases, complete rebuilding of existing high volume sites to correct public safety and operational concerns provides only a short-term solution to Beaufort County's solid waste collection management problem.

11.5 Fire Protection Plan

11.5.1 Background/Existing Conditions

Beaufort County is divided into five fire districts: Bluffton Township Fire District; Daufuskie Island Fire District; Burton Fire District; Lady's Island-St. Helena Fire District; and Sheldon Fire District. Service areas for each fire district are illustrated on the Community Facilities map.

The Insurance Services Organization (ISO), a private insurance organization, provides the most significant standard by which fire districts are rated for their ability to provide fire protection services. Ratings criteria include the distance between structures and fire stations, the composition of structures, numbers and types of fire fighting equipment and apparatus, fire stations, and personnel. Beaufort County's ISO ratings range from a high of nine in the Daufuskie Fire District and four/nine in Burton to five in the Lady's Island/St. Helena District. Response times vary from an approximate average of three minutes on Lady's Island/St. Helena to the six-seven minute range in Bluffton and Sheldon. The Burton district responded to the highest number of calls in 1996 with an approximate total of 1326. Daufuskie Island responded to the fewest calls with approximately 180 total.

11.5.2 Analysis Per Fire District

a. Sheldon Fire District

The Sheldon District serves a 123 square mile area, providing service to a population of approximately 4600. It operates two fire stations: Station 40 on Paige Point Road serving Sheldon, Jenkins, and Big Estate and Station 41 on Kean's Neck Road serving Dale/Lobeco. The department employs a paid fire chief, twelve paid fire fighters, one part-time secretary, and fifty volunteer fire fighters. Its equipment includes two first line pumpers, one first line pumper/tanker, one first line tanker, two first line rescues, one reserve pumper, and a chief's car. FY 1996 -1997 budget was $349,720. Sheldon's current ISO rating is 7. The department answered a total of 447 calls during 1996 in an average response time of approximately six minutes.

b. Burton Fire District

The Burton District provides service to an 80 square mile area and a population of approximately 27,000. It operates four fire stations: Burton Hill, Pinewood, Station 892 in Gray's Hill, and Station 893 in Shell Point. It is a combination-type department including a fire chief, twenty-seven paid fire fighters, and forty volunteer fire fighters. Equipment includes two aerial devices, two squad, six pumpers, two tankers, three administrative vehicles, and one pickup used as a medic. FY 1996-97 budget was $1.4 million; personnel expenditures were $959,415; capital costs were $161,128, and operating expenses were $225,480. Five year budget projections were not made by the Burton Fire District. Burton's current ISO rating is Class 4/9. The department responded to 1326 total calls in 1996, but no average response time was available.

c. Lady's Island/St. Helena Fire District

The Lady's Island/St. Helena District covers a 140 square mile service area, providing protection to a population of approximately 15,000. It maintains five fire stations. Headquarters are located at the county airport on U.S. 21. Additional stations include the Sam's Point Road location and Stations 22, 23, 24 dispersed throughout the rest of the island. Personnel include a fire chief, assistant chief, thirty-three paid firefighters, and an average of twelve volunteer fire fighters. Equipment includes two squads, seven pumpers, a chief's and an assistant chief's car. FY 1996-1997 budget is $1,194,719. The department's current ISO rating is 5. 965 total calls were answered in 1996 with an average response time of three minutes.

d. Bluffton Township Fire District

The Bluffton Fire District provides service to a population of approximately 10,000 over a 280 square mile area. It has a total of five fire stations located at Bluffton, Pritchardville, Chelsea, Buckingham, and Okatie. It is a combination-type department consisting of fifteen volunteer fire fighters, thirty-nine paid firefighters, and two fire chiefs. The department operates one aerial truck mobile fire fighting equipment, eight front-line triple combination pumpers, two squads, three tankers, and four support vehicles. The District's FY 1996 budget was $1.5 million. Bluffton's current ISO rating is 5/9. The department responded to 1053 total calls during 1996 in an average time of approximately 6-7 minutes.

e. Daufuskie Fire District

The Daufuskie Island Fire District provides service to the entire island. It is a special purpose tax district charged with performing building inspections, emergency management services, disaster preparedness, and other specific functions The District provides service to approximately 3000 annual visitors and 180 full time residents. It has two stations. Station 16 is loaned by the Beaufort County School District. Station 15 is loaned by the International Paper Realty Corporation, and is manned 24 hours a day with two persons. Personnel include a full time fire chief, six full time fire fighters, (two per shift) and ten paid volunteers. Equipment in service includes two Class A pumpers, one reserve pumper, one tanker, and a squad. Daufuskie's ISO rating is currently nine due to its recent take over of the Haig Point jurisdiction.

Its rating was six previous to the take over and is expected to return to a six after the next scheduled evaluation. The department responded to approximately 180 calls in 1996 in an average of approximately five minutes.

f. Operational Funding

Budget sources for fire district operation and expansion include County funding and bond referendums. Although the cost of future expansion is not specific at present, fire district budget projections over the next five years provide an approximation. Bluffton's budget is projected to almost double, from just under $2 million to just under $4 million. Sheldon's budget is projected to increase the least of any district. With no facility construction planned, the budget will increase by approximately $150,000 to just under $475,000. The Lady's Island/St. Helena district is projected to increase by 54 percent, or over $600,000, to just under $2 million. Daufuskie Island costs will increase almost $500,000 in FY 1999 according to new station construction projections.

11.6 Emergency Medical Services Plan

11.6.1 Background/Existing Conditions

Established in 1974, Beaufort County Emergency Medical Services (EMS) provides emergency transport services to residents of the County, including inter-hospital transports to Savannah or Charleston from Hilton Head Island, Beaufort, and the Naval Hospital in Beaufort. EMS provided emergent and emergency/life–threatening circumstances transport until the early 1990s, when County Council decided to eliminate non–emergent transport services.

With the addition of EMS 8, located at the Okatie Fire Station at Sun City Hilton Head, EMS will operate eight stations throughout the County. Each station has a minimum of two EMTs, including a minimum of one paramedic with South Carolina Advanced Paramedic Certification. All stations are equipped to provide advanced life support services. System-wide equipment includes eight primary trucks and six back ups. System-wide, there are forty-eight full time, fifteen part time personnel, and fourteen volunteers, rotating on a twenty-four on/forty-eight off schedule, with the first twenty-four of the forty-eight off subject to recall.

The Beaufort County EMS team has placed first in paramedic competition for the past five years and, in 1992, was designated system of the year, on a competitive basis, at the South Carolina EMS Symposium sponsored by the South Carolina Department of Health and Environmental Control (SCDHEC) and four regional EMS Councils. Beaufort County EMS is regulated by SCDHEC, which licenses the system (License #12), permits its ambulances, and certifies its personnel.

EMS responded to approximately 7000 calls County-wide in 1996 at an average cost of $429 per call, for total cost to the County of $3,006,817 total. The total EMS budget for FY 1997 is $3,087,275, for an average service cost of $29.40 (based upon a 105,000 County population estimate). Separate budgets are not kept for each EMS station. Average

EMS response time to any service area in the County is 8 - 10 minutes. The ideal goal is a five minute response time County-wide. In order to keep response times to a minimum, the EMS stations operate on a tier system based on ambulance relocation. When any EMS station gets a call, another station's ambulance relocates so it can respond in either direction should another call come in. For example, if EMS 6 gets a call in Bluffton, EMS 7 relocates from its station at the Hilton Head Airport to stand by at the Hilton Head bridge ready to respond to a call from Bluffton. If a second call comes in from the Bluffton area, EMS 7 takes the call while EMS 2 relocates an ambulance from its Shell Point station to stand by at the Career Education Center. The relocation system will change to include EMS 8 at Sun City Hilton Head, once it comes on line.

Trends indicate that many services currently provided by home health care nurses will be provided by paramedics in the future. EMTs can provide home-setting services, with physician authorization, at a lower cost than transporting the patient to a medical facility for treatment. Although seen as a promising measure to reduce health care costs, the legal issues of how far EMTs can go in the provision of home health care are being explored.

Other trends indicate that there will a pairing up of EMS and Home Health agencies in the future to provide services such as medication and vital signs checks, IV therapy, and a range of geriatric services.

11.6.2 Analysis of EMS Districts

Since a number of EMS stations are co-housed in fire stations, a comparison will be made between the two on the basis of service area coverage and number of facilities.

a. EMS 1

EMS 1 serves the Beaufort area, including the Naval Hospital, and also functions as the main office, providing administrative support, training, and supplies to the entire EMS system. It is located at 2727 Depot Road in Beaufort. The station's service area overlaps the fire districts serving Beaufort, Port Royal, and Lady's Island. There is one EMS station to five fire stations in the overall service area. The volume of calls responded to in 1996 was 1680, which is 25.9 percent of total calls.

b. EMS 2

EMS 2 serves the Burton area across the Broad River, and is co-housed at the Burton Fire Station at the Parris Island gateway. Its service area overlaps part of the Port Royal Fire District, the Burton Fire District, and part of the Bluffton Fire District. The unit also functions as the first line back up for the Parris Island EMS. There is one EMS station to 3 fire stations, not including the military, in the overall service area. The volume of calls responded to in 1996 was 1404 for 22.3 percent of total calls.

c. EMS 3

EMS 3 serves the area from the Marine Corps Air Station (MCAS) to the Whale Branch River, and is co-housed in the Kean Neck Road Fire Station located in the Dale area of the Sheldon Fire District. Its service area overlaps the Sheldon and Burton Fire Districts. There is one EMS station to four fire stations in the overall service area. The volume of calls responded to in 1996 was 823 for 13.1 percent of all calls.

d. EMS 4

EMS 4 serves Daufuskie Island and corresponds with the Daufuskie Fire District. In coordination with the International Paper Corporation at Haig Point, arrangements are provided for boat transport of patients to Hilton Head Island and for major trauma Life Star helicopter service to Memorial Hospital in Savannah. There is one EMS station to two fire stations in the overall service area. The volume of calls responded to in 1996 was sixty-nine for 1.1 percent of all calls.

e. EMS 5

EMS 5 is located at the Fripp Point Road Fire Station and provides service to St. Helena Island, Harbor Island, Hunting Island, and Fripp Island. It corresponds with the fire districts of Lady's Island/St. Helena and Fripp Island. There is one EMS station to four fire stations in the overall service area. The volume of calls responded to in 1996 was 691 for 11 percent of all calls.

f. EMS 6

EMS 6 is located in Bluffton adjacent to the fire department at Burnt Church Road and Alljoy Road. It serves most of the Bluffton area and overlaps the Bluffton Fire District. There is one EMS station to two fire stations in the overall service area. 655 calls were responded to in 1996 for 10.4 percent of total calls.

g. EMS 7

On July 1, 1997 EMS 7 was located on Lady's Island on Sams Point Road. Until July 1997, it was housed at the Rescue building at Hilton Head Airport and served the mid-section of the Town of Hilton Head Island as well as providing inter-hospital transported from Hilton Head for every third call. It also transports Daufuskie patients, brought by boat to Harbor Town, to the hospital on the mainland. In addition, EMS 7 served as back up to the Town of Hilton Head Fire and Rescue. While servicing Hilton Head, 699 calls were responded to in 1996 for 11.1 percent of all calls. Figures for calls on Lady's Islands are not yet available.

h. EMS 8

EMS 8, located at the Okatie Fire Station at Sun City Hilton Head, responds to calls from the New River to the vicinity of Callawassie and to Pinckney Colony. Its service area overlaps the Bluffton Fire District. This station has been in operation for six months to date and there have been 249 calls for 3.9 percent.

11.7 Governmental Facilities

11.7.1 Background/Existing Conditions

The County has expanded its facilities over the past ten to fifteen years to accommodate growing service demands. The construction of the various buildings within the Government Center during the years 1987 - 1993 consolidated several administrative functions into a central area at the County seat, which includes several departments within County Administration, the Development Division City/County Human Resources, the Judicial Court System, the Sheriff's Department, the Emergency Management Department, and the County Detention Center. The main office of the Public Works Department is located in the Grays Hill area, and the Department of Parks and Leisure Services has its main office in the Town of Port Royal. A satellite office outside the Town of Bluffton was added in 1978 to accommodate the increasing need for services in that area of the County. Among the County departments who have offices in Bluffton are Building Codes, Parks and Leisure Services, Public Works, Alcohol and Drug Abuse, other County health agencies, and the Magistrate's Office.

Beaufort County operates two airports, one on Lady's Island and the other within the Town of Hilton Head Island. On Lady's Island, the airport is an uncontrolled airport with a 3430 foot runway providing service to general and corporate aviation aircraft. The Hilton Head Airport offers commercial services and all general aviation amenities. There are two fixed-based operators on site that provide service to the general aviation community.

11.8 Educational Facilities Plan

11.8.1 Background/Existing Conditions

The Beaufort County School District is currently composed of twenty elementary, middle, and high schools, which are structured into three geographically-based school clusters: the Beaufort Cluster, the Battery Creek Cluster, and the Hilton Head Cluster. Each cluster is presently served by one middle school and one high school facility. The number of elementary schools varies per cluster, with six in the Beaufort Cluster and four in both the Battery Creek and Hilton Head Clusters.

The Beaufort Cluster is comprised of the following schools: Battery Creek Elementary, Beaufort Elementary, Lady's Island Elementary, Mossy Oaks Elementary, Port Royal Elementary, St. Helena Elementary, Lady's Island Middle, and Beaufort High School. The Battery Creek Cluster includes: Broad River Elementary, Davis Elementary, Shanklin Elementary, Shell Point Elementary, Robert Smalls Middle, and Battery Creek High School. The Hilton Head Cluster includes: Hilton Head Primary, Daufuskie Elementary, Hilton Head Elementary, M. C. Riley Elementary, H.E. McCracken Middle, and Hilton Head High School.

Total enrollment for the 1994 school year was 14,576 students. Elementary schools enrolled 7,239 students; middle schools served 3,541 students; and high schools enrolled 3,796 students.

Total enrollment was 15 percent over the design capacity of 12,349 students. According to 1994 calculations, eight out of the twenty schools were overcrowded, and over 12 percent of the district's students were being taught in eighty-four mobile classrooms.

School District projections (based on public utility population growth projections, Beaufort County and Beaufort School District population trends and projections) show that the Beaufort County school population will grow by 46 percent over the next ten years. The elementary school population is pro-

Table 49: Projected school increase.

School Type	Projected Increase (percent) to 2006
Elementary School	38%
Middle School	36%
High School	73%

jected to increase 38 percent; the middle school population by 36 percent; and the high school population by 73 percent.

In addition to population growth projections, health and safety-related concerns arising from the use of overcrowded and inadequate facilities led the Board of Education to form a Facilities Task Force in 1993 as part of a larger school district study entitled *Beaufort County 2000*. Inadequate facilities cited by the Task Force included mobile classrooms, cafeterias, gyms, teacher workrooms, auditoriums, custodial services, playground equipment, and parking. The Task Force concluded that the combination of appropriate capacities and quality learning environments was essential to the success of Beaufort County's educational system.

New school facilities are to be sited in accordance with the policies set forth in The *South Carolina School Facilities Planning* & Construction Guide. The *Guide* mandates a site selection process that takes into consideration all natural or man-made hazards, including any potential environmental hazard such as air, water, or soil contamination. Other factors to be considered include location, shape of the facility, topography, access, noise, utilities and service, soil conditions, easements, and electric transmission lines.

New school facilities should be sited near student population centers inside Priority Investment Areas with consideration given to the direction of growth. Important considerations for the siting of new schools include highway access, width of roads, and future development and traffic patterns. Sites requiring acute angle turns, circuitous routing, involving narrow roadways or congested traffic areas are to be avoided. Schools should be located on collector streets, away from but convenient to major arteries. Where possible, direct access to two or more roads on the state highway system is desired. Sight lines on major road frontages and ample frontage along state and county road to allow separate bus and car entrances and exits are also important factors influencing new school siting.

The site should be free from disturbing noises resulting from high-speed vehicular traffic, airport approaches, shopping centers, and industrial plants. The availability of water, sewer, gas, telephone, electricity, and public safety services are other key factors. Soil conditions, easements on the site, as well as the location of electric transmission lines are additional considerations. Transmission lines shall not cross any portion of a school site, and setbacks are used to establish the distances appropriate for school facility sites. Adjacent land uses, especially those considered noxious or potentially harmful to the educational environment, should also be considered in the future siting of schools.

11.9 Libraries

11.9.1 Background/Existing Conditions

The Beaufort County Public Library system is the principal provider of library services to the general public of all ages, both residents and visitors. No municipality operates library facilities in the County. The Beaufort County Board of Education operates media centers in the public schools to support their curricula. With the exception of two facilities, the media centers are for the use of students and faculty only. The University of South Carolina-Beaufort and the Technical College of the Lowcountry serve students and faculty but allow use by the public for in-house reference material and limited borrowing privileges. The military bases operate libraries for the use of military personnel and their dependents only, with limited in-house public use. The military facilities cooperate with the other libraries via interlibrary loan.

The Beaufort County Library system operates as a fiscal and administrative department of County government. Eighty-nine percent of its operating revenue comes from County appropriations. A seven member Board of Trustees acts as an advisory body to County Council. The Board establishes library-related policy, monitors library operations, and makes recommendations to Council concerning budget and planning and development.

The Beaufort County Library system consists of five branches dispersed throughout the County. There are three facilities north of the Broad and two south of the Broad River. The headquarters/northern regional branch is located in downtown Beaufort with branch libraries in Dale and St. Helena. The Dale and St. Helena facilities are housed within elementary school media center facilities; consequently, their hours of operation are limited to non-school hours. The southern regional branch library is located in Hilton Head with a branch in the Town of Bluffton. Extension services to the homebound, senior centers, and day care centers are currently available north of the Broad River.

All Library branches provide varied resource formats to the public, including traditional print materials, talking books, video cassettes, CD–ROM information databases, and inter-library loan services. FY 1996 borrower registrations totaled

30,647 or 30 percent of the County's projected population of 101,892. Beaufort registered 15,410 borrowers; Hilton Head had 12,965, followed by Bluffton with 1303, Dale with 466, and St. Helena with 429 (Many St. Helena borrowers originally registered in Beaufort). An additional seventy-four borrowers registered through the extension services available north of the Broad River..

The Library system has experienced significant improvement projects within the last five years. A major addition to the Beaufort Library was completed in 1992, which expanded the facility from 5,600 square feet to 21,000 square feet. Completion of the library's second floor in the fall of 1996 added another approximately 8,000 square feet of usable space, including a 150 seat meeting room and a conference room seating 12-25. These assembly rooms are available for use by government agencies and community groups on a scheduled basis. A new 26,900 square foot facility is under construction in Hilton Head at the intersection of Highway 278 and the new Beach City Road connection. This building will replace the twenty-one year old, 8,500 square foot facility now in use. It is scheduled to open in early 1998.

11.10 Cultural Facilities

11.10.1 Background/Existing Conditions

a. The Arts

Despite its distance from major urban areas, Beaufort County has a thriving, nationally recognized arts community. The City of Beaufort was included in the book *100 Best Small Art Towns in America,* edited by John Villani and Burk Willes (1996, John Muir Publications).

There are two local arts agencies in Beaufort County: The Arts Council of Beaufort County and the Self Family Arts Center. The Arts Council manages the University of South Carolina-Beaufort Performing Arts Center in downtown Beaufort. The Self Center, which has assumed the functions of the former Cultural Council of Hilton Head Island, occupies its own facilities on that island.

In addition to the two local arts agencies, Beaufort County is home to a variety of arts organizations. Foremost among these is the Artistic Pursuits foundation, which provides space for rehearsals, performances, and classes at the Shed Center for the Arts in Port Royal. Other arts organizations include the Beaufort Art Association, the Hilton Head Art League, Creation Station, Sea Island Quilters, the Environmental Art Association, the Byrne Miller Dance Theater, the Hilton Head Dance Theater, Beaufort Square and Round Dance Club, the Beaufort Little Theater, the Beaufort Repertory Company, the Rafael Sabatini Players, Roges & Vacaboundes, Red Bug Productions, the Beaufort Film Society, the South Carolina Playwrights Convention, the Lowcountry Writers Group, the Beaufort Chamber Orchestra, the Hilton Head Orchestra, the Sea Island Youth Orchestra, the Bay Street Rollers, the Beaufort Barbershop Belles, Words and Music of Beaufort, the Hallelujah Singers, the Lowcountry Chorale, the Greater Beaufort Jazz Association, and the Fripp Island Friends of Music. USCB also sponsors a variety of cultural and arts events throughout the year.

b. Performance Venues

Beaufort County has a total of twelve performing arts facilities. There are three performing arts facilities south of the Broad River and nine facilities north of

the Broad. The facilities in the south are located on Hilton Head Island. There are no performing arts facilities in Bluffton, Okatie, or Callawassie. Facilities north of the Broad are primarily located on Port Royal Island with seven, as well as one on Lady's Island, and one on St. Helena Island. There are no facilities north of the Whale Branch River.

The 44,000 square foot Self Family Arts Center, with two theaters on site and one off-site, is the major venue for performing arts on Hilton Head Island. The Elizabeth Wallace Theater is a 350-seat theater used for major productions. Experimental and workshop productions are held in the 125-seat Studio Theater. Dunnagan's Alley, on the southern end of the island is also affiliated with the Self Center. The Space Theater, the island's third venue, is located in Market Place and seats 50. The Self Center has plans to establish a major concert hall presence with a $6-8 million expansion project on an adjacent parcel. The expansion will include a 950 square foot auditorium, offices, reception hall, cafe (tentative), and meeting areas. The target dates for initiation and completion have not been decided yet. All of Hilton Head Island's facilities may be booked by any organization without regard to nonprofit or educational status.

Of the ten performance venues north of the Broad, five are available only to nonprofit organizations or schools. These groups have access to three U.S. military venues: the Naval Hospital Auditorium in Port Royal (seats 250), the Lasseter Theater on the Marine Corps Air Station (seats 70009, and the Depot Theater at the Marine Corps' Parris Island Recruit Training Depot (Seats 990). The Beaufort County Board of Education operates one facility and another is under construction. Lady's Island Middle School offers a 150-seat elevated lecture/classroom facility with a small stage. Beginning in October 1997, Battery Creek High School's 750-seat Performing Arts Center will be available as well.

There are five facilities north of the Broad River that are available to any group. Two provide adequate restrooms and professional technical support: USCB's Performing Arts Center, in downtown Beaufort, seats 474, and the Shed Center for the Arts in Port Royal seats 200. Three other facilities offer more rustic sites for cultural events: Frissell Community House at Penn Center, on St. Helena Island, seats 100; the Port Royal Playhouse, in an old church, seats 50; and the City of Beaufort's Henry C. Chambers Waterfront Park offers an open air covered stage.

Two public school facilities, available to non-profits and school uses only, have performing arts facilities. Lady's Island Middle School has an elevated lecture/classroom facility with small stage which seats 150, and Battery Creek High School has a new theater under construction. Completion date is November 1997, and will seat 1000 persons.

c. Museums and related organizations

Four of the five museums in Beaufort County—and all its historical and cultural museums—are located on islands north of the Broad River. There are two museums in the City of Beaufort: the John Mark Verdier House and the Beaufort Museum. The Verdier House (ca. 1790), maintained by the not-for-profit Historic Beaufort Foundation, is the only historic house in Beaufort open to the general public. It is restored and furnished with artifacts appropriate to the Federal era. The Beaufort Museum

is located in the Beaufort Arsenal, the County's oldest civic structure. The building's main elements were constructed in 1852 atop a 1798 tabby first floor. The exhibits at this municipally-funded museum include an eclectic conglomeration of materials, both local and foreign, collected during its earlier years as not-for-profit organization. The Parris Island Museum, in the War memorial building at the Parris Island Marine Corps Recruit Training Depot, is federally funded. Its exhibits primarily deal with Marine Corps heritage. Sea Island military history, including the establishment of French and Spanish forts on Parris Island, is addressed as well. The story of the African American residents of the Sea Islands is the focus of Penn Center's York W. Bailey Museum. Penn Center, a not-for-profit organization with headquarters on St. Helena Island, is also significant because its grounds have been designated a National Landmark Historic District. Hilton Head Island's Coastal Discovery Museum fills an important niche as the only museum in the heavily populated southern half of the County. It is the county's only natural history museum, although occasional forays into the historical and cultural arena are common. This not-for-profit museum is operated in conjunction with the Island's Visitor's Center. All the County's museums sponsor ongoing research and education efforts.

Related organizations that sponsor special events, such as tours of homes and lectures, include the Beaufort Historical Society, the Episcopal Women's Club of St. Helena's Church, the Bluffton Historical Preservation Society, and the Historic Port Royal Foundation. Main Street Beaufort, USA, a program of the National Trust for Historic Preservation, is responsible for historic preservation advocacy and downtown revitalization in the City of Beaufort.

11.11 Sheriff's Department

11.11.1 Background/Existing Conditions

The Sheriff's Department is housed at the County Government Center in the Law Enforcement Center. The department has a substation south of the Broad River that services Hilton Head Island. There are approximately fifty-nine deputies employed at this substation. The increase in year round tourists on Hilton Head Island has warranted this many deputies on that Island.

Major crimes, murder, rape and robbery have shown no discernible pattern over the past few years, increasing from four murders in 1990 to seven in 1994, and 43 rapes in 1990 dropping to 35 in 1994. Increases occurred in robberies, from 73 in 1990 to 92 in 1994. Aggravated assault and larceny both experienced increases, while burglary and motor vehicle thefts decreased.

As of 1996, the County had 120 full-time deputies and twenty-six additional deputies associated with the School Resource Program and COPS program. According to the Southern Police Institute, the recognized national average is two to three law enforcement officers per 1000 citizens. However, it is noted that determining such a ratio is a complex endeavor which requires consideration of an extensive series of factors and current data. The International Association of Chiefs of Police recommends that a Patrol Allocation, Deployment and Scheduling study be conducted to determine each community's ratio.

One of the factors that must be considered when evaluating the number of deputies necessary to serve Beaufort County is the cost and benefit of promoting tourism. Although the department has ten officers per shift year round, the number of calls and response time increases during the peak tourism season.

The department currently provides assistance when asked for local special events. This is a costly venture for the department which at times has exceeded $10,000. The department should consider a policy that would require a reimbursement to the Sheriff's office for a percentage of the extra costs incurred.

The increase in population in Beaufort County over the last 10 years has undoubtedly affected the Sheriff's Depart-

ment. Specifically, the County has been unable to keep up with the financial cost of hiring enough officers and procuring equipment to effectively serve all areas of the County. For example, Lady's Island and St. Helena Island, which currently have a combined population of 13,000, have only two deputies for both islands per shift. The increased traffic, especially to the resort areas on Hilton Head, Fripp, Harbor, and Hunting Islands during the peak tourist season, creates a greater demand on the department. The creation of new roads within new developments also places increasing demands on the Sheriff's Department, as the responsibility for patrolling likewise increases.

The most critical factor in determining the number of deputies needed is the County's geography. The nature of the landscape forces long roads leading to peninsulas, multiple cul-de-sacs, and single access ways, all of which place burdens on patrolling capabilities.

11.12 Emergency Management Department

11.12.1 Background/Existing Conditions

The Beaufort County Emergency Management Department was created in 1961 in order to establish, develop, coordinate and provide for civil defense and emergency preparation in the County. The Department is responsible for the Emergency Management program as described by South Carolina Laws and Regulations and the County Local Emergency Planning Committee as required by Federal SARA Title III, and other various duties.

The Department has several other duties beyond emergency evacuation coordination. The Department also coordinates the Beaufort County Hazardous Materials Response Team and has the responsibility for the enforcement of the Beaufort County Hazardous Materials Ordinance. The County-wide central dispatch and the operation and maintenance activities for the E-911 Program are managed from this office, as well as the communication equipment for fire, police and EMS. The issuance and enforcement of all house addressing is coordinated through Emergency Preparedness office to ensure the correct data is available for Central Dispatch and 911. Currently, there are thirty-five full time and five part time employees responsible for the department's daily operations. The Emergency Operations Center is housed in the Government Center, and there is a satellite office at the Public Works compound. For the purposes of the Comprehensive Plan, the goals and action items will focus on provisions for emergency evacuation, but most certainly, the demands and needs for the daily operations were factored into the land use and transportation elements within the Plan.

The increasing population and development trends over the past ten years has placed serious demands on the public safety infrastructure and emergency evacuation resources. The department must consider various factors for a successful evacuation, from the coordination of mass transit and the capacity of the road system to the number and placement of law enforcement officials and

the placement of communication facilities.

One critical element for safe and efficient evacuation during an emergency is the protection of the evacuation corridors. In keeping corridors protected, the roads must be safely designed, the amount of activity from businesses or residences which front the roads should be minimized, and curb cuts (access points) should also be minimized. Each new street intersection or curb cut created on an emergency corridor requires one police officer at that intersection to direct traffic during an evacuation. The number of law enforcement officers required during evacuation exceeds the number that can be marshaled from within the County. For example, to evacuate residents from Hilton Head alone, the Emergency Management Department (EMD) needs 138 officers. These deficiencies in law enforcement personnel are not covered by the state. The problem, however, is in getting officers to Beaufort and deploying them in an efficient manner.

This type of situation is further complicated when the corridors extend into Jasper County, where significant growth and development is also occurring. Any lack of coordination between the two Counties will significantly affect the ability to safely evacuate our citizens, no matter what comprehensive plan or zoning is put in place in either County. Successful comprehensive planning south of the Broad River must include coordination with Jasper County.

Evacuation north of the Broad River presents different issues but is equally compromised by uncontrolled development. U.S. 21 is the major evacuation route from Fripp Island to the northernmost reaches of Yemassee and the Combahee River. There are identifiable "bottleneck" areas along this route where traffic may get slowed down during an evacuation, those areas principle from Fripp Island across St. Helena's onto the heavily populated Lady's Island, and through the City of Beaufort. The Emergency Management Department considers Fripp Island as the most vulnerable location in Beaufort County. During the peak tourist season there are approximately 5,000 people on the Island on any given day. Adding in the residents of Harbor, St. Helena and Lady's Islands, and tourists at the Hunting Island State Park, this road becomes the only evacuation route for approximately 15,000 people.

The Transportation Chapter of the Comprehensive Plan addresses these problems and others regarding emergency evacuation in greater detail, but it is obvious that access management is crucial to the safe evacuation of the citizenry. Some key points to consider regarding transportation are as follows:

1. many miles of evacuation routes are two lanes, and will need some form of improvement to accommodate greater numbers of people evacuating over time;
2. even if corridors are widened or improvement, bridge and crossroad improvements must also be implemented, or the road improvements will not be effective;
3. the regulation of driveways, new street intersections and commercial access points are also necessary to ensure road capacity and safe movement along the corridors; and
4. the provision of alternative or secondary corridors for evacuation will increase the efficiency of present corridors.

Some of the solutions recommended by EMD are expensive capital improvement projects that will involve the County and cooperation from SCDOT. Therefore, if the County and SCDOT are unable to improve the roads and bridges to match the pace of residential and commercial construction, then controlling density levels and directing growth to the appropriate places are the among the best options to ensure safe evacuation.

Final considerations involve the efficient use of community facilities for emergency purposes. New community facilities should be constructed with emergency evacuation goals in mind. In the past five years, eight shelters have been closed by the Red Cross because they did not meet the locational criteria for use during an evacuation, leaving three approved for use during a Category Two storm (M.C. Riley Elementary, Battery Creek High School, and Beaufort Elementary). For a storm event classified higher than "Three," all shelters are closed in the County, and evacuees must go to Hampton County shelters. As new schools and community buildings are constructed in the County, the Emergency Management Department should be consulted on the proposed location to determine if the site would be acceptable to the Red Cross as a shelter.

Community Facilities

Policies

- Policy 1: Limit expansion of sewage lines to Priority Investment Areas.
- Policy 2: Require all development over one unit per acre and currently not sewered within Priority Investment Areas to utilize public sewer as available within a reasonable time period.
- Policy 3: Protect spray effluent capacity.
- Policy 4: Service outside Priority Investment Areas.
- Policy 5: Encourage SCDHEC to improve the permitting process for septic tanks.
- Policy 6: Utilize public water in Priority Investment Areas.
- Policy 7: Support SCDHEC in its efforts to ensure an adequate water supply for rural areas in accordance with the goals of the Future Land Use chapter.
- Policy 8: Eliminate duplication of solid waste services and associated costs.
- Policy 9: increase recycling participation rates by citizens within the County.
- Policy 10: Encourage participation by businesses and industry i the recycling program.
- Policy 11: Develop Intergovernmental Agreements.
- Policy 12: Construct and equip facilities to keep pace with and ensure all new development meets fire safety standards.
- Policy 13: Encourage development in fire districts that are capable of providing adequate fire protection services, at appropriate costs, to an increased number of structures.

- Policy 14: Add fully staffed and equipped facilities within Priority Investment Areas.
- Policy 15: Maintain separate fire protection and EMS services.
- Policy 16: Reevaluate County development standards to improve EMS response.
- Policy 17: Update the General Government Facilities Plan.
- Policy 18: Expand the satellite office in Bluffton Township.
- Policy 19: Construct a new central office for the Development Division.
- Policy 20: Construct/expand educational facilities in Priority Investment Areas.
- Policy 21: Encourage the optimum siting and construction of new school facilities.
- Policy 22: Construct/expand library facilities within Priority Investment Areas and maximize accessibility in non-growth areas.
- Policy 23: Develop reasonable criteria for the placement of library branches.
- Policy 24: Develop the Library system materials collection to meet state goals.
- Policy 25: Provide in-library public access to the internet and County, State and Federal electronic files. Make available in-home and in-office electronic access to library resources.
- Policy 26: Encourage and support the construction and expansion of cultural facilities within Priority Investment Areas and maximize accessibility in other areas.
- Policy 27: Determine the appropriate number of deputies to service Beaufort County.
- Policy 28: Develop an ordinance that will allow the Sheriff's office to charge for additional man power when needed to service a special event.
- Policy 29: Improve the response times and increase the law enforcement presence in the area between the Hilton Head Bridge and the Broad River Bridge.
- Policy 30: Develop a written agreement with Jasper, Colleton and Hampton Counties for regional cooperation during emergency evacuations.
- Policy 31: Protect, upgrade and expand the capacities of the major County evacuation routes.

- Policy 32: All large scale residential developments, PUDs, nursing homes, and retirement homes must prepare and submit an emergency evacuation plan to the County's EMD for approval as part of the SCDHEC approval process. This coordination should be reflected in the ZDSO revisions.
- Policy 33: New community facilities should be constructed with emergency evacuation goals in mind.
- Policy 34: Ensure the continued viability of a County-wide mass transit system for emergency evacuation.
- Policy 35: Ensure that the drainage systems of new developments are in working order prior to transfer of ownership from developers to Property Owners Associations.

Wastewater Management

Policy 1: Limit expansion of sewage lines to Priority Investment Areas.

Expansion and location of new regional sewage collection and transmission facilities will be limited to Priority Investment Areas as identified on the Future Land Use map. Extension of sewer beyond the boundaries of Priority Investment Areas will be done only for public health and environmental safety reasons, and should be accomplished only by an amendment of the Comprehensive Plan and the regional 208 Plan.

Actions

☑ *1.1 Prohibit the future expansion of regional sewer service outside the Priority Investment Areas.*

☑ *1.2 Delineate a clear process by which the County will assist the BJWSA to provide limited onsite wastewater systems or small appropriate technology systems to service existing development and infill within Community Preservation areas or outside the Priority Investment Areas.*

☑ *1.3 Review the sewer needs and capacities in Priority Investment Areas every three years for modification.*

☑ *1.4 With assistance from BJWSA, develop a plan for the installation of public sewers within the Priority Investment Areas.*

The plan should be jointly developed by Beaufort County and the BJWSA for those already developed areas which are above the designated density or where public health or environmental risks exist. As an example, the Pritchardville area is developed at a density that warrants public sewer but the finances are not available for construction and installation. The plan will identify projects, define financing and set priorities for the construction of these collection systems.

☑ *1.5 Develop a program to offset the financial impacts of sewer connection*

for persons with low to moderate incomes.

Policy 2: Require all development over one unit per acre and currently not sewered within Priority Investment Areas to utilize public sewer as available within a reasonable time period.

Currently in Beaufort County, sewer service in some areas is extended based on requests to the BJWSA from developers. However, if the developer can provide enough percolation sites to service the density, even if it is being developed at an urban density, there is no formal mechanism to require the tie into the public sewer.

Actions

☑ *2.1 Allow on-site septic systems within Priority Investment Areas provided the designated density is based on the soil capacity and upon approval from SCDHEC that there is no public health or environmental risk.*

☑ *2.2 Revise the Development Standards Ordinance to require dry sewer lines to be installed in all subdivisions and developments in those portions of the Residential and Lights Commercial Area where public sewer is not yet available and can not be made available immediately as determined by the BJWSA and when the density is one unit per acre and above.*

Policy 3: Protect spray effluent capacity.

Present and future capacities and opportunities for the disposal of spray effluent should be protected.

Actions

☑ *3.1 Work with the BJWSA to develop a plan to identify and protect potential spray sites throughout the County for future use and or purchase by the BJWSA. Specific criteria should be established to assist with the determination of appropriate sites, i.e. the delineation of soil types, the legal agreements for use of the sites, and other such determining factors. Each site should be identified on the adopted Community Facilities Map.*

☑ *3.2 Revise the Zoning and Development Standards Ordinance to protect future spray sites through easements.*

Policy 4: Service outside Priority Investment Areas.

The BJWSA should identify alternative and limited capacity wastewater systems to serve areas that are outside the Priority Investment Areas which cannot be served by septic tanks but may have public health or environmental problems.

Actions

☑ *4.1 Investigate new technology for wastewater treatment disposal.*

☑ *4.2 Work with the BJWSA to identify the Community Preservation Areas of the County which may need appropriate small systems. Due to SCDHEC regulations, the BJWSA must be the responsible public entity to own and maintain any community septic tank and leach field. The results of this work should be coordinated with the 208 Plan.*

Policy 5: Encourage SCDHEC to improve the permitting process for septic tanks.

Currently, South Carolina has the least stringent standards for septic tank approval in the southeast. This has contributed to septic tanks not sited correctly, placed on inappropriate soils and constructed improperly. In most states, the minimum depth to ground water requirement is eighteen inches; South Carolina requires only six inches therefore a malfunction may will feed straight into the high ground water table. The continued approval of septic tanks without proper siting and construction will contribute to the degradation of local water quality.

Actions

☑ *5.1 Develop educational programs for the public on the proper maintenance of septic tanks.*

☑ *5.2 Review the current permitting procedures and develop ways to improve the process as a joint effort between Beaufort County and SCDHEC.*

☑ *5.3 Develop, or assist SCDHEC in identifying and establishing a monitoring program for those areas of the County with a high percentage of failing septic systems.*

☑ *5.4 Revise the current policy and approved process regarding minimum lot sizes for subdivision. To improve the longevity and efficiency of septic systems, the lot should contain sufficient space for the repair or replacement of septic tank absorption trenches or disposal areas. Requiring additional land on each subdivided lot will ensure the homeowner is able to be serviced without the need to purchase additional land in case of failure.*

☑ *5.5 Establish a septic tank task force to investigate creating local septic regulations to further protect the water quality.*

☑ *5.6 Work with LCOG to revise the 208 Management Plan to support the policies of the County Comprehensive Plan.*

Water Supply, Treatment, and Distribution Plan

Policy 6: Utilize Public Water in Priority Investment Areas.

Within the Priority Investment Areas, all new development over one unit per acre will be required to utilize public water. On-site wells will be allowed only below the designated density and only when there is no public health or environmental risk.

Currently in Beaufort County, water extension requests are submitted to the Beaufort Jasper Water and Sewer Authority from developers. Coordination of this service within the Priority Investment Areas will ensure that public infrastructure is directed to the appropriate places. Providing public water in the Priority Investment Areas will be made cost effective by concentrating the new development in these areas.

Actions

☑ *6.1 Consider a policy by which the County will review requests for on site wells within Priority Investment Areas.*

☑ *6.2 Develop public water supplies in Priority Investment Areas where SCDHEC has documented problems with wells or polluted ground water or saline intrusion exist.*

☑ *6.3 Investigate the provision within 10 years of a source of public water in Community Preservation Areas which are in Rural Service Areas.*

Low water quantity in the Dale area north of the Broad River and Pritchardville south of the Broad River along with the salinization of existing wells present

additional demands on water service providers.

Policy 7: Support SCDHEC in its efforts to ensure an adequate water supply for rural areas in accordance with the goals of the Future Land Use chapter.

Actions

☑ *7.1 When installing public water in the rural areas of the County, provide adequate size lines for fire protection.*

☑ *7.2 Work with SCDHEC to develop an annual well monitoring program to determine the locations throughout the County with well problems.*

Solid Waste and Recycling

Policy 8: Eliminate duplication of solid waste services and associated costs.

Actions

☑ *8.1 Adopt a plan to structure the County into nine districts in order to tailor services and generate revenue based on the demographics and population density in each area.*

☑ *8.2 Modify solid waste facilities to improve efficiency, safety and functioning.*

Policy 9: Increase recycling participation rates by citizens within the County.

Actions

☑ *9.1 Continue to educate the public citizens on the benefits of recycling and the necessity of meeting state-wide goals for waste stream reduction.*

Policy 10: Encourage participation by businesses and industry in the recycling program.

Actions

☑ *10.1 Develop a program to expand existing recycling programs to*

encourage participation by businesses and industry and be cost-effective to the County.

Policy 11: Develop Intergovernmental Agreements

Actions

☑ *11.1 Develop Intergovernmental agreements with municipalities and form a Solid Waste Management Board to administer County solid waste districts. Coordination of resources will improved allocation and in, some cases, eliminate redundant costs.*

Fire Protection Plan

Policy 12: Construct and equip facilities to keep pace with and ensure all new development meets fire safety standards.

As areas of the County develop, it will be essential for new development to meet current fire safety standards and to receive adequate fire protection services. New fire stations, additional staff and equipment will be especially needed to provide these services in Priority Investment Areas in the County.

Actions

Sheldon Fire District

☑ *12.1 Hire six new firefighters. The district anticipates hiring six additional paid fire fighters to man both stations on a 24 hour basis and increasing its volunteer fire fighters by thirty-two.*

☑ *12.2 Purchase additional apparatus and equipment, including a new pumper and ladders, nozzles, helmets, and bunker gear, etc.*

Burton Fire District

☑ *12.3 Purchase additional apparatus to properly equip existing stations. Purchase three pumper/tankers needed to replace aging equipment to meet ISO standards.*

☑ *12.4 Hire thirty new personnel over the next five years to meet the three man per truck policy adopted by County Council.*

☑ *12.5 Encourage a County fire hydrant plan in order to strengthen fire protection throughout the district.*

Lady's Island/St. Helena Fire District

The five year plan is to follow ISO regulations to upgrade the department in the

areas of manpower, training, and facilities.

☑ *12.6 Hire twenty-one additional paid fire fighters. All personnel will require additional training.*

☑ *12.7 Acquire additional equipment, including a pumper, two squad trucks, a platform, and a 75' snorkel.*

☑ *12.8 Construct a new fire station to service the Cat, Cane and Gibbs Islands area within six to eight years based on build out.*

Bluffton Fire District

☑ *12.9 Build, staff, and equip a new fire station near the Eagle's Point development on U.S. 278 to service the Okatie area. Five year plans project the need for additional facilities to meet growing population demands. Growth and development along the Highway 170 and 278 corridors will result in the need to build, staff, and equip a new fire station near Eagle's Point on U.S. 278.*

☑ *12.10 Construct a new station on Callawassie Road.*

☑ *12.11 Hire thirty-nine additional fire fighters. To fully staff the projected seven fire stations, as well as identifying and implementing effective incentive programs to recruit and maintain an adequate force of trained volunteer fire fighters.*

☑ *12.12 Purchase five apparatus to equip new stations over the next five years, including three pumpers and an aerial apparatus to serve new commercial and two-three story multi-family structures.*

☑ *12.13 Rebuild the Pritchardville station on the existing site.*

Daufuskie Fire District

☑ *12.14 Construct a new central fire station as planned, and provide for needed equipment repairs and replacement, and the addition of trained personnel.*

☑ *12.15 Implement road improvements. Road improvements and planning for actual development of the community versus projected development will continue to be important factors in the provision of fire protection services to residents of the island.*

Policy 13: Encourage development in fire districts that are capable of providing adequate fire protection services, at appropriate costs, to an increased number of structures.

While location and funding of new fire stations are issues addressed by Beaufort County's five year capital facilities planning process, the actual siting of these facilities is, at present, largely determined by the availability of donated land. However, fire district capabilities should be a

consideration in the delineation of Priority Investment Areas.

Actions

☑ *13.1 Coordinate the planning and location of new development with fire district capital improvement programs and the budget allocation process.*

☑ *13.2 Develop a Regional Training Center of approximately 40 acres for use by Beaufort, Hampton, Colleton, Jasper Counties, and the Town of Hilton Head, and other interested municipalities.*

☑ *13.3 Revise the Development Standards Ordinance to ensure that the appropriate Fire Protection Standards are addressed in the development permit process.*

☑ *13.1 In rural areas where public water is not recommended, support the use of dry hydrant systems and additional pumpers and tankers to address fire protection outside the Priority Investment Areas.*

Emergency Medical Services Plan

Policy 14: Add fully staffed and equipped facilities within Priority Investment Areas.

In order to achieve the goal of a five minute response time County-wide, Beaufort County EMS projects a need for a minimum of two additional stations in the next five years. Each additional station will need to be fully staffed and equipped. The problem presented by relatively low population dispersed over a relatively large land mass interrupted by numerous marshes and water systems results in longer than desired response times County-wide. However, the volume of calls must increase in order to justify these facilities. Beaufort County has the land mass to justify these additional stations, but it does not have the population base to justify them at present.

Actions

☑ *14.1 Locate an additional station at the Buckingham Fire Station.*

☑ *14.2 Locate a second station in the vicinity of Callawassie.*

☑ *14.3 Purchase three additional trucks to equip new stations.*

☑ *14.4 Hire eighteen additional personnel, including eight paramedics, to fully equip these new facilities.*

☑ *14.5 Locate another additional facility in the Burton area, if current growth continues.*

☑ *14.6 Purchase three additional trucks to maintain Hilton Head's current level of service, if the Town requests the County to continue providing these services.*

Policy 15: Maintain separate fire protection and EMS services.

Fire and EMS services should remain separate entities, working together and continuing to serve different functions. Fire service is not historically linked with the medical community but with fire protection services. While EMTs function as physician extenders, based on a close connection with the medical community.

Policy 16: Reevaluate County development standards to improve EMS response.

There is a need to revisit development and design standards, including road widths, parking requirements, service alleys and lanes, and building heights, to accommodate EMS equipment, while at the same time balancing aesthetic and environmental considerations.

Actions

☑ *16.1 Develop appropriate curbside marking of house numbers as a simple means to increase safety and lower response times.*

☑ *16.2 Revise the Development Standards Ordinance to improve the accessibility of emergency equipment with construction of new public facilities.*

Governmental Facilities

Policy 17: Update the General Government Facilities Plan

Update the General Government Facilities Plan to coordinate with the recommendations of the Comprehensive Plan and to provide adequate community services for the needs of the County's growing population over time.

Actions

☑ *17.1 Establish a task force to include County staff representatives to investigate and determine strategies for the short-term and long-term provision of adequate public facilities and services.*

☑ *17.2 Investigate the need for an Adequate Community Facilities Ordinance as a growth management strategy to ensure that the provision of community services keeps pace with development.*

Policy 18: Expand the satellite office in Bluffton Township.

To more efficiently serve the citizens south of the Broad River, the County will need to expand its satellite office in Bluffton to house extensions of the Human Service, Public Safety and Development Division offices of the County. Population expansion in southern Beaufort County over the last five years has affected the ability of the County to provide efficient services to the public.

Actions

☑ *18.1 Expand the satellite office within the Priority Investment Area in Bluffton Township.*

Policy 19: Construct a new central office for the Development Division

Determine an appropriate location for the central office of the Development Division, giving the consideration to the County's goal of "one-stop shopping" for citizens seeking permit approvals, and the overall efficiency of the Development Division in relation to other departments and agencies.

Action

☑ *19.1 Construct a new building within the Priority Investment Area at the most suitable site considering the goals for the Division during the next five years.*

Educational Facilities Plan

Policy 20: Construct/expand educational facilities in Priority Investment Areas.

To address the anticipated growth and lack of adequate facilities, the Board of Education undertook a $122 million bond referendum, which was approved by the voters in 1995. Eight new schools will be constructed with these funds; three schools will receive major renovations and/or expansions; and six schools will receive major repairs/completion over the next five years.

An estimated $90 million will build a total of 933,386 square feet in new schools at $96 a square foot. $32 million will be used for land acquisition, technology, equipment, and other professional fees.

The cost to property taxpayers of Beaufort County will be two mills the first year; four mills the second year; and seven mills in years three to five. Calculated at $4.00 per mill, additional tax on a residence appraised at $100,000 will be $8.00 the first year; $16.00 the second year; and $28.00 in the third through fifth years.

Actions

☑ *20.1 Construct eight new school facilities. Of the eight new schools that will be constructed, there will be four elementary schools, three middle schools, and one high school. The new schools are listed below, according to cluster: Lady's Island Elementary, Beaufort Middle School, and Beaufort High School in the Beaufort Cluster. Gray's Hill Elementary and Battery Creek Middle School in the Battery Creek Cluster, and Bluffton Elementary, Hilton Head Island Elementary, and Bluffton Middle School, in the Hilton Head Cluster.*

☑ *20.2 Expand/renovate three schools. Major expansion/renovation financed by the school bond will occur at the following three schools: Broad River Elementary (Battery Creek Cluster), Mossy Oaks Elementary, and Lady's Island Elementary (Beaufort Cluster).*

☑ *20.3 Repair/complete six schools. Major repairs/completion of school facilities are slated for the following six schools, listed according to cluster: Lady's Island Middle School (Beaufort Cluster), Shell Point Elementary and Battery Creek High School (Battery Creek Cluster), and Hilton Head High School, Daufuskie School, and Hilton Head Island Elementary (Hilton Head Cluster).*

Policy 21: Encourage the optimum siting and construction of new school facilities.

Each of the eight new school facilities planned should be sited and constructed with maximum appropriate input from the Beaufort County Planning Board so that the new facilities, and the impacts they will have on the targeted neighborhoods and planning areas, can be coordinated with and incorporated into the County's long range planning efforts.

Actions

☑ *21.1 Develop effective coordination between the Beaufort County Board of Education and the Beaufort County Planning Board and Planning Department.*

☑ *21.2 Review of proposed school sites should include consideration of County goals and policies and location in relationship to identified growth areas of the County, in addition to the Department of Education policies that govern new facility siting, design, and construction.*

☑ *21.3 Encourage and pursue State legislative action required to change the status of Planning Board and County Council authority regarding recommendations. Planning Board recommendations are currently non-binding on School Board actions, and the County Council has no recommendation authority per the State legislation.*

☑ *21.4 New school facilities should not be located in the Military Planning Areas on the Future Land Use Map.*

Libraries

Policy 22: Construct/expand library facilities within Priority Investment Areas and maximize accessibility in non-growth areas.

Based on library administration projects, additional library facilities will be needed within the next five years. Regional library facilities will be expanded or constructed to meet growing needs where population center are projected. The expanded Beaufort Library and newly constructed Hilton Head Library should be equipped to function as hubs for the foreseeable future.

Actions

☑ *22.1 Expand or relocate the facility in the Town of Bluffton. Based on current space requirement projections, the Town of Bluffton's branch will need to be expanded or relocated to an approximate 10,000 square foot facility by FY 1999.*

☑ *22.2 Expand the branch library at Dale into its own facility. The library branch housed within school facilities at Dale is expected to need expansion into its own facility by FY 1999.*

The Dale branch is projected to need an approximate 2,800 square foot facility and to be located within a Community Preservation Area in Sheldon to the maximum extent possible.

☑ *22.3 Expand the St. Helena branch library into its own facility. The branch housed within school facilities at St. Helena is expected to need its own facility by 1999. The branch is expected to require a 8,000 square foot facility and would preferably be located on U.S. 21 near the elementary school between the intersections of Routes 45 and 77 and within the Community Preservation Area.*

☑ *22.4 Locate an additional facility in the McGarvey's Corner area by*

2005. An additional "Okatie Branch" satellite may be required in the McGarvey's Corner area to serve Sun City Hilton Head and other developing communities. Its space requirement is projected at approximately 10,000 square feet.

☑ *22.5 Locate a new facility in the Shell Point/Burton/Broad River/Chechessee area. A new 5,000 to 10,000 square foot facility may also be needed in the Shell Point/Burton/Broad River/Chechessee area and would be located on Highway 170 between the Cross Creek Shopping Center and the Broad River Bridge. If this facility is constructed, administrative and processing functions could be relocated to a more central location in the County.*

☑ *22.6 Provide phone access and centralized delivery services to Daufuskie Island. Plans for library service to Daufuskie Island in the future include at least dial-up access and delivery of materials to and from a central point on the island.*

☑ *22.7 Expand extension services south of the Broad River. Services will be provided as staffing and funding permit.*

Policy 23: Develop reasonable criteria for the placement of library branches.

As the need for additional library facilities in Beaufort County continues to grow, it will be necessary to develop a rationale for strategically locating new facilities. Criteria for siting potential branch libraries should be based on centers of population, high visibility, accessibility, and traffic patterns within the County, and those considered identified in the Future Land Use Chapter.

Actions

☑ *23.1 Create a consultant/planner team to work with the Library Board of Trustees and Library management to develop reasonable siting criteria.*

Policy 24: Develop the Library system materials collection to meet State goals.

As the major provider of library services to an expanding County, it will become increasingly important that the Beaufort County Library System increase its holdings to attain and keep pace with State goals for books and audio-visual materials.

Action

☑ *24.1 Acquire two books per capita and one audio-visual holding per capita over the next ten years.*

Policy 25: Provide in-library public access to the internet and County, State and Federal electronic files. Make available in-home and in-office electronic access to library resources.

A primary goal of the Library System is to provide residents with computerized access to information. Access to the Internet as well as to governmental electronic files will be major steps toward meeting this goal.

Actions

☑ *25.1 Develop public access Internet stations in branches as funds and personnel become available, beginning in 1997.*

☑ *25.2 Continue to research potential on-line and phone access to electronic information resources such as DIALOG and LEXIS/NEXIS.*

Cultural Facilities

Policy 26: Encourage and support the construction and expansion of cultural facilities within Priority Investment Areas and maximize accessibility in other areas.

As the County continues to develop, additional cultural facilities will be needed in Priority Investment Areas to meet increasing demands. At the same time, providing for cultural opportunities in non-growth areas will also be important.

As the County's population continues to grow, four needs must be met to permit adequate service from Beaufort's cultural organizations and facilities in the future:

- new performance, office and meeting facilities in Priority Investment Areas;
- technical and operational improvements to existing performance, office and meeting facilities;
- coordination between humanities organizations by creating a Local Agency to improve humanities funding, eliminate duplication of services, and increase the quality and level of services to citizens; and
- enhanced arts & humanities services for visitors in recognition of the importance of heritage/cultural tourism to the County's economy

Actions

☑ *26.1 Identify areas of specific need regarding increased accessibility to existing cultural facilities. Based on existing conditions, the following areas should receive priority investigation: the Bluffton area, Lady's Island, the Okatie/Callawassie area, and Sheldon Township.*

☑ *26.2 Assist in the development or coordination of entities to address the creation of additional cultural facilities in targeted areas of the County.*

☑ *26.3 Assist in funding the technical and operational improvement of existing facilities to meet the demand for a*

growing number and diversity of cultural events.

☑ *26.4 Coordinate establishment of a local humanities agency, modeled after the local arts agencies, to serve as a link between existing historical groups, museums, and preservation organizations, and support pursuit of humanities grants.*

☑ *26.5 Coordinate cultural programs with economic development planning to ensure growth of low-impact cultural, tourism and ecotourism.*

☑ *26.6 The local humanities agency should coordinate with the Lowcountry Tourism Council, Visitor's Centers, and local Chambers of Commerce to facilitate research and education about the area's rich cultural resources, and assist in balancing the demands of heritage tourism in Beaufort County with the need to preserve the lifestyle of current residents.*

Sheriff's Department

Policy 27: Determine the appropriate number of deputies to service Beaufort County.

The County should bring the ratio of sheriff's deputies in line with the National recommended standard to safely and efficiently serve the citizens of Beaufort County. As noted, the dramatic increase in population in the County has placed a hardship on the department. The County has been unable to keep up with the financial cost of hiring enough officers and equipment to adequately service all areas of the County.

Actions

☑ *27.1 Conduct a patrol manpower allocation and deployment study to prescribe the level of staffing needed to enable the Department to respond to the needs of citizens in a timely manner, and to deploy manpower to match the geographic incidence of crime and demands of non-crime services. The ratio should be adjusted to account for seasonal, tourism and military population.*

☑ *27.2 Consider the demand for increase in officers over the next 5 years as a significant priority for the expenditure of the County's General Fund.*

Policy 28: Develop an ordinance that will allow the Sheriff's office to charge for additional man power when needed to service a special event.

During the peak tourism season, man-hours are stretched with the number of calls. At the same time, the Department continues to provide assistance upon request for local special events. Such unbudgeted assistance can be a costly expenditure for the Department, at times exceeding $10,000.

Actions

☑ *28.1 Develop an ordinance to provide services for reimbursement for designated community events.*

Policy 29: Improve the response times and increase the law enforcement presence in the area between the Hilton Head Bridge and the Broad River Bridge.

Actions

☑ *29.1 Plan and construct a new substation in the Okatie area in coordination with the Beaufort County Administration.*

Emergency Management Department

Policy 30: Develop a written agreement with Jasper, Colleton and Hampton Counties for regional cooperation during emergency evacuations.

Actions

☑ *30.1 Commence negotiations with the surrounding counties and work to develop a coordinated emergency evacuation plan.*

Policy 31: Protect, upgrade and expand the capacities of the major County evacuation routes.

Actions

☑ *31.1 Actively encourage the SCDOT to plan and construct the four-lane Parris Island Gateway that connects to U.S. 21 and the Brickyard Point Bridge from Lady's Island.*

☑ *31.2 Amend the Zoning and Development Standards Ordinance to protect the evacuation corridors by limiting the number and type of access points approved.*

☑ *31.3 Develop a more coordinated process between the SCDOT and the*

County for the permitting of access points during the development permit process.

☑ *31.4 Use the Corridor Task Force committee recommended in the Transportation Chapter (2.1.10) to work with the State Department Of Transportation to plan for the construction of new road systems needed for emergency evacuation. The Emergency Medical Department (EMD) Director should serve on the Task Force.*

☑ *31.5 Coordinate with the Future Land Use Chapter and revisions to the zoning ordinance to balance the future allowed density on Lad's, St. Helena's and out to Fripp Islands with evacuation requirements.*

Policy 32: All large scale residential development, PUDs, nursing homes, and retirement homes must prepare and submit an emergency evacuation plan to the County's EMD for approval as part of the SCDHEC approval process.

This coordination should be reflected in the ZDSO revisions.

Actions

☑ *32.1 Revise the Development Standards Ordinance or another appropriate ordinance to require all new development with private road systems to submit an evacuation plan for approval by the Emergency Management Division which must be updated on an annual basis.*

☑ *32.2 Revise the Development Standards Ordinance to require an emergency evacuation plan as part of the development process for significant developments that will have a negative impact on existing infrastructure.*

Policy 33: New community facilities should be constructed with emergency evacuation goals in mind.

Actions

☑ *33.1 Identify new shelter locations approved by the Red Cross for evacuations.*

☑ *33.2 Create a process by which the Emergency Management Department and the Red Cross are part of the planning process for new school site locations.*

Policy 34: Ensure the continued viability of a County-wide mass transit system for emergency evacuation.

Actions

☑ *34.1 Update the agreement annually for use of the Lowcountry Regional Transportation Authority and School Board buses during an emergency evacuation.*

☑ *34.2 Support the endeavors of the Lowcountry Regional Transportation Authority for the continuance and enhancement of the mass transit system.*

Policy 35: Ensure that the drainage systems of new developments are in working order prior to transfer of ownership from developers to Property Owners Associations.

Emergency Management Division receives many calls during rain storms from flooding that occurs as a result of drainage systems not being properly maintained.

Action

☑ *35.1 Revise the Development Standards Ordinance to require a plan note that states: "To ensure that drainage in developments is operational and that the development was actually constructed as planned prior to transferring a development from ownership by Development Company to Ownership by the Property owners Association, the County must inspect the drainage system to ensure that it is in proper working order for the transfer to take place."*

Insert

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W E
S

RIVER RD
CASTLE HALL RD
BIG ESTATE RD
RIVER RD
CHARLESTON HWY
TRASK PKY
ST ROBAN RD
STUART POINT RD.
TRASK PKY
SEE INSERT
SAMS POINT ROAD
ROBERT SMALLS PKY
SAVANNAH HWY
SEA ISLAND PKY
LINK
FOLLY RD
BAILPARK RD
SEA ISLAND PKY
EBENEZER RD.
LANDS END
DUFFY RD.
SEASIDE RD
OKATIE HWY.
OKATIE HWY.
LOGAN RD.
FORDING ISLAND RD.
BUCK ISLAND RD.
MAY RIVER RD.

Legend

County Boundary
Class 1 Roads
Community Facility Locations

Beaufort County
Community Facilities
MAP 26

Scale 1:239361

Prepared By Beaufort County GIS Department

Community Facilities Map Legend

1 EMS-3

2 Burton Fire District 3

3 Lady's Island Fire District 1

4 Lady's Island Fire District 2

5 Lady's Island/St. Helena Fire Station 24

6 Lady's Island/St. Helena Fire Station 22

7 Fripp Island Fire Department

8 Lady's Island/St. Helena Fire Station 23

9 Bluffton Fire Station 1

10 Bluffton Fire Station 2

11 Sheldon Fire Department

12 Sheldon Fire Sub Station

13 Burton Fire District 2

14 Burton Fire District 3

15 Burton Fire District 1

16 Beaufort Fire Department

17 Port Royal Fire Department

18 Bluffton Fire Substation

19 Daufuskie Fire & Rescue

20 Hilton Head Fire Department

21 Hilton Head Fire Department

22 Hilton Head Fire Department

23 Hilton Head Fire Department

24 Hilton Head Fire Department

25 Hilton Head Fire Department

26 Bluffton Police & Town Hall

27 Sheriff & Beaufort Police

28 County Detention Center

29 Port Royal Police & Town Hall

30 Sheriff, Southern Division

31 Beaufort Memorial Hospital

32 US Naval Hospital

33 EMS-1 (EMS Headquarters)

34 EMS-2

35 EMS-5

36 EMS-8

37 EMS-6

38 EMS-4

39 EMS-7

40 Hospital

41 Proposed Elementary School

42 Proposed High School

43 Proposed Elementary School

44 Proposed Elementary School

45 Beaufort Academy

46 Penn Center School

47 University USCB

48 Technical College of the Lowcountry

49 County Library

50 Hilton Head Library

51 St Helena Post Office

52 Sheldon Post Office

53 Seabrook Post Office

54 Burton Post Office

55 Beaufort Post Office

56 Post Office

57 Post Office

58 County Courthouse

59 County Administration

60 Health Department

61 County School Board

62 Beaufort City Hall

63 Lady's Island Airport

64 Hilton Head Airport

65 Shell Point Elementary School

66 Lady's Island Elementary School

67 M.C. Riley Elementary School

68 Davis Elementary School

69 J.S. Shanklin Sr. Elementary School

70 Broad River Elementary School

71 Battery Creek Elementary School

72 Beaufort Elementary School

73 Mossy Oaks Elementary School

74 Port Royal Elementary School

75 St. Helena Elementary School and Library

76 Hilton Head Elementary School

77 Lady's Island Middle School

78 Robert Smalls Middle School

79 H.E. McCracken Middle School

80 Battery Creek High School

81 Beaufort High School

82 Hilton Head High School

83 Beaufort/Jasper Career Education Center

84 Public Edu Training/offices

Addendum

The addendum contains some revisions to the Comprehensive Plan, which were adopted, but have essentially expired since most addressed the interim period between the adoption of the plan and the approval of the Zoning Ordinance on April 26, 1999. Page numbers reference other changes that are noted below, but were not incorporated by the consultants in the final text.

Part A: Introduction, Section 5, Page 14, follows:

A. All rezoning and subdivision applications received after the passage of the Comprehensive Plan will be judged and acted upon under the provisions of current zoning and development standards applicable at the date of receipt of a complete application. Zoning derived from the Comprehensive Plan will not be applicable until pertinent zoning ordinances and associated maps have been prepared, received by the Planning Board, and duly passed by Council.

   To the extent S.C. Code Ann. Sect. 6-29-540 et.seq. mandates that actions following passage of the Plan must be compatible, this Plan does not alter, supersede, or in any way amend present ordinances.

   This policy does not preclude revision/passage of deleted development standards ordinances (e.g. tree ordinance, stormwater) prior to new zoning ordinance amendments.

B. No zoning ordinance amendments derived from the Comprehensive Plan will be passed by County Council until such time as programs and policies for Transfer of Development Rights (PDR) can be considered. This will include explicit funding source(s) for PDR programs which will be considered during 1998-1999 budget deliberations. Therefore, June 1998, is the earliest possible date on which new zoning amendments can be approved.

C. Where future ordinances conflict with the Comprehensive Plan will be amended and made consistent with the pertinent ordinances.

D. The Planning and Economic Development Committee shall, by January 7, 1998, recommend to the Chairman of County Council names of citizens to constitute an ad hoc committee(s) that will function during the course of ordinance preparations derived from the Comprehensive Plan. The primary function of this broad-based committee(s) will be to provide substantive input for ordinance progress through the approval process.

Page 419, No. 7. The following paragraph was not deleted:

Potential new development near the intersection of U.S. 278 and S.C. 170 could limit construction of a high capacity grade separated and interchange appropriate to manage anticipated traffic volumes in this area. Therefore, a planning effort should be initiated for the phased construction of a new grade separated an appropriate interchange south or west of the Career Education Center (CEC). In addition, this interchange design should also account for very long-term access to I-95, and should consider the land use and development patterns of the surrounding area. This would be in addition to the U.S. 278 corridor, which was recently extended to I-95.

Page 483, No. 8.3. The phrase "and consistent with the Future Land Use Plan" was not included in the following sentence: Designate any new roads through Rural and Transitional Investment Areas as limited access facilities accessible only at planned locations, and carefully plan land uses along these new corridors.

Page 520, Goal 2, after "market" the following phrase was not added "and low income households, for both rental and owner occupied property".

Page 560, Action No. 12.1, the reference to existing organizations and groups was not taken out, " to identify community based organizations and representative individuals".

Page 617, The first paragraph, the word "most" was not changed to "many".

Page 659, Policy 6, First sentence "over one unit per acre" was not deleted.

2001/1

AN ORDINANCE OF THE COUNTY OF BEAUFORT, SOUTH CAROLINA, TO ADOPT AN ADDITION TO THE BEAUFORT COUNTY COMPREHENSIVE PLAN OF 1997.

BE IT ORDAINED that County Council of Beaufort County, South Carolina, hereby adds to the Beaufort County Comprehensive Plan of 1997, enacted by Ordinance 97-33, a new Appendix F entitled Dale Community Preservation Plan.

Adopted this 8th day of January, 2001.

COUNTY COUNCIL OF BEAUFORT COUNTY

BY: _____
Thomas C. Taylor, Chairman

ATTEST:

_____
Clerk to Council

REVIEWED BY:

_____
County Attorney

First Reading: November 27, 2000
Second Reading: December 11, 2000
Public Hearing: January 8, 2001
Third and Final Reading: January 8, 2001

Amending 97/33

THE DALE COMMUNITY PLAN

PURPOSE

The Dale Community Plan is designed to serve as a general guide for the development of the community. It addresses land use, recreational opportunities, traffic circulation and design. As a policy document, appended to the County's Comprehensive Plan, this plan is to be used to guide zoning, subdivision, facilities funding and design, and community development decisions made by government officials and agencies. The Dale Community Plan serves as a foundation and the structure upon which more detailed policies, standards and master plans may be developed.

PROCESS

The solutions to the issues, which this plan analyzes, have emerged as a result of a continuing dialogue with a wide range of participants, which began a year ago. The goal and activities represent the creativity of Dale residents.

Listed below are the goals and actions derived from the many issues debated during the Dale Community Preservation planning process. The goals reflect what Dale residents believe will help to build the community. Through a series of public meetings Dale residents identified important issues to be addressed, each related primarily to the issue of growth and land use. The fundamental question was how to accommodate growth while maintaining the character of the community. Specifically the Dale community had concerns about and asked the CP committee to consider the following:

1. What mix of land uses and development densities are desirable?
2. What kinds of businesses are most appropriate and where should they be located?
3. How can we improve recreational opportunities?
4. How do we establish safe connections to activity areas such as the school and the store?
5. What is the potential for passive recreational facilities and improvements at Wimbee Landing Creek?

Based on the information gathered and detailed questions posed by the community, four key areas of concern emerged: land use, recreational opportunities, traffic circulation and design.

GOALS AND ACTIONS

GENERAL LAND USE GOALS

Ensure that new development and redevelopment maintains and enhances the character of Dale.

- Provide access to local commercial services by developing a mixed used district along Keans Neck Road that encourages the integration of residential, commercial, civic and public uses.

- Permit commercial uses at a scale that maintains compatibility with residential uses; require new buildings to respect the character of the community.

- Maintain diversity in the type and the character of development and promote various opportunities in the type and the cost of housing.

- Prohibit Planned Communities on sites adjacent to Keans Neck Road.

- Develop an appropriate sign ordinance for the Dale area.

- Identify future needs and requirements for public facilities and lands.

- Pursue available funding sources at the State and the Federal levels to provide for public services and facilities.

PARKS & RECREATIONAL GOALS

Provide recreational opportunity through the use of a quality park system utilizing county, school district and private resources. Recreation facilities should be safe and of a high quality.

- Make a special effort to acquire additional parkland around the Dale Community Center Park to accommodate further facilities and passive recreation.

- Develop the Dale Greenway Plan in conjunction with the countywide greenway system.

- Investigate the development of passive recreational facilities at Wimbee Landing Creek.

- Provide public places and open spaces that complement the public realm and create identifiable focal points within the Mixed- use district.

TRANSPORTATION AND TRAFFIC CIRCULATION GOALS

Provide a transportation system that effectively and safely accommodates pedestrians and motorists.

- Develop techniques that calm traffic speeds and reduce cut-through traffic along Keans Neck Road in order to improve pedestrian, bicyclist, and motorist safety.

- Improve the design and location of bus stops by emphasizing pedestrian access and integrating transit stops into the surrounding neighborhood.

- Implement traffic calming measures, such as textured paving and chokers along Keans Neck Road and major intersections.

- Balance the needs of motorists, pedestrians and bicyclists with walking paths, narrow roadways to calm traffic, continuous bicycle routes, ample and accessible at-grade pedestrian crossings and landscaped parkways to separate pedestrians and traffic.

- Improve pedestrian connections to activity centers such as the school and the corner store by providing greenway connections from adjacent neighborhoods.

- Support commercial development, which is planned as a total concept to include access points, internal circulation, and parking, may be better coordinated.

- Separate sidewalks from the roadway by planting strips wide enough to support trees.

- Pave Wimbee Landing Creek Road (that portion west of Kim Lock Road) to serve as an alternate route for Keans Neck Road. The paving of Wimbee Landing Creek Road is to be of a higher priority than other roads in the Dale area.

DESIGN GOALS

A safe and aesthetically pleasing community through the orderly and efficient development of land

- Create a strong "sense of place".

- Enhance entryways to the community.

- Implement a streetscape program that creates a visually attractive, safe and comfortable street and gives scale and definition to the public realm.

- Select medium sized trees, which provide canopy, shade and distinctive foliage or flower as the community theme tree.

- Provide public amenities such as planters, lighting, trash receptacles, bicycle racks, sheltered bus stops and information kiosks that are functional and aesthetically integrated into the streetscape for pedestrian comfort, convenience and safety.

- Provide public art for aesthetics and contemplation.

- Identify ways to build upon the history of the Dale area and identify sites for historic markers.

The Dale Community Plan provides a goal and policy framework for guiding community development, promoting high-quality public facilities. Nevertheless, the Plan should not be

viewed as a static document. It is meant to be reviewed, debated, and modified as necessary to account for changing conditions and community values.

IMPLEMENTATION

The time and effort spent in producing this Plan is worth nothing without implementation. It is implementation and agreement on methods of implementation that will bring the Plan to life and initiate an evolution of activity that will move the Dale community toward the fulfillment of its goals. This section outlines the activities that must be pursued to carry out the Plan.

Preparation and adoption of the Plan is a beginning step in its implementation. Its basic purpose is to provide a guide for specific action. The Implementation Plan identifies techniques, strategies, and methods for carrying out the recommendations contained in the Dale Community Plan. The major implementation processes described include the Dale Community Preservation Land Development Standards, the County's Capital Improvement program, the annual review and update process, general plan update and specific implementation program.

DALE COMMUNITY PRESERVATION LAND DEVELOPMENT STANDARDS

The Dale Community Preservation Land Development Standards is a regulatory tool used to define districts within the Community Preservation area for the purpose of controlling and guiding land use and development. These standards are the primary instrument for implementing land use policies. The County's review and adoption of the land development standards are important first steps in plan implementation.

CAPITAL IMPROVEMENTS PROGRAM

Another tool for implementing the plan is the Capital Improvements Program (CIP), which establishes schedules and priorities for all public improvement projects within a five-year period. The County first prepares a list of all public improvements that will be required in the next five years, including transportation and community facility projects. Then all projects are reviewed, priorities are assigned, cost estimates prepared, and potential funding sources identified.

The CIP typically schedules the implementation of a range of specific projects related to the Comprehensive Plan and Community Plans, particularly the restoration and upgrading of existing utilities and infrastructure facilities. Construction of public facilities and infrastructure is an important link between the development of Dale and the implementation of the Dale Community Plan. Based on an annual review, the CIP shall be reexamined for consistency with the goals and actions of this Plan. The CIP shall also be revised to include projects identified within the Dale Community Plan. In this way, the CIP serves as a financial planning document as well as a physical-planning document. It permits the construction of improvements identified in the Dale Community Plan.

The five-year CIP shall be used to enable the implementation of the Dale Community Plan policies in a manner that is consistent with the goals and actions identified. The CIP can also be used to implement growth strategies in the Dale Community Plan by locating and programmi

public facilities and infrastructure for lands within the approved Dale Community Preservation area. Finally, by stipulating the desired community projects and improvements, the Dale Community Plan provides the guide for desirable public facilities and services.

ANNUAL REVIEW

The county administrator shall submit an annual report to Beaufort County Council on the status of the Plan and the progress of its application. By going through this process, it is possible to regularly reexamine the plan's premises and evaluate progress made on its implementation. Implementation actions may need to be modified as additional information is received. The county's administration department along with the lead departments identified in Table 1 is also responsible for monitoring the implementation of the Dale Community Plan.

The annual review process provides an opportunity to update and refine the policies expressed in the Dale Community Plan and to monitor and evaluate the progress of the implementation strategies and programs incorporated therein. This process is the vehicle by which the county, private property owners, developers, community groups or individual citizens request changes to the goals and actions of the Dale Community Plan. The review and amendment process includes citizen participation, through community meetings to familiarize Dale residents with the amendment proposals and at formal public hearings before the Planning Commission and County Council.

GENERAL PLAN UPDATE

The Dale Community Plan reflects a ten-year planning period. This period allows for the systematic implementation of desired projects, land use patterns, and installation of required public improvements. To provide for flexibility and responsiveness to change, the Plan also should be comprehensively reviewed and revised, if appropriate, at four-year intervals. This periodic update enables the Plan always to maintain at least a 10-year time frame.

The update of the Plan is not synonymous with a total revision. Once adopted, the Plan establishes a basic policy framework that must be followed over time. The purpose of reviewing the Plan at intervals is to allow it to adjust to changing conditions, the availability of more recent planning data, and shifts in community values. When revisions to the Plan are proposed, Dale residents and property owners should be invited to participate in the formulation of the changes.

IMPLEMENTATION ACTIONS

1. IDENTIFY GRANTS

Federal and State grants-in-aid are available to assist with land use planning facility improvements and other services and improvements. Coordinating grant proposals with the Plan directives is a positive step toward accomplishing the Plan's goals. Most grants require matching funds for the receiving municipality. The County's contribution may be met by in-kind contributions from various departments and also through departmental budg
Additional sources for funding are:

(A) *Community Development Block Grant (CDBG)* The Community Development Block Grant Program is funded by the U.S. Department of Housing and Urban development and provides assistance for programs and projects directly aimed at the type of projects identified in the Dale Community Plan. The Community Development Block Grant funding is allocated on an annual basis and can be uses for a variety of projects contemplated in The Dale Community Plan.

(B) Beaufort County Transportation Committee(C Funds) This funding source is generate from gasoline sales tax funds appropriated to the county from the state and administered by the Beaufort County Transportation Committee. Permitted projects include road paving, sidewalks, curb improvements, walking paths, bus shelters and road signage. Projects other than road paving projects require a "special project application" which is accepted each three years.

(C) *The Beaufort County Tree Fund.* Funds generated from projects where the Development Review Team determines that the required replacement of trees is not feasible or not desirable, such reductions are subject to a general forestation fee. The funds collected through this forestation fee may be used by the County to plant trees and other landscaping in highway medians, along roads, and general landscaping such as those identified in the Dale Community Plan.

(D) *The Land Preservation Board.* This advisory board was established to protect rural and critical lands through the Purchase of Development Rights, voluntary programs and other mechanisms. The Board is mandated to establish criteria and ranking system to rank land parcels, which are approved by County Council. Beaufort County currently levies and designates 2 mills in ad valorem taxes in order to acquire land for conservation, farmland protection and open space preservation. The County Council is considering a proposition to authorize the County to issue 40 million dollars in general obligation bonds to acquire lands for preservation and retire the bond debt.

2. PRIORITIZE PROJECTS & ADD TO CIP

Table 1 summarizes the implementation actions recommended in The Dale Community Plan. In addition, the projects are prioritized, a responsible department is assigned and the timing for implementation of the specific action is noted.

3. SCHEDULE IMPLEMENTATION

The implementation of the Dale Community Plan will be monitored. Some items are expected to be completed quickly. For others, especially those items that need additional funding, it may be harder to schedule a firm completion date. Nevertheless, the status of every item proposed in the Plan will be tracked. A check date, if not a completion date, will be set for each item. This tracking chart will be updated regularly, as more information becomes available and as the status of each project changes. An update report is scheduled

for the Fall of 2001 to summarize the overall implementation status of the plan's recommendations.

4. COMMITMENT and SUPPORT

Thus, while the Dale Community Plan provides the framework for community development, the everyday action of the County shapes the community. The manner in which the Plan is implemented is the real test of the County's commitment to the goals, objectives, and policies.

By adopting the Plan, the County Council will demonstrate the County's commitment to the implementation of the Plan. However, every action item listed in this plan will require separate and specific implementation. Adoption of the Plan does not begin the implementation of any item. The implementation will require specific actions by the Dale community, the County and other agencies. The Plan will be supported and implemented by:

- County Boards, Commissions and Staff
- County Budgets
- Capital Improvement Projects
- Other Agencies and Organizations
- Direct Community Action

County Boards, Commissions and Staff

The numerous boards and commissions of the County will look to The Dale Community Plan when they need guidance about the neighborhood. The Planning Commission will already know if a proposed zoning change in the Dale CP area is appropriate and supported by the residents and businesses of the community. Additionally, County staff will use the Plan as a guidance document for review of projects and programs.

Department Budgets

Each year every County department puts together a budget that states the department's priorities for the coming year. By bringing the strengths and desires of the community to the attention of County departments, the Dale Community Plan will help them prioritize those projects that help safeguard the community's assets while addressing its needs. Allocating dollars to certain programs and activities inevitably results in setting policy priorities, which are critical to the implementation of the Dale Community Plan. The budget instructions to department heads shall require that proposed expenditures include reference to items in the Plan that will be implemented with the funds.

Capital Improvement Projects

There are many projects in the communities that require major capital expenditure. In these instances, the guidance provided by the plan will be critical to guarantee the project will proceed in a fashion that keeps in mind the overall long term interests of the community.

Other Agencies and Organizations

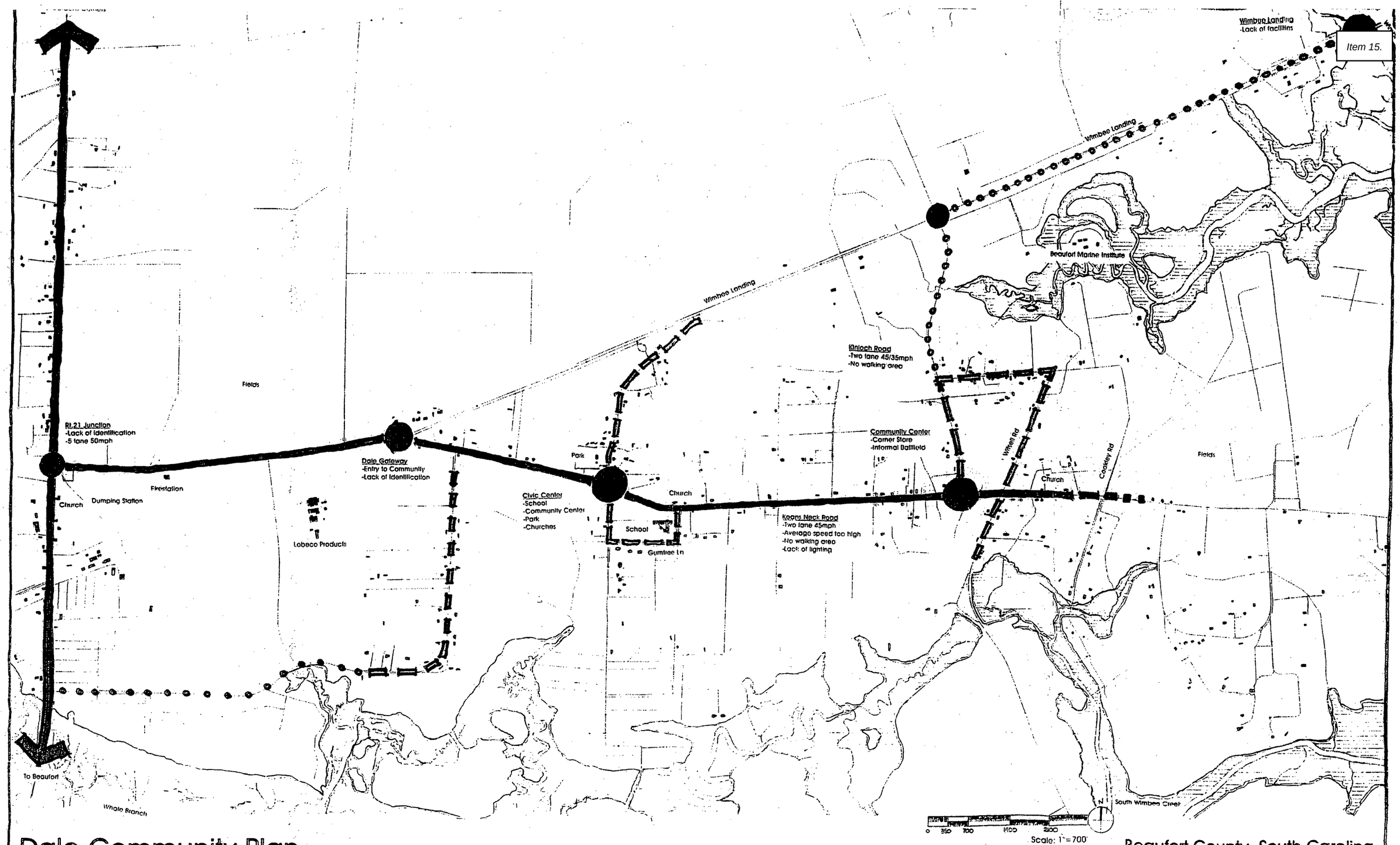
Other agencies and organizations outside County government will play an essential role in the implementation of the Plan. As these agencies look for public input, the Dale Community Plan will be available as a clearly articulated vision of the direction the community desires to go.

Community monitoring of Implementation

The Community Planning Process has established a healthy dialogue among local residents concerning the future of the community. A number of citizens have thus far been involved in planning discussions. Dale has always been characterized by active citizen involvement, and this should continue to be standard policy. The planning process will affect everyone in the community, and everyone should contribute to planning decisions. The Dale Community Plan Implementation Tracking Chart (Appendix A, included in the back pocket) provides a way to easily check the status of the implementation of the plan. For each action proposed in the plan, the chart lists the contact, the estimated cost, the current status and comments. This chart will be updated by the Dale CP group, as the status of the projects change and as new information is available.

CONCLUSION

The purpose of planning is implementation. The Dale Community Plan identifies the overall development needs in Dale, the tasks involved in addressing them, the various parties who should perform these tasks, and the level of participation sought from these parties. The Dale community group should continue to advocate for themselves, their community and the plan. The ultimate success of the Dale Community Plan will be determined, in large part by the collective efforts of this group, along with Beaufort County Council, the county administrator, the planning department, and concerned citizens in general.

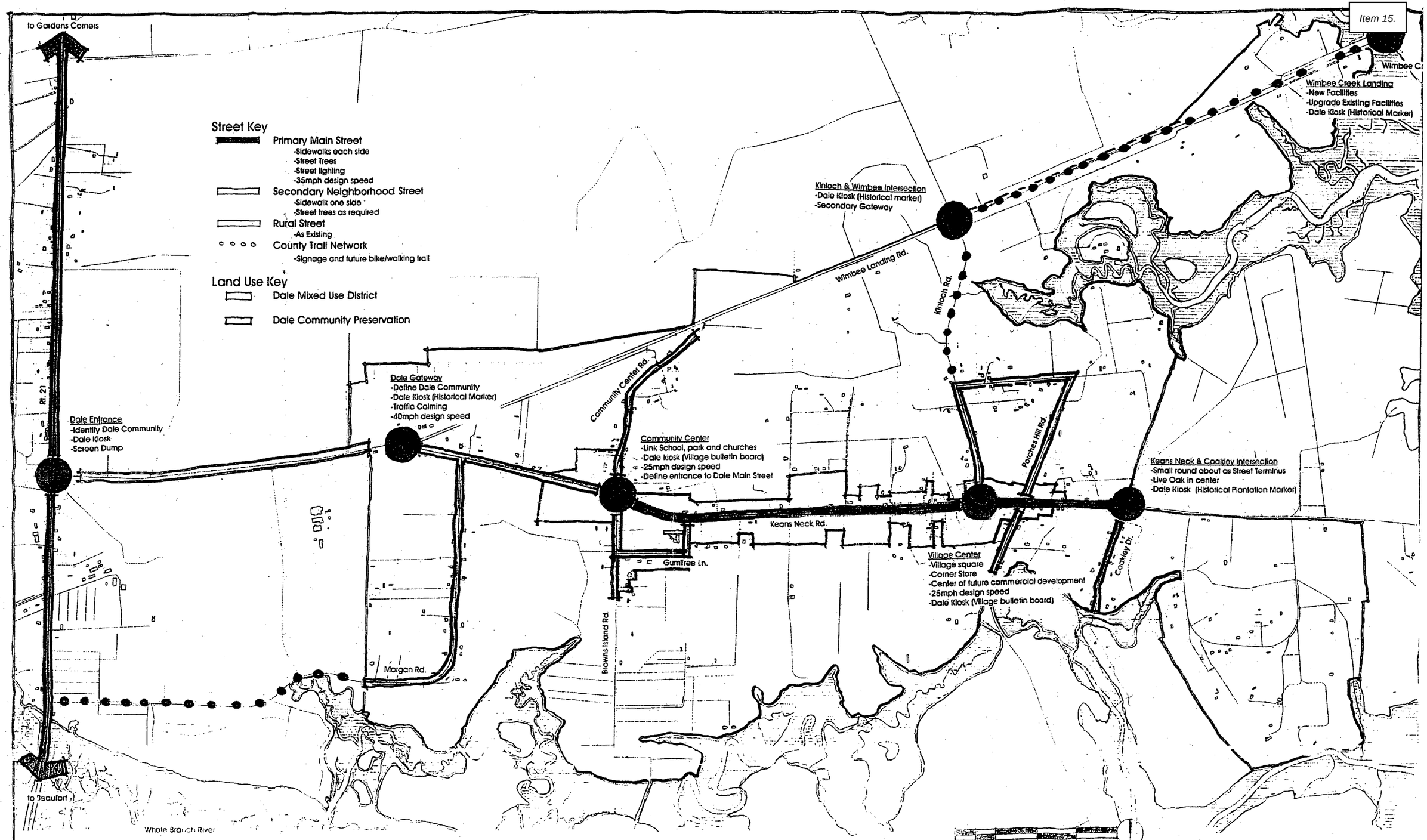


Dale Community Plan

Beaufort County, South Carolina

Studio 3 Architects

Existing Conditions / Site Analysis

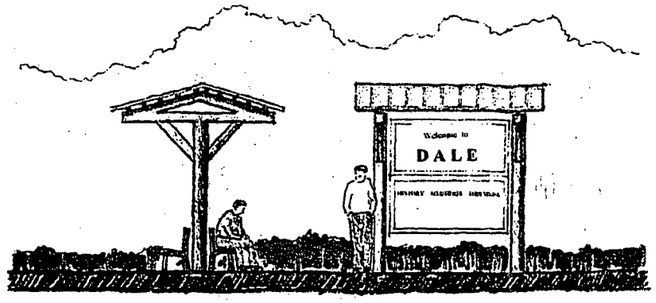


Dale Community Plan

Beaufort County, South Carolina

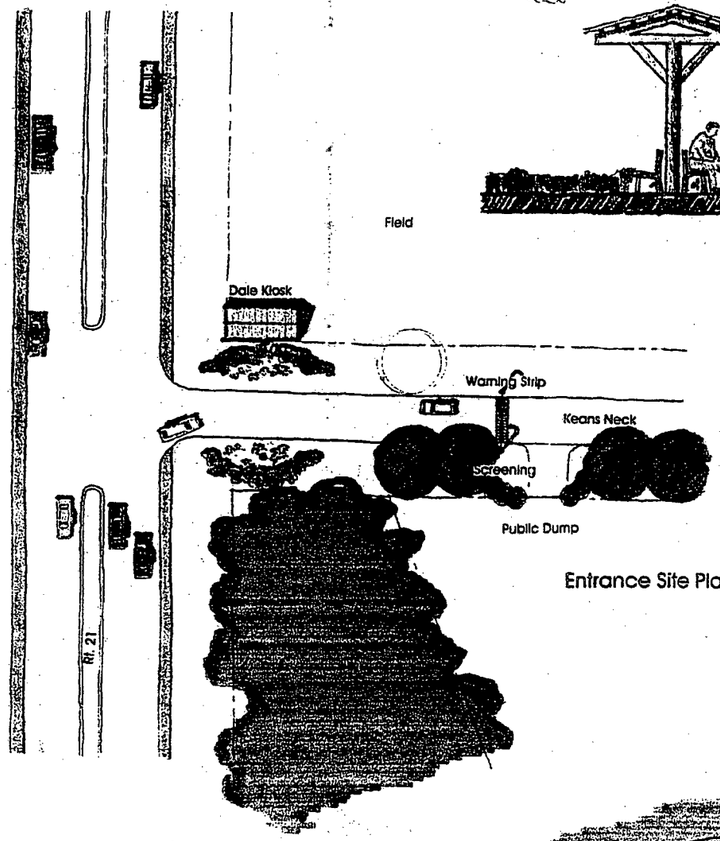
Studio 3 Architects

Master

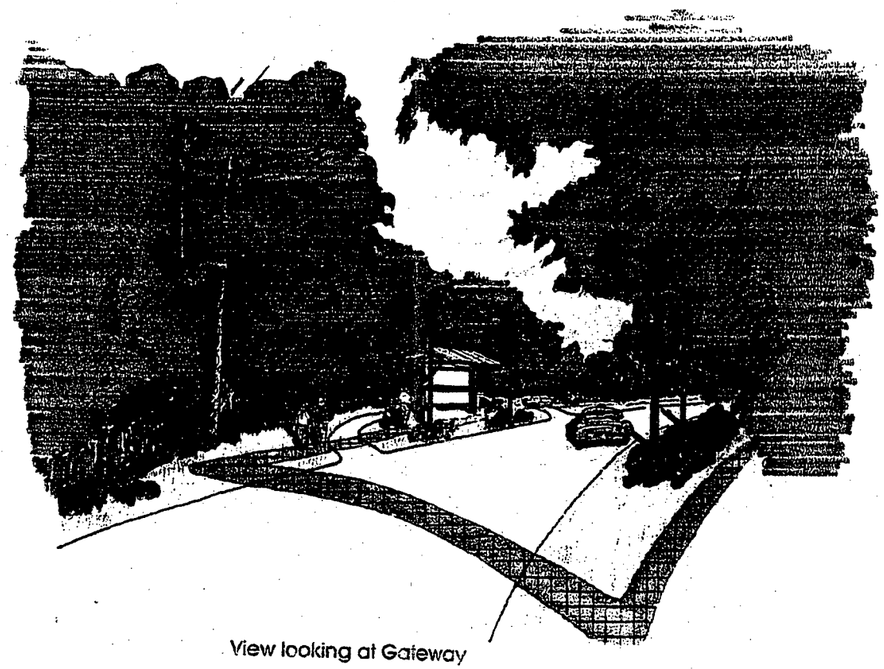


Field

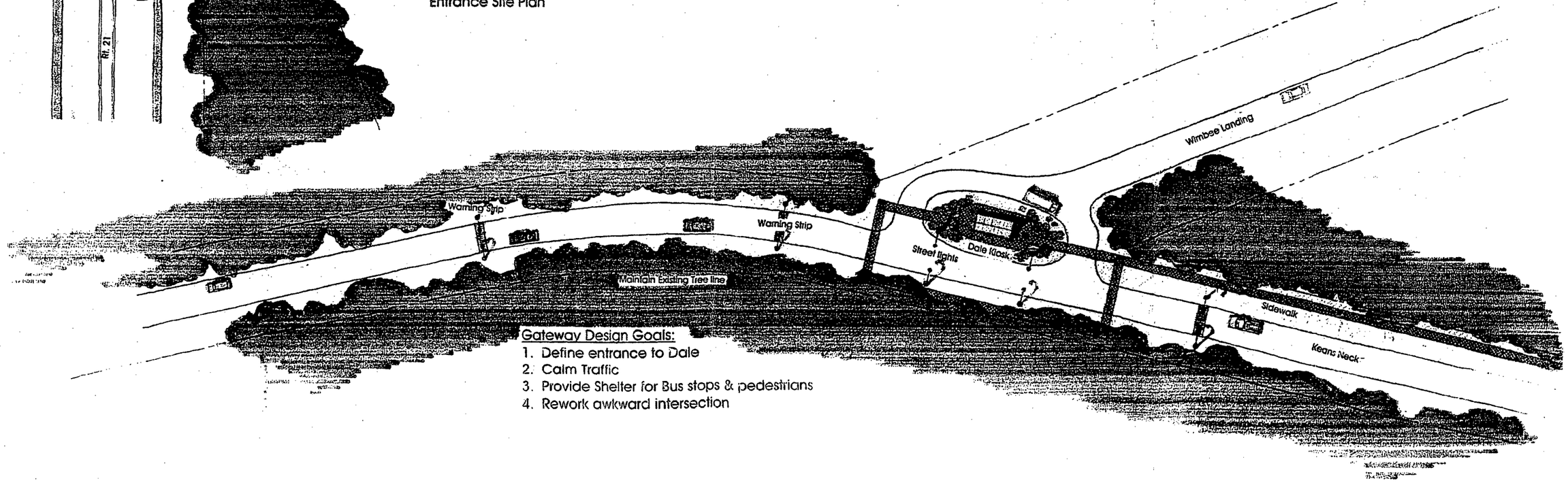
Dale Kiosk



Entrance Site Plan

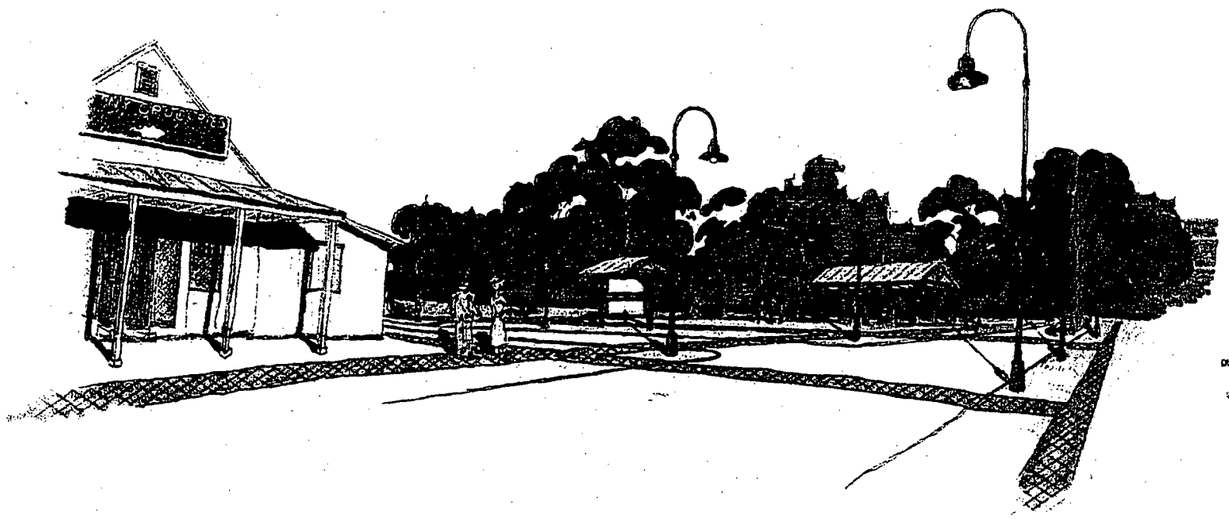


View looking at Gateway

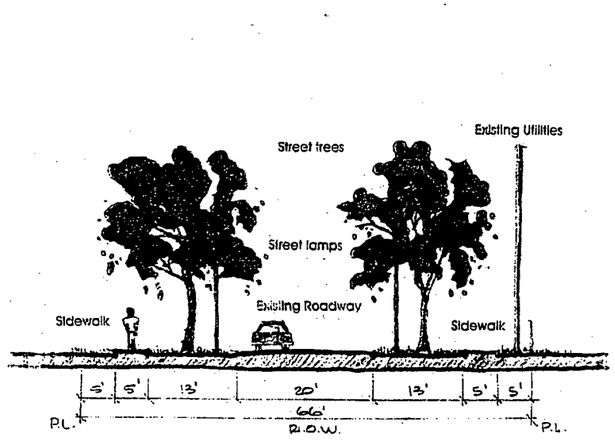


Gateway Design Goals:

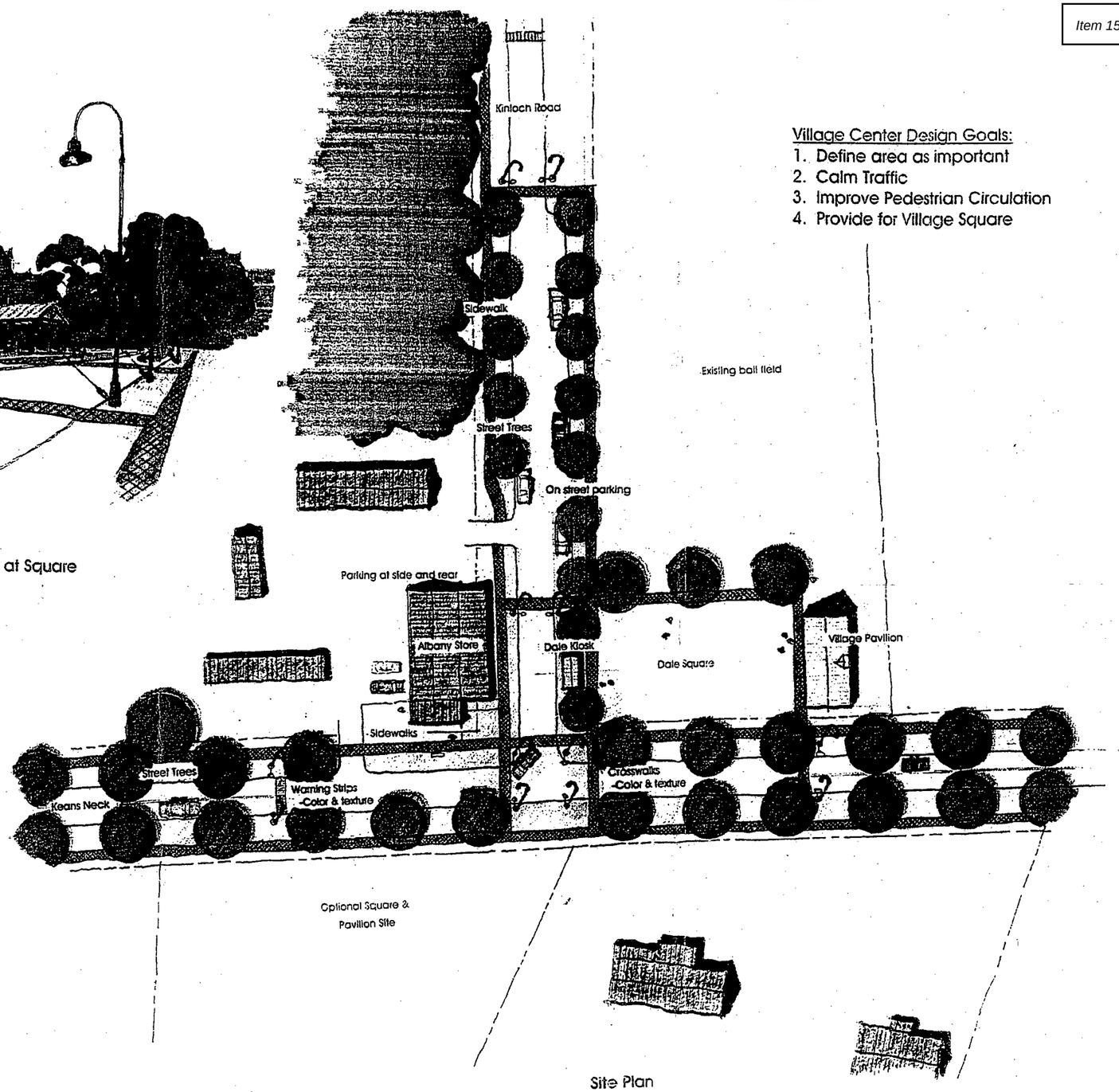
1. Define entrance to Dale
2. Calm Traffic
3. Provide Shelter for Bus stops & pedestrians
4. Rework awkward intersection



View looking at Square



Keans Neck Street Section



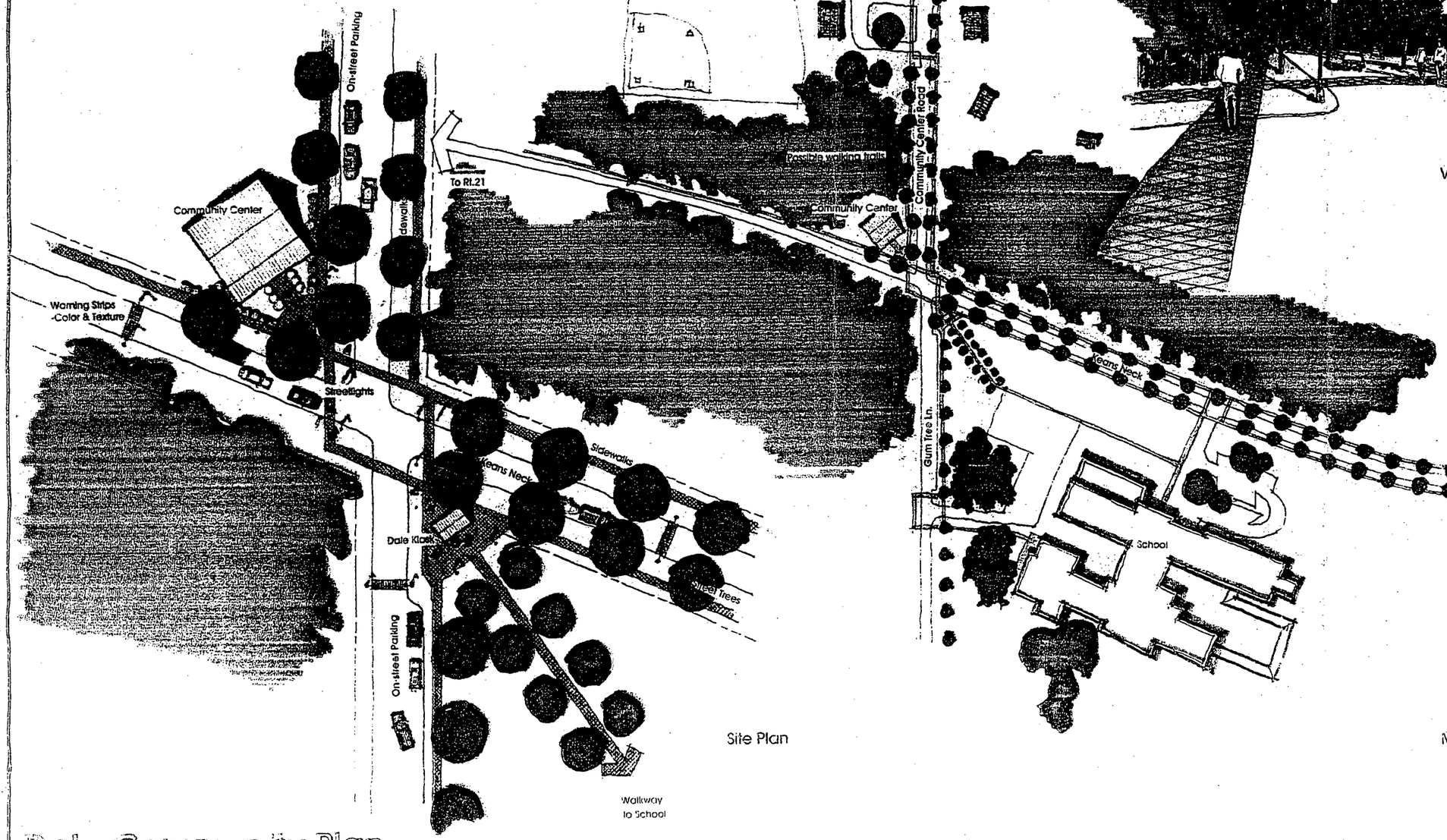
Site Plan

Village Center Design Goals:

1. Define area as important
2. Calm Traffic
3. Improve Pedestrian Circulation
4. Provide for Village Square

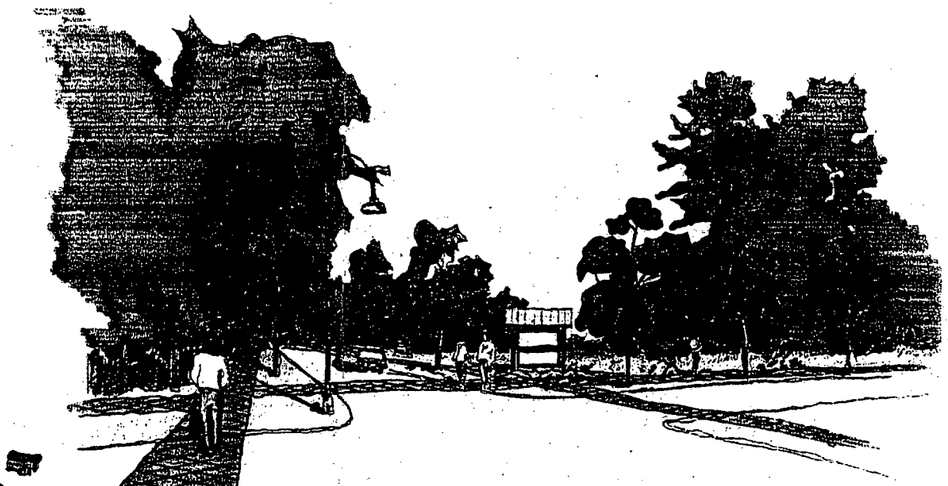
Community Center Design Goals:

1. Define area as important
2. Improve access to School
3. Connect park to School & Community
4. Rework intersection for better pedestrian access



Site Plan

Master Plan



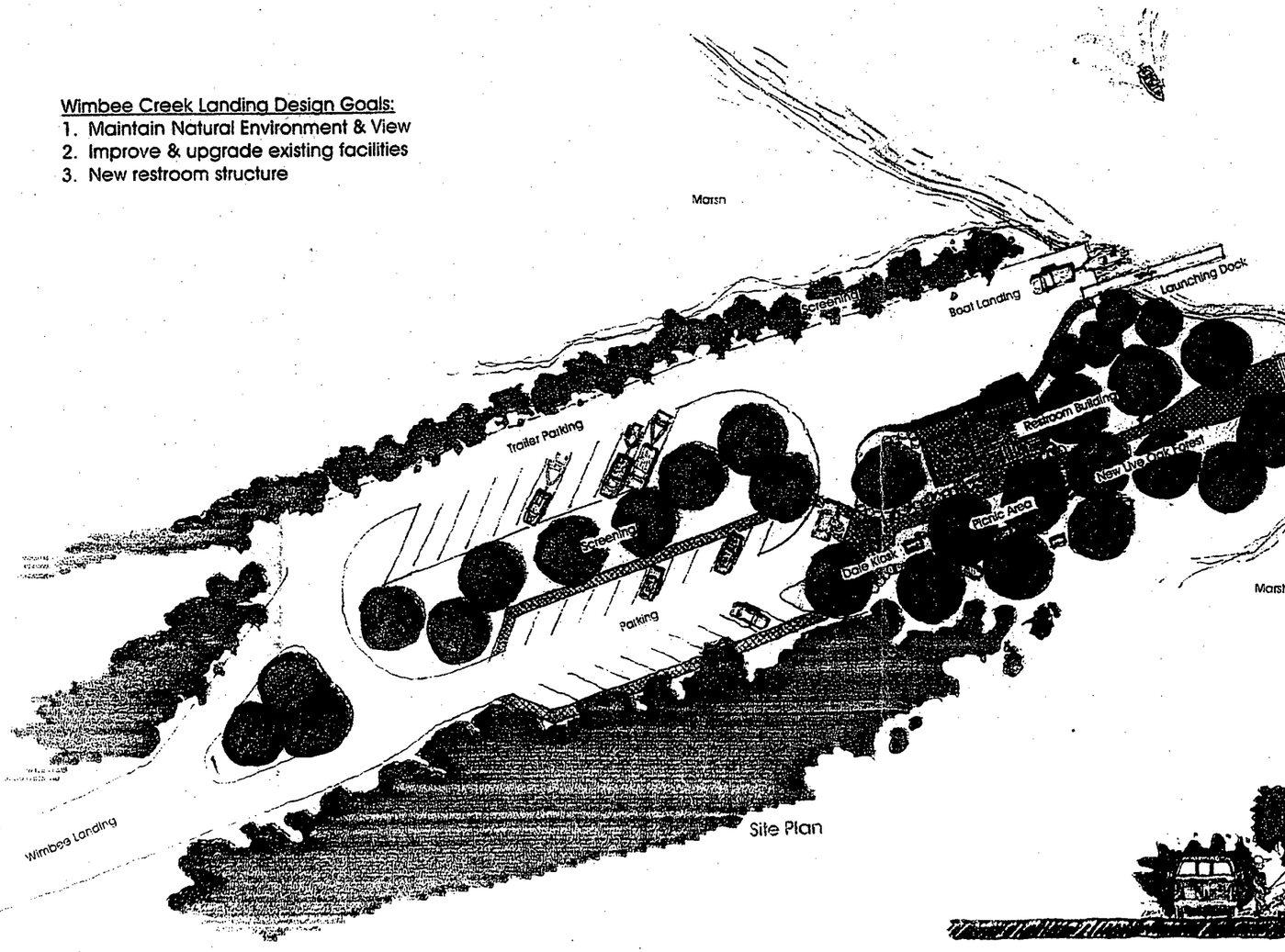
View at Intersection looking at the School



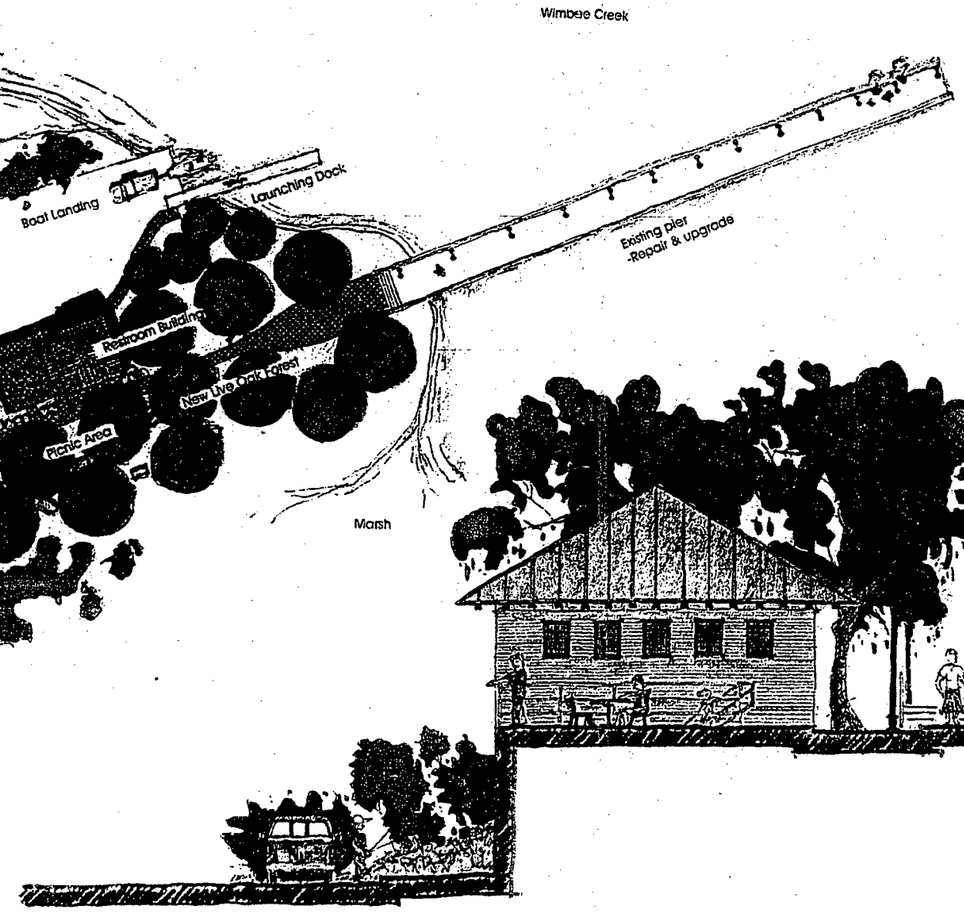
Riverside Elevation

Wimbee Creek Landing Design Goals:

1. Maintain Natural Environment & View
2. Improve & upgrade existing facilities
3. New restroom structure



Site Plan



Section at Building

2002/9

AN ORDINANCE OF THE COUNTY OF BEAUFORT, SOUTH CAROLINA, TO ADOPT AN ADDITION TO THE BEAUFORT COUNTY COMPREHENSIVE PLAN OF 1997.

BE IT ORDAINED that County Council of Beaufort County, South Carolina, hereby adds to the Beaufort County Comprehensive Plan of 1997, enacted by Ordinance 97-33, a new Appendix F entitled St. Helena Corners Area Community Preservation Plan.

Adopted this 25th day of February, 2002.

COUNTY COUNCIL OF BEAUFORT COUNTY

BY: _____
Thomas C. Taylor, Chairman

ATTEST:

_____
Suzanne M. Rainey
Clerk to Council

REVIEWED AS TO FORM:

_____
Kelly J. Golden, Esquire
Staff Attorney

First Reading: January 28, 2002
Second Reading: February 11, 2002
Public Hearing: February 25, 2002
Third and Final Reading: February 25, 2002

Amending 97/33

St. Helena Island
THE CORNERS AREA PLAN

HISTORY

"In the 1520's a ship from Spain traveled up the marsh strewn coast of the Atlantic and the crew breathed in the clean salt filled air. As Francisco Gordillo looked out over the land and sea, his eyes captured a scene of beauty. This reminded him of a saint, Santa Elena, so he decided to name this place for her, 'Punta de Santa Elena.' This area went from Edisto, South Carolina to Savannah, Georgia and was surrounded by St. Helena Sound, the Combahee River, the Savannah River, and the Atlantic Ocean." (Goodwine p. 1-2)

The beauty of St. Helena Island continued to impress visitors for many years as they arrived on this Sea Island, which is the last of the viable Gullah/Geechee communities in the Sea Island chain. This island is well known as the home of many historic people and places. From some events on the island, visitors have often heard these words:

"Oh, none in all the world before
Were ever as glad we!
We're free on Carolina's shore,
We're all at home and free.

Thou Friend and Helper of the poor,
Who suffered for our sake,
To open every prison door,
And every yoke to break!

Bend low Thy pitying face and mild,
And help us sing and pray;
The hand that blessed the little child,
Upon our foreheads lay.
We hear no more the driver's horn,
No more the whip we fear,
This holy day that saw Thee born
Was never half so dear.

The very oaks are greener clad,
The waters t smile;
Oh, never shone a day so glad
On sweet St. Helena's Isle.

We praise Thee in our songs today,
To Thee in prayer we call,
Make swift the feet and straight the way
Of freedom unto all.

Come once again, O blessed Lord!
Come walking on the sea!
And let the mainlands hear the word
That set the island free!
[Saint Helena Hymn by John Greenleaf Whittier*]*

Freedom has been something that people long sought on St. Helena Island. The first days of freedom when the Cusabos, Dataws, and others had this island as their homeland. They later shared this homeland with enslaved Africans who would later be known as "Gullahs" and "Geechees." Yes, but these who were enslaved would also know this as a place of freedom and make it home!

The guns sounded for the beginning of the Civil War sending the European people that had enslaved the Africans on these islands to seek refuge in other places. "Since the 'owners' of the land had abandoned St. Helena and the surrounding area, they were not around when it came time for land to be auctioned due to unpaid taxes. After much ado over whether or not former 'slaves' should be allowed to bid and what price would be reasonable for the Gullahs and Geechees. 'On March 9, 1863, exactly one year after the arrival of the Gideonites at Beaufort the first land sales took place.' (Rose 214) 76,775 acres were put up for sale of which 16,479 were bought by individuals and the rest was allotted to the government.

The average price that individuals paid was $1 per acre. 'Several plantations, about 2,000 acres of land, were purchased cooperatively by Negroes, who by pooling their small savings were able to preserve their right to live and work on their own places.' (Rose 215) This was the beginning of 'true' independence for St. Helena's Gullahs and Geechees." (Goodwine p. 38-39)

In seeking to protect such independence and culture and to encourage its continued existence, a Cultural Protection Overlay District (CPO) was established as a part of the Zoning District Standards Ordinance. This district serves to:

> "The Cultural Protection Overlay (CPO) District is established to provide opportunities to protect natural and/or natural resources found on St. Helena Island. The Comprehensive Plan provides "actions" to be undertaken, which would prevent rural gentrification and displacement of residents. The intent of the CPO District is to protect St. Helena and the Gullah culture from encroaching development pressures. Rapid in-migration would substantially alter the traditional social and cultural character of this area, as new residents represent different values and customs. The gentrification of the island would result in a greater demand for urban services and eventually to the urbanization of the island. This can be particularly acute on St. Helena Island where maintaining the traditional lifestyle becomes cost prohibitive because of the value of land for development.
>
> The CPO District provides additional zoning and development standards based on meeting the following criteria:

- The omnipresence of an ethnic heritage
- Historic structures, settlements, and land use patterns
- Archeological sites
- Significant cultural features and sites"

Many now come to St. Helena Island to dwell there and appreciate its natural and historic beauty. The uniqueness of St. Helena is in its community. "Anyone can live on land, but it is different when the spirit of the land lives in the person. Those who are proud Gullah/Geechee islanders of St. Helena have the land in them along with 'Gawd.' They celebrate the land, the language, the heritage, the community, the family, 'ourstory,' and their survival on a daily basis." (Goodwine p. 51)

One place that St. Helena Islanders have always celebrated their culture and community is the Corner Area Community of the island. In this area exist a number of historic buildings that have changed ownership over the years, but have never ceased from being major points of gathering and community empowerment. Thus, the Corner Area is definitely a place that should be preserved.

The Corner Area Community Preservation District encompasses the Corner Community, the eastern portion of the Fuller Community, and the western portion of Indian Hill. Hence the name "Corner Area" instead of simply the "Corner CP District." All three of the communities have unique stories of their own. Indian Hill has its name due to the Native American mound that many St. Helena Island natives recall playing on as they grew up. The Fuller Community was one of the many rice plantations on St. Helena Island in its hey day.

The Corners Area is seen by all that venture to St. Helena Island. However, even as many journey through it to head to the Penn Center Landmark Historic District which is next to the Corners Area Community Preservation District, they are not aware of the history that they drive by, through, and over. In the Corner Community there are several National Historic Register Sites including:

- Dr. York Bailey's House
- The Green which has been renamed "Dr. Martin L. King Memorial Park"
- Packing Shed
- Knights of Wise Men Hall
- Corner Store
- Bishop Store

The stories of these buildings and grounds and what they mean to the community cannot be truly felt from the written text. Why the old oak trees have their long Spanish beards and why Old Polowana Road serves as a community landmark can be felt in the interactions of the people of St. Helena. Thus, the Corners Area Community Preservation District has been designed to encourage the continued sustainability of the story of this rich island and to have it always be told through the people.

The Corners Area Community Preservation District is designed as a pedestrian friendly district with a Public Market District in the center of it. As visitors journey to St. Helena Island, the Corners Area Community Preservation District is a place where they will have a chance to interact with the people that actually preserve the community through history, business, crafts, and the unique heritage of the Gullah/Geechee community.[1]

Written by Marquetta L. Goodwine

PURPOSE

The Corners Area Plan is designed to serve as a general guide for the development of the community. It addresses land use, historic and cultural preservation, recreational opportunities, traffic circulation and design. As a policy document, appended to the County's Comprehensive Plan, this plan is to be used to guide zoning, subdivision, facilities funding and design, and community development decisions made by government officials and agencies. The Corners Area Plan serves as a foundation and the structure upon which more detailed policies, standards and master plans may be developed.

PROCESS

In 1999 The Corners Area Community Preservation Committee of 12 members, representing the St Helena community was charged with reviewing planning issues; defining a vision; formulating standards for residential and commercial development and developing techniques for historic and cultural preservation for the Corners Area. Significantly, this group provided a critical sounding board for proposals and contributed countless hours of input over the course of about 140 meetings. The solutions to the issues, which this plan analyzes, have emerged as a result of a continuing dialogue with a wide range of participants. To assist the Corners Area CP Committee in its deliberations during its 2-1/2 years of involvement, the Committee sponsored a series of community forums and organized a community workshop. The goal and activities represent the creativity of St Helena residents.

Listed below are the goals and actions derived from the many issues debated during the development of the Corners Area Plan. The Plan reflect what residents believe will help to build the community and preserve the areas culture. Through the planning process the committee identified several

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[1] Cited materials:

Gullah/Geechee: The Survival of Africa's Seed in the Winds of the Diaspora Volume I: St. Helena's Serenity ©1995 by Marquetta L. Goodwine

Rehearsal for Reconstruction: The Port Royal Experiment ©1976 by Willie Lee Rose

important issues to be addressed, each related primarily to the issue of growth and land use.

The fundamental question was how to accommodate growth while maintaining the character of the community and preserving the culture, especially as this process relates to the CPO District. Specifically the Committee had concerns about the following:

1. What mix of land uses and development densities are desirable?
2. What kinds of businesses are most appropriate and where should they be located?
3. What improvements should be made to MLK Park?
4. The nature of Highway 21 through the Corners Area
5. How to preserve the history of the Corners Area

These issues were all addressed within the framework of keeping in line with the rural character of St. Helena Island and preserving the Gullah/Geechee culture.

GOALS AND ACTIONS

COMMUNITY IDENTITY AND DESIGN

Goal: To make St. Helena's unique cultural heritage central to the development of the Corners Area and ensure that new development respects the rural and historic character of the area.

Actions:

- Integrate, rather than isolate, housing, shops, workplaces, and public uses that are all essential to the daily life of St Helena's residents.

- Establish design standards that visually and functionally enhance the Corners Area and promote walkable roads for interaction amongst community members and island visitors.

- Develop standards that prevent new buildings from dominating the community's historic structures. The footprint of new buildings visible from Highway 21 can be no larger than 5,000-sq. ft., excluding porches; building height can be no greater than 35 feet and two stories.

- Preserve valuable natural features and scenic features, such as oaks, waterways and canopy roads within the Community Preservation Area.

- Clearly, define the CP boundaries to distinguish between commercial areas and the surrounding rural and agricultural areas.

- Develop appropriate building design and parking strategies. Shared or community parking areas are encouraged.

- Encourage building design and architecture that create visual interest and public open space along roads, maintain an attractive rural environment, and promote informal surveillance of public spaces by building occupants.

- Encourage building design and architecture that emulate the Corners Area building traditions.

- Develop unique sign standards for the Community Preservation Area

GENERAL LAND USE

Goal: To reinforce the Corners Area's importance as the community's historic, cultural, and civic heart, by proactively encouraging a mixture of compatible commercial, residential, civic and recreational uses to increase community interaction and gathering opportunities.

Actions:

- Verify that proposed development standards advance the goals of the Cultural Protection Overlay District.

- Limit permitted commercial use size, scale and type to encourage service mainly to St. Helena residents.

- Establish a minimum setback standard that permits buildings to be built close to the road. This slows traffic and creates a pedestrian friendly public space.

- Develop a Public Market District within the Corners Area Community Preservation District. Its purpose is to create a pedestrian-friendly commercial center that retains the character of a rural crossroads, with open green spaces, scenic vistas, a minimum of asphalt paving, preserved historic structures, and community gathering places.

- Limit the amount and visibility of parking from Highway 21.

- Limit residential use to single-family units, duplexes and commercial apartments. Allow accessory dwelling units.

- Acquire land within the Public Market District suitable and sufficient for the development of a public library and additional public service facilities.

ECONOMIC VIABILITY

Goal: To create conditions that allow and promote programs that foster entrepreneurial opportunities for St. Helena residents.

Actions:

- Broaden the diversity of goods and services offered to and by St. Helena residents to prevent local sales from "leaking" to surrounding communities.

- Provide an open and inviting business climate for local businesses.

- Promote the retention of existing businesses and the attraction of new local businesses that will serve the St. Helena Community.

- Promote the expansion and enhancement of economic informational resources.

- Promote diverse employment opportunities that support local residents and enable residents to live and work on St Helena.

- Reserve adequate land to accommodate commercial development, sufficient to meet the needs for goods and services for the island and to create jobs.

- Support efforts and investment to upgrade the physical appearance of the Corners by:
  a. Developing design criteria to unify the Corners;
  b. Promoting pedestrian circulation through the area;
  c. Establishing standards for walking paths; and
  d. Defining standards for attractive and adequate parking facilities.

ROAD DESIGN

Goal: Develop guidelines for road designs that meet travel demands but also create a safe and pleasant walking environment.

The road design should "calm", or slow, traffic in the Corners Area through a variety of techniques that have the effect of slowing through traffic, without compromising safety, emergency access, and reasonable flows. Examples of traffic slowing techniques include narrow traffic lanes, changes in road texture to reduce speed and pedestrian crosswalks.

Actions:

- Encourage proper planning for movement of goods to commercial properties. Connector roads that provide access to commercial development shall be designed to accommodate commercial vehicles.

- Retain certain roads as unpaved roads in order to preserve their particular character and beauty. Specifically, preserve the vista down Old Polawana Road, all buildings there must be set back an appropriate distance, with a vegetative screen that makes them invisible from U.S. 21.

- Monitor conditions at key intersections and identify needed improvements to maintain acceptable levels of service and/or safety.

- Provide opportunities for St. Helena residents, visitors and employees to circulate about the Public Market without total reliance on the automobile.

- Develop design criteria for road crossings, signage, building material and building placement.

- Develop design standards for the enhancement of parking lots, which should include (but are not limited to):
  1. placing parking lots away from streets;
  2. requiring landscaping and shade trees; and
  3. defining appropriate heights and design of lighting along pedestrian walkways and roads, and adjacent to residential uses.

- Modify existing ordinances and develop design standards to minimize the size of parking lots. Strategies that should be considered include, but are not limited to:
  1. sharing parking among nearby uses; and
  2. designing for regular parking demands rather than peak periods (e.g. Heritage Days events).

HISTORIC PRESERVATION

Goal: Preserve the cultural resources of the Corners Area

Actions:

- Identify and preserve significant cultural or historical sites or structures within the Corners Area.

- Promote public awareness of and support for historic preservation, and encourage both visual and physical access to historic properties, whenever appropriate.

- Continue to encourage efforts, both public and private, to preserve the Corners historical and cultural heritage. Property owners should be encouraged to nominate eligible properties for listing in local, state, and federal registers of historic places. As part of this program, owners of eligible historic properties should be informed of State and federal preservation programs and ways to participate in tax incentive programs for historic restoration.

- Encourage the reuse of architecturally interesting or historical buildings in a manner that preserves their historic architectural merit.

- Encourage programs that advance public education efforts regarding the history and heritage of St. Helena.

IMPLEMENTATION PROGRAMS

The time and effort spent in producing this Plan is worth nothing without implementation. It is implementation and agreement on methods of implementation that will bring the Plan to life and initiate an evolution of activity that will move the Corners Area community toward the fulfillment of its goals. This section outlines the activities that must be pursued to carry out the Plan.

Preparation and adoption of the Plan is a beginning step in its implementation. Its basic purpose is to provide a guide for specific action. The Implementation Plan identifies techniques, strategies, and methods for carrying out the recommendations contained in the Corners Area Plan. The major implementation processes described include the Corners Area Community Preservation Land Development Standards, the County's Capital Improvement program, the annual review and update process, general plan update and specific implementation program.

CORNERS AREA COMMUNITY PRESERVATION LAND DEVELOPMENT STANDARDS

The Corners Area Community Preservation Land Development Standards is a regulatory tool used to define districts within the Community Preservation Area for the purpose of controlling and guiding land use and development. These standards are the primary instrument for implementing land use policies. The County's review and adoption of the land development standards are important first steps in plan implementation.

CAPITAL IMPROVEMENTS PROGRAM

Another tool for implementing the plan is the Capital Improvements Program (CIP), which establishes schedules and priorities for all public improvement projects within a five-year period. The County first prepares a list of all public improvements that will be required in the next five years, including transportation and community facility projects. Then all projects are reviewed, priorities are assigned, cost estimates prepared, and potential funding sources identified.

The CIP typically schedules the implementation of a range of specific projects related to the Comprehensive Plan and Community Plans, particularly the restoration and upgrading of existing utilities and infrastructure facilities. Construction of public facilities and infrastructure is an important link between the development of Corners Area and the implementation of the Corners Area Plan. Based on an annual review, the CIP shall be reexamined for consistency with the goals and actions of this Plan. The CIP shall also be revised to include projects identified within the Corners Area Plan. In this way, the CIP serves as a financial planning document as well as a physical-planning document. It permits the construction of improvements identified in the Corners Area Plan.

The five-year CIP shall be used to enable the implementation of the Corners Area Plan policies in a manner which is consistent with the goals and actions

identified. The CIP can also be used to implement growth strategies in the Corners Area Plan by locating and programming public facilities and infrastructure for lands within the approved Corners Area Community Preservation area. Finally, by stipulating the desired community projects and improvements, the Corners Area Plan provides the guide for desirable public facilities and services.

ANNUAL REVIEW

To insure timely implementation of the Corners Area Plan, it shall be reviewed annually in accordance with Section B.3.of the Comprehensive Plan (pp. 13-14). The annual review process provides an opportunity to update and refine the policies expressed in the Corners Area Plan and to monitor and evaluate the progress of the implementation strategies and programs incorporated therein. This process is the vehicle by which the county, private property owners, developers, community groups or individual citizens request changes to the goals and actions of the Corners Area Plan. The review and amendment process includes citizen participation, through community meetings to familiarize Corners Area residents with the amendment proposals and at formal public hearings before the Planning Commission and County Council. The county's administration department along with the lead departments identified in Table 1 is also responsible for monitoring the implementation of the Corners Area Plan.

GENERAL PLAN UPDATE

The Corners Area Plan reflects a ten-year planning period. This period allows for the systematic implementation of desired projects, land use patterns, and installation of required public improvements. To provide for flexibility and responsiveness to change, the Plan also should be comprehensively reviewed and revised, if appropriate, at four-year intervals. This periodic update enables the Plan always to maintain at least a 10-year time frame.

The update of the Plan in not synonymous with total revision. Once adopted, the Plan establishes a basic policy framework that must be followed over time. The purpose of reviewing the Plan at intervals is to allow it to adjust to changing conditions, the availability of more recent planning data, and shifts in community values. When revisions to the Plan are proposed, Corners Area residents and property owners should be invited to participate in the formulation of the changes.

IMPLEMENTATION ACTIONS

1. IDENTIFY GRANTS
   Federal and State grants-in-aid are available to assist with land use planning, facility improvements, historic preservation and other services and improvements. Coordinating grant proposals with the Plan directives is a positive step toward accomplishing the Plan's goals. Most grants require matching funds for the receiving municipality. The County's contribution may

be met by in-kind contributions from various departments and also through departmental budgets. Additional sources for funding are:

(A) ***Community Development Block Grant*** *(CDBG)* The Community Development Block Grant Program is funded by the U.S. Department of Housing and Urban development and provides assistance for programs and projects directly aimed at the type of projects identified in the Corners Area Plan. The Community Development Block Grant funding is allocated on an annual basis and can be uses for a variety of projects contemplated in The Corners Area Plan.

(B) ***Beaufort County Transportation Committee(C Funds)*** This funding source is generated from gasoline sales tax funds appropriated to the county from the state and administered by the Beaufort County Transportation Committee. Permitted projects includes road paving, sidewalks, curb improvements, walking paths, bus shelters and road signage. Projects other than road paving projects require a "special project application" which are accepted once every three years.

(C) ***The Beaufort County Tree Fund.*** Funds generated from projects where the Development Review Team determines that the required replacement of trees is not feasible or not desirable, such reductions are subject to a general forestation fee. The funds collected through this forestation fee may be used by the County to plant trees and other landscaping in roadways medians such as those identified in the Corners Area Plan.

(D) ***The Land Preservation Board.*** This advisory board was established to protect rural and critical lands through the Purchase of Development Rights, voluntary programs and other mechanisms. The Board is mandated to establish criteria and ranking system to rank land parcels, which are approved by County Council. Beaufort County currently levies and designates 2 mills in ad valorem taxes in order to acquire land for conservation, farmland protection and open space preservation. The County Council has authorized the County to issue 40 million dollars in general obligation bonds to acquire lands for preservation and retire the bond debt.

(E) ***A-TAX FUNDS*** These are the tax accommodation funds, which are granted to various projects once per year. These funds are taken from the money spent on hotels and restaurants and then used for community projects in the county. The funds can be applied for through Beaufort County.

(F) ***SURVEY AND PLANNING AND DEVELOPMENT GRANTS*** The "Survey and Planning Grant" as well as the "Development Grant" are

available once a year through the South Carolina Department of Archives and History. The first grant is provided to historic buildings for projects involving surveying, restoration, and maintenance of them and their grounds. The latter is provided for community projects that focus on developing a particular project for a community in South Carolina. The project can include producing a report or pamphlet for the community. Given that historic structures in the Corners Community are on the National Register of Historic Places, projects that relate to them are eligible for these two grants.

2. PRIORITIZE PROJECTS & ADD TO CIP

Table 1 summarizes the implementation actions recommended in The Corners Area Plan. In addition, the projects are prioritized, a responsible department is assigned and the timing for implementation of the specific action is noted.

3. SCHEDULE IMPLEMENTATION

The implementation of the Corners Area Plan will be monitored. Some items are expected to be completed quickly. For others, especially those items that need additional funding, it may be harder to schedule a firm completion date. Nevertheless, the status of every item proposed in the Plan will be tracked. A check date, if not a completion date, will be set for each item. This tracking chart will be updated regularly, as more information becomes available and as the status of each project changes. An update report is scheduled for the Fall of 2002 to summarize the overall implementation status of the plan's recommendations.

4. COMMITMENT and SUPPORT

While the Corners Area Plan provides the framework for community development, the everyday action of the County shapes the community. The manner in which the Plan is implemented is the real test of the County's commitment to the goals, objectives, and policies.

By adopting the Plan, the County Council will demonstrate the County's commitment to the implementation of the Plan. However, every action item listed in this plan will require separate and specific implementation. Adoption of the Plan does not begin the implementation of any item. The implementation will require specific actions by the Corners Area community, the County and other agencies. The Plan will be supported and implemented by:

- County Boards, Commissions and Staff
- County Budgets
- Capital Improvement Projects
- Other Agencies and Organizations
- Direct Community Action

County Boards, Commissions and Staff

The numerous boards and commissions of the County will look to The Corners Area Plan when they need guidance about the neighborhood. The Planning Commission will already know if a proposed zoning change in the Corners Area CP area is appropriate and supported by the residents and businesses of the community. Additionally, County staff will use the Plan as a guidance document for review of projects and programs.

Department Budgets

Each year every County department puts together a budget that states the department's priorities for the coming year. By bringing the strengths and desires of the community to the attention of County departments, the Corners Area Plan will help them prioritize those projects that help safeguard the community's assets while addressing its needs. Allocating dollars to certain programs and activities inevitably results in setting policy priorities which are critical to the implementation of the Corners Area Plan. The budget instructions to department heads shall require that proposed expenditures include reference to items in the Plan that will be implemented with the funds.

Capital Improvement Projects

There are many projects in the community that require major capital expenditure. In these instances, the guidance provided by the plan will be critical to guarantee the project will proceed in a fashion that keeps in mind the overall long-term interests of the community.

Other Agencies and Organizations

Other agencies and organizations outside County government will play an essential role in the implementation of the Plan. As these agencies look for public input, the Corners Area Plan will be available as a clearly articulated vision of the direction the community desires to go.

Community Monitoring of Implementation

The Community Planning Process has established a healthy dialogue among local residents concerning the future of the community. A number of citizens have thus far been involved in planning discussions. Corners Area has always been characterized by active citizen involvement, and this should continue to be standard policy. The planning process will affect everyone in the community, and everyone should contribute to planning decisions. The Corners Area Plan Implementation Tracking Chart (Appendix A, included in the back pocket) provides a way to easily check the status of the implementation of the plan. For each action

proposed in the plan, the chart lists the contact, the estimated cost, the current status and comments. This chart will be updated by the Corners Area CP group, as the status of the projects change and as new information is available.

CONCLUSION

The purpose of planning is implementation. The Corners Area Plan identifies the overall development needs in the Corners Area. The tasks involved in addressing them, the various parties who should perform these tasks, and the level of participation sought from these parties. The Corners Area CP committee should continue to advocate for themselves, their community and the plan. The ultimate success of the Corners Area plan will be determined, in large part by the collective efforts of this group, along with Beaufort County Council, the county administrator, the planning department, and concerned citizens in general.

Table 1

THE CORNERS AREA IMPLEMENTATION PLAN

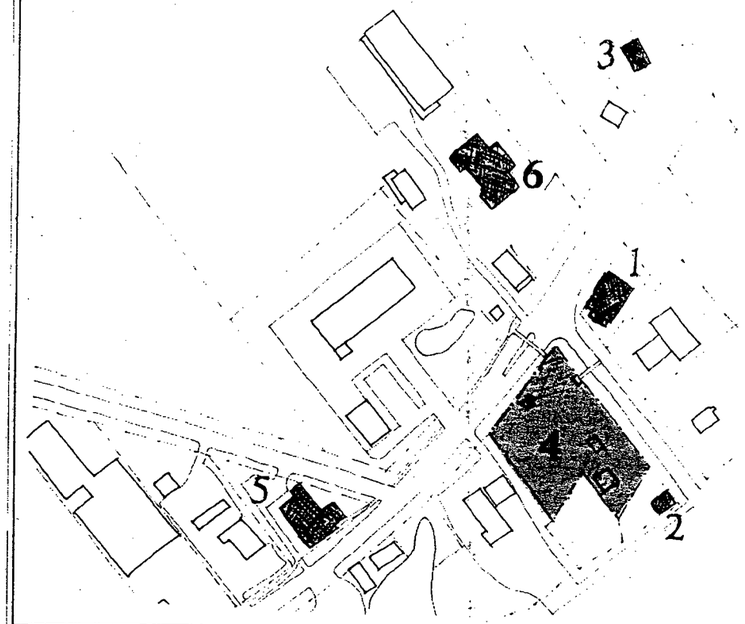
Activity	Priority	Time Frame (To begin implementation of item from adoption of Plan)	Cost Estimate	Implementor	Executive Response	Possible Funding Source
Land Acquisition for Library	H-1	0-I year	$800,000			
Entry Signage	H-2	0-2 year	$5,200 (4 signs at $1,300 each) Design & Professional fees $728.00			
Historical Markers	H-3	0-2 year	$4,600 (4 signs at $400 & 2 at 1,500 each) Design & Professional fees $644.00			
Improvements to Martin Luther King Jr. Park						
Community Board	M-4	0-3 years	$15,000 Design & Professional fees $2,100			
Flagpole	M-5	0-3 years	$3,000 Design & Professional fees $450.00			
Gazebo	L-6	0-5 years	$35,000 Design & Professional fees $4,900			
Bust of MLK Jr.	L-7	0-5 years	$13,000 Design & Professional fees $1,450			

Tota[illegible] Priority	$811,172
Tot[illegible]edium Priority	$20,550

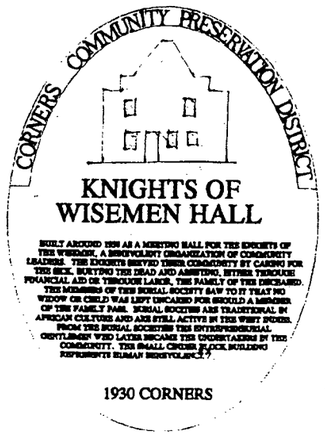
Total Long Term Priority	$54,350
Contingency 15%	$13,291
TOTAL	$899,363

HISTORICAL STRUCTURES

THERE IS A LOT OF HISTORY ON ST. HELENA ISLAND AND IN THE CORNERS COMMUNITY. IN THE IMMEDIATE CORNERS COMMUNITY, SIX STRUCTURES ARE EITHER ON THE NATIONAL REGISTER OR ARE BEING CONSIDERED.



SAMPLE PLAQUE



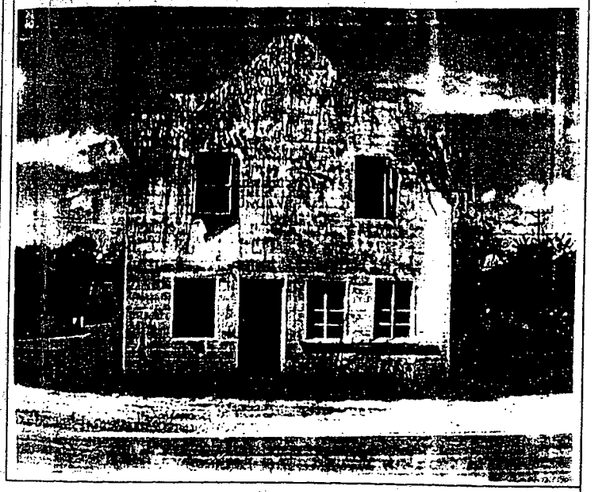
1. CO-OP STORE

BUILT AROUND 1940, THIS STRUCTURE WAS RENOVATED IN 1999. AFRICAN-AMERICAN LANDOWNERS AND FARMERS FOUNDED THE CO-OPERATIVE AFTER STUDYING LAND USE AND AGRICULTURAL TECHNIQUES AT PENN SCHOOL. THESE ISLAND LEADERS TRAVELED TO NOVA SCOTIA, CANADA WHERE THEY LEARNED ABOUT AGRICULTURAL CO-OPERATIVES FROM CANADIAN FARMERS. THE PURPOSE WAS TO PROVIDE A MARKET FOR THE ISLAND'S AGRICULTURAL PRODUCTS, AND TO PROVIDE, AT A REASONABLE PRICE, MATERIALS AND SUPPLIES TO AREA FARMERS. IT WAS THE FIRST AGRICULTURAL CO-OPERATIVE OF ITS KIND FOUNDED IN THE STATE OF SOUTH CAROLINA.



2. KNIGHTS OF WISEMEN HALL

BUILT AROUND 1930 AS A MEETING HALL FOR THE KNIGHTS OF THE WISEMEN, A BENEVOLENT ORGANIZATION OF COMMUNITY LEADERS. THE KNIGHTS SERVED THEIR COMMUNITY BY CARING FOR THE SICK, BURYING THE DEAD AND ASSISTING, EITHER THROUGH FINANCIAL AID OR THROUGH LABOR, THE FAMILY OF THE DECEASED. THE MEMBERS OF THIS BURIAL SOCIETY SAW TO IT THAT NO WIDOW OR CHILD WAS LEFT UNCARED FOR SHOULD A MEMBER OF THE FAMILY PASS. BURIAL SOCIETIES ARE TRADITIONAL IN AFRICAN CULTURE AND ARE STILL ACTIVE IN THE WEST INDIES. FROM THE BURIAL SOCIETIES CAME THE ENTREPRENEURIAL GENTLEMEN WHO LATER BECAME THE UNDERTAKERS IN THE COMMUNITY. THE SMALL CINDER BLOCK BUILDING REPRESENTS HUMAN BENEVOLENCE AND PLAYED A MAJOR ROLE ON THE ISLAND.



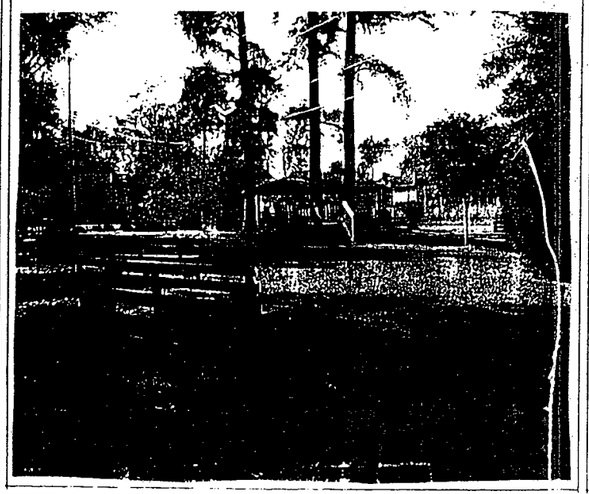
3. DR. YORK BAILEY HOUSE

BUILT BETWEEN 1915 AND 1920, DR. YORK BAILEY'S HOUSE REFLECTED THE ASPIRATIONS OF THE NATIVE ISLANDERS. A GRADUATE OF PENN SCHOOL AND HOWARD UNIVERSITY, DR. BAILEY WAS A PROMINENT CITIZEN AND LONG TIME TREASURER OF THE KNIGHTS OF THE WISEMEN LODGE (#15). HE WAS THE FIRST AFRICAN-AMERICAN PHYSICIAN TO RETURN TO ST. HELENA ISLAND TO PRACTICE MEDICINE. HIS ISLAND PRACTICE LASTED NEARLY FIFTY YEARS. PENN SCHOOL PRINCIPAL, ROSSA COOLEY, DESCRIBED HIS HOUSE AS "AN ACHIEVEMENT AND INSPIRATION TO ANY PENN SCHOOL BOY. IT STANDS BACK FROM THE ROAD WITH A NEAT WIRE FENCE AROUND IT, A LAWN PLANTED, AN ORCHARD IN THE REAR, AND A CONCRETE WALK TO THE STEPS."



4. MLK JR. MEMORIAL PARK

THE GREEN HAS BEEN THE TRADITIONAL OUTDOOR GATHERING SITE FOR THE COMMUNITY SINCE THE CIVIL WAR. PEOPLE WHO HAD LEFT THE ISLAND AND MANY OTHERS CAME TO ST. HELENA TO CELEBRATE SPECIAL HOLIDAYS SUCH AS EMANCIPATION DAY, MEMORIAL DAY,LABOR DAY AND THE MOST POPULAR DAY OF ALL, INDEPENDENCE DAY (FOURTH OF JULY), ON THE GREEN. MISSIONARY DR. J. M. HAWES WROTE TO HIS WIFE, " WE HAD A GREAT CELEBRATION ON THE FOURTH, FIRST AT 6AM THE PEOPLE RAISED A BIG FLAG... THERE THEY HAD A REGULAR BARBEQUE. A BEEF WAS KILLED AND ROASTED A LA MODE SOUTHERN. IN THE PM DANCING COMMENCED AND WAS KEPT UP THE REST OF THE DAY. OUR SUPERINTENDENTS AND SCHOOLMASTER AND AN OFFICER JOINED IN THE DANCE."



5. CORNER STORE

BUILT IN 1877 DURING THE VICTORIAN PERIOD, IN THE QUEEN ANNE REVIVAL STYLE, BY JAMES ROSS MC DONALD, A NATIVE OF PROVIDENCE R.I. WHO CAME TO SOUTH CAROLINA BECAUSE OF HIS HEALTH.

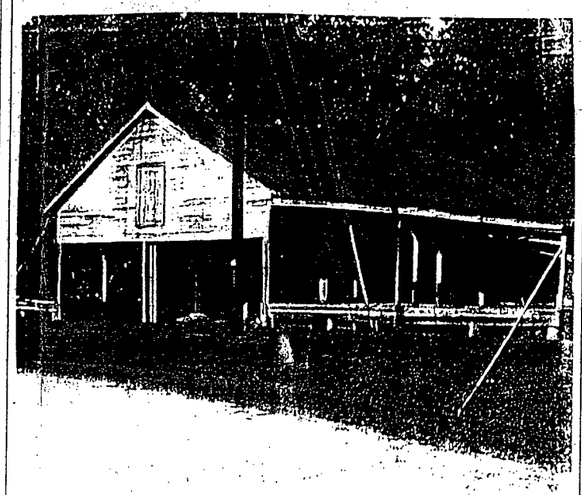
THE CORNER STORE WAS SO NAMED BECAUSE OF TWO REASONS. IT SITS ON LAND THAT WAS NAMED THE CORNER PLANTATION AND WAS OWNED BY THE FRIPP FAMILY OF COPPIN POINT. THIS PARCEL OF LAND WAS PURCHASED BY FREEDMEN AFTER THE CIVIL WAR. SECONDLY, PRIOR TO 1936, WHEN THE ROAD TO HUNTING ISLAND WAS BUILT, THE ROAD ACTUALLY TURNED MUCH CLOSER TO THE STORE. THEY TOOK OUT THE CURVE WHEN THE ROAD WAS PAVED.

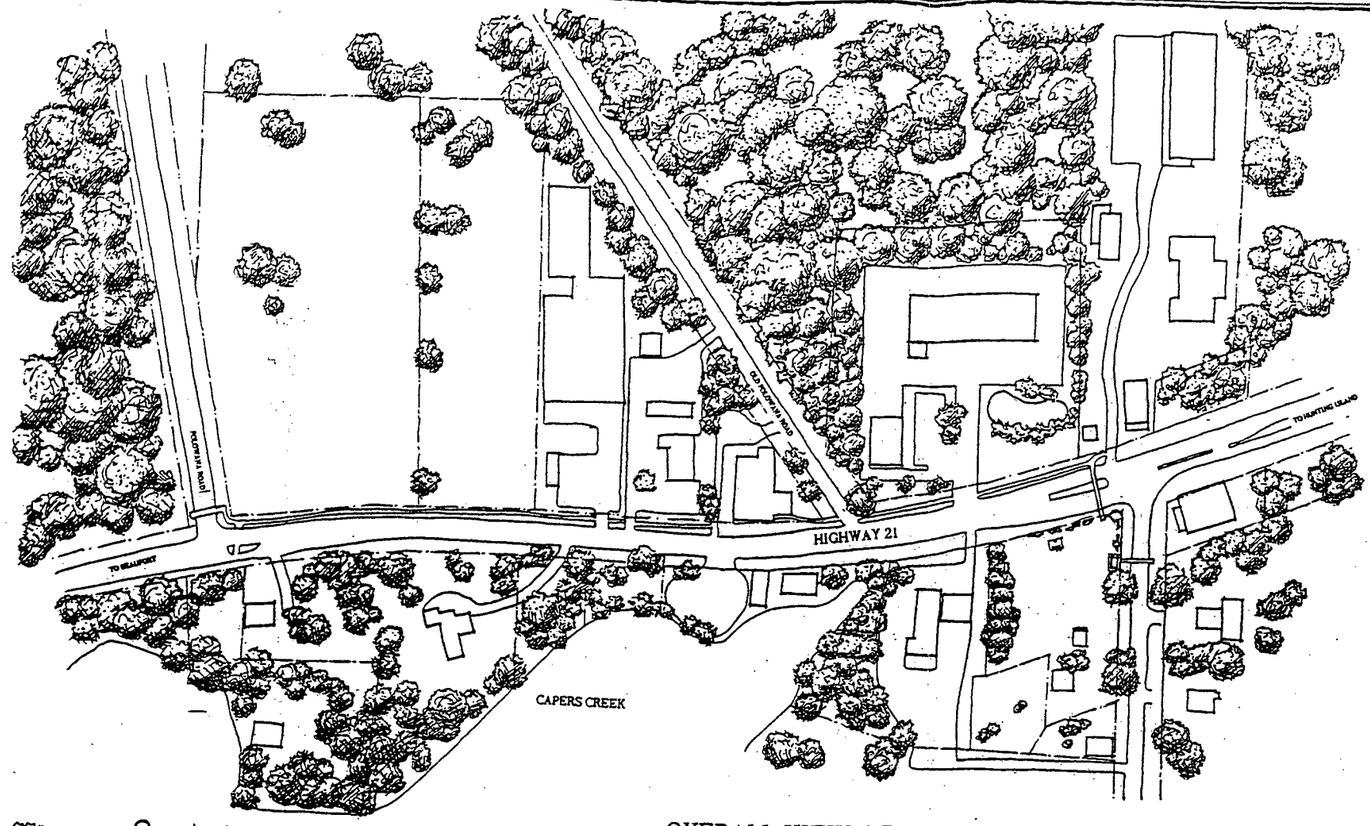
FOR MANY YEARS THE CORNER STORE WAS THE ONLY STORE ON THE ISLAND. IT WAS THE CENTER OF COMMUNITY COMMERCIAL LIFE.



6. PACKING SHED

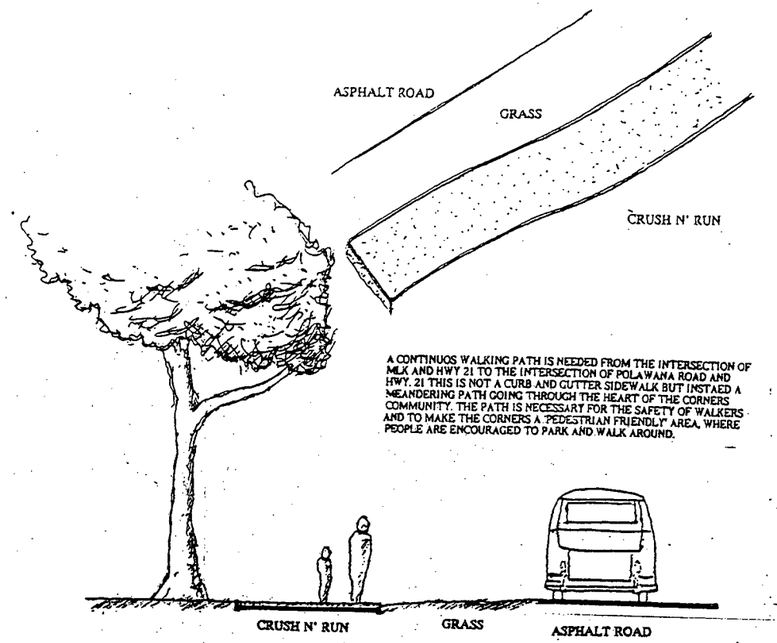
BUILT IN THE 1920'S AS A PACKING FACILITY FOR THE BURGEONING TRUCK-FARMING INDUSTRY ON ST. HELENA ISLAND. THE PRINCIPLE PRODUCTS WERE COTTON, BROCOLLI, CABBAGE AND COLLARDS.



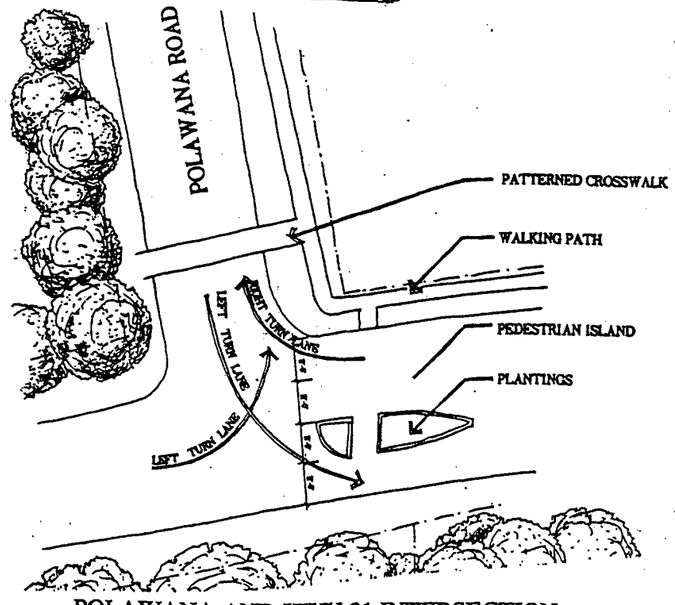


OVERALL VIEW OF CORNERS CPD

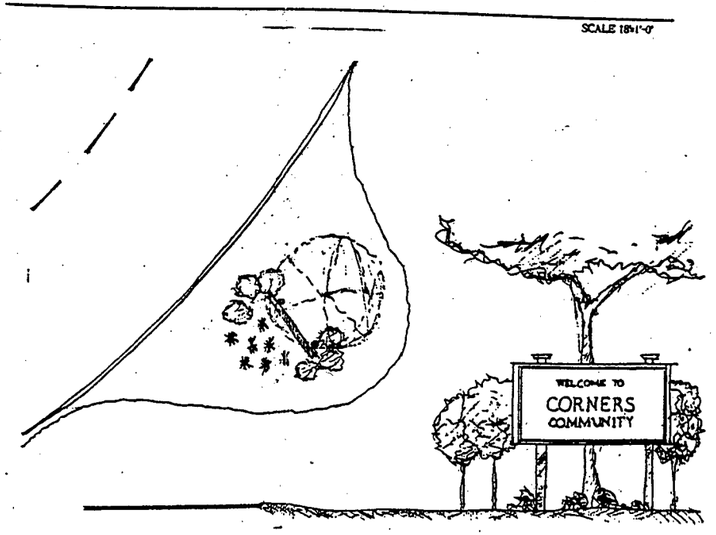
SCALE 1B=1'-0"



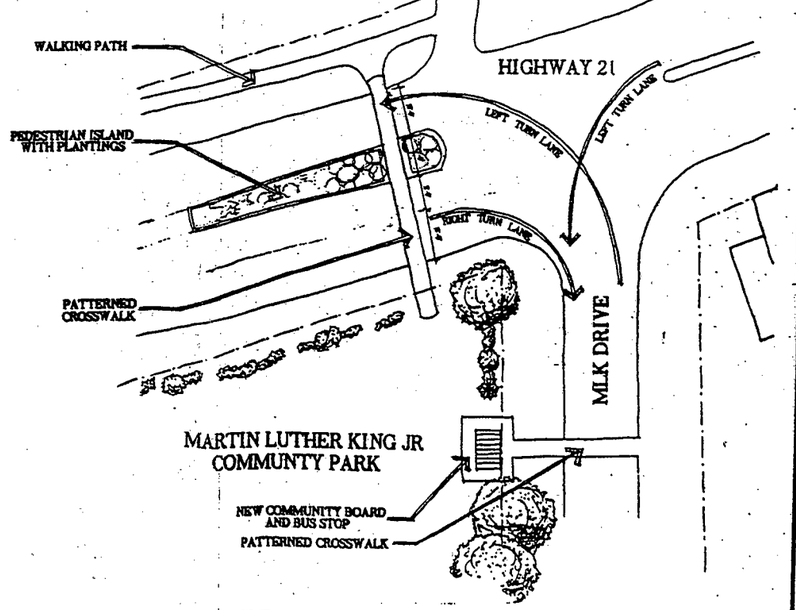
WALKING PATH



POLAWANA AND HWY 21 INTERSECTION



ENTRY INTO CORNERS COMMUNITY



MLK DRIVE AND HWY 21 INTERSECTION

DESIGN GOALS

CORNERS COMMUNITY PRESERVATION DISTRICT

ALLISON RAMS ARCHITECTS



PATHS:

A PATH IS NECESSARY FROM MARTIN LUTHER KING JR. MEMORIAL PARK TO POLOWANA ROAD FOR THE SAFE PASSAGE OF PEOPLE LIVING AND VISITING IN THE CORNERS COMMUNITY. THE PATH WOULD BE NARROW IN WIDTH AND NOT BE DEFINED BY STRONG EDGES (I.E. CURB AND GUTTER) BUT WOULD BE MORE NATURAL IN ITS PLACEMENT.



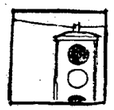
PEDESTRIAN ISLAND:

FOR SAFETY OF CROSSING HIGHWAY 21, A PEDESTRIAN ISLAND IS SUGGESTED. THE ISLAND ALSO SERVES AS AN ENTRY FEATURE INTO THE CORNERS COMMUNITY, AS WELL AS A TRAFFIC CALMING DEVICE, SLOWING CARS DOWN AS THEY ENTER THE COMMUNITY.



TRAFFIC CALMING DEVICES:

FOR THE SAFETY OF THE CITIZENS OF CORNERS COMMUNITY, MEASURES MUST BE PASSED TO SLOW THE TRAFFIC DOWN. THESE MEASURES INCLUDE: A SLOWER SPEED LIMIT OF 35 MPH, PEDESTRIAN ISLAND, CROSSWALKS AND STOPLIGHTS.



STOP LIGHT/ TURNING LANES:

A CONTINUOS TURNING LANE IS NOT NEEDED IN THE CORNERS COMMUNITY. THE TWO PROPOSED STOPLIGHTS WOULD SLOW DOWN AND CONTROL TRAFFIC FLOW WHILE MAINTAINING SAFETY. THE TURNING LANES WOULD ALLOW TURNING ON BUSY ROADS WITHOUT BLOCKING THE LANE.



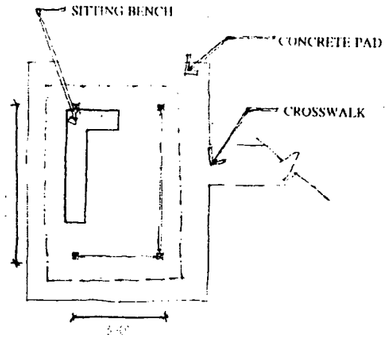
HISTORICAL PLAQUES:

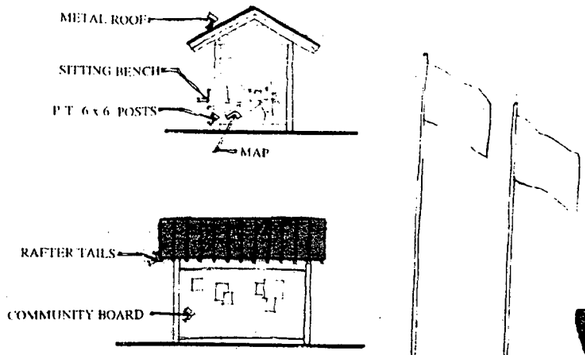
THERE ARE BUILDINGS EXISTING IN CORNERS WHICH ARE ON THE NATIONAL REGISTER. THESE STRUCTURES SHOULD BE HIGHLY VISIBLE AND MAPPED FOR VISITING PEOPLE TO APPRECIATE THE SIGNIFICANCE OF CORNERS.



FARMERS MARKET:

THE FARMERS MARKET WOULD BE USED BY THE COMMUNITY IT WOULD ALSO ENCOURAGE WALKING AROUND CORNERS AND THE USE OF THE PEACH PACKING SHED.

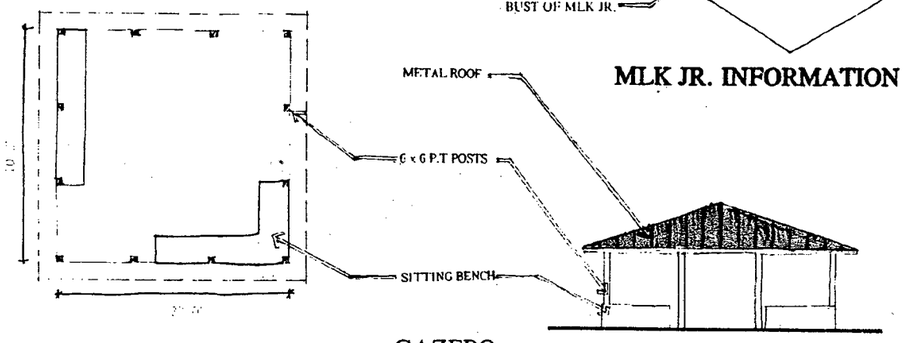




COMMUNITY BOARD/ BUS STOP

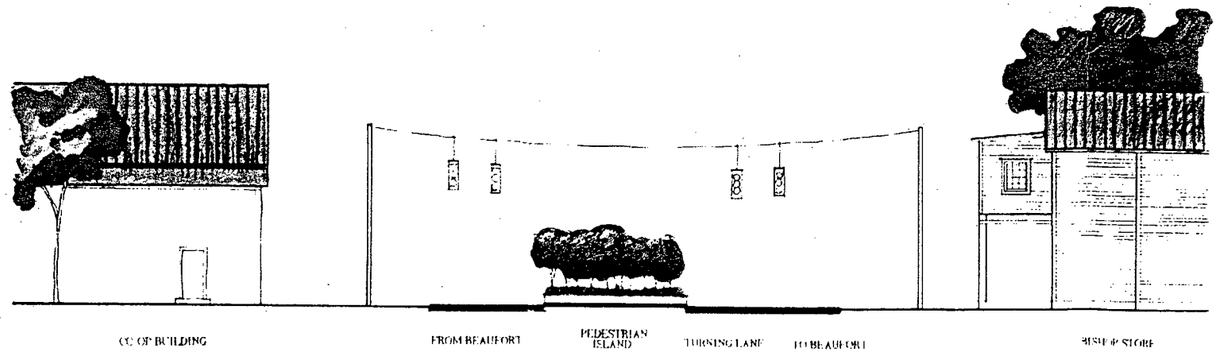
THE COMMUNITY BOARD/BUS STOP PROVIDES THE COMMUNITY WITH INFORMATION INFORMATION AND CONTACT. THE PARK IS A STOP ON THE TRANSIT LINE AND IS USED BY RESIDENTS. A SMALL, COVERED STRUCTURE IS PROPOSED, IN THE ST. HELENA TRADITION. THE STRUCTURE DOUBLES AS THE NEW COMMUNITY BOARD, WHICH ALLOWS THE COMMUNITY AND VISITORS TO KNOW WHERE AND WHEN EVENTS ARE TAKING PLACE. ONE SIDE OF THE STRUCTURE WILL HAVE A MAP INDICATING SIGNIFICANT SITES AND LANDMARKS IN THE COMMUNITY.

MLK JR. INFORMATION

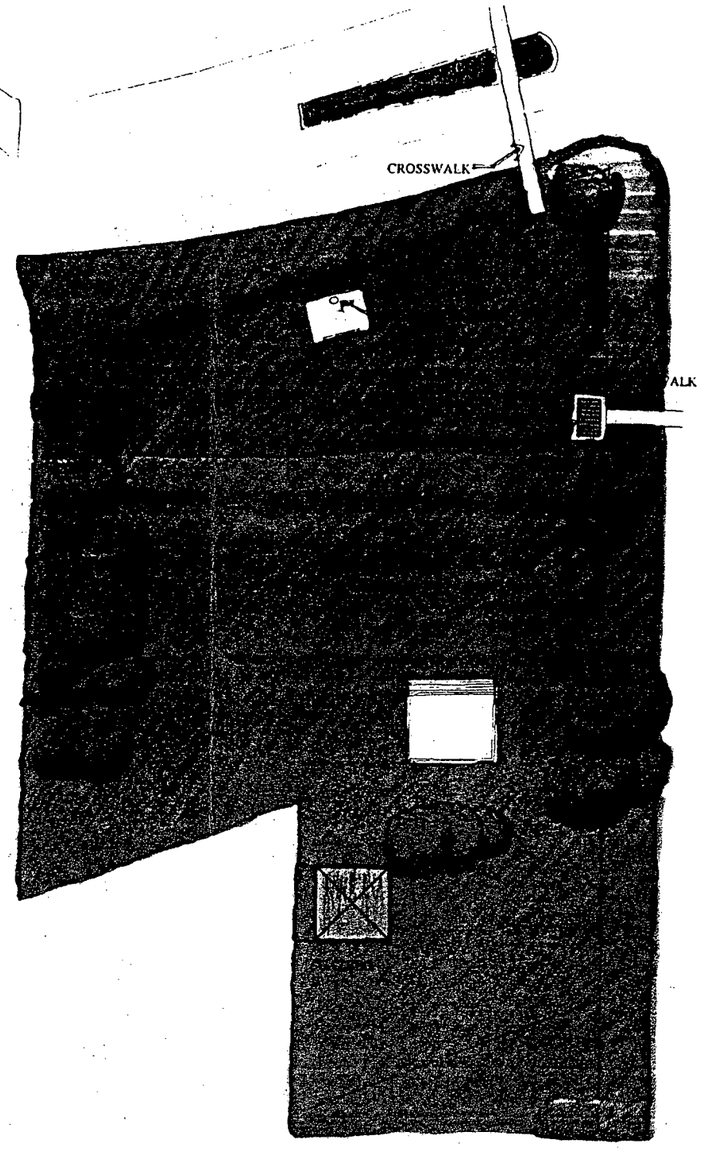


GAZEBO

THE GAZEBO IS A GATHERING PLACE IN THE MLK COMMUNITY PARK. IT PROVIDES A LARGE AREA FOR PEOPLE TO GATHER AND BE PROTECTED FROM BOTH THE SUN AND THE RAIN. THE CURRENT GAZEBO NEEDS TO BE REPLACED. THE GAZEBO WILL BE CONSTRUCTED OF MATERIALS, TECHNIQUES AND FORMS INHERIT AND FAMALIAR TO ST. HELENA.



CROSSROAD SECTION AT MLK AND HWY 21 LOOKING WEST



IMPROVEMENTS TO MARTIN LUTHER KING JR. COMMUNITY PARK

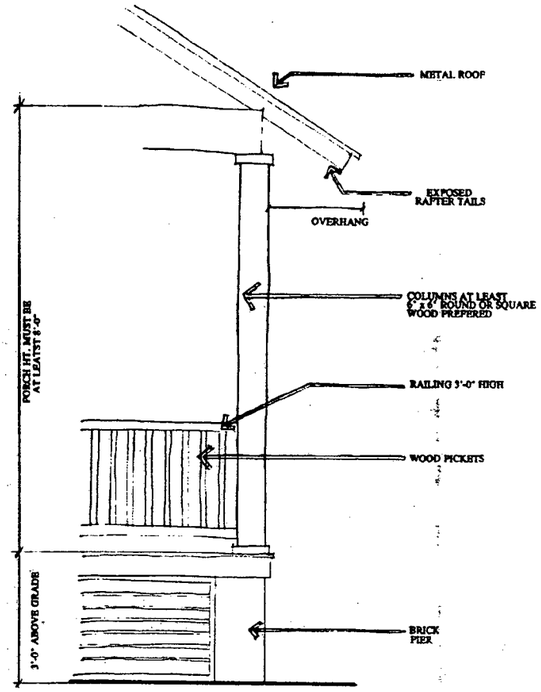
IMPROVEMENTS MADE TO MARTIN LUTHER KING PARK ARE MEANT TO TOUCH IT UP A LITTLE, NOT A COMPLETE OVERHAUL. LANDSCAPING WILL BE USED NOT ONLY TO BEAUTIFY BUT TO DEFINE SPACES AND CONTROL ENTRY. THE BANDSTAND WILL WIDENED AND THE GAZEBO WILL BE REPLACED WITH ONE WHICH IS EXACTLY THE SAME SIZE BUT WILL HAVE BUILT IN SEATING AND A POSSIBLE AREA FOR OUTDOOR COOKING.

DESIGN GOALS

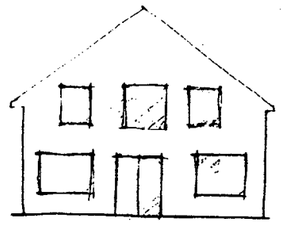
CORNERS AREA COMMUNITY PRESERVATION DISTRICT

ALLISON RAMSEY ARCHITECTS

DESIGN STANDARDS

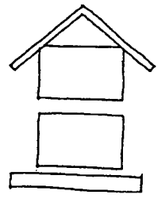


PORCH DETAIL

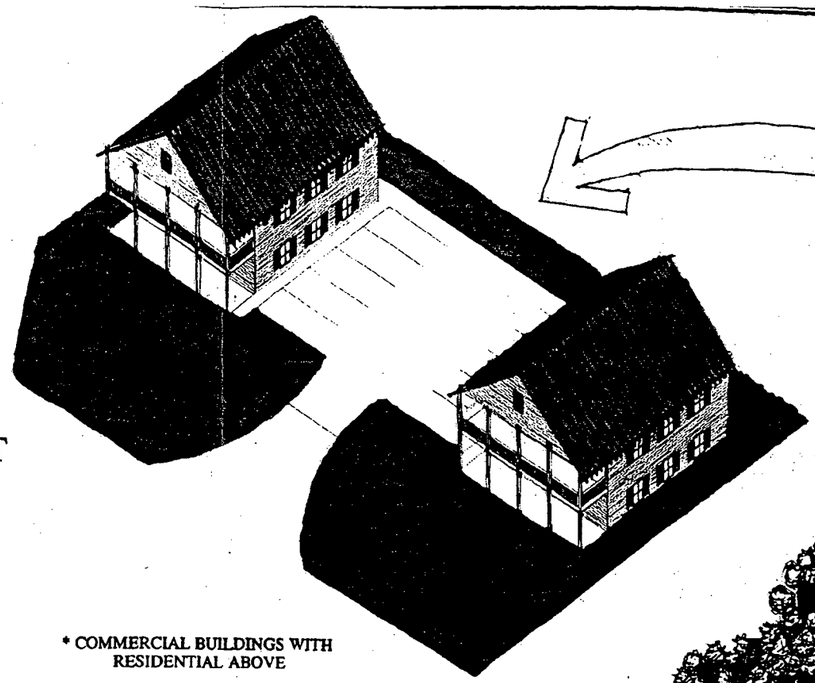


FENESTRATION
60% OF BUILDING FACADE

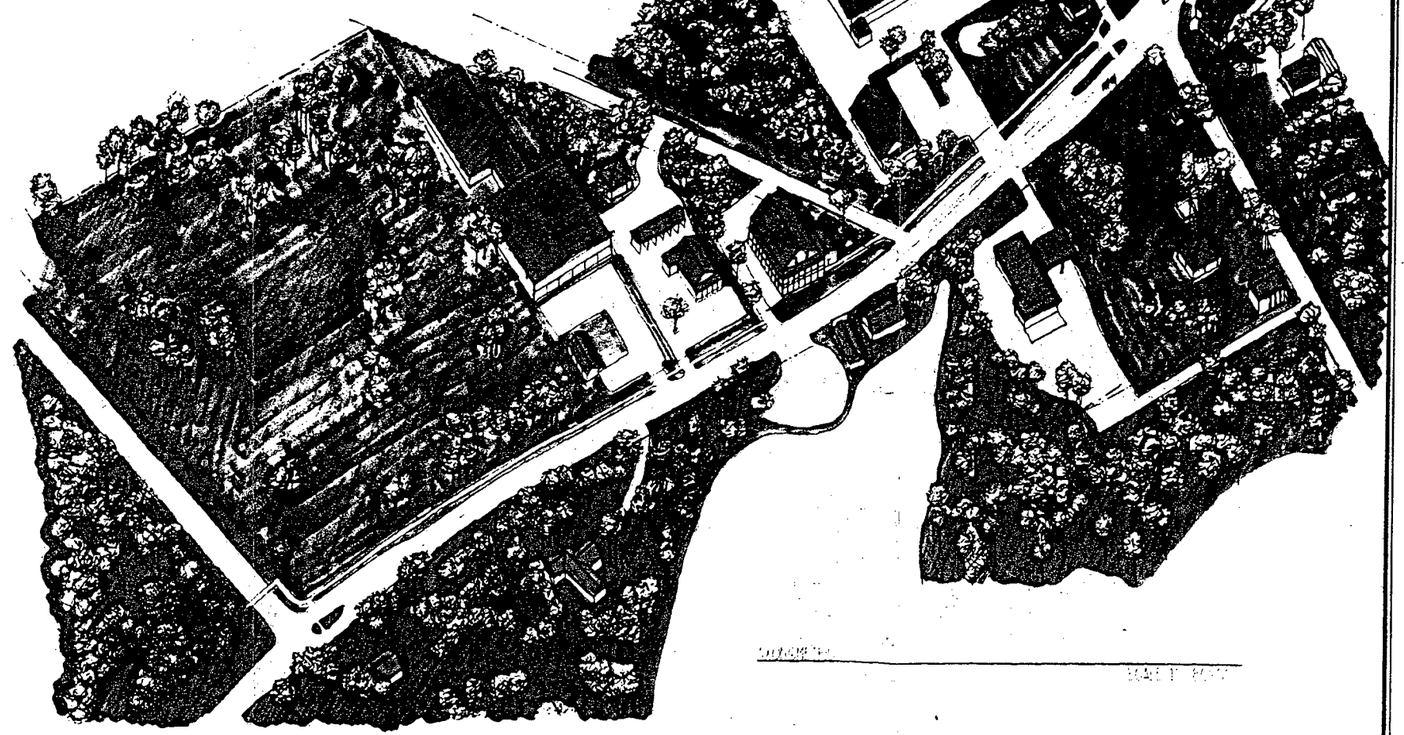
PLACEMENT



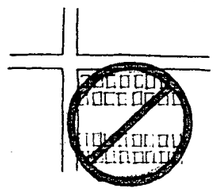
BUILDING HEIGHT IS LIMITED TO 35'-0" OR 2 STORIES



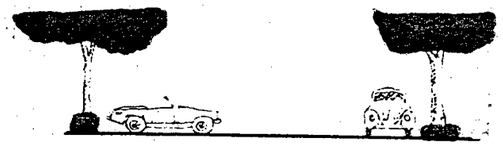
* COMMERCIAL BUILDINGS WITH RESIDENTIAL ABOVE



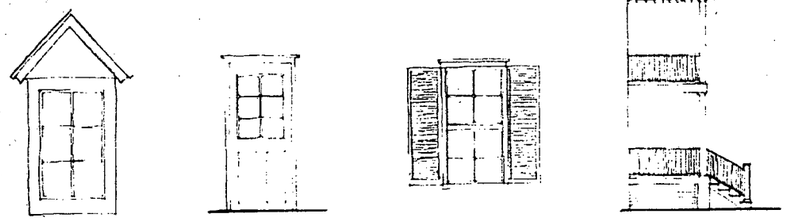
PARKING



NO CORNER PARKING LOTS



TREES, HEDGES AND WALLS ARE ENCOURAGED TO BUFFER VIEW OF PARKING LOT



DORMER WINDOW | DOORS | WINDOW AND SHUTTERS | PORCHES

TRADITIONAL MATERIALS AND DETAILS ENCOURAGED

ALLISON RAMSEY ARCHITECTS

2002/32

AN ORDINANCE OF THE COUNTY OF BEAUFORT, SOUTH CAROLINA, TO ADOPT AN ADDITION TO THE BEAUFORT COUNTY COMPREHENSIVE PLAN OF 1997.

BE IT ORDAINED that County Council of Beaufort County, South Carolina, hereby adds to the Beaufort County Comprehensive Plan of 1997, enacted by Ordinance 97-33, Appendix F, Section 3, entitled Shell Point Community Preservation Plan.

Adopted this 25th day of November, 2002.

COUNTY COUNCIL OF BEAUFORT COUNTY

BY: _____
Thomas C. Taylor, Chairman

ATTEST:

_____
Clerk to Council

REVIEWED BY:

_____
County Attorney

First Reading: October 28, 2002
Second Reading: November 11, 2002
Public Hearing: November 25, 2002
Third and Final Reading: November 25, 2002

Amending 97/33

SHELL POINT REGIONAL PLAN

The Shell Point Regional Plan is a joint effort between Beaufort County and the Town of Port Royal to plan for the future of the Shell Point Region in a manner that will be consistent across jurisdictional boundaries. The plan originated with the Shell Point residents who expressed an interest in having more say in zoning and land development decisions that had an impact on the quality of life in their neighborhood. On February 28, 2000, Beaufort County Council amended its Comprehensive Plan and Zoning and Development Standards Ordinance to designate the neighborhood as a Community Preservation District. The Town of Port Royal, a key player in the future of the Shell Point Region, became a joint partner in the planning process.

Purpose

The purpose of the Shell Point Plan is to serve as a policy document for the development of the Shell Point Community. As a policy document appended to both the Beaufort County Comprehensive Plan and the Town of Port Royal Comprehensive Plan, the Shell Point Regional Plan is to be used to guide zoning, subdivision, facilities funding, design and community development decisions for both governing bodies.

Future Land Use

Goal: *To guide future growth in the Shell Point Community to be consistent with the goals of the Port Royal and Beaufort County Comprehensive Plans while protecting the existing residential areas from the adverse impacts of incompatible land uses.*

The Future Land Use Plan proposes three future land use classifications – Community Commercial, Neighborhood Commercial, and Residential. The location of the following future land use classifications can be found on ***Map #1:***

Community Commercial: This Future Land Use classification contains retail and service businesses that primarily serve Shell Point area residents, but also may serve those in Port Royal, Mossy Oaks, and the Broad River Bluff neighborhoods. Businesses are meant to be accessible by car and foot. Buildings are encouraged to locate in proximity to and address the street. Requiring the parking areas to locate at the sides and rear of buildings will achieve this goal. In addition, franchise architecture is discouraged. Buildings should reflect the architectural character of the Lowcountry. Innovative, high-quality design and development is encouraged.

Neighborhood Commercial: These commercial uses should be of a size, scale and type that will serve the surrounding neighborhood, and will not create a negative impact on the quiet and safety of the surrounding residential areas. The size, scale and architecture of buildings should be compatible with that of the surrounding residential areas. Businesses are meant to be accessible by car and foot.

Residential Infill Development: To protect the integrity of existing neighborhood residential areas, infill development in existing subdivisions shall be compatible with the surrounding neighborhood. Larger parcels (5 acres and above) have option to incorporate mixed uses and housing types by using the Planned Community Option.

Planned Communities: In order to further the Traditional Neighborhood Development goals of both the County's and Town's Comprehensive Plan, this plan offers, for parcels 5 acres or greater, a Planned Community option that incorporates a mix of uses and housing types arranged in a pedestrian scale. Planned Communities would be permitted as a Special Use or Conditional Use in the areas designated as Residential in the Future Land Use Map ***(Map #1)*** and would require the submission of a master plan and review by an appointed board. ***Map #2*** provides a conceptual layout of a hypothetical Planned Community. The following elements apply to Planned Communities:

- The internal street network needs to be interconnected and individual block sizes need to be small. The individual developments must connect to the established road network of the surrounding neighborhood and provide stub streets to future developments. Streets will equitably serve the needs of the pedestrian, the bicycle, and the automobile.
- 15% of the gross site area shall be set aside as open space. Open space includes parks, greens, trails, etc. Planned Communities shall work around natural features such as wetlands and mature forests. Public access to the marsh front is encouraged through the use of public docks and the termination of streets at the marsh front.
- A 25-foot wide, thickly vegetated buffer between established neighborhoods and incompatible uses within the Planned Community will be required. A buffer is not required if uses and intensity at edges of Planned Developments are at the same scale as surrounding developed neighborhoods.
- All lots share a frontage line with a street or square. Average lot frontage width must be narrow enough to allow for a pedestrian scale of development.
- Individual houses should address the street by incorporating such elements as porches and front stoops. Unless Vehicular access to dwellings should be via alleys with garages and parking pads located at the rear of the principle dwelling. Where this is not possible, garages and parking pads are to be located behind the front wall of the principle dwelling. Accessory Dwelling Units are permitted and encouraged.
- Within the Planned Community, similar land categories shall generally front across streets. Dissimilar categories shall abut at rear lot lines.
- A maximum of 30% of the Planned Community may be designated for commercial use. Parking lots shall be located at the rear and sides of commercial buildings. Small retail shops, barber shops, medical and dental offices, ice cream parlors, coffee shops, bakeries, delis, with building footprint limited to 5,000 square feet.

Parks, Natural Resources, and Wetlands

Goal: *To provide for recreational, aesthetic and fitness opportunities for Shell Point Area residents by enhancing the current park facilities and improving connections between residential neighborhoods and existing parks.*

Goal: *To encourage the preservation of sensitive ecological areas and marsh access through careful site plan review and selective public purchases.*

Improvements to Shell Point Park: Shell Point Park occupies 14 ½ acres in the vicinity of Broad River Drive. The park is owned and maintained by the Beaufort County Parks and Leisure Service (PALS) and currently contains a walking trail, two tennis courts and an open field that is used for soccer. This plan proposes to provide additional amenities that are consistent with the passive nature of Shell Point Park.

- **Recommended Park Improvements:** Please refer to ***Map #3*** for the location of the recommended improvements listed below.
    1. Provide a playground in the western portion of the Park near Broad River Drive.
    2. Construct restroom facilities near the parking area where the existing septic system can be utilized.
    3. Provide a more formalized parking area constructed of a pervious material. The parking lot will need to be situated so that the existing septic system drain field is not affected.
    4. Construct a picnic shelter in the vicinity of the parking area. The shelter should be placed beneath the existing tree canopy with minimal removal of overstory trees. The shelter should be connected to the existing trail network.
    5. Extend the existing trail network into the undeveloped, County-owned wooded area at the eastern end of the park. The trail should be constructed with minimum removal of vegetation. This plan recommends that this portion of the trail be constructed of a pervious material such as wood chips.
    6. Provide signage at the eastern park entrance off of Broad River Drive.

- **Establish a direct pedestrian and vehicular link from Parris Island Gateway (SC 280/802) to Shell Point Park.** The recommended location of this access is through the Midtown Shopping Center (Bi-lo) property. This location provides a direct link to the existing parking area. A sign at the future Parris Island Gateway entrance is recommended.
- **Explore the future use of the existing stormwater detention ponds at the Lowcountry Medical Group and Midtown Shopping Center sites.** These ponds offer an excellent opportunity for a public/private partnership that would, in effect, expand the park boundaries. Issues that need further study include ways to lessen the liability that the ponds present. Some recommended solutions include decreasing the bank slope to prevent persons from being trapped in the pond or providing impenetrable wetland vegetation at the pond perimeter to prevent entry.

- **Monitor parking demand at the western end of the park.** There is currently no formal parking at the western end of Shell Point Park along Broad River Drive. The installation of a playground may increase the demand for parking in this area. The average number of vehicles informally parking in this area should be monitored by the Shell Point Regional Planning Committee to determine whether the future provision of a parking lot is warranted.

Improvements to Battery Creek Boat Landing: The Battery Creek Boat Landing provides one of the finest marsh views in this part of the County. This plan recognizes that the Battery Creek Boat Landing receives heavy use by boaters, but is underutilized as a passive recreation area. Please refer to ***Map #4*** for the location of the recommended improvements listed below.

- **Provide a combined picnic pavilion and restroom facility.** The location of this facility should provide views of Battery Creek and the Russell Bell Bridge. A small-scale pavilion with two picnic tables is recommended. Picnic tables are recommended for the wooded area surrounded by the parking lot.
- **Stabilize the riverbank in the area south of the boat ramp.** This portion of the riverbank is eroding and sending trees into Battery Creek. Stabilizing the riverbank would help preserve the only available County-controlled area of high ground where views of the creek can be enjoyed. It is recommended that PALS work with the Beaufort County Planning Department to devise an effective and environmentally sensitive solution to this problem.
- **Provide a vegetative buffer along the Battery Creek Marina property line.** It is recommended to screen from view the outdoor boat storage area of the Marina. Native shrubs such as wax myrtle and yaupon holly and vines such as Carolina jessamine would be most effective and require little maintenance once established. Additional river buffer vegetation along the riverbank is also recommended.
- **Formalize the parking area.** A clear delineation of parking areas is recommended to protect natural areas and to keep vehicles adequately set back from the riverbank.

Improvements to Jericho Park: This five-acre property was acquired by the County from the Federal Government in the 1970's with the stipulation that it be used only for recreational uses. The PALS department has recommended that it be used as a passive park. This parcel is one of a series of parcels that was used to provide water to the Marine Corps Air Station and the Parris Island Depot. ***Map #5*** shows the location of the improvements described below.

- **Installation of a parking area, trails, and picnic tables:** Development of this small park is meant to be as non-intrusive as possible. Designated parking for several cars, two or three picnic tables, and an interpretive trail is recommended for this park.
- **Pump House Restoration:** There is a pump house located on the southeast corner of this property. This structure may be eligible for the National Register of Historic Places. This plan recommends that historic designation for this site, along with the other remaining wells and pump houses associated with the provision of water to Parris Island be pursued by the Beaufort County Planning Department in conjunction with the Parris

Island Museum. Pursuant to historic designation, the pump house should be restored and an historical marker should be provided.

Pleasure Boat Landing: There is a 2 ½ acre parcel in the Shell Point Subdivision near the intersection of Broad River Drive and Shell Point Road that was designated in the original plat to be used as a "pleasure boat landing" for the subdivision residents. This parcel has never been developed and offers the opportunity to provide marsh front access for neighborhood residents. This plan recommends that the Shell Point Neighborhood Association explore the feasibility of developing this site as a private park for use by subdivision residents and guests. A boat landing is not practical for this site due to its distance from deep water. A small dock to be used for launching kayaks, crabbing, and marsh viewing is recommended.

Greenways: The County is in the early stages of assembling a Beaufort County Greenway Master Plan. Shell Point needs to be an integral part of that Master Plan by providing connections from the City of Beaufort, the Town of Port Royal, Burton and eventually to South of the Broad River. By utilizing existing easements, sidewalks, neighborhood roads, and potential acquired easements or property a series of connections throughout the community can be realized. The following specific elements below are shown on ***Map #6***.

- **BJWSA Water Line Easement:** The Beaufort-Jasper Water Sewer Authority has a water line easement that extends from the Shell Point Area near the Bonaire Estates Subdivision all the way to Burton Wells Park and north to Laurel Bay Road. This easement should be an integral element in a countywide greenways network.
- **System of wetlands between Baynard and Scipio Roads:** A series of tidal wetlands extend from the Broad River Marsh into Shell Point Area beyond Savannah Highway (SC 802). This plan recommends that public access be provided along this natural amenity and be integrated into the countywide greenways network.
- **Incorporation of Neighborhood Streets and sidewalks in plan:**

Preservation of Wetlands and Marsh Views: Several properties exist in the Shell Point area that should be protected for environmental quality issues (i.e. migratory waterfowl and songbird roosting and nesting habitat), critical wetlands and passive public access to the tidal creeks and marshes that surround Shell Point. This plan recommends that Planned Communities be evaluated so that public access and views of the marsh are set aside through the provision of public docks, parks and street vistas. The neighborhood or community as a whole could provide funding and possibly partner with the County and/or Town to purchase areas of ecological significance and public access points.

Transportation

Goal: *To promote safe and convenient vehicular travel on neighborhood roads and along state highways while enhancing the aesthetic appeal of their connection with the community.*

Improvements to 280/802 Intersection: This plan recognizes that this intersection is rife with problems and eventually will warrant a traffic signal or some other solution. It is recommended that Beaufort County, the SC Department of Transportation and neighborhood residents work together to strike a solution to this intersection that will provide the following:

- An orderly flow of traffic coming from Port Royal and proceeding to the Broad River Bridge via Savannah Highway (SC 802).
- A reduction of conflicts with local streets in the vicinity of the intersection (Cypress St., Grafton, Dr. and Shell Point Road).
- Consideration of an alternative form of intersection such as a traffic circle.

Improvements to Baynard/Shell Point Road Intersection: This intersection currently has one stop sign for eastbound traffic from Shell Point Road extension. There is no protection for traffic continuing west across the intersection to Shell Point Road extension. Two possibilities could correct this problem:

- A "Through Traffic Yield" sign for westbound traffic continuing toward the Shell Point extension would not adversely affect the more voluminous traffic turning northbound onto Baynard from Shell Point.
- A Stop Sign could be placed on the southbound side of Baynard to protect vehicles that would continue westbound along Shell Point (there are only five homes on this extension).

802 Savannah Highway Cross-section: The SC Department of Transportation currently has no plans to widen Savannah Highway (SC 802). However, this highway provides an important link to those traveling from Port Royal and Lady's Island to Southern Beaufort County. It is highly likely that it will be widened at some future date as the County continues to grow. This plan recommends that future widening include landscaped medians along the entire length of the segment, pedestrian walkways set apart from the roadway, and street trees ***(Map #5).***

Street Connectivity: This plan recommends that future subdivisions and developments be evaluated on their effectiveness in establishing an interconnected grid network of local streets. This goal will be facilitated through the development review process when Planned Communities and other subdivisions are evaluated.

Vistas: Select advantageous highway views and promote the preservation and enhancement of vistas at these locations. The intention is to retain visual reinforcement of the natural setting of the region, even in the face of road widening or site development. Several vista opportunities are at locations where creek and wetland incursions abut and traverse three segments of SC 802, two segments of Grober Hill Road and one wide vista remains on SC 280 just north of Picket Fences.

Economic Development and Community Enhancement

Goal: *To provide for the economic development of marginalized commercial properties by offering the greatest amount of site plan flexibility, providing for shared parking, and making public sector investments that optimize private sector opportunities.*

Shell Point Plaza Area: The Shell Point Plaza area at the intersection of Parris Island Gateway (SC 280) and Savannah Highway (SC 802) is the traditional and geographical center of the Shell Point Community. In order to strengthen the civic and commercial qualities of this area, this plan recommends the following projects (refer to ***Map #5***):

- **Future Library Branch Location:** The Beaufort County Department of Library Services, in their long term Capital Improvements Plan (1999), proposes to construct a library branch to serve the Shell Point, Burton, Broad River and Chechessee areas when population has reached a threshold to warrant a new branch. The Library is also interested in relocating its administrative offices to this future branch. The Library has outlined several criteria for site location that include access and visibility from an arterial highway, proximity to commercial properties, access to sewer and water, and avoidance of flood prone areas. This plan recommends locating the library branch in proximity to Shell Point Plaza and Jericho Park. This location would give the library visibility on two highway corridors, spur commercial redevelopment in the Shell Point Plaza area, and give greater visibility to Jericho Park. This site is also outside of the floodplain. At a minimum, the site should accommodate 20,000 square feet of library space and 15,000 square feet of office space.
- **Shared Parking Facility:** As a library branch is developed in this area, a shared parking facility serving the library, park and nearby businesses should be considered. This would help promote well-planned commercial redevelopment in the area and reduce site costs for individual businesses.
- **Future Street:** A street running along the southern property line of Jericho Park connecting Parris Island Gateway to Savannah highway is recommended. This would provide access to the future library branch and park from both highways.

Battery Creek Boat Landing/Marina Boulevard: There is an interesting mixture of commercial, residential and recreational land uses in the vicinity of the Battery Creek Boat Landing. This area was adversely affected by the construction of the Russell Bell Bridge and the widening of Parris Island Gateway. This plan proposes to assist in the revitalization of this area by providing better visibility from Parris Island Gateway and removing some of the awkward elements that resulted when the road bed of Parris Gateway was shifted to the south. Refer to ***Map #4*** for the location of the following improvements.

- **Provision of on-street parking:** On-street parking should be provided along Marina Boulevard in order to promote redevelopment of this area by reducing site costs for individual developments.
- **Shared sign at Parris Island Gateway:** .In order to help local businesses with more visibility, this plan recommends that a shared sign be provided at the intersection of Marina Boulevard and Parris Island Gateway. The sign would be similar to those uses in multi-tenant shopping centers where a directory of individual businesses is provided on the same sign. This project should be a public/private partnership

initiated and coordinated by Beaufort County and the Town of Port Royal, and funded by the participating businesses.

- **Removal of "Road Ends" signs:** There are currently two unsightly "road ends" signs located at both ends of Marina Boulevard. This plan recommends replacing the sign at the western end of Marina Boulevard with a cluster of palmettos or another aesthetically pleasing visual clue that conveys the same message as "road ends". Likewise, the "road ends" sign at the entrance to the Battery Creek Boat Landing should be replaced with a directional sign announcing the entrance to the landing.

Shell Point Elementary School: Shell Point Elementary School is the institutional heart of the Shell Point Region. The school not only serves as an elementary school but a polling station and community center where many public meetings are held. This plan recognizes the importance of this institution and advocates good pedestrian connections to the school and future expansions that improve access and internal circulation.

- **Provide another means of access for circulation & parking:** This plan recommends that future expansions of the school take into consideration adequate stacking room for buses and parents picking up and dropping off students.
- **Integrate into future neighborhoods to the north and west:** As properties to the north and west of the school site are developed, the Town of Port Royal will work with the developer to provide pedestrian connections to the school.
- **Provide connections to the Shell Point Subdivision:** As an ongoing project, the Shell Point Regional Planning Committee will work with property owners on Magnolia Street to explore possible pedestrian connections.

Future Beaufort Jasper Water Sewer Authority (BJWSA) Sewer Extensions: Much of the Shell Point Area is wet, low in elevation and, therefore, not suitable for on-lot septic systems. Unfortunately, public sewer does not serve most of the existing residential areas. Therefore, the following policies and actions are recommended to address future public sewer service in Shell Point's existing residential communities:

- **Carefully plan sewer extensions to new developments:** As new development occurs on vacant parcels, water and sewer extensions will be necessary to accommodate this development. This plan recommends that the Town of Port Royal and Beaufort County work with the Beaufort Jasper Water-Sewer Authority to route future sewer extensions in a manner that will bring existing residential areas in closer reach to public sewer.
- **Assess feasibility and cost of extending public sewer:** BJWSA has established the Community Sewer Program for the purpose of assessing the feasibility of extending sewer into the existing communities. Through this program, BJWSA, given sufficient community interest, will provide a detailed estimate of the average cost per household to extend public sewer.
- **Pursue grant funding:** As public sewer is extended into existing neighborhoods, grant sources, such as the Community Development Block Grant Program (CDBG), will be pursued to assist in impact fees and lateral hookups for low and moderate-income families.

Implementation

Effective implementation is vital to the success of any plan. The Shell Point Regional Plan identifies the overall development needs in Shell Point, the tasks involved in addressing them, the various parties who should perform these tasks, and the level of participation sought from these parties. The Shell Point Regional Planning Committee will meet quarterly to assess the progress of the implementation of this plan, to pursue ongoing projects outlined in this plan, and to make recommendations for possible future plan amendments. Outlined below, is a general timeline for implementation:

Adoption of Zoning Amendments: Simultaneous to the adoption of the Shell Point Regional Plan, a series of zoning amendments will be presented to both the Beaufort County Council and Port Royal Town Council for adoption.

- **Town of Port Royal:** The planning staffs of the Town of Port Royal and Beaufort County will work together to formulate appropriate zoning amendments to implement the Land Use Plan portion of this plan. These amendments will be incorporated into the Town of Port Royal Zoning Ordinance.

- **Beaufort County:** Likewise, amendment to the Beaufort County Zoning and Development Standards Ordinance will be formulated and presented for adoption.

Short Term Projects (1 to 5 years): This series of projects are outlined in this plan that are intended to be implemented in a five-year time frame. These include:

- **Shell Point Park:** Playground equipment, restroom facilities, formalized parking, sign on Broad River Drive, picnic shelter, and trail extension. These improvements are to be implemented through PALS.
- **Battery Creek Boat Landing:** Picnic and restroom facility, riverbank stabilization, vegetative buffer, and formalized parking. These improvements are to be implemented through PALS.
- **Jericho Park:** Parking area, picnic tables and trail to be implemented by PALS. Pump house restoration to be implemented by Beaufort County Planning Department in conjunction with PALS and Parris Island.

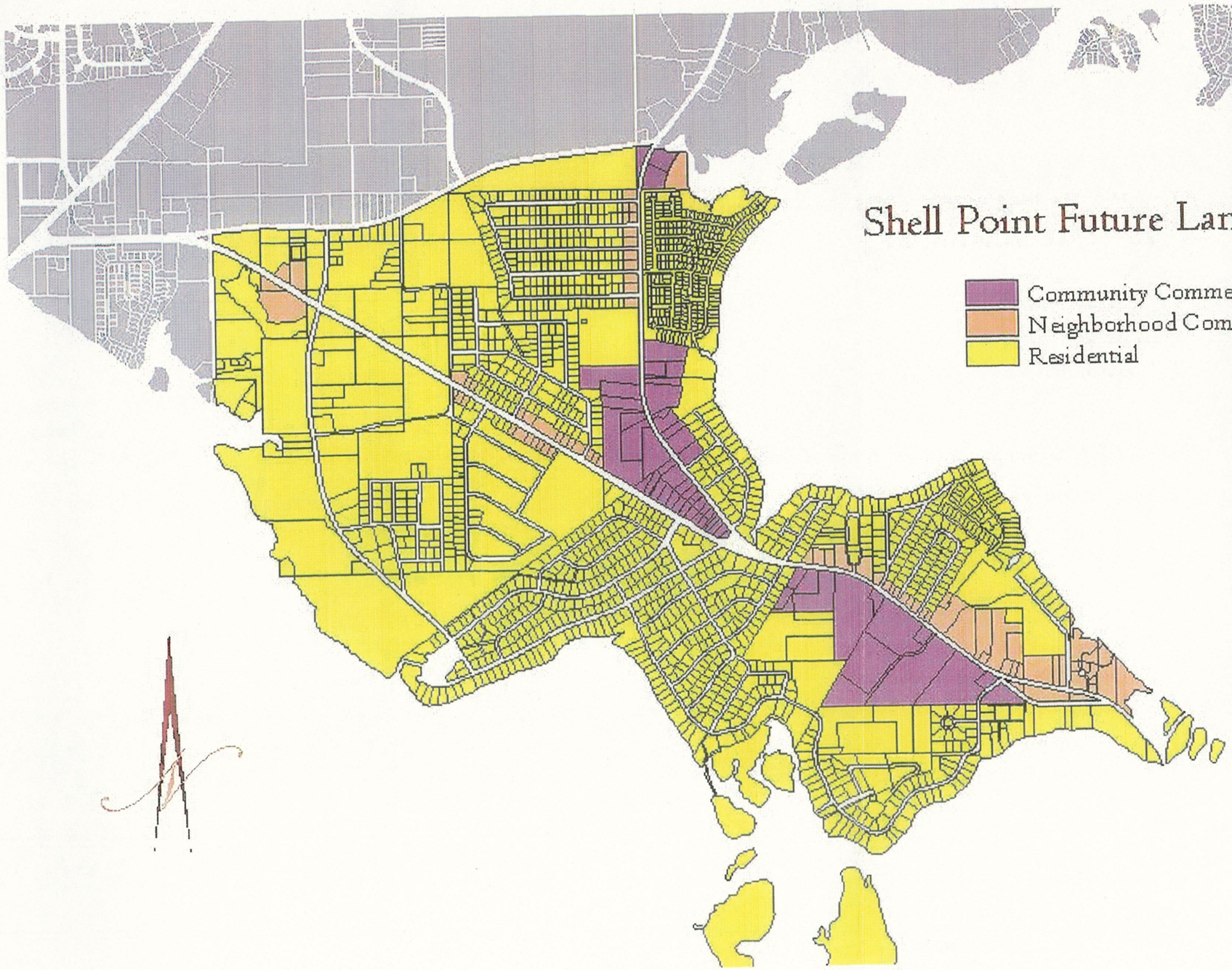
Long Term Projects (3 to 10 years): This series of projects are outlined in this plan that are intended to be implemented in a three to ten-year time frame. These include:

- **Shell Point Park:** Auto and pedestrian connection to Parris Island Gateway. Incorporation of two detention ponds into park. To be implemented by PALS in conjunction with private property owners.

- **Pleasure Boat Landing:** Construction of a crabbing dock with small parking area. To be implemented by Shell Point Neighborhood Association with assistance from Beaufort County Planning Department.
- **Shell Point Library Branch:** Construction of a Library, shared parking lot, and internal street. To be implemented by Beaufort County.
- **Parris Island Gateway/Savannah Highway Intersection Improvements:** To be implemented by SCDOT.

MAP 1

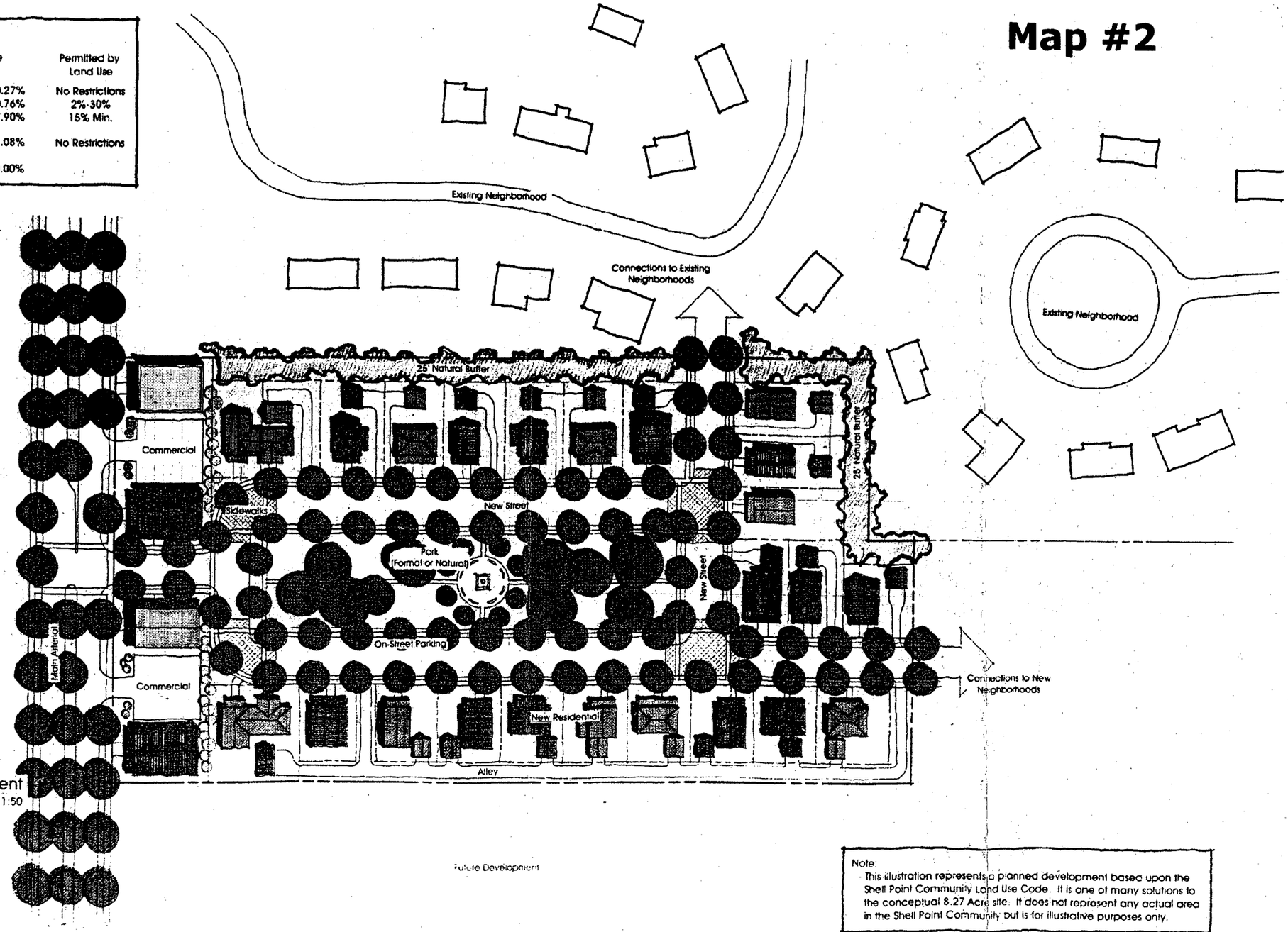
Shell Point Future Land Use Plan



Map #2

Planned Unit Development: Land Use Table

Area	Land	Percentage of Total	Permitted by Land Use
Residential	3.33 Ac.	40.27%	No Restrictions
Commercial	0.89 Ac.	10.76%	2%-30%
Open Space (Park and Buffers)	1.48 Ac.	17.90%	15% Min.
Street R.O.W.	2.57 Ac.	31.08%	No Restrictions
Total	8.27 Ac.	100.00%	



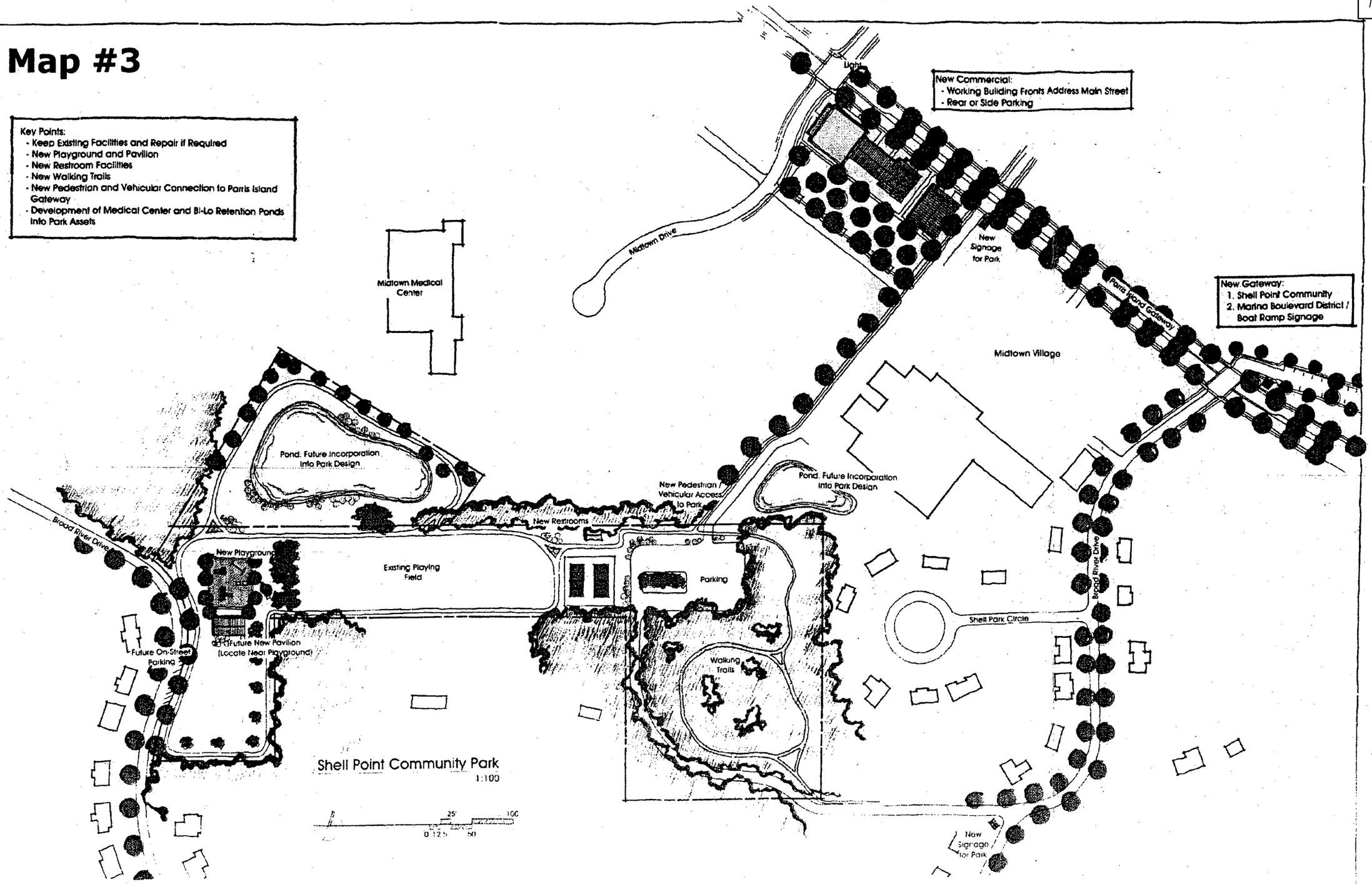
Conceptual Residential Development
1:50

0 12.5 25 50 100

Note:
- This illustration represents a planned development based upon the Shell Point Community Land Use Code. It is one of many solutions to the conceptual 8.27 Acre site. It does not represent any actual area in the Shell Point Community but is for illustrative purposes only.

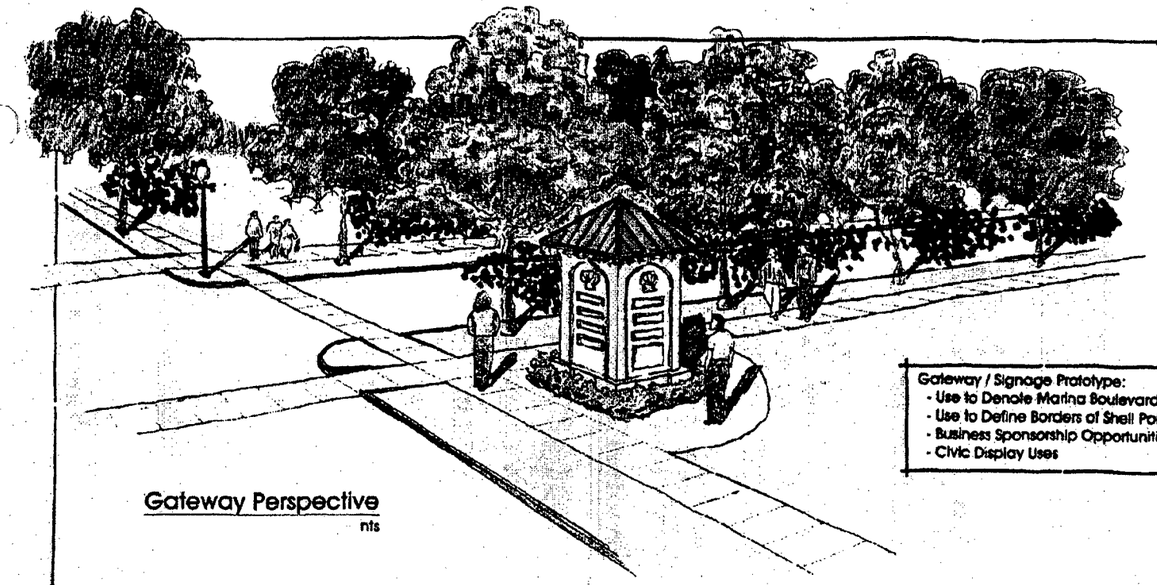
Map #3

Key Points:
- Keep Existing Facilities and Repair if Required
- New Playground and Pavilion
- New Restroom Facilities
- New Walking Trails
- New Pedestrian and Vehicular Connection to Parris Island Gateway
- Development of Medical Center and Bi-Lo Retention Ponds into Park Assets



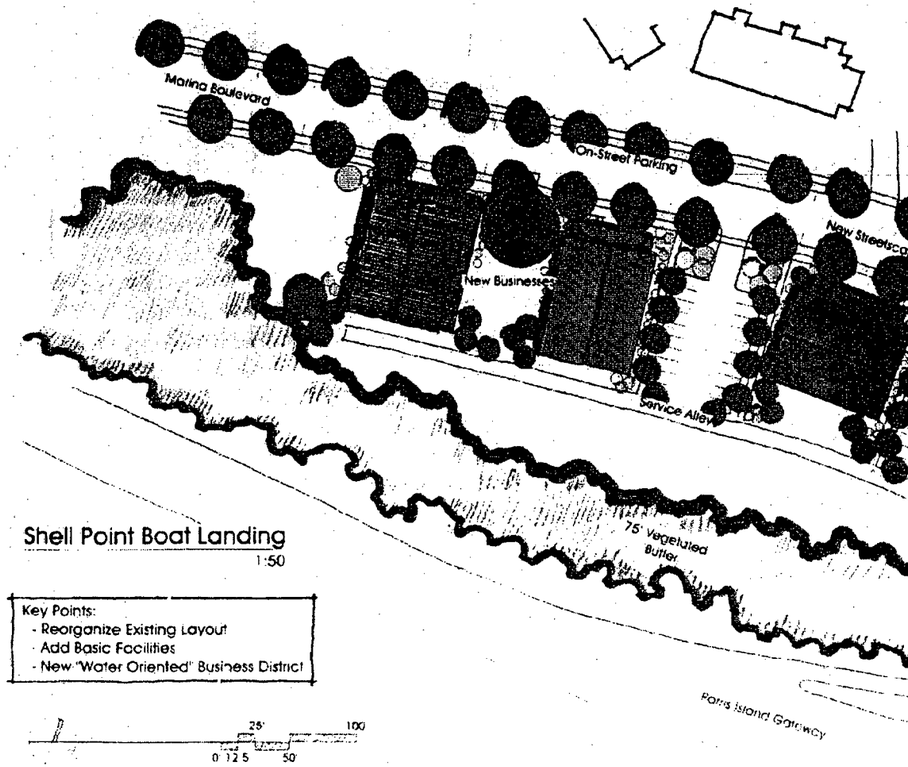
Shell Point Community Plan

Beaufort County, South Carolina



Gateway Perspective
nts

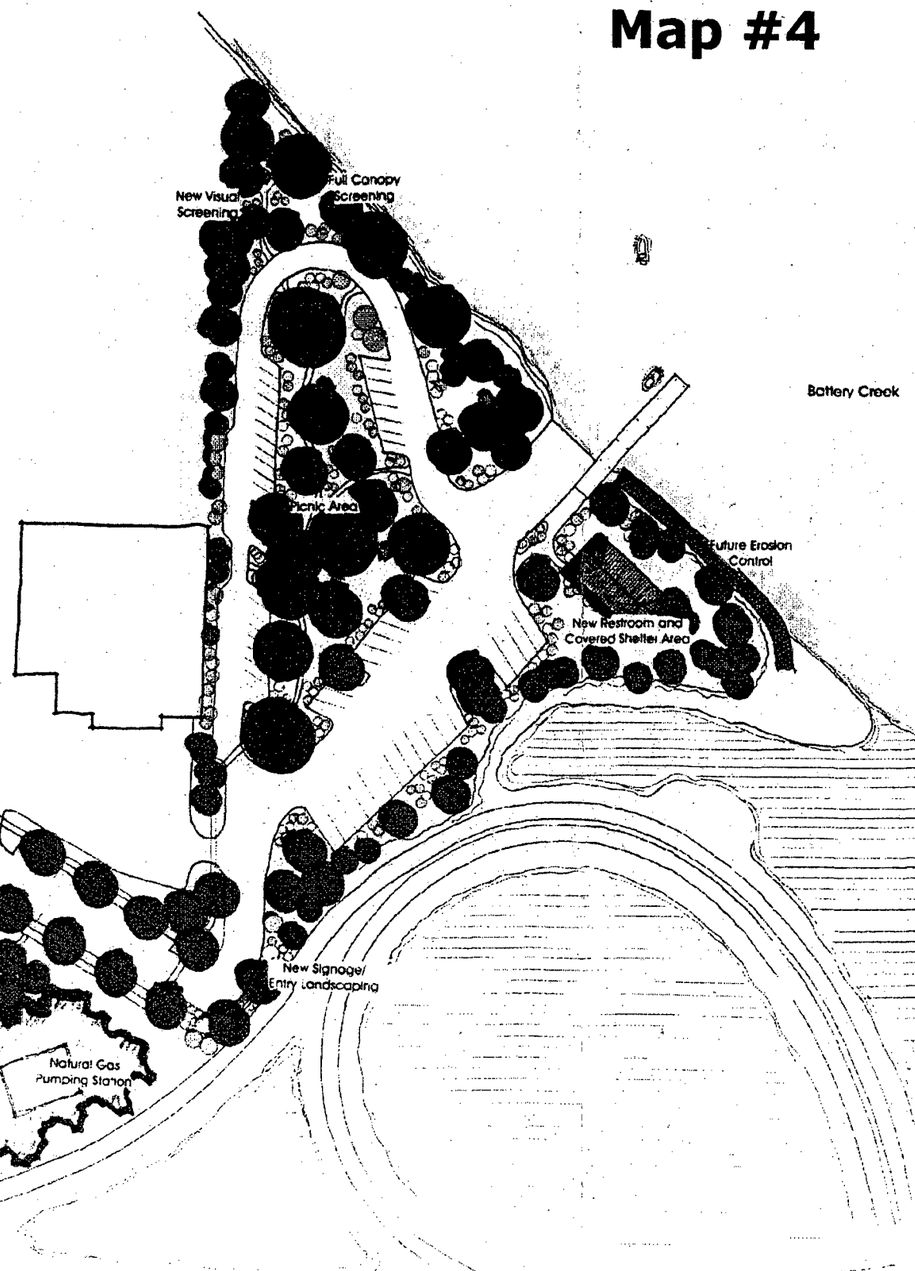
Gateway / Signage Prototype:
- Use to Denote Marina Boulevard District
- Use to Define Borders of Shell Point Community
- Business Sponsorship Opportunities
- Civic Display Uses



Shell Point Boat Landing
1:50

Key Points:
- Reorganize Existing Layout
- Add Basic Facilities
- New "Water Oriented" Business District

Map #4



Shell Point Community Plan

Beaufort County, South Carolina

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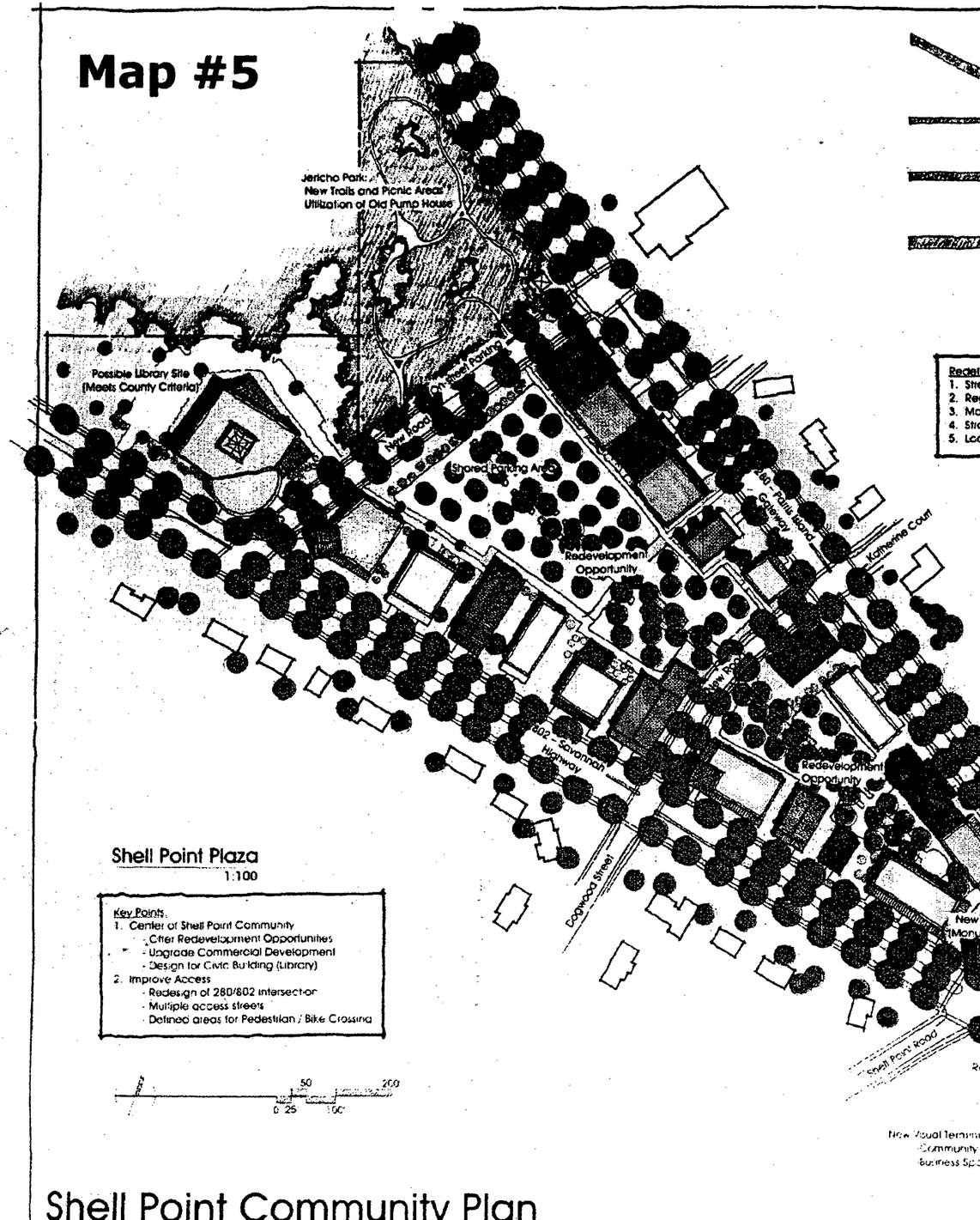
Shell Point Boat Landing

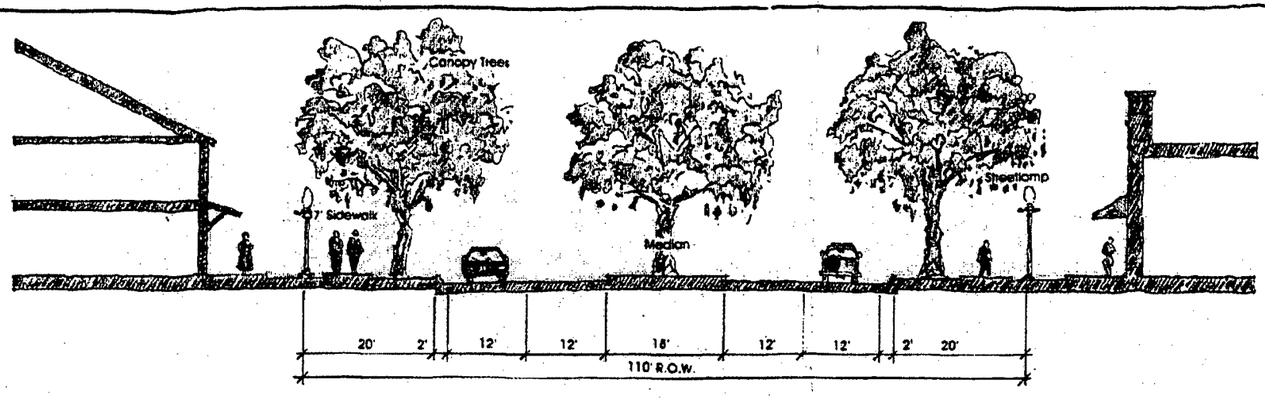
Map #5



Shell Point Plaza
1:100

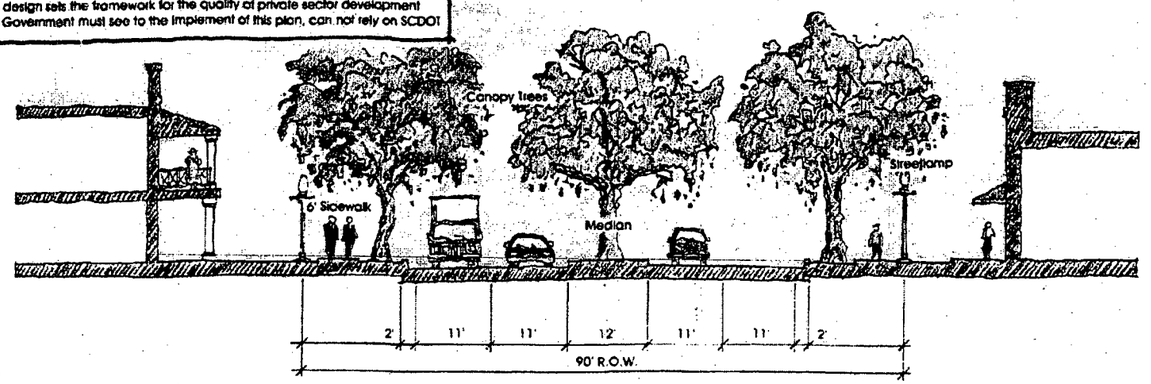
Key Points:
1. Center of Shell Point Community
   - Offer Redevelopment Opportunities
   - Upgrade Commercial Development
   - Design for Civic Building (Library)
2. Improve Access
   - Redesign of 280/802 intersection
   - Multiple access streets
   - Defined areas for Pedestrian / Bike Crossing

0 25 50 100 200

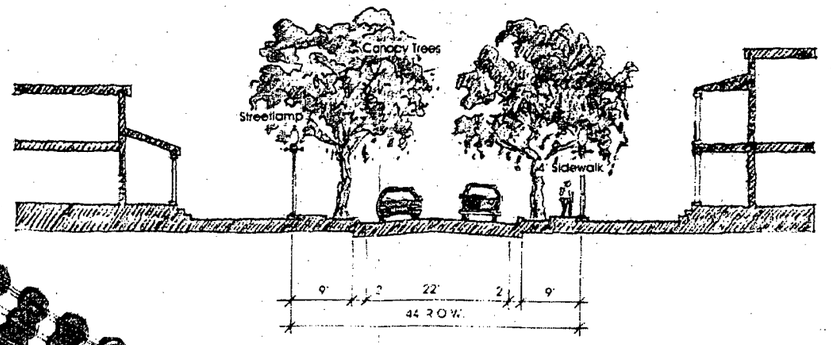


Redefining The Streets of Shell Point:
1. Streets serve many functions not just vehicular traffic
2. Regional vehicular routes do not need to be "freeway" like
3. Match realistic vehicular speeds with design speeds
4. Street design sets the framework for the quality of private sector development
5. Local Government must see to the implement of this plan, can not rely on SCDOT

Savannah Highway Section
1:10



Parris Island Gateway Section
1:10



Residential Street Section
1:10

Shell Point Community Plan

Beaufort County, South Carolina

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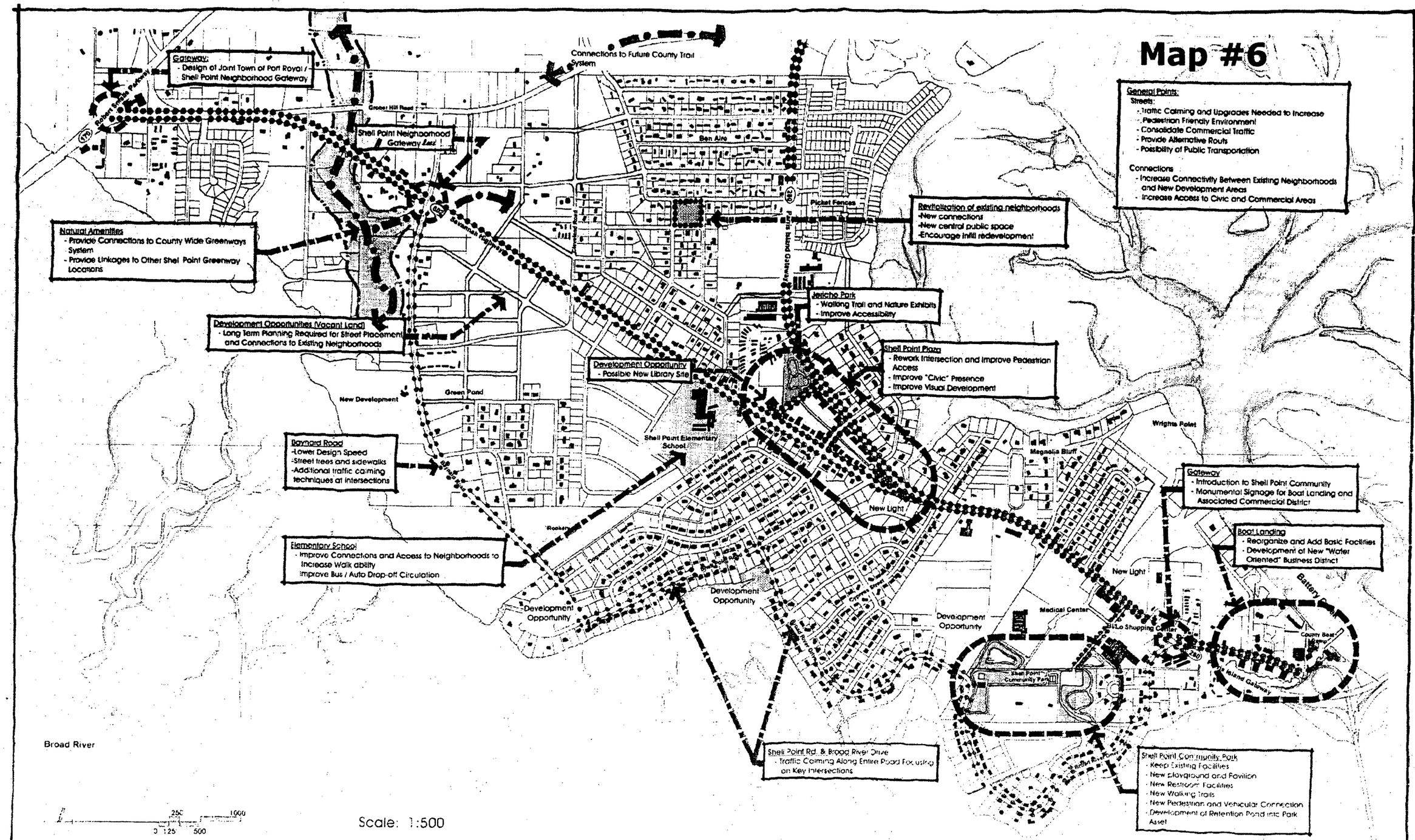
Shell Point Plaza

Map #6



Scale: 1:500

Shell Point Community Plan

Beaufort County, South Carolina

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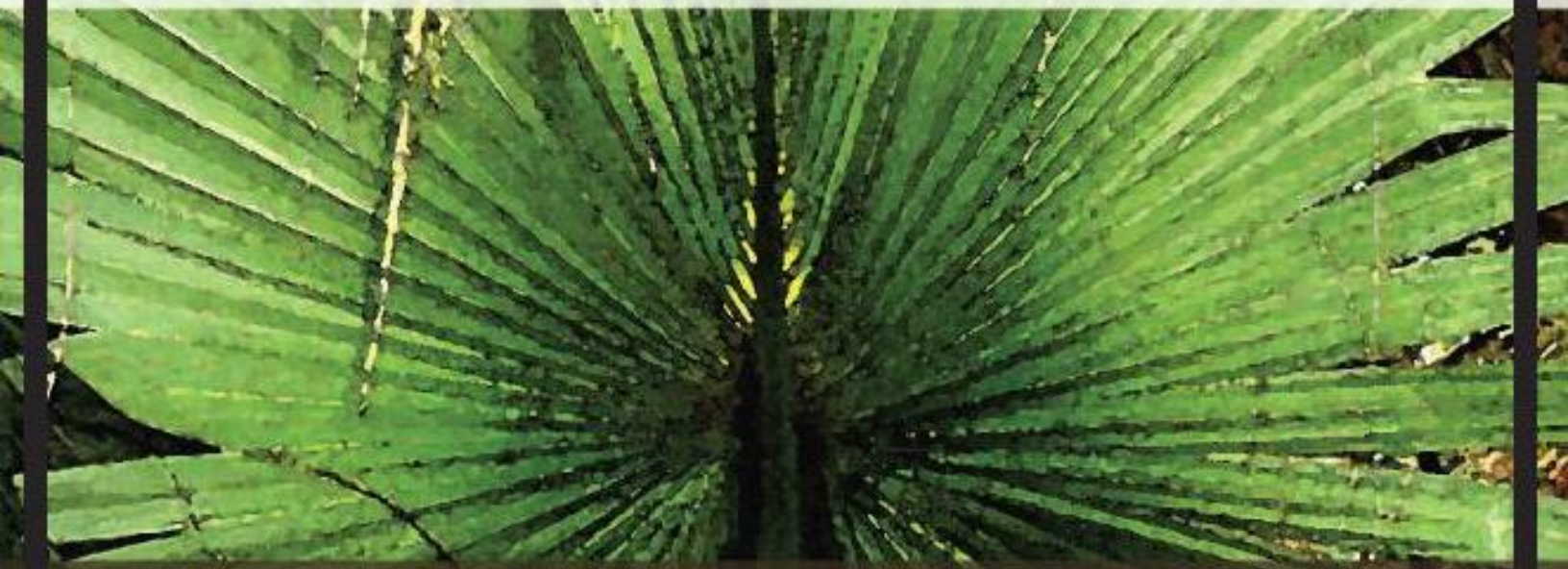
Master Plan

NORTHERN BEAUFORT COUNTY

SOUTH CAROLINA



REGIONAL PLAN

McBride DALE CLARION

Acknowledgements

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Executive Summary

Introduction

The Northern Beaufort County Regional Plan represents agreement reached by Beaufort County, the City of Beaufort, the Town of Port Royal, and the Town of Yemassee as to how the region will grow and develop. The plan begins with a series of common regional goals that serve as the foundation on which the plan is built.

The plan delineates a future growth boundary that focuses new growth in well-defined areas, preserving over 60% of the land area for rural related uses. The plan includes a future land use plan that creates a framework within which each community will continue to plan their own futures within a regional vision. It includes a transportation planning strategy that will enable effective regional transportation planning in a changing and unpredictable environment. It addresses the fiscal aspects of planning so that allocating regional costs of growth can be prepared for. It includes improved baseline environmental standards and other planning initiatives. Finally, it sets the stage for continued oversight of the implementation of the plan through intergovernmental action.

The Planning Process

This plan was prepared in close consultation with a Steering Committee that was appointed by Beaufort County, the City of Beaufort, the Town of Port Royal, and the Town of Yemassee. It had representatives from Beaufort County Council, Beaufort City Council, Port Royal Town Council, Yemassee Town Council, the Beaufort County Planning Commission, the Joint Planning Commission, the Lowcountry Council of Governments, and the Beaufort County School District.

The Steering Committee generally met on a monthly basis for more than a year to prepare this plan. It was supported by planning staffs from each jurisdiction working together with planning consultants as a unified planning team. In addition, the Technical Advisory Committee was formed with representatives of many other community organizations and agencies to provide advice and expertise on particular topics relevant to the plan. The Technical Advisory Committee, in turn,

organized itself into a series of special topic working groups who provided focused recommendations on different elements of this plan.

The Steering Committee held public meetings over the course of the planning process at locations throughout the county in order to provide public input and comment. In addition, all meetings of the Steering Committee were open to the public, and public comments were taken by the Committee.

The Steering Committee worked its way through the planning process in a logical and orderly manner. It began by working with the planning staff team to develop a series of "guiding principles" that set the scope and tone of the planning process. Those guiding principles were eventually translated into the Common Goals that are in Chapter 1 of this plan. The Steering Committee worked with staff to understand possible growth forecasts and alternative future growth scenarios, and ultimately focused in on a particular growth scenario that evolved into what is now embodied in the growth boundaries and land use plan.

Northern Beaufort County is forecasted to grow by approximately 53% over the next twenty years, from approximately 80,500 to almost 123,500. The Committee spent a great deal of time analyzing what future growth meant in terms of transportation needs, and ultimately developed a transportation strategy for the future. Following the transportation analysis, the Committee then worked with a fiscal impact consultant to understand the regional costs of growth related to transportation and other public facilities.

The working groups of the Technical Advisory Committee worked hard to develop specific recommendations for other plan elements, particularly the need for baseline environmental standards, and these recommendations were embraced by the Steering Committee and are included in this plan. Finally, the Committee worked hard to develop a system for future implementation and monitoring of the plan, so that it could become a regional reality.

The Plan

The Northern Beaufort County Regional Plan is organized into eight chapters.

Chapter 1 – Regional Growth and Common Goals: This chapter contains a series of Common Goals that were derived from the initial Guiding Principles created by the Steering Committee early in the process. These Common Goals are in effect the regional planning "values" that are the foundation for the plan. They include a series of regional planning themes, including:

- The importance of each community working together to coordinate growth in a collaborative way,
- The related importance of coordinated regional infrastructure planning, such as regional transportation facilities,
- The importance of a strong and diverse regional economy,
- The need for a sustainable and fair way of funding regional infrastructure,
- The need for consistent natural resource protection from one jurisdiction to another,
- The desire to focus growth in certain areas, thereby preserving rural character and avoiding inefficient sprawl,
- The importance of preserving open spaces,
- The desire to preserve socioeconomic diversity of the region,
- The regional need for affordable and workforce housing for residents,
- The role that high quality compatible infill can play in regional development,
- Recognition of the need to balance planning policies with the rights of land owners,
- The importance of military facilities in the regional economy and the importance of coordination with military planners,
- The need for continued coordination of the various governments, and
- The need to institutionalize this plan through local community plans and regulations.

Chapter 2 – Growth Coordination Principles: This chapter contains what is in many ways the heart of the plan – future growth boundaries and growth principles. While all elements of the plan are important, this plan revolves around agreement on boundaries for where communities are to grow, and where they agree not to grow, making it possible for the municipalities to plan for their services and for the county to encourage long term sustainable rural areas. The growth boundaries create predictability for both the municipalities and the county by addressing where growth will occur. The growth principles that go with the boundaries lay the groundwork for future agreements as to how the growth will occur, in particular the future "rules" for how development and annexations will be reviewed. The emphasis in the plan is on jurisdictions working together to maximize benefits of growth while mitigating its negative impacts, particularly cross jurisdiction impacts.

Chapter 3 – Land Use: This chapter works in concert with Chapter 2 by defining a future land use plan that fits within the growth boundaries framework. It defines land uses at a level of detail that

creates a regional vision, while allowing each community to continue to do more fine grained land use planning within the regional plan.

Chapter 4 – Transportation and Other Public Facilities: This chapter outlines a strategy for transportation and other public facilities. It recognizes that transportation, perhaps more than any other element, is the "canary in the mine", meaning that road congestion is often the first and most visible evidence of negative impacts of growth. The plan recognizes, however, that transportation planning occurs in a very dynamic environment, making it difficult to plan at a 20 year horizon with great specificity. For example, many alternatives are identified in this plan that could make certain road projects unneeded in the 20 year horizon, such as mass transit, improved pedestrian and bicycle facilities, and enhanced access management, but no one can predict with certainty how effective these alternatives can be in reducing the growth of vehicular traffic. For this reason, this plan suggests that certain road improvements be included in this plan for continued planning and evaluation, such as the US 21 widening, and the western bypass, recognizing that there is a strong desire by many in the region to avoid having to construct those projects due to perceived negative impacts on the quality of the community.

Chapter 5 – Fiscal Impact of Growth: This chapter places the price tag on future growth. Not surprising, the fiscal analysis points out that current funding sources will not allow the region to keep up with the capital and operating costs of regional public facilities. The unfunded capital costs for transportation, libraries, parks and recreation, and other regional governmental services is expected to be over $216 million over the next twenty years, 77% of which are transportation related. Another $230 million in operating and maintenance costs are expected over the same time period. The net fiscal deficit for regional facilities, including capital and operating costs, is forecasted to be in excess of $217 million over 20 years. This analysis makes it clear that the communities of Northern Beaufort County must work together to identify and plan for new tools to fund this projected deficit, such as updated impact fees, and capital sales tax. Efforts to fund operating costs will be a particular challenge.

Chapter 6 – Baseline Environmental and Corridor Standards: This chapter along with Chapter 7 represents the efforts of the Technical Advisory Committee Working Groups. These Working Groups developed excellent recommendations that address specific implications of plan policies and are an excellent guide to some of the actions that are needed to carry the plan forward. Chapter 6 contains recommendations for improved baseline environmental standards. These include implementation of the Beaufort County Special Area Management Plan (SAMP), storm water "best management practices", critical line setbacks and natural vegetative buffers, baseline standards for the protection of freshwater wetlands, and others. Baseline standards are also recommended for shared scenic and travel corridors

throughout the region, and for the use of transfer of development rights to preserve open space.

Chapter 7 – Regional Planning Initiatives: This chapter contains recommendations for a series of additional regional planning initiatives related to economic health and diversity, socioeconomic diversity, affordable and workforce housing, infill and redevelopment, military base coordination, and a regional growth tracking system.

Chapter 8 – Implementation Oversight: This chapter provides an overall framework for the implementation of the plan. It provides a four point approach to implementing the plan, including a continuing role for the Steering Committee as an implementation oversight group, the use of intergovernmental agreements to ratify certain plan elements, the inclusion of regional plan policies in local plans and regulations, and ongoing work by the Technical Advisory Committee on additional planning initiatives.

This plan represents a quantum leap forward for regional planning in Northern Beaufort County. In the past, each community engaged in local community planning; while each community tried to plan responsibly, they planned without a sense of the regional implication of their own actions. This regional plan creates a starting point for local planning within a regional framework. While this plan respects the planning autonomy of each community, it represents an agreement by each community to plan as part of the larger regional entity.





1 Regional Growth and Common Goals

Introduction

Northern Beaufort County has experienced steady growth over the last decade. It has not grown as rapidly as the southern portion of the county, but it appears that growth pressures may be increasing – at the very least, we can expect that growth pressures will remain steady. This growth is occurring in an extremely sensitive natural environment that is home to many historic rural, urban, and suburban communities, each of which contributes to a unique and much treasured quality of life.

Growth forecasts were prepared for Northern Beaufort County as part of this regional planning process using the methodology developed originally for the regional transportation planning model. The method of making those forecasts is explained more fully in Appendix A of this plan.

Northern Beaufort County is forecasted to grow by approximately 53% over the next twenty years, from approximately 80,500 to almost 123,500. The following table illustrates the breakdown by planning sub area, and also shows how that population translates into potential dwelling units. During the process of preparing this plan, some members of the public suggested that growth may occur faster than that forecasted using this methodology. It was suggested, for example, that the population could exceed 145,000 in the next twenty years. It should be noted that these population forecasts are not intended to be "predictions" of the future. There are many variables that can influence future growth, including local, regional, national, and global economic trends and changes. Rather, these forecasts should be considered as reference points for planning purposes.

Figure 1

Planning Area	2006 Dwelling Units	2006 Population	2025 Dwelling Units	2025 Population
Port Royal Island	19,875	50,244	30,587	76,299
Sheldon	2,123	5,266	3,696	9,203
Lady's Island	4,855	11,918	7,430	18,911
St. Helena Island	7,599	13,190	8,937	19,119
TOTAL	34,452	80,618	50,650	123,532

In addition to an increase in population and resulting residential dwelling construction, there will also be a corresponding increase in non-residential growth, for uses such as retail, office, industrial, and institutional uses. It is estimated that an additional 6.4 million square feet of non-residential land uses could be added over the next twenty years, most of which would be in the form of retail and office uses (2.3 million square feet of retail, and 2.2 million square feet of office).1

The communities that make up Northern Beaufort County, including the City of Beaufort, the Town of Port Royal, the Town of Yemassee, and Beaufort County (together referred to as The Participating Local Governments), recognize that a regional approach is needed to manage this growth, to supplement ongoing local planning in each community. For this reason, the four local governments agree to cooperate and coordinate on regional planning issues that transcend local boundaries. This regional plan is the starting point for an ongoing collaborative regional planning process.

Unlike the southern portion of the county, the communities of Northern Beaufort County are able to set the pattern of growth in the future. In the southern portion of the county, over 90% of the land is already committed in one form or another. In the Northern portion of the county, over two thirds of the land remains uncommitted, which means that the land use pattern has yet to be set.

This plan begins with a series of common regional goals. These common goals are a broad statement of regional planning values and aspirations and serve as the foundation of other plan recommendations in subsequent chapters of this plan.

---

[1] The methodology for the growth forecasts is described in Appendix A.

Recommendation 1.1*: The Participating Local Governments should work together to achieve common goals related to:*

- *Coordinated Growth*
- *Public Facilities*
- *Economy*
- *Fiscal Health*
- *Environment*
- *Quality of Growth*
- *Open Space*
- *Cultural Diversity*
- *Affordable and Workforce Housing*
- *Infill and Redevelopment*
- *Individual Property Rights*
- *Military Facilities*
- *Local Planning within the Regional Plan*
- *Intergovernmental Coordination*

Each of these is discussed below.

Coordinated Growth

Northern Beaufort County includes four different units of local government, including the City of Beaufort, the Towns of Port Royal and Yemassee, and Beaufort County, each of which is responsible for a wide range of local government services. Each entity has jurisdiction over diverse areas that are unique in their challenges and opportunities, and each entity values their autonomous ability to act in their best interests. Further, there is desire to continue to have distinct and unique communities, each with their own identities.

While recognizing this autonomy and uniqueness of interests, there also are many regional growth and development issues that transcend the boundaries of individual jurisdictions. Chief among these are transportation, natural resource protection, education, workforce housing, and providing public facilities. The livability of individual communities or areas is, in fact, heavily influenced by what happens in other jurisdictions. For this reason, it is agreed by all jurisdictions that certain regional planning issues must be addressed through coordinated regional actions. It is not effective for any one jurisdiction to try to address these regional issues without the coordinated action of all jurisdictions. It is agreed that growth and development, particularly near areas where jurisdictional boundaries meet, should be subject to

strong collaborative planning, while respecting individual jurisdiction autonomy.

Compounding the issue, the unique geography and topography of Northern Beaufort County makes it difficult to define and predict the pattern of future growth, thereby making it difficult to plan for community "edges". The relationship between historic land use patterns and the unique nature of upland, lowland, island, and water does not lend itself to an easy pattern of concentric growth radiating out from existing communities. Nonetheless, it is critical to the future health and sustainability of the region for the various jurisdictions to come together through a collaborative planning process to address the issues of future growth. A key building block for this regional plan will be agreement on an approach to municipal annexation of property that is currently in the county's jurisdiction, with mechanisms to facilitate joint planning for such development.

Common Goal 1:
The City of Beaufort, the Town of Port Royal, the Town of Yemassee, and Beaufort County will coordinate growth in Northern Beaufort County, especially around the current and future edges of the communities.



Timing and Adequacy of Infrastructure and Public Facilities

The provision of infrastructure and public facilities, such as roads, schools, utilities, public safety services and facilities, and libraries is a fundamental purpose of local government. It is incumbent upon local government to provide adequate levels of public service for existing population and businesses and to plan for future facilities to serve anticipated future population. Further, it is incumbent of local government to provide these services in a timely manner relative to the rate of new growth, and to do so in a fiscally responsible manner that fairly allocates the cost of the services relative to existing and new population.

Individual jurisdictions are responsible for various local infrastructure and public facilities within their own jurisdictions and those local facilities are not appropriately addressed as part of this regional planning effort. However, certain facilities have a regional role that goes beyond individual jurisdictions, such as regional roads, bridges, regional parks, schools, and libraries. Other services are provided locally, but can benefit from multi-jurisdictional cooperation, such as public safety services (i.e. police and fire/EMS).

The region's transportation facilities are among the most important in terms of continued economic health and community livability, and they are also the facility that would most benefit from a regional approach. Safe and adequate transportation facilities are important for many reasons: economic trade, convenience of residents and businesses, safety service accessibility, and hurricane evacuations. The planning for and reservation of adequate transportation corridors relative to anticipated growth, and the planning for capital investment and maintenance of roads, are paramount regional challenges to be addressed in this plan.

Common Goal 2:
Adequate and timely regional infrastructure and public facilities will be provided in a fair and equitable manner through a cooperative process in which all units of local government participate and act in the spirit of partnership.

Economic Health and Diversity

One of the critical success factors for any region is to have a strong, vibrant, and healthy local economy. A strong local economy provides employment opportunities for residents, creates a sense of progress and activity, and generates tax dollars that fund local public services and facilities.

There are continuing efforts to actively encourage economic development through agencies such as the Economic Development Partnership and the Beaufort County Chamber of Commerce, and through efforts such as the Beaufort Commerce Park. Part of the challenge in such efforts is to identify and set aside land well served by adequate transportation facilities and other supporting infrastructure.

Beaufort County is in very serious need of new economic development that draws capital and investment from outside the county and provides good wages and opportunities for our citizens. While the county has the highest per-capita income of any county in South Carolina, it has one of the lowest wage rates. It also relies heavily on its residential tax base for property tax revenue. To change this, the county must make a priority of attracting and retaining new business and industry that can make substantial capital investment, and pay good, above state average wages.

Northern Beaufort County is well situated between the ports and airports of Charleston and Savannah, and is close to Interstate 95 and the major east coast rail corridor. The quality of life is high and the county is increasingly a destination for early retirees from eastern metropolitan areas. In spite of these locational advantages, four obstacles have been identified to economic development in Northern Beaufort County.

- The region lacks an adequate supply of appropriately zoned and appropriately located land for non-retail commercial uses. While Northern Beaufort County has two designated industrial parks, one of these, the Yemassee Park, is almost completely wetlands. A more suitable site closer to I-95 should be established to benefit from the locational advantages described above.

- The region also lacks suitable vacant industrial buildings that businesses wishing to locate here can use. The one suitable building available, the Vanguard Building on US 21, was acquired by the Economic Development Partnership and transferred to Greenline Industries, a manufacturing firm that has hired forty persons for good wages and intends to hire more. If more vacant buildings were available, there would be more success in attracting suitable firms to the region.

- Even when a suitable site is available, the development approval and permitting process in Beaufort County and in most municipalities can be time consuming and may discourage potential industrial companies and speculative building developers from locating in the county.

- Finally, a critical piece of our challenge with economic development lies with our workforce. Because we have had few skilled employment opportunities, we have not attracted a pool of skilled labor nor have we provided incentives for our young people to acquire technical skills. Therefore, when a prospective business looks at the availability of skilled workers, the pool is lacking.

Common Goal 3:
A strong, vibrant, and healthy economy will be achieved through a successful economic development program in order to ensure the long term success and viability of the Northern Beaufort County region.

Fiscal Sustainability

As new growth occurs, it will bring with it demands for new regional public service and facilities along with the need for maintenance of both new and old facilities. The construction and maintenance of those facilities will be funded by tax revenues. When tax revenues are not adequate to fund those needs, there will be a fiscal imbalance that can not be maintained in the long run. Therein lays the challenge: how to achieve a land use balance and a revenue structure that funds regional public service and facility needs in a fair and equitable manner among existing and new population and among the Participating Local Governments.

Common Goal 4:
Northern Beaufort County will maintain a fiscally sustainable system of funding regional capital infrastructure, operating, and maintenance needs.

Consistency of Environmental Standards

Natural resource protection is an obvious and classic instance of where impacts transcend political boundaries. Further, the natural environment in Northern Beaufort County is of paramount importance to its lifestyle, image, and economy, more so than in most regions of the country. During the Southern County Regional Plan process, the natural resources deemed most important for protection were salt marshes, marsh islands, coastal waters, and marine resources; trees, forests, and wildlife habitats; beaches and dunes; and freshwater wetlands. That plan also recognizes the importance of mechanisms to permanently preserve open space as a way to protect these natural resources. This planning effort embraces these same natural resources.

While each jurisdiction is free to develop natural resource protection measures that best fit its area, there is great value in having an agreed upon base of environmental protection standards below which no jurisdiction should go. Consistency among jurisdictions in standards relating to water quality is especially important.

Common Goal 5:
Northern Beaufort County will be protected by baseline standards for natural resources including salt marshes, marsh islands, coastal waters, and marine resources; trees, forests, and wildlife habitats; beaches and dunes; and open space preservation that each jurisdiction adopts as part of their planning policies and regulations.

Quality and Form of Development

Northern Beaufort County has a rich diversity of unique "places" – far from the homogeneity of many growing suburban areas, one can experience a full range of natural and man made environments. From the rural historic landscape of Sheldon, to the historic neighborhoods of Beaufort and Port Royal, to the coastal island environment of St. Helena, to the new urbanism styles in communities such as Habersham and Point View, the area is home to distinct "forms" of development and environment. As the region continues to feel growth pressure in the future, all agree that we should strive to maintain its unique sense of place.

Further, the relationship of existing and new communities and neighborhoods is important. The concept of "connectivity", while it has many dimensions, is an important regional issue. The way in which existing and newly developing areas are connected with roads, pedestrian facilities, and environmental corridors can help contribute to a sense of integrated community, rather than a sense of isolated pods of development.

One of the ways in which a sustainable regional form can be accomplished is to identify a regional vision for the overall form of new development relative to existing development and the natural environment, and then to implement local planning policies and regulations to implement that vision. While each community will continue to have its own responsibility to implement such policies at the local level, the region as whole benefits from a common understanding of the how the individual communities will fit together as a region. While it would not be desirable to have each community have the same standards – having all the communities look alike would detract from diversity of the area – it is very desirable for each community to understand where it fits into the regional form.

Common Goal 6:
Northern Beaufort County will maintain a distinct regional form of compact urban and suburban development surrounded by rural development for the purpose of reinforcing the valuable sense of unique and high quality places within the region.



Open Space Preservation

One of the features that most contributes to the character of Northern Beaufort County is its extensive amount of open spaces. These open spaces take many forms – water, marshes, pine forests, farms, and simple vacant land. The long term preservation of some of these open spaces is important to preserve community character. The open space preservation issue is closely tied to both the natural resource protection and regional form issues discussed in those respective common goals. The preservation of natural resources often also preserves open space, and a well designed regional open space system contributes heavily to an overall regional form.

Substantial preserved open spaces that form a regional system will not occur without a strong regional effort. It is true that participating local government can and should pursue open space preservation at a local level, but those efforts should be part of a regional framework to ensure that they fit together in such a way that they reinforce natural resource and regional form goals.

It is also important to recognize as part of this regional planning effort that the extensive open spaces that currently exist can not be expected to remain without active efforts by the communities. Most open spaces (other than those already permanently protected) are in private ownership. In a sense, this is "borrowed open space" - much of the general public appreciates and enjoys that open space, but we can not expect private land owners to carry the burden of providing open space in the long term.

Common Goal 7:
Methods of creating and permanently preserving a regional open space system will be developed.

Diversity

Northern Beaufort County is blessed with a diverse population, both ethnic and socioeconomic. It has many people whose families and culture date back centuries, and whose roots and commitment to the community are deep. However, as a potential high growth region with tremendous natural beauty and character, there is concern about the ability of many within the indigenous population who were in Beaufort County prior to modern development in the later part of the twentieth century to remain in the region as land values and housing costs rise.

There are many regions around the country where high growth changes the fundamental nature of the local economy, making it difficult for many people to afford to continue to live in the area (including being able to afford real estate based taxes) or to participate fully in the economic prosperity and opportunities that growth can bring. This is particularly true of the underprivileged or poor.

Northern Beaufort County and its Participating Local Governments want to avoid this phenomenon of cultural and economic displacement and isolation of certain populations in the region. All of the local ethnic and socioeconomic groups contribute to the quality of the region and its communities, and this plan recognizes the role that they have played in making the area what it is.

Common Goal 8:
An integrated ethnic and socioeconomic diversity of the region will be promoted regionally, and in particular the ability of indigenous population groups to remain a contributing part of the region and benefit from the opportunities that come from growth will be protected.

Affordable and Workforce Housing

Related to the issue of diversity is the provision of affordable and workforce housing. While the availability of affordable housing and the provision of work force housing for local workers are different issues, they are part of the same larger need to ensure that the region is providing a full range of housing to meet a growing and changing population.

Common Goal 9:
Affordable and workforce housing will be addressed on a regional basis through a multi-jurisdictional approach.

Infill and Redevelopment

Infill and redevelopment refers to the development of vacant land that is surrounded by development, or the redevelopment of land that had previously been developed but which is underutilized under current market conditions. While this is not often an issue addressed at the regional level, infill and redevelopment can have regional implications in that may reduce pressure for growth in "greenfield" areas. Thus, while each community will wish to have its individual infill and redevelopment policies to ensure that this type of development occurs in a way that is compatible with the community, the regional plan embraces the idea of infill and redevelopment as a way to absorb some share of regional growth, perhaps reducing pressure around the edges.

Common Goal 10:
Compatible local infill and redevelopment by the local governments will be supported on a regional basis.



Balancing of the Broad Public Interests with Fairness to Individual Property Owners

Planning for the future of a region inevitably involves the balancing of interests. Local governments have the right and responsibility to plan for the broad public interest, in the manner that such public interest gets defined in an individual community. Much of the planning that occurs directly affects people who own private property. While it is well established that local governments have the ability to regulate the use of private property within the limits of law, the importance of private property rights is also a core value.

Land in Beaufort County is obviously owned by a wide range of interests. Some is owned in large assemblages and some is owned in small holdings. Some is owned by relative newcomers to the region, and some has been in family hands for many generations. Some is owned by interests who wish to capitalize on it as an investment, and some is owned by people who intend to use their land as is indefinitely into the future. In all cases, planning must involve a balancing of property ownership and public interests, a balancing that is unique in each region.

Common Goal 11:
The Northern Beaufort Regional Plan will promote the broad public interest, but it will be mindful of the impacts that planning policies have on private property interests.

Relationship of Growth to the Military Facilities in Northern Beaufort County

The military facilities in Northern Beaufort County, such as the Marine Corp Air Station, the Naval Hospital, and Paris Island are important components of the regional planning effort. The military facilities are long-time major economic engines for the County, and their continued presence is important to the long term economic health of the region. The Participating Local Governments all agree that this plan must

respect the operational needs and constraints presented by the presence of the military facilities.

The Air Station in particular has potential impacts that affect this planning effort. The Air Station has been clear in identifying its potential impacts on the region through the publication of AICUZ maps (Air Installation Compatible Use Zones). The Station has also been a willing participant in intergovernmental planning efforts designed to plan for the external impacts of the base. Further, potential changes in the mission and types of aircraft associated with the base may expand the zone of impacts of future flight patterns.

Common Goal 12:
The Northern Beaufort Regional Plan will result in continued collaboration with military facility planners, and in particular will respect the AICUZ contours.

Preparation of Comprehensive Plans

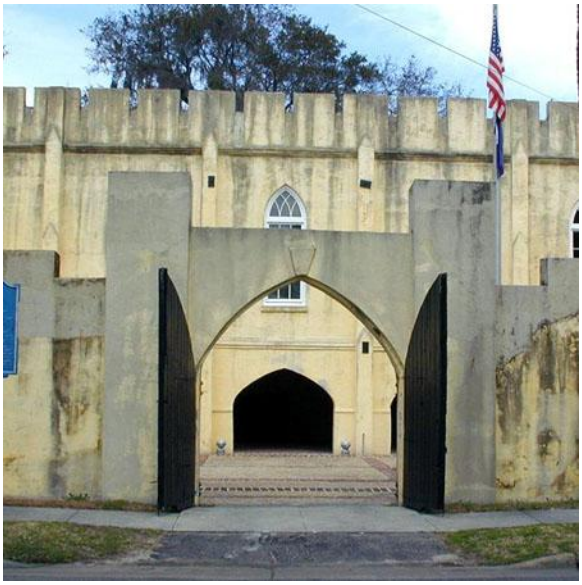
Beaufort County and its municipalities face statutory requirements for preparing new Comprehensive Plans in 2007 and 2008. With overlapping geographic areas of common interest, along with issue areas that transcend jurisdictional borders, it is important that these new individual policy documents contain common approaches to regional challenges. The plans should be based on a common expectation for growth patterns in the county, and contain consistent approaches to transportation, environmental, and housing issues.

Common Goal 13:
Preparation of individual Comprehensive Plans for each of the county's jurisdictions in 2007 and 2008 will use this Northern Regional Plan as a common policy base for growth patterns and issues of regional scale.

Intergovernmental Coordination

Overlaying all the issues identified in these Common Goals is the need to identify a way in which to accomplish the regional strategies that ultimately arise from this plan. It is clear to all that close cooperation, collaboration, and communication is needed on these issues.

Common Goal 14:
The regional planning effort will require future intergovernmental coordination to implement this plan.





2 Growth Coordination Principles

Introduction

The Northern Beaufort County Regional Plan provides a framework for the Participating Local Governments to plan cooperatively for the future. While it is fully recognized that each jurisdiction will continue to plan for their own best interests, it is also recognized that there is a strong need for an overall organizing vision for the region's and the people's common good that transcends local boundaries. Further, the Participating Local Governments agree that a shared regional vision put into practice benefits not just the region and its citizens, but each community individually as well.

The regional plan is wide ranging and far reaching, addressing issues as diverse as land use, the delivery of essential public services, transportation, the environment, the economy, fiscal sustainability, and affordable housing. However, in order to successfully address these diverse issues on a regional level, it is necessary to embrace the overarching growth coordination principles set forth in this chapter.

The following principles propose agreement on a basic set of future growth boundaries, a future regional land use pattern, the implications that these boundaries and land uses have on future municipal growth and rural preservation, how this plan can be institutionalized in local planning programs, and how the implementation of this plan can be promoted. The over-riding principles to be applied in all instances are: (1) Mutual public benefit, (2) Mitigation of extra-territorial impacts, (3) Joint regional plan consistency, and (4) Plan implementation through inter-government agreements.

Recommendation 2.1: *The Participating Local Governments should work together to incorporate growth boundaries and growth principles into future regional and local planning efforts, policies, plans, and land use regulations.*

Growth Boundaries

Agreement on future boundaries of growth is a critical step for the Northern Beaufort region. Growth boundaries allow for the municipalities to plan for their future growth in an efficient and predictable manner. Likewise, growth boundaries allow for the county to plan for rural areas and focus its attention on county-wide issues such as transportation and environmental resources in a cooperative manner with the municipalities. In order to provide a clear boundary to growth and identify those areas anticipated to be preserved for rural uses, the Participating Local Governments agree:

- That the Growth Boundary identifies land that is envisioned as the future growth areas (inside the boundary, with the exception of the AICUZ areas and the northern portion of Lady's Island discussed separately in this plan) and land that is envisioned to remain rural in character (outside the boundary).

- That land located inside the Growth Boundary (see Figure 2) is expected to ultimately annex into a municipality with a demonstration that adequate public facilities are available or will be available at the time of development and that negative impacts of development will be mitigated.

- That land outside the Growth Boundaries is envisioned as developing at rural densities of no more than one unit per three acres gross density or subject to existing Community Preservation Districts (CPD), and that such land is not anticipated to be annexed into a municipality nor is it envisioned as being approved for urban densities. It is acknowledged by the Participating Local Governments that the county will further plan for and define rural planning policies through its comprehensive plan update and that this additional planning may further define rural development options and policies. However, the county agrees that the underlying policy of preservation of rural character and low density development patterns as contained in this regional plan will be respected in the comprehensive plan update.

- The Participating Local Governments agree that rural preservation is an important component of the overall system of Growth Boundaries and that it is in the regional interest to protect rural character and density while allowing economic use of rural property. In order to ensure longtime residents in the rural areas are protected, it is anticipated that the county will continue to allow family subdivision exemptions. Generally what the provision would do is exempt the transfer of certain size parcels from long-time landowners to their children. It is further anticipated that the county will seek to enhance economic opportunities for rural

residents by encouraging nonresidential activities that are compatible with rural areas through uses such as rural business districts, cottage industries, and continued agriculture and forestry.



Land Use Plan

Within the framework of the Growth Boundaries, it is also in the regional interest for the various communities to agree on an overall land use pattern (see Chapter 3). This will allow for closer coordination of land use planning and provision of services among and between the communities as they continue to engage in their own local planning and land use regulation. In order to provide a long term regional land use vision, the Participating Local Governments agree:

- That the Future Land Use Plan will serve as the regional guide to future land uses in order to ensure that growth will occur in an orderly and coordinated manner.

- That the Future Land Use Plan will be supplemented with land use definitions and policies that identify the circumstances under which they are considered appropriate.

Annexation Principles

While it is important to agree on growth boundaries and recognize that annexation is likely within those boundaries, it is also important for the communities within the region to agree on how annexations will occur, and in particular how land use and service delivery will be addressed relative to multi jurisdictional impact. In order to provide for efficient annexation that promotes the long term economic health of municipalities, allows for reasonable growth within designated growth boundaries, and mitigates negatives impacts on unincorporated land and provision of services, the Participating Local Governments agree:

- To develop mutually agreeable annexation principles that address mitigation of extraterritorial impacts associated with annexations, including protection for designated CPD's, public facility standards, traffic impact study requirements, baseline open space requirements, and baseline environmental standards that will be met prior to annexation occurring. These will include at least the following:
    - The Participating Local Governments agree to develop procedures for notices of proposed annexations by a municipality with an ample opportunity for comment by the county.
    - The Participating Local Governments agree to develop administrative mechanisms to analyze and mitigate the potential impacts of proposed annexations on the delivery and level of service of public services and facilities, including fire, parks, library facilities, law enforcement, schools, transportation and roads, and public water (river) access in order to assure that adequate public services and facilities will be available to serve development expected as a result of annexations.
    - The Participating Local Governments agree to develop administrative mechanisms to analyze the impact of proposed annexations on the efficiency of services. This will include the ways in which services can be coordinated among jurisdictions, the avoidance of inefficient overlap of services or potential gaps in services, and a fair and proportional funding of services between the municipality and the county.
    - When, or if, after review and comment by the county, there is disagreement as to the consistency of the annexation with the regional plan, the participating municipality and the county shall devise a method by which the two bodies resolve their differences on the matter and come to a mutually agreeable decision.
- To develop mutually agreeable principles that address enclaves of unincorporated county territory within the Growth Boundary to provide for the most efficient pattern of land uses and provision of services consistent with the regional plan. Mutually agreeable

principles will also be developed that address instances in which development approval is requested, but where municipal annexation is not yet practical or desirable due to lack of contiguity with a municipality. These will include at least the following:

- The Participating Local Governments agree that it is the policy of this plan that land contiguous to municipalities will not be increased in authorized density without annexation to a municipality.

- For properties that are not contiguous to a municipality, the Participating Local Governments agree that the most appropriate method of urban or suburban development is through eventual annexation to a municipality. The Participating Local Governments agree that it is contrary to this regional plan for the municipalities and the county to compete for urban or suburban development or to allow the jurisdictions to be a party to zoning "jurisdiction shopping" by applicants. The county agrees that it will encourage property owners / developers who desire to increase density on non-contiguous property to first explore the feasibility of annexation, including consultation with the municipality and contiguous property owners.

- The Participating Local Governments agree that it is the policy of this plan not to increase density on property within the Growth Boundaries that is not contiguous to a municipality unless feasible annexation options have been ruled out and until the municipality has been provided the opportunity to review and comment on the request. If it is determined that it is not feasible to annex due to a lack of contiguity, the Participating Local Governments agree to develop guidelines for municipal review and comment to the county prior to their being considered for rezoning.

- Further, the Participating Local Governments agree that it is in the regional interest to avoid the creation of developed enclaves of unincorporated land that create inefficient service patterns. The Participating Local Governments agree to work together to find ways to encourage the eventual annexation of non contiguous urban or suburban development. Specifically, the Participating Local Governments agree to explore legal mechanisms whereby urban or suburban development could be subject by agreement by property owners to annex to a municipality under prescribed circumstances at a later date, subject to law.

- The Participating Local Governments agree to develop guidelines for the protection of existing Community Preservation Districts within the Growth Area.

- When, or if, after review and comment by the municipality, there is disagreement as to the consistency of the rezoning and development standards with the regional plan and agreed upon guidelines, the participating municipality and the county shall devise a method by which the two bodies resolve their differences on the matter and come to a mutually agreeable decision.

- The Participating Local Governments agree to develop approaches to addressing existing enclaves of unincorporated county land surrounded by municipal land, particularly to assure an orderly and efficient provision of public services and facilities, and the possible ultimate annexation of such areas.

Comprehensive Plans and Regulations

There is a clear desire on the part of the communities in the region for this regional plan to become ingrained in local planning policies and practices and serve as a true regional planning guide. In order to make this regional plan a part of the local planning and regulatory systems, the Participating Local Governments agree:

- To incorporate the policies and recommendations of this plan into their local comprehensive plans and local land use regulations.

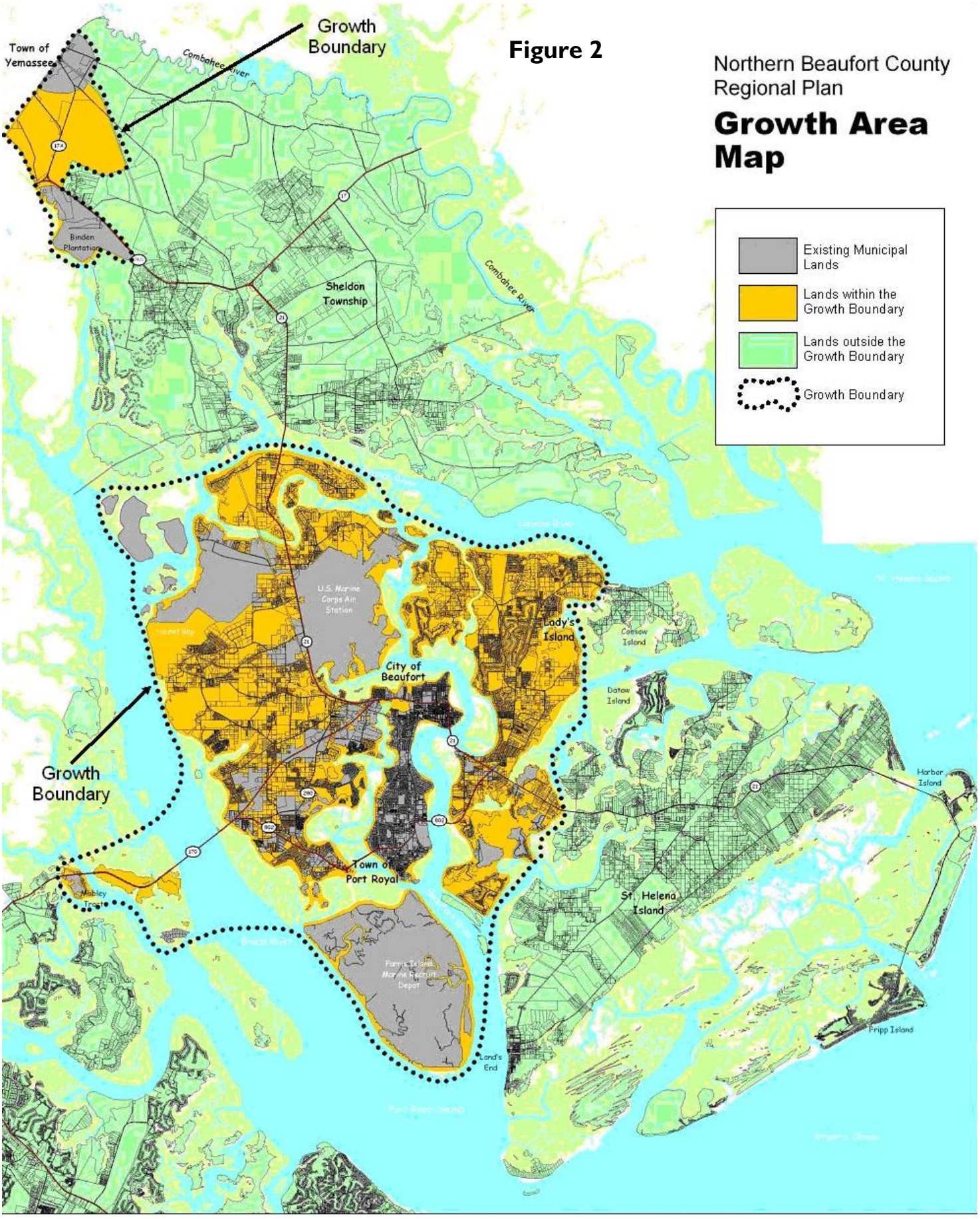
Ongoing Implementation

Just as there is a desire for this plan to make a difference at the local level, it is important that this plan be accompanied by measures designed to make it a reality. In order to insure that this regional plan is implemented, the Participating Local Governments agree:

- That once the Northern Beaufort County Regional Plan is completed the Regional Plan Steering Committee will continue to exist under the name of the Northern Beaufort County Regional Plan Implementation Oversight Committee and meet with responsibility for monitoring and facilitating implementation of this plan.

- To pursue development of an intergovernmental agreement that will establish the provisions for complying with, monitoring, overseeing implementation, and updating this plan.

Figure 2


Northern Beaufort County
Regional Plan
Growth Area
Map
Existing Municipal Lands
Lands within the Growth Boundary
Lands outside the Growth Boundary
Growth Boundary
Growth Boundary
Growth Boundary
Town of Yemassee
Combahee River
Binden Plantation
Sheldon Township
Combahee River
U.S. Marine Corps Air Station
Lady's Island
Coosaw Island
City of Beaufort
Datow Island
Harbor Island
Town of Port Royal
St. Helena Island
Parris Island Marine Recruit Depot
Land's End
Fripp Island



3 Land Use

Introduction

The growth boundaries described in Chapter 2 establish a broad and critical regional vision of growth areas and rural areas. Within this framework, it is also important to define a regional land use pattern. This chapter summarizes the future regional land use pattern envisioned by the Participating Local Governments for Northern Beaufort County. This regional land use plan will serve as the basis for updates to land use plans for each of the individual communities.

The Future Land Use Map (See Figure 3) identifies a land use pattern that builds on the Growth Area Map. It includes land uses organized into six categories, including residential, commercial, light industrial, rural, preserved, and military. Within the broad categories there are more detailed breakdowns of land uses, along with definitions of the land uses. Also, the land use categories include additional discussion of the regional issues associated with those land uses in order to further guide the individual communities in their local planning processes.

Generally speaking, the areas within the growth boundaries are designated for either commercial, light industrial, urban residential, or neighborhood residential uses, and the areas outside the growth boundaries are designated for rural uses. There are, however, several exceptions to this pattern:

- The area around the Marine Corp Air Station is designated as low density residential," as part of the joint planning effort designed to minimize growth within potential noise or hazard zones.

- The area on the northern portions of Lady's Island is designated as "rural" use. While this is within the growth boundary, it is not desirable for this area to develop at higher than rural densities due to the regional transportation constraints (namely the bridge crossings between Lady's Island / St. Helena and Port Royal Island). At such time that a third crossing or other relief can be provided in the future, this plan could be reevaluated relative to rural

designations within the growth boundary as part of a regional plan update.

- There are several "neighborhood residential" areas designated on Fripp and Harbor Islands, simply reflecting the existing development patterns. This plan does not envision those neighborhood residential areas expanding beyond their current boundaries.

Recommendation 3.1: *The Participating Local Governments should work together to implement the regional land use plan through their own local plans and land use regulations.*

Residential Land Uses

To promote a desirable regional pattern, new residential uses should develop in a pattern that maximizes the efficiency of regional infrastructure and the avoidance of sprawl or "leap-frog" patterns. Residential uses are encouraged to develop inter-connected neighborhoods, not isolated subdivisions that lack regional connections. Residential areas should promote regional pedestrian connections and should be coordinated with regional parks and open space facilities where feasible.

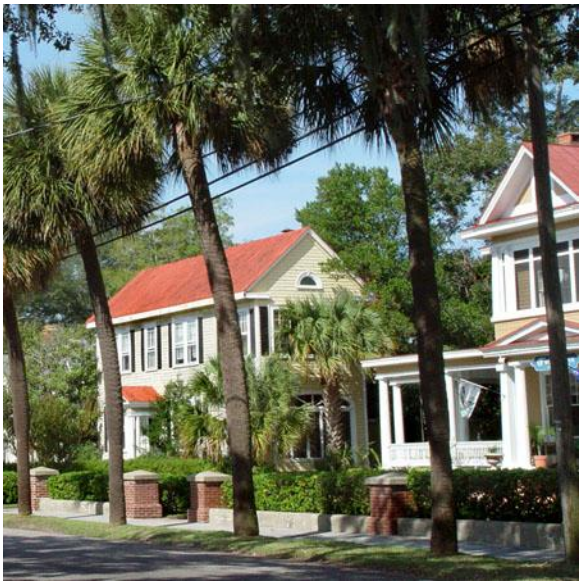
The Residential Land Use group includes urban residential and neighborhood residential land uses.

Urban Residential - Future development within the urban residential area is anticipated to be similar to the type and mix of land use currently found in the City of Beaufort and the Town of Port Royal. Infill and redevelopment would be targeted within Beaufort and Port Royal and in the Shell Point areas, parts of Lady's Island and Burton (outside of the Airport Overlay District). Gross residential densities are between 2 and 4 dwelling units per acre with some denser pockets.

Neighborhood Residential - Neighborhood residential use implies that residential is, in fact, the primary use, with some supporting neighborhood retail establishments. New development is encouraged to be pedestrian-friendly, have a mix of housing types, a mix of land uses and interconnected streets. Maximum gross residential density is approximately 2 dwelling units per acre. It is assumed that 5% to 10% of the land area may consist of commercial development. This designation also includes Dataw, Fripp, and Harbour Islands.

Low Density Residential - Low density residential uses, which are located in northern Port Royal Island and Lady's Island, are affected by

the noise contours and accident potential zones associated with the U.S. Marine Corps Air Station. Residential development and places of assembly would be highly limited in those areas. Light industrial, commercial, and agricultural uses would be recommended in these areas.



Regional Planning Issues Associated with Residential Uses:

- It is recognized that urban and neighborhood residential areas will include a mix of uses, housing types, and residential densities, however it is important that the overall density remain within the parameters established in the above definitions and that the mixture of non-residential uses not overwhelm the residential character of these areas. While local commercial uses are envisioned as appropriate and desirable in residential areas, they should retain the local commercial scale so as to not overwhelm the residential neighborhoods. Similarly, while higher density multi-family uses are envisioned as being appropriate in residential areas, they should be offset with lower density residential and open space in the neighborhood to maintain the residential neighborhood character.

- Residential uses should be designed and developed to improve regional transportation connectivity. While the design of streets in individual neighborhoods is a local matter, the promotion of multiple road connection options on a regional level should be encouraged in residential developments.

- Residential developments that are made possible by annexation should be sensitive to and mitigate negative impacts on surrounding residential areas, including those in remaining unincorporated land.

Commercial Land Uses

Commercial development in Northern Beaufort County should embody high quality site plan and design principles, particularly related to landscape, signage, building design and orientation, and parking lot designs. Commercial development should be compatible with surrounding residential areas and should be connected to pedestrian systems such as sidewalk and trail systems that exist. Commercial uses should focus on key transportation nodes, avoiding strip patterns.

The commercial land use group includes core commercial, regional commercial, and community commercial.

Core Commercial - Core commercial uses include downtown Beaufort and Port Royal and areas along Boundary Street that are planned to have pedestrian scale, zero lot line oriented commercial development.

Regional Commercial - Regional commercial uses are those uses due to their size and scale that will attract shoppers and visitors from a larger area of the county and outside the county. Typical uses include "big box" retail uses, chain restaurants, and supporting retail.

Community Commercial - Community commercial uses typically serve nearby residential areas, such as a shopping district anchored by a grocery store. Good local examples of community commercial areas are at the intersection of US 21 and SC 802 on Lady's Island and Midtown Plaza (Bilo) in Shell Point.

Regional Planning Issues Associated with Commercial Uses:

- Commercial land uses should be designed according to sound access management principles and techniques in order to provide for efficient ingress and egress of traffic to minimize the efficiency and capacity of the regional transportation system.
- Commercial uses should promote regional transportation connections, and should avoid being designed and located so as to impede efficient regional transportation flow.

Light Industrial Land Uses

Chapter 7 of this plan identifies the need for providing a sufficient quantity of suitable located land zoned for non-retail commercial uses that promote the region's economic health and diversity. Uses in this category include the following: business parks, research and development centers, product assembly, distribution centers, cottage industries, and light and heavy industrial uses.

Rural Land Uses

The historic character of rural areas should be preserved and strengthened respecting existing Community Preservation Districts, providing for family subdivision options, by promoting compatible density and intensity, and by allowing rural economic opportunities that are compatible with rural areas.

The Rural Land Use group includes rural areas and rural communities.

Rural Community - These areas roughly correspond with the areas designated as "community preservation" in the county's Comprehensive Plan. These areas are proposed to serve the surrounding rural community with small scale retail and service uses and low to moderate density residential – approximately 1 dwelling unit per acre.

Rural - Rural areas are situated outside of the urban service area. Except where noted, these areas would retain their rural character with low density residential development, supporting small scale commercial development, and agricultural land uses. Future development in rural areas is anticipated to be similar to the type and mix of land uses currently found in the Sheldon area and St. Helena Island. Maximum gross residential density – 1 dwelling unit per 3 acres.



Regional Planning Issues Associated with Rural Uses:

- The Rural Land Use categories assume a mix of land uses, including agricultural, residential, and commercial. However, commercial land uses should be limited to those supporting the surrounding residential or agricultural areas and should typically be located along arterials.

- This Regional Plan acknowledges and respects the rural communities. In several of the rural communities, local plans have been undertaken and will continue to govern planning in those areas. It is anticipated that local plans will be completed for other rural communities as designated on the future land use map.

Preserved Lands

The Participating Local Governments should continue to preserve lands for open space purposes consistent with this regional plan.

This category includes all park lands and public and private lands preserved through conservation easements.

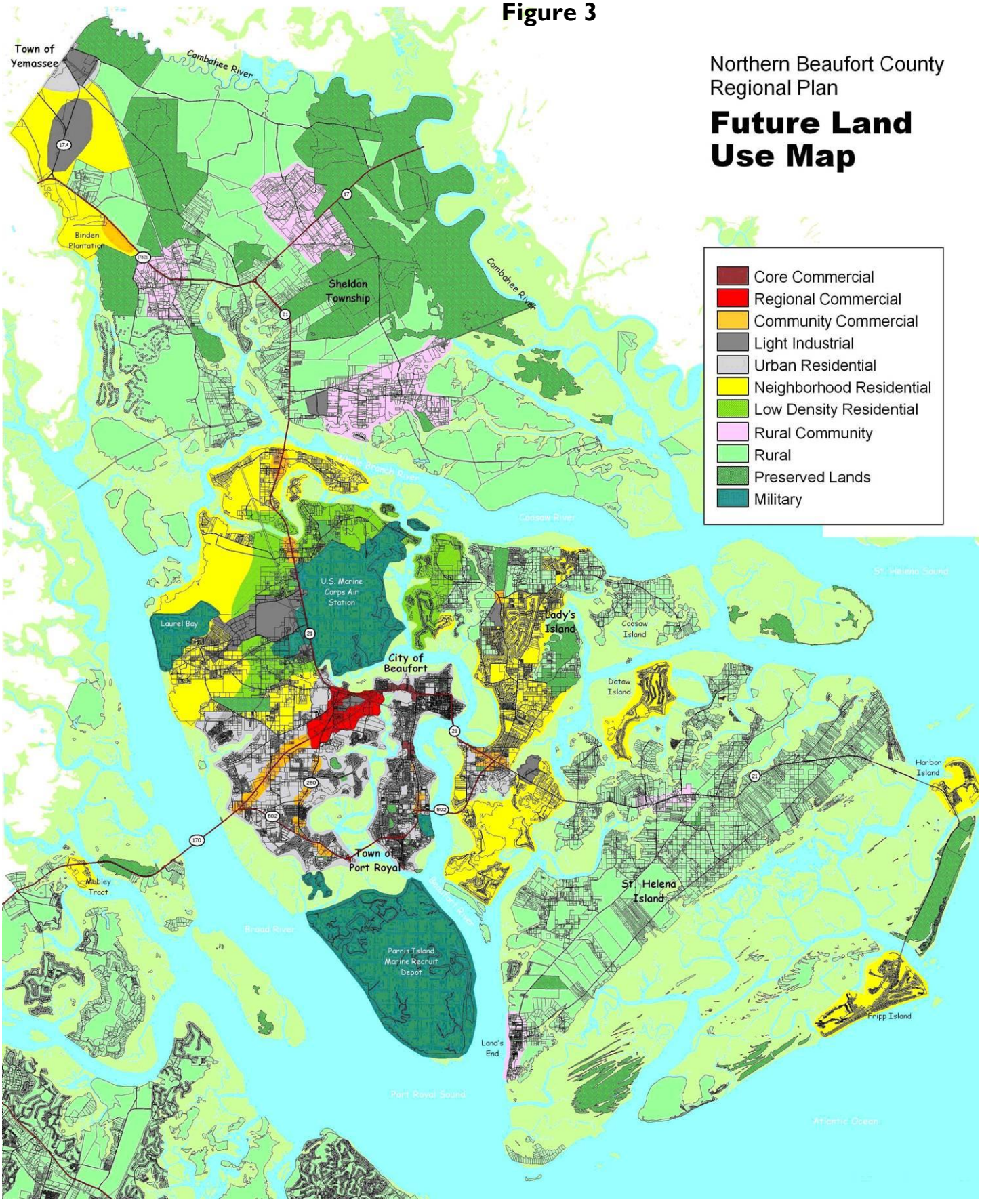
Military

The Participating Local Governments should continue to coordinate land use planning with military installation planning consistent with this regional plan.

This category includes all military installations.



Figure 3


Northern Beaufort County
Regional Plan
Future Land
Use Map
Core Commercial
Regional Commercial
Community Commercial
Light Industrial
Urban Residential
Neighborhood Residential
Low Density Residential
Rural Community
Rural
Preserved Lands
Military
Town of Yemassee
Combahee River
Binden Plantation
Sheldon Township
Whale Branch River
Coosaw River
U.S. Marine Corps Air Station
Laurel Bay
City of Beaufort
Lady's Island
Coosaw Island
Dataw Island
St. Helena Sound
Harbor Island
Town of Port Royal
Mobley Tract
Broad River
Beaufort River
Parris Island Marine Recruit Depot
St. Helena Island
Fripp Island
Land's End
Port Royal Sound
Atlantic Ocean



4 Transportation and Other Public Facilities

Introduction

One of the common goals of this plan is to provide public facilities in a coordinated way concurrent with new growth. While some local public facilities are best planned for and provided by individual communities and are beyond the scope of this plan, some public facilities raise issues that go beyond the ability of individual communities to address.

Traffic congestion is the most tangible and noticeable indicator of the declining quality of life caused by new growth. This is not to suggest that other public facilities, the natural environment, and other elements of this plan are any less important, but transportation level of service, particularly related to vehicular traffic congestion, is where we often see the earliest impacts of growth. It is the proverbial "canary in the mine". For this reason, this plan focuses attention on understanding the implications of growth for transportation, the potential solutions to address impacts of growth, estimated costs of those improvements, and a strategy for responding to the uncertainties involved in planning for transportation improvements in an ever changing environment.

This plan also identifies public facility needs and costs related to parks and recreation, sheriff's facilities, detention facilities, general government and courts, health and human services, libraries, and emergency medical services.

Transportation

The transportation strategies identified in this chapter are based upon extensive analysis performed to determine transportation needs in the northern region of Beaufort County. The land use assumptions developed in the plan (as explained in Appendix A) were incorporated into the transportation analysis. In addition to the capacity of the existing road network, the analysis factored in committed and planned transportation improvements. Even with these committed and planned projects, the analysis identified future road deficiencies that will likely result from new growth in the next 20 years. Rather than simply addressing these deficiencies by building more roads, this analysis first looked at how future road capacity could be preserved and enhanced by pursuing the following alternative transportation strategies:

- Transit
- Travel Demand Management
- Pedestrian and Bicycle Connections
- Access Management
- Intersection Operational Improvements

Transportation projects are summarized in two categories: "planned and committed" projects, and "recommended additional transportation solutions". Each is discussed below.

Planned and Committed Transportation Projects in Northern Beaufort County

The analysis of future transportation conditions was based on year 2025 and reflected projects with committed funding (committed project) or for which significant studies have been performed and are included in the Beaufort County planning process for future funding (planned projects). The analysis results for the "committed and planned projects" assumed to be in place in the future year 2025 are shown in Figure 4.

Recommendation 4.1: *The Participating Local Governments should work together to implement planned and committed road widenings, new road alignments, and planned intersection improvement projects:*

Committed Widening Projects

1) US 21 on St. Helena Island (3 lanes)
2) US 17 from US 21 to SC 64 (4 lanes)

Planned Widening Projects

3) US 21/SC 802 from Ribaut Road to US 21 (widen to 4-lane divided road)
4) SC 802 from SC 170 to SC 280 in Port Royal (widen to 4-lane divided road)

Planned New Roadway Alignment

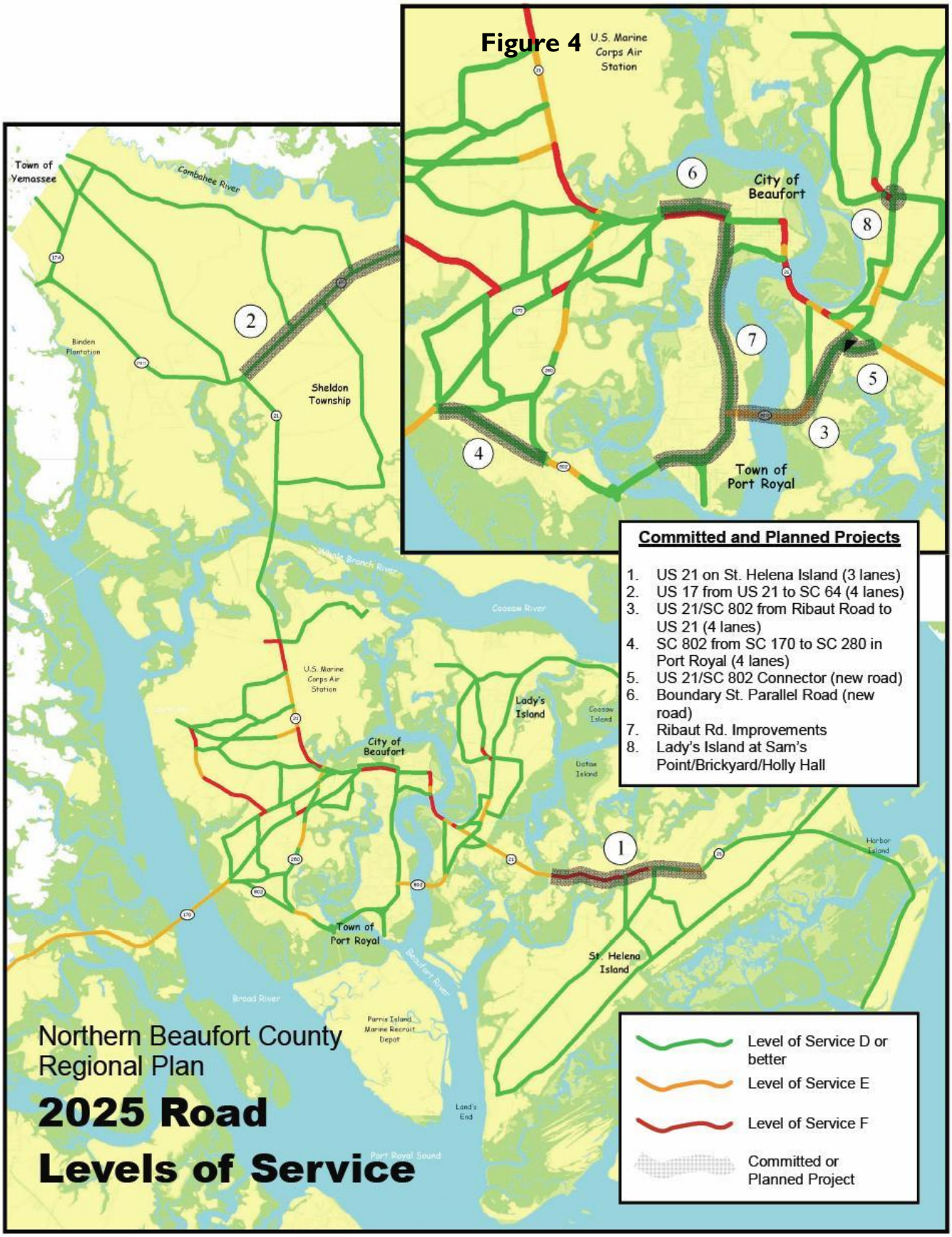
5) US 21/SC 802 Connector (new 4-lane divided road)
6) Boundary Street Parallel Road (new 2-lane road)

Planned Intersection Improvements

7) SC 802 (Ribaut Road) Improvements
8) Lady's Island at Sam's Point/Brickyard/Holly Hall



Figure 4


U.S. Marine Corps Air Station
City of Beaufort
Town of Port Royal
Town of Yemassee
Combahee River
Binden Plantation
Sheldon Township
Whale Branch River
Coosaw River
U.S. Marine Corps Air Station
Lady's Island
Coosaw Island
Datax Island
City of Beaufort
Harbor Island
Town of Port Royal
St. Helena Island
Broad River
Beaufort River
Parris Island Marine Recruit Depot
Land's End
Port Royal Sound
Committed and Planned Projects
1. US 21 on St. Helena Island (3 lanes)
2. US 17 from US 21 to SC 64 (4 lanes)
3. US 21/SC 802 from Ribaut Road to US 21 (4 lanes)
4. SC 802 from SC 170 to SC 280 in Port Royal (4 lanes)
5. US 21/SC 802 Connector (new road)
6. Boundary St. Parallel Road (new road)
7. Ribaut Rd. Improvements
8. Lady's Island at Sam's Point/Brickyard/Holly Hall
Level of Service D or better
Level of Service E
Level of Service F
Committed or Planned Project
Northern Beaufort County Regional Plan
2025 Road Levels of Service

Recommended Additional Transportation Solutions

The transportation analysis shows that even with the planned and committed projects, additional transportation solutions are needed for longer term growth. Specifically, assuming the planned and committed projects are built, the following areas are forecasted to be deficient in the long run (by year 2025) based on growth forecasts:

- US 21 (Broad River Boulevard to Clarendon Road)
- US 21 (SC 170 to Ribaut Road)
- US 21 (Boundary Street to St. Helena Island)
- SC 802 (east of Ribaut Road)
- SC 802 (north of US 21)
- Joe Frazier Road (north of Broad River Boulevard)
- SC 170 (west of SC 802)
- SC 280 (US 21 to Mink Point Boulevard)

Thus, additional improvement recommendations were prepared after considering a wide range of solutions, including major capacity improvements, transit, pedestrian and bicycle connections, access management, and operational improvements.

Recommendation 4.2: *The Participating Local Governments should work together to explore and evaluate a range of transportation improvements, including road capacity improvements, transit, pedestrian and bicycle connections, enhanced access management, and operational improvements. It is important to recognize that these approaches should be explored and evaluated, and that flexibility is needed to determine the best specific solutions based upon analysis of changing conditions.*

Transit and Travel Demand Management *– A transit route could reduce the trips made across the key Woods Memorial Bridge and SC 802 river crossings. A circulator between these areas would need to operate with frequent service/short headways to be effective in attracting riders to switch modes from automobile use. A program to provide an organized approach to teleworking, flexible work hours, carpool matching, and vanpool services is recommended for the Downtown Beaufort and Port Royal areas. A second program to focus on U.S. Marine Air Station carpooling is also recommended. The transit and travel demand management strategies will require more detailed study to determine the anticipated level of benefits and feasibility.*

Pedestrian and Bicycle Connections *– Providing local pedestrian and bicycle connections where commercial areas are present near residential*

communities could reduce trip making along adjacent arterials. On a larger scale, implementation of a bike corridor along the abandoned railroad corridor west of US 21 is recommended to provide access to an alternative transportation mode for those along the US 21 corridor. This corridor would provide a trail that is separated from automobile traffic, enhancing safety for all users over on-street bike lanes or "share the road" designations.

***Access Management** – Access management along major corridors is recommended to maximize the capacity available to move through traffic. Access management is recommended along the following corridors:*

- *US 21 north of SC 170*
- *US 21 south of the Beaufort River to St. Helena Island*
- *SC 170 from US 21 to the Broad River*
- *Joe Frazier Road from SC 170 to Laurel Bay Road*
- *SC 280 from SC 170 to Mink Point Boulevard*

***US 21 Widening from SC 170 to Clarendon Rd (6 lanes)** – The US 21 corridor experiences significant capacity limitations that are beyond those effectively addressed with the alternatives to capacity expansion examined. Further, significant growth management would be needed to reduce trip making to mitigate deficiencies along the corridor. Therefore, widening of US 21 north of SC 170 is recommended to accommodate these travel needs. This should be designed as a "complete streets" application to include automobile, pedestrian, bicycle, and transit considerations, as well as landscaping.*

***US 21 to SC 170** – Western Bypass (Planning, feasibility analysis, and right-of-way for a 2 lane road with turn lanes and bicycle lanes) – This connection will provide a link from the US 21 corridor to the SC 170 and SC 802 corridors. This connection has the potential to relieve US 21 for traffic traveling to/from SC 170, as well as serving some traffic along US 21 north of Beaufort that is destined for Port Royal, Lady's Island, or St. Helena Island. This project will provide the planning and analysis needed for consideration of this alternative for application beyond year 2025.*

***Third Crossing of Beaufort River (Planning, feasibility analysis, and right-of-way for additional Lady's Island Crossing)** – The capital project sales tax currently provides funding for a possible alignment (the northern bypass) for a third crossing from Lady's Island to the mainland. Pursuant to Federal concept definition/NEPA requirements, this feasibility study would include analysis of the mobility, economic, and community/environmental impacts and benefits of various alignment options.*

***New Connector Road from SC 170 to Ribaut Road (2 lanes with bike lanes)** – This road would connect from SC 170 near Neil Road eastward via an abandoned rail corridor toward Downtown Beaufort. This linkage would provide direct relief to the congested section of US 21 between SC 170 and Ribaut Road, as well as provide a bicycle connection through the area. In order to minimize long distance through travel, the roadway cross*

section and speed design should be that of a collector road for local connectivity.

Intersection and Roadway Operational Improvements *– Implementation of turning lanes at appropriate locations and intersection improvements to enhance flow at bottleneck intersections could free underutilized capacity along key corridors. Operational improvements are recommended in the following areas:*

- *SC 802 north of US 21*
- *Joe Frazier Road from SC 170 to Laurel Bay Road*
- *SC 280 from SC 170 to Mink Point Boulevard*

The Recommended Additional Transportation Solutions are illustrated in Figure 5.



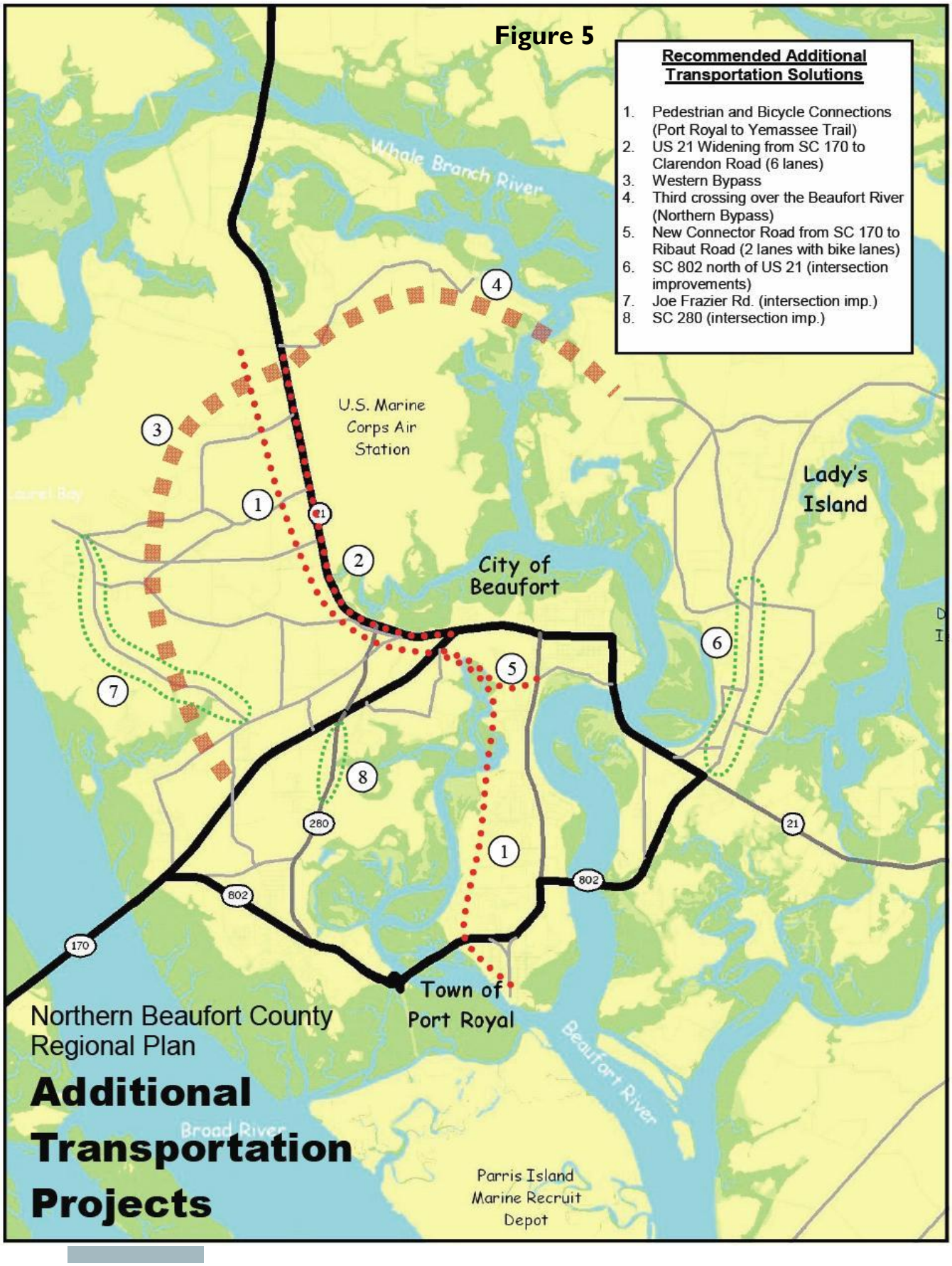


Figure 5
Recommended Additional Transportation Solutions
1. Pedestrian and Bicycle Connections (Port Royal to Yemassee Trail)
2. US 21 Widening from SC 170 to Clarendon Road (6 lanes)
3. Western Bypass
4. Third crossing over the Beaufort River (Northern Bypass)
5. New Connector Road from SC 170 to Ribaut Road (2 lanes with bike lanes)
6. SC 802 north of US 21 (intersection improvements)
7. Joe Frazier Rd. (intersection imp.)
8. SC 280 (intersection imp.)
Whale Branch River
U.S. Marine Corps Air Station
Lady's Island
City of Beaufort
Town of Port Royal
Parris Island Marine Recruit Depot
Beaufort River
Broad River
Northern Beaufort County Regional Plan
Additional Transportation Projects
170
802
280
21

Transportation Cost Estimates

Capital cost estimates for transportation improvements are indicated below in 2006 dollars. The fiscal impact of these capital costs are evaluated in Chapter 5.

Committed and Planned Roadway Improvements

Below is a list of the eight "committed and planned" projects and their associated costs, totaling approximately $178 million. The County sales tax will be used to match the larger state and federal shares of these projects. Based on the availability of state and federal funds, many of these projects could be implemented in the short-range (2007-2015).

Committed Widening Projects

1) US 21 on St. Helena Island (3 lanes) - $12.3 million

2) US 17 from US 21 to SC 64 (4 lanes) - $92 million for Beaufort County portion only

Planned Widening Projects

3) US 21/SC 802 from Ribaut Road to US 21 (widen to 4-lane divided road) - $35.7 million

4) SC 802 from SC 170 to SC 280 in Port Royal (widen to 4-lane divided road) - $7.0 million

Planned New Roadway Alignment

5) US 21/SC 802 Connector (new 4-lane divided road) - $6.0 million

6) Boundary Street Parallel Road (new 2-lane road including Boundary Street improvements) - $22.0 million

Planned Intersection Improvements

7) SC 802 (Ribaut Road) Improvements - $2.3 Million

8) Lady's Island at Sam's Point/Brickyard/Holly Hall - $250,000

Additional Transportation Improvements

Beyond the eight planned and committed projects, this plan recommends an additional list of transportation improvements. These eight additional recommended projects result in an overall cost of $122.3 million with $33.7 million occurring in the short-range and $88.6 million occurring in the long range. Some of these costs could be reduced through potential state or federal dollars. The transit improvements in particular could be assisted by up to a 50% match by the federal government. Further, it is possible that the costs of creation of a local transit authority could be avoided by working with the existing

Low Country Council of Governments (LCOG) authority. However, for the purpose of conservative planning, the total costs of these improvements are assumed to be a local responsibility.

Transit and Travel Demand Management - $20.3 million

Pedestrian and Bicycle Connections – $10.9 million

Access Management - $6.9 million

US 21 Widening from SC 170 to Clarendon Rd (6 lanes) - $38.0 million

US 21 to SC 170 – Western Bypass (Planning, feasibility analysis, and right-of-way for a 2 lane road with turn lanes and bicycle lanes) - $12.6 million

Third Crossing of Beaufort River (Planning, feasibility analysis, and right-of-way for additional Lady's Island Crossing) - $6.4 million

New Connector Road from SC 170 to Ribaut Road (2 lanes with bike lanes) - $9.5 million

Intersection and Roadway Operational Improvements - $17.6 million

In summary, substantial transportation improvements will be needed to maintain acceptable levels of service as growth continues to occur. Many of those projects are already committed and planned for the region, at a cost of approximately $178 million. However, the projects that are already committed and planned are not adequate for the long range planning horizon of 20 years. This plan recommends a strategy of exploring additional projects, at an additional cost of approximately $122 million. Thus, the total capital cost of transportation improvements is approximately $300 million for transportation. Note that some of this capital cost is already funded with state and federal funds, which affect its fiscal impact, as further discussed in Chapter 5.

Other Public Facilities

Additional public facilities will be needed as a result of the forecasted growth in Northern Beaufort County. In order to plan for this growth, including the need to finance public facilities, estimates are made about new facility demands that could be created by future growth. There are several important things to understand about these estimates:

First, they focus on county level facilities. Individual communities will continue to have responsibility for providing certain local public facilities on a local basis.

Second, they assume that current levels of service are maintained in the future. It isolates the public facility needs created only by future growth assuming the future growth is served with public facilities at the same level as is current population. To the extent that the region desires to increase levels of services for existing population and for future growth, those costs would be in addition to those assumed for this analysis. For example, the current library administrators for Beaufort County note that the existing levels of service for libraries do not meet national standards and would propose to raise the local level of service to achieve those national standards. This regional plan certainly does not suggest that increased levels of service are inappropriate; however for the purpose of estimating needs created by new growth, estimating costs, and examining the fiscal implications of those needs and costs (see Chapter 5), existing levels of service are assumed to be the minimum standards for the future.

Recommendation 4.3: *The Participating Local Governments will work together to coordinate the planning and funding of parks and recreation, libraries, schools, sheriff and public safety, general government, courts, health, and human services, and other regional public facilities.*

The following public facility needs and costs are estimated at almost $50 million as follows:

- *Parks and Recreation ($27.9 million)*
  - New capital facilities include ten neighborhood parks (100 acres total) and six community parks (150 acres total)

- *Library ($7.2 million)*
  - Two additional library branches totaling 23,000 square feet would be constructed using the current standard of 0.6 square feet per capita

- *Sheriff and Public Safety ($5.4 million)*
  - 4,606 square feet of additional Sheriff's space would need to be constructed
  - 25,630 square feet of Detention Center space would need to be constructed

- *General Government ($2.9 million)*
  - 12,355 square feet of additional General Government office space would need to be constructed

- *Courts ($2.7 million)*
  - 12,716 square feet of additional Court space would need to be constructed

- *Health and Human Services ($2.8 million)*
  - 3,709 square feet of additional Health Department office space would need to be constructed
  - 8,390 square feet of Human Services space would need to be constructed

The fiscal implications of these costs are explored in the following chapter.





5 Fiscal Impact of Growth

Introduction

Population in Northern Beaufort County is forecasted to grow by more than 53% over the next 20 years, from just over 80,500 to over 123,500. This population growth will create additional regional demands for transportation, parks and recreation, EMS, sheriff, general government, and health and human services capital infrastructure.

The costs of providing infrastructure to serve this new growth at current levels of service are estimated to be approximately $350 million, including approximately $300 million in transportation improvements, and $50 million in other public facilities, as described in Chapter 4.2 Of the $300 million for capital transportation costs, approximately $134 million is already funded with state and federal dollars, leaving $166 million to be funded. Thus, for fiscal modeling purposes, it is assumed that approximately $216 million in capital costs will be funded locally. Note that this is a conservative estimate in that it assumes no state or federal funds for transportation beyond those already committed. Obviously the region will continue to actively pursue outside funding, which would mitigate the regional fiscal needs.

In addition to capital costs, there will be ongoing operations and maintenance costs that can be expected in excess of $230 million over this planning period. The funding of operating and maintenance costs is

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[2] Since this analysis focused on county facilities, it does not include schools or fire services. In the case of schools, the school district is currently in the process of conducting a space needs assessment, and that information is not yet available. However, as a follow up phase to the fiscal analysis, the capital costs of schools will be included on a county-wide basis.

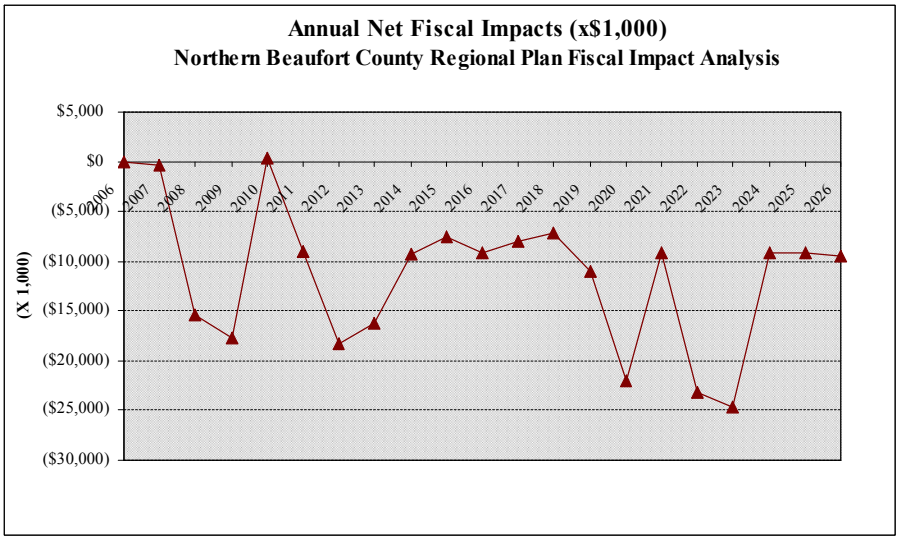
a county-wide problem that will be examined on a county-wide basis in the subsequent phase of the fiscal analysis, but it is included in this analysis in order to understand the magnitude of the issue.

In order to understand the net fiscal impact of this growth, a fiscal impact analysis was prepared as part of this regional planning process. Specifically, the fiscal impact analysis was performed to evaluate whether revenues generated by new growth are forecasted to be sufficient to cover the resulting costs to Beaufort County of continuing existing levels of public services and facilities for new growth.

Fiscal Impacts

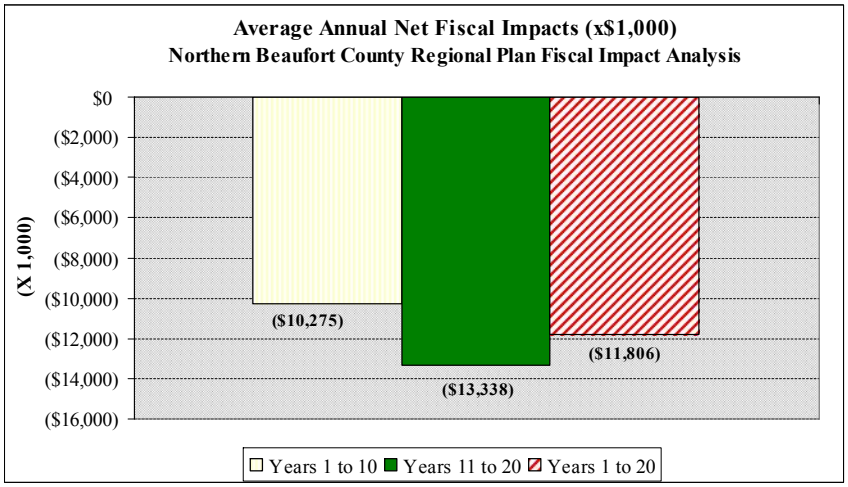
The fiscal impacts were summarized in several ways. First, annual net results are shown from one year to the next over the twenty year planning period. (These results are for new growth only, and do not include costs and revenues from existing population.) By showing the results annually, the magnitude, rate of change, and timeline of deficits and surpluses can be seen over time. As can be seen, on a year-to-year basis there are varying degrees of deficits – the "bumpy" nature of the line represents the opening of capital facilities and/or major capital operating costs being incurred. New growth is expected to generate annual deficits to the county in all but one year in the planning period. The greatest deficits will likely occur in the later half of the planning period primarily due to transportation improvements required after the current capital sales tax expires. At that time, the current impact fee structure is not adequate to offset these capital costs (see later discussion of potential next steps).

Figure 5



The fiscal impacts can also be summarized by the average net fiscal impact over the twenty year planning period, broken down in ten year increments. The net fiscal deficit, including capital and operating costs for years 1 – 10 are in excess of $10 million per year; for years 10 – 20 they are in excess of $13 million per year; and for the total 1-20 year period they average out at almost $12 million per year. As can be seen, new growth generates average annual net deficits to the county in all three time periods. Once again, the higher deficits in the later half of the planning period are due to the current capital sales tax expiring in five years time, leaving the county with only impact fees as a dedicated funding source for transportation capital costs.

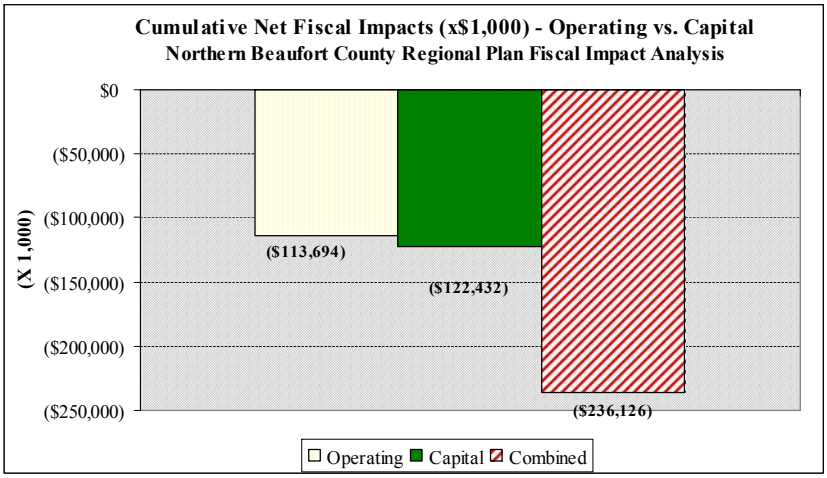
Figure 6





Finally, the fiscal impacts can be summarized by showing the net fiscal impact to the county for both capital and operating costs. As can be seen, cumulative net deficits are generated for both the operating and capital budget. The cumulative net impact of operating costs over the 20 year planning period is over $113 million. The cumulative net impact of capital costs over the 20 year period is over $122 million. The total net impact combined is over $236 million.

Figure 7



Several conclusions can be drawn from the fiscal analysis:

- The average annual net deficits generated show that the county's present revenue structure cannot provide current levels of service to new growth without finding new revenue sources or raising existing rates. This is similar to what most other communities and regions in the country face – in order for growth to pay for itself, new funding sources and solutions must constantly be explored and evaluated.

- The total deficit including both capital and operating budgets is forecasted to be in excess of $236 million over the planning period of 20 years.

- By far, the greatest shortfall for capital funding is for transportation and parks/recreation, which comprise 90 percent of the capital costs.

- In order to provide at least the current levels of service for new growth, additional funding sources must be identified or existing funding sources must either be continued or expanded.

Fiscal Impact Recommendations

The Southern Beaufort County Regional Plan also examined the fiscal impact of growth, and recommended a regional funding strategy to address the issue. That strategy is applicable in Northern Beaufort County, and is also endorsed in this plan, as follows. Specifically, the Northern Beaufort County communities agree to work together to explore regional approaches to funding regional infrastructure, focusing on a limited range of regional tools similar to those to be explored in the southern portion of the county, including:

Recommendation 5.1: *Adopt Regional Level of Service (LOS) Standards: In order to establish a foundation for coordinating transportation and parks planning across the region, each of the Participating Local Governments will adopt the same level of service standard for these facilities, that is consistent and coordinated with the LOS adopted by the other Participating Local Governments.*

Recommendation 5.2: *Identify Existing Deficiencies and Future Capital Improvements Needs: Using the agreed upon LOS standards, the Participating Local Governments will then work cooperatively to identify needed capital projects, determine their costs and identify revenue sources to fund the projects.*

Recommendation 5.3: *Work Cooperatively with the School District: While the School District has the responsibility to plan and provide funding for its capital needs, a framework needs to be established where the Participating Local Governments can work cooperatively with the School District and support its efforts to plan for the future deficiencies and future capital improvement needs for public schools.*

Recommendation 5.4: *Develop an Overall Funding Strategy: The following factors should guide the selection of revenue sources to address the capital and operating funding gap:*

- Revenue Potential: Whether the tool can generate substantial sums of monies to fund capital infrastructure;
- Geographic Application: Whether the tool can be applied across the region;
- Legislative Authorization: Whether the tool requires legislative authorization;
- Technical/Administrative Ease: The ease of administering the tool; and
- Public Acceptability: How citizens will accept the tool.

Recommendation 5.5: *Focus First on Available Funding Tools: In order to take immediate action on addressing capital funding needs, it is important to concentrate first on revenue sources that the State of South Carolina enables local governments to use to fund capital improvements. These include property taxes, local sales, impact fees, and taxes. For example, the current capital sales tax is expected to generate approximately $62,200,000 for capital transportation facilities in Northern Beaufort County. In addition, the impact fee for Southern Beaufort County was recently updated, demonstrating that when kept current impact fees could be expected to generate substantial additional capital revenues.*

Recommendation 5.6: *Consider Funding Tools that Require Changes in State Legislation: If the available funding tools are not adequate to address the funding gap, particularly the operating cost gap, it may be necessary to lobby the state to initiate legislation that would enable new funding sources.*

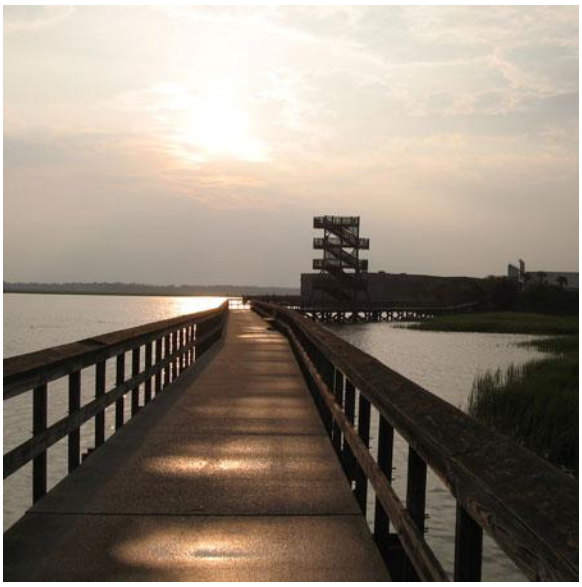
Recommendation 5.7: *Explore New Institutional Arrangements: Where appropriate, new institutional arrangements to facilitate multi-jurisdictional cooperation on funding issues should be explored.*



6 Baseline Environmental and Corridor Standards

Introduction

Several of the Common Goals contained in Chapter 1 involve the creation of agreed upon baseline standards, especially for environmentally sensitive areas and key travel corridors in Northern Beaufort County. This chapter offers specific actions that need to be taken to accomplish those goals. These actions should be addressed first through intergovernmental agreements and then ultimately through local plans, and especially through the land use regulations of the local communities, as is further discussed in Chapter 8 Implementation.



Consistency of Environmental Standards

Recommendation 6.1: *The Participating Local Governments should make it their priority to protect water quality by implementing the recommendations of the Beaufort County Special Area Management Plan (SAMP).*

- ***Background:*** *Much of the local efforts and initiatives that address water quality and environmental protection in the last seven years are a direct result of the Beaufort County Special Area Management Plan (SAMP) and its recommendations. The SAMP, initiated in 1999, encompassed a wide range of topics and activities ranging from more advanced stormwater controls, wastewater management, and water quality monitoring, to public education and outreach. Recommendations 6.2, 6.3, 6.4, and 6.5 below provide a further explanation of which measures are being proposed in Northern Beaufort County to protect water quality in accordance with the SAMP.*

Recommendation 6.2: *The Participating Local Governments should require all new development to adhere to a common Stormwater Best Management Practices (BMP's) Manual.*

- ***Background:*** *Traditionally, stormwater management has dealt with controlling the quantity of runoff from a site in order to avoid flooding downstream properties. This measure of stormwater protection, however, does not protect against specific pollutants that impair water quality and threaten shellfish beds. In 1998, Beaufort County adopted the Stormwater Best Management Practices (BMP) manual which has specific attenuation standards for two types of pollutants – nutrients (phosphorus) and fecal coliform bacteria. The City of Beaufort, the Town of Port Royal, and the Town of Yemassee currently do not require new development to meet these standards.*

Recommendation 6.3: *The Participating Local Governments should adopt baseline standards for critical line setbacks and natural vegetative buffers.*

- ***Background:*** *The purpose of the natural vegetative buffers is ultimately to improve water quality by capturing sediments and pollution from stormwater runoff. Critical line setbacks and vegetative buffers also stabilize the shoreline, reduce flooding and flood damage, preserve the natural habitat and create a sense of place and privacy for the homeowners. Currently Beaufort County requires a 50-foot wide natural vegetative buffer for single family houses and a 100-foot wide buffer for all other uses. The City of Beaufort has a 30-foot requirement for single-family residential development. An average buffer width of 50 feet with a*

minimum of 35 feet is required for multi-family and commercial development. The Town of Port Royal and the Town of Yemassee currently only require natural vegetative buffers in specific PUD's or development agreements.

Recommendation 6.4: *Where justified, the Participating Local Governments should provide opportunities for limited community uses in close proximity to the OCRM critical line in order to enhance the community's enjoyment of the waterfront.*

- ***Background:*** *One criticism of vegetative river buffer standards is that they would preclude the development of regional attractions such as the Waterfront Park in Beaufort, the Battery in Charleston, and Harbourtown on Hilton Head Island. Each of these developments provides the public with views and access to the water. In order to accommodate this type of development and at the same time preventing the degradation of the environment, it is important to establish guidelines that must be met in order to relieve river buffer requirements.*

  The development cannot be on a waterway classified as ORW (Outstanding Resource Waters) and SFH (Shellfish Harvesting Waters) by the South Carolina Department of Health and Environmental Control (DHEC).

  Stormwater management must be designed to compensate for the reduction or elimination of the natural vegetative buffer and increase in the amount of impervious surfaces.

Recommendation 6.5: *The Participating Local Governments should apply more stringent standards in critical areas such as the headwaters of local waterways, low-lying areas and the ACE Basin.*

- ***Background:*** *The SAMP called for the creation of a River Quality Overlay District Ordinance to address such concerns such as setbacks, vegetative buffers and appropriate impervious surface cover limits to minimize impacts of development to salt water marshes. This recommendation would most appropriately be applied in sensitive areas such as headwaters because of their increased vulnerability to pollution.*

Recommendation 6.6: *The Participating Local Governments should develop and adopt baseline standards for the protection of freshwater wetlands.*

- ***Background:*** *With the current condition of Federal and State wetlands protection, the role of local governments is vital to protecting small, "non-jurisdictional" wetlands. Beaufort County has wetland protection regulations, which allow fill for non-tidal wetlands less than one acre in size and require mitigation. Of the municipalities, currently only the Town of Port Royal has wetland protection requirements and they are limited to planned communities in the Shell Point Overlay District.*

Consistency of Corridor Standards

Recommendation 6.7: *The Participating Local Governments should adopt consistent corridor overlay district standards among the Participating Local Governments on shared corridors such as SC 170 (Robert Smalls Parkway), U.S. 21 and SC 280 (Parris Island Gateway).*

- ***Background:*** *It is understood that the county and its municipalities have a mutual interest in preserving shared corridors and the rural character of the entrance corridors to the municipalities. Currently, a patchwork quilt of political jurisdictions exists in Shell Point, Burton, Sheldon, and parts of Lady's Island. It is important that consistent development standards are required regardless of political jurisdiction. Another important factor is that in some corridors (Boundary Street, Ribaut Road, US 21 on Lady's Island), development is encouraged or required to be pedestrian friendly and address the street, while on other corridors (Trask Parkway, Robert Smalls Parkway) development is required to be set back from the highway and screened with a vegetated buffer (see Figure 2). It is important for the county and its municipalities to recognize where it is appropriate to apply these distinct sets of development standards.*

Recommendation 6.8: *The Participating Local Governments should establish a shared Corridor Review Board for all applicable projects in Northern Beaufort County.*

- ***Background:*** *Currently Beaufort County and the City of Beaufort have their own Corridor Review Boards that oversee development in their respective Corridor Overlay Districts. Establishing a shared board would accomplish two objectives:*

    - It would provide for more consistency in the application and enforcement of corridor overlay district standards.

    - There is a limited pool of design professionals in Northern Beaufort County who are willing to serve on boards. The more boards there are, the more difficult it is to find board members.

    Specific local design districts such as the City's historic district and the Traditional Town Overlay District in Port Royal, however, will continue to be better served by local boards.

Recommendation 6.9: *The Participating Local Governments should identify which highways will most likely be widened in the next 20 years and apply corridor overlay district standards accordingly.*

- ***Background:*** *Northern Beaufort County's population growth and increased traffic congestion has necessitated the widening of many roads. Road widenings can have a negative effect on the region's aesthetic qualities. Therefore, to preserve highway buffers, it may be necessary to require greater buffer widths along corridors that will be widened in the future. Also, it may be necessary to require interim front yard setbacks in areas where development is encouraged to be pedestrian friendly and address the street. Zero lot line development must be avoided on roads that will be widened to avoid encroachment that may necessitate condemnation to secure additional right-of-way width.*

Recommendation 6.10: *The Participating Local Governments should develop programs such as Transfer of Development Rights (TDR's), payment in lieu of open space, and density bonuses to encourage clustered village development in rural areas as opposed to low-density sprawling development.*

- ***Background:*** *The current density requirement in Beaufort County's rural district is one dwelling unit per three acres. Strict application of this standard may result in low-density suburban sprawl and fragmented open space. A more desired development pattern would consist of higher density hamlets and villages surrounded by large tracts of agricultural land and open space. This type of development could be encouraged by the application of a transfer of development rights (TDR) program or a payment in lieu of open space program (see Common Goal 7).*

Recommendation 6.11: *The Participating Local Governments should support the establishment of dedicated utility corridors to divert major transmission lines away from residential neighborhoods.*

- ***Background:*** *South Carolina Electric & Gas (SCE&G) plans to upgrade its transmission lines connecting Beaufort with Lady's Island from a 46,000 volt capacity to a 115,000 volt capacity. This upgrade would require an increase in height of the utility poles from 65 feet to 75 to 95 feet. This has raised both aesthetic and health concerns in the affected residential neighborhoods. This recommendation proposes to solve this issue from a regional perspective by diverting these power lines away from populated areas. Future roads, such as the third crossing to Lady's Island, would provide a possible location for utility corridors because the right of way for the road and the utility corridor could be planned, negotiated, and acquired at the same time. The advantages of this policy include reducing the amount of land affected, avoiding duplication, reducing the impact on homes and businesses, reducing construction cost, making maintenance more accessible, and (depending on circumstances) reducing ongoing maintenance cost.*



7 Regional Planning Initiatives

Introduction

In addition to the common goals that lend themselves to a regulatory approach as recommended in Chapter 6, other common goals will require proactive action in order to accomplish the goals. These initiatives should be more fully explored and addressed first by the Technical Advisory Committee and its working groups, and ultimately through the local plans and initiatives of the local communities, as is further discussed in Chapter 8 Implementation.

Economic Health and Diversity

Recommendation 7.1: *The joint future land use plan for the Northern Beaufort County Regional Plan must provide a sufficient quantity of suitably located land zoned for non-retail commercial uses that promote the region's economic health and diversity. Non-retail commercial uses include the following: business parks, research and development centers, product assembly, distribution centers, cottage industries, and light and heavy industrial uses.*

- ***Background:*** *Steps involved to forward this recommendation include the following:*

  - The Planning staffs of the Participating local governments should inventory the existing supply of appropriately zoned land available for non-retail commercial development within Beaufort County, the City of Beaufort, the Town of Port Royal and the Town of Yemassee and assess the present opportunities they provide for competitive economic development. The staffs should make this inventory and assessment available to local and regional agencies involved in promoting economic development.

- The Participating Local Governments should support the Economic Partnership's efforts to establish the Northern Beaufort County Corridor Commerce Park near the intersection of US 17 and 17A.

- Beaufort County should rezone to rural the 700 acres of land presently zoned light industrial located in the unincorporated county between Old Sheldon Church Road and River Road.

- The Participating Local Governments should expand non-retail commercially zoned properties within the Airport Overlay Districts, including the existing business park and light industrial zoned properties near the Beaufort County Airport (Lady's Island) and the Beaufort Commerce Park where such uses are compatible or could be made compatible with adjacent properties. This policy may not be appropriate universally throughout the Airport Overlay Districts, especially in portions of Gray's Hill and northern Lady's Island which are more rural and rural residential in character.

- The Participating Local Governments should provide more flexibility in commercial zoning districts to permit smaller non-retail commercial uses such as contractor's offices, small assembly facilities, and small light industrial operations that do not adversely impact surrounding retail uses.

Recommendation 7.2: *The Participating Local Governments should commit resources to construct infrastructure and provide new and renovated light industrial buildings to attract companies interested in locating or expanding in the region.*

- ***Background:*** *There are two approaches to this recommendation. One is providing financial support to construct capital improvements to the Beaufort Commerce Park or the Northern Beaufort County Corridor Commerce Park. In addition to funding the installation of roads and infrastructure, these capital improvements also include the construction of spec buildings to provide readily available space for prospective companies interested in locating in the region. Another approach includes inventorying vacant non-residential structures (e.g. underutilized retail buildings and packing sheds) and identifying and overcoming regulatory obstacles to converting them to non-retail commercial uses.*

Recommendation 7.3: *The Participating Local Governments should establish an expedited permitting process for projects that forward the economic development goals in Northern Beaufort County.*

- ***Background:*** *One of the obstacles to attracting industry to Northern Beaufort County is the length of time it takes to complete the local development permitting process. One approach to addressing this problem is for the local jurisdiction to "pre-permit" non-retail commercially zoned properties, similar to the process established in the Beaufort Commerce Park. This involves the local jurisdiction proactively analyzing the properties, assessing site conditions, determining the location of natural resources, determining appropriate locations for*

buffers, etc. for the purpose of completing portions of the development permitting process for the applicants. Another approach is for the local jurisdiction to create "floating zones" that would be available for business parks or industrial areas.

Recommendation 7.4: *The Participating Local Governments should encourage industries that support sustainable practices by promoting renewable energy and attracting or growing value-added industries that support using locally available resources such as agricultural or seafood products.*

Recommendation 7.5: *The Participating Local Governments should facilitate a higher level of coordination with the Technical College of the Lowcountry and the University of South Carolina Beaufort to establish research and development facilities to provide workforce development and stimulate high-tech entrepreneurial activities in the region.*

Open Space Preservation

Recommendation 7.6: *In order to create a regional network of open spaces, four broad-based open space acquisition goals are recommended:*

- Preserve large agricultural land holdings on St. Helena Island and north of the Whale Branch River.
- Maintain a green corridor through the ACE Basin and along the Whale Branch River.
- Continue to target open space acquisition within the Airport Overlay District (AOD) boundaries around the US Marine Corps Air Station.
- Provide for the passive recreation needs for Northern Beaufort County's residents.

Recommendation 7.7: *The Participating Local Governments should continue to utilize the "Greenprint" process for targeting the acquisition of future preserved lands.*

- ***Background:*** *Federal, state and local governments have been aggressive in securing open space and natural areas in Northern Beaufort County. However, Figure 8 illustrates that many of these preserved places are discrete and unconnected. As growth continues to occur, these natural areas will become more isolated and will not effectively be able to support healthy wildlife communities. In addition, as land becomes scarcer, it is more important to prioritize areas with outstanding natural*

resources in order to target future acquisitions of open space. The "Greenprint" program established by the Trust for Public Lands for Beaufort County is a good strategy for targeting open space acquisition to further regional goals.

Recommendation 7.8: *The Participating Local Governments should consider an open space land bank where fees are collected in lieu of open space to apply to the purchase and preservation of larger or more critical lands.*

- ***Background:*** *Required open space set asides for major subdivisions and PUD's is a useful tool for enhancing the region's open space network. Poor application of these standards can result, however, in small fragments of open space that provide no real benefit to the larger open space goals of the region. A fee in lieu of open space option could allow developments with no outstanding natural features or resources to pay into a program where the fees could be applied to the purchase (fee simple or development rights) of more critical lands.*

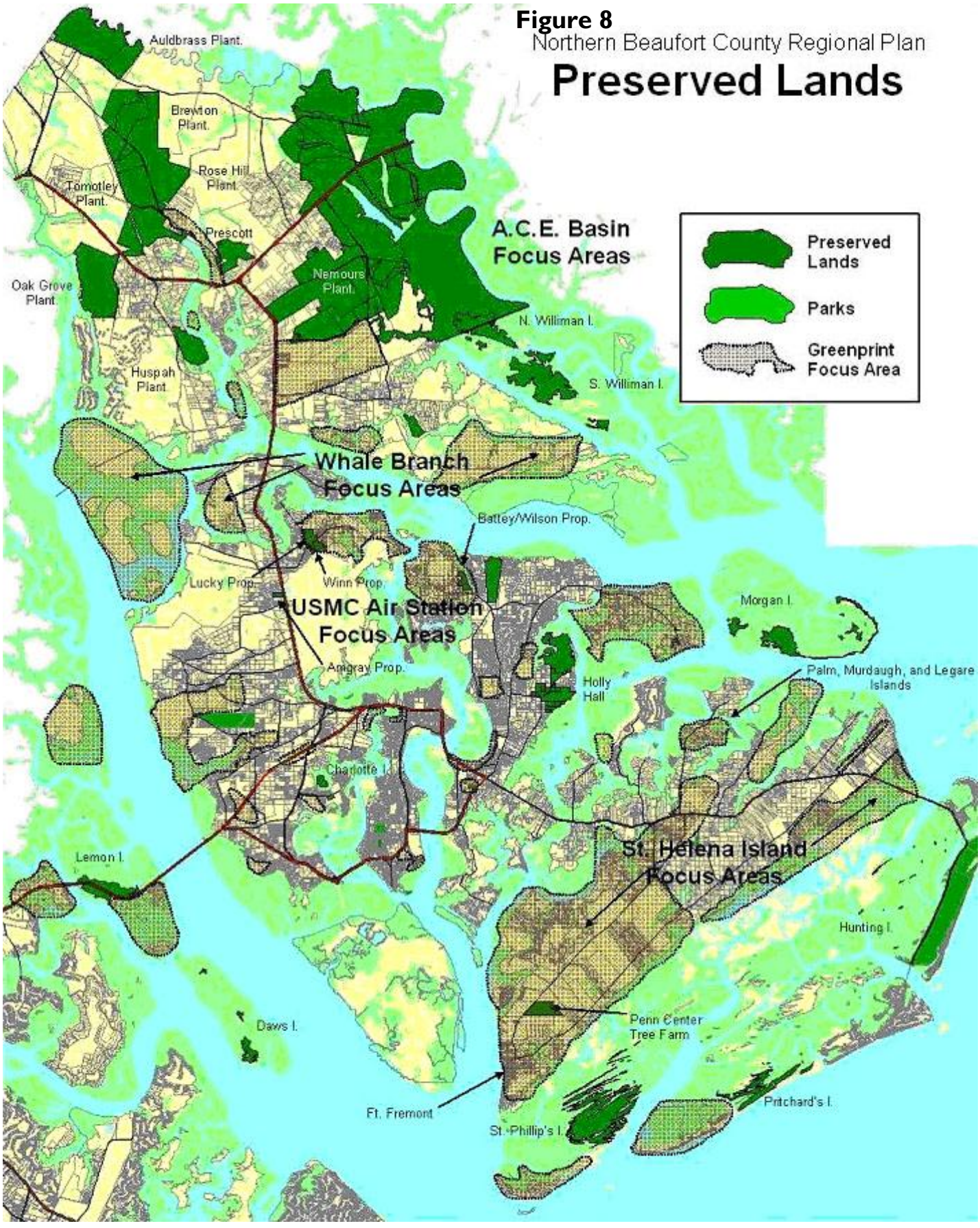
Recommendation 7.9: *The Participating Local Governments should establish a common definition and baseline standards for regional open space.*

- ***Background:*** *Beaufort County, the City of Beaufort and the Town of Port Royal have different requirements and standards for open space when land is subdivided or developed. This recommendation calls for the Participating Local Governments to agree on the required percentage of land area to be set aside as open space when a rezoning or annexation occurs. This recommendation also calls for the Participating Local Governments to agree on a common definition and consistent requirements for open space. This would address such concerns as whether wetlands can count towards required open space, whether stormwater detention ponds could be placed within open space, and to what degree does open space serve recreation needs vs. preservation needs.*

Figure 8

Northern Beaufort County Regional Plan

Preserved Lands



Diversity

Recommendation 7.10: *The Participating Local Governments should support the Penn Center's Land Use and Environmental Education Program.*

- ***Background:*** *This program was established to assist native Sea Islanders in preserving and maintaining their land and cultural practices in the midst of the pressures of growth and rising property values in the coastal regions of the Southeast. The program concentrates on citizen education, land use planning and reform and sustainable economic development. General program activities include assistance with issues pertaining to taxes, heirs' property, and community organizing.*

Recommendation 7.11: *Beaufort County should assess whether the Cultural Protection Overlay District is achieving its goals to protect and enhance St. Helena Island's rural culture and assess whether it should be applied to other rural areas of the region such as Sheldon Township.*

Recommendation 7.12: *The Participating Local Governments should carefully weigh its goals to promote infill development and redevelopment in established neighborhoods in Beaufort and Port Royal with the unintended consequence of the displacement of poorer residents of these neighborhoods.*

Recommendation 7.13: *Beaufort County should assess the pros and cons of its current policy to restrict the extension of public sewer into rural areas as a method of protecting the diversity of the rural areas both within and outside of the Community Preservation districts.*



Affordable and Workforce Housing

Recommendation 7.14: *The Participating Local Governments should pass a multi-jurisdiction mandatory inclusionary zoning ordinance.*

- ***Background:*** *An inclusionary zoning ordinance would require all new residential development to address the provision of affordable dwelling units. Making this policy mandatory and applying it consistently throughout the region would help to increase the supply of workforce housing, whose need was documented in the 2004 Workforce Needs Assessment commissioned by Beaufort County. The inclusionary zoning policy should include provisions for, on a case by case basis, a housing fee in lieu of, off-site inclusionary units, land donation, and incentives such as density bonuses that are greater than the Inclusionary Zoning set aside so that the builder can reap the benefit of some bonus market-rate units.*

Recommendation 7.15: *Participating local governments should work jointly to identify federal and state funding streams to address the housing needs throughout the county.*

- ***Background:*** *In addition to applying for such funds directly, the Participating Local Governments should work with nonprofit organizations such as the Economic Opportunity Commission, Habitat for Humanity, the Lowcountry Community Development Corporation of Hilton Head and other agencies to maximize the utilization of funds to increase housing opportunities.*

Recommendation 7.16: *The Participating Local Governments should establish and implement different affordable housing strategies appropriate for urban/suburban areas and for rural areas to preserve rural culture, combat sprawl, and to ensure that a majority of workforce and affordable housing is located in proximity to jobs and services.*

- ***Background:*** *The following housing strategies are recommended for different parts of the region:*

    - Urban/Suburban areas (Port Royal Island and Lady's Island): Focus affordable housing strategies on constructing new workforce housing and low/moderate income housing and on the rehabilitation of existing housing structures.

    - Rural areas (Sheldon Township and St. Helena Island): Focus affordable housing strategies on the rehabilitation of existing houses for low/moderate income homeowners, and eliminating barriers to expanding existing housing compounds.

Recommendation 7.17: *The Participating Local Governments should make home repair and replacement of substandard housing a housing priority to further the recommendations outlined in the 2004 Workforce Needs Assessment.*

- ***Background:*** *In order to maximize the amount of grant funds available for housing rehabilitation, the Participating Local Governments will continue to provide local matching funds to the Lowcountry Regional Home Consortium (comprised of Beaufort, Colleton, Jasper and Hampton Counties), which is a Participating Jurisdiction eligible to receive Home Investment Partnership Funds (HOME) and American Dream Down Payment Assistance Funds from HUD. The funds can be used to increase the affordable housing stock by providing down payment assistance to eligible first time homebuyers; sustaining homes through home repair; assisting with the development of new homeowner and rental units; providing assistance for infrastructure; and encouraging involvement of community based non-profit homeownership initiatives.*

Infill and Redevelopment

Recommendation 7.18: *The Participating Local Governments should recognize common definitions for "infill" and "redevelopment".*

- ***Background:*** *In order to set up an effective program to target the development of infill parcels, it is important to have a common understanding of what is meant by infill and redevelopment. The following definitions are offered as a starting point for this discussion:*

  - Small Tract Infill Development: The targeting of individual subdivided lots within existing residential subdivisions and commercial strips. Usually necessitates additional subdivision of land. Example: The construction of a single-family house, duplex or small apartment building on a single vacant urban lot.

  - Large Tract Infill Development (leapfrogged parcels): The targeting of larger undeveloped residential or commercial parcels (10 acres or greater). Development of these sites would require further subdivision of the land. This includes large lots in urbanized areas and areas with concentrations of undeveloped or underdeveloped large lots that have been passed over in favor of larger parcels further from the urban centers (e.g. Burton, Shell Point).

  - Small Scale Redevelopment: Replacing a single family house on a large lot with several houses or multi-family structures on smaller lots.

  - Large Scale Redevelopment: Redevelopment of a larger scale that requires the assembly of several parcels, removal of the older

structures and the construction of more intense residential or commercial development.

Recommendation 7.19: *The Participating Local Governments should identify infill and redevelopment priority areas.*

- ***Background:*** *The following infill priority areas are suggested:*
  - Urban Residential neighborhoods with a large number of small vacant lots;
  - Areas of Northern Beaufort County with a large number of undeveloped parcels that are situated close to urbanized areas and public facilities (Burton, Shell Point, Lady's Island Redevelopment District); and
  - Marginal commercial corridors with a large number of vacant or under-utilized buildings (Parris Island Gateway, Trask Parkway).

Recommendation 7.20: *The Participating Local Governments should conduct an infill parcel inventory in the identified priority areas.*

- ***Background:*** *Once the infill priority areas have been identified, then it will be easier to further identify individual parcels that have development or redevelopment potential. The following are some steps that could be taken to complete this inventory:*
  - Establish GIS "screening" criteria to identify possible infill areas or parcels. Consider such factors as zoning, size of parcels, infrastructure, land use, and constraints to development such as wetlands.
  - For redevelopment, look at such factors as ratio of assessed value of improvements to land value, age of structure, etc.
  - Conduct field surveys to supplement GIS screening – condition of structures, surrounding land use patterns.

Recommendation 7.21: *The Participating Local Governments should identify impediments to infill development and develop strategies to overcome the impediments.*

- ***Background:*** *There are many real and perceived impediments to infill and redevelopment. These include the cost of redevelopment, possible regulatory barriers, opposition of neighbors, and lack of developer interest. Below is a summary of these barriers and possible solutions to overcome the barriers:*
  - Cost of Development: Infill parcels typically cost more than land in "green field" sites. While land costs are greater in developed areas, the cost of public services and infrastructure may be less expensive.

- Possible solutions: Density bonuses; Fee waivers and subsidies (impact fees, development permit fees); Land assembly by the public sector; Tax abatements or rebates.

- Neighborhood Resistance: Neighborhood resistance can delay a project, especially if the land needs to be rezoned.

- Possible solutions: Establish design standards that ensure the compatibility of new infill development. Require developers to meet with residents of the surrounding area to solicit their input on the project design before finalizing plans.

- Regulatory Barriers: Zoning, subdivision and land development regulations, and even building codes may present obstacles to developing infill sites. Setbacks and minimum lot sizes may frustrate single-lot infill development. Density must be addressed – very often infill is only justified economically if increased densities are allowed.

- Possible solutions: Consider conducting an infill audit that examines local plans, codes, and practices to identify infill barriers.

- Lack of Developer Interest: Developers may be unaware of the market potential for infill development.

- Possible solutions: Publicize infill parcel inventory and make information available to developers. Provide examples of successful infill development projects.

Military Base Coordination

Recommendation 7.22: *The Participating Local Governments should continue to enforce standards within the AICUZ contours that discourage development that would adversely affect the mission of the US Marine Corps Air Station.*

- ***Background:*** *The JLUS (Joint Land Use Study) Implementation Committee drafted an Airport Overlay District that would restrict land uses within the AICUZ contours to be adopted by Beaufort County, the City of Beaufort, and the Town of Port Royal. All three local governments have adopted the ordinance. The Airport Overlay District (AOD) essentially has four components. They are as follows:*

  - Disclosure: All potential homebuyers and renters will be required to be notified that they are in a noise zone and/or accident potential zone.

  - Noise Level Reduction: New construction will be required to be built to achieve a 25 to 35 decibel reduction from exterior to interior, depending on the noise zone.

- Use Limitations: New hospitals, churches, schools, day care centers, multi-family housing and other incompatible uses would not be permitted in the Clear Zone, Accident Potential Zone and Noise Zone 3. Existing buildings would be grandfathered.

- Density Limitations: Residential densities will be restricted to avoid encroachment of development around the Air Station.

Recommendation 7.23: *The Participating Local Governments should consider such tools as transfer of development rights (TDR) program to compensate affected property owners within the Airport Overlay District (AOD) and continue encroachment partnering acquisition efforts in the vicinity of the Air Station.*

- ***Background:*** *Many property owners may be negatively affected by restrictions proposed to be adopted within the AOD boundaries. A TDR program has the potential to offer relief to these property owners. The JLUS (Joint Land Use Study) Implementation Committee recommended that this program will complement the proposed Airport Overlay District ordinance. A conservation partnering program relieves encroachment pressures from either incompatible development and/or loss of natural habitat on training, testing, and support operations at military installations (this could apply to Parris Island some day due to their ranges). The most effective way to avoid encroachment is to prevent incompatible development in the vicinity of the Air Station. This recommendation is further supported in Recommendation 7.1.*

Regional Growth Tracking System

Recommendation 7.24: *The Participating Local Governments should work together to create and maintain an improved regional growth tracking system, including a land demand and land use forecasting model integrated with other regional models (such as the transportation model) that can be used by all entities for planning purposes.*

- ***Background:*** *It became clear during the process of preparing the growth forecasts for this plan that an improved regional model is needed that is capable of providing regional data related to growth. For example, there is not readily available data that summarizes historic growth, pending development (i.e. growth that is in the "pipeline"), or remaining capacity for growth under local land use plans or zoning. Likewise, there is no system in place to regularly monitor growth forecasts that are the basis for transportation or other regional planning, such as schools. This recommendation would mirror the recommendation in the Southern Beaufort County Regional Plan and would involve the creation of a regional data base and model that would likely build on the existing traffic*

model and its traffic analysis zones, but it could be expanded for use in a wide range of planning efforts by local and regional agencies. Specifically:

- The county's new Land Development Office (LDO) program would be configured to count Certificates of Occupancy by tax district and address.
- Municipalities would use the same system to enter permit and occupancy data or planning staff will enter data in the interim.
- The LDO development counts will be integrated with GIS traffic analysis zones through address or parcel ID numbers.
- A growth report will be periodically generated to show the change in growth by Traffic Analysis Zone (TAZ), by tax district, and by jurisdiction.



8 Implementation Oversight

Introduction

This regional plan reflects significant changes in direction for regional planning in Northern Beaufort County. The policies in this plan grew out of a long and intense process of analysis, consideration of alternative approaches, and consensus building. While this process achieved agreement on many important concepts, its success will only be meaningful if there is follow through on actions needed to implement the plan.



Recommendation 8.1: *The implementation of the Northern Beaufort County Regional Plan should involve a four point approach:*

1) *The evolution of the Northern Beaufort County Regional Plan Steering Committee into a continuing Implementation Oversight Committee,*

2) *The drafting and execution of intergovernmental agreements that ratify key plan elements,*

3) *The incorporation of regional plan policies in local comprehensive plans and local plan implementation tools, such as land use regulations and ordinances, and*

4) *Ongoing work of the Technical Advisory Committee and working groups on ongoing planning initiatives.*

Each of these is discussed below.

Northern Beaufort County Regional Plan Implementation Oversight Committee

The Northern Beaufort County Regional Plan Steering Committee that oversaw the preparation and completion of this plan will be reappointed and reformed into an Implementation Oversight Committee, and will continue to work on a long term basis. This Implementation Oversight Committee will oversee and coordinate the actions identified in this chapter, and will oversee the preparation of the intergovernmental agreements and the technical committee working groups that will work on long term planning initiatives as identified in this plan. Specifically, the Implementation Oversight Committee will have at least the following responsibilities:

- Responsibility for preparing intergovernmental agreements as discussed in the next section.
- Responsible for prioritizing actions in collaboration with the city, towns, and county.
- Serve as an advocate for strong regional planning initiatives and actions in concert with the Participating Local Governments pursuant to this plan.
- Overall responsibility for working with local communities on their long range transportation plans, pursuant to the transportation strategy outlined in Chapter 4 of this plan.

- Overall responsibility for working with local communities to plan for adequate funding of regional infrastructure, pursuant to the fiscal strategies outlined in Chapter 5 of this plan.
- Responsibility for encouraging local governments to incorporate this regional plan into local plans and regulations.
- Oversight of the Technical Advisory Committee and its working groups.
- Monitoring, amending, and updating the plan.

Intergovernmental Agreements

This regional plan identifies several sets of planning issues that should be addressed initially through intergovernmental agreements. These include the following:

Growth Management and Annexation Policies

Chapter 2 of this plan establishes a commitment on the part of the Participating Local Governments to develop mutually agreeable principles that address:

- Mitigation of extra territorial impacts of annexations,
- Mitigation of negative impacts on the delivery of public services,
- Procedures for notice and comment on proposed annexations,
- Enclaves of unincorporated county territorial within the growth boundaries,
- Guidelines for the protection of existing Community Preservation Districts, and
- Policies for city and county consideration development requests within and outside the growth boundary.

The negotiation, preparation, and execution of an intergovernmental agreement / agreements is a high priority of this plan.

Baseline Standards

Chapter 6 of this plan establishes a commitment to adopt baseline standards related to several issues, including environmental protection and corridor protection. The plan calls for baseline environmental standards that address:

- Storm water management best management practices,
- Critical line setback and buffers (with provision for flexibility in cases of public access),
- Enhanced standards for especially sensitive areas such as waterway headwaters, low lying areas, and the ACE basin, and
- Protection of freshwater wetlands.

Chapter 6 also establishes a commitment to adopt baseline standards that address consistent corridor overlay standards along shared travel corridors.

Local Planning Conformity Commitments

Chapter 2 of this plan establishes a commitment to carry the policies of this regional plan into the local planning process as described below. This commitment to bring local plans and regulations into conformance with this plan should be further endorsed through an intergovernmental agreement.

Local Plans and Regulations

The true test of the willingness of the Participating Local Governments to implement this regional plan will be the extent to which the policies of this plan can be institutionalized through the incorporation of those policies in local plans, such as comprehensive plans. Even more important, the local governments should carry those policies through into the local land use regulations – including zoning codes and subdivision regulations.

As each community updates its comprehensive plans and updates its land use regulations, the Implementation Oversight Committee will work with the communities to build this plan and its policies into that process. Local land use plans will be encouraged to be consistent with

the growth boundaries and regional land use plan contained in this plan. Local transportation plans will be encouraged to be consistent with the transportation strategy outlined in this plan. Baseline standards for environmental and corridor protection that are developed through the intergovernmental agreements will be encouraged to be incorporated into land use regulations. Local governments will also be encouraged to use their plans to establish the policy foundation for planning initiatives related open space preservation, infill development, economic development, housing, and coordination with military authorities will be encouraged.

The Participating Local Governments will explore opportunities to coordinate the updating of comprehensive plans and regulations, including the timing of updates, the use of common data and information, joint land use planning, and the creation of common planning and regulatory terminology, definitions, and standards.

During the development of the intergovernmental agreement that would confirm the communities' commitment to build regional plan policies into local plans and regulations, the communities should discuss and consider the creation of a voluntary plan conformity review process. This plan conformity review process could involve agreement by each of the communities to audit their planning and regulations for ways in which the plans and regulations currently advance the regional plan policies, ways in which they may conflict with regional plan policies, ways in which local plans and regulations can be modified to better reflect the regional plan, and actions that the communities agree to undertake when updating their plans.

Technical Advisory Committee and Working Groups

During the preparation of this regional plan, the Technical Advisory Committee and the related working groups demonstrated tremendous value in thinking through the actions needed to help implement this plan. The Technical Advisory Group is envisioned as continuing to work and assist the Implementation Oversight Committee on an ongoing basis. The Technical Advisory Committee will help with the coordination of longer term planning initiative identified in this plan, including:

- Regional economic development initiatives,
- Regional open space planning and preservation,
- Cultural diversity initiatives,

- Affordable and workforce housing initiatives,
- Creation and implementation of a regional infill development strategy, and
- Coordination with military authorities.

Regional Plan Management

This regional plan is intended to plan for a 20 year horizon; however it is recognized that it is a policy guide that must be monitored and updated periodically. The Implementation Oversight Committee will work with local planning staffs and the Technical Advisory Committee to develop methods for the following:

- Annual monitoring, including the creation of benchmarks for charting progress in achieving the plan, along with an annual report of plan implementation progress.
- Updating of this plan every five years.
- A process and guidelines for hearing requests for amendment to the plan by the Implementation Oversight Committee and the Participating Local Governments.



Appendix A

Population Estimation, Projection Methodology for the Beaufort County Transportation Model & the Beaufort County Regional Plans

The following is a brief description of Beaufort County's population projection methodology used in its transportation model and applied to the Northern Beaufort County Regional Plan. It is important to point out that Hilton Head Island has its own traffic model and forecasting methodology which is not described here.

Traffic Analysis Zones (TAZs)

Traffic Analysis Zones (TAZ's) provided the level of analysis for the population projection methodology. TAZ's are small geographical sub-areas of the county (see Diagram A) that are used for the purpose of analyzing the impact of future population growth on the road network. In each TAZ, there is an estimate of the future (2025) number of dwelling units, population, employment and school attendance. Estimations made at the TAZ level can be assembled to define larger planning areas such as Northern Beaufort County, Lady's Island, or any of the land bodies or tax districts. Because the TAZ boundaries are drawn based on Census delineations, Census data can be used to supplement local data, and for base data comparisons.

Estimating Current (2004) Population

Current population estimates began with a count of current dwelling units in each of the TAZ's. This was accomplished using the County's GIS/Assessor database. The parcels in each TAZ were selected, the residentially coded parcels were then selected, and those with buildings or manufactured homes were counted. The parcels with tax codes for multiple units were viewed on an aerial for an estimated unit count as no current County database lists unit counts. Current population was estimated by applying persons per household and vacancy rates from the 2000 Census, for the Census tract within which the TAZ was located, to the dwelling unit count. Where new development was proposed in a particular TAZ that did not resemble historic growth patterns in that area (e.g. recent fast-growing areas within Bluffton), persons per household and vacancy rates from similarly profiled Census Tracts were used.

Forecasting 2025 Population

Population forecasts for the year 2025 are based on the historic growth rate and the amount of developable land remaining in each TAZ. The amount of developable land left within each TAZ was determined by analyzing aerials and subtracting out wetlands and marshes (unbuildable land). Future development within vacant land was assumed to occur at already approved densities, or, where no development had been approved, at densities consistent with the selected future land use plan scenario.

Based on the two factors of growth rate and remaining developable land, an S-curve was used to forecast the future rate of growth. The s-curve (see Diagram B) was divided into the following four slopes whose parts represent four broad categories of growth in Beaufort County:

a) slow historic growth (e.g. rural and constrained growth in areas such as Sheldon)
b) moderate growth (e.g. Port Royal Island)
c) high growth (e.g. Bluffton, Lady's Island)
d) tapering growth of places approaching buildout (e.g. Hilton Head Island)

In addition to the above described methodology, there are many developments in Beaufort County (mostly in the Bluffton area) where the developer has provided a timetable for completion usually via a development agreement. These "known" forecasts were applied where applicable.

Once a TAZ was assigned a growth category, the current residential count was then entered into a compounding formula at a rate for X

years to generate the curve assigned. [See Diagram C for an example of the growth curve for category 3 or those TAZs that are growing at the pace of Lady's Island in general.] Finally, forecasted dwelling units were converted to population figures by assuming the same persons per household and vacancy rate as the 2000 Census for the Census tract within which the TAZ is located where appropriate or using the rates of a similarly profiled community. The individual TAZ projections were added up and the result was compared to historic growth trends in the region to ensure that the overall 2025 growth projections for the region are consistent with historic growth trends.

Population Projection Results

Planning Area	2006 Dwelling Units	2006 Population	2025 Dwelling Units	2025 Population
Port Royal Island	19,875	50,244	30,587	76,299
Sheldon	2,123	5,266	3,696	9,203
Lady's Island*	4,855	11,918	7,430	18,911
St. Helena Island	7,599	13,190	8,937	19,119
TOTAL	34,452	80,618	50,650	123,532

State Review and Approval of Method

The *TAZ scale and use of a growth-curve* for estimating and projecting the 124 different growth scenarios for the TAZ model was novel, therefore the Planning Department contracted with the S.C. Budget & Control Board's Office of Statistical Data to review the method, the process, and the results. At every stage that Office was supportive of the methods used to detail and locate Beaufort's growth indicators. The Office of Research and Statistics' veteran statistician, Diana Tester of Health and Census Statistics was the reviewer.

DIAGRAM A:
Beaufort County's 124 Traffic Analysis Zones (TAZ's)

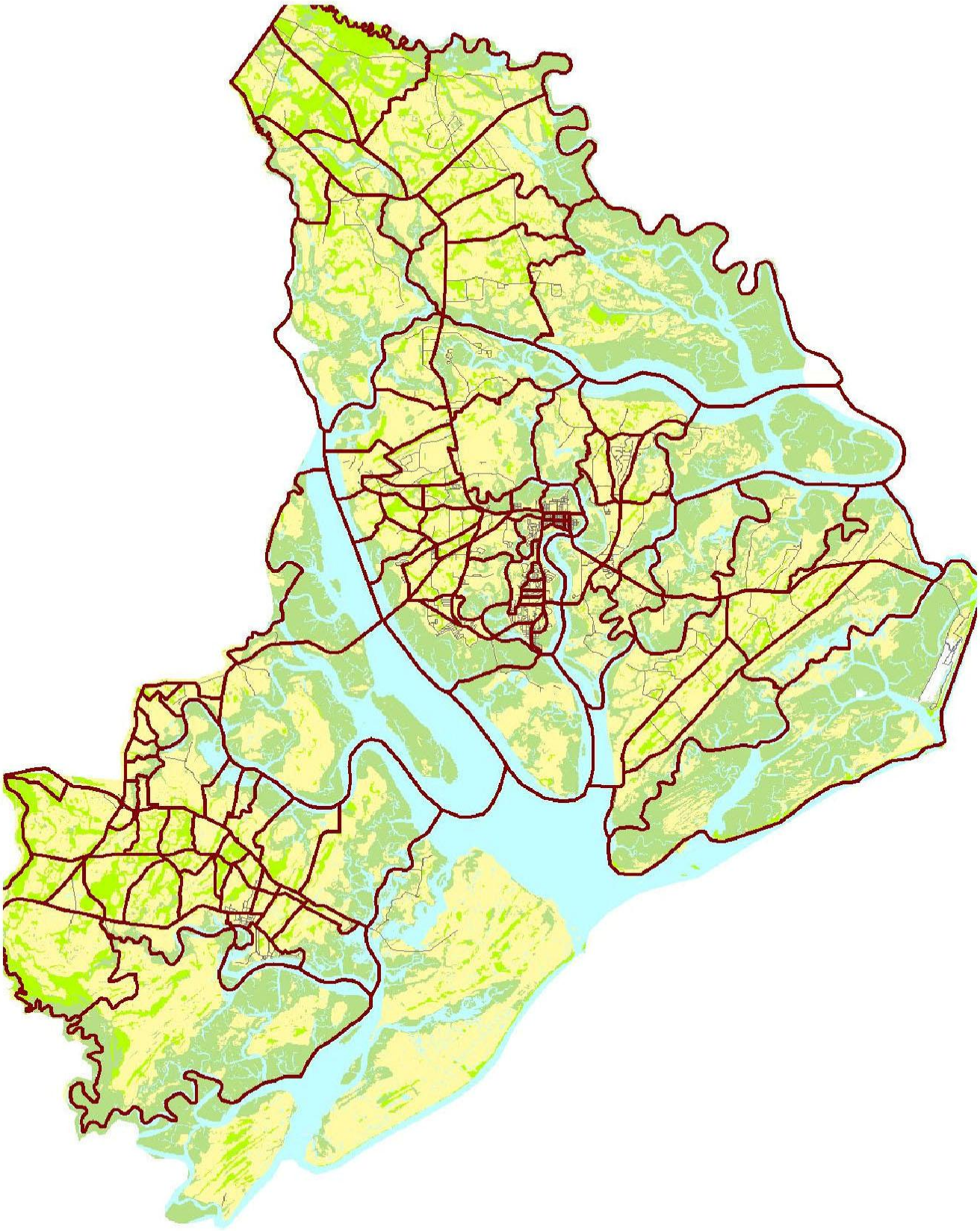
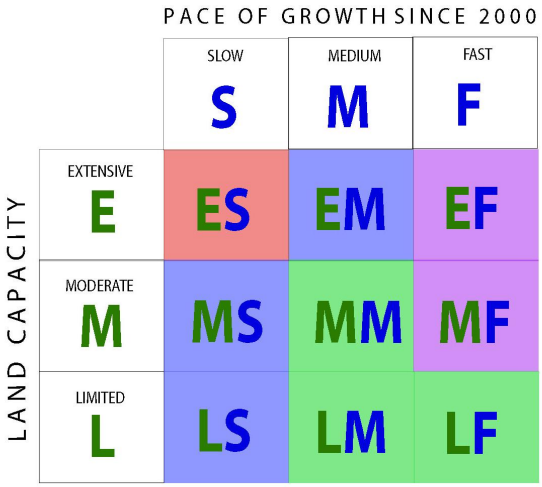


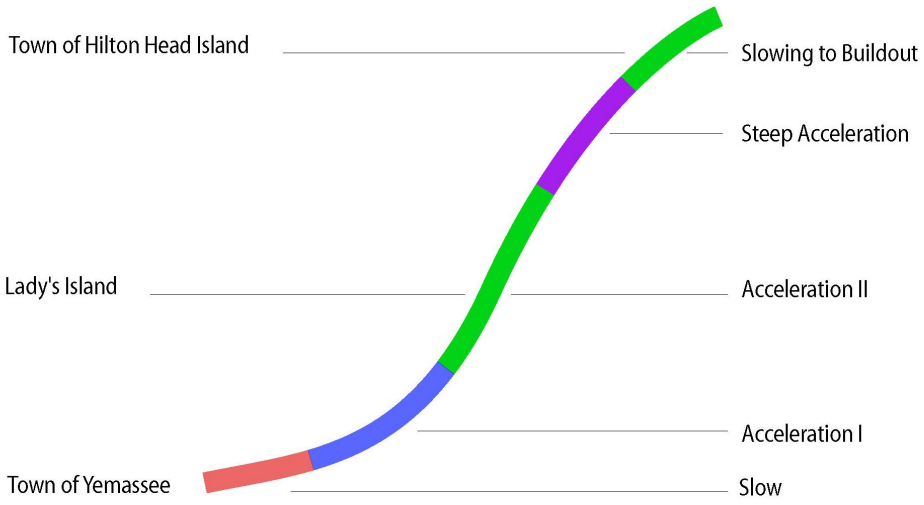
DIAGRAM B

Criteria For Determining Growth Curves
For Beaufort County T.A.Z. Areas



Area Average Growth Rates

Location on the Growth Curve



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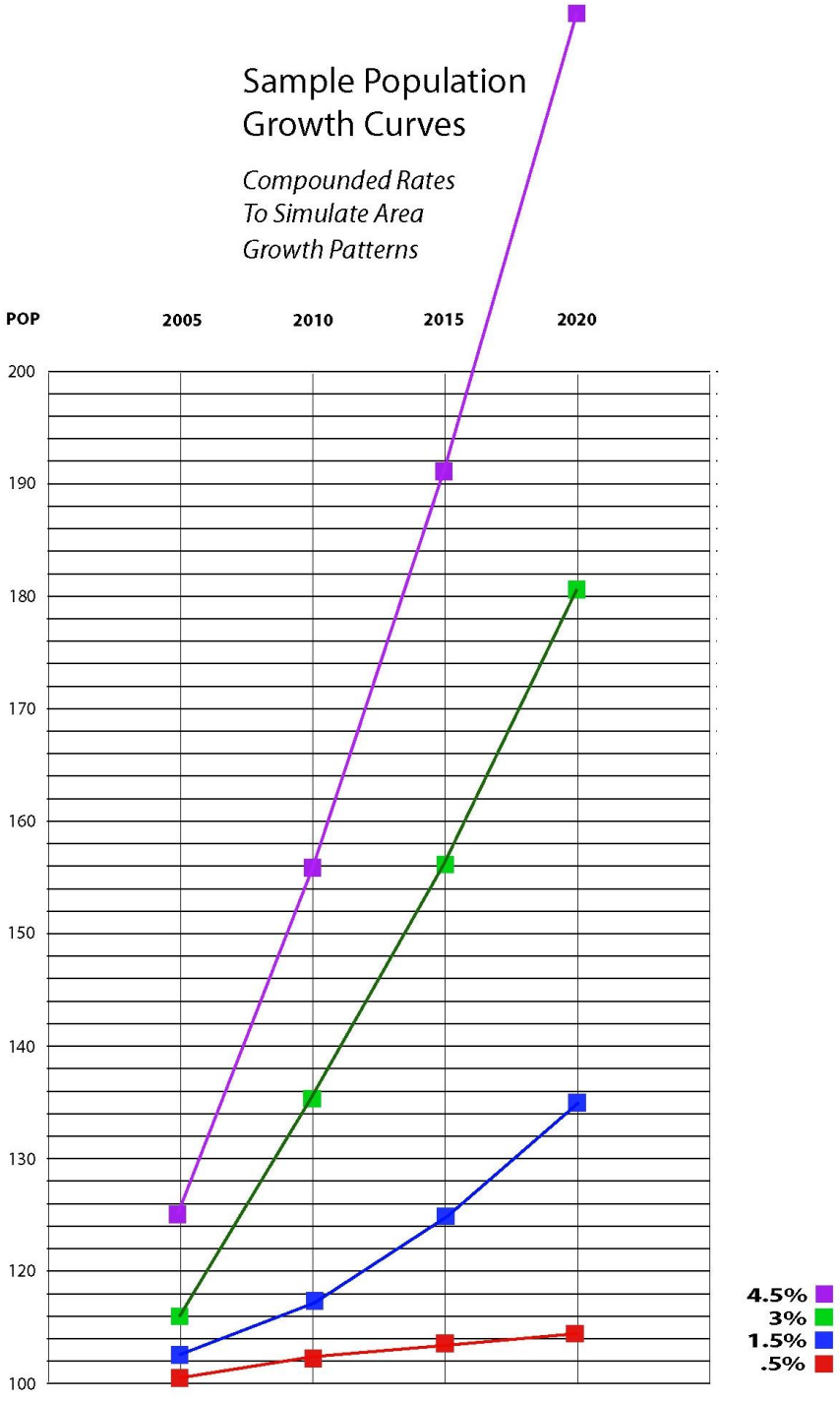
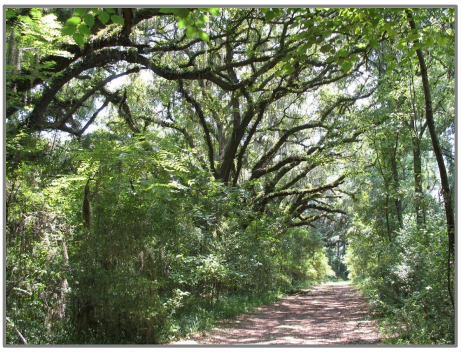

Sample Population
Growth Curves
Compounded Rates
To Simulate Area
Growth Patterns
POP
2005
2010
2015
2020
200
190
180
170
160
150
140
130
120
100
4.5%
3%
1.5%
.5%

1

Beaufort County Comprehensive Plan
Introduction





Introduction

The purpose of the Beaufort County Comprehensive Plan is to enable government officials and citizens to effectively manage natural, cultural, economic and fiscal resources in light of growth, change and an uncertain future. The policies in this document are aimed at promoting safe and healthy communities that preserve and build on the County's unique sense of place; and at promoting sustainable economic opportunities that allow all County residents to thrive and prosper. This Comprehensive Plan is a vital document because it contains guidance for the development of the County for the next 10 to 20 years. The Plan provides this guidance by outlining recommendations and implementing strategies which are supported by data and technical analysis, and developed through a public review process. This plan is a living document and in addition to a statutorily required 5-year review, will be continually monitored and updated to respond to changing conditions and data.

Building on Past Planning Efforts

This document builds on comprehensive and regional planning efforts conducted in the last 15 years. In addition to Beaufort County's first comprehensive plan adopted in 1997, the policies in this document build on the recommendations of the Northern and Southern Beaufort County Regional Plans. The Southern Beaufort County Regional Plan (2006) focused on planning for the amount of growth anticipated over the next 20 years in Hilton Head Island, the Town of Bluffton, and the surrounding unincorporated areas of the county. The Northern Beaufort County Regional Plan (2007) represents an agreement between Beaufort County, the City of Beaufort and the Town of Port Royal as to how the northern county region will grow and develop. The plan establishes growth boundaries for municipalities, and includes a land use plan framework that focuses growth in and around the municipalities while preserving over 60% of the land area for rural uses.

Authority of Comprehensive Plans

Comprehensive Plans were mandated by the State of South Carolina in 1994 for all local governments who regulate land use. The Comprehensive Plan is not a detailed land development or zoning

ordinance, but rather a public policy document, adopted by ordinance, forming the legal basis for any future land use ordinances. In order for local land use regulations to be valid, they must be adopted in accordance with a locally adopted plan that is based upon and includes appropriate studies of the location and the extent of the present and anticipated population, social, economic and environmental resources, and the current issues and concerns of the community.

"It is the function and duty of the local planning commission… to undertake a continuing planning program for the physical, social, and economic growth, development, and redevelopment of the area within its jurisdiction. The plans and programs must be designed to promote public health, safety, morals, convenience, prosperity, or the general welfare as well as the efficiency and economy of its area of jurisdiction. Specific planning elements must be based upon careful and comprehensive surveys and studies of existing conditions and probable future development and include recommended means of implementation."

- South Carolina Local Government Planning Enabling Act of 1994.

Plan Elements

Comprehensive Plans in South Carolina are required to have a minimum of nine elements – population and demographics, land use, natural resources, cultural resources, transportation, economic development, affordable housing, community facilities, and priority investment. In addition to these required nine elements, this document includes a history element that provides a backdrop to the current conditions discussed in the other chapters. The plan also includes an energy element that promotes sustainable practices regarding energy consumption.

History: This element provides a brief history of Beaufort County starting with the first Native American settlements to the present time. This chapter provides an historical backdrop to the Population and Demographics, Land Use and Cultural Resources Elements.

Population and Demographics: This element analyzes historic and current population and demographic trends and provides reasonable projections of future population growth to help guide policy decisions through the lifespan of this plan. Each of the following chapters of this plan utilize these projections to help shape their recommendations.

Land Use: This element provides an analysis of existing development patterns, recent planning and plan implementation efforts, and a vision for future land use and growth management policies. The policies in this chapter build on the recommendations of the 1997 Plan and on the recommendations of the Northern and Southern Beaufort County Regional Plans.

Natural Resources: Beaufort County has a unique natural beauty, made up of salt marsh vistas, sub-tropical maritime forests of live oaks and palmettos, forested wetlands of cypress and tupelo and over 30 miles of beaches. Beaufort County residents and visitors have a great attachment to these natural features. This element focuses on the protection, preservation, and management of Beaufort County's natural resources in light of the pressures of growth.

Cultural Resources: This element focuses on preserving and enhancing the County's cultural resources, which include historic sites and structures, scenic highways, maritime heritage, agricultural heritage,

the military, Gullah culture and the visual and performing arts community.

Economic Development: This element provides an analysis of the current economic condition and focuses on how to build on the county's existing assets while diversifying its economic base. The chapter promotes policies that encourage quality job creation that allow citizens to find reasons to remain or settle in Beaufort County in employment that requires knowledge, talent and training and compensates with higher-paying jobs.

Affordable Housing: This element analyzes the location, type, age, condition, tenure, and affordability of housing. This element includes an analysis of the regulatory environment to determine unnecessary barriers to the provision of affordable housing. The goal of this element is to maintain and enhance the diversity of Beaufort County by providing the opportunity for people of all income levels to live and work in the County.

Energy: This element focuses on how to lower Beaufort County's energy dependency by reducing local energy consumption and facilitating local renewable energy production. The element first assesses how to make local government facilities and operations more energy efficient; how to promote green technologies and energy efficiency in the private sector; how to implement land use and transportation policies to promote fewer vehicle miles traveled; and how to best facilitate educational outreach to promote energy efficiency and green technology.

Transportation: This element provides an analysis of the County's existing road network and assesses existing deficiencies and future needs in light of projected growth. The chapter offers strategies to maximize the efficiency of the county's road network while promoting policies and alternative transportation choices to reduce dependency on automobile transportation.

Community Facilities: This element analyzes existing and future needs for water supply, waste water treatment; solid waste collection and disposal, fire protection, emergency medical services, general government facilities, education facilities, parks, and libraries. For each of these community facilities, this chapter provides an assessment of existing conditions, projects future needs based on projected population growth, and provides recommendations on how to implement and fund these recommendations.

Priority Investment: This element ties the capital improvement needs identified in other elements to forecasted revenues for the next ten years. It is, in essence, a ten-year Capital Improvements Plan that is meant to guide the County's five-year Capital Improvements Program (CIP) and annual budgeting processes.

2

Beaufort County Comprehensive Plan
History



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Native Americans

The first identified presence of the aboriginal, or Native American, people who inhabited the Southeastern coastal area dates to approximately 1800 B.C. Early inhabitants were hunters and gatherers who moved seasonally in search of favorable weather and changing food sources, leaving few permanent features on the landscape. Seasonal encampments, such as the Fish Haul Archaeological site on Hilton Head Island were located at sites that offered an abundance of food staples, such as hickory nuts, fish, shellfish and game.

Shell Rings

Shell Rings are circular or semi-circular Native-American sites consisting of deposits of shell, bone, soil and artifacts. They are located on barrier islands along the Southeastern coast from South Carolina to Florida and date from the Late Archaic Period, 3000 to 5000 years ago. They range in size from large rings that can be as much as 9 to 15 feet high and 300 feet in diameter to much smaller rings only a few feet in height and diameter. There is a debate among archaeologist as to what shell rings represent. Are they intentionally formed mounds for ceremonies or feasts, are they the accumulation of seasonal or permanent occupations, or are they a combination of both?

Early Settlements

Remains of structures such as shell rings, ceremonial mounds, and burial mounds indicate the more settled life of subsequent groups of Native Americans. Beaufort County has at least seven identified large shell rings and a few smaller rings that are believed to date from about the second millennium B.C. and contain some of the earliest known pottery in North America. Large mounds believed to be religious temples dating from approximately 900-1400 A.D are located at the Indian Hill site on St. Helena Island and the Little Barnwell site on the Whale Branch. Judging from the size of the Indian Hill mound, it probably served as a regional ceremonial center with an adjacent village near by. A mound constructed around 500 A.D. for burial purposes only is located at the Hassell Point site on the Colleton River. Evidence indicates that burned human remains as well as pottery and other materials were buried in layers and that a number of graves were located in one shell ring.

The Yemassee

Around 1680 Native Americans began moving to the Carolina coast from Florida, fleeing Spanish settlers. Among these were the Yemassee. Until 1715, the Yemassee coexisted and traded with the English settlers, unified by their mutual adversary – Spanish Florida. The Yemassee were granted a reserve that covered a huge tract of land from the Combahee River in the north to the Savannah River to the south. However, increasing tensions over trade abuses eventually led to the Yemassee War (1715-17). The war began when Yemassee attacked the Port Royal



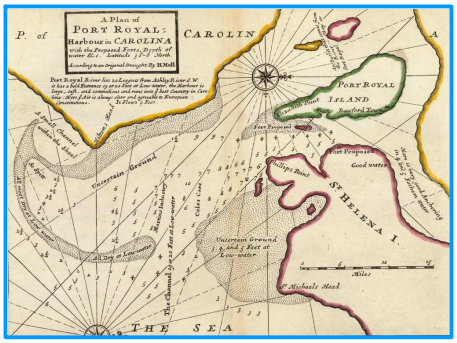
The Sea Pines shell ring site is one of 20 or more prehistoric shell rings located on the southeast coast. All are believed to date early in the second millennium BC, and they contain some of the earliest pottery known in North America.

settlement, and massacred all but a few of the residents, as well as most of the settlers living on the inland plantations. Eventually, the Yemassee and their allies were driven from the area.

There are two identified remaining archaeological sites that were Yemassee town sites – Pocosabo Town, located near present day Sheldon, and Altamaha Town, located in the Okatie area near the Colleton River and Chechessee Creek. These settlements were scattered villages that covered as much as 125 acres and probably had as many as forty households. Altamaha, believed to be inhabited by Native Americans for over 3,200 years, was the head town of the lower region and was the home of the head chief.

Legacy

In addition to shell rings, mounds, artifacts, and place names, perhaps the most identifiable legacy of Native American habitation is the location of many of our current roads and highways. US Highway 21, for example, follows a route from northern Beaufort County to Fripp Island that was originally an Indian trail. Where possible the road follows the high ground, especially across the barrier islands. Many of these trails crossed rivers and creeks making a trip of any distance one that required more than one method of transportation.



Early Explorers and Settlers

From 1520 when the Spanish first sailed the waters along the coast of present day South Carolina to the early 18th century when the English gained a permanent foothold, the region was sought after and contested for by the Spanish, French, English, and Scots. The influence of these Europeans, as well as the Africans they brought in slavery, is apparent today in Beaufort County in the names of places, by the built environment and archaeological sites, and in the language and customs of the people.

Spain



Archaeological dig at the site of Santa Elena and Charles Forte on the southern tip of Parris Island.

In 1526, Captain Lucas Vasquez de Ayllon brought a company of 550 men to what is now Beaufort County. The fort that he built was short-lived as hostile Indians as well as cold and exposure killed most of his men. The rest returned to Hispaniola leaving no trace of this first European settlement. In 1566, the Spanish, intending to establish a northern outpost to protect Florida from the French and English, returned to build another fort named San Felipe which lasted 10 years. The Spanish returned in 1577 and built another fort, San Marcos, about 100 feet from San Felipe. Like its predecessor, San Marcos had a town within its walls. During its eleven year existence, San Marcos was a thriving place. The settlement, now known as Santa Elena, contained over 60 houses. The presence of women, children, agriculture, and Catholic priests gave the settlement a sense of permanence and stability. However, in 1588, the inhospitable Indians and climate forced the Spanish to return to Florida. Today, Santa Elena exists as an important archaeological site on Parris Island and is invaluable as a source of information about the first European settlers in Beaufort County.

France

Arriving in 1562, the French Huguenots were the next Europeans to try and establish themselves in Beaufort County. Led by Captain Jean Ribault, the French explorers cast anchor in "a mighty river" he named Porte Royall because of "the largeness and fairness thereof." He said that there was "No fayrer or fytter place than Porte Royall."



In 1562, Captain Jean Ribault, in an attempt to establish a French colony in the new world, cast anchor in a river he named Porte Royall because of the "largeness and fairness thereof." He said that there was "no fayrer of fytter place than Porte Royall."

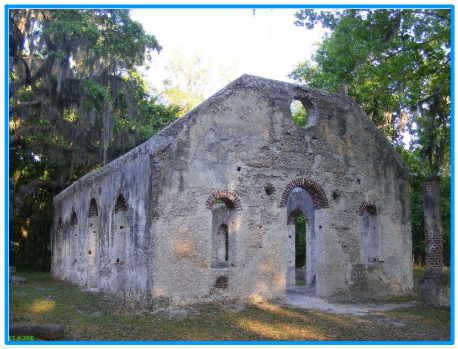
Ribault built a fort of logs and clay that he named Charles Forte located on present day Parris Island. The French stayed only a few months and like the Spanish before them, abandoned the fort. Ribault and his men were later massacred by the Spanish near St. Augustine. While Charles Forte lasted only a short time, it has the distinction of being the first Protestant settlement in North America. The most obvious reminder of the French presence here is the name of Beaufort County's largest island as well as one of its principal towns, Port Royal, and the use of the name Ribaut.

Scotland

In 1684, a Scotsman, Lord Cardross, with 148 of his countrymen, established a colony he named Stuart Town at Spanish Point on the Beaufort River. Difficulties with the English authorities in Charles Town over the fur trade and raids by the Spanish from Florida soon led to the demise of Stuart Town. In 1686, a Spanish force attacked the town and killed or captured most of the Scots. The survivors fled and the town was destroyed. While the approximate site of Stuart Town is known, the exact location has never been determined.

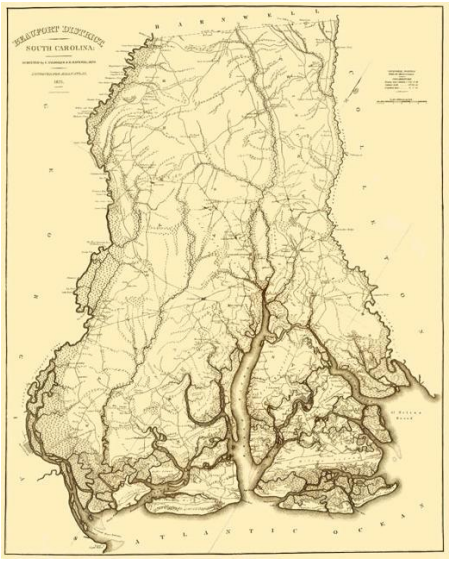
England

For nearly 100 years after the Spanish left, there was no permanent settlement in the area although Spanish priests continued to sporadically operate missions along the coast. Port Royal Sound provided refuge for privateers and warships of all nations as they raided one another and attempted to gain a foothold. In 1663, Captain William Hilton, for whom Hilton Head Island is named, became the first Englishman to explore the region. He reported back favorably to the Crown, and in 1670 the first shipload of colonists arrived in Port Royal Sound. They intended to establish a colony there since they considered the area to be the most favorable for settlement. However, they went further north where they established a colony near present day Charleston that became the first permanent English settlement.



Colonial Period

In 1710, the Lords Proprietors of Carolina ordered the establishment of Beaufort Town, in honor of one of the Lords Proprietors, the Duke of Beaufort. The location of the town was chosen primarily because it offered a safe harbor on the Beaufort River away from the open Port Royal Sound. The growth of the town was initially slow due to its remote island location, skirmishes with the Yemassee Indians, and the continued threat of invasion by the Spanish. In 1721, it was reported that there were only thirty white and forty-two black inhabitants.



Beaufort County was established in 1769 and originally included what is now Jasper and Hampton Counties.

Concerned about the defense of the area, authorities in Charles Town appropriated 1,500 pounds to construct a fort at Port Royal. In 1734, a tabby structure named Fort Frederick was constructed on the Beaufort River under the supervision of the colony's treasurer, Alexander Parris, for whom Parris Island is named. Unfortunately, Fort Frederick was poorly situated and rapidly deteriorated until it was finally abandoned. Tabby ruins of Fort Frederick still exist at the site near the Naval Hospital. When Fort Frederick was abandoned, a new, more formidable tabby fort named Fort Lyttelton was built upriver at Spanish Point, and was used through the Revolutionary War.

Not only did the town of Beaufort develop slowly, but the Sea Island planters did not share in the great wealth being accumulated by the rice and indigo planters of the Charles Town and Georgetown areas. The lack of large freshwater swamps so plentiful on the mainland prevented them from having success with rice, the colony's most profitable export crop. Indigo was the most profitable money crop on the islands and was supported by an imperial bounty which was abolished after the Revolution. Rather than owning huge plantations tilled by hundreds of slaves, the average Sea Island area planter was middle class and owned few slaves and roughly 500 acres of mostly wilderness.

It was not until 1763 when the English finally solidified their hold on North America and the Colonial wars ended that the Port Royal area began to experience prosperity and growth. Between 1763 and 1776 the population of the area quadrupled. The economy grew with the population and the area became a center of the shipbuilding industry.

During that period several large ocean going vessels were constructed of live oak and cypress at boat yards in Beaufort and on Hilton Head, Lady's and Daufuskie Islands.

The American Revolution

As sentiment for a break from England grew in the colonies and among some Beaufort people, many of the prominent families like the Bulls and the Stuarts remained Loyalist. As a result, the revolutionary government in Charles Town had little confidence in the residents of Beaufort. The smuggling of contraband to England in defiance of colonial authority was a constant problem.

The early years of the Revolutionary War were relatively quiet in the area. Then in February 1779, the British attacked in what was to become known as the Battle of Port Royal. While the battle was an American victory and the British were repelled, the American forces left soon after to aid in the defense of Charles Town. The British then occupied Beaufort and Port Royal Island and remained until near the end of the War. Frequent raids on plantations and settlements along the area's rivers were conducted by the British from Port Royal causing extensive damage. After three years of occupation and warfare, the area was devastated. A returning citizen noted that "all was desolation . . . every field, every plantation showed signs of ruin and devastation." The area did, however, produce some revolutionary heroes such as Daniel Heyward, Jr., and John Barnwell.

Tabby

Tabby is a cement like material made of oyster shells, lime, sand and water that when hardened becomes a strong material. Neither stone nor the ingredients needed to make brick are found in the area. Tabby incorporates easily available, inexpensive materials into a reliable building material. There are differing opinions as to where the formula for making tabby originated. Some credit the Africans for bringing it here while others believe that Native Americans were the first to use tabby.

Legacy

A small but significant group of 18th century buildings remain in Beaufort today. Among the most prominent are St. Helena's Episcopal Church (c. 1724) and the Hepworth-Pringle House (c. 1720) considered to be the oldest house in Beaufort. The most significant 18th century structure outside of the city of Beaufort is the ruins of the Prince William's Parish Church (c. 1745-55). Commonly known as Old Sheldon Church, it is said to be the first conscious attempt in America to imitate a Greek temple and is considered to have been one of the finest revival buildings in the country. It was burned by British forces in 1779, rebuilt in 1826 and later burned by Sherman's troops in 1865 and never rebuilt. At least two extant homes in Beaufort are made completely of tabby (see sidebar) and several others in the area have raised tabby basements or walls of tabby. A number of significant tabby ruins also exist. Among the most prominent are the ruins of the St. Helena Parish Chapel of Ease (c. 1740) on St. Helena Island and several tabby buildings on Spring Island. The Chapel of Ease was built to serve the planters of St. Helena Island, for whom it was too far to travel to the church in Beaufort.



Ruins of Fort Frederick (circa 1735-1758). The fort was named after Frederick, son of George II of England and was the main defense of Beaufort until replaced by Fort Lyttleton at Spanish Point.



The Antebellum Era and Civil War

The reconstruction and economic growth of Beaufort after the Revolutionary War was slow. It was not until the introduction and spread of long-staple Sea Island cotton that Beaufort began to enjoy the prosperity it had long awaited. Production of Sea Island cotton in South Carolina and Georgia increased from 10,000 pounds in 1790 to eight and one-half million pounds in 1801. The cotton was shipped from Charleston, Savannah and Port Royal to mills in England.

At this time the landscape of the area, especially the Sea Islands began to change dramatically. Forests were cleared for cotton fields. Marshes and swamps were filled and diked for agricultural lands. The small planters and middle class yeomen of the colonial era were gradually replaced by wealthy planters with large holdings. The wealth of the area began to be concentrated in the hands of a few families. Typical were the St. Helena Island planters like the Fripps, Coffins, Sams, and Chaplins who owned thousands of acres of land and many hundreds of slaves. They often owned large working plantations on St. Helena and the other Sea Islands as well as homes in Beaufort or Charleston.

The prosperity brought by Sea Island cotton facilitated by the invention of the cotton gin had a direct impact on the growth of slavery in Beaufort County during this period. The planters began to realize the enormous profits to be made; the more astute began to buy more land and more slaves. As a result, the African American population of the Beaufort area, especially on the Sea Islands, grew dramatically. By 1800 over 80 percent of the population of the Beaufort area were slaves and slightly higher on the Sea Islands. Like in much of the southeast Atlantic coast, the African Americans in Beaufort County held on to many of the West African customs, religion, and traditions. The historic isolation of the Sea Islands has preserved this culture, known as "Gullah." Gullah communities continue to thrive on the Sea Islands. Today the Gullah are noted for the continued preservation of their African roots and traditions: the language, arts, foods, architecture, dress and customs of the Gullah are all African based. They speak a language that derives

Praise Houses

Praise houses were places of worship for slaves who had no formal churches of their own. First appearing around 1840, they were usually very small, frame structures sometimes built by the planters but often as not constructed by the slaves themselves with whatever material they could find. Elders led services that were a mixture of Christian and African customs. At one time dozens of praise houses dotted the landscape of the Sea Islands. They served not only as places of worship but as community centers for the Africans on the islands. Today, only four 20th century praise houses remain in Beaufort County.

most of its vocabulary from English but many of the words and rhythms are African in origin.

Today a number of significant buildings from the plantation era remain in the County, mostly on the Sea Islands. Many of the finest homes and important public buildings and churches in the 304 acre Beaufort City National Historic Landmark District were built during this time. Included are the Beaufort College Building (c. 1852), the First Baptist Church (c. 1844), Tabernacle Baptist Church (c. 1840), and the Beaufort Arsenal (c. 1852), which was built to house the Beaufort Volunteer Artillery. The oldest known extant plantation house in the area is Retreat Plantation (c. 1740), also known as the Jean de la Gaye House, on Battery Creek near Beaufort. A number of plantation house ruins are found on Daufuskie, Lady's, Hilton Head, St. Helena, and Port Royal Islands. Some of the more prominent churches from the plantation era are Brick Baptist Church (c. 1855) on St. Helena Island, The Church of the Cross (c. 1857) in Bluffton, and St. Luke's Church (c. 1824) near Bluffton.



The gothic revival Church of the Cross in Bluffton was constructed in 1857. The church survived widespread burning by Union troops in 1863.

The Civil War

As might be expected from an area that had a wealthy planter class whose fortunes were dependent upon slave labor, Beaufort County had a strong secessionist movement. On July 31, 1844, Robert Barnwell Rhett, known as South Carolina's "father of secession," spoke at a meeting held under a giant live oak tree in Bluffton. This is believed to be the first secession meeting and "The Bluffton Movement" for secession was born. Later an important secession meeting was held in 1851 in the Milton Maxcy House in Beaufort, the "Secession House," which at the time was owned by Edmund Rhett, the brother of Robert Barnwell Rhett. Both the "Secession Oak" and the Milton Maxcy House are still standing.



Fort Walker during the Battle of Port Royal, November 1861.

In 1860 when South Carolina seceded from the Union, the Beaufort Artillery along with other units such as the St. Helena Mounted Rifles joined in the defense of the area. Their primary fear was that the U.S. Navy would attempt to gain control of the deep harbor of Port Royal Sound. While Beaufort and Port Royal were of little use since there were no well developed port or railroad facilities, the Sound, was a natural anchorage for large warships and other vessels. Two fortifications, Fort Walker on Hilton Head Island and Fort Beauregard on Bay Point, were constructed to defend against attack from the sea. Remains of these earthworks exist today.

The Confederate fears were justified when on November 7, 1861, Union naval and ground forces attacked Confederate forces on Hilton Head Island. The Union won a complete victory routing the Confederates and forcing them to evacuate not only Fort Walker and Fort Beauregard, but all of Hilton Head Island, Port Royal Island and the

other Sea Islands. By December of 1861, Union forces occupied Beaufort and gained control of the entire area.

During this occupation, most of the planters and others of means fled the area going to Charleston, Columbia and other locations. They left their homes in Beaufort and their plantations with no one but the slaves to maintain them. The Union army used a number of Beaufort houses as headquarters, living quarters, and hospitals throughout the occupation and later during Reconstruction. Some Beaufort homes including the Milton Maxcy House and the George Parsons Elliott House have historic graffiti written on the walls by Union troops garrisoned there.

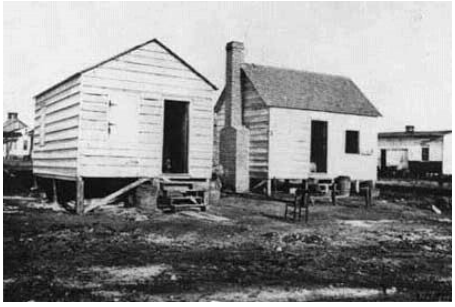
The former slaves who remained in the area were not officially free until January 1, 1863 when the Emancipation Proclamation was read to them at Camp Saxon on the Beaufort River near Fort Frederick. The Green on St. Helena is another place where the good news was given, and it has traditionally been a meeting place for celebration on the island. Both of these sites are listed in the National Register of Historic Places.

During the occupation of Hilton Head Island, one of the many issues facing the Union Army was how to deal with the many freed slaves that either lived on the island or were descending on the island from other areas still under control of the Confederacy. Tent cities and large barracks were originally built to provide housing for freed slaves but did little to help this population to experience and learn about their new freedom. During the fall of 1862, General Ormsby Mitchel, commander of the Union forces on Hilton Head Island, selected a site near the Drayton Plantation, and by March, 1863 a town for freed slaves was built and named after the commander. The town was self governing in matters of education, police, sanitary conditions, public order, tax collection, dispute resolution, and elections. Every child between six and fifteen years of age was required to attend school- the first compulsory education law in South Carolina. By 1865 about 1,500 people lived in Mitchelville. The town included simply built homes, located on about ¼ acre of land for the planting of gardens, as well as stores, a church, a jail, and a school. Many of the freedman worked for the Union Army while others worked for wages on the plantations they once worked on as slaves. No extent buildings or other physical features of Mitchelville remain today.

The Union occupation was characterized by a number of social experiments which served as a prelude to the later occupation of the Southern states during the Reconstruction Era. During the occupation Beaufort was visited by a number of well intentioned Northern missionaries whose purpose was to bring education and culture to the newly liberated freedman who had been released from slavery once the army arrived and their masters fled. While some of the missionary's plans for the freedman were not realized, some of the so called "Port

Penn Center

Under the leadership of Laura Towne and Ellen Murray, the Penn School was located first at the Oaks Plantation and later at a campus in the center of St. Helena. The school operated for over a century as a center of learning, teaching young blacks not only academic subjects but job skills as well. When the school closed in the 1960s, the Penn Community Center was established and still functions as a center of cultural, political and social activities. During the civil rights movement of the 1960s, Dr. Martin Luther King Jr. and his associates used Penn as a retreat and as a place to plan such activities as the March on Washington. While none of the original buildings remain at Penn, a number of 20th century buildings are in use on the campus today. The Penn Center campus is a National Historic Landmark District, one of only four in South Carolina.



A photograph of Mitchelville in 1865 showing typical housing.

Royal Experiment" was successful. Perhaps the most lasting was the establishment of the Penn School on St. Helena Island by the Port Royal Relief Committee of Philadelphia. Under the leadership of Laura Towne and Ellen Murray, the Penn School was located first at the Oaks Plantation and later at a campus in the center of St. Helena.

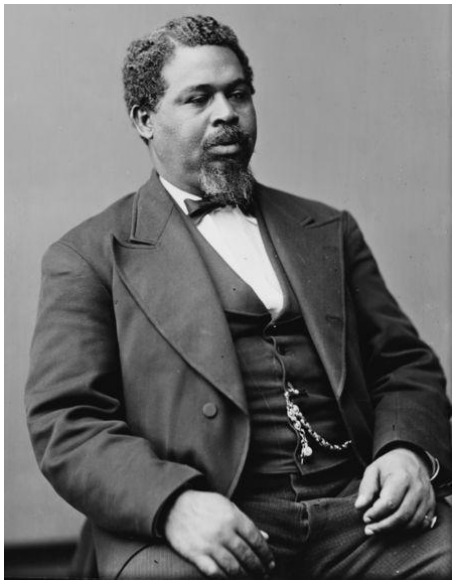
The era of wealthy planters had come to an end. Many never returned, others came back and were able to reacquire some of the lands they had lost. But their influence was never the same. And while Beaufort was spared much of the physical destruction of the war, the political and social upheaval that resulted would change the face of Beaufort forever.



Late 19th and Early 20th Centuries

The Reconstruction Era (1865-1877)

Reconstruction brought about radical change in South Carolina. The most important of the changes seen was the enfranchisement and entry into the political arena of African-Americans. During this time, forty six of the 124 members of the Reconstruction Era South Carolina Legislature were black. There were two black Lieutenant Governors, eight members of Congress, six delegates to the Constitutional Convention, and several judges, including a State Supreme Court Chief Justice. Many of the men were from Beaufort County.



During reconstruction, Robert Smalls was a member of the South Carolina House of Representatives (1865-1870) and the South Carolina Senate (1871-1874).

Perhaps the most distinguished of these representatives from Beaufort County was Robert Smalls. Smalls first gained fame when during the Civil War he commandeered a boat called "The Planter," that he served on as a crewman, and brought a number of slaves from Charleston to the freedom of Beaufort. Later he was to serve as a member of the U.S. Congress for nine years, as a member of both the House and Senate of the S.C. State Legislature, and as a delegate to two Constitutional Conventions.

In April of 1877, the Reconstruction Era in South Carolina came to an end amid charges of corruption and malfeasance. The Republican Governor, D.H. Chamberlain, and most other Republican leaders, including most blacks, resigned from office and the political winds of South Carolina changed dramatically. Wade Hampton, a Confederate General during the Civil War, became the Governor. The imposition of the notorious "Black Codes," a system of government designed to keep African-Americans from gaining political, social and economic equality changed the lives of both black and white South Carolinians.

The Reconstruction Era was one of poverty and little change in the South. Most people, black and white, barely got by. Many lived on food they grew or raised themselves and little change occurred to the landscape. While most of the county did not suffer extensive damage during the Civil War, the Town of Bluffton had been burned by Union

troops as well as many of the plantations on the Combahee, Broad and Edisto Rivers. However, much of Beaufort was preserved intact because the owners did not have the money to make changes.

Packing Sheds

The most notable structures related to the truck farming business were the large packing sheds that still dot the landscape near agricultural areas. These buildings were originally used to pack vegetables grown on the islands by truck farmers for shipment to markets around the country. Currently the sheds are used to ship tomatoes and watermelons. The oldest is the Corner Packing Shed (circa 1930) on St. Helena Island. The others in use were built after 1950. Some packing sheds have been adapted for reuse as retail stores, farmers markets or as sites for social gatherings such as oyster roasts.

Post Civil War Economy

Agriculture: Perhaps the most significant change to the landscape during the late 19th century was in the field of agriculture. Land that had once been part of huge cotton plantations was now divided into smaller truck farms, where tomatoes, cucumbers, corn, squash, melons, berries, broccoli, asparagus and beans, among others were cultivated for shipment to towns and cities. In time, successful truck farms consolidated acreage and expanded their operations. By the early 20th century a number of families operated large successful farms in the county, including the Trask family who owned farms throughout the county; the Bellamys in Burton; the McLeods in Seabrook; the Mitchells in Lobeco; the Godleys at the Oaks Plantation; and the Bishops at Yard Farm on St. Helena. Many of the farms had access to the Port Royal Railroad that ran from Port Royal to Yemassee with connections to the main line, where their produce was shipped to the cities of the north. Truck farming was to grow through the first half of the 20th century, reaching its peak in the 1950s. By the 1960s a decline had set in as farming became less profitable. As traditional agriculture declined in the early 20th century, timbering, or silvaculture, emerged as a major industry in the state and in Beaufort County.

Seafood: Along with agriculture another economic force in the County during this time was the seafood business. Fish, shrimp, crabs and oysters have been a staple of the Lowcountry diet since the days of the Native American inhabitants. However, it was not until the 1880s that shrimping began on a larger scale. From that time until well into the 1920s-30s most of the shrimping was done by migrant shrimpers operating mostly out of Florida. Then more local shrimpers began to buy and build the big, diesel powered boats like the ones seen today and the industry began to have an economic impact on the area. Ice houses and processing facilities began to appear on the waterfronts of Beaufort, Port Royal and the islands. Oystermen, operating out of Daufuskie, St. Helena and the other islands, as well as Bluffton, could be seen in their small, flat bottomed boats called "bateaus" working with huge tongs as they pulled clusters of oysters from their beds and placed them in their boats. In the 1880s the first major oyster packing house was established by the Maggioni family on Factory Creek across from Beaufort on Lady's Island. An oyster packing house, the ruins of which are still visible, was also opened during the same time period in Bluffton.

Phosphate Industry: In the late 19th century, the area experienced a brief economic boom from the phosphate industry. The Port Royal Railroad was built to haul phosphate to ships docking at the Port of Port Royal, and the Town of Port Royal was established during this time as



Historic lighthouses such as the Hunting Island Lighthouse and Keeper's Dwelling (c. 1875) are a visible reminder of Beaufort County's maritime history.

well. Phosphate was mined along the coastal areas in Charleston and Beaufort Counties for a few years until the industry eventually succumbed to competition from Florida and the hurricane of 1893. The high winds and ensuing flooding from the "great hurricane of '93" resulted in damaged crops, killed livestock, destroyed buildings, and loss of lives.

From the Reconstruction Era to the 1930s, a number of wealthy individuals, mostly Northern industrialists, purchased large tracts of land along the Carolina and Georgia coasts for use as hunting retreats and winter vacation homes. Often the land they purchased was on former plantations where the houses had been destroyed during the Civil War. Often building on the historic foundations, the new owners built new large beautiful homes often in revival styles. Among some of the notable examples of these homes are Bonny Hall Plantation (c. 1867), Twickenham Plantation (c. 1878), Brays Island Plantation (c. 1938), and Clarendon Plantation (c. 1935). Perhaps the most unique is Auldbrass Plantation designed by Frank Lloyd Wright. Started in 1940 it was never completed. In 1988 the present owner began an extensive restoration, and has completed most buildings from the original site design.



1950 - Present

Much of Beaufort County's slow economic growth during the late 19th and early 20th centuries was due to its geographic isolation. Modern development, which is dependent on rail and automobile accessibility was slow until the construction of bridges began. In the 1920s a bridge was first constructed between Port Royal Island and the mainland and in the 1930s Port Royal and Lady's Islands were bridged. Not until the 1950s were northern and southern Beaufort County joined with bridges across the Broad and Chechessee Rivers; and Hilton Head Island joined to the mainland.

Growth of Southern Beaufort County



Modern development began in Southern Beaufort County with the opening of the bridge to Hilton Head Island in 1956

These transportation improvements set the stage for the growth of the tourism and retirement community industries in Beaufort County. Hilton Head Island, like the other Sea Islands, was largely agricultural in the middle of the century before its bridge to the mainland was built in 1956. At that time the Hilton Head Company had been in the process of purchasing many of the large tracts on the island for timbering. Charles Fraser, the son of one of the principals, set his sights on developing a resort community on the southern portion of the island that became Sea Pines. The concept of a large master planned community with amenities such as tennis, golf, and preserved open space caught on in other large land holdings on the island. By the time the Town incorporated in 1983, 10 large master-planned communities had been approved making up approximately 70% of the island.

Prior to the initial development of Moss Creek and Rose Hill in the mid 1970's, the mainland of Southern Beaufort County was largely rural. Bluffton had scarcely 500 people and covered roughly one square mile. While residential and commercial growth in the Bluffton area had been occurring at a significant pace during the previous two decades, the most significant event that accelerated the spread of development onto the mainland was the arrival of DelWebb (Sun City) on over 6,000 acres of pine forest 11 miles west of Hilton Head Island. In 1993, Beaufort County Council approved a 6,385-unit retirement community that became an anchor for the western part of the U.S. 278 Corridor. Sun City was followed by Belfair, Eagle's Point, Crescent Plantation, Berkeley

Hall, Island West and many other smaller developments. Commercial development in mainland southern Beaufort County followed population growth lining the U.S. 278 corridor with businesses such as Home Depot, Target and outlet malls. The accumulating development along the U.S. 278 corridor in Beaufort County contributed considerably to the current traffic congestion experienced on the roadway today. The Town of Bluffton, which consisted of roughly one square mile before 1998, began to look at annexation as a means to possess more local control over future development. In November 1998, Bluffton annexed Palmetto Bluff and the Shults Tract. In 2000, two more large tracts, the Buckwalter Tract and the Jones Estate annexed into Bluffton, increasing the Town to over 50 square miles, making it one of the largest municipalities (in area) in South Carolina.



Aerial view of Sun City, located approximately 11 west of the bridge to Hilton Head Island.

Growth of Northern Beaufort County

Tourism also increased in northern Beaufort County to a lesser extent due, in part, to an overall growth in heritage tourism. Many tourists drawn to Charleston or Savannah also stop in Beaufort when visiting and often return to visit again, or in many cases to live. Another growing tourism sector is African-American oriented tourism, with Penn Center and the sea island Gullah culture attracting increasing numbers of African-American tourists from around the nation.

In addition to tourism, the growth of the military installations in the 20th century also greatly influenced the social life, economy and built environment of northern Beaufort County. The Navy first acquired a portion of Parris Island in the 1890's and was later given over to the Marine Corps in the early 20th century. Today, the island is the site of the Marine Corps Recruit Depot, Parris Island, the East Coast training area for Marines. The establishment of the Marine Corps Air Station dates back to 1941 when 1,300 acres in Beaufort were purchased by the Civil Aeronautics Authority for an auxiliary air station that supported advanced training for anti-submarine patrol squadrons. During the Korean War the Navy decided to establish a Marine Corps air station in Beaufort and the land was purchased by the Federal government. Today the entire installation includes 6,900 acres at the air station, 1,076 acres at Laurel Bay and an additional 5,182 acres at the Townsend Bombing Range in Georgia, the weapons training installation for the air station.

3

Beaufort County Comprehensive Plan

Population and Demographics

Draft



Provisional
Pending Data
from 2010 Census

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Introduction

In less than 30 years, Beaufort County has more than doubled in population. In 1980, the U.S. Census reported that the County had 65,364 persons. The most recent Census projections (2008) estimates that the County's population now exceeds 146,000. The sheer magnitude of this population growth and the likelihood that it will continue into the future has tremendous policy implications on the provision of public facilities, the transportation network, the availability of affordable housing, natural resources, water quality and cultural resources. Population growth has brought about many changes in the County's demographics. Much of the recent growth has been a result of people moving to Beaufort County from other parts of the country or from other countries for retirement or to seek economic opportunities. Compared to 1980, on average, today's population is older, lives in smaller households, is better educated and is wealthier. However, these demographic trends do not apply evenly to all population subgroups or across geographic regions of the County.

The purpose of this chapter is to analyze historic and current population and demographic trends; and to provide reasonable projections of future population growth to help guide policy decisions through the lifespan of this plan (2025). Each of the following chapters of this plan utilize these projections to help shape their recommendations. It is important to note that nine years have elapsed since the 2000 Census. This chapter uses 2008 U.S. Census estimates and information compiled in the 2006-2008 American Community Survey (also conducted by the U.S. Census Bureau). When the County receives data from the 2010 U.S. Census, this chapter will be updated to reflect this data.

Provisional
Pending Data
from 2010 Census



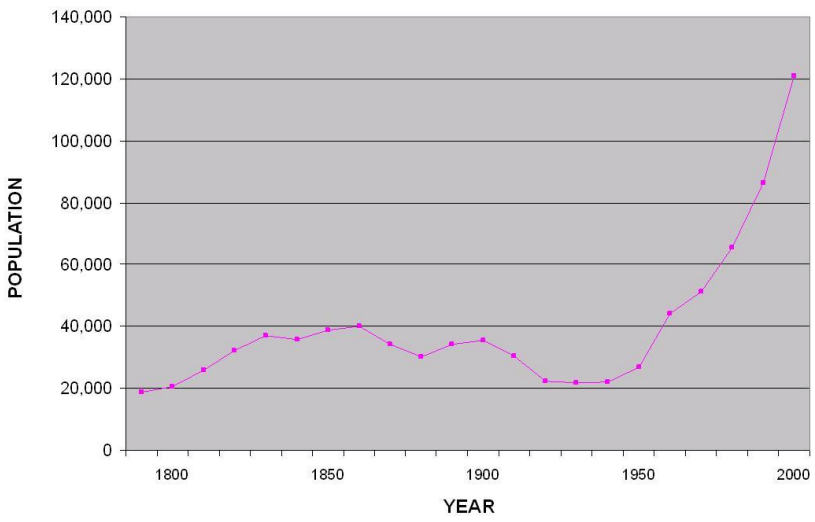
Historic, Current, and Projected Growth Trends

Beaufort County's rapid growth rate is a relatively recent phenomenon in its 240-year history. The County was established in 1769 when South Carolina was still a British Colony. Over 200 years of census data reveal that Beaufort County's growth rate began to consistently trend upward after the 1950 census. Two events helped to spur this growth. In Northern Beaufort County the establishment of the US Marine Corps Air Station in 1955 eventually brought thousands of military and civilian jobs to the region. In Southern Beaufort County, the construction of a bridge to Hilton Head Island in 1956 spurred the development of the County's tourism and retirement based infrastructure.

Beaufort County Population Growth – 1790-2000

Year	Population
1790	18753
1800	20428
1810	25887
1820	32199
1830	37032
1840	35794
1850	38805
1860	40053
1870	34359
1880	30176
1890	34119
1900	35495
1910	30355
1920	22269
1930	21815
1940	22037
1950	26993
1960	44187
1970	51136
1980	65364
1990	86425
2000	120937

Figure 3-1: Historic Population Growth Trends 1790-2000[1]



[1] Beaufort County's original boundaries included present-day Hampton and Jasper Counties. Two historic downward growth trends can be explained by the establishment of Hampton County in 1877 and Jasper County in 1912.

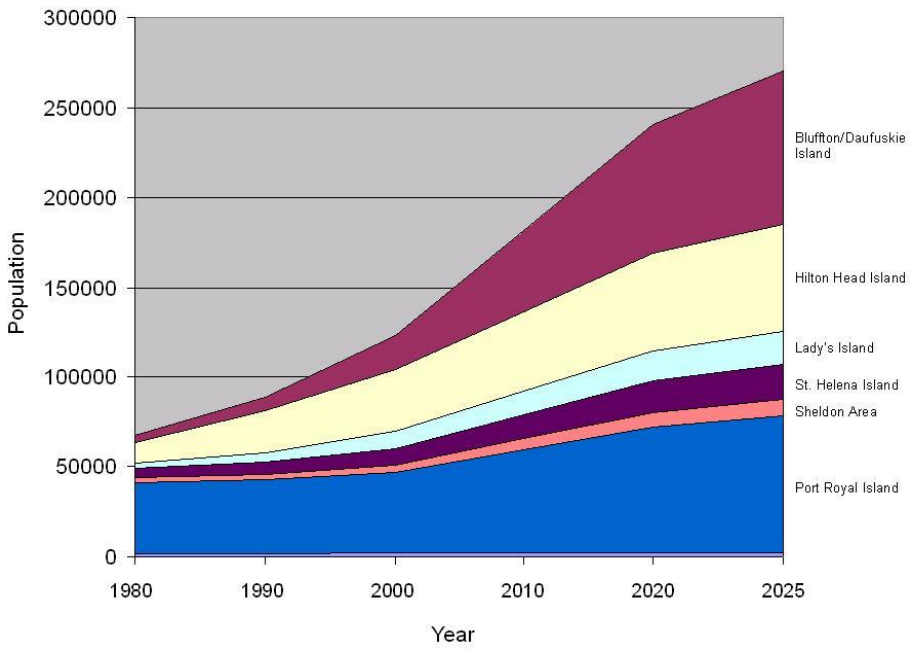
Current Year-round Population

The US Census estimates that Beaufort County's current population (July 2008) is 146,743. This figure represents a 125% increase in population since 1980. This is a dramatic increase compared to population increases in South Carolina and the United States during the same period (Figure 3-2). Figure 3-3 helps to illustrate that this growth has occurred and will continue to occur unevenly across the County with the greatest increases occurring in Bluffton, Hilton Head Island and on Lady's Island.

Figure 3-2: Comparison of Growth Rates 1980-2008

	Beaufort County	South Carolina	United States
1980	65,364	3,122,814	226,545,805
1990	86,425	3,486,703	249,639,692
2000	120,937	4,012,012	281,421,906
2008[2]	146,743	4,403,175	301,237,703
%change 1980-2008	124.5%	41.0%	32.9%

Figure 3-3: Comparison of Growth by Planning Area 1980 - 2025



[2] US Census estimate as of July 1, 2008.

Average Daily Population

In addition to Beaufort County's permanent population, tourists and other visitors, seasonal residents, and a net influx of daily commuters increases the County's population by 34% on an average day. This increase has a significant impact on the County's roadways, other public facilities and the provision of public services such as law enforcement, fire protection, and emergency medical services. Figure 3-4 summarizes the County's estimated average daily population.

- **Tourists and Other Visitors:** According to estimates from the Hilton Head Island Chamber of Commerce and estimates based on accommodations tax receipts, Beaufort County had approximately 2,961,285 visitors in 2008. Factoring in an average stay of 5 nights for a vacationer to Hilton Head Island, this translates to 30,211 visitors on an average day. This number peaks in July at over 40,000 visitors a day.
- **Seasonal Residents:** Based on the 2000 Census and estimates for 2008, there are 14,206 seasonal dwellings in the County. Assuming that one third of seasonal dwellings are occupied on any given time, there are 10,702 seasonal residents on an average day.
- **Net Influx of Commuters:** Based on the 2000 Census and estimates for 2008, there is net influx of 8,993 commuters daily in Beaufort County.

Provisional Pending Data from Census

Figure 3-4: Beaufort County Average Daily Population

Population Segment	Estimated 2008 Average Daily Population
Year-round Residents	146,743
Tourists and Other Visitors	30,211
Seasonal Residents	10,702
Net Commuters	8.993
Average Daily population	**196,649**

Population Projections

The imperfect nature of population projections results in a number of different predictions of future growth in the County. For planning purposes, the County utilizes the projections employed in its transportation model.

Figure 3-5: Beaufort County Population Estimates from its Transportation Model

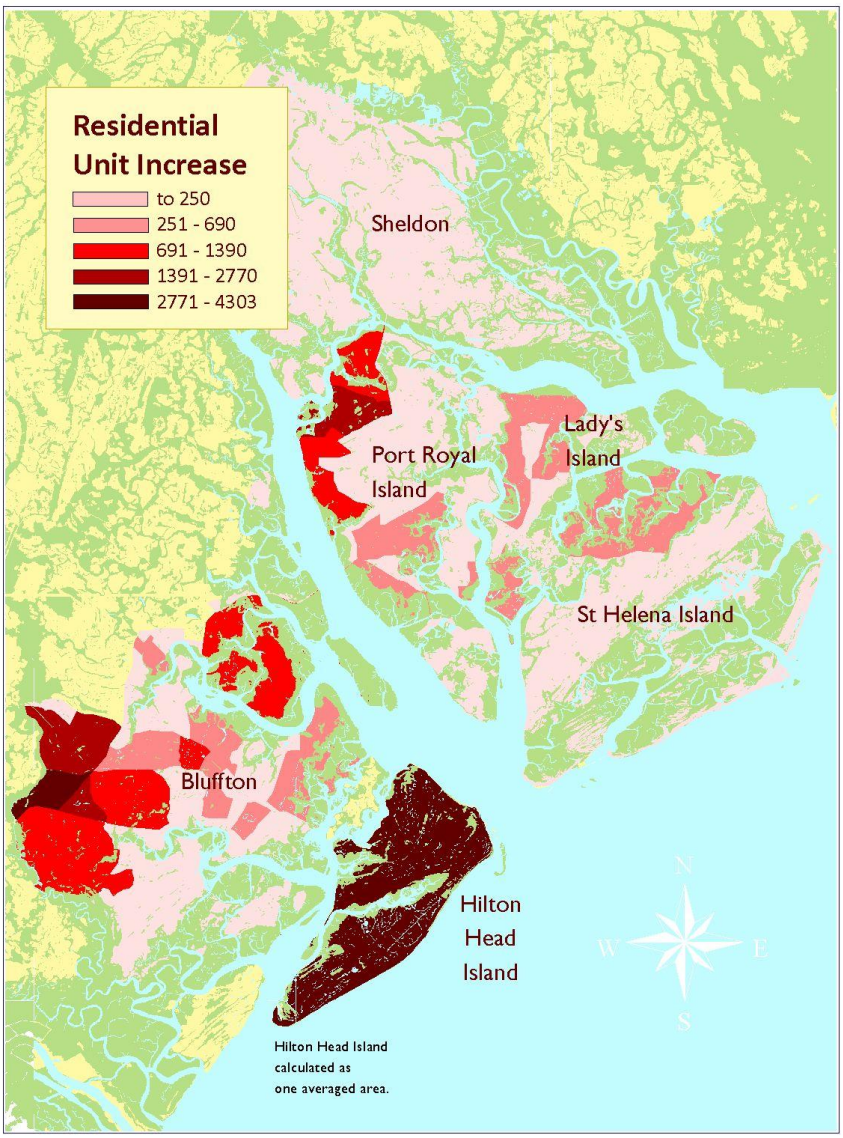
Planning Area	2006 Dwelling Units	2006 Population	2025 Dwelling Units	2025 Population
Port Royal I.	19,875	50,244	30,587	76,299
Sheldon	2,123	5,266	3,696	9,203
Lady's I.	4,855	11,918	7,430	18,911
St. Helena I.	7,599	13,190	8,937	19,119
Greater Bluffton Area	17,510	36,864	39,291	83,616
Hilton Head I.	28,299	39,985	38,692	53,329
Daufuskie I.	170	340	315	630
TOTAL	80,431	157,807	128,948	261,107

The model utilizes projections compiled by the County's planning staff that divides the County into 124 Transportation Analysis Zones (TAZ). Within each TAZ, historic growth rates, planned development patterns, and land capacity are used to predict future growth. Other sources of population forecasts include the SC Budget and Control Board and Woods and Poole Economics, Inc. It is important to note that population estimates derived from national and state sources tend to be lower than locally derived data. Large area sampling methodologies tend toward conservative averaging, while local, area-specific transportation modeling tends toward maximal accounting.

Map 3-1 helps to illustrate where future growth is likely to occur over the next 15 to 20 years. The western portion of southern Beaufort County is projected to receive the greatest number of dwelling units as existing approved subdivisions build out in those areas. Additional growth is forecasted on Port Royal Island in the vicinity of Habersham and Clarendon Plantation, and in northern Lady's Island. Based on

Provisional Pending Data from 2020 Census

Map 3-1: Projected Residential Unit Increase by Transportation Analysis Zone: 2005-2025



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current projections, southern Beaufort County (south of the Broad River) is anticipated to surpass northern Beaufort County in year-round population in 2012 or 2013. This population shift will have implications on County Council representation in future years.



Characteristics of Population

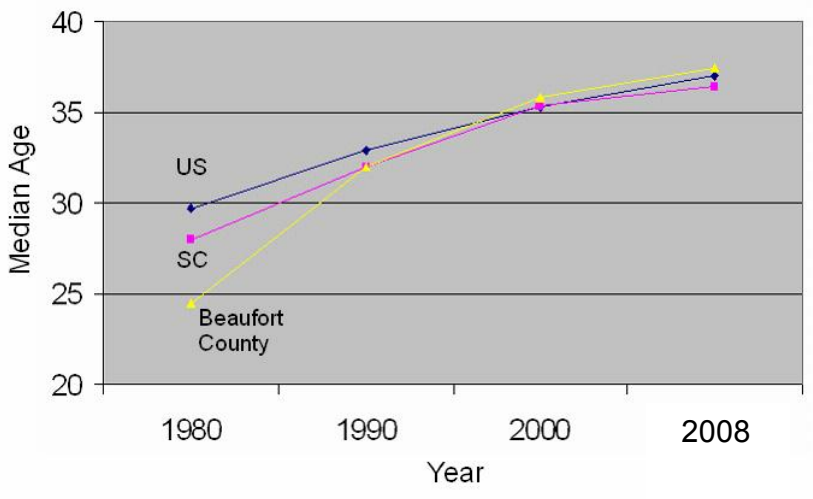
Provisional Pending Data from 2010 Census

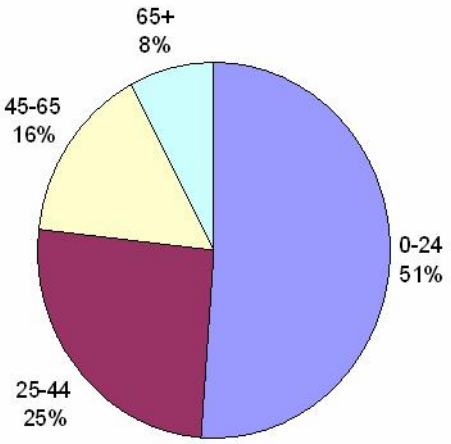
This section explores various attributes of Beaufort County's population including age, household size, race and ethnicity, educational attainment, and income. There are two noteworthy demographic trends in Beaufort County. One trend is the increased proportion of residents over 65 years of age. The other trend is the significant growth of the County's Hispanic community. In many ways, these two trends stand in contrast to each other. For example, the median age of the County's Hispanic population is 12 years younger than the County average. Hispanic households are, on average, 1.35 persons larger than the County average while elderly residents tend to live in smaller households. While these two demographic trends reflect national trends, they are amplified in Beaufort County by the region's popularity as a retirement destination and its relative prosperity over the last 15 years, which has attracted in-migration.

Age

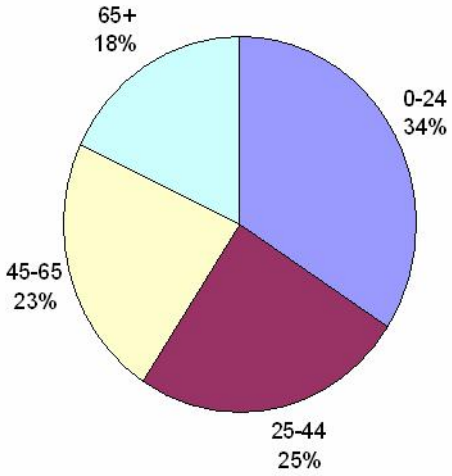
The age of Beaufort County's population has changed significantly since the 1980 census. In 1980, the median age was 24.5, much lower than both state and national median ages (see Figure 3-6).

Figure 3-6: Comparison of Median Age 1980-2008





1980 distribution of population among age groups.



2008 distribution of population among age groups.

In 2008, Beaufort County's median age grew to 38.1, slightly higher than the state and the nation. Another significant statistic is the growth of the 65-year and older age cohort. In 1980, this group only made up 8% of the County's population. In 2008, it was estimated that over 18% of County residents were 65 years or older (see sidebar).

Beaufort County's aging population can be attributed to several factors; primarily the County's popularity as a retirement destination. Other factors include the advance of the Baby Boom generation and improvements in the standard of living as Beaufort has transformed from a poor rural county to a relatively prosperous urbanizing county.

In 2011, the first Baby Boomers will turn 65. The US Census predicts that the 65 and older population will grow from 34.9 million (one in eight Americans) to 53.7 million (one in six) by 2020. This national demographic trend is anticipated to have a significant impact and policy implications on Beaufort County and the surrounding region. The Atlanta Regional Commission (ARC), through a series of public meetings, developed a set of strategies to deal with the issue of an aging population. The ARC "Lifelong Communities" program was set up with the goal to develop communities where older adults can age in place. Many of these strategies have land use, housing and transportation components and are very relevant to Beaufort County. The following is a summary of some of the "Lifelong Communities Strategies and Solutions":

- **Land Use Issues:** Strategies are aimed at developing walkable communities to eliminate the need for older adults to drive; and to develop land use policies that promote a diversity of housing choices so that older adults can live near children and grandchildren.
- **Transportation:** Transportation strategies include enhancing public transportation options to better serve older adults; Integrating modifications to new and existing roadways to reduce accidents and assist older drivers (left hand turn lanes, improved signage, and lighting); and improving sidewalk infrastructure.
- **Housing:** Housing strategies are aimed at allowing older adults to age at home or in proximity to their families. Strategies include incentivizing accessory dwelling units; expanding housing rehabilitation programs, including weatherization, to help older adults to stay in their houses; and providing incentives to develop housing for seniors[3].

These strategies will be addressed further in the Land Use, Transportation, Housing and Energy chapters of this plan.

[3] Atlanta Regional Commission. "Lifelong Communities: A Regional Approach to Aging: Strategies and Solutions," http://www.atlantaregional.com/documents/ag_llc_solutions_strategies_5_13_08.pdf

Household size

An average household in Beaufort County in 2008 contained 2.41 persons compared to 2.84 in 1970. This reduction in household size mirrors the national trend of a growing number of smaller families, single parent households and an aging population. This downward trend will likely continue as the County's population ages.

Figure 3-7: Comparison of Persons per Household 1980-2008

	1980	1990	2000	2008
United States	2.75	2.63	2.59	2.61
South Carolina	2.93	2.68	2.53	2.52
Beaufort County	2.84	2.59	2.51	2.41

Race and ethnicity

Population growth over the last 30 years has brought about several changes to the racial and ethnic makeup of the County. From 1980 to 2008, Beaufort County's white population grew by 155% while the black population grew by only 39%. In 1980, one third of all Beaufort County residents were African-American compared to 20% in 2007. This demographic change is largely due to the influx of new residents, including retirees, from other parts of the county.

Provisional Pending Data from 2010 Census

Figure 3-8: Racial Trends 1980-2008

	1980	1990	2000	2008
White	42,454	59,843	85,451	108,366
Black	21,504	24,582	29,005	29,864
Asian, Pacific Islander	610	813	1,016	1,196
Native American	161	251	321	254
Other	635	936	4,823	7,063

Another significant trend is the growth of Beaufort County's Hispanic community. Nationally, the Hispanic population is the fastest growing demographic segment. Until the early 1990s, Hispanic immigration was largely limited to southwestern states, and a handful of other states including Florida and Illinois. Since the early 1990's, there has been a significant growth in Hispanic immigration to other parts of the country including the southeast. For example, between 1990 and 2000, South Carolina's Hispanic population grew by 211% from 30,551 to 96,178. Within South Carolina, Beaufort County has the second largest Hispanic community (Figure 3-9).

Figure 3-9: Hispanic Population

	1980	1990	2000	2008
# of Hispanics	1,329	2,168	8,208	14,122
% of total population	2.0%	2.5%	6.7%	9.6%

Mexicans make up approximately 57% of the County's Hispanic population with Puerto Ricans (8.5%) making up the second largest group. Over 33% are from various countries in Central and South America. It is likely that the actual numbers and percentages of Hispanic residents are significantly higher than reported census data and estimates. National and regional evidence supports that this population is undercounted.

The recent growth of Beaufort County's Hispanic community poses several challenges to public policy makers. One challenge is the language barrier. According to recent data, 57% of foreign-born Hispanics in the southeast do not speak English or do not speak it fluently.[4] This barrier presents a challenge to public service providers, public safety officials and teachers. Another concern is health care. Approximately 66% of Hispanics in the United States, who primarily speak Spanish, do not have a regular doctor; 45% have no insurance; and 33% use only public health services.[5]

Educational attainment

Another significant change over the last 30 years in Beaufort County's population is educational attainment. From 1980 to present, Beaufort County went from having nearly 30% of its population lacking a high school diploma to exceeding state and national averages in terms of the percentage of high school and college graduates (Figure 3-10). In 2000, 40% of Beaufort County's residents that were 65 years or older had a college degree compared to the only 33% of the general population. This statistic indicates that some of the improvements in educational attainment are a result of and influx of educated retirees.

Provisional Pending Data from 2010 Census

[4] "The Growing Hispanic Population in South Carolina: Trends and Issues ", Richard D. Young, Institute of Public Service and Policy Research, University of South Carolina, 2005

[5] "Uninsured Hispanics with limited English face formidable barriers to health care", The Commonwealth Fund, 2003

Figure 3-10: Comparison of Educational Attainment: 1980-2008

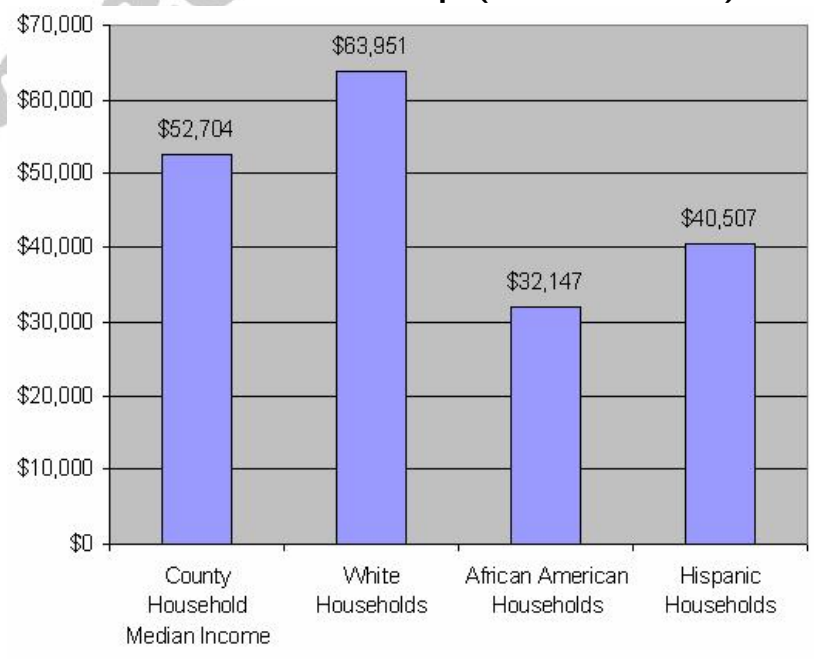
	1980	1990	2000	2008
No High School Diploma	28.0%	16.6%	12%	9.8%
High School Graduate	50.1%	56.8%	54.6%	53.3%
4-year College or greater	21.9%	26.5%	33.2%	36.9%

Income

In terms of per capita and median income, Beaufort County is the wealthiest in South Carolina. However, the County is unique in that only 56% of household income is derived from actual wages. A large percentage (30.6%) of personal income comes from interest, dividends and rent. This is indicative of the County's large retiree population. Beaufort County's median income was estimated to be $65,150 in 2008. This is slightly higher than the national median income ($63,211) and 19% higher than the state average ($54,710). At the same time, statewide average weekly wages ($668) exceed the County's average ($595) by 12%. This data begins to indicate that Beaufort County's wealth does not evenly benefit all segments of the County's population.

There is a disparity of income among racial and ethnic groups and among geographical regions of the County. Figure 3-11 shows that the median income for African American and Hispanic households is significantly lower than the County as a whole.

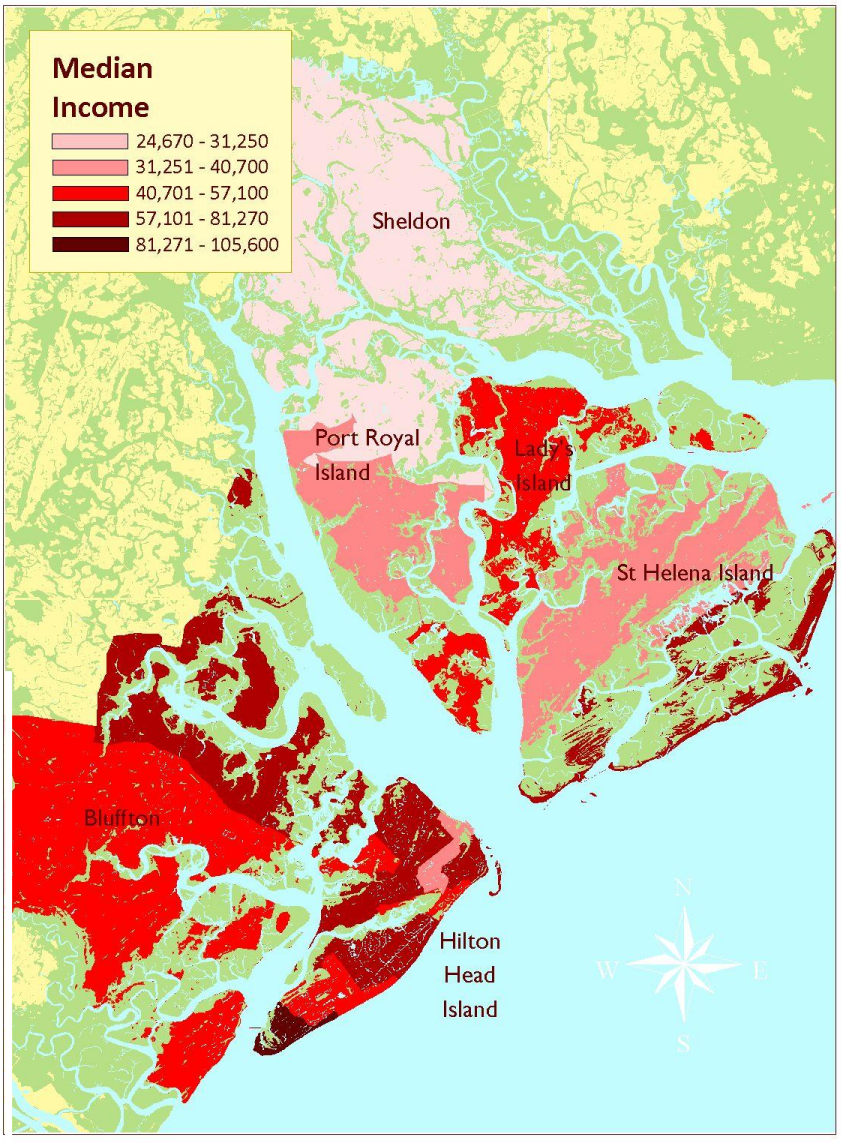
Figure 3-11: Comparison of Median Household Income among Racial and Ethic Groups (2000 U.S. Census)



Provisional Pending Data from 2010 Census

Map 3-2 indicates that wealth is not spread evenly countywide. Higher income households are generally concentrated in Southern Beaufort County. Rural communities, such as Sheldon and St. Helena Island have much lower household incomes than the County's median income.

Map 3-2: Median Income per Census Tract (2000 U.S. Census)



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Beaufort County Comprehensive Plan

Future Land Use





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Introduction

This Land Use chapter provides an analysis of existing development patterns, recent planning and plan implementation efforts, and a vision for future land use and growth management policies. This chapter replaces the Future Land Use Plan chapter of the 1997 Beaufort County Comprehensive Plan. The policies in this chapter build on the recommendations of the 1997 Plan and on the recommendations of the Northern and Southern Beaufort County Regional Plans. The policies in this chapter also incorporate the results of the rural planning process conducted during 2007-2008.

COMMON PLANNING GOALS

The following eleven common land use goals form the foundation upon which the policies and recommendations of the Land Use chapter are built. These goals expand on the original six core planning policies of the 1997 Comprehensive Plan and incorporate the public input gathered during the formulation of the two regional plans. The regional plans included various goals and objectives that were aggregated into the following common land use goals:

Goal 1: Beaufort County will work with the municipalities to coordinate growth throughout the county, especially around the current and future edges of the municipalities.

Goal 2: Beaufort County will maintain a distinct regional form of compact urban and suburban development surrounded by rural development for the purpose of reinforcing the valuable sense of unique and high quality places within the region.

Goal 3: Beaufort County will have livable and sustainable neighborhoods and communities with compatible land uses, mixed-use developments, pedestrian and transportation connections, and integrated open spaces.

Goal 4: Development will be coordinated with the planning for and provision of public services and facilities for transportation water and sewer facilities, schools, and other related services.

Goal 5: Beaufort County will preserve water quality and protect natural resources by promoting baseline standards for natural resources including salt marshes, marsh islands, coastal waters, and marine resources; trees, forests, and wildlife habitats; beaches and dunes; stormwater management; and open space preservation that each jurisdiction adopts as part of their planning policies and regulations.

Goal 6: Methods of creating and permanently preserving a regional open space system will be developed.

Goal 7: An integrated cultural, ethnic and socioeconomic diversity of the region will be preserved and promoted regionally, and in particular, the ability of indigenous population groups to remain a contributing part of the region and benefit from the opportunities that come from growth will be protected.

Goal 8: Affordable and workforce housing will be addressed on a regional basis.

Goal 9: There will be a continued collaboration with military facility planners, and in particular will respect the AICUZ contours.

Goal 10: The county will maintain a strong community aesthetic that includes the protection of scenic view corridors and regional commercial travel corridors, in order to promote and protect the economic well-being of Beaufort County and supplement the high quality of master planned areas.

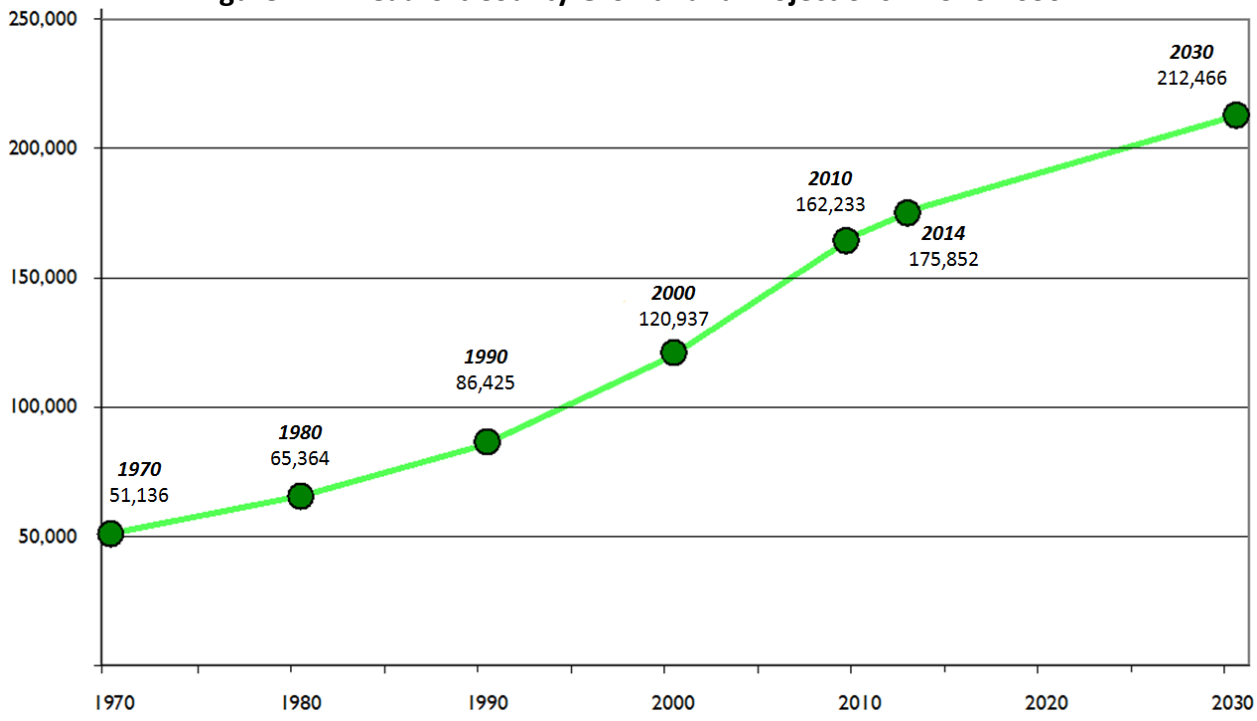
Goal 11: There will be intergovernmental coordination to implement this plan.



Historical Background on Growth in Beaufort County

It is only within the last 40 to 50 years that Beaufort County has truly witnessed a surge in population growth brought about initially by the development of tourism on Hilton Head Island in southern Beaufort County and by the growth of the military bases located in northern Beaufort County (See Figure 4-1). Due to Beaufort County's size and overall geography, the county is often seen as being comprised of two distinct areas: southern Beaufort County and northern Beaufort County, divided by the Broad River. This is relevant to the comprehensive plan because the development trends and patterns are varied between these two areas.

Figure 4-1: Beaufort County Growth and Projections – 1970-2030



Source: U.S. Census and Regional Transportation Model projections.

RECENT DEVELOPMENT TRENDS

Southern Beaufort County: A majority of the county's recent growth has taken place in southern Beaufort County, originally spurred by the resort and master planned developments on Hilton Head Island. The Southern Beaufort County Regional Plan identifies the following common development patterns prevalent in this portion of the county:

- Large, amenity-based, low-density master planned communities dominate the developed landscape of southern Beaufort County.
- The planning of these communities has been primarily a private sector endeavor with great care given to internal road networks, the delivery of services, and private covenants ensuring that development standards are high within the developments.
- The planned unit development (PUD) has been the preferred zoning tool to facilitate the development of these communities because it provides greater site design flexibility.
- Outside of the master planned communities, government has been faced with the challenge of providing roads, infrastructure, and land use regulations to connect the rest of the community together.
- Many of the region's current transportation inadequacies are a result of poor connectivity between the master planned communities and insufficient land being available for an adequate road network.
- Development is spreading west. Modern development began on Hilton Head Island, spread to the greater Bluffton Area (Bluffton and unincorporated county lands in the region), and is moving toward Jasper County and the City of Hardeeville.
- Currently, all but 9.4% of the land area of southern Beaufort County is either committed to future development or preserved from development.



Currently, all but 9.4% of the land area of southern Beaufort County is either committed to future development or preserved from development.

Northern Beaufort County: Northern Beaufort County has also continued to grow since the 1950s with the growth of the military bases, the growing popularity of the City of Beaufort's historic district, and the attractiveness of the region's natural and cultural resources. In contrast with the southern portion of the county, the following development patterns have been prevalent in the northern portion of the county:

- Northern Beaufort County has experienced steady growth over the last decade, but it has not grown as rapidly as the southern portion of the county.
- However, growth pressure appears to be increasing in the northern portion of the county, and the county expects that growth pressures will remain steady.

- Most of the growth has been occurring on Port Royal Island and on Lady's Island.
- There is much more rural land remaining in the northern portion of the county than in the southern portion.
- While there remains rural land on Port Royal Island and Lady's Island, the bulk of the rural areas are in the Sheldon area north of the Whale Branch River and on St. Helena Island.
- The growth pressures are showing signs of pushing out from the developed areas on Port Royal and Lady's Islands. However, the opportunity remains for growth in northern Beaufort County to be contained within an efficient growth boundary, preserving rural character, open spaces, and environmentally sensitive resources.
- Cooperative land use planning between Beaufort County, the City of Beaufort, the Town of Port Royal, and the Town of Yemassee is key to managing growth and preserving rural areas.

MUNICIPAL GROWTH

One of the most significant development trends since the adoption of the 1997 Comprehensive Plan has been the amount of acreage that has been annexed into municipalities. Beaufort County is home to five municipalities: The City of Beaufort, the Towns of Bluffton, Port Royal, Hilton Head Island, and Yemassee. Each of these communities, along with the county, maintains its own individual comprehensive plan and land use regulations. The percentage of land within the municipal boundaries has grown from 11.6% to 34.1% within the past 18 years (see Table 4-2 and Map 4-1).

Table 4-2: Municipal Growth – 1997- 2015

Jurisdiction	1997 Acreage*	2015 Acreage*
City of Beaufort	2,930	13,514
Town of Bluffton	640	33,143
Town of Hilton Head Island	21,862	21,862
Town of Port Royal	1176	9,912
Town of Yemassee	794	1,794
City of Hardeeville	0	81
Unincorporated Beaufort Co.	208,094	155,190

*Acreage does not include water and salt marshes

EXISTING LAND USE PATTERNS

Beaufort County's 2007 inventory of existing land uses provides a generalized picture of existing development patterns. The purpose of this inventory is to provide a "snapshot" of what is on the ground today to serve as a benchmark for future analyses of land use patterns. Table

4-3 provides a description, acreage and percentage of total land area for each existing land use category. Maps 4-2 and 4-3 show the distribution of existing land use in northern and southern Beaufort County respectively. Map 4-4 shows existing land use for Hilton Head Island, which is based on the *Land Use Patterns and Trends Background Report* (2005) of the *Southern Beaufort County Regional Plan.*

Table 4-3: Existing Land Use Categories

Land Use Category	Description	Acreage	% of Total
Preserved Land	All municipal and county parks and both publicly and privately preserved lands.	37,919	16.1
Rural/Undeveloped	All the currently undeveloped and rural areas regardless if they are committed for future development.	130,128	55.3
Residential/Mixed-use	All single-family and multi-family developments and supporting small-scale commercial and service uses	49,455	21.0
Community Commercial	Includes commercial uses that typically serve nearby residential areas, such as a shopping district anchored by a grocery store.	1,494	0.6
Regional Commercial	Includes those uses due to their size and scale that attract shoppers and visitors from a larger area of the county and outside the county (include “big box” retail uses, chain restaurants, and supporting retail).	2,373	1.0
Light Industrial	Includes business parks, product assembly, distribution centers, major utility facilities, and light and heavy industrial uses.	1,405	0.6
Military	Land owned by the military	12,722	5.4
	Total	**235,496**	**100.0**

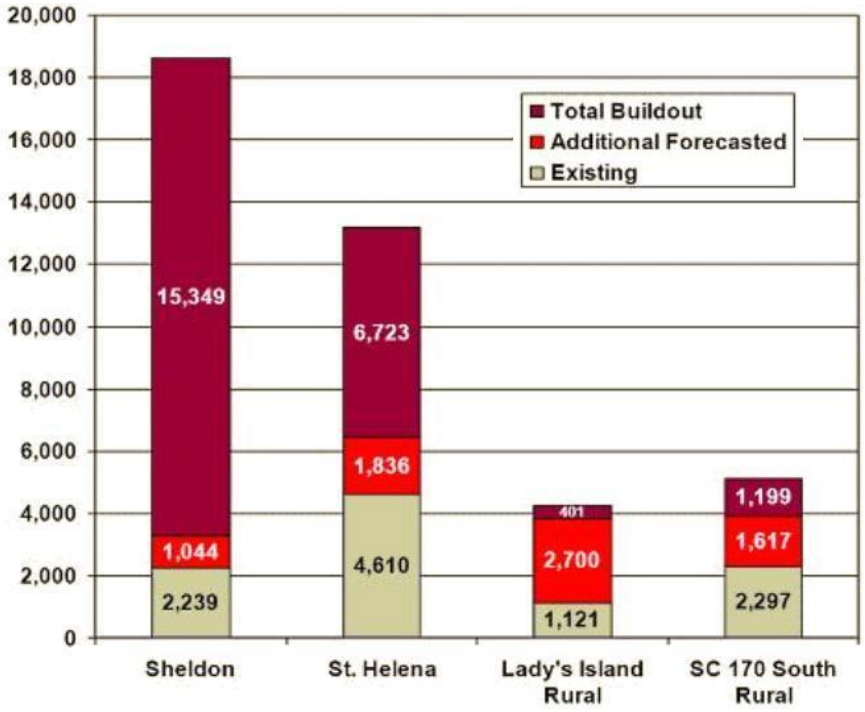
RURAL DEVELOPMENT TRENDS

Currently over 50% of Beaufort County’s land area is classified as rural/undeveloped. One of the goals of the 1997 Comprehensive Plan was to maintain a distinction between rural and developing areas of the County by discouraging intense development and infrastructure investment in rural areas. The analysis below looks at existing development trends in the rural areas of the County and the potential impact of existing land use policies on the future development of rural areas.

Rural land uses are predominately located in four general areas, including the Sheldon area north of the Whale Branch River, St. Helena Island, northern Lady’s Island, and along SC 170 south of the Broad River. The number of dwelling units that could occur under the existing zoning designations is projected and compared to the number of

dwelling units that exist as well as forecasted to occur within the next twenty years.

Figure 4-4: Growth Potential of Rural Areas



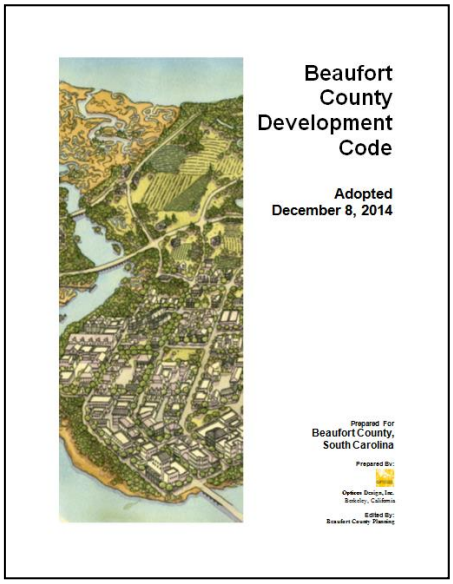
While Sheldon has the largest geographic area of rural land uses, St. Helena has the most dwelling units in a rural area, reflecting the relatively higher rural density of existing development. It is also striking that while both Sheldon and St. Helena have extensive remaining capacity for dwelling units (total build out on the chart), the twenty year forecasted growth would consume only a small amount of that capacity.



Planning Framework

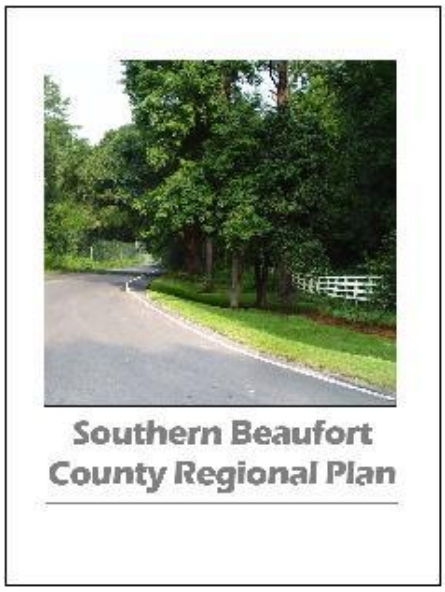
In 1994, the State of South Carolina adopted the Local Government Comprehensive Planning Enabling Act, which required for the first time that all counties and municipalities regulating land use adopt a Comprehensive Plan. In 1997, Beaufort County was the first county in South Carolina to adopt a Comprehensive Plan pursuant to this legislation. Since the adoption of this plan, Beaufort County has not only taken steps to implement that plan through its Zoning and Development Standards Ordinance (ZDSO), but has engaged in both neighborhood and inter-jurisdictional planning efforts and in innovative programs to put into action the policies of its 1997 plan. The policies and recommendations of this chapter are a result of the integration of these recent planning efforts.

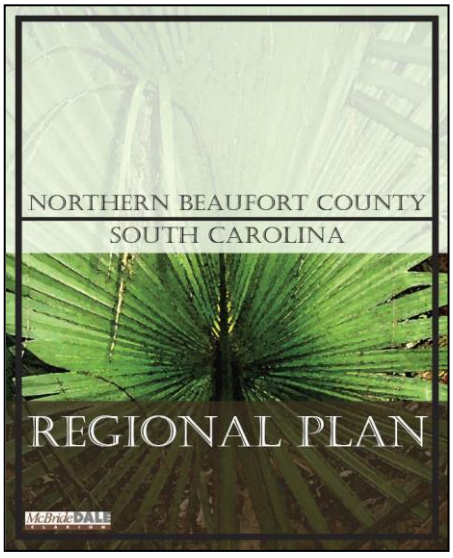
EXISTING PLANS AND REGULATIONS



1997 Beaufort County Comprehensive Plan: The 1997 Beaufort County Comprehensive Plan, entitled "Get a Grip on Our Future", was designed to guide the development of the county through a 10 to 20 year planning horizon. The plan included goals, policies, and implementation strategies, supported by technical analysis, which covered a number of key planning elements. In particular, the 1997 plan provided guidance in the areas of future land use, natural resources, cultural resources, parks, recreation, and open space, transportation, economic development, affordable housing, and community facilities. In 2002, the county evaluated the comprehensive plan and amended various recommendations based on the strategies the county had accomplished since the adoption of the original plan.

Community Development Code: Beaufort County first adopted zoning regulations in 1990. This ordinance was drafted with no supporting comprehensive plan. After Beaufort County Council adopted their first comprehensive plan in 1997, they immediately began drafting the Zoning and Development Standards Ordinance (ZDSO), which was adopted in 1999. The ZDSO incorporated characteristics of performance-based zoning providing mixed-use districts and performance standards. The ZDSO provided tools to protect trees and wetlands; preserve rural areas; and promote quality architecture and



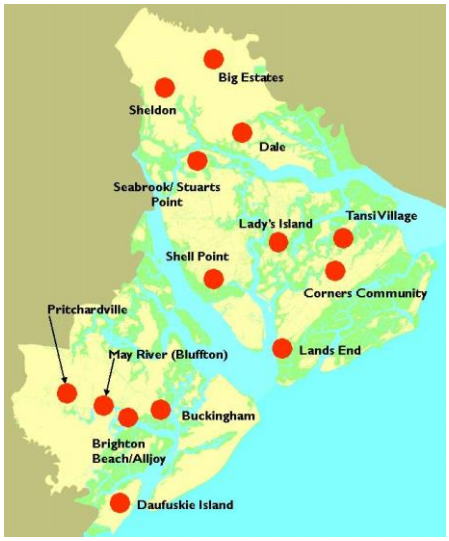


landscaping for new development. In 2014, Beaufort County adopted the Community Development Code that utilized the most effective tools of the ZDSO while providing new tools to foster the creation and enhancement of mixed-use walkable communities that reflect the natural and built environment of the region. The Community Development Code integrates both form-based and conventional districts as one comprehensive countywide land use policy to promote the diversity of places in Beaufort County.

Southern Beaufort County Regional Plan: The Southern Beaufort County Regional Plan focused on planning for the amount of growth anticipated over the next 20 years within the southern Beaufort County area. This area encompasses Hilton Head Island, the Town of Bluffton, and the surrounding unincorporated areas of the county. The plan evaluated the impacts of the anticipated growth on traffic, recreation, other public services, and the overall quality of life. As stated in the plan, "the plan explores how the three jurisdictions can work together as a region to keep up with the demands of growth, to protect the fragile coastal environment and to continue to make southern Beaufort County a desirable place to live and work."

Northern Beaufort County Regional Plan: The Northern Beaufort County Regional Plan represents an agreement between Beaufort County, the City of Beaufort and the Town of Port Royal as to how the northern county region will grow and develop. The plan identifies a series of common goals, establishes growth boundaries for municipalities, and includes a land use plan framework that focuses growth in and around the municipalities while preserving over 60% of the land area for rural uses. The plan includes a strategy to promote regional transportation planning. The plan also includes a fiscal analysis and strategy for addressing the costs of the anticipated growth. The final element of the plan is an implementation strategy that focuses on the continued regional cooperation between the county and the municipalities through the adoption of an intergovernmental agreement.

Community Preservation Plans: The 1997 Comprehensive Plan recognized that there were several areas throughout unincorporated Beaufort County that possessed distinct qualities. In an effort to protect the character of these areas, the county designated them as Community Preservation (CP) Areas. The 1997 Plan called for detailed community plans to be conducted for each of the CP areas that would lead to design guidelines and community-specific land use and development standards to implement the plans. The 1997 plan originally designated 15 CP Areas with County Council adding the Shell Point CP in 2000. Table 4-5 provides a summary of the status of the 16 CP Areas.



Beaufort County's Community Preservation (CP) Areas

Table 4-5: Status of Beaufort County's Community Preservation (CP) Areas

CP Area	Status
Alljoy Road (Brighton Beach)	Completed (April 2005); Updated with November 2011 Charrette
Big Estates	Waiting initiation
May River (Bluffton)	Completed (Sept 2010)
Buckingham Landing	Completed (June 2007)
Corners Community	Completed (Feb 2002); Updated with December 2011 Charrette
Dale	Completed (Dec 2000)
Daufuskie Island	Completed (Sept 2010)
Lady's Island	Completed (March 2000)
Lands End	Addressed through December 2011 Charrette
Polk Village	Removed*
Pritchardville	Addressed through December 2011 Charrette
Sawmill Creek	Removed*
Seabrook	Completed (Aug 2003)
Sheldon	Waiting initiation
Tansi Village	Waiting initiation
Shell Point	Completed (Nov 2002); Updated with October 2011 Charrette

*In 2003, Polk Village was rezoned to Urban and Sawmill Creek was rezoned to Rural Residential. This implemented a recommendation from the 5-year review of the Comprehensive Plan in 2002.

OTHER PLANNING INITIATIVES

In addition to the above plans, the county currently employs several planning tools and strategies to assist in the implementation of the various plans. The following is a summary of some of these tools.

Rural Policy Assessment: Beaufort County undertook a comprehensive review and evaluation of planning policies related to development in the rural areas. This effort was a direct implementation strategy dictated by the Northern Beaufort County Regional Plan. The results of this assessment are incorporated into the comprehensive plan. Most of the changes are incorporated into this chapter, while others have been incorporated into the Cultural Resources chapter.

AICUZ Protection and Transfer of Development Rights Program: In October 2004, the County Council, City of Beaufort and



Entrance to the U.S. Marine Corps Air Station, Beaufort

Town of Port Royal adopted the Lowcountry Joint Land Use Study (JLUS), the purpose of which was to cooperatively plan for and protect the present and future integrity of operations and training at Marine Corps Air Station (MCAS) Beaufort. One of the recommendations that came out of that JLUS was for the three jurisdictions to develop a coordinated "AICUZ Overlay" district for all land affected by accident potential and/or noise zones associated with the air station.

Approximately 13,000 acres of unincorporated land in Beaufort County fall within one or more of the AICUZ footprints, and about 10,000 of these acres are currently undeveloped. In December 2006, the County Council adopted the new overlay regulations, which limited the type and density of development that could occur within the AICUZ boundaries. The City of Beaufort and the Town of Port Royal subsequently adopted the overlay district.

To further prevent long-term encroachment of incompatible development around MCAS and to provide some economic relief for those landowners affected by the AICUZ overlay district, Beaufort County adopted a transfer of development rights (TDR) program in 2011. This program allows for the "transfer" of development out of the AICUZ zones and "sends" it to other "receiving" areas within unincorporated Port Royal Island. A property-owner in the receiving area who agrees to buy the development rights would compensate a property owner within the overlay district who sells their development rights in exchange for an increase in allowable density on the receiving property. While officially part of the County's zoning regulations, however, the TDR program has not been formally implemented to date.

Through a grant received from the U.S. Department of Defense, the Lowcountry Council of Governments (LCOG) contracted with a consulting firm to conduct a new JLUS between March 2014 and March 2015. The purpose of the new study was to address the transition of MCAS from the F-18 to the F-35B aircraft over roughly the next decade. The F-35B will create different noise impacts on the surrounding area. The 2015 JLUS builds on the earlier JLUS, taking into account changing noise impacts, and makes additional recommendations to mitigate land use compatibility issues where they exist and to further ensure compatible land use around the Air Station in the future. The study also contains recommendations for implementing the TDR program. The County Council adopted a resolution in May 2015 to commit to review and consider adopting the new recommendations.

Rural and Critical Land Preservation Program: Beaufort County's Rural and Critical Lands Preservation Program (RCLPP), established by Ordinance in 1999, is an effort to provide a means by which lands may be protected by fee simple purchase or conservation easements. Beaufort County- contracts with the Beaufort County Open Land Trust



(BCOLT) to manage the program, negotiate with property owners and to assist in the purchase of properties. The Rural and Critical Lands Preservation Board was set up to prioritize properties and make recommendations to County Council. The Board consists of eleven citizens representing a cross section of the County and the municipalities. In 2014, the County adopted a "Greenprint" map with seven focus areas identified to target preservation efforts. Since 1999, the RCLPP has preserved more than 22,000 acres of land.



Regional Growth Management Strategy

Beaufort County is home to six municipalities: Beaufort, Bluffton, Port Royal, Hilton Head Island, Yemassee, and Hardeeville. Each of these communities, along with the county, maintains its own individual comprehensive plan and land use regulations. The percentage of land within the municipal boundaries has grown from 11.6% to 34.1% within the past 18 years. Beaufort County's authority to regulate land uses and implement adopted land use policies only applies to the remaining 65.9% of the unincorporated land; a number that is continuing to shrink. It is for these reasons that any countywide growth management strategy must involve joint planning and cooperation between the county and each of the municipalities.

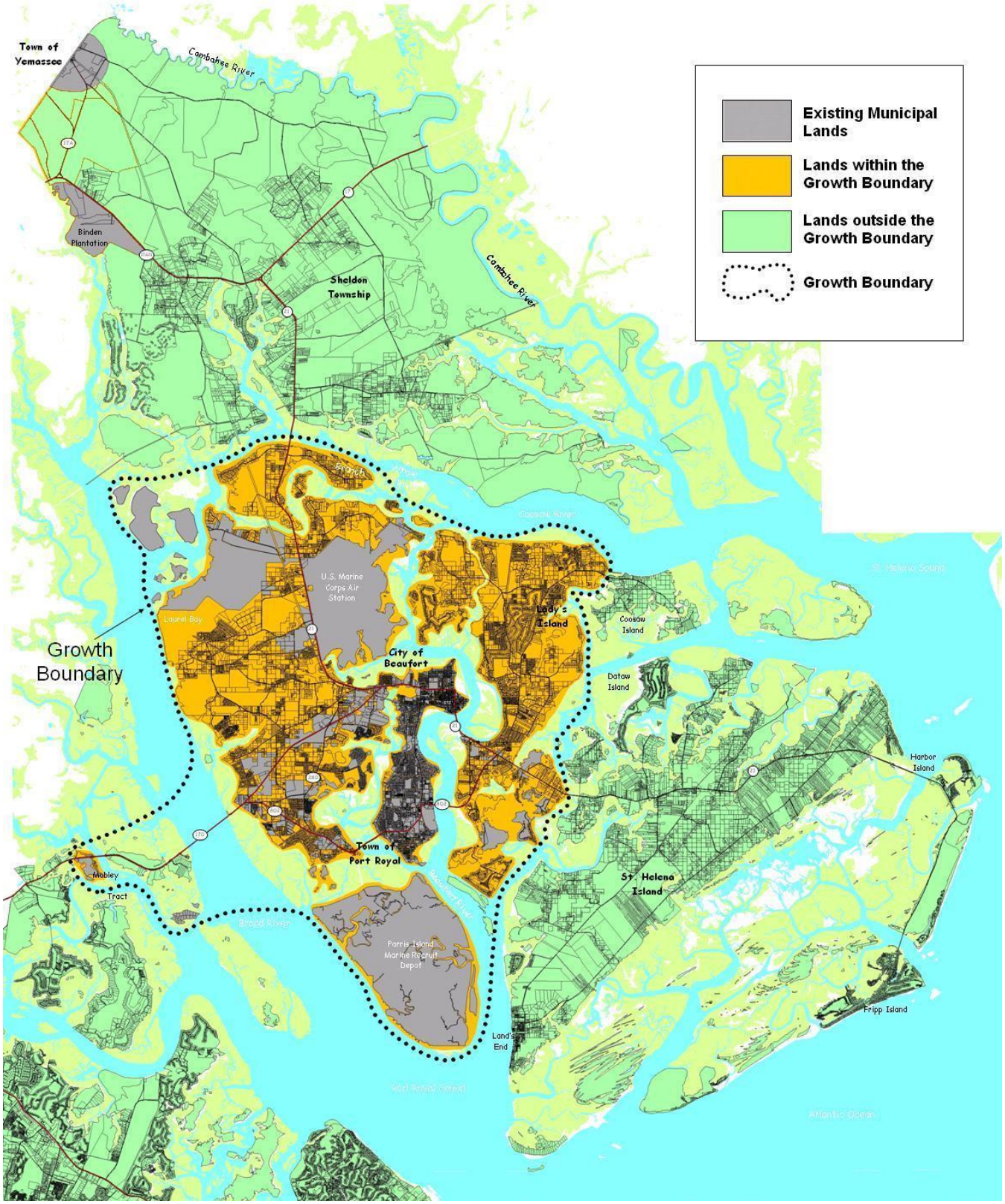
REGIONAL GROWTH MANAGEMENT STRATEGY FOR NORTHERN BEAUFORT COUNTY

Based on the Northern Beaufort County Regional Plan, this plan recommends a regional growth management strategy for northern Beaufort County and its municipalities that involves:

- The establishment of mutually agreed upon growth boundaries surrounding the municipalities;
- The definition of the municipality's roles within the growth boundaries; and
- The definition of Beaufort County's role in the protection and preservation of rural areas outside of the growth boundaries.

This regional growth management strategy replaces the 1997 Comprehensive Plan strategy, which identified priority, transitional, and rural investment areas.

Map 4-5: Growth Boundaries for Northern Beaufort County



Establishment of the Growth Boundaries: The Northern Beaufort County Regional Plan provided a model for implementing the regional growth management strategy. The plan established growth boundaries for the City of Beaufort and the Town of Port Royal. These growth boundaries identify those areas where the municipalities are likely to grow and provide services over the planning horizon period of 20 years. The areas of the county beyond the growth boundary are considered to be rural areas that should be preserved in accordance with the common planning goals in the previous section.

Agreement on the future boundaries of growth was a critical step for the county. Growth boundaries allow for the county and the municipalities to plan for their future growth in an efficient and predictable manner. Growth boundaries also allow the county to plan for protection and preservation of rural areas and focus its attention on countywide issues, such as transportation and protection of environmental resources, in a cooperative manner with the municipalities. This plan recognizes the following principles related to the growth boundaries as identified in the Northern Beaufort County Regional Plan:

- That the growth boundaries identify land that is envisioned as future areas of urban and suburban development (with the exception of those areas designated low density residential and rural within the growth boundaries) and land that is envisioned to remain rural in character (outside the boundary).
- That land located inside the growth boundaries (see Map 4-5) is expected to ultimately annex into a municipality with a demonstration that adequate public facilities are available or will be available at the time of development and that negative impacts of development will be mitigated.
- That land outside the growth boundaries is envisioned as developing at rural densities of no more than one unit per three acres gross density unless otherwise subject to existing Community Preservation Districts (CPD).
- That the county does not anticipate that the land outside the growth boundaries will be annexed into a municipality nor is it envisioned as being provided with urban services or developed at urban densities.
- That rural preservation is an important component of the overall system of growth boundaries and that it is in the regional interest to protect rural character and density while allowing economic use of rural property. In order to ensure longtime residents in the rural areas are protected, the county will continue to allow family subdivision exemptions.

- That the county anticipates that it will seek to enhance economic opportunities for rural residents by encouraging nonresidential activities that are compatible with rural areas through uses such as rural business districts, cottage industries, and continued agriculture and forestry.

Annexation Principles for Areas Inside of the Growth Boundaries: As established above, the County agrees with the importance of establishing growth boundaries and recognizes that annexation is likely within those boundaries. In compliance with the regional planning efforts, the county agrees to work cooperatively with the municipalities to develop a mutual agreement on how annexations will occur, and in particular how land use and service delivery will be addressed relative to the multi-jurisdictional impact. In order to provide for efficient annexation that promotes the goals of this plan and the regional plans, this plan recognizes the following principles, detailed in the Northern Beaufort County Regional Plan, as they relate to annexation:

- The county will work with the municipalities to develop mutually agreeable annexation principles that address mitigation of extraterritorial impacts associated with annexations, including protection for designated Community Preservation Districts (CPDs), public facility standards, traffic impact study requirements, baseline open space requirements, and baseline environmental standards that will be met prior to annexation occurring. As part of this plan, the county will work cooperatively to:
  - Develop procedures for notices of proposed annexations by a municipality with an ample opportunity for comment by the county.
  - Develop administrative mechanisms to analyze and mitigate the potential impacts of proposed annexations on the delivery and level of service of public services and facilities, including fire, parks, library facilities, law enforcement, schools, transportation and roads, and public water (river) access in order to assure that adequate public services and facilities will be available to serve development expected as a result of annexations.
  - Develop administrative mechanisms to analyze the impact of proposed annexations on the efficiency of services. This will include the ways in which services can be coordinated among jurisdictions, the avoidance of inefficient overlap of services or potential gaps in services, and a fair and proportional funding of services between the municipality and the county.
  - When, or if, after review and comment by the county, there is disagreement as to the consistency of the annexation with the regional plan, the participating municipality and the county will work with the municipalities to devise a method by which the

two bodies resolve their differences on the matter and come to a mutually agreeable decision.

- The county will work with the municipalities to create mutually agreeable principles that address enclaves of unincorporated county territory within the growth boundaries to provide for the most efficient pattern of land uses and provision of services consistent with the regional plans.
- It is the policy of this plan that land contiguous to municipalities will not be increased in authorized density without annexation to a municipality.
- For properties that are not contiguous to a municipality, the county concurs that the most appropriate method of urban or suburban development is through eventual annexation to a municipality. The county also agrees that it is contrary to this plan for the county and the municipalities to compete for urban or suburban development or to allow the jurisdictions to be a party to zoning "jurisdiction shopping" by applicants. The county will encourage property owners / developers who desire to increase density on non-contiguous property to first explore the feasibility of annexation, including consultation with the municipality and contiguous property owners.
    - It is the policy of this plan not to increase density on property within the growth boundaries that is not contiguous to a municipality unless feasible annexation options have been ruled out and until the municipality has been provided the opportunity to review and comment on the request. If it is determined that it is not feasible to annex due to a lack of contiguity, the county will work cooperatively with the municipalities to develop guidelines for municipal review and comment to the county prior to their being considered for rezoning.
    - Further, the county agrees that it is in the regional interest to avoid the creation of developed enclaves of unincorporated land that create inefficient service patterns. The county will work with the municipalities to find ways to encourage the eventual annexation of non-contiguous urban or suburban development. Specifically, the county will work with the municipalities to explore legal mechanisms whereby urban or suburban development could be subject by agreement by property owners to annex to a municipality under prescribed circumstances at a later date, subject to law.
    - The county will work with the municipalities to develop guidelines for the protection of existing CPDs within the growth boundaries.

- When, or if, after review and comment by the municipality, there is disagreement as to the consistency of the rezoning and development standards with the regional plan and agreed upon guidelines, the county and municipality shall devise a method by which the two bodies resolve their differences on the matter and come to a mutually agreeable decision.

REGIONAL GROWTH MANAGEMENT STRATEGY FOR SOUTHERN BEAUFORT COUNTY

The Southern Beaufort County Regional Plan recommended that Beaufort County, the Town of Hilton Head Island, and the Town of Bluffton work together to develop a joint land use plan that addresses the residential density and land uses within the uncommitted lands in southern Beaufort County. The future land use map for southern Beaufort County (Map 4-7) is a result of this cooperative effort and is consistent with the future land use map that the Town of Bluffton adopted as part of its 2007 Comprehensive Plan. The shared land use policies of Beaufort County and the Town of Bluffton in addition to the work of the Southern Beaufort County Implementation Committee have been beneficial in promoting cooperative land use planning in the region.



Rural Land Use Policies

Since the adoption of the 1997 Comprehensive Plan, the preservation of rural areas has been a planning goal. Recent developments in Beaufort County's long range planning process have brought this issue to the forefront. First, growth pressures have continued to intensify in rural areas. Second, the Northern Beaufort County Regional Plan resulted in a multi-jurisdictional consensus on growth boundaries, outside of which would remain rural. These developments have elevated rural preservation to a regional level, along with the question of balancing the desire to preserve rural areas with the interests of rural residents and property owners.

In 2007, Beaufort County initiated a public process to evaluate the effectiveness of its existing rural policies. The planning process was conducted in a collaborative manner engaging rural residents, county elected officials, large landowners, and other stakeholders.

BALANCING DIVERSE GOALS AND INTERESTS

During the rural policy analysis, it became clear that the term "rural" applies to a complex web of varying concerns and interests. On one hand, the preservation of rural areas accomplishes many planning goals.

- It discourages sprawl by focusing new growth in and around existing developed areas.
- It plays an important role in natural resource protection.
- It promotes fiscal sustainability by making more efficient use of public facilities such as roads.

On the other hand, owners of large farms struggle with maintaining economic viability for their property after their families have farmed it for many generations. Likewise, many small landowners whose families have also owned land for many generations feel that current regulations create injustices by preventing them from subdividing their land into saleable parcels, and feel that they pay taxes with very little corresponding benefits of land ownership. At the same time, low-income rural land owners do not want to see development pressures unleashed that could result in economic displacement, nor do they want to lose their rural culture.

Finally, Beaufort County's rural areas have a well-established population living in rural settlements with a rich and historic community fabric. St. Helena Island in particular, with its Gullah heritage, is particularly concerned about the protection of these cultural resources. How to balance cultural resource protection while creating meaningful economic opportunities for low-income people is a major planning challenge in the rural areas.

DEFINING RURAL

While it is difficult to define the specific attributes of rural areas that are desired to be preserved, protected, and promoted, the following characteristics are common attributes cited for rural Beaufort County:

- Places where people live, including clusters of unincorporated and unofficial communities with local place names
- Places with cultural roots and heritage where multi-generational families live, many of whom live on "heirs" property
- Small scale services and businesses that serve rural areas
- Small institutions such as churches, schools, community centers, and post offices
- Agricultural and timbering operations
- Forested and wooded areas
- Low density residential
- Pristine low country natural environment
- Fishing villages

RURAL POLICY GOALS

The rural policy analysis reaffirmed the importance of rural preservation as a core Beaufort County planning value. The following goals relate specifically to rural areas, building on the common planning goals applicable to all areas of the county. These goals provide the basis for recommendations in this chapter and in Chapter 6: Cultural Resources.

- Beaufort County will recognize rural land uses as a critical element of a balanced regional system of urban, suburban, and rural land uses.
- Beaufort County will promote the permanent preservation of open spaces in the rural areas.
- Beaufort County will promote the long-term viability of agricultural uses.
- Beaufort County will preserve and protect sensitive natural features in rural areas.
- Beaufort County will promote rural based economic development that benefits local rural businesses and residents.

- Beaufort County will promote institutional uses in rural areas that are compatible with the rural environment, such as churches, schools, community centers, job training centers, social service agencies, and post offices.
- Beaufort County will protect cultural and historic resources in rural areas, such as the Gullah culture and Penn Center.
- Beaufort County will recognize and respect the unique needs of long time landowners in rural areas.



Future Land Use Plan

The regional growth management strategy, as described in the previous section, establishes a broad and critical regional vision of growth areas and rural areas. This section summarizes the future land use patterns envisioned for Beaufort County within this framework.

The Future Land Use Plan (See Maps 4-6 and 4-7) provides for a land use pattern that builds on the regional growth management strategy. First, the broad land use categories are defined based on its location inside or outside of the growth areas. Growth areas are those areas targeted for future population growth and major infrastructure investment over the next 20 years. In northern Beaufort County, growth areas encompass those areas identified within the growth boundaries in the Northern Beaufort County Regional Plan. In southern Beaufort County, growth areas encompass those areas identified through the joint land use planning efforts of the Land Use Working Group of the Southern Beaufort County Regional Plan Implementation Committee. Beyond these basic land use categories, there are also special designations described in the *Special Land Use Designations* section that apply to specific areas of the county.- In addition to the definitions, this section also provides basic development guidelines for each land use category that may be built upon based on further planning studies.

Generally speaking, the areas within growth areas are designated for either commercial, light industrial, urban residential, or neighborhood residential uses, and the areas outside the growth areas are designated for rural uses. There are, however, several exceptions to this pattern:

- The area around the Marine Corps Air Station is designated as an Air Installation Compatible Use Zone (AICUZ) as part of the joint planning effort designed to minimize incompatible development within potential noise contours or hazard zones.
- Certain lands within the growth areas are designated as “rural” for the following reasons:
    - In areas such as Northern Lady’s Island, the purpose of the rural land use designation is to control growth so that it does not exceed the capacity of available public facilities (primarily roads).

  - In areas such as the May River Road (SC 46) corridor and Pinckney Colony, the rural designation serves to protect the scenic qualities and character of the area.

- Outside of the growth areas, there are several areas designated "neighborhood residential". These areas include Dataw Island, Fripp Island, Harbor Island, Oldfield, Riverbend, River's End and Callawassie Island. Each of these developments was approved and built as planned unit developments prior to the adoption of Beaufort County's 1997 Comprehensive Plan or ZDSO. This plan does not envision those neighborhood residential areas expanding beyond their current boundaries.
- Hilton Head Island's future land use goals represent those of a more maturely developed community and therefore address issues of infill development, redevelopment and the build out of the island's remaining vacant parcels. Therefore, the Town's future land use plan is its official zoning map (adopted in 2014).

LAND USES IN THE GROWTH AREAS

Within the growth areas is the area where the county anticipates moderate to high intensity residential and commercial development, the provision of the majority of capital investments and municipal growth. This plan establishes the following future land use designations within the growth areas.

Residential Land Uses: To promote a desirable regional pattern, new residential uses should develop in a pattern that maximizes the efficiency of regional infrastructure and the avoidance of sprawl or "leap-frog" patterns. Residential uses are encouraged to develop as interconnected neighborhoods, not isolated subdivisions that lack regional connections. Residential areas should promote both local and regional pedestrian connections and should be coordinated with regional parks and open space facilities, and other public facilities such as schools. There are three land use categories within the growth areas that are primarily residential:

- Urban Mixed-Use: Future development within the urban mixed-use area is anticipated to be similar to the type and mix of land use currently found in the municipalities. Infill and redevelopment would be targeted within Beaufort and Port Royal and in the Shell Point areas; parts of Lady's Island and Burton; and the center of Bluffton. Gross residential densities are between two and four dwelling units per acre with some denser pockets of development. Commercial uses providing neighborhood retail and services are limited to collectors and arterials and within master planned mixed-use developments.

- Neighborhood Mixed-Use: In neighborhood mixed-use areas, residential is the primary use, with some supporting neighborhood retail establishments. New development is encouraged to be pedestrian-friendly, have a mix of housing types, a mix of land uses and interconnected streets. The maximum gross residential density is approximately two dwelling units per acre. No more than 5% to 10% of the land area should consist of commercial development. Commercial uses providing neighborhood retail and services are limited to collectors and arterials and within master planned mixed-use developments. This designation also includes Dataw Island, Fripp Island, Harbor Island, Callawassie Island, Riverbend, River's End, and Oldfield.
- Air Installation Compatible Use Zone (AICUZ): The AICUZ is located in northern Port Royal Island and Lady's Island due to the noise contours and accident potential zones associated with the U.S. Marine Corps Air Station. Residential development and places of assembly (e.g., churches, schools, etc.) should be highly limited in these areas. Light industrial, commercial, and agricultural uses are considered appropriate to this area.

Residential Development Guidelines: Future residential development within the growth areas should occur pursuant to the following guidelines:

- Density incentives may be provided for in the zoning and development standards that allow for higher densities when the housing meets targeted housing requirements as identified in the Affordable Housing Chapter of this plan;
- A mix of housing types and densities should be provided in each neighborhood provided the overall density is consistent with the recommendations of this plan;
- Variations in lot sizes and frontage dimensions are encouraged to allow for a range of housing sizes and costs as well as provide for a varied streetscape;
- Mixed-use developments are encouraged to promote pedestrian access to services and facilities while providing internal trip capture to minimize the traffic impact of these developments;
- Incorporate integrated bike and pedestrian trails to link schools, shopping areas, village centers, government buildings, business parks, recreational areas, libraries, and parks;
- A street system of interconnected roads in a grid or modified grid is encouraged while cul-de-sac streets and large, gated developments are discouraged. Gated communities will be limited to those locations where they will not interfere with the interconnection of

major streets or are in areas where they do not limit access to waterfront locations;

- Park and greenspace set asides, or a fee in-lieu of providing parks, should be provided in accordance with the zoning and development standards. Clustering is strongly encouraged to maximize open space and protect natural areas; and
- Where feasible, mature trees will be preserved and street trees will be provided.

Commercial Land Uses: Commercial development should embody high quality site plan and design principles, particularly related to landscape, signage, building design and orientation, and parking lot designs. Commercial development should be compatible with surrounding residential areas and should be connected to existing pedestrian systems such as sidewalk and trail systems. Commercial uses should focus on key transportation nodes, avoiding strip patterns. Where appropriate, smaller non-retail commercial uses such as contractor's offices, small assembly facilities, and light industrial operations that do not adversely impact surrounding retail uses are encouraged. There are three commercial land use categories within the growth areas:

- Core Commercial: Core commercial uses include downtown Beaufort, Bluffton, and Port Royal that are planned to have pedestrian scale, and zero lot line oriented commercial development.
- Regional Commercial: Regional commercial uses are those uses due to their size and scale that will attract shoppers and visitors from a larger area of the county and outside the county. Typical uses include "big box" retail uses, chain restaurants, and supporting retail.
- Community Commercial: Community commercial uses typically serve nearby residential areas, such as a shopping district anchored by a grocery store.

Commercial Development Guidelines: Future commercial development within the growth areas should occur pursuant to the following guidelines:

- New development will meet strong architectural, landscaping and site planning standards;
- Off-street connections between adjacent parcels should be established for vehicular, pedestrian, and bicycle traffic;
- Sidewalks and bike trails should be required to connect with nearby residential neighborhoods;
- Vegetated buffers should be located between incompatible uses;

- Parking lots should be landscaped with interior islands planted with trees and bushes and with a landscaped buffer surrounding the parking area;
- Where possible, all landscaping should be composed of existing native vegetation where possible, particularly mature trees that exist on site; and
- New development will meet strong environmental standards working around the natural features of the site and providing excellent stormwater management.

Light Industrial Land Uses: This plan encompasses the recommendations of the regional plans, which identify the need for providing a sufficient quantity of suitably located land zoned for non-retail commercial uses that promote the region's economic health and diversity. There are two light industrial land use categories within the growth areas:

- Light Industrial: Uses in this category include, but are not limited to, business parks, research and development centers, product assembly, distribution centers, cottage industries, and light and heavy industrial uses.
- Research and Development: This future land use designation is intended to provide for offices, laboratories, institutions of higher learning and other research facilities.

Light Industrial Development Guidelines: Generally, future industrial development within the growth areas should occur under the following guidelines:

- New development will meet strong environmental standards working around the natural features of the site and providing excellent stormwater management;
- Adequate buffer must be provided between industrial uses and adjacent residential or commercial uses;
- Signage located along access roads should be limited to monument signs, should be a moderate size, and should be well landscaped; and
- Sites should maintain as much of the existing vegetation as possible to minimize large expanses of manicured lawn areas;
- Traffic to and from the site will not have adverse impact on local roads and adjacent residential uses.

Rural Land Uses Inside Growth Areas: While rural land uses are targeted for protection outside of the growth areas, there are areas of

the county within the growth areas where the Future Land Use Plan recommends rural land uses and densities. These areas should retain their rural character with low-density residential development, supporting small-scale commercial development, and agricultural land uses. The maximum gross residential density in rural areas is one dwelling unit per three acres. Rural land uses within the growth areas should meet the development guidelines established for rural land uses outside of the growth areas.

LAND USES OUTSIDE OF THE GROWTH AREAS

The policies outlined in this section are a result of a comprehensive review and evaluation of existing rural planning policies._Land uses for the areas of Beaufort County located outside of the growth areas are classified into the following categories:

Rural: Rural areas are situated outside of the growth areas. Except where noted, these areas should retain their rural character with low-density residential development, supporting small scale commercial development, and agricultural land uses. Future development in rural areas is anticipated to be similar to the type and mix of land uses currently found in the Sheldon area, St. Helena Island, and along the SC 170 corridor between McGarvey's Corner and the Broad River Bridge. The maximum gross residential density in rural areas is one dwelling unit per three acres. Rural areas should not be targeted with the development of major public infrastructure or the extension of public sewer service except where a documented health, safety, and/or welfare condition warrants such an expansion.



Albany Grocery Store in the Dale Community Preservation Area.

Rural Development Guidelines: Future development in the rural areas should occur pursuant to the following guidelines:

- Utilization of the purchase of development or transfer of development rights program (as described in the Recommendations section) is highly encouraged in this area to preserve open space and the rural character;
- Higher densities may only be considered when appropriate wastewater treatment is available and the higher density is offset by preserved land; and
- The clustering of development may be considered as a rural and natural resources preservation technique when the proposed development maintains the overall proposed gross density and is clustered on lots compatible with surrounding areas.
- Small-scale commercial (primarily retail and service uses) that serve the surrounding rural neighborhoods are encouraged where there

are existing concentrations of commercial uses such as Lobeco and Garden's Corner.

Rural Community Preservation: These areas correspond with the areas designated as "community preservation areas" in the 1997 Comprehensive Plan that are located outside of the growth areas. The rural community preservation areas are proposed to serve the surrounding rural community with small-scale retail and service uses and low to moderate density residential with a gross density of approximately one dwelling unit per acre. Community-based planning is recommended to protect the unique qualities of these areas.

Rural Community Preservation Development Guidelines: Future development in the rural community areas should occur pursuant to the following guidelines:

- Development with the community preservation areas should comply with the development standards of the Community Preservation Area Overlay district in the ZDSO unless the county has prepared a detailed plan for the area.
- In cases where a community preservation area plan has been established, new development and redevelopment should occur pursuant to the recommendations and guidelines of the applicable community-based plan.

Resource Conservation Areas: Resource conservation areas are those areas, which are not accessible by land or are environmentally sensitive due to their soils and/or location. Resource conservation areas are primarily those areas, which have the following characteristics:

- Are barrier islands and islands within the major waterways of the county;
- Have significant natural resources;
- Have significant archeological resources;
- Are difficult to access; or
- Pose a higher potential for water quality impacts from septic systems.

Resource Conservation Area Development Guidelines: Due the highly sensitive nature of these areas and poor access, future development in the resource conservation areas should occur pursuant to the following guidelines:

- The density of these areas is limited to one unit per ten acres;
- Uses are limited to single-family residential uses, parks, recreation, and government uses;

- Generally, clustering of homes is not recommended;
- The removal of existing vegetation, particularly native vegetation, should be minimized; and
- The maintenance of a 100-foot buffer along all waterways is critical and therefore required.

Cultural Protection Area (Overlay): The traditional cultural landscape and its physical setting on St. Helena Island is a treasure of national significance. As one of Beaufort County's last substantially rural sea islands and the center of its most notable concentration of Gullah culture, the island requires an additional level of development standards to protect this important resource. In order to protect this vital cultural heritage of St. Helena Island, the county has developed the Cultural Protection Overlay to prevent rural gentrification and displacement of residents in these cultural communities. The intent of this overlay is to protect this area from encroaching development pressures. While growth is not discouraged, the quality and rate of growth is of concern. Rapid in-migration would substantially alter the traditional social and cultural character of St. Helena Island. Also, gentrification could drive up land values, making the continuation of the Island's traditional way of life cost prohibitive. The Cultural Protection Overlay encompasses the entire island and acknowledges its historic cultural landscape and the sense of community that has existed on the island for 300 years. As the revisions to the ZDSO are developed, it will be necessary to fully evaluate what defines St. Helena Island as a significant traditional cultural landscape, as well as to assess the contribution of the Gullah culture, in order to develop specific provisions within the overlay district that will result in effective long-term protection for the culturally significant aspects of the island.

Cultural Protection Overlay Development Guidelines: Future development in the cultural protection areas should occur pursuant to the following guidelines:

- The following uses are considered incompatible with the purpose of this area and should be discouraged or prohibited.
  - Gated communities, which are intentionally designed or developed to prevent access by nonresidents.
  - Resorts that could include lodging that serves as a designation point for visitors, or is located and designed with some combination of recreational uses or natural areas such as marinas, beaches, pools, tennis courts, golf courses, equestrian uses, and other special recreation opportunities. This use does not include ecotourism or its associated lodging.

- Golf courses that includes regulation and par three golf courses and related uses (e.g., clubhouse) having nine or more holes.

- Beyond the limitation of uses above, development should be consistent with the underlying future land uses and their applicable development guidelines.

Commercial Fishing Villages (Overlay): The fish and seafood industries have provided strong cultural contributions to Beaufort County over the years even though the industry has declined in size and scale over the years. The county has established commercial fishing village areas with the following goals:

- To provide for the maintenance and enhancement of the local and traditional commercial seafood industry and related traditional uses such as retail, storage, repair and maintenance, that support the commercial seafood industry.
- To preserve and/or recognize existing and potential commercial fishing areas and related activities or developments.
- To minimize and reduce conflicts between the seafood industry and residential developments by reducing the potential for land use conflicts between the two types of uses.
- To avoid commercial fishing activities that are detrimental to the water quality and the environment.

Within the commercial fishing village areas, only uses that are related to the commercial seafood industry are permitted including, but not limited to, those uses intended for the processing, manufacturing, storage, wholesale, retail, and distribution of commercial fishing products. In addition to these primary uses, these areas are also envisioned for related uses such a marine related retail, small restaurants, boat chartering, and other similar uses.

SPECIAL LAND USE DESIGNATIONS

Within the county, there are several special land use designations specified on the Future Land Use Map that are defined below and are not defined based on their location inside or outside of designated growth areas.

Community Preservation Areas (Overlay): The unincorporated areas of the county today include several existing communities in a variety of sizes and land uses, each with a different character. These communities, whether towns or just neighborhoods are recognized as important areas in this plan as they help create a sense of place in the county as important places to live, work, and play. In order to preserve and protect these areas, the county will continue its efforts to preserve

these communities through community preservation area planning, zoning overlay districts, and special plan recommendations identified in this plan and in the regional plans.

Community Preservation Area Development Guidelines: Generally, future development in the community preservation areas should occur under the following guidelines:

- New development should infill around and between existing homes with a similar density and character;
- The character of new homes should be based on the height, massing, and setback of the surrounding homes;
- New homes should have complementary architecture to surrounding homes;
- Greenway buffers should be maintained between existing communities and new development that may occur around the community preservation areas;
- The character and layout of the existing street network should be maintained and enhanced;
- Commercial nodes, whether neighborhood or larger scale commercial, should be maintained around existing commercial sites and expanded pursuant to detailed community preservation plans;
- All of the siting and design standards identified for new commercial and mixed-use development should be applied in accordance with detailed community preservation plans; and
- New commercial buildings should be designed around the size and scale of the surrounding neighborhoods.

Corridor Overlay: Much of the allure of Beaufort County is in the unique blend of the natural and built environment. To protect the county's special and desired character, new development along arterials and major collectors should have strong architectural, site design, and landscaping standards. A Design Review Board, consisting of design professionals and laypersons should provide oversight to insure that the development guidelines established below are met.

- The architecture of new development should be innovative and of high quality that blends with the natural surroundings and incorporates Lowcountry elements. Pitched roofs, exposed rafter ends, muted colors and context sensitive materials are encouraged. Blank building facades and long unarticulated rooflines are discouraged;
- Landscaping should include a diversity of plant materials, overstory trees in the parking areas, foundation buffers, and requirements to

save and work around existing trees. Where appropriate, buffers along the highway should be provided;

- Lighting standards should be geared toward reducing glare for passing motorists. Fixtures should be required to be "cutoff", that is they are required to direct their light downward so the lighting source cannot be visible from the highway; and
- Monument signs are encouraged by limiting the height and overall size of highway signs. Internally illuminated signs are prohibited. Signage colors are required to be muted and signage materials should match those used on the building.

Preserved Lands: This land use category includes all park lands, public lands, and private lands that are preserved through conservation easements.

Military Areas: This land use category includes all military installations including Parris Island and the U.S. Marine Corps Air Station.

Place Type Overlay: Both within and outside of Growth Areas the policies of this plan encourage the development and reinforcement of pedestrian scaled mixed-use communities. The purpose of the Place Type Overlay future land use is to identify locations in the County to promote appropriately scaled walkable environments with a mix of housing, civic, retail, and service choices and that achieve the following:

- Improve the built environment and human habitat.
- Promote development patterns that support safe, effective, and multi-modal transportation options, including auto, pedestrian, bicycle, and ultimately transit. This will minimize vehicle traffic by providing for a mix of land uses, walkability, and compact community form.
- Provide neighborhoods with a variety of housing types to serve the needs of a diverse population.
- Remove barriers and provide incentives for walkable urban projects.
- Promote the greater health benefits of a pedestrian-oriented environment.
- Reinforce the character and quality of local communities, including rural crossroads, neighborhoods, hamlets, and villages.
- Reduce sprawling, auto-dependent development.
- Protect and enhance real property values.
- Reinforce the unique identity of Beaufort County that builds upon the local context, climate, and history.

Rural Place Types: While rural landscapes consist largely of natural areas, agricultural and forestry uses, and low-density residential development, historically, small walkable communities served as retail, service and civic hubs for the surrounding rural hinterlands.

Rural Place types consist of Rural Crossroads and Hamlets (See Map 4-9 and 4-10). Appendix 4-I further defines the appropriate character, form, scale, intensity, and mix of uses for each of the place types in Beaufort County so that suitable zoning districts and other tools can be developed and applied to implement these places.

- Rural Crossroad Place Types. Rural crossroads are typically located at the intersection of two or more rural roads. They provide a small amount of pedestrian-oriented, locally-serving retail in a rural context, and transition quickly into agricultural uses and/or the natural environment as one moves away from the intersection. Historic examples of rural crossroads include Pritchardville in southern Beaufort County and the Corners Community on St. Helena Island.
- Hamlet Place Types. Hamlets are typically larger and more intense than rural crossroads and are often located at the edge of the rural and urban condition. A hamlet often has a small, pedestrian-oriented main street with surrounding and supporting residential fabric that is scaled to the size of a pedestrian shed. The main street and surrounding residential fabric transitions quickly into agricultural uses and/or the natural environment. A historic example of a hamlet includes the original settlement of Bluffton along Calhoun Street. The size and scale of the Habersham community would currently be classified as a hamlet, but could develop into a village if existing development plans are realized.

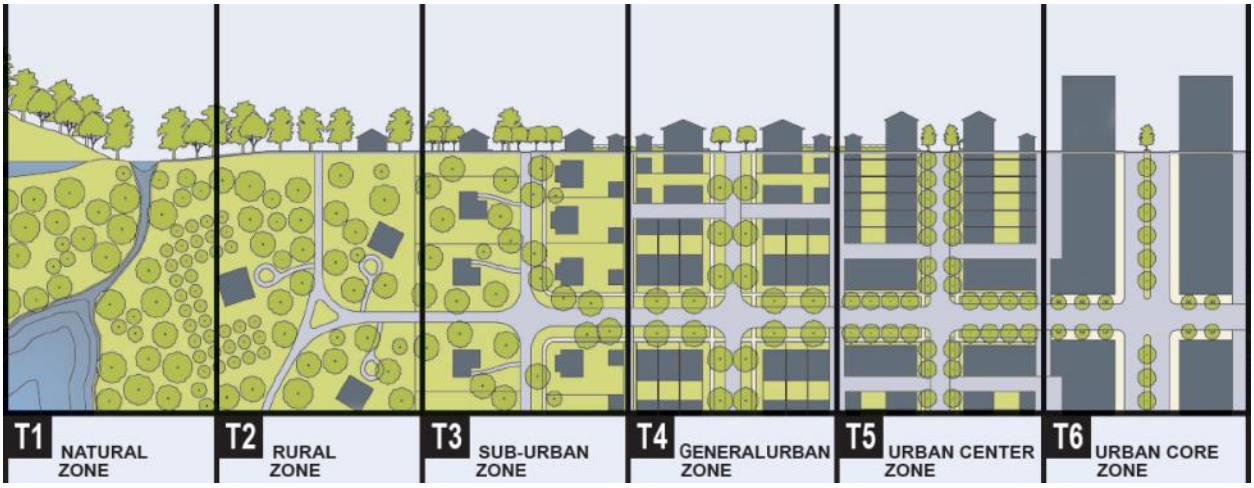
Urban Place Types: Urban places are more complex with concentrations of public infrastructure, community services, and existing homes and businesses. They are located within urbanized areas, and are organized within an interconnected network of streets and blocks in multiple pedestrian sheds. They include areas where one has the opportunity to walk, bike, or ride transit to work, to fulfill daily shopping needs (such as groceries), and to access other amenities within close proximity. These places are composed of elements that create complete walkable places, including downtowns, neighborhood main streets, neighborhood centers, and residential neighborhoods of varying densities and intensities.

Urban Place types consist of Villages, Towns, and Cities (See Map 4-9 and 4-10). Appendix 4-I further defines the appropriate character, form, scale, intensity, and mix of uses for each of the place types in Beaufort County so that suitable zoning districts and other tools can be developed and applied to implement these places.

- Villages are made up of clusters of residential neighborhoods of sufficient intensity to support a central, mixed-use environment. The mixed-use environment can be located at the intersection of multiple neighborhoods or along a corridor between multiple neighborhoods. Habersham is a good example of a place that is evolving into a village.
- Towns are made up of clusters of neighborhoods or villages that can support a larger, more complex mixed-use environment. Buildings at the core of a town are attached and may be up to four stories tall. Towns are important centers of the County. The Town of Port Royal represents the local archetype.
- Cities are made up of clusters of neighborhoods or villages that can support the most intense, complex mixed-use environments. Buildings within the cores of a city are attached and may be taller than four stories in height. Cities are regional centers of the County and contain primary commercial and civic destinations. The City of Beaufort represents the local archetype.

Implementing the Place Type Overlay: The place types should be implemented with form-based zoning districts that focus firstly on the intended character and intensity of development and secondly on the mix of uses within. The form-based districts should be organized on the principle of the Transect (Figure 4-5).

Figure 4-5: A Typical Rural-Urban Transect with Transect Zones



Source: The Smart Code Version 9.2

The Transect, as a framework, identifies a range of settlement patterns from the most natural to the most urban. Its continuum, when subdivided, lends itself to the creation of zoning categories with standards that prescribe appropriate intensity, character and mix of

uses. The following are generalized zoning categories based on the Transect.

- T-1 Natural Zone consists of lands approximating or reverting to a wilderness condition, including lands unsuitable for settlement due to topography, hydrology or vegetation.
- T-2 Rural Zone consists of sparsely settled lands in open or cultivated state. These include woodland, agricultural land, and natural areas. Typical buildings are farmhouses, agricultural buildings, and low density houses.
- T-3 Sub-Urban Zone consists of low density residential areas, adjacent to higher zones that contain some mixed use. Home occupations and outbuildings are allowed. Planting is naturalistic and setbacks are relatively deep. Blocks may be large and the roads irregular to accommodate natural conditions.
- T-4 General Urban Zone consists of a mixed use but primarily residential urban fabric. It may have a wide range of building types: single, sideyard, and rowhouses. Setbacks and landscaping are variable. Streets with curbs and sidewalks define medium-sized blocks.
- T-5 Urban Center Zone consists of higher density mixed use buildings that accommodate retail, offices, rowhouses and apartments. It has a tight network of streets, with wide sidewalks, steady street tree planting and buildings set close to the sidewalks.
- T-6 Urban Core Zone consists of the highest density and height, with the greatest variety of uses, and civic buildings of regional importance. There are no locations within Beaufort County where T-6 Urban Core is appropriate. Typically only large towns and cities have an Urban Core Zone.

In order to be an effective tool to implement the Place Type Overlay District the specific mix of uses, intensity and character of these districts should be calibrated to fit the unique natural and built environment of Beaufort County.



Recommendations

Recommendation 4.1: Use the Comprehensive Plan and Future Land Use Element as an Implementation Tool

This comprehensive plan and the future land use element were created to serve as a guide for future growth and development. As such, the comprehensive plan and this future land use element should be used as a strategy to implement the recommendations of the regional plans and other county planning efforts. More specifically, this plan can be used:

- As decision-making tool when evaluating proposed developments, rezonings, and any other decision that may impact, or be impacted, by growth (e.g., public facilities).
- As a framework for the cooperation of planning activates and plan review with the municipalities as outlined in this plan and the regional plans.
- To update the Community Development Code on an ongoing basis as needed to implement this plan.

Recommendation 4.2: Implement the Northern and Southern Beaufort County Regional Plans

Beaufort County has adopted both the Northern and Southern Beaufort County Regional Plans and will strive to implement the plans as outlined in each individual plan. This effort will involve county actions as described below and as detailed further in each of the individual plans:

- The county will assist in the implementation of the regional plans through participation in the Northern Beaufort County Regional Plan Implementation Committee and through the reenactment of the Southern Beaufort County Regional Plan Implementation Committee;
- The county will participate in the drafting and execution of intergovernmental agreements to ratify key plan elements; and
- The county will participate in staff working groups for ongoing planning initiatives.

Recommendation 4.3: Update the County Land Use Regulations

Beaufort County will update its Community Development Code to incorporate the related recommendations of the regional plans and to facilitate the Future Land Use element of this comprehensive plan. In particular, the county will consider incorporating the following recommendations:

- Incorporate the development guidelines and recommendations established in this plan and in the regional plans; and
- Encourage mixed-use developments, where proposed, through revisions that will expedite review procedures and provide density incentives.
- Codify requirements that allow for the county, municipalities, the school district, and where involved, the military, to review and comment on major development proposals and annexations. This action would require that any application for an annexation or proposed rezoning will be sent to the planning directors, or similar official, of the relevant review body prior to the public hearing on the application. Any comments provided by such planning official will be included in the review packets for the subject annexation or rezoning.

Recommendation 4.4: Continue to Utilize and Expand Existing Tools to Further the Policies of the Comprehensive Plan

This plan identifies some of the major tools, beyond zoning, that the county already uses in order achieve the goals established as part of this plan. The county should continued to utilize these tools, identified in *Planning Framework* section, with the following recommendations:

- Implement the TDR program recommendation for the AICUZ Overlay district surrounding the Marine Corps Air Station. Consider expanding the receiving areas beyond Port Royal Island.
- Consider expanding the TDR program, described above, based on the results of the initial program around the Marine Corps Air Station to preserve rural areas, provide financial relief to large rural property owners, and to implement other recommendations of the Comprehensive Plan.
- Continue to utilize the Rural and Critical Land Preservation Program as its strategy for purchasing development rights. This program should be used to preserve as much rural lands as feasible. For the purposes of this comprehensive plan update, the county should also consider revisions to the current program to encourage more protection of rural and critical lands on St. Helena Island and in Sheldon.

- Continue to promote the establishment of conservation easements as a method of protecting rural lands, natural resources, and the rural character of Beaufort County. This program should be further studied by the county and coordinated with the efforts of the TDR and PDR programs as well as the Beaufort County Open Land Trust.

Recommendation 4.5: Utilize Development Agreements to Accomplish Goals of this Plan and the Regional Plans

The county should utilize development agreements, where feasible, to accomplish the goals set forth in this plan and the regional plans. These agreements can be utilized to implement a number of the recommendations including coordinating development in the growth areas and protecting the rural character of the county.

Any development agreement must be consistent with the comprehensive plan and land use regulations that will be implemented following plan adoption. Development agreements are discouraged in areas where development impacts may affect the provision of essential services and available infrastructure. The process by which the agreement is negotiated must be a public process to ensure that potentially affected citizens are notified and aware of any potential impacts.

Recommendation 4.6: Establish and Adopt Baseline Standards for PUDs and Development Agreements

The county will work with the municipalities to establish and adopt uniform baseline standards for the creation of and revisions to Planned Unit Development (PUDs) and development agreements. For PUDs, the standards should address the following issues, at a minimum:

- Open Space;
- Environmental Protection;
- Traffic Mitigation;
- Connectivity; and
- Access Management.

For development agreements as described in the previous recommendation, the following minimum regulations and recommendations should apply:

- Require compliance with the uniform baseline standards established for PUDs, to the maximum extent allowed by law.
- Establish criteria allowing the agreement to be re-opened if defined conditions occur. These conditions should include:

  - A phasing schedule that requires phases to be completed within a specified period of time; or
  - A schedule that requires the transportation analysis and mitigation requirements to be re-evaluated after certain thresholds are reached, to ensure transportation impact and mitigation issues are addressed.
- Recognition that subsequently adopted laws are not in conflict with the development agreement, and can be applied, if at a public hearing the local government determines:
  - There are substantial changes that have occurred within the local government in pertinent conditions existing at the time the development agreement was adopted, which changes, if not addressed by the local government, would pose a serious threat to the health, safety, and welfare of the community;
  - The new laws address these problems and are essential to addressing them; and
  - The laws expressly state they are to apply to the development agreement.
- Recognition that subsequently adopted laws can apply to the development agreement if it is based on substantially and materially inaccurate information supplied by the developer.
- In addition, baseline indicators should be established in the agreement itself, focusing on areas such as impacts on public facilities. Development exceeding the baseline indicators would be required to be re-opened.

Recommendation 4.7: Continue to Develop and Update Community Preservation Plans

Since the adoption of the 1997 plan, the county has embarked on detailed planning efforts for several community preservation areas. Due to the unique qualities of these areas, it is important for the county to continue these planning efforts to address other community preservation areas. In particular, this plan recommends the following actions:

- Pursue the Sheldon and Big Estates Community Preservation Plans
- Work with local residents and Community Preservation Committees where they are formed to evaluate the effectiveness of existing CP Plans and zoning districts and make revisions as warranted.

Recommendation 4.8: Promote Appropriate Infill Development and Redevelopment in Accordance with this Plan

Many small commercial parcels located in the unincorporated areas of Beaufort County, along the edges of the municipalities, are in need of redevelopment. There is also a need to encourage infill development rather than continued sprawling development or "leapfrog" developments. Currently, redevelopment and infill development are addressed by requiring higher standards for architecture, landscaping, and site design for new projects. This existing policy does not take into account the large number of small properties are often overlooked for investment in favor of developing on greenfields due to the size of the property and the difficulty and expense of complying with the zoning regulations. The county encourages infill development and redevelopment as an alternative to new development, particularly in areas where public facilities are readily available. The following are targeted recommendations related to infill development and redevelopment.

- Explore ways to facilitate integrated stormwater management systems for clusters of small parcels;
- Develop incentives for developments on infill or redevelopment sites;
- Incorporate context-sensitive design standards for various scales of infill development and redevelopment to promote compatibility with surrounding developments, where appropriate; and
- Utilize the regional Geographic Information System (GIS) to identify and market undeveloped or underutilized sites.

Recommendation 4.9: Develop Regional Demographic Models and a Regional Growth Tracking System

Beaufort County will work cooperatively with the municipalities to develop a regional demographic and land use model of existing and forecasted population, including permanent and seasonal population. This model should be maintained through a multi-jurisdictional effort. At a minimum, the system should consist of existing and forecasted seasonal and permanent population data; a consistent classification system for existing and future land use; and a regional land use model that monitors remaining growth capacity and assesses the impacts of land use decisions on the region.

In addition to the regional demographic model, the county will work with the municipalities to create and maintain an improved regional growth tracking system, including a land demand and land use forecasting model integrated with other regional models (such as the transportation model) that can be used by all entities for planning purposes. This recommendation would mirror the recommendation in the regional planning efforts and would involve the creation of a

regional database and model that would likely build on the existing traffic model and its traffic analysis zones, but it could be expanded for use in a wide range of planning efforts by local and regional agencies. Specifically:

- The county's permitting database should be configured to count certificates of occupancy by tax district and address.
- The county's permitting database will be integrated with GIS traffic analysis zones through address or parcel ID numbers.
- A growth report will be periodically generated to show the change in growth by Traffic Analysis Zone (TAZ), by tax district, and by jurisdiction.

Recommendation 4.10: Establish Joint Corridor Planning Efforts

Beaufort County will work with the municipalities to establish coordinated review, administration, and enforcement of development to maintain the views and images of the low country created along designated regional scenic corridors. Important elements of this recommendation include:

- Defining distinctions between urban, suburban, and rural roads and applying corresponding architecture, landscaping, lighting, signage, and streetscape standards for each road type.
- Including uniform standards consistent with the corridor plans, which can be adopted by the county and related municipality for the subject corridor.
- Including additional standards to provide heightened protection for scenic resources along the May River Road (SC 46) and Okatie Highway (SC 170).
- Utilize the Southern Beaufort County Beautification Board to evaluate the aesthetic qualities of development within highway rights-of-way including road widening and intersection improvements.

Recommendation 4.11: Develop Detailed Area Plans

Jointly prepare a detailed land use plan for the uncommitted lands in southern Beaufort County, and potential redevelopment areas where densities could be increased. The joint land use plan should address the following elements at a minimum:

- The residential density and land uses of the uncommitted lands;
- Lands with infill potential;
- Lands where mixed use development should be encouraged;
- Public facilities and services for the planning area;

- The future growth boundaries of Bluffton and Hardeeville; and
- Recommendations on how the coordinated land use policy will be implemented through a seamless set of zone districts and development standards between the County, Bluffton, and neighboring jurisdictions (as appropriate).

Until the joint land use plan is completed, the county and the Town of Bluffton should adopt an interim policy that states annexations and rezonings within the study area shall conform to the Future Land Use element of this comprehensive plan.

Recommendation 4.12: Formalize Regional Planning Efforts with Neighboring Counties and Municipalities

Formalize regional planning cooperation and collaboration between Beaufort County, Jasper County, and the City of Hardeeville to plan on a wider regional basis. As part of this recommendation, the county incorporates the following recommendations from the Southern Beaufort County Regional Plan:

- The county will enter into a Memorandum of Understanding (MOU) with Jasper County and the City of Hardeeville to identify a common geographic area of interest, issues of common concern, and commitment to provide staff support to address common issues related to future land use, public facilities (especially transportation and the new port), and natural assets and environmental protection.
- Staff representatives from Jasper County and Hardeeville will be invited to participate as members of the southern Beaufort County working groups, on a permanent basis.
- Utilize the Lowcountry Council of Governments (LCOG) and the Metropolitan Planning Organization (MPO) for cooperative inter-jurisdictional planning.

The County should also expand these cooperative planning efforts to other neighboring counties and municipalities such as the Town of Ridgeland and Hampton County.

- County working groups, on a permanent basis.

Recommendation 4.13: Ongoing Monitoring

Beaufort County should commit to a process of ongoing monitoring to chart the progress of the implementation of the 2007 Comprehensive Plan. The monitoring process should focus on those issues that would benefit from annual reporting as determined by the Planning Commission. Beaufort County should coordinate this process with the municipalities.

Recommendation 4.14: Rural Small Lot Subdivision

Beaufort County should continually pursue policies that require low density residential development in rural areas while providing greater flexibility for owners of small properties.

Recommendation 4.15: Rural Conservation Subdivisions

Beaufort County should encourage the clustering of residential subdivisions in rural areas to preserve and promote agricultural and forestry uses on set-aside open spaces.

Recommendation 4.16: Small Rural Businesses

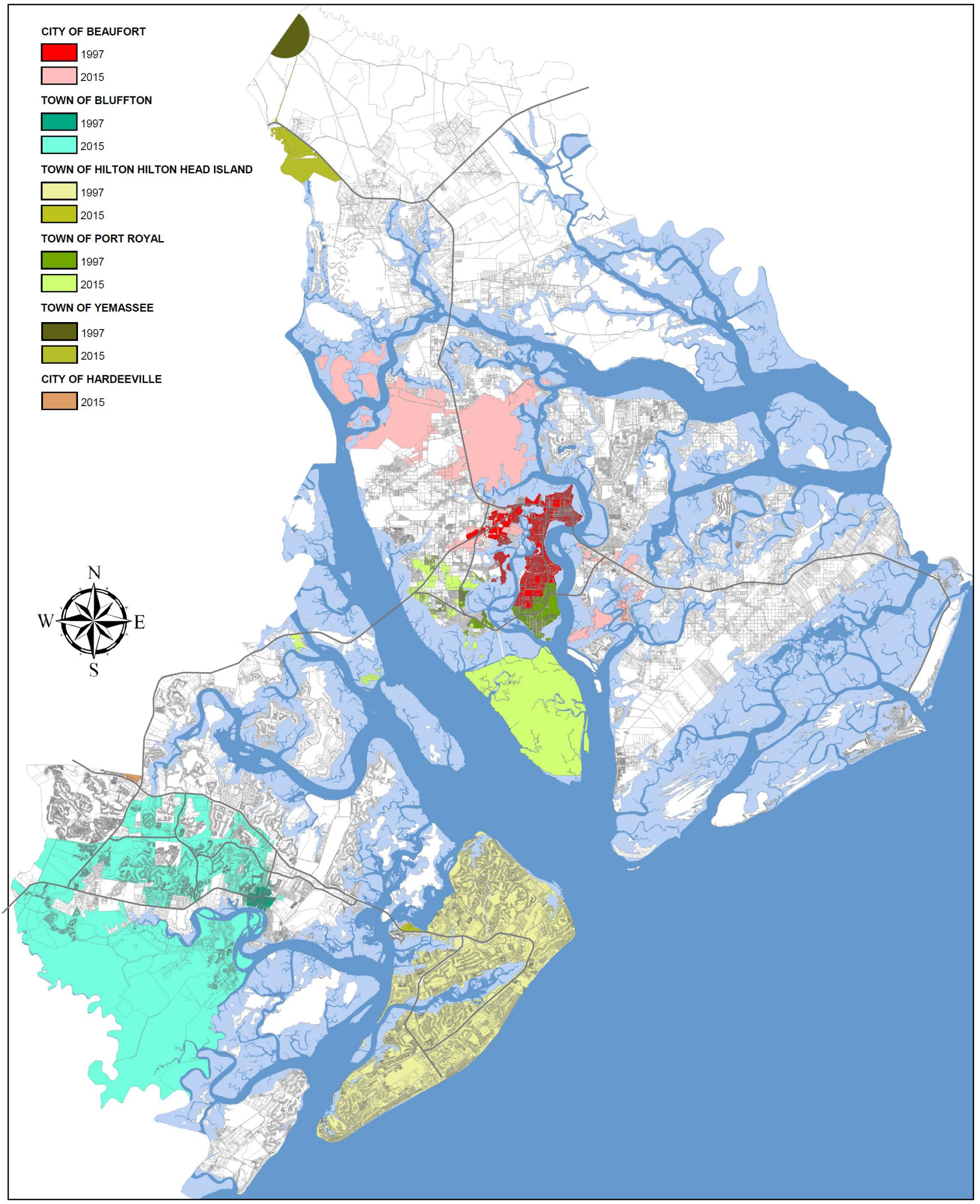
Beaufort County should evaluate its ZDSO to provide more flexibility and overcome obstacles to the establishment of compatible rural businesses.

- Consider changes to the ZDSO to place more emphasis on performance standards rather than use-restrictions for cottage industries, home occupations, and rural businesses.
- Establish a Rural Business District at Garden's Corner.

Recommendation 4.17: Small Landowner Liaison

Beaufort County should provide education and assistance to small rural landowners on development options available in rural areas.

- Provide public education in the form of brochures, workshops, and other outreach efforts for small rural landowners about family compounds, rural business options, cottage industries, home occupation, and small-lot rural subdivision options.
- Consider creating a County Staff Liaison position to assist small rural landowners in the development review process.



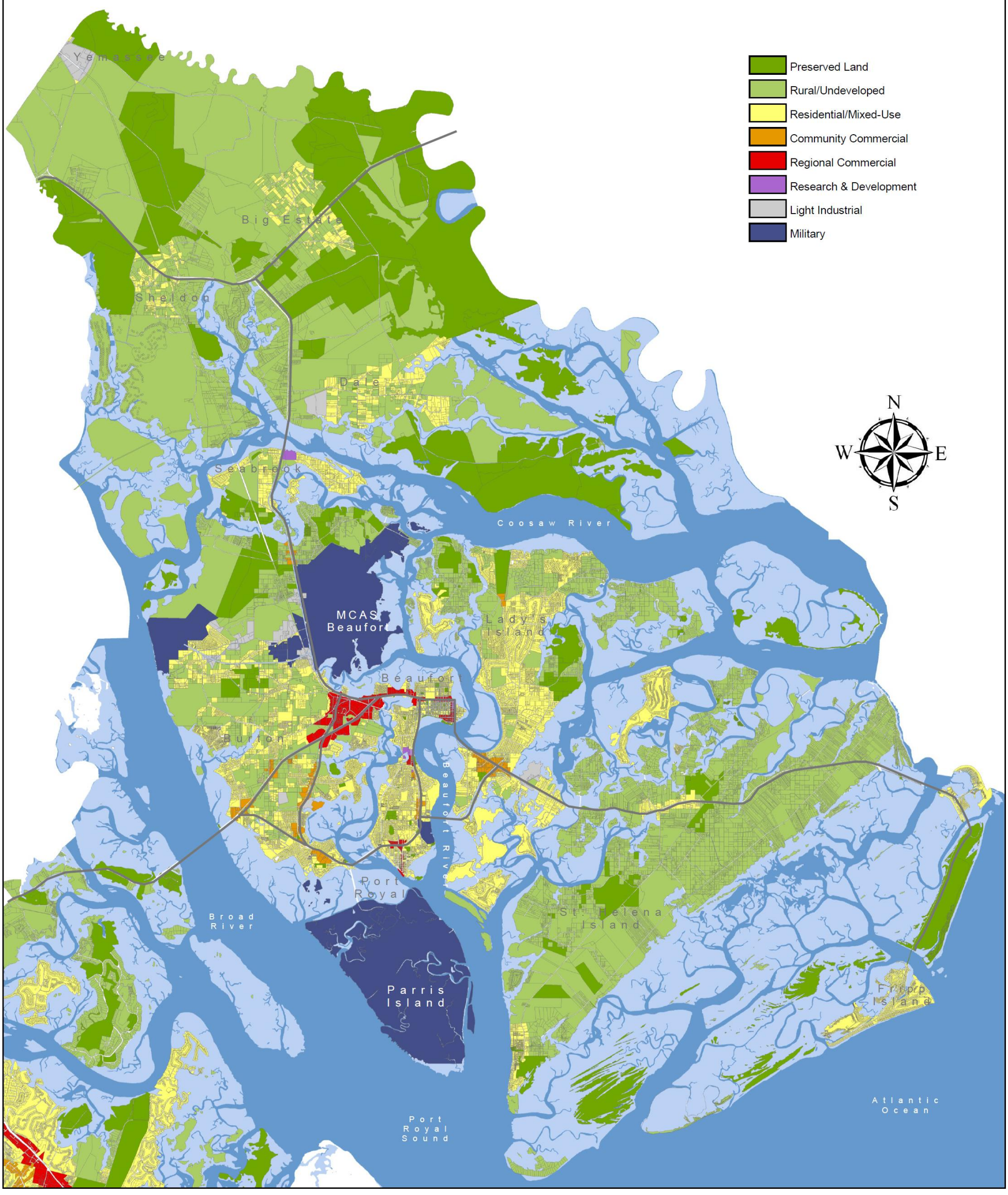
Chapter 4

Land Use

Map 4-1: Municipal Growth

1997 to 2015

2010 Beaufort County Comprehensive Plan



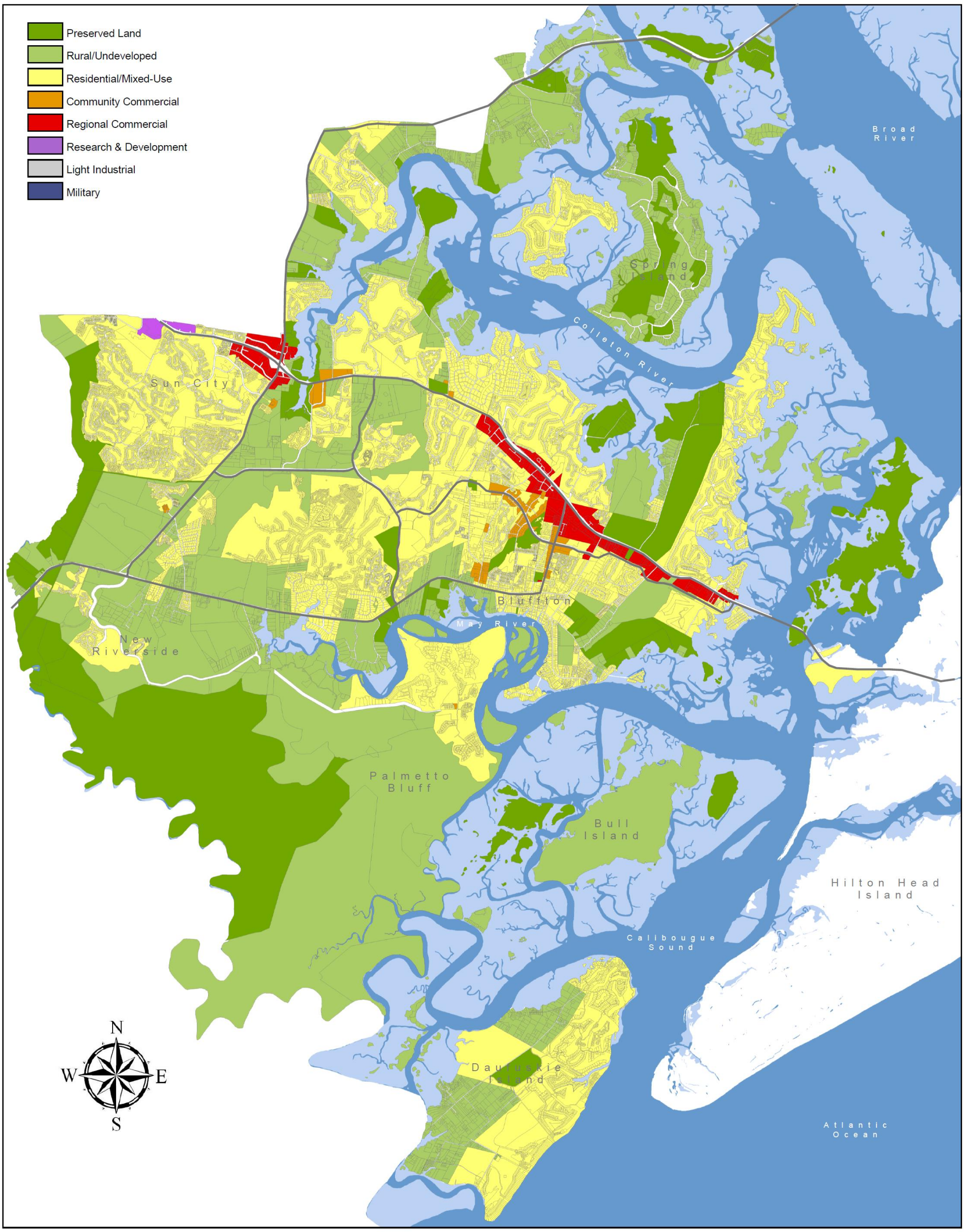
Chapter 4

Land Use

Map 4-2: Existing Land Use

Northern Beaufort County

2010 Beaufort County Comprehensive Plan



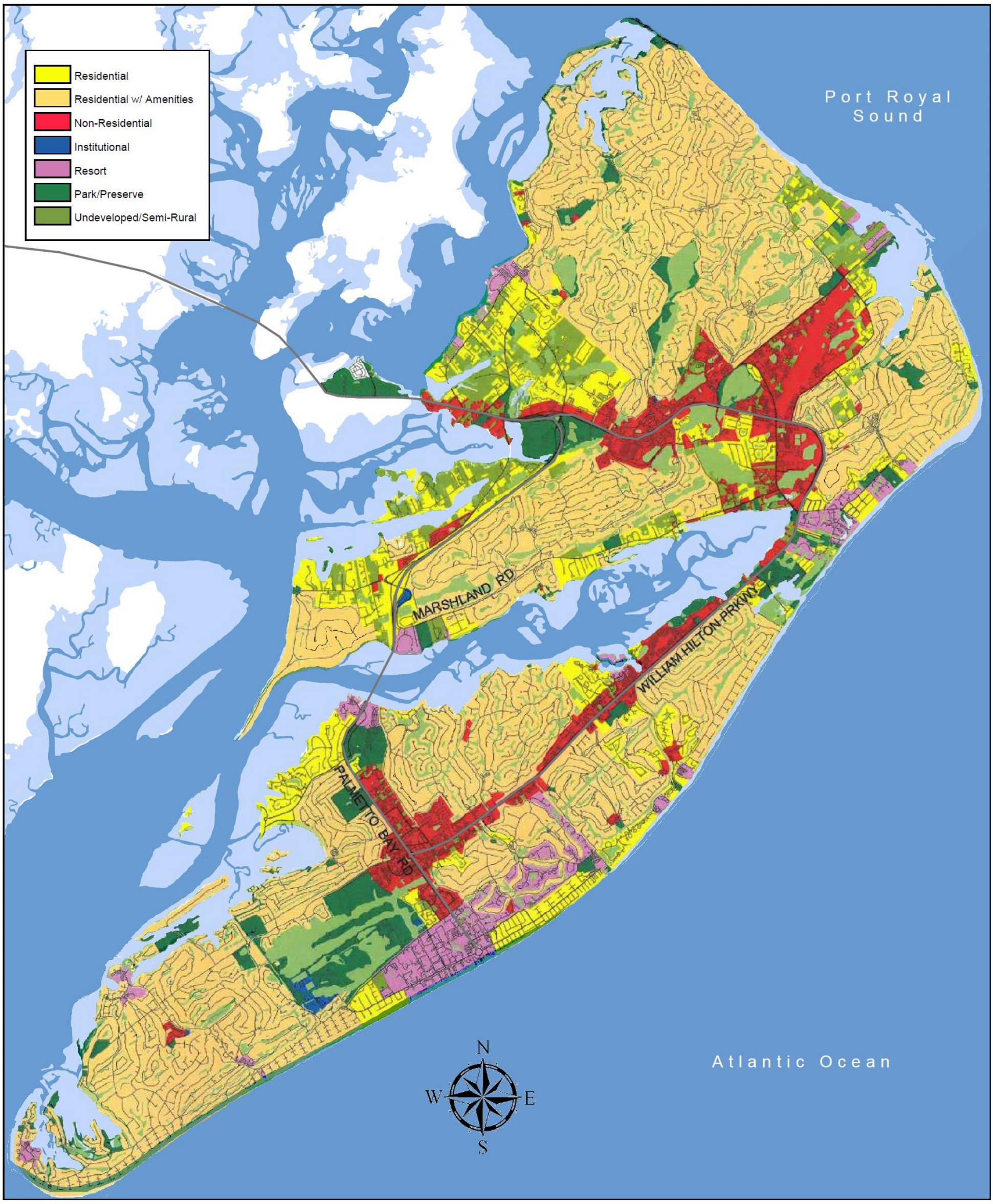
Chapter 4

Land Use

Map 4-3: Existing Land Use

Southern Beaufort County

2010 Beaufort County Comprehensive Plan



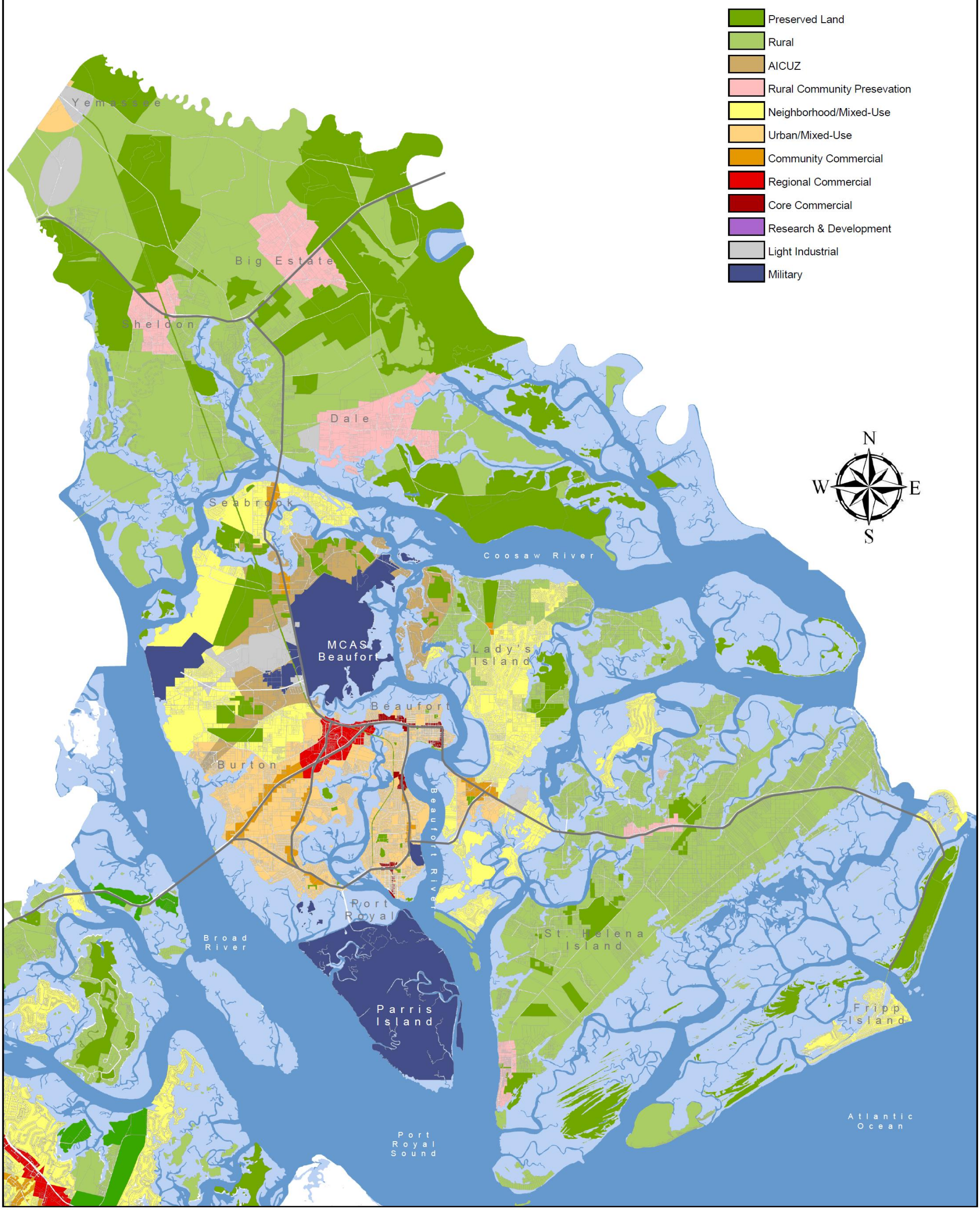
Chapter 4

Land Use

Map 4-4: Existing Land Use

Hilton Head Island

2010 Beaufort County Comprehensive Plan



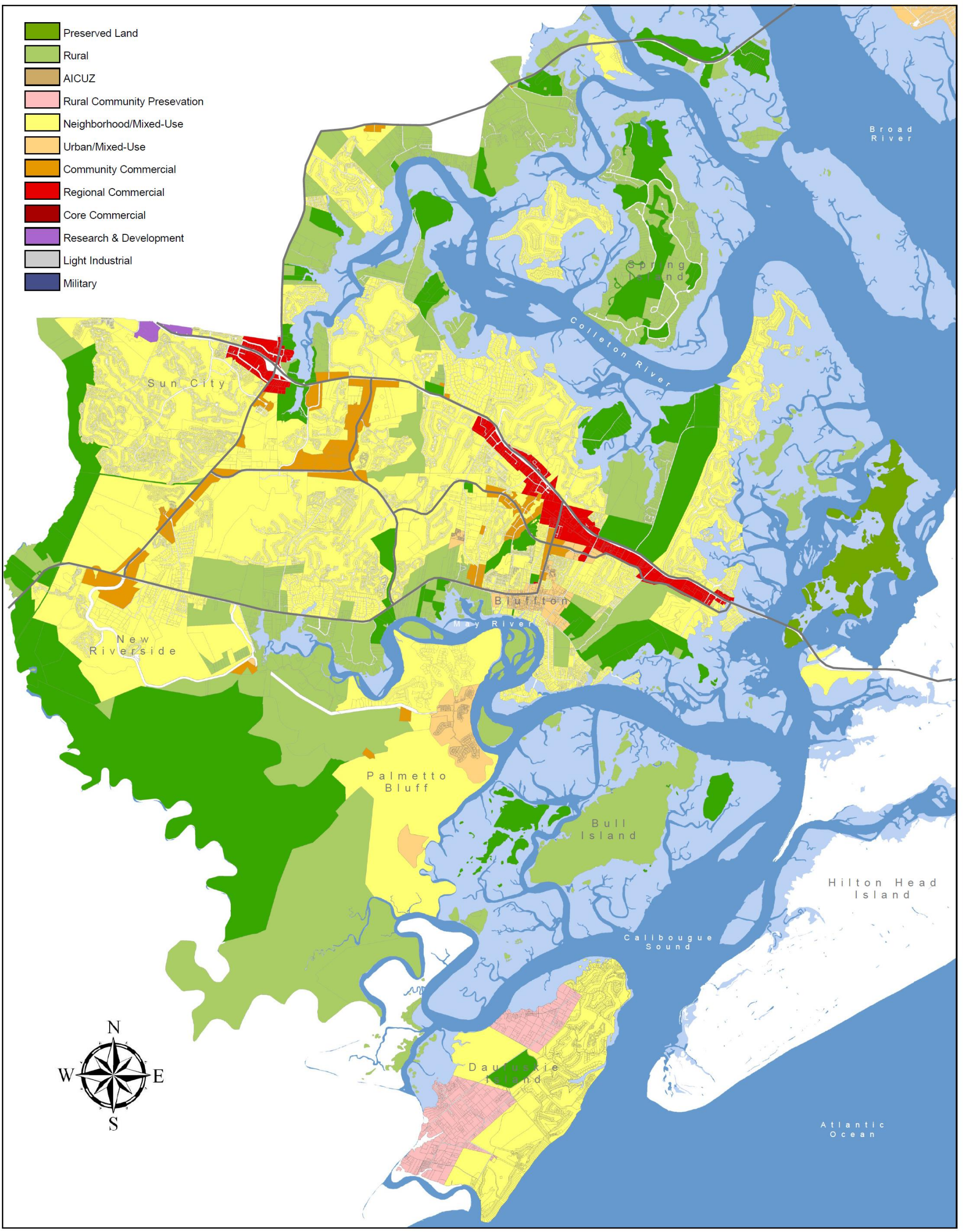
Chapter 4

Land Use

Map 4-6: Future Land Use

Northern Beaufort County

2010 Beaufort County Comprehensive Plan



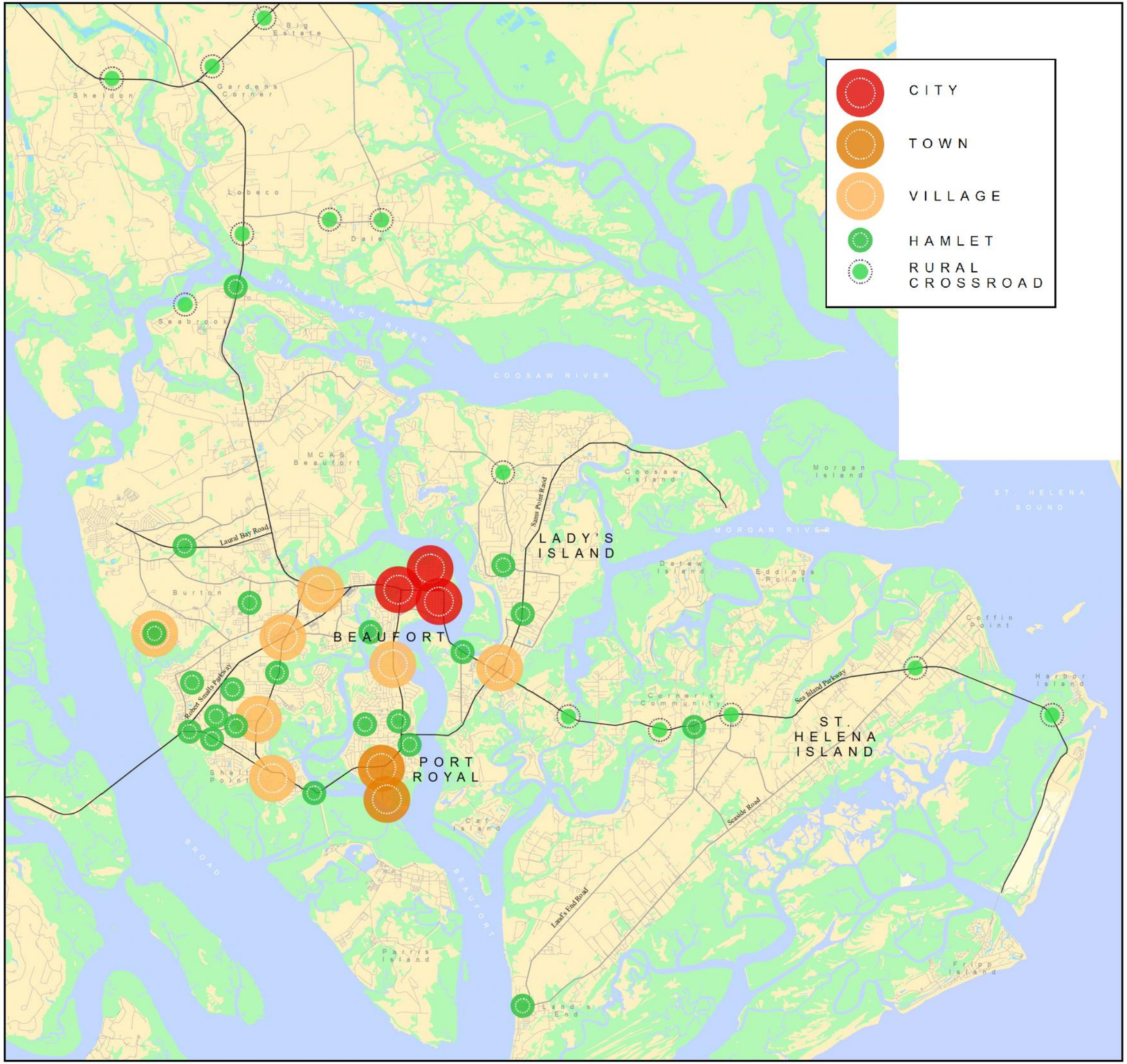
Chapter 4

Land Use

Map 4-7: Future Land Use

Southern Beaufort County

2010 Beaufort County Comprehensive Plan

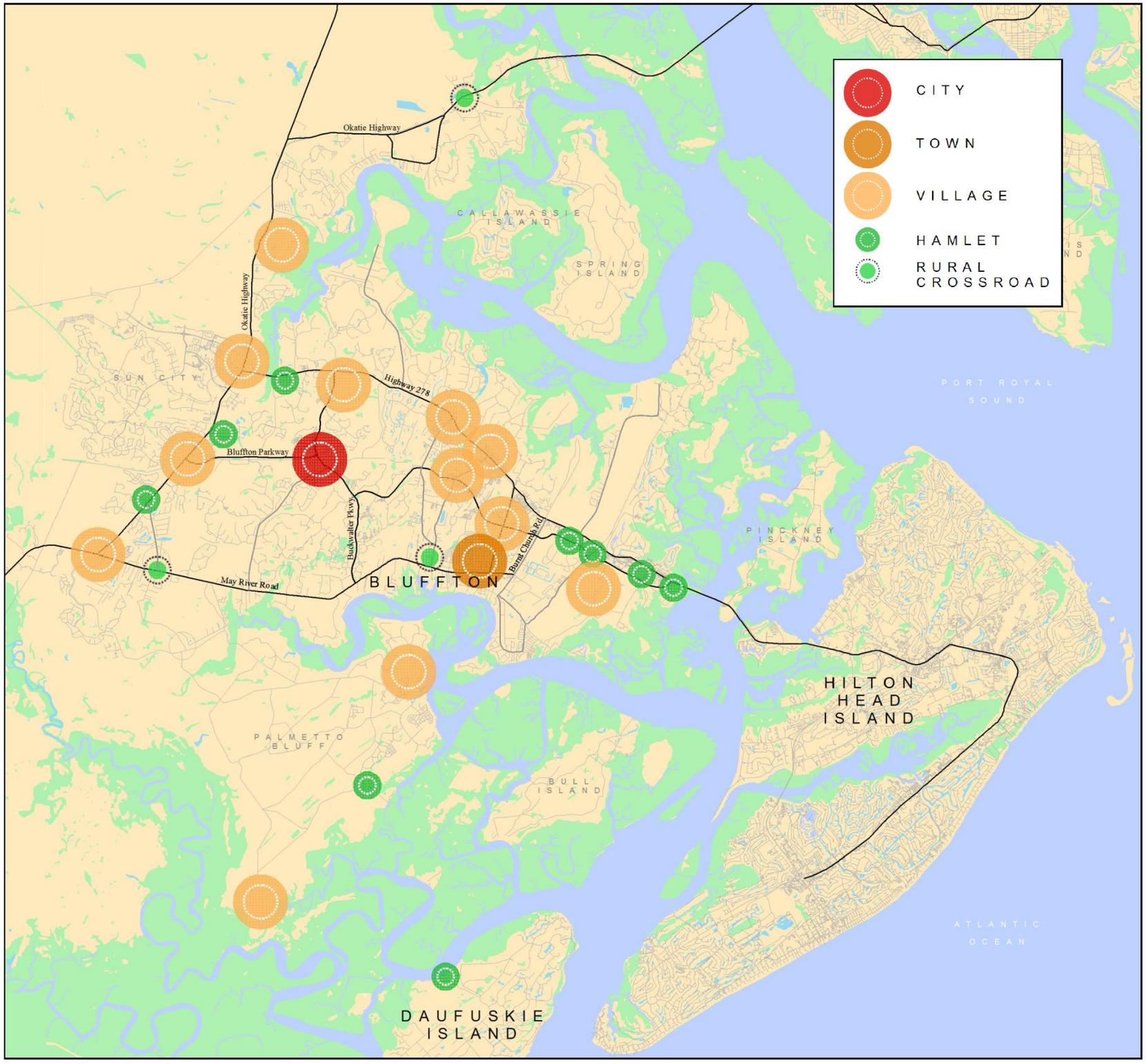


Chapter 4
Land Use

Map 4-8: Place Type Overlay

Northern Beaufort County

2010 Beaufort County Comprehensive Plan



Chapter 4

Land Use

Map 4-9: Place Type Overlay

Southern Beaufort County

2010 Beaufort County Comprehensive Plan

5

Beaufort County Comprehensive Plan

Natural Resources



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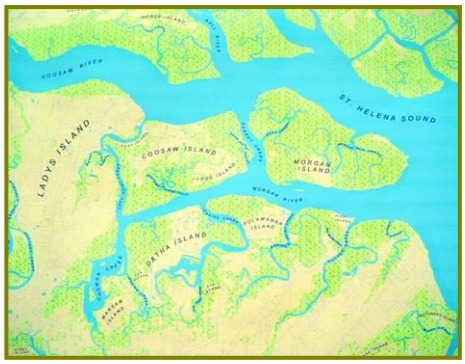
Introduction

Protection and preservation of Beaufort County's natural resources is a principal component of this plan. Beaufort County has a unique natural beauty, made up of expansive marsh vistas teeming with marine life, sub-tropical maritime forests of live oaks and palmettos, towering pines, forested wetlands of cypress and tupelo and over 30 miles of beaches. Beaufort County residents and visitors have a great attachment to the land and water. Many symbols of the region are an indicator of the region's ecological well-being. Shrimp boats plying the waters and vast expanses of *Spartina* grass waving in the breeze are an indicator of good water quality. Live oaks and Spanish moss point to good resource protection and air quality. Beaufort County's natural environment, however, cannot be taken for granted. If not managed properly, the County's rapid pace of growth will have grave consequences for water quality, forest communities, wetlands, and beach erosion.



Physical Features and Constraints

Beaufort County, like all coastal areas in the southeast, continues to attract new residential and commercial development. The County's geographical and environmental characteristics, however, place many limitations to development. Beaufort County consists of more water than land. Of its 468,000 acres, approximately 51% consists of open waters, sounds, marshes, and estuaries. An additional 14% are freshwater wetlands. The ubiquitous presence of tidal waters, low elevation, and waterlogged soils present unique constraints to development and make the natural environment particularly vulnerable to the impacts of growth. Beaufort County is also susceptible to many natural hazards, including hurricanes, shoreline erosion and earthquakes.

CLIMATE AND WEATHER



Storm looming over the Chechessee River.

The climate of Beaufort County is subtropical, characterized by long, hot summers followed by short and relatively mild winters. The County's precipitation rate averages 49 inches per year with about 70% of the annual rainfall occurring during the April through October growing season. The Sea Islands commonly have winter temperatures 3 to 5 degrees warmer and 30 to 40 additional frost-free days than the more inland areas. Historically, an average of one hurricane or tropical storm visits the South Carolina coast every 4 to 5 years. Since 1900, eight category 2 or larger storms have made landfall in Beaufort County, which is especially vulnerable to storm surge flooding due to its low-lying nature and relatively shallow offshore waters.

ELEVATION

Beaufort County is generally flat and low-lying with elevation ranging from sea level to 42 feet in the Gray's Hill portion of northern Port Royal Island. The County's low elevation makes it very vulnerable to coastal flooding. Approximately 400 square miles or 2/3 of the County's land mass lies within the 100-year floodplain. The primary factors contributing to flooding are storm surges associated with hurricanes, tropical storms and northeasters. To help predict the impact of future

storms, the National Weather Services has produced the sea, lake and overland surge from hurricanes (SLOSH) model (Map 5-1). During a category 3 storm, over 70% of the County's uplands would be under water. A category 5 storm would render all but 7% of the County's land area under water.



The County's low elevation makes it very vulnerable to coastal flooding.

Even a modest increase in sea level would have a profound impact on Beaufort County. In 2007, the Intergovernmental Panel on Climate Change estimated that global sea level is likely to rise 7 to 23 inches over the next century, but also indicated that the sea could rise an additional 3 to 6 inches if polar ice sheets begin to disintegrate. Along the mid-Atlantic coast, sea level rise is generally expected to be 4 to 8 inches more than the global average rise.[1] Sea level rise and higher evaporation rates are expected to increase storm frequency and severity, worsening such environmental hazards as storm surge flooding, erosion, and saltwater infiltration into ground water.

SOILS

Beaufort County's soils also place many constraints to development. As classified by the United States Dept. of Agriculture Natural Resources Conservation Service (NRCS) Soil Survey, Beaufort County has 36 different types of soils in addition to water areas, borrow pits and beach areas. The five most common soils are Bohicket association (24%), Capers association (10%), Wando fine sand (8%), Coosaw loamy fine sand (6%), and Seabrook fine sand (5%).



Organic fall crops on St. Helena Island.

Hydric Soils: A hydric soil is a soil that is saturated with water for all or part of the growing season. Hydric soils have a low infiltration potential and high runoff potential. NRCS has classified 73% of the soils in Beaufort County as hydric (Map 5-2). The wet nature of Beaufort County's soils affects the location of suitable agricultural areas and building sites, the rate of stormwater runoff, and the functionality of septic systems.

Agriculture: The NRCS has inventoried land that can be used for the agriculture. Prime farmland is land that has the best combination of physical and chemical characteristics for producing crops. The second category, farmland of state importance, includes areas of soils that nearly meet the requirements for prime farmland and that economically produce high yields of crops when treated and managed according to acceptable farming methods. The NRCS has designated 90% the County upland acreage as "prime" or "additional farmland of state importance."

[1] Intergovernmental Panel on Climate Change, Climate Change 2007 Synthesis Report

These designations are assigned due to soil characteristics and a location that is favored by warm moist air from the nearby ocean and tidal streams. The USDA stipulates that, when the soils are well managed, they are among the most productive in the region. Some of the soils identified as important farmland require irrigation or drainage. This is due to the high water tables in the area and the abundance of sandy soils (Map 5-3).

Preservation of farmland in the County is important to the maintenance and growth of local food production, the economic well being of local farmers, and maintenance of green space. Much of the land suitable for agriculture has been committed to development. The remaining farmland is concentrated on St. Helena Island, northern Port Royal Island and north of the Whale Branch River. Efforts to preserve remaining farmland should be focused on these areas.

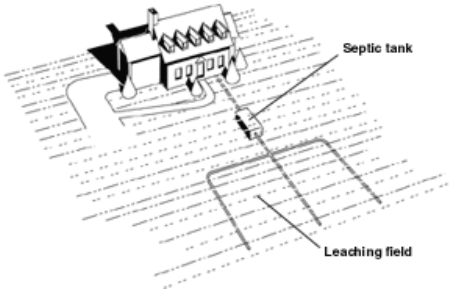


Diagram of a typical on-site sewage disposal system.

On Site Sewage Disposal Systems: Septic tank absorption fields require soils that allow effluent to be properly distributed into the soil. The NRCS classifies 74% of Beaufort County's soils to be "very limited" in their suitability to support septic systems. In fact, no soils in the County are classified as "not limited", the most ideal environment for septic systems. The State (SCDHEC) has different criteria than the NRCS for installation of septic tank absorption fields. The NRCS criteria are three foot depth from the bottom of the drain field to the water table, while SCDHEC requires a six inch depth from the bottom of the drain field to the high water table. SCDHEC makes the determination by looking at soil indicators, thereby removing the seasonal variation in water table levels as a criterion. Because many sites in South Carolina are unsuitable for conventional on-site wastewater systems, the SCDHEC Bureau of Environmental Health has developed 15 alternative standards with specific requirements designed to provide proper on-site treatment on disposal of domestic wastewater.[2]



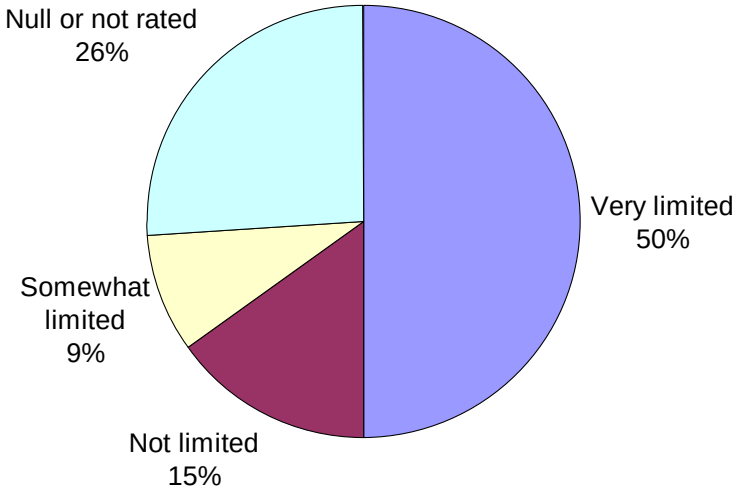
Only 24% of the County's soils do not have severe limitations to the construction of dwelling units

Construction: The fragility of the soils in the County is illustrated further by the NRCS designations of soils that are suitable for constructing dwellings without basements. Only 24% of the soils in the County are considered to be "not limited" or "somewhat limited" for the construction of a single-family house of three stories or less. The ratings for dwellings are based on the soil properties that affect excavation and construction costs and the capacity of the soil to support a load without movement. These properties include the depth of the

[2] Personal communication. Feb., 2008. Blaine Lyons, R.S., Environmental Health Director, Region 8, DHEC.

water table, ponding, flooding, subsidence, shrink-swell potential, and compressibility.

Chart 5-1: Suitability of Beaufort County Soils for Construction of Dwellings Without Basements



Source: USDA Natural Resource Conservation Service Soil Survey



The County's geographical and environmental characteristics place many limitations to development.

CONCLUSIONS

The constraints and limitations of the County's geography, climate and natural environment need to play a greater role in future land use planning, site plan review, and the location of infrastructure and County facilities. This is especially true of the County's soils, which affect everything from agriculture, drainage, to suitability of on-site septic systems.



Salt Marshes, Coastal Waters and Marine Resources

The health of Beaufort County's waterways and adjacent marshes is vital to the region's identity, culture and local economy. Shrimp, crabs, and oysters, staples of Lowcountry cuisine, depend on the marshes for all or part of their lifecycle. Recreational fishermen flock to the region for its abundant sheepshead, flounder, croaker, sea trout, whiting and cobia. Marshes also serve to stabilize the shoreline and help absorb floodwaters and storm surges. Finally, the quality of life created by the aesthetic and recreational opportunities serves the residents of the County and attracts tourists and newcomers.

The issue of water quality has been at the forefront of local government initiatives in Beaufort County over the last 20 years. In 1995, the closure of 500 additional acres of shellfish beds due to high levels of fecal coliform bacteria alarmed many County residents. This event sparked a heightened awareness of the importance of water quality to the overall health of the natural resources in the region and led to the creation of the Clean Water Task Force, which initiated the Special Area Management Plan (SAMP) for Beaufort County. The SAMP process led to many local programs, policies and ordinances that address water quality.



Shrimp, crabs, and oysters, staples of Lowcountry cuisine, depend on the marshes for all or part of their lifecycle.

ESTAURINE ENVIRONMENT

Of the County's 468,000 acres, 51% are tidally influenced, consisting of sounds, rivers, creeks, and marshes. With the exception of the Combahee, New and Coosawhatchee Rivers, there is an absence of freshwater rivers. The Beaufort, Broad, Colleton, and May Rivers, for example, are actually large saltwater arms of the ocean that ebb and flow twice daily with the tides. Beaufort County lies within the Savannah River and Combahee/Ashepoo/Broad River Basins and is further subdivided by five watersheds (Table 5-2 and Map 5-4).



Placards found on storm drains and catch basins.

Table 5-2: Basins, Watersheds, and Sub-Watersheds in Beaufort County

Basin	Watershed	Sub-Watershed
Savannah River	New River	
	May River/Calibogue Sound	May River
		Calibogue Sound
Combahee/Ashepoo/ Broad River	Coosaw River/St. Helena Sound	Coosaw River
		Morgan River
		Coastal
	Broad River/Port Royal Sound	Whale Branch West
		Broad River
		Beaufort River
		Colleton Okatie River
		Chechessee River
	Combahee River	

Source: Watershed Water Quality Assessment: Salkehatchie River Basin, SCDHEC, 2003; Beaufort County Stormwater Management Plan, 2006, Thomas & Hutton Engineering Co.

The water bodies of South Carolina have been classified by SCDHEC based on the intended uses for each waterbody. SCDHEC uses these classifications to determine permit limits for treated wastewater dischargers and other activities that may impact water quality (see Maps 5-5 and 5-6).

Table 5-3: SCDHEC Water Body Classifications in Beaufort County

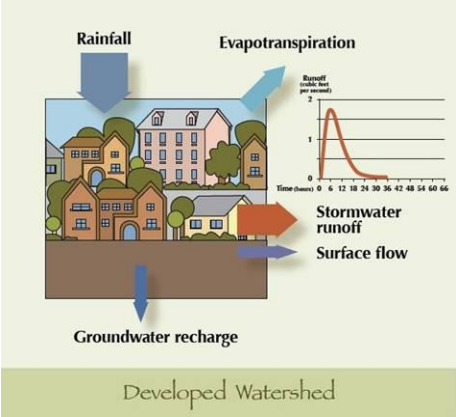
Water Classification	Description
Outstanding Resource Waters (ORW)	Waters that are an outstanding recreational or ecological resource.
Shellfish Harvesting Waters (SFH)	Tidal saltwaters protected for shellfish harvesting.
Tidal Saltwaters (SA)	Waters suitable for primary and secondary contact recreation, crabbing and fishing.
Freshwaters (FW)	In Beaufort County it applies to the upper reaches of the Combahee River.

Source: Watershed Water Quality Assessment: Salkehatchie River Basin, SCDHEC, 2003

Beaufort County experiences the largest tidal range on the Atlantic coast south of Maine. The difference between high and low tide ranges between 6 feet during neap tides and 10 feet during spring tides. The region's unusually large tides are largely responsible for the prominence of saltmarshes. Smooth cordgrass (*Spartina alternifolia*) the primary plant species in saltmarshes, thrives in places where it is both submerged in saltwater during high tides and exposed to air during low

tides. Each fall, smooth cordgrass dies and is slowly decomposed by bacteria. The resulting mixture, called detritus, is a major food source for zooplankton (including the larval stages of shellfish and fish) and for clams, mussels, oysters, shrimps, and certain fish.

THREATS TO WATER QUALITY



Source: Tidal Creek Habitats: Sentinels of Coastal Health, NOAA.

The greatest threats to Beaufort County's estuarine environment come from non-point source pollution associated with stormwater runoff, drainage, seepage and septic system failure. Because non-point source pollution originates from many different sources, it is difficult to control. Increased flows and pollutants from impervious surfaces, resulting from coastal development (rooftops, roads, parking lots), are a primary factor in degrading water quality. According to the National Oceanic and Atmospheric Administration (NOAA) when the amount of impervious cover without proper treatment in a tidal creek watershed exceeds 10 to 20 %, stormwater runoff greatly increases, resulting in increased concentrations and loadings of chemicals and pathogens that impair water quality and marine life. [3] In vegetated environments, a greater degree of stormwater either infiltrates into the soil or evaporates into the air. Impervious surfaces cause more of the stormwater to surge directly into tidal creeks. There are three forms of pollution that result from stormwater runoff:

Animal Pathogens: The presence of fecal coliform bacteria has been the most widespread and well-studied water quality issue in Beaufort County. Fecal coliform bacteria originate from the digestive tracts of waterfowl and mammals, including humans. Major sources of fecal coliform bacteria include malfunctioning septic systems and pet waste. When levels of fecal coliform bacteria exceed specified standards[4] SC DHEC closes oyster beds in the area. Oysters are such highly efficient filter feeders that they filter even very small bacteria from the water. The presence of elevated fecal coliform bacteria levels may indicate that other disease-causing bacteria such as diphtheria or cholera might also be present.

South Carolina's Department of Health and Environmental Control (DHEC) classifies water bodies and salt marshes based on their intended use for the harvesting of shellfish (SFH). Map 5-7 provides an indication of where animal pathogens are compromising water quality.

[3] Tidal Creek Habitats: Sentinels of Coastal Health, NOAA

[4] SCDHEC Water Classifications and Standards Fecal Coliform Standards [Section G 11(e)], "Not to exceed a most probable number (MPN) fecal coliform geometric mean of 14/100 ml; nor shall more than 10% of the samples exceed and MPN of 43/100 ml.

Chemical Contaminants: Chemical contaminants found in tidal creeks include substances that may be harmful to marine life as well as may cause risks to humans through consumption of seafood. Chemical contaminants include:

- Pesticides from agriculture and residential and commercial landscaping;
- Nutrients, such as phosphorus and nitrogen, resulting from fertilizer applications on farms, lawns and landscaping; and
- Polycyclic aromatic hydrocarbons (PAHs) and heavy metals derived from car exhaust, brake dust and tire wear on roads and parking lots.

Changes in Salinity Levels: Large amounts of stormwater runoff into the upper sections of tidal creeks can cause rapid drops in salinity, which kills some species of small marine worms, crustaceans and spawning fish. These small marine animals are important food for shrimp and larval crabs. A decrease in the abundance of these animals could therefore have a negative impact on larger animals farther up the food chain.

EXISTING EFFORTS TO PRESERVE WATER QUALITY

There are two general approaches to protecting salt marshes and coastal waters through the regulatory process. They consist of limiting development in and around salt marshes and coastal waters, and controlling the quantity and quality of upland stormwater runoff.

Limiting development in and around salt marshes and coastal waters: The Office of Ocean and Coastal Resource Management (OCRM) provides protection to most of southern Beaufort County's salt marshes and coastal waters through its ownership of these areas (fee simple title) on behalf of the state. In those rare cases of King's grant or state grant lands where property owners hold title to salt marshes, development activity is strictly regulated and limited to water dependent structures, such as docks, marinas, and boat ramps. The OCRM sets a demarcation between upland and state controlled marshland or "critical areas" called the critical line.



Preserving land from development around saltmarshes is one method of protecting water quality.

- Critical Line Buffers: Beaufort County and its municipalities limit development adjacent to salt marshes and coastal waters by requiring development to be set back and buffered from the critical line. The purpose of this requirement is ultimately to improve water quality by capturing sediments and pollution from stormwater runoff. Requirements for critical line buffers vary between Beaufort County and its municipalities. Providing "baseline" standards for critical line buffers was a common

recommendation in both the Northern and Southern Beaufort County Regional Plans.

- Purchasing Development Rights: Another effective water quality measure practiced in Beaufort County is limiting development in sensitive headwater areas through voluntary conservation easements (as with properties within the ACE Basin), purchase of development rights, and fee simple land purchases.



Small Coastal Island in the Harbor River.

- Limiting Development on Small Coastal Islands: Beaufort County has hundreds of small islands with no bridge access. Almost all of these islands are surrounded by expanses of salt marsh and occasionally bordered by tidal creeks. While historically the lack of bridge access has protected these islands from development, there has been a growing concern that, as waterfront and marshfront property becomes scarcer, there will be a greater demand to develop small coastal islands. Providing access to these islands requires bridges and docks, both of which necessitate placing structures in salt marshes and coastal waters and creating potential threats to the health of the marsh and water quality. The State adopted regulations in 2006 that limit the construction of bridges to small marsh islands. The regulations prohibit the construction of bridges to islands smaller than two acres. For larger islands, the length of bridges is restricted based on the size of the island. Beaufort County further limits the development of small marsh islands through its T1 Natural Preserve zoning district which restricts residential density to 1 dwelling unit per 10 acres.

Stormwater Management: The protection of Beaufort County's water bodies was advanced in the mid-1990s with the creation of the Clean Water Task Force. Improvement of stormwater management and planning to improve water quality was one of the primary focuses of the task force and led to the creation of Beaufort County's Stormwater Best Management Practices (BMP) Manual and the Stormwater Utility.



Landscaped stormwater retention basin.

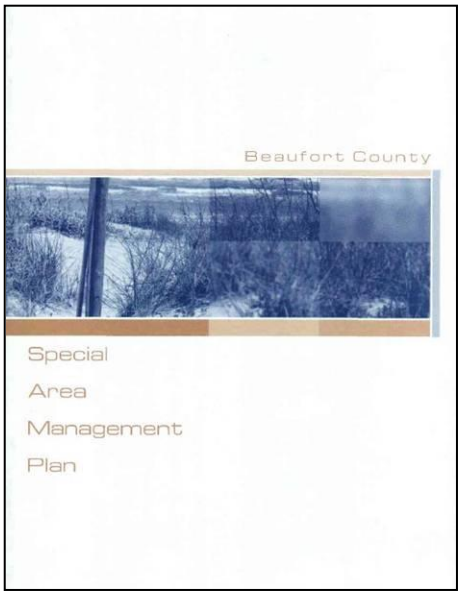
- Managing Stormwater Quantity: Traditionally, stormwater management has been dealt with in terms of managing the quantity of runoff from a site in order to avoid flooding downstream. OCRM's stormwater regulations reflect this traditional approach, requiring stormwater to be detained at pre-development levels in a 10-year storm event. OCRM's requirements also control sedimentation, but do not address specific pollutants that ultimately affect water quality. Beaufort County requires stormwater systems to be designed for 2, 10, 25, 50, and 100 year storm events, thus further regulating the quantity of runoff.
- Managing Stormwater Quality: In 1998, Beaufort County adopted the Beaufort County Manual for Stormwater Best Management

Practices (BMP) and has periodically updated the manual. The current BMP Manual has specific attenuation standards for ~~two~~ three types of indicator pollutants; phosphorus, nitrogen and fecal coliform bacteria. The manual also has stormwater volume runoff control regulations. Recognizing the negative impacts of impervious surfaces on water quality, the BMP Manual requires that on-site stormwater attenuation meet the level of 10% or less impervious development. This level is even lower (5%) for fecal coliform bacteria. In 2007, the Town of Bluffton adopted its own stormwater ordinance which placed greater emphasis on Low Impact Development (LID) stormwater approaches and long term monitoring of stormwater systems to ensure that water quality is being protected. Beaufort County has revised its Manual to be more consistent with Bluffton's requirements, and is currently considering revisions based on Municipal Separate Storm Sewer System (MS4) requirements.

- Stormwater Utility: The Stormwater Utility was established in 2001 as a countywide program primarily aimed at maintaining and enhancing regional stormwater management systems and retrofitting older stormwater systems. The Stormwater Utility was originally recommended by the Clean Water Task Force which recognized that "any gains in better land use planning and better BMP design are likely to be overshadowed by the poor performance of existing systems that are not maintained properly."[5] The Utility's activities are guided by the Beaufort County Stormwater Management Plan which was completed in 2006. The Utility partners with the City of Beaufort and the Towns of Hilton Head Island, Bluffton, and Port Royal through inter local agreements. Drainage efforts within these municipalities are supported through fees collected by the County and redistributed to the municipalities. A small percentage of revenues is retained by the County to cover the cost of billing and collections. Oversight of the Stormwater Utility is provided by the Stormwater Management Utility Board
- MS4: In 2014, Beaufort County, the Town of Hilton Head Island and the Town of Bluffton were designated as a Municipal Separate Storm Sewer System (MS4). This designation requires a permit from the SC DHEC. The permit requires a program to address six minimum control measures (MCM) to address water quality. They are:
  - Public Education;

[5] A Blueprint for Clean Water: Strategies to Protect and Restore Beaufort County's Waterways, Clean Water Task Force, 1997.

- Public Outreach and Involvement;
- Illicit Discharge and Involvement;
- Construction Runoff;
- Post-Construction Best Management Practices; and
- Municipal Facilities Pollution Prevention



The Beaufort Special Area Management Plan (SAMP) led to many local programs, policies, and ordinances that address water quality.

Beaufort Special Area Management Plan (SAMP): Responding to the closure of 500 acres of shellfish beds in 1995, the SAMP was conducted to address stormwater and other sources of water pollution and to identify effective actions to prevent further degradation of the County's waterways. The SAMP consisted of 10 work elements that addressed stormwater management, wastewater management, water quality monitoring, boating management and education. Below are some of the highlights of the SAMP:

- Countywide Stormwater Utility: (see above)
- Management Plans for Broad Creek and the Okatie River: These plans emphasize the need for stormwater BMPs, riparian setbacks and buffers, reduction of on-site septic systems, boating management, and other methods to protect water quality.
- River Quality Overlay District: This District would address such concerns as setbacks, buffers and appropriate impervious surface cover limits to minimize impacts of development in sensitive headwater areas.
- Develop a Comprehensive On-Site Disposal System (OSDS) Program: The SAMP recognized that State requirements for on-site septic systems do not account for the region's high water table and do not control density. These two factors heighten the risk of degrading water quality. The SAMP calls for the adoption of more stringent septic system standards and for regular programs of inspection and maintenance.
- Coordinate Water Quality Monitoring: There is a considerable amount of monitoring of water quality in Beaufort County at the federal, state and local levels, but no central coordination of these efforts or dissemination of the information being gathered. Coordinating monitoring efforts would provide more efficient and effective use of the collected data and would help to identify specific pollution sources and track the overall health of the County's waterways.
- Conduct Educational Campaigns: Finally, the SAMP calls for education and public involvement in furthering water quality goals.

CONCLUSIONS



Great egret stalking a coastal marsh.

Over the last 15 years, Beaufort County has taken great strides to protect its saltmarshes, coastal waters, and marine resources. As the County continues to develop, these policies and regulations will need to be continually reevaluated and adjusted to ensure that the County's water quality goals are being met. Information is key to determining the effectiveness of existing measures to protect water quality. Continued support of the water quality monitoring lab at USCB is key to assuring that information is collected and analyzed and shared to benefit the region and inform new advances in water quality protection.

Another concern is that, in spite of the many achievements in environmental protection, developments that predate newer regulations continue to contribute to water quality degradation. Also, there is still an uneven playing field between Beaufort County and some of the municipalities and neighboring counties that can result in water quality degradation. Therefore, the County needs to continually work to with its neighbors on cooperative natural resource planning, achieving baseline environmental standards, and retrofitting stormwater management for older developments.



Trees, Forests and Habitats

Beaufort County lies almost entirely within the coastal zone of South Carolina. Upland plant communities of the coastal zone include pine woodland, bottomland hardwoods, upland oak-hickory forest, southern mixed hardwood forest, marl forest and calcareous cliff, cypress-tupelo swamps and maritime forests. Maritime forests, which support Beaufort County's signature mature live oaks and sabal palmettos, typically occur on barrier islands immediately inland of dune systems and on sand ridges that mark former shorelines[6].

The threats to Beaufort County's forest communities and native habitat types are related primarily to the rapid pace of development. Comparing the 1988 Land Use/Land Cover data from the US Geological Survey to 2006 aerial photography provides a snapshot of the impact of growth on Beaufort County's forested areas (Table 5-4). During this period of 18 years, Beaufort County has lost over 18,000 forested acres to development.



Specimen live oaks along Bay Street in Beaufort.

Table 5-4: Comparison of Plant Communities – 1988 and 2006

Plant Community	1988 Acreage	2006 Acreage	% Consumed
Deciduous Upland Forest	2,610	2,607	0.1
Evergreen Upland Forest	44,448	39,035	12.2
Forested Wetland	34,273	32,386	5.5
Herbaceous Rangeland	885	734	17.1
Mixed Upland Forest	32,502	28,136	13.5
Shrub/Brush Rangeland	1,841	1,671	9.2
Upland Planted Pine	23,925	17,891	25.2
TOTAL	**140,483**	**122,460**	**12.8**

Source: US Geological Survey, Beaufort County Planning Department

[6] 2005 Comprehensive Wildlife Conservation Strategy, SCDNR

TREE PROTECTION

Beaufort County residents have long recognized the value of protecting significant trees both for aesthetic and practical reasons. Trees provide numerous public benefits including the reduction of stormwater runoff, buffering sounds and views from roads, reducing air conditioning costs in shaded buildings, and providing wildlife habitat. Beaufort County requires the preservation of specimen trees and encourages preservation of all trees greater than 8 inches diameter breast height (dbh). Removed specimen trees must be mitigated by planting a similar species with the quantity amounting to the total caliper inches of the tree removed. Other removed trees must be replaced in kind. Where a site does not have sufficient room for mitigated trees, a fee-in-lieu payment must be made to the forestation fund.

Each local jurisdiction classifies certain trees as specimen or significant trees based on the species and size of the tree. During site plan review, emphasis is placed on designing the site around specimen trees. Where trees cannot be saved, mitigation is required by planting back the total caliper inches that were removed or contributing to a reforestation fund. Each local ordinance also requires measures to protect trees during construction.

Beaufort County's Definition of Specimen Trees

1. Dogwood, redbud, and southern magnolia greater than 4 inches dbh.
2. American holly, bald cypress, beech, black oak, black tupelo, cedar, hickory, live oak, palmetto, pecan, red maple, southern red oak, sycamore, or walnut with a dbh of greater than 16 inches.
3. All other non invasive trees with a dbh of 24 inches or greater.

Source: Beaufort County ~~Zoning and Development Standards Ordinance~~

PROTECTION OF HABITATS AND FOREST COMMUNITIES

In addition to saving individual trees, only Hilton Head Island and Beaufort County require the preservation of plant communities and forest types. Beaufort County requires a natural resources survey when property is developed. A developer must provide a survey of the site, which delineates the different forest types such as maritime forests and mixed upland forest and other natural areas such as freshwater wetlands. The amount of each forest type that must be preserved is determined by the value of the resource and the intensity of the zoning district. Hilton Head Island requires much greater protection of native understory vegetation by restricting under-brushing of buffers and other natural areas while requiring the replanting of natural plant species in disturbed areas.

ENDANGERED AND THREATENED SPECIES

According to the US Fish and Wildlife Service, there are 14 species of plants and animals that are listed as either endangered or threatened in Beaufort County. An additional 17 species are listed as "species of special concern." Currently, only endangered and threatened species are protected by the Federal Endangered Species Act and reinforced by County standards.



Wood Storks are classified as federally endangered species.

Table 5-5: Federally Endangered and Threatened Species in Beaufort County

Species	Status
West Indian manatee	Endangered
Bald eagle	Federally Protected
Wood stork	Endangered
Red-cockaded woodpecker	Endangered
Piping plover	Threatened
Kemp's ridley sea turtle	Endangered
Leatherback sea turtle	Endangered
Loggerhead sea turtle	Threatened
Green sea turtle	Threatened
Flatwoods salamander	Threatened
Shortnose sturgeon	Endangered
Pondberry	Endangered
Canby's dropwort	Endangered
American chaffseed	Endangered

Source: U.S. Fish and Wildlife Service

CONCLUSIONS

While Beaufort County has well-developed tree standards, some minor adjustments could provide further tree protection while lessening confusion and conflicts between the County and property owners. For example, existing standards to protect "specimen" trees make little distinction between a 24" mature water oak and a 50" caliper live oak. Revising these definitions to make this distinction could provide for greater protections for larger trees, while providing more flexibility for selective removal of hazardous trees such as water oaks and laurel oaks. Requiring a tree management plan could assist large planned unit developments and subdivisions in carrying out routine tree maintenance while emphasizing the overall sustainability of forest communities in common areas.

While Beaufort County and the Town of Hilton Head Island both provide for some protection of forested areas, these plant communities are often discovered only after a survey of the site is performed. What is lacking is a detailed, area wide database of valuable forest types to assist in a more proactive planning approach to resource preservation. Once certain forest types are gone, it's very difficult to replace them. Many important plant species unique to the coastal south are either slow growing or require a unique set of circumstances to be propagated. Also, Beaufort County and its municipalities should explore the provision of local requirements to protect species of special concern and provide for more "wildlife-friendly" development.



Beaches and Dunes

Beaufort County's beaches are the first line of defense against the powerful forces of wind, waves and currents. A healthy beach and dune system provides a natural storm barrier protecting life and property for those living along the coast. They also provide the basis of much of the region's successful tourism industry and are a factor in the region's attractiveness as a place in which to relocate.

EXISTING CONDITIONS

Beaufort County has approximately 39 linear miles of beaches. Like most of the Atlantic and Gulf coasts, the coastal edge of Beaufort County is made up of a series of barrier islands (Table 5-6), which take the brunt of most offshore storms, thereby protecting the County's inland estuaries and uplands. Barrier islands are composed of dune and beach ridge sands formed by the interaction of wind, waves and ocean currents, and are therefore very dynamic environments. The shapes of these islands change slowly but constantly due to weathering. Evidence of this is seen in the erosion of certain beaches such as Hunting Island and the accretion (gaining sand) on other beaches such as portions of Fripp and Harbor Islands.



Beach erosion on Hunting Island.

Dunes offer the first line of protection from the ocean. Without a healthy dune system, ocean waves rush upland, eroding high ground. Even low dunes (2 to 3 feet tall) can help to avoid this erosion.[7] Dunes are formed when sand from offshore sandbars is washed ashore, picked up and carried by the wind, and deposited on the downwind side of natural debris that accumulates along the shore. Eventually plants such as sea oats, salt meadow cordgrass and marsh elder take root, further stabilizing the dune. Primary dunes are the first row of dunes nearest the ocean. They typically are built up during calm weather and are washed back to sea during storms. Secondary dunes, characterized by the growth of heavier shrubs and located behind the primary dunes, do not as readily wash away.[8] Beaufort County's dunes are relatively small

[7] How to Build a Dune, SC DHEC/OCRM
[8] Preface to the South Carolina Beachfront Management Act, 1988

due to the lack of strong, direct winds. Hunting Island and Pritchard's Island lack healthy dune systems and are characterized by maritime forests giving way to the forces of the ocean resulting in bleached, dead trees littering the beaches.

Table 5-6: Beaufort County's Barrier Islands

Barrier Island	Miles of Beach	Comments
Harbor I.	1.5	Beaches generally accreting
Hunting I.	4.2	Very erosional ranging from -7 ft. to -15 ft. per year. Latest renourishment in 2006.
Fripp I.	2.9	Beaches almost continuously armored with revetments. Beaches generally stable.
Pritchards I.	2.4	No bridge access. Moderate to severe erosion. Owned and managed by the University of South Carolina.
Capers I.	2.5	No bridge access. Minimal upland.
St. Phillips I.	1.3	No bridge access. Private residence.
Bay Point I.	2.2	No bridge access. Privately owned.
Hilton Head I.	19.0	Slightly accreting at south and north ends. Greatest erosion between Coligney Circle and Folly Beach.
Daufuskie I.	3.2	No bridge access. Long term erosion rates from -4 ft. to -5 ft. per year, but going as high as -10 to -11 ft. per year. Last renourishment in 1998.

Source: SC Annual State of the Beaches Report 2008, OCRM



Barrier Islands are a very dynamic environment.

THREATS

The greatest threats to Beaufort County's beaches come from the challenges inherent in building permanent structures in a shifting natural environment. Concern about sea level rise only compounds this issue. In a natural barrier island environment, beach erosion would simply cause waves to break higher up shore. Over time, sand would be carried behind the dune system and the beach would "retreat" inland. Man-made structures interrupt this natural process, create concerns about property loss and may actually accelerate erosion.

Another potential threat to the health of Beaufort County's beaches is beach vitex, and invasive plant that has been spreading among South Carolina's dunes since the mid 1980s. Originally introduced in North Carolina, it has spread as far south as Folly Beach, Charleston County. Beach vitex crowds out native dune vegetation and is not effective in stabilizing dunes.

REGULATORY FRAMEWORK

Development along Beaufort County's beaches is regulated both by state and local governments. The Hilton Head Island beaches are entirely within the Town's jurisdiction. Beaufort County has jurisdiction over the remaining barrier islands with significant private development only occurring on Daufuskie, Harbor, and Fripp Islands.



A portion of Hunting Island's beaches were renourished in 2006 and groins were installed.

State Regulations: The South Carolina Coastal Zone Management Act (CZMA) is the primary legislation that addresses the protection and enhancement of the state's beaches. The OCRM is the state agency charged with enforcement of this legislation. The CZMA identifies three approaches to managing beaches rejecting the first and adopting the second and third as policy:

- Providing hard erosion control devices such as bulkheads and groins;
- Renourishing the beach with sand; or
- Requiring development to be adequately set back from the beach.

The OCRM regulates beachfront setbacks by first identifying a "baseline" defined as the crest of the primary oceanfront sand dune. Setbacks from the baseline are set at 40 times the average annual erosion rate or no less than 20 feet. The OCRM also prohibits the construction of erosion control devices, such as sea-walls and revetments seaward of the setback line. Groins perpendicular to the shoreline are exempted.

Local Regulations: Hilton Head Island requires additional restrictions on development of the dunes and requires a minimum 20-foot buffer from the baseline. Beaufort County requires development to be setback at least 50 feet, and septic fields and drainage fields to be setback at least 100 feet from the crest of the primary dunes and protects dunes through its resource protection standards.



Providing public access to beaches is vital to both the quality of life for the County's residents and to the economic health of the region's tourism industry.

BEACH RENOURISHMENT

A significant amount of state, local, and private funds have been spent to import sand onto the County's beaches. The Town of Hilton Head Island uses its accommodations tax to fund beach renourishment. In 2007, Hilton Head underwent a $19 million beach renourishment project which involved moving 2.7 million cubic yards of sand to the Island's beaches. Additional renourishment projects occurred in 2013, 2014, and 2016 that focused on the beaches in the vicinity of Port Royal Plantation, Sea Pines and Forest Beach areas. A state and federally funded renourishment of a portion of Hunting Island's beaches was completed in 2006. A privately funded renourishment of Daufuskie's beaches occurred in 1998 adding 1.4 million cubic yards of sand.

PUBLIC ACCESS

Between mean high tide and the water, beaches are public lands that are under the jurisdiction of the OCRM. Providing adequate public access to this amenity is vital to both the quality of life for the County's residents and to the economic health of the region's tourism industry. Beachfront property tends to be intensely developed and expensive to acquire. These two factors create a challenge to the public sector to provide adequate access and to provide sufficient land for parking and other supportive facilities.

In southern Beaufort County, Hilton Head Island has nine public access points with approximately 1,400 parking spaces along its 19 miles of beaches. Daufuskie Island has approximately 3 ½ miles of beach with only two public access points. In northern Beaufort County, public beach access is essentially limited to Hunting Island. Harbor and Fripp Islands are gated and largely restricted to residents and guests. Pritchard's, Caper's, St. Phillips, and Bay Point are accessible only by boat. Hunting Island State Park receives approximately 1 million visitors annually. As demand for the park is increasing, erosion has had a negative impact on what the park has to offer the public. During high tide, only small portions of the 4.2 mile beach remain accessible. The rapid rate of erosion on the southern portion of the island has been especially severe, resulting in the loss of 10 cabins that were available for rent by the State Park. Many privately leased structures were lost as well. Since 1935, when Hunting Island State Park was established there have been 8 beach nourishment projects. The most recent, in 2007 included the construction of 6 groins in the most popular area of the beach. The beach is currently in need of renourishment just to maintain the area of the beach that was stablilzed in 2007.



Coastal development threatens the long-term survival of loggerhead sea turtles.

Beaufort County and the Town of Hilton Head Island have both adopted policies that give local government the option to purchase beach access when land is developed or redeveloped. Beaufort County requires public access for developments with more than 1,000 feet of beach frontage.

SEA TURTLE PROTECTION

Like much of the southeast coast, Beaufort County's beaches serve as nesting habitat for endangered and threatened sea turtles. Coastal development threatens the long-term survival of sea turtles because artificial lighting can deter females from nesting and disorient hatchlings, resulting in eventual death from cars, predators or desiccation. In 2001, Beaufort County adopted an ordinance regulating lighting along beaches to restrict direct light visible from beaches and dunes.

CONCLUSIONS

Beaufort County should recognize that its beaches are a public resource that needs to be protected, stabilized, and made accessible to the public. Greater emphasis should be placed on promoting a healthy dune system by encouraging property owners to enhance and reestablish dune systems with native vegetation. In addition, the acquisition of new public access areas and the enhancement of existing public access are vital given anticipated population growth and growth in tourism.



Freshwater Wetlands

Freshwater wetlands serve as natural stormwater drainage systems, absorbing floodwaters and filtering out pollutants while providing a habitat for many plants and animals. Like other natural habitats, freshwater wetlands are vulnerable to the County's rapid pace of growth. Another threat, however, is the uncertain regulatory framework for freshwater wetland protection. In 2001, the US Supreme Court ruled that the US Army Corps of Engineers no longer had jurisdiction over isolated freshwater wetlands.[9] This left isolated freshwater wetlands unprotected in much of the United States. In the mean time, the South Carolina State Legislature adopted legislation that provides some oversight of non-jurisdicitional wetlands in coastal counties. However, the role of local governments is vital to protecting isolated wetlands, especially in a rapid growth environment.

EXISTING CONDITIONS

According to the National Wetlands Inventory (NWI), there are 34,440 acres of freshwater wetlands in Beaufort County, making up approximately 15% of the total land area. The locations of these wetlands are shown on Map 5-8. While this is not an exhaustive inventory, it provides a general picture of the quantity and location of freshwater wetlands.

REGULATORY FRAMEWORK

As stated above, until 2001 protection of freshwater wetlands was primarily addressed by the Corps of Engineers. Today, however, protection of isolated freshwater wetlands is the responsibility of state and local governments.

Federal Wetlands Regulations: Section 404 of the Clean Water Act regulates the discharge of dredged or fill material into waterways and

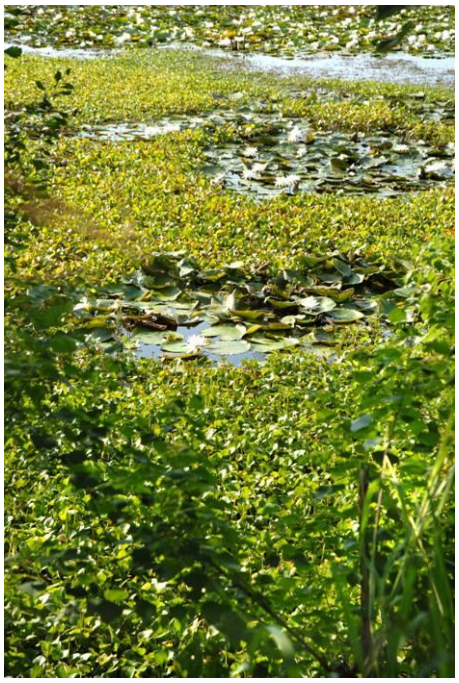
[9] Solid Waste Agency of Northern Cook County *v.* United States Army Corps of Engineers, January 9, 2001



Manmade wetland attracting a great egret.

wetlands. Before development that impacts wetlands can occur, an applicant must demonstrate through a permit process that they have taken steps to avoid wetland impacts; that potential impacts on wetlands have been minimized; and that compensation is provided for any remaining unavoidable impacts. The U.S. Army Corps of Engineers administers and enforces federal wetland regulations. Since 2001 the Corps only regulates wetlands that adjoin navigable waters, leaving the protection of isolated wetlands up to state and local governments.

State Wetlands Legislation: Since 2001, the South Carolina Legislature has proposed several bills that address the protection of isolated wetlands with no success. Currently, non-jurisdictional wetlands only have State oversight in the eight counties that comprise the Coastal Zone. In these areas, the OCRM must issue a coastal zone consistency determination before any activity that impacts non-jurisdictional wetlands may proceed.



The role of local government is vital to the protection of freshwater wetlands.

Local Wetlands Ordinances: With the current condition of federal and state wetlands protection, the role of local governments is vital to protecting isolated wetlands. Beaufort County's wetland protection regulations allow fill for nontidal wetlands less than one acre in size and require mitigation. Minor fill is also allowed in these wetlands in order to reshape the wetland boundary to provide a reasonable building site, providing that less than 20% or 1 acres (the lesser of the two) is disturbed. Setbacks ranging from 20 to 50 feet are required depending on the type of development. These regulations also give special protection to bird rookeries and high quality wetlands.

The Town of Port Royal prohibits development in nontidal wetlands except where structures are necessary to a permitted use and cannot be located outside the wetland. In these cases, the structures are required to be located on pilings. The Town has setbacks from wetlands similar to the County's requirements.

The Town of Hilton Head Island requires developers to attempt to preserve wetlands in their site design. If wetland alteration is proposed, it can only be permitted if the wetland is of low or moderate value, based on a wetland evaluation sheet that equates environmental, social and landscape value of the wetland with a numerical score. Minimization of the alteration in the site design must then be shown, and mitigation of the altered wetland is required. Mitigation must be done on-site, in-kind and acre-for-acre. Mitigated wetlands and their required buffers must be permanently protected through restrictive covenants. As a last resort, a fee-in-lieu-of program is available, but only when all other options have been exhausted.

The City of Beaufort, Town of Yemassee, and Town of Bluffton currently

have no comprehensive local wetland protection requirements. The establishment of baseline freshwater wetlands protection standards was a common recommendation in the Northern and Southern Beaufort County Regional Plans.

CONCLUSIONS

The role of local governments is vital to protect isolated freshwater wetlands. Beaufort County, while strengthening its own regulations, needs to actively work with its municipalities and neighboring counties to enact suitable wetland protection standards. The region also needs to work cooperatively to lobby the state to enact legislation to protect isolated freshwater wetlands while at the same time allowing local governments to enact more stringent standards.



Groundwater Resources

Beaufort County lies above the northernmost reaches of the Floridian Aquifer, which historically has supplied the region with a reliable source of water. In 1998, SCDHEC produced a map of the Floridian Aquifer charting the areas of significant groundwater recharge and areas with intense groundwater withdrawal – cones of depression (Map 5-9).

AQUIFER RECHARGE AREAS

Aquifer recharge occurs as a direct result of rainfall entering the aquifer where the overlying confining unit is thin or absent. Because the Floridian Aquifer is generally unconfined throughout Beaufort County, most of the upland areas of the County contribute some ground-water recharge to the underlying aquifers. Locally significant recharge occurs on the northern part of Port Royal Island, the northern part of Lady's Island, St. Helena Island, and on the barrier islands. The northern part of Hilton Head Island is possibly an area of recharge, but the effects of this are insignificant due to the dominating regional influence of the cone of depression centered in Savannah.

CONES OF DEPRESSION

Hydraulic cones of depression are areas in which intense local groundwater withdrawal (pumping) causes the surface of the ground water table to form a conical depression. Locally, there are two areas which indicate cones of depression. One is located on Hilton Head Island and the other is located west of Dale, just north of the Whale Branch River. Savannah's regional cone of depression continues to dominate the shifts in the local potentiometric groundwater surface.

SOURCES OF GROUNDWATER CONTAMINATION

Contamination of groundwater is caused both by pollution infiltrating soils and saltwater intrusion. Due to the unconfined nature of the Floridan Aquifer, the risk of groundwater contamination is very high in Beaufort County. Since the late 1970's, concerns have been raised over the issue of saltwater intrusion into the aquifer. As a result, since the

1980's, over $40 million has been spent to provide alternative sources of drinking water primarily from the Savannah River. As part of the "Sound Science Initiative", Georgia contracted with the South Carolina DHEC to provide monitoring wells, which revealed that there are three separate points of saltwater intrusion into the aquifer in the county; one underlying northern Hilton Head Island, one underlying the Pinckney Island National Wildlife Refuge, and one under the Moss Creek area. These infiltration points are threatening the water quality for those residents in areas like Sawmill Creek, and Pritchardville that are on private wells and for developments still using groundwater for irrigation.



Pervious paving infiltrates stormwater back into the soil thereby recharging groundwater.

CONCLUSIONS

Irrigation for golf courses and other landscaped areas by far accounts for the greatest use for groundwater in Beaufort County. Therefore, reducing or eliminating the use of groundwater for irrigation would help to preserve the groundwater for the remaining residents who still rely on private wells. A logical source of available water for irrigation is the land disposal of treated wastewater. Another strategy aimed at recharging groundwater is utilizing more low impact development (LID) stormwater management techniques that utilize swales and pervious areas to infiltrate stormwater back into the soil and reuse by storage cisterns.



Open Space

Protecting open space is a common thread among Beaufort County's natural resource goals and recommendations. Conservation easements and fee-simple purchases of land to limit or prevent future development is a powerful tool in protecting valuable habitat types, limiting development in environmentally sensitive areas, providing public access to natural amenities, and facilitating regional stormwater management.

EXISTING CONDITIONS

Currently 30,572 acres of land in Beaufort County are preserved through conservation easements and government and/or non-profit ownership. This makes up approximately 17% of the total land area. Map 5-10 shows the locations of these preserved lands. As undeveloped land becomes scarcer, the cost of acquiring land for open space increases. This fact has made the acquisition of open space for the purpose of preservation a top priority in Beaufort County.



The Alan Ulmer property, a conservation easement purchased through the Rural and Critical Lands Preservation Program.

LOCAL EFFORTS TO PRESERVE OPEN SPACE

There are essentially three methods used to preserve open space. The first is the fee simple purchase of a property by a governmental, non-profit or private entity for the purpose of preservation. The second method is through a conservation easement or purchase of development rights which allows the property owner to continue to own their property but limits future development through covenants. The third method is requiring by ordinance the set aside of a certain percentage of open space when land is developed. The most effective (and most expensive) way for local governments to control the use of land is to own it. Both Beaufort County and the Town of Hilton Head Island have programs that target purchasing properties to protect natural areas and to take land out of active development.

Beaufort County's Rural and Critical Lands Preservation Program: This program, established by ordinance in 1999, is aimed at preserving open space either by fee simple land purchases or the purchase of conservation easements on private property. Four successful bond

referendums (2000, 2006, 2012, and 2014) have provided the program with $135 million in County funding. The County contracts with the Beaufort County Open Land Trust to manage the program, negotiate with property owners, and assist in the purchase of properties. The Rural and Critical Lands Preservation Board, representing a cross-section of Beaufort County, prioritizes properties and makes recommendations to County Council. In 2014, based on citizen input gathered at a number of public meetings, the Open Land Trust assisted the County in developing a "Greenprint" maps that defined seven focus areas to target preservation efforts.



Fish Haul Beach, preserved by the Town of Hilton Head Island.

Hilton Head Island's Land Acquisition Program: Hilton Head Island has its own land acquisition program, funded primarily by a real estate transfer fee (RETF) that generates over $2 million annually for the Town. Hilton Head Island's integrated approach to land acquisition and its funding is also unique. All of the potential funding sources, RETF, Beach Preservation Fees, Stormwater Utility Fees, general funds and grants feed into a matrix that takes into account all the activities that require land acquisition such as open space, parks, beach access, public facilities and municipal stormwater projects. This integrated approach invites inter-disciplinary solutions to Town needs and maximizes the potential of each of the funding sources.

Private/Non-Profit Sector Resource Protection Efforts: The protection of open space in Beaufort County is not in the exclusive domain of the public sector. The Beaufort County Open Land Trust, formed in 1971, is a non-profit organization dedicated to preserving vistas and natural areas through the purchase of land and conservation easements. In addition, the Sea Pines Forest Preserve, and open space on Spring Island and in Palmetto Bluff are three local examples of private sector efforts to preserve open space.

CONCLUSIONS

While Beaufort County has been very aggressive in securing open space, many of the preserved lands are discrete and unconnected. As growth continues, these natural areas will become more isolated and will not effectively be able to support healthy wildlife communities. In addition, as land becomes scarcer, it is more important to prioritize areas with outstanding natural resources in order to target future acquisitions of open space, and to target the preservation of greenways and wildlife corridors to connect natural areas.

Open space can serve many different needs, including the preservation of natural areas, provision of public access to water, recreation needs, relieving traffic congestion, and regional stormwater projects. There are also several methods and funding mechanisms that can be used to

secure open space, including the Rural and Critical Lands Program, the Stormwater Utility fund, municipal programs such as Hilton Head Islands Land Acquisition Program, and open space preserved through ordinance requirements and development agreements. As open space becomes scarcer and more expensive to acquire, it may become necessary to look more creatively at several different open space acquisition methods to achieve multiple objectives.



Sea Level Rise

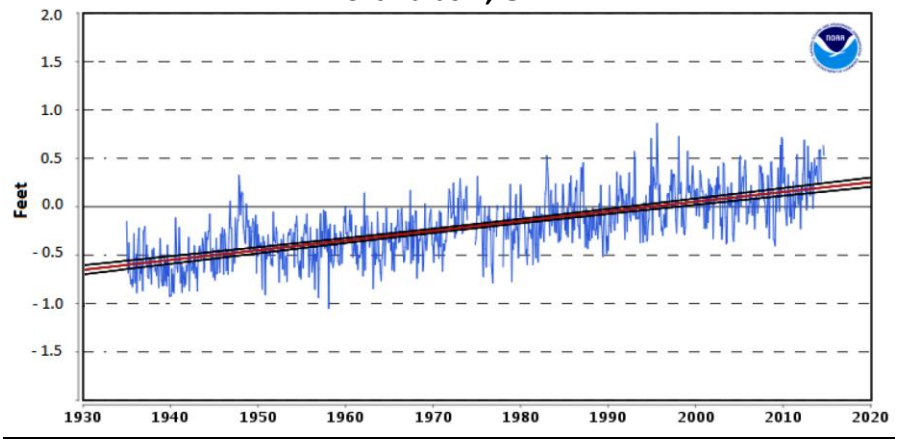
One of the most significant challenges facing low-lying coastal regions, such as Beaufort County is the threat of climate change and resultant sea level rise. Even slight changes in sea levels have the potential to significantly affect private property, public infrastructure, and the natural environment. Mean sea level has increased approximately 1 foot since 1935 and is projected to rise between 1 and 7 feet before the end of this century. Given the potential consequences, it is imperative that the County track changes and projections, closely monitor local conditions, and adopt adaptation strategies to make the region more resilient to the effects of climate change.

HISTORIC SEA LEVEL TRENDS AND CURRENT CONDITIONS

Oceans naturally rise and fall with winds, storms, tides, and seasons, therefore, all measures of sea level need to be averaged over a long time period to arrive at a clear trend. Tidal gauges and satellites are two instruments that scientists use to measure changes in sea level. The nearest tidal gauge is NOAA station 86708703 at Fort Pulaski, Georgia. Although it is situated about 10 miles outside of Beaufort County, this station provides the best long term data necessary for identifying sea level trends in the region. Since the station's establishment in 1935, relative mean sea level has increased an average of 0.12 inches per year (Figure 5-7). This translates to 1.2 in./decade or 1.0 ft./century.

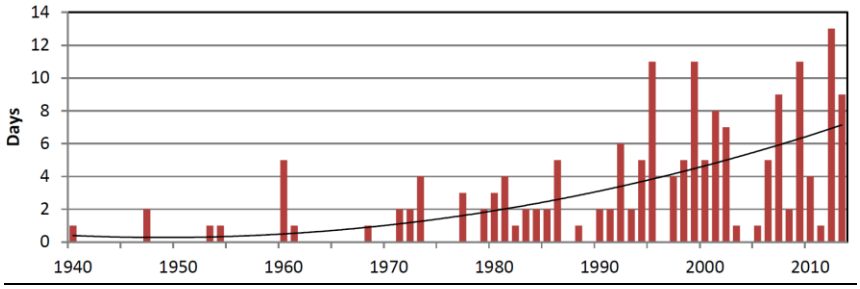
Accompanying gradual increase in mean sea level has been an increase in coastal flooding events due to extreme tides. According the same tidal gauge in Fort Pulaski, GA, extreme tide events have become more common in recent decades. Figure 5-8 below indicates the number of days each year when tide levels have exceeded minor flood stage as defined by the National Weather Service as 1.7 feet above mean higher high tide.

Table 5-7: Historic Sea Level Measurements at Fort Pulaski, GA



Source: NOAA Station 8670870 at Fort Pulaski, GA

Table 5-8: Days with Tides above Minor Flood Stage Each Year at Fort Pulaski, GA



Source: NOAA Station 8670870 at Fort Pulaski, GA



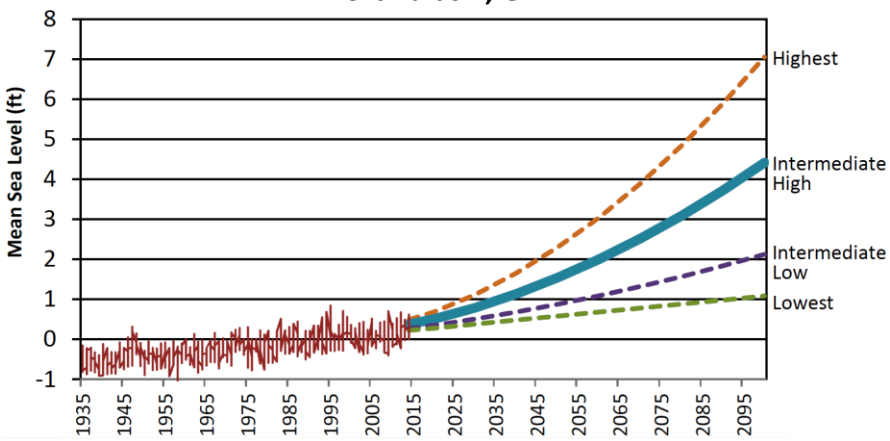
On August 10, 2014, heavy rains combined with an exceptionally high tide combined to generate flooding in the +3-4 ft. zones in the Mossy Oaks neighborhood in the City of Beaufort.

FUTURE SEA LEVEL PROJECTIONS

Global mean sea level is predicted to continue to increase as a result of global climate change. Like mercury in a thermometer, water expands when heated, increasing the surface height of the ocean. In addition, atmospheric heat melts ice, including land-based ice sheets and glaciers, adding additional water volume to ocean basins. These two forces are expected to intensify due to atmospheric heat trapped by the presence of greenhouse gases like carbon dioxide (CO^2). The U.S. National Climate Assessment provides four global sea level rise projection scenarios. The lowest scenario is based on a continuation of historic sea level rise; the highest is based on significant glacier and ice sheet loss. These four planning scenarios are meant to serve as a guide for climate adaptation planning for local communities. Figure 5-9 provides localized projections of these four scenarios up to the year 2100. Scientists are 90% confident that global mean sea level will rise within

the 1 ft. to 7 ft. range of these scenarios by the end of the century, but they cannot attribute a probability to any specific scenario.

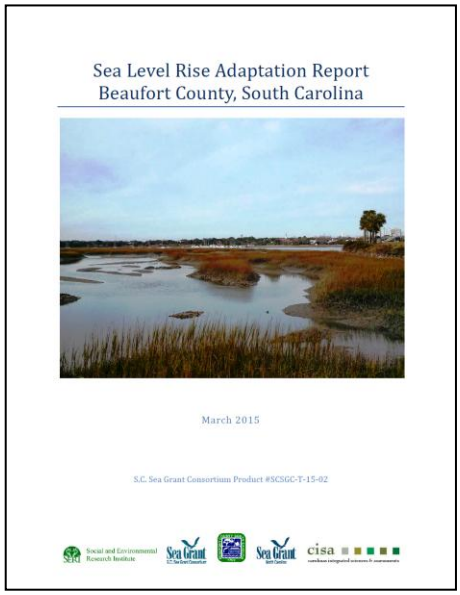
Table 5-9: Historic and Projected Sea Level Rise at Fort Pulaski, GA



Source: NOAA, US Army Corps of Engineers, Parris et al.

ASSESSING THE POTENTIAL IMPACTS

In response to these uncertainties, Beaufort County joined with the South Carolina Sea Grant Consortium and other agencies to investigate opportunities for the County to adapt to future sea level rise impacts. The process was driven by a stakeholders group, who analyzed the potential impacts of sea level rise and identified adaptation actions. These adaptation actions were presented and prioritized at two public workshops. The results of this analysis were published in the *Sea Level Rise Adaptation Report*. The report identified 23 adaptation actions grouped into nine categories that addressed diverse topics such as increasing intergovernmental cooperation; strengthening development and building standards; protecting low-lying areas from development; monitoring the impacts on natural resources; and protecting vulnerable infrastructure and developing standards for the location and design of future public facilities.



Sea Level Rise Adaptation Report: Beaufort County, South Carolina, prepared by South Carolina Sea Grant Consortium in 2015.

CONCLUSIONS

While there is uncertainty on the magnitude of future sea level rise, it is important for the County to assess its vulnerabilities and take actions to increase its resiliency to the impacts. The Sea Level Rise Adaptation Report provides a good framework and balanced approach that should serve as a starting point to guide for future policy decisions related to climate change. These adaptation actions can be summarized as follows:

- Encourage communication and joint activities among local governments, agencies, non-profits and the private sector to increase the region's awareness of the impacts of climate change and to coordinate appropriate actions;
- Maintain and strengthen development standards and building codes to respond to the impacts of sea level rise such as flood level elevation, erosion, and stormwater runoff;
- Preserve and protect natural resources increasing by protecting low lying areas from development and stabilizing shorelines; and
- Protecting and replacing vulnerable public facilities, and developing policies that assure that new infrastructure and capital facilities take into account projected sea level rise.



Recommendations

Recommendation 5-1: Cooperative Planning with Municipalities and Neighboring Counties

Beaufort County should continually work with its municipalities and neighboring counties to develop baseline standards and plan cooperatively to optimize the protection of natural resources at a regional level.

- Work toward the adoption of baseline standards for critical line buffers, stormwater BMPs, freshwater wetland protection, beach and dune protection, and the protection of trees and habitats.
- Centralize and standardize the collection and analysis of County, municipal, and state water quality monitoring data.
- Coordinate open space protection efforts by pooling and leveraging funds for the preservation of open space and coordinating existing preservation efforts across municipal and county boundaries.
- Coordinate natural resource planning with neighboring counties, with the recognition that development impacts natural resources and water quality across county boundaries.

Recommendation 5-2: Educational Outreach

Beaufort County should work to develop education programs aimed at informing local residents, builders, developers and realtors about the value of water quality and the region's key natural resources, and of County regulations that are designed to protect these resources.

- Dedicate additional staff and funding to environmental education programs.
- Better coordinate existing programs conducted by governmental and non-profit agencies.

Recommendation 5-3 : Enforcement

Beaufort County should dedicate additional staff resources to the enforcement of County regulations designed to protect water quality and protect natural resources.

Recommendation 5- 4: Implement the SAMP

Beaufort County should address the remaining recommendations from the Beaufort SAMP.

- River Quality Overlay District (RQOD): Review the adequacy of existing regulations already adopted, such as river buffers and stormwater BMPs to determine if the intent of the SAMP is already being met.
- On Site Disposal System (OSDS) program: Develop a comprehensive regional approach to reducing the negative impacts of on-site septic systems to surface water quality.
- Coordination of Water Quality Data Collection: Establish a structure to coordinate all water quality monitoring activities in the County.

Recommendation 5-5 : Open Space Preservation

Beaufort County should cooperate and continue to emphasize protection of public and private open space.

- Continue to support and fund Rural and Critical Lands Preservation Program.
- Use local funds to leverage funds from state, federal, and non-governmental organization programs
- Pursue the acquisition of sites that meet multiple objectives, such as the preservation of natural resources, passive recreation, public access to water, and regional stormwater projects.

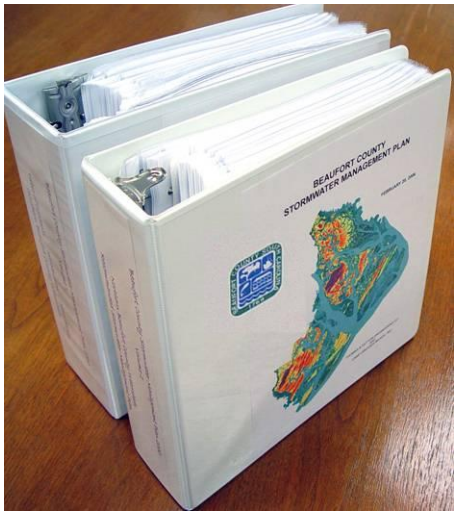
Recommendation 5- 6: Soils

Beaufort County should take greater consideration of soil types in future land use planning, site plan review and locating future infrastructure projects and County facilities.

Recommendation 5- 7: New Approaches to Stormwater Management

Beaufort County should utilize the Stormwater Management Utility Board to explore, develop and promote new approaches to stormwater management

- Continually reevaluate the Stormwater BMP Manual and its application and enforcement to increase the use of Low Impact Development (LID) techniques, such as bioretention, green roofs, pervious paving, and cisterns that promote water conservation and groundwater recharge.
- When evaluating the impact of new development, take into account the collective impacts of existing development in the same sub-watershed.
- Incorporate soil types as a criterion to determine the appropriate percentage of impervious surface within a development.



Beaufort County Stormwater Management Plan (2006)

- Provide for mechanism to allow high density developments to mitigate the impact of nitrogen pollution by retrofitting stormwater management devices in older non-conforming developments within the same sub-watershed.
- Continually evaluate how stormwater standards can be modified to help reduce FEMA flood insurance rates.

Recommendation 5-8 : Stormwater Utility

Beaufort County should continue to implement the Stormwater Utility with a priority placed on retrofitting stormwater in older moderate and high density developments that predate the adoption of stormwater standards in Beaufort County.

- Work toward a joint capital improvements plan (CIP) for County and municipal Stormwater Utility projects.
- Utilize Rural and Critical Lands Preservation Program to purchase key sites that serve regional stormwater utility needs.

Recommendation 5-9 : Water Quality Monitoring

Beaufort County should continue to work toward centralizing and standardizing the collection and analysis of water quality data.

- Establish what are considered acceptable and unacceptable water quality standards on the sub-watershed level.
- Update BMP Manual to adjust to new information.



Typical items collected during a County sponsored household hazardous waste collection event.

Recommendation 5- 10: Other Water Quality Measures

Beaufort County should pursue additional measures aimed at improving water quality.

- Assess the effectiveness of existing County and state policies to protect small marsh islands from over-development.
- Continue to expand the ability to help the public discard toxic items that can degrade water quality.

Recommendation 5-11 : Tree Protection Standards

Beaufort County should maintain good standards both to protect mature and specimen trees and to plant new trees when property is developed or redeveloped.

- Revise Beaufort County's tree standards to distinguish between "mature" trees and "specimen" trees, giving greater protection to specimen trees.
- Continue to require and increase the enforcement of the protection of root zones and canopies of trees during construction.
- Encourage the removal of non-native invasive tree species such as



Preserved trees in Bluffton.

Chinese tallow, Chinaberry, and mimosa.

- Revise parking standards to enlarge islands and medians so that they are of sufficient width to support large shade trees.
- Require replacement trees planted for those removed to be retained in perpetuity or replaced as they die or become hazardous
- Require caliper inch-for-inch replacement for illegal tree removal with a higher replacement ratio assigned for specimen trees.
- Beaufort County should adhere to its tree standards for County properties, parks, and preserved areas.
- Encourage a network of preserved forested areas across parcel boundaries.

Recommendation 5- 12: Tree Management Plan

Beaufort County should require new developments and encourage existing developments to adopt a tree management plan.

- The plan should include a map of all common areas, their purposes and the trees that currently exist in the common areas.
- The plan should address such aspects as the thinning of trees to provide sufficient light to keep desirable trees healthy, and the planting of new trees and shrubs to replace aging or unhealthy trees.
- Beaufort County should work with the Clemson Extension Master Gardner Program to complete tree management plans for the County's parks and preserved lands.

Recommendation 5- 13: Trees - Educational Outreach

Beaufort County should build on its current partnership with Clemson University Extension Service to promote the value of tree protection and proper tree care.

- Provide information on identifying backyard trees, evaluating the health of trees, keeping specimen trees healthy, and planting and caring for new trees.
- Promote good tree maintenance such as root zone protection and sustainable pruning techniques.
- Encourage residents to submit information about outstanding specimen trees to assist the County to establish a GIS database to aid in the evaluation of site plans.

Recommendation 5- 14: Wildlife and Habitat Protection Standards

Beaufort County should develop standards aimed at protecting wildlife and local wildlife habitat.

- Develop mitigation standards for development projects to protect

and encourage wildlife. Standards may include replanting of native vertical layers of vegetation, installation of thickets, keeping dead trees where they do not present a hazard, and installation of rest/nest boxes

- Encourage new development to be wildlife friendly and to provide linkages between wildlife habitats through a combination of ordinance requirements and incentives.
- Develop regulations to protect animal and plant species defined as Species of Special Concern by the State of South Carolina
- Promote innovative road construction techniques that are wildlife friendly. Techniques include culverts for under-road crossings, rolled curbing, traffic calming devices, and signage to alert motorists.

Recommendation 5-15: Wildlife and Habitat Educational Outreach

Beaufort County should encourage property owners to landscape their properties to be more wildlife friendly.

- Develop an education program aimed at informing property owners of the benefits of preserving or enhancing native vegetation.
- Inform the public about programs for certifying backyard wildlife habitat offered by the National Wildlife Federation, the National Audubon Society, and the Clemson University Extension Service (Carolina Yards and Neighborhoods).



Consequences of beach erosion and the lack of a healthy dune system.

Recommendation 5- 16: Beaches and Dunes

Beaufort County should recognize that its beaches and dunes are both an important public resource and are valuable as a natural storm barrier protecting life and property for those living along the coast. The following policy components are recommended:

- All new beachfront developments and redevelopments should enhance or reestablish dune systems.
- All native dune plants that provide dune stabilization should be protected.
- Require a natively vegetated buffer between the dune system and development with planting standards and a prescriptive list of native plants.
- Restrict the size and location of structures in dune systems and buffer areas, such as decks and dune walkovers. Dune walkovers should be constructed so that they do not restrict the free flow of wildlife.
- Prohibit the direct discharge of storm water and pool water into dune systems or onto beaches.

- In order to protect sea turtles, all lighting for parcels fronting barrier island beaches and dunes should be configured so as to ensure that no light is visible from the beaches or dunes during sea turtle nesting season.
- Beaufort County should consult with the SCDNR Sea Turtle Program on the proper placement and configuration of sand fencing, if it is used to reestablish dune systems.
- Beaufort County should exercise its authority to purchase public access when reviewing development plans on beachfront properties, in order to gain as much public beach access as possible when property is being redeveloped.
- Beaufort County should support efforts to stabilize the beach at Hunting Island for the purpose of preserving beach access, recreational amenities, natural habitats, and historic structures on the island.

Recommendation 5- 17: Network of Open Spaces



Privately preserved open space on Spring Island.

Beaufort County should work toward a network of open spaces that protects critical habitats and provides wildlife corridors.

- Continue to fund the Rural and Critical Lands Preservation Program and utilize the Greenprint map to assist in prioritizing land purchases.
- Develop better critical habitat identification tools utilizing DNR, NOAA data, and aerial photography to assist in identifying lands for preservation.
- Coordinate public and private preserved open space
- Explore the feasibility of an open space land bank where fees would be collected in lieu of ordinance required open space set asides and applied to the purchase and preservation of larger more critical lands

Recommendation 5- 18: Freshwater Wetlands

Beaufort County should continue to acknowledge the importance of freshwater wetlands as natural assets worthy of protection because of their vital role as natural stormwater drainage systems and as habitats for plants and animals.

- The County should adopt a zero net loss policy on isolated freshwater wetlands with an emphasis placed on avoiding negative impacts on wetlands.
  - Where avoidance is not possible, emphasize minimizing and mitigating impacts.
  - Provide incentives for development plans that are designed around freshwater wetlands
  - Mitigation of impacted wetlands should be on site. When it is

not feasible, in-kind mitigation acre for acre in same the watershed should be considered a last resort.
    - Once a property is developed, wetlands that are preserved or mitigated and their buffers should be given permanent protection.
- High quality wetlands and wetlands with rookeries should be managed to maintain the site as suitable rookery habitat.
- Freshwater wetlands should have native, upland buffers.
- Stormwater management should be designed so to provide no negative impacts to freshwater wetlands.

Recommendation 5- 19: Protect Groundwater Quality

Preserve groundwater quality by reducing and eliminating heavy usage of groundwater resources in the county.

- Require all new developments to hookup to public water.
- Require Low Impact Development (LID) stormwater management techniques that infiltrate stormwater runoff into the soil, thereby recharging groundwater.
- Encourage heavy users of irrigation (golf courses, landscaping) to use treated effluent for irrigation or storage lagoons.
- Discourage wells for the irrigation of residential landscaping.
- Develop standards for geothermal HVAC systems that recycle the use of groundwater.

Recommendation 5- 20: Sea Level Rise – Cooperation and Education

Beaufort County should encourage communication and joint activities among government agencies and the private sector to increase the region's capacity to adapt to sea level rise.

- Public Sector Cooperation: Improve coordination among governments and agencies to share information, assess impacts, and promote public education on the impacts of climate change. Governments and agencies should include local governments; the Department of Defense; regional alliances and networks such as LCOG and the MPO; relevant federal and state agencies such FEMA, DHEC, DNR and SCDOT; and utilities and public service districts.
- Private Sector Cooperation: Facilitate a dialogue on how to balance public and private interests and responsibilities with respect to climate change. This dialogue should involve homeowner associations, the Board of Realtors, the National Association of Homebuilders, and financial and insurance interests.
- Emergency Management Plans: Incorporate future sea level rise impacts into emergency management plans.

- Develop Trigger Points: Work cooperatively to develop trigger points based on data monitoring to inform future policy changes and actions.

Recommendation 5- 21: Sea Level Rise – Development and Building Standards

Beaufort County should maintain and strengthen development standards and building codes to respond to sea level rise.

- Maintain and strengthen setback and buffer policies to protect both the natural environment and private property.
- Revise building codes to higher standards and incentivize better design.
- Continue to evaluate and modify standards for stormwater quality and volume.
- Consider requiring a disclosure statement when development and building permits are issued on low-lying property acknowledging that the County is not committed to stabilizing property or maintaining private roads and causeways by constructing seawalls, levees or other devices.

Recommendation 5- 22: Sea Level Rise – Natural Resource Protection

Beaufort County should develop policies and actions to protect natural resources from the impacts of sea level rise.

- Study the impact of sea level rise on saltmarshes, oyster beds, shoreline erosion, water quality, and other environmental concerns.
- Use land preservation to protect low lying areas and to protect vulnerable ecosystems.
- Discourage the use of sea walls that limit the ability of the marsh to migrate upland in response to sea level rise. Install and encourage the use of living shorelines to reduce erosion.

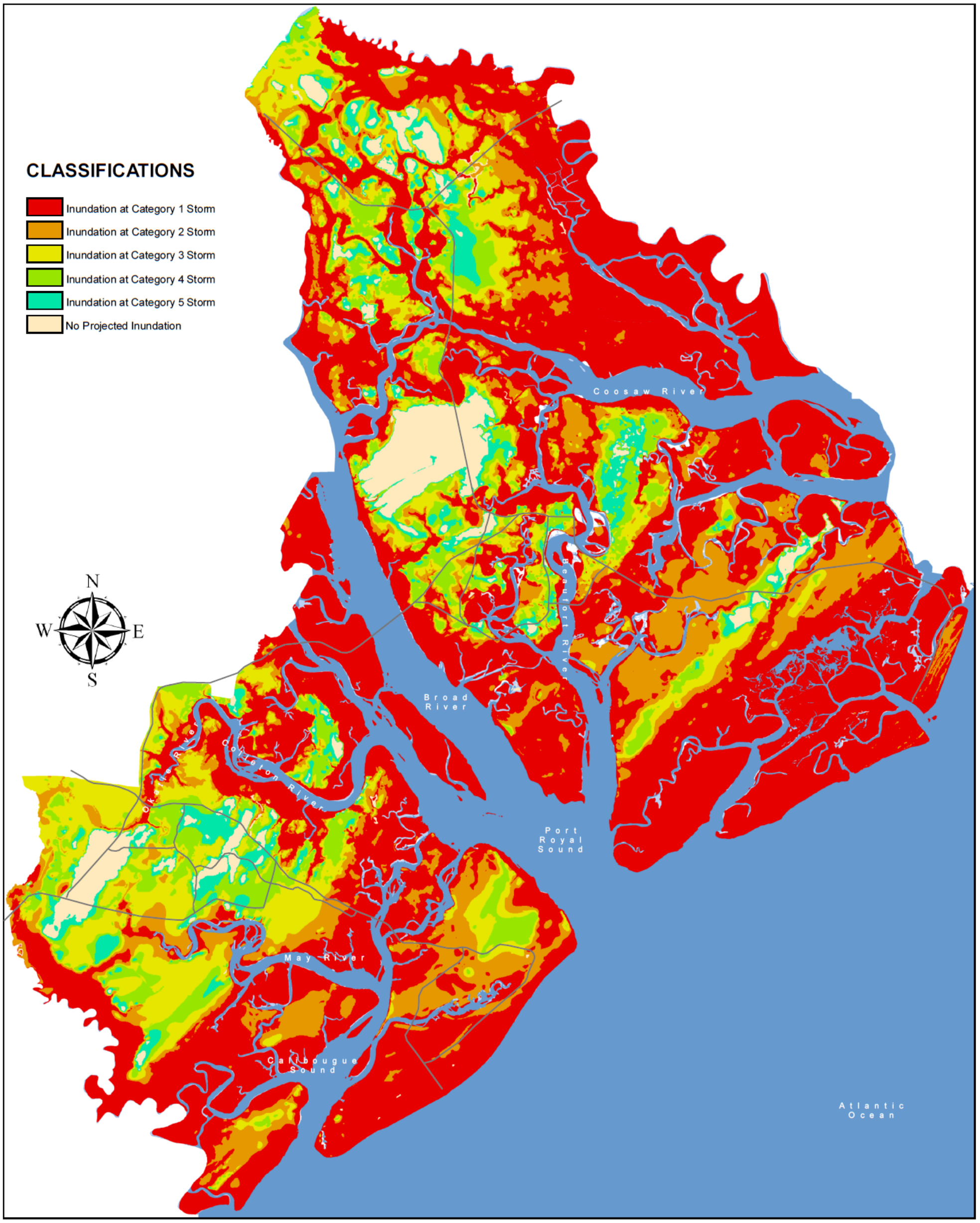
Recommendation 5- 23: Sea Level Rise – Infrastructure and Public Facilities

Beaufort County should make improvements to infrastructure located in vulnerable areas and develop policies assure that new infrastructure and public facilities take into account projected sea level rise.

- Prioritize, elevate, and protect low-lying roads and causeways. Base prioritization on the importance of roadway improvements on such factors as average daily traffic counts (ADTs), lack of alternative

routes, and importance of roadway for evacuation.

- Identify other vulnerable public facilities such as schools, pump stations, stormwater ponds that may need to be improved or relocated.
- Monitor the impacts of sea level rise on the supply of drinking water.
- Develop policies that require the design and location of future capital improvements and infrastructure to account for projected sea level rise.

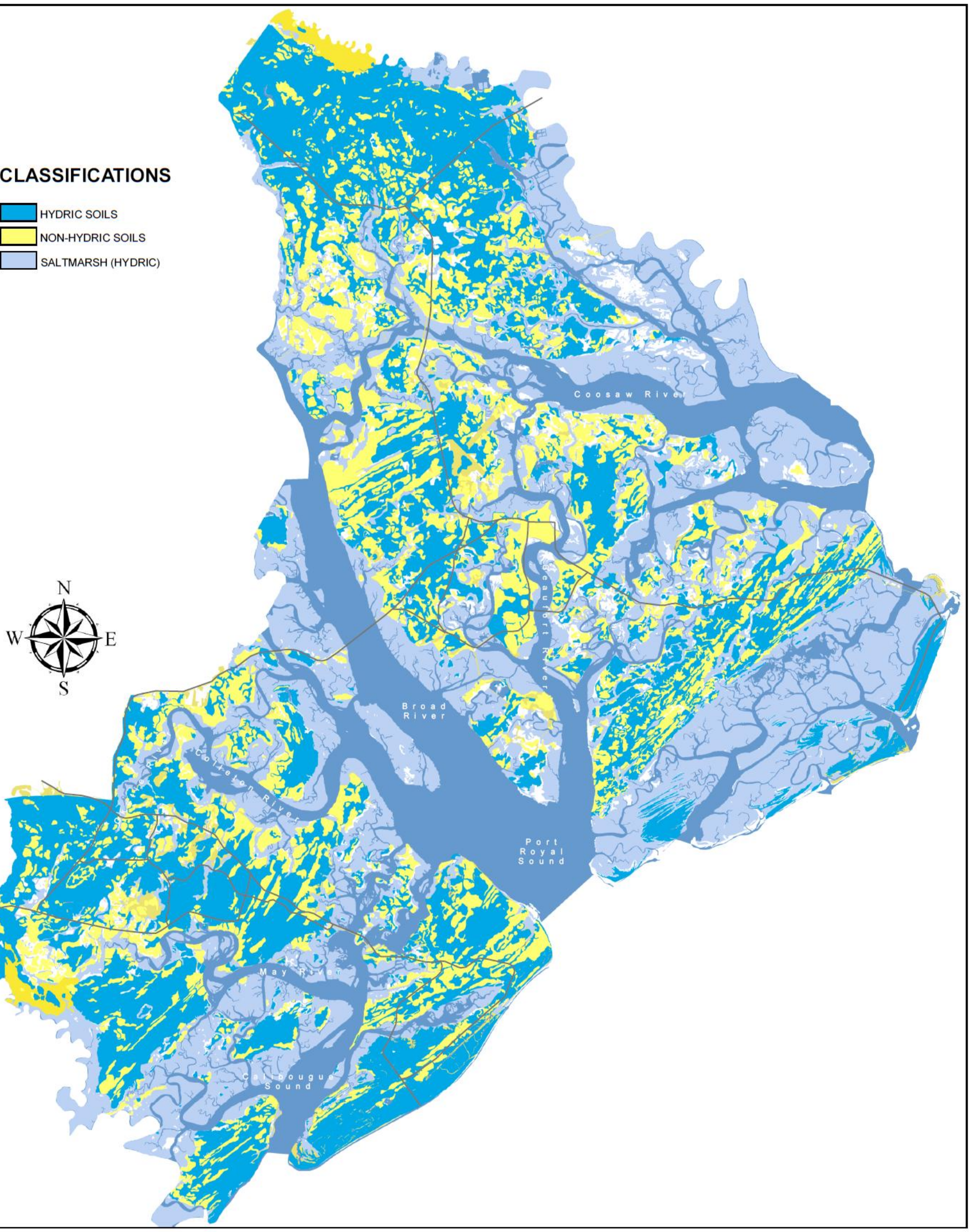


Chapter 5

Natural Resources

Map 5-1: SLOSH (Sea, Lake, and Overland Surges from Hurricanes)

2010 Beaufort County Comprehensive Plan

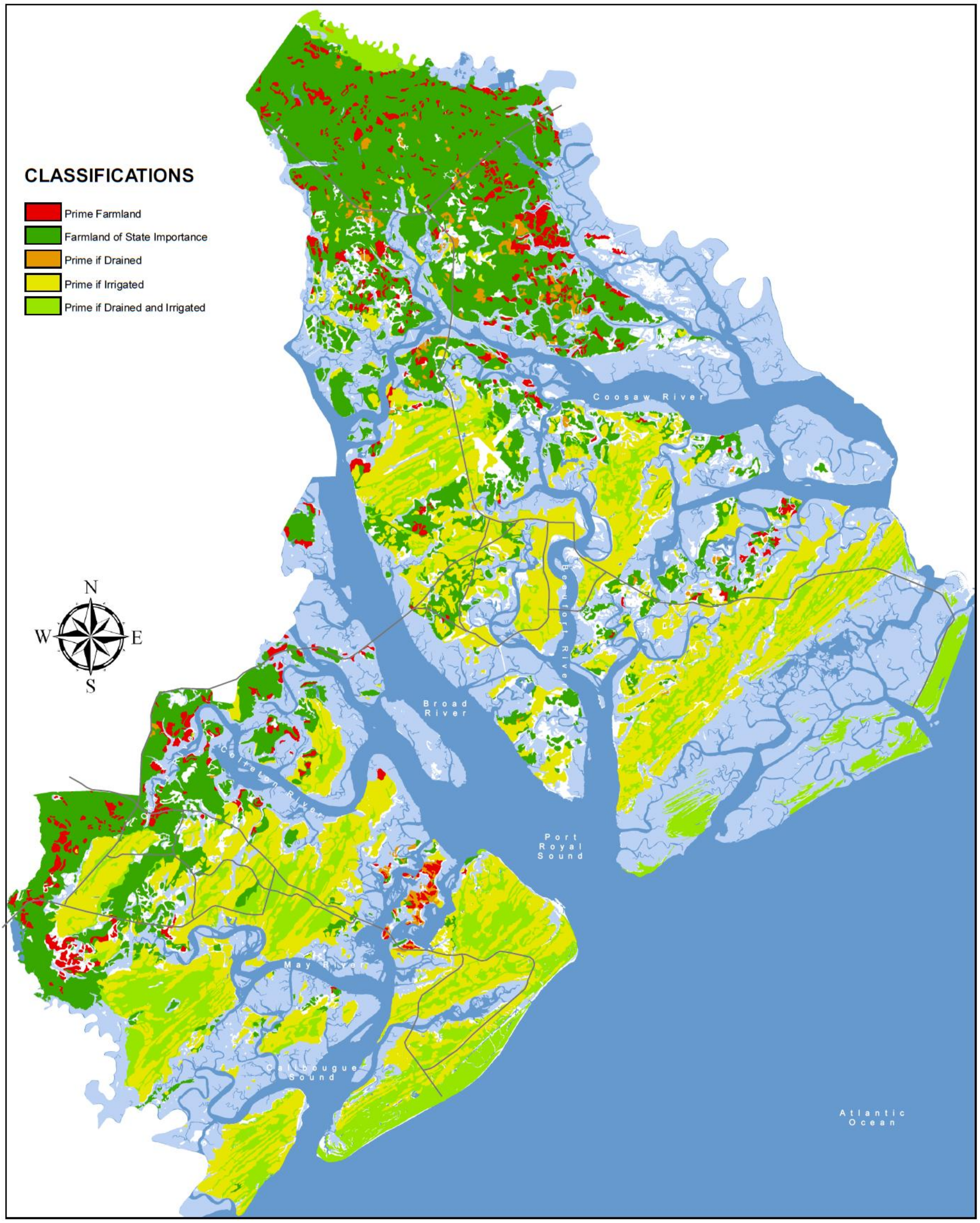


Chapter 5

Natural Resources

Map 5-2: Soil Hydrology

2010 Beaufort County Comprehensive Plan



Chapter 5

Natural Resources

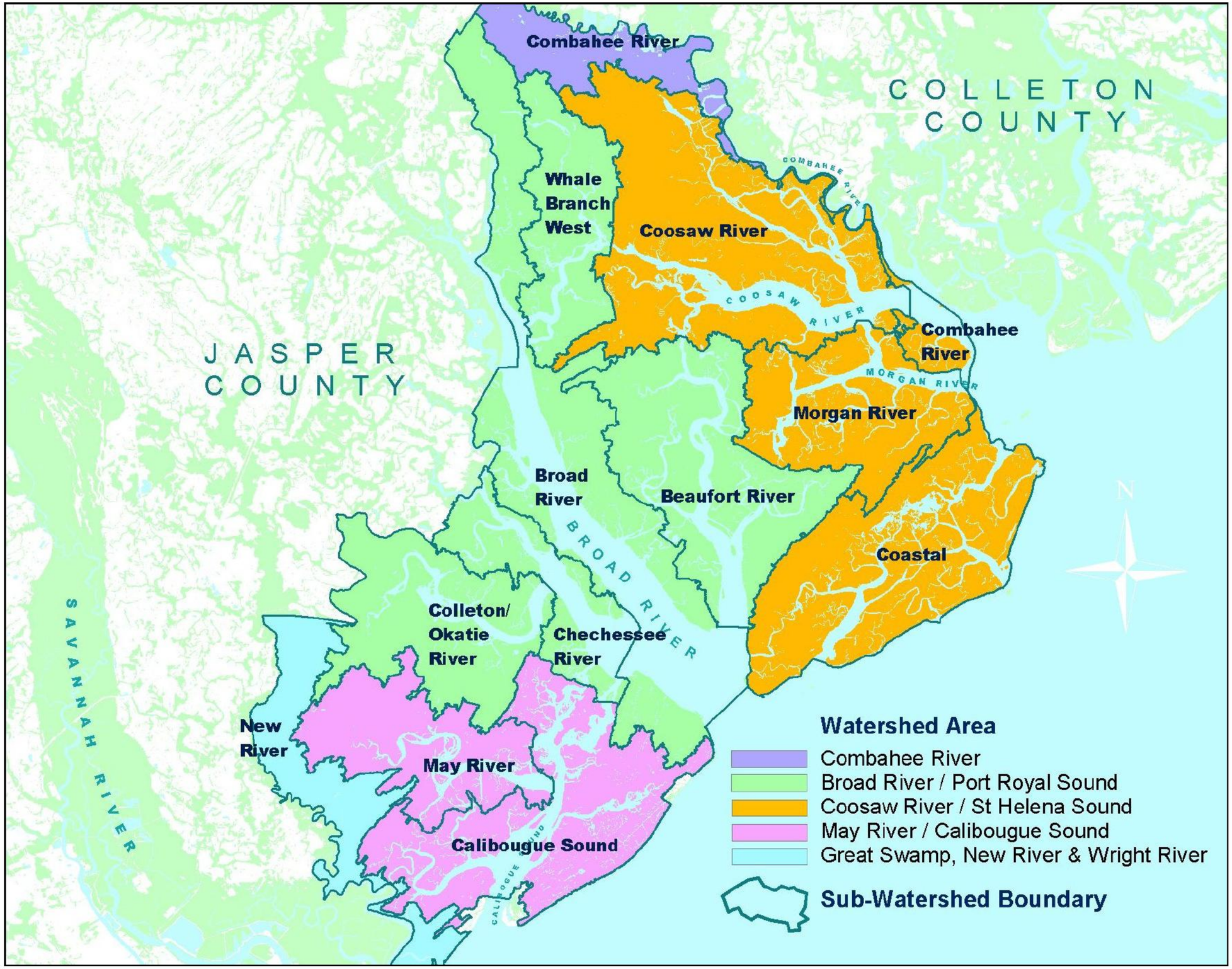
Map 5-3: Suitability of Soils for Agriculture

2010 Beaufort County Comprehensive Plan

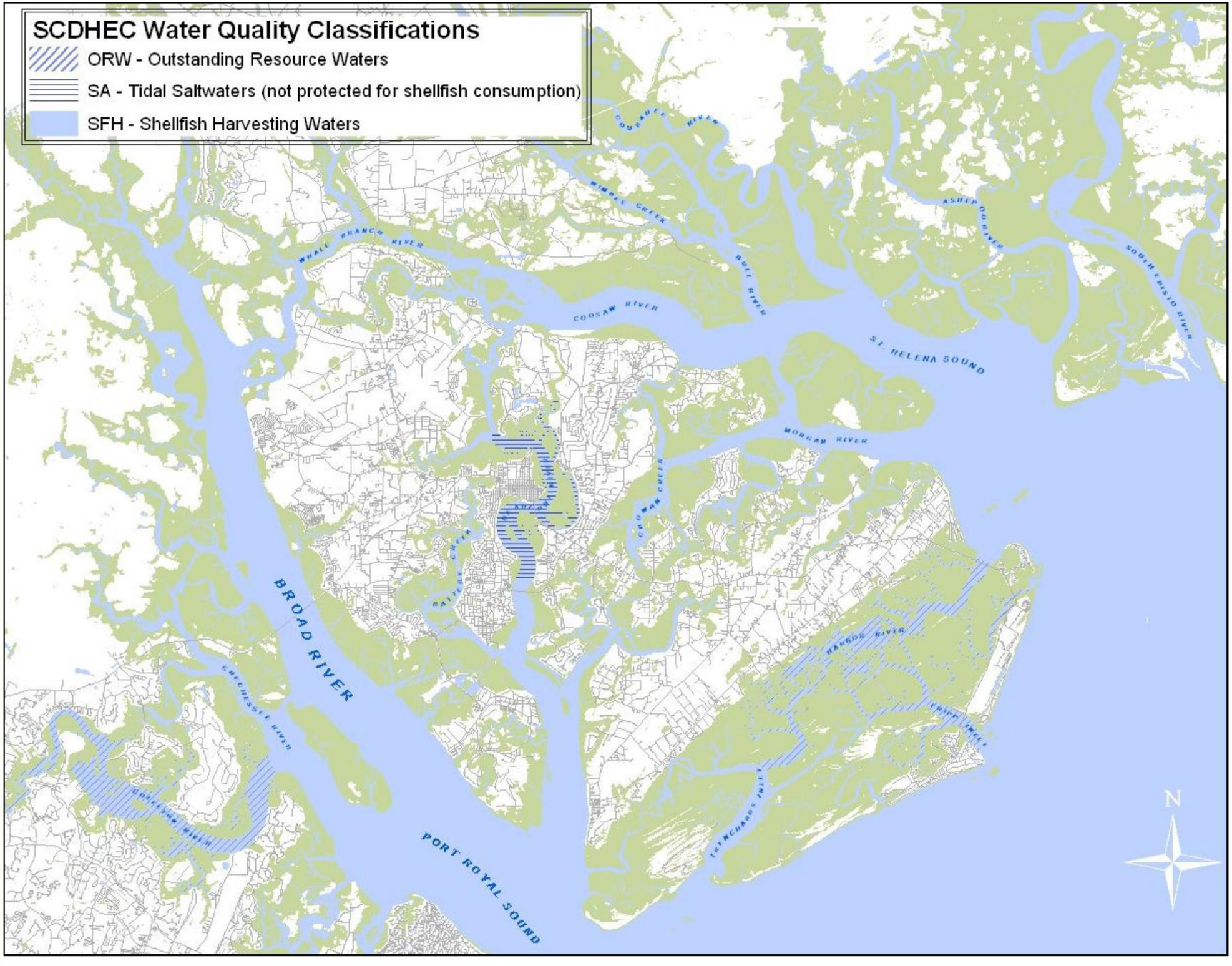
Chapter 5

Natural Resources

Map 5-4: County Watersheds and Sub-Watersheds



2010 Beaufort County Comprehensive Plan

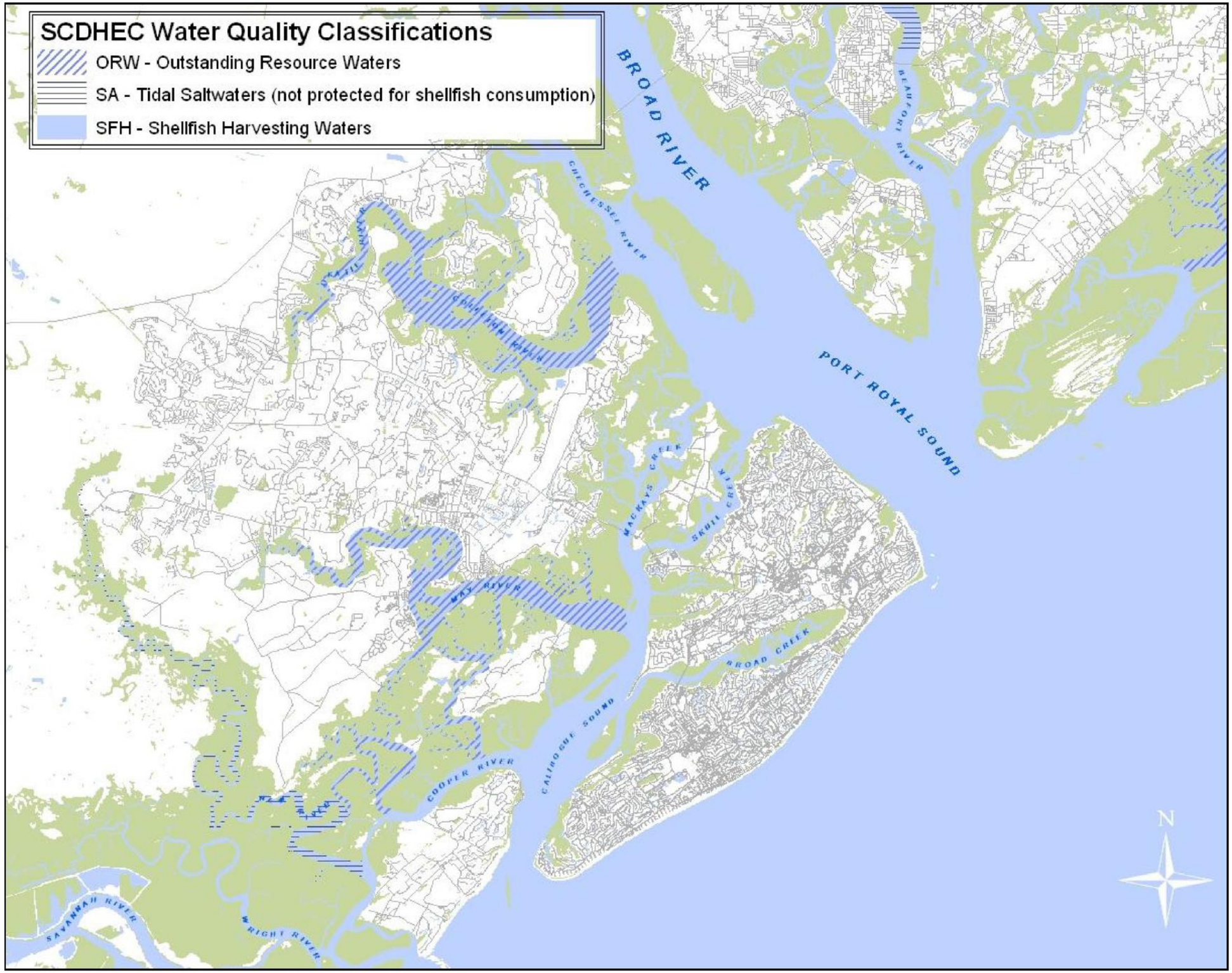


Chapter 5

Natural Resources

Map 5-5: Water Quality Classifications: Northern Beaufort County

2010 Beaufort County Comprehensive Plan



Chapter 5

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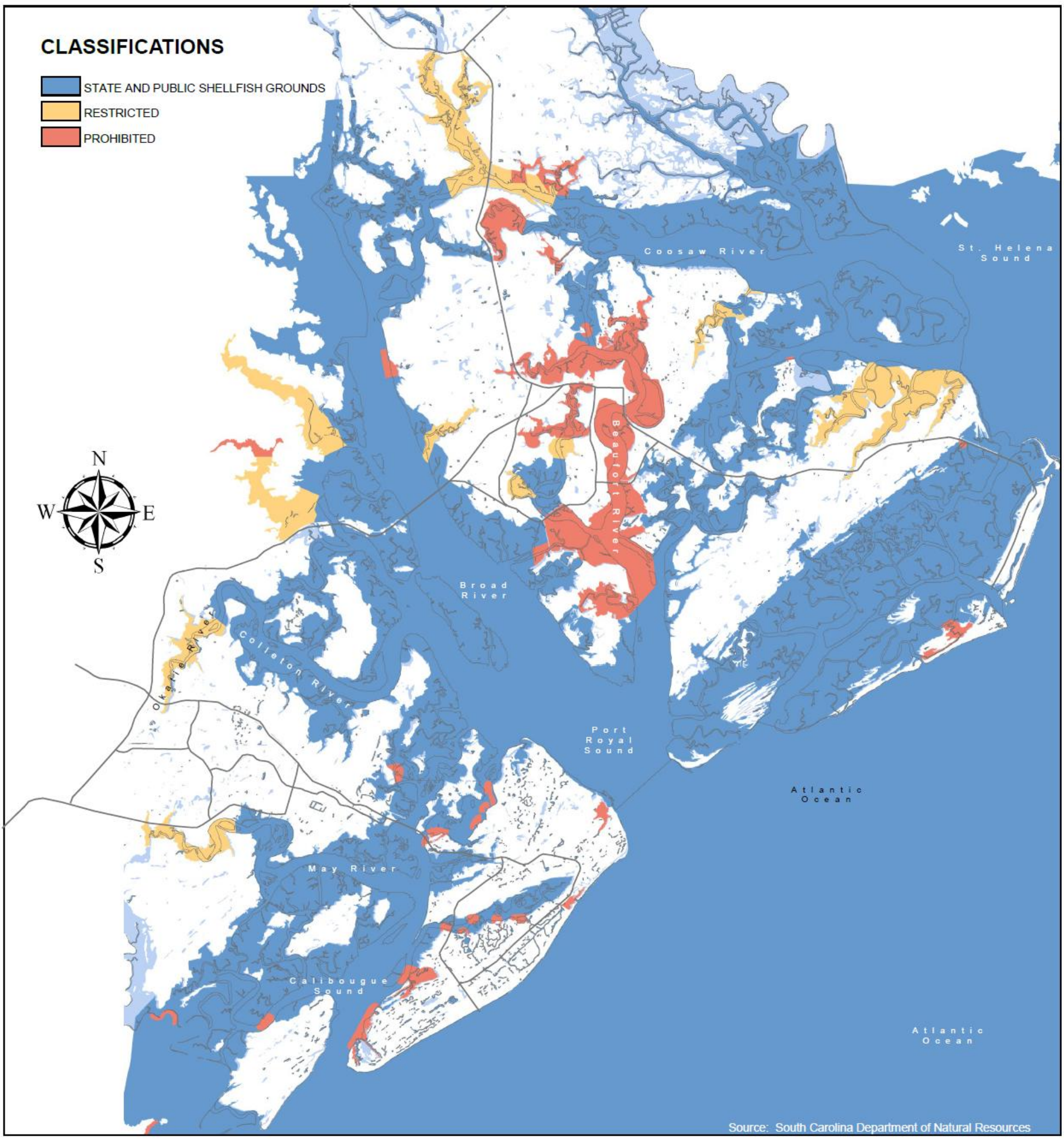
Map 5-6: Water Quality Classifications: Southern Beaufort County

2010 Beaufort County Comprehensive Plan



Chapter 5

Natural Resources

Map 5-7: Status of Shellfish Beds

2010 Beaufort County Comprehensive Plan



Chapter 5

Natural Resources

Map 5-8: Freshwater Wetlands

2010 Beaufort County Comprehensive Plan

POTENTIOMETRIC SURFACE OF THE FLORIDAN AQUIFER SYSTEM IN SOUTHERN SOUTH CAROLINA, September 1998

By

Camille Ransom, III and James L. White

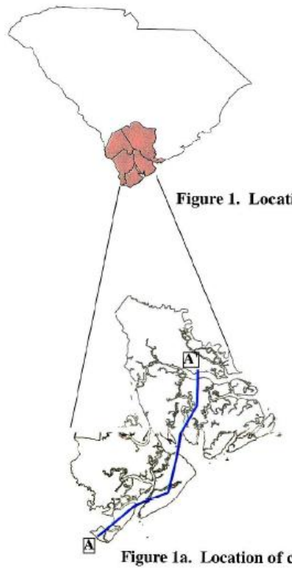


Figure 1. Location of Study Area

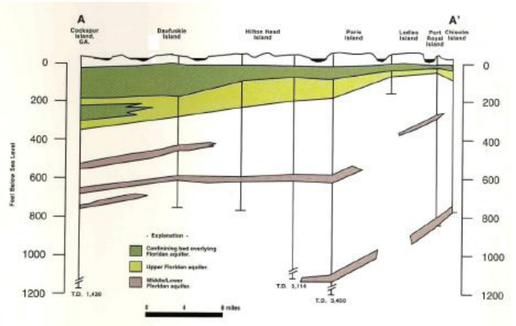
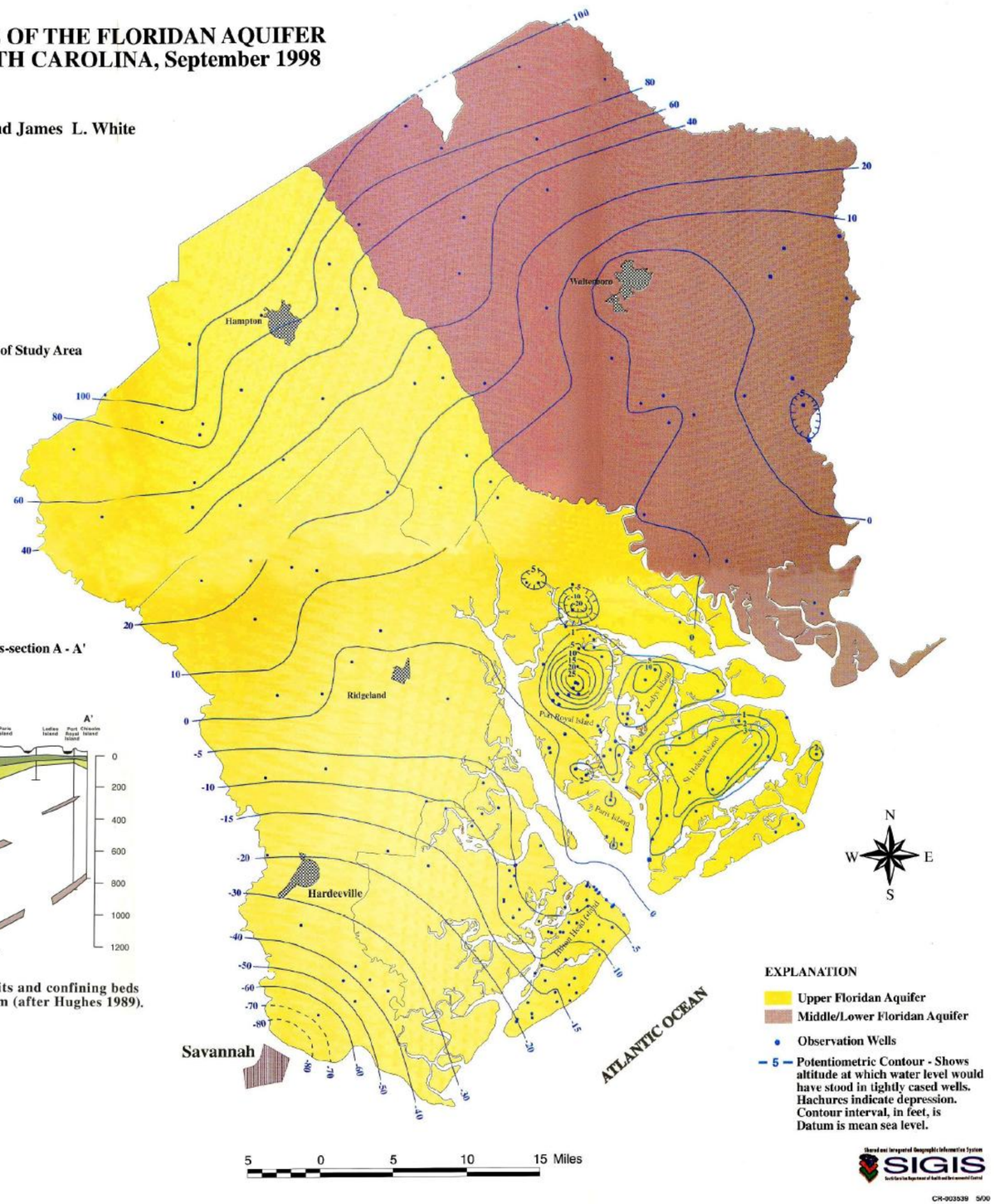


Figure 1a. Location of cross-section A - A'

Figure 2. Distribution of permeable units and confining beds of the Floridan Aquifer System (after Hughes 1989).



Chapter 5

Natural Resources

Map 5-9: Aquifer Recharge Areas and Cones of Depression

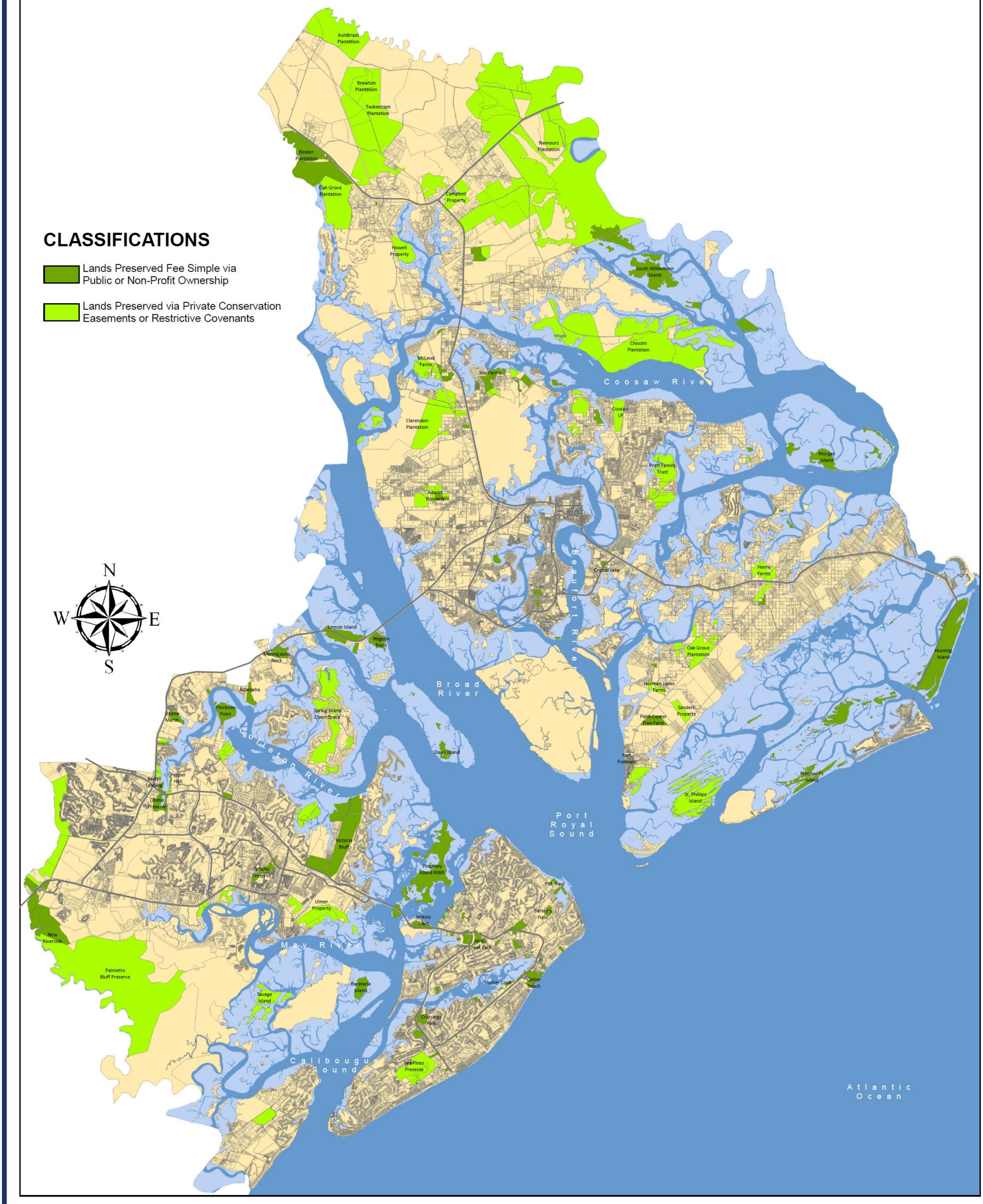
Upper Floridian Aquifer

Middle/Lower Floridian Aquifer

Observation Wells

-5- Potentiometric Contour

[Shows altitude at which water level would have stored in tightly cased wells. Hachures indicate depression. Contour interval, in feet while Datum is mean sea level.]



Chapter 5

Natural Resources

Map 5-10: Preserved Open Space

2010 Beaufort County Comprehensive Plan

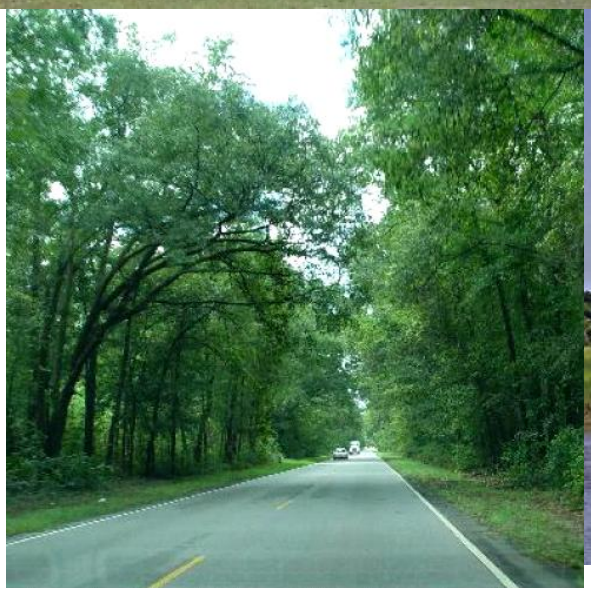
6

Beaufort County Comprehensive Plan

Cultural Resources









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Introduction

Beaufort County is one of America's historic and cultural treasures, a place where history and tradition are reflected in a vibrant landscape that provides a tangible link between past, present and future generations. Beaufort's attractiveness as a place to live and work, as a destination for visitors, and consequently its economic well being, are directly related to its historic character and unique quality of life.

Beaufort County's popularity and high growth rate has brought both recognition of the County's more visible historic assets and an influx of financial support for the rehabilitation of historic structures. As a result, Beaufort County, the City of Beaufort, the Town of Port Royal, the Town of Bluffton and the Town of Hilton Head Island each have adopted ordinances that protect historic and archaeological resources.

Given the County's rapid population growth over the last 20 years, however, it is vital to analyze the region's less tangible, but more inherent cultural resources, which make up the Lowcountry way of life. These resources include the County resident's relationship to the water as a source of food, recreation and transportation; the County's rich agricultural heritage; the County's military heritage; the County's scenic highways and byways; Gullah culture; and the active visual and performing arts community. Each of these components is vital to the region's identity. They add to the quality of life for residents; they make this region attractive to visitors and future residents; they drive the local tourism economy; and they ideally make this region an attractive site to relocate or create new businesses.

As one of the nation's historic and cultural treasures, Beaufort County bears a great responsibility to be good stewards of these resources. Therefore, it is vital not only to identify the County's historic and cultural resources, but to develop policies to preserve and enhance these resources.



Historic and Archaeological Resources

Beaufort County is blessed with a wealth of important historic buildings and sites as well as numerous pre-historic and historic archaeological sites. The County and its municipalities have devoted much time and effort to both inventorying these sites and creating the necessary regulatory framework to protect these sites from the potential adverse impacts of new development, redevelopment, rehabilitation, and neglect.



The Church of the Cross, located in Bluffton's historic district, was constructed in 1854

RESOURCE IDENTIFICATION

Beaufort County Above Ground Historic Resources Survey: In 1997, Beaufort County completed a survey of historic buildings and other above ground historic resources that covered the unincorporated areas of Beaufort County, the City of Beaufort, and the Town of Port Royal. The Town of Bluffton was surveyed in 1995. The County survey identified over 1,500 historic sites and buildings; provided an historic overview of Beaufort County; an architectural analysis by building type, material and style; provided recommendations for National Register of Historic Places eligibility; and gave recommendations for future preservation actions. The survey is used by the County and municipalities in staff project development review, and by property owners, realtors, developers, historians, and other researchers as well as by the public. Because the survey primarily included only those properties that could be seen from public roads or those surveyed on private property with owner permission, the County continues to work with property owners to identify sites missed by the survey. For example, County staff, the Historic Beaufort Foundation, and the military installations have worked with local citizens to locate and survey rural cemeteries, the majority of which are African-American. The survey can be accessed on Beaufort County's website[1].

Archaeological Sites: Beaufort County has nearly 2,000 identified archaeological sites both underground and underwater. A majority of

[1] Presently the unincorporated County, the City of Beaufort, and the Town of Port Royal are available on the website.



Historic cemetery on Daufuskie Island

these sites are identified by surveys done when development projects are undertaken. In addition, archaeologists using grants from federal and state sources perform data recovery work on important sites such as the Santa Elena/Charlesfort site on Parris Island. On occasion, groups of local citizens commission archaeologists to identify and protect sites on private property. Projects of this type have been done on Dataw Island, Callawassie Island, and the Mitchelville area on Hilton Head Island. County staff has also worked with the Underwater Division of the SC Institute of Archaeology and Anthropology on a project to survey underwater archaeological sites in the Port Royal Sound.

EXISTING REGULATORY FRAMEWORK

The regulatory framework for protecting the County historic resources includes federal and state requirements along with County and municipal regulations. Generally, County and municipal regulations are meant to attend to gaps not addressed by state and federal regulations.

Federal and State Requirements: There are several mechanisms at the federal and state level, by which impacts on archaeological and historic sites are required to be identified and mitigated. Section 106 of the National Historic Preservation Act of 1966 requires consideration of historic properties when the federal government is involved in financing, licensing, or permitting a project. Section 106 requires federal agencies to consult with the State Historic Preservation Officer (SHPO), assess potential adverse affects of a project on historic resources and to address and mitigate those affects. Various state laws, such as the SC Coastal Zone Management Act of 1979 have similar provisions.

Historic Preservation Overlay District Ordinance: Beaufort County has adopted as part of the Community Development Code, a section that provides protection of the County's historic and archaeological resources. This ordinance requires that all work done on the exterior of designated historic buildings in the unincorporated County to be reviewed and approved either by the Historic Preservation Review Board or by staff acting on behalf of the Board. Once a project is approved, a Certificate of Appropriateness is issued, which is required before a building permit can be received.

Archaeological and Historic Impact Assessment Ordinance: This ordinance requires developers to provide information regarding the development site. After conducting document searches, consultations with compliance archaeologists and other research, the Planning Director and Historic Preservationist determine whether a survey of the property will be required. Reports, maps or other information resulting from any survey are reviewed by the County, who works with the

The Historic Preservation Review Board and staff have worked with the following private owners and organizations to protect important historic sites and buildings.

- Rose Hill Plantation
- Darrah Hall at Penn Center
- Brick Church
- Coffin Point Plantation House
- Old Sheldon Church Ruins
- Lobeco School
- First African Baptist Church (Daufuskie Island)
- Mt. Carmel Church (Daufuskie Island)
- Tombee Plantation



The Lobeco Library is located in the restored Lobeco School that was constructed in 1937.



Fort Fremont dates back to 1898 when it was constructed for the Spanish-American War.



Vernacular architecture on Daufuskie Island.

developer to devise a mitigation plan for the treatment of any identified archaeological resources. The plan would then be included in a Memorandum of Agreement (MOA) to be signed by the developer and the County.

Municipal Ordinances: The City of Beaufort, Town of Port Royal, Town of Bluffton and the Town of Hilton Head Island all have ordinances that provide some degree of protection of historic and archaeological resources. In the past, Beaufort County staff has provided professional assistance to the municipalities to identify and protect historic resources.

OTHER PLANNING AND PRESERVATION EFFORTS

Over the last 10 years, Beaufort County has undertaken a number of projects to preserve important County owned historic properties and to acquire and preserve other important historic sites through its Rural and Critical Lands Preservation Program.

- **Lobeco Library:** Listed in the National Register of Historic Places and owned by the Beaufort County Board of Education, this school building was renovated in 2003 into the Lobeco branch of the Beaufort County Library.
- **Barker Field Tabby Ruins:** Beaufort County financed the restoration of tabby ruins located in Barker Field County Park on Hilton Head Island.
- **Ford Shell Ring:** Beaufort County in conjunction with the Town of Hilton Head Island purchased a 6.8-acre parcel that contains Native American Shell Rings believed to have ceremonial importance. The site is also home to the remains of a freedman's cottage.
- **Altamaha Town:** Beaufort County purchased a 100-acre site located on Old Baileys Road in 2004 that includes Altamaha, a Yamasee Indian town that is being developed as a passive park and historic site.
- **Fort Fremont:** Beaufort County purchased 14 acres on St. Helena Island that contains the ruins of a historic Spanish-American War fort that was completed in 1898.

The Town of Hilton Head Island has also been active in the preservation of historic and archaeological sites. Town preservation efforts include Greens Shell Ring, Honey Horn Plantation, Jenkins Island Shell Pit, Jenkins Island Cemetery, and the Fish Haul Creek Site. The Town of Bluffton has been active in restoring the Garvin House, an 1870 residence constructed by Cyrus Garvin, a former slave. In addition to public sector preservation efforts, private residential communities, such as Dataw Island, Spring Island and Haig Point have preserved tabby ruins and other above ground features.

VERNACULAR ARCHITECTURE

Beaufort County has a rich inventory of vernacular architecture, much of which is being lost to redevelopment and neglect. Protection of these older structures, many of which are located in the rural and less affluent parts of the County, is vital both to preserving an important component of the County's historic built environment and as a source of affordable housing. Many of these structures are modest homes built largely by African-Americans. The best examples can be found on St. Helena Island, Daufuskie Island and in the Northwest Quadrant in the City of Beaufort. Non-residential vernacular structures include rural roadside markets and truck farming packing houses.



Albany Groceries, located in Dale, is a good example of commercial vernacular architecture.

CONCLUSIONS

Beaufort County, its municipalities, and military bases have devoted many resources to both inventory and protect historic structures and archaeological sites. These preservation efforts need to be continued and enhanced in the future. Special emphasis should be placed on identifying and preserving the County's most endangered structures and sites through proactive means (adaptive reuse, grant funded rehabilitation, tax incentives, etc.).



Scenic Highways and Byways

Beaufort County's highways are the County's primary and most visible public realm. It is where the manmade environment intersects with the natural environment. Therefore, scenic highways and byways are included as a cultural resource. It is the most frequent way that people enjoy the scenic beauty of the County.

Fifty years ago, Beaufort County's transportation network was made up of 2-lane highways, many of which were completely shaded under a canopy of oaks. Population growth accompanied by development has rendered this a vanishing feature of the Lowcountry landscape. Most of the County's principal and minor arterials and its major collectors have been or are slated to be widened to four or six lanes.

EXISTING PRESERVATION AND ENHANCEMENT EFFORTS

In the past 15 years, Beaufort County has recognized the importance of preserving the scenic qualities of its highways. These efforts include the adoption of the Corridor Overlay District; the designation of Old Sheldon Church Road as a state scenic highway; and preserving trees and creating context sensitive features when roads are widened.

South Carolina State Scenic Byways in Beaufort County

- Hilton Head Island Scenic Byway
- May River Scenic Byway
- McTeer Bridge & Causeways Scenic Highway
- Old Sheldon Church Road Scenic Byway
- SC 170 Scenic Highway
- US 21 Scenic Highway

Source: South Carolina Department of Transportation

Development Standards: In 1992, Beaufort County adopted the Highway Corridor Overlay District to apply to U.S. 278, the primary corridor leading onto Hilton Head Island. The Corridor Overlay District was then expanded to include all major highways in Beaufort County. The district provided standards for architecture, landscaping (including tree preservation), signage, and lighting for new development along the County's major highways. The Community Development Code then expanded these standards to apply to all development with the exception of single-family and two-family residential. While these development standards have helped to limit the potential adverse visual impact of commercial growth along these highways, the standards do not apply to improvements within the highway right-of-way.

Southern Beaufort County Corridor Beautification Board: Since development standards only apply to development on individual parcels, additional oversight was needed for road improvements within

the highway right-of-way. In 2013, County Council authorized the creation of the Southern Beaufort County Corridor Beautification Board. County Council created the Board to assist Council in the design, implementation, fundraising and promotion of median beautification and other aesthetic improvements along highways in Southern Beaufort County.



Old Sheldon Church Road was designated a State Scenic Byway in 2003.

State Scenic Byway (Old Sheldon Church Road): The State designated Old Sheldon Church Road a Scenic Byway in 2003. Old Sheldon Church Road is one of the County's most scenic highways. A trip on Old Sheldon Church Road offers glimpses into the past through the remains of the Sheldon Church ruins, the entrances to several historic plantations, and views of former rice fields. In addition to its historic importance, the road is one of the few remaining canopy roads in Beaufort County. In recent years, the road has become a short cut between I-95 and Beaufort for both cars and trucks. Accompanying state scenic byway designation, Beaufort County adopted a management plan to protect the highway's scenic qualities. This management plan called for extending the corridor overlay district to apply to Old Sheldon Church Road; working with the state to reduce speed limits and to limit truck traffic; and working with SCDOT and the utility companies to utilize best management practices when trees are pruned for maintenance.

Canopy Roads Brochure: In 2009, the Beaufort County Planning Department produced a brochure titled The Canopy Roads of Beaufort County. The purpose of the brochure was to provide greater awareness of the County's remaining canopy roads and highlight them as a unique feature of the region's history, culture and natural environment.

CONCLUSIONS

Beaufort County has taken important steps to protect the scenic qualities of its highways and byways. Architectural, landscaping, signage and lighting standards have been a key component in these preservation efforts and should be continually implemented to provide more protection to the County's remaining rural scenic highways. The designation of Old Sheldon Church Road as a state scenic byway and the accompanying management plan represent the next step in moving the protection of scenic corridors beyond the regulatory environment to include public outreach and partnerships with SCDOT and utility companies. The County should seek this designation on other highways with similar qualities. Finally, the County has many rural scenic highways that are not likely to be eligible for state scenic designation. The County should take steps to develop a management plan to protect and promote the scenic qualities of these roads.



Maritime Heritage

Beaufort County consists roughly of half land and half water. Throughout its history, the County's waterways have been a source of food, industry, trade, transportation and recreation. The County's culture and identity has been as closely tied to its waterways as it has been tied to its land. Seafood, fish, shrimp, crabs and oysters have been a staple of the Lowcountry diet since the days of the Native American inhabitants. Historically many of Beaufort County's islands lacked direct access to the mainland and therefore water was vital to transportation. Today, recreational boating and fishing are an important facet both to the Lowcountry way of life and to the local economy as an increasing number of visitors are interested in chartering fishing boats and in ecotourism. Although there is an abundance of rivers, bays and marshes in Beaufort County, the rapid pace of growth and rising land values have challenged the traditional uses of the County's waterways.

- Growth has brought with it concerns about declining water quality, excessive stormwater runoff and increased pollutants into the local marshes and waterways.
- Waterfront access facilities, such as boat landings and fishing piers, have not kept pace with population growth.
- Rising land values have put a premium on waterfront property and made it very expensive to purchase new land for waterfront access.
- Rising land values have also brought about pressure on commercial waterfronts to sell to the highest bidder.
- Increased residential development on marshfront and waterfront property has brought about conflicts between property owners and those harvesting crabs and oysters.

Summary of 2013 South Carolina Shellfish Catches

- Blue Crab –5.13 million lbs. - $6.4 million
- Shrimp (Brown, White & Other) – 1.99 million lbs. - 5.8 million
- Eastern Oysters –0.37 million - $2.3 million

Source: NOAA – National Marine Fisheries Service

LOCAL SEAFOOD INDUSTRY

Fishing as a commercial venture dates back to the colonial times when street peddlers and small merchants sold fish and shellfish for local consumption. In the late 1800's, canning became a major part of the seafood business, allowing local seafood to be sold to other parts of the world. Freezing became popular in the late 1940s and is still used for a

majority of today's seafood catch, especially when shipped elsewhere. Today the industry is in decline; nevertheless, the demand for fresh seafood from Beaufort County's waters is still high. Many of the hardships facing the local seafood industry are international in scale – flat market prices, competition from Asia and Latin America, and rising fuel costs. This plan focuses on local issues and possible solutions to protect the viability of the industry.

Issues Facing the Local Seafood Industry

- Low-priced imported shrimp and crabs
- Rising fuel costs
- Rising labor costs
- Increased land values affecting waterfront access
- Loss of processing facilities
- Age of fleet
- Loss of maintenance facilities

Working Waterfronts: The local seafood industry relies on the availability of ice, fuel, grading and processing, freezers, access to markets, and places to moor fishing boats. Beaufort County has nine remaining working waterfronts (Map 1) that provide these services to the industry. The long-term viability of these waterfronts is in question as owners face both the declining profitability of the industry and rising land costs that make it attractive to sell.

Other Commercial Fishing Concerns: The local seafood industry is affected by other aspects of rapid population growth. Increased development has led to the closure of shellfish beds, reducing the availability of oysters and clams. Stormwater runoff also affects the salinity levels in localized areas, which has led to declining crab populations. The proliferation of private docks on small tidal creeks and an increasing number of no wake zones have made it more difficult and time consuming to harvest crab pots and to reach oyster beds. Finally, most crabbers and oystermen utilize the County's boat landings and must compete with an increasing number of recreational boaters for a limited number of landings.



A commercial crabber on the Combahee River.



Popular bumper sticker supporting the local seafood industry in Beaufort County.

Local Initiatives: Beaufort County and its municipalities have taken several steps to protect the viability of the local seafood industry.

- Commercial Fishing Village Overlay District (CFVOD): In 2000, Beaufort County Council adopted the CFVOD. The process involved inventorying the County's existing working waterfronts and interviewing those involved in the seafood industry to determine the existing and future needs of the commercial fishing operations. The purpose of the district was to remove regulatory barriers that could threaten the operation and expansion of the existing active uses.
- Bluffton Oyster Company: In 2002, Beaufort County purchased 5 acres at the site of the Bluffton Oyster Company, the last oyster shucking facility in Beaufort County. The Bluffton Oyster Company continues to operate under a long-term lease arrangement with Beaufort County.
- Benny Hudson Seafood Company: In 2003, the Town of Hilton Head Island purchased the development rights of this active seafood operation which allows for the continued operation of the



Recreational cast netting for shrimp.

company, provides tax breaks to the property owner, and protects the property from redevelopment.

- Port Royal Seafood: The Town of Port Royal took over the management and operation of this facility to keep it viable as the Port of Port Royal property is sold and redeveloped. However, with the July 2015 fire and pending sale of the Port property, the future of this operation is uncertain.

RECREATIONAL FISHING AND BOATING

Recreational fishing and boating is a traditional local pastime as well as a draw for visitors. In 2007, Field and Stream magazine named Beaufort a top 20 fishing town. Local coastal waters offer sheepshead, mullet, croaker, sea trout, and whiting, along with crabs, shrimp and oysters. Cobia season brings many visitors to the Broad River in May. The popularity of recreational fishing and boating also supports fishing charters and ecotourism which are a component of the local economy. According to SCDNR, in 2014, there were 15,131 boats registered in Beaufort County. This is 2,906 more registered boats than just 7 years prior. Assuming that boat registration keeps pace with projected population growth, Beaufort County can expect 18,278 boats in 2030. This growth will place further stress on the County's 26 public boat landings.



The Hunting Island Fishing Pier extends 1,120 feet into Fripp Inlet.

The Beaufort County Public Works Department maintains and manages 25 public boat ramps and the City of Beaufort owns the Pigeon Point boat ramp. In 2007, SCDHEC/OCRM published the *South Carolina Five Coastal County Boat Ramp Study*. This study provided a detailed assessment of the County's existing boat landings and provided the following general findings and recommendations

- There is a major need for more parking at existing boat ramps;
- Existing boat landings need to be upgraded and repaired with new restrooms, more trash disposal, and better lighting;
- Certain accesses should be designated for non-motorized uses such as fishing, crabbing, kayaking, canoeing, and viewing; and
- Passenger cars should not park in car/trailer parking spaces.

OTHER WATER ACCESS ISSUES

The demand for shore-based fishing is already evident in the number of people fishing from bridges and in undesignated areas in proximity to roads and bridges. Changing demographics have the potential to change the desires of the public with respect to water access needs. As the population ages there may be increasing demands for shore-based fishing facilities. Beaufort County has ten fishing piers. In addition to



A shrimp boat on the May River.

shore based fishing, canoes and kayaks compete with motorized boats for the same limited number of water access facilities.

CONCLUSIONS

Because of growth and rising land prices, the traditional relationship between County residents and the water is being challenged. To address these challenges, Beaufort County will need to take a more active role in preserving traditional water dependent uses and providing improved access to the water for all County residents.



Agricultural Heritage

Historically and culturally, Beaufort County's identity has been closely tied to its soil. For much of the County's history, agriculture has been the mainstay of the local economy. Agriculture has also played an important role in sustaining its population through periods of isolation and hard economic times. From the period immediately following the Civil War through the first half of the 20th century when employment and capital were scarce, vegetables, melons, poultry and livestock provided the County's many small property owners, many of them freed slaves, the means to survive and remain independent in spite of poverty and isolation. While the County's recent population growth has brought increased economic opportunities, the importance of farming and the skills related to farming are in decline. Preserving and enhancing agriculture as a way of life in Beaufort County is vital to maintaining the County's economic and demographic diversity, providing economic opportunities to rural residents and landowners, reducing the pressures of sprawl, providing a source of local fresh produce, and retaining the traditions and characteristics that make this region unique.



Dempsey Farms on St. Helena Island.

HISTORY OF AGRICULTURE IN BEAUFORT COUNTY

Beaufort County is endowed with 250 frost-free days and good agricultural soils. The US Department of Agriculture (USDA) designates 25% of the County acreage as unique, 3% as prime, and 25% of the total County acreage as additional farmland of state importance. The unique category was assigned due to soil characteristics and a location that is favored by warm moist air from the nearby ocean and tidal streams. The USDA stipulates that when the soils are well managed, they are among the most productive in the region.

The early colonists found Beaufort County almost completely wooded and densely populated with many species of wildlife. Lumber for shipbuilding and the use of other forest products became a major industry of the early settlers. In 1680, rice was introduced into the region. By 1719, the colonists, merchants, traders and farmers had built up great wealth from rice production from the abundant resources available. Indigo was introduced in the early to mid-1700s, and remained profitable until after the Revolutionary War when the English



Marshview Community Organic Farm is a local example of Community Sustainable Agriculture.

government removed their bounty on it. Sea Island long-staple cotton, known for its long, smooth fibers, was introduced in 1785 and soon became the next major cash crop. While Sea Island cotton nearly disappeared from production during the Civil War, it made a modest comeback in the 1880s, only to fall victim to the boll weevil in the 1920s. Following the Civil War, the agricultural economy of Beaufort plummeted. Although a number of crops were grown, including corn, tobacco, rice, potatoes, truck crops and livestock, none reached the prominence of the rice, indigo, or Sea Island long-staple cotton of previous years. In the early 1900's, the USDA encouraged truck farming in the Southeast, due to its long growing season. Truck crops were a large and profitable industry in Beaufort County during the early to mid-1900s, and much of today's agricultural production is based upon this agricultural sector.

EXISTING CONDITIONS

According to the 2012 USDA Census of Agriculture, there were 42,177 acres of land classified as farmland in Beaufort County with 137 individual farms. Table 6-1 depicts that although Beaufort County lost about 12,000 acres of farmland between the years of 1987 and 2012, with a modest increase in the corresponding number of farms. Farms with greater acreage are subject to greater pressure from development and face the continuing need to truck their products longer distances. Large-scale truck farms are still active on St. Helena Island and north of the Whale Branch River. Typically, tomatoes are grown and harvested during the month of June to be shipped to markets in the Northeast.

Table 6-1: Number of Farms and Farmland in Beaufort County

Year	Number of Farms	Land in Farms (acres)
1987	125	54,152
1992	120	44,800
2002	116	44,373
2007	125	49,401
2012	137	42,177

Source: USDA Census of Agriculture

On a smaller scale many other types of crops, including collards, cabbage, turnips, carrots, beans, watermelon, cantaloupe, corn, yellow squash, okra, potatoes, sweet potatoes, and pumpkins are grown locally on small farms and gardens to be marketed at the State Farmers Market in Columbia or at local farmers markets.

LOCAL MARKETING INITIATIVES



The Bluffton Farmers Market.

Increasing energy costs for transportation and recent public demand for locally grown foods have created opportunities for smaller scale farmers. While there is ample production potential, local products must be matched by marketing prospects to promote expansion of small-scale farming geared toward local and regional consumption. Local marketing programs, such as farmers markets, are being on, that are designed to provide visibility of the small farmer to a larger marketplace.

CONCLUSIONS



Locally grown turnips at the Bluffton Farmers Market.

While agriculture has been experiencing a slow and steady decline in Beaufort County, there are opportunities arising that may reverse this trend. Rising food and fuel prices along with concerns about the safety and quality of mass~~ed~~ produced food products has led to a worldwide interest in consuming locally grown and produced food. This global movement has the potential to benefit local small and medium sized growers. In order to facilitate this opportunity, there are three general sets of policies that Beaufort County should pursue.

- Beaufort County should ensure through land use policies and other programs that the potential supply of available land for agriculture is maximized and maintained.
- Beaufort County should support programs aimed at creating marketing opportunities for local growers such as the local farmers markets or the creation of a wholesale auction market.
- Beaufort County should provide information to the public on where locally grown and produced food products can be purchased.



Military Heritage

Beaufort County's military heritage is nearly 500 years old and has influenced virtually every aspect of the local culture. The County is centered around Port Royal Sound which is the deepest natural harbor in the southeastern United States. This location played a key role in the original settlement of the County; the strategic role the County played in many conflicts over the years; and influenced the location of the Marine Corps Recruit Depot, Parris Island; the Marine Corps Air Station, Beaufort; and the Naval Hospital. The presence of the military today is a major driver of the local economy directly and indirectly providing approximately $1.5 billion in economic activity, supporting a total of 12,826 jobs and over $700 million in personal income each year.[2] The presence of the military has influenced development patterns, the building of roads and other infrastructure and has attracted retirees and tourists.

MILITARY HISTORY

From the first European to arrive in what is now Beaufort County to the present the military has played an important role in the life of the area. In 1526 Spanish explorers named the area Santa Elena (St. Helena). The following year the Spanish attempted to place a colony in the Port Royal area. The colony was a failure and the surviving settlers left. The French were the next to come to the region placing a colony on Parris Island in 1562 as they attempted to gain a foothold in southeastern America. They named their fort Charlesfort. This settlement also failed. The Spanish returned and established a colony known as Santa Elena in 1566. They remained until 1587. In 1684 Scottish Presbyterians established Stuart Town believed to be at the present site known as Spanish Point. The colony only lasted for two years after Spanish and Indian forces attacked and destroyed the colony. The survivors fled to Charleston.

[2] *The Economic Impact of South Carolina's Military Community: A Statewide and Regional Analysis,* Prepared at the request of the South Carolina Military Base Task Force by: University of South Carolina, Darla Moore School of Business, Division of Research, January 2015.



The "Iron Mike" monument to the U.S. Marines stands in front of the Parris Island Headquarters and Service Battalion Barracks

Once Beaufort was established in 1711, the SC Legislature approved a series of forts to protect the entrance to the City of Beaufort and Port Royal. In the 1730's Fort Prince Frederick, a tabby fort, was constructed on the site of the present day Naval Hospital. Ruins of the fort remain. In 1755, Fort Lyttelton was built on Spanish Point and in 1811 Fort Marion was constructed on the same site. Extensive archaeological remains of these forts still exist.

There was considerable activity in the Beaufort area during the Revolutionary War. There were a number of defenses, fortifications and camps in Beaufort County. The most important engagement was the Battle of Port Royal that took place in Gray's Hill. During the American Revolution and the War of 1812, Beaufort was protected by earthworks. These defenses were occupied by the Confederates at the start of the Civil War. Later, the Confederates built works to protect the Charleston to Savannah Railroad. Some of these fortifications were built under the supervision of General Robert E. Lee whose headquarters were at Coosawatchie. Other fortifications were built on Hilton Head and Bay Point Islands to protect Port Royal Sound.

When the Union Army occupied the Beaufort area, several fortifications were built on Hilton Head and Port Royal Islands. A series of earthworks and forts were built between Battery Creek and the Beaufort River. A few of these earthworks remain whole or in part. A partial earthwork named Battery Saxton remains on US 21 near the entrance to the City of Beaufort.

Camp Saxton, located on the site of the present day Naval Hospital, was a camp for the 1st South Carolina Volunteers, the first black regiment in the Union Army. On January 1, 1863, the Emancipation Proclamation was read to the troops and freed slaves. The event is celebrated each year on New Year's Day.

On Hilton Head Island, the Confederates built several fortifications including Fort Walker and Fort Beauregard. The Union Army enlarged Fort Walker and renamed it Fort Welles. Other Union fortifications included Fort Howell, Fort Sherman and Fort Mitchel. These last three forts are in a good state of preservation. Mitchelville, a community built for freed slaves in the area became a thriving community during and after the War. Efforts to preserve Mitchelville continue today.

Fort Fremont, named after General John C. Fremont, which included two concrete sea coast batteries, was built on St. Helena Island in 1898 as part of a coastal defense system for the Eastern and Gulf coasts of the United States. The fort consisted of all support needed for the batteries including barracks, officers quarters, a mess hall, bakery, carpenter shop, administration building, a hospital and other buildings. The fort was decommissioned in 1921. Only the batteries, named Jesup and Fornance, and the hospital remain today. The batteries are now

owned by Beaufort County and are part of a public passive park. The hospital building is privately owned.

RECENT MILITARY ACTIVITY

The US Navy and Marine Corps have played an important role in the cultural and economic life of Beaufort for over 100 years. The Navy acquired a portion of Parris Island in the 1890's and built a coaling station and later a dry-dock on the island. The Marine Corps took over the base in the early 20th century and at the end of World War 1, acquired the entire island. During WWII, Page Field, a naval air station was located on Parris Island. Today, the island is the site of the Marine Corps Recruit Depot, Parris Island, the headquarters for the Eastern Recruiting Region.

The establishment of the Marine Corps Air Station dates back to 1941 when 1,300 acres in Beaufort were purchased by the Civil Aeronautics Authority for an auxiliary air station that supported advanced training for anti-submarine patrol squadrons. During the Korean War the Navy decided to establish a Marine Corps air station in Beaufort and the land was purchased by the Federal government. It was activated on January 1, 1955 as Merritt Field, named after Major General Lewie Merritt. In 1959, the Navy built Laurel Bay, a housing complex for Marine and Navy personnel. Today the entire installation includes 6,900 acres at the air station, 1,076 acres at Laurel Bay and an additional 5,182 acres at the Townsend Bombing Range in Georgia, the weapons training installation for the air station. MCAS is currently transitioning from the F18 to the F35B Joint Strike Fighter and adding a mission to house five ~~three~~ squadrons and to operate a Pilot Training Center.

The Naval Hospital Beaufort was commissioned in 1949 to provide medical support to the Parris Island and its recruits. The hospital currently serves the military installations in Beaufort County including Laurel Bay.

CONCLUSIONS

Today, the Navy and Marine Corps continue to have in an important role in Beaufort and in our nation's defense. Military and civilian personnel contribute significantly to the economy of Beaufort both in money they spend and as part of the non-military workforce. Military personnel also participate in community cultural and charitable organizations. We are reminded of the important role they play as we hear jets flying to and from the Air Station and small arms fire from Parris Island where tomorrows Marines are being trained.



Gullah Culture

The Gullah/Geechee are a community of African-Americans who live along the Atlantic coast on the Sea Islands of South Carolina and Georgia. Generally, the term "Gullah" is used in South Carolina and "Geechee" is used in Georgia. Comprised of descendants of slaves brought from West Africa, Gullah/Geechee communities continue to thrive on the Sea Islands today. The historic isolation of the Sea Islands was crucial to the survival of this culture. Within their rural communities, Gullah/Geechee people were able to maintain language, arts, crafts, religious beliefs, rituals, and foods that are distinctly connected to their West and Central African roots. Today there exists a strong movement to preserve and maintain Beaufort County's Gullah culture, language and customs.

ISSUES AFFECTING GULLAH CULTURE IN BEAUFORT COUNTY

As in other parts of the Southeast, Gullah culture is under extreme stress from rapid coastal development, population growth, lack of recognition, and the lack of significant financial resources. Rapid population growth has the potential to substantially alter the traditional social and cultural character of Beaufort County's Gullah community, as new residents represent different values and customs. The gentrification of St. Helena Island, which represents the County's largest Gullah community, would result in a greater demand for urban services and eventually to urbanization and higher property values, which would make it more difficult and costly to maintain the traditional rural lifestyle on the Island.



Historic Praise House on St. Helena Island.

Beaufort County's Gullah communities face other unique challenges brought on by increased development pressure. When Beaufort County was largely rural, large tracts of agricultural and forested land, regardless of their private ownership, provided the Gullah community with traditional access to waterways, oyster beds, hunting grounds and other amenities of the natural environment that were the lifelines for the community. Rising land values, especially along marshes and waterways, have often led to property owners limiting access through their properties. In addition, many of the older cemeteries, which play

an important role for the Gullah community, are located within the original plantations and are now on private property and difficult to access.



The Gullah Grub, located in the Corner Community on St. Helena Island served traditional Gullah cuisine. It operates under the South Carolina Coastal Community Development Organization.

LOCAL INITIATIVES TO PRESERVE GULLAH HERITAGE

In the past 10 years, Beaufort County, working closely with community groups, has taken several initiatives aimed at strengthening the Gullah community.

Corners Area Community Preservation District: The Corners Community is located around the intersection of Sea Island Parkway (US 21) and Martin Luther King, Jr. Drive and is the cultural and commercial heart of St. Helena Island. The 1997 Comprehensive Plan designated this area as a Community Preservation District, which led to a community-based plan that was completed and adopted in 2003. The plan was formulated by the 12-member Corners Area Community Preservation Committee, which conducted 140 meetings over a period of 2 ½ years. The plan outlines policies that encourage the district to be pedestrian friendly, promotes the preservation of historic structures and calls for context sensitive design for the widening of US 21 through the heart of the community. In 2014, based on input from the Community Preservation Committee and island residents, the County adopted transect zones for the Corners Community to further promote the objectives of the plan.

Cultural Protection Overlay District: In order to protect the Gullah cultural heritage of St. Helena Island, the County developed the Cultural Protection Overlay to prevent rural gentrification and displacement of residents in these cultural communities. The intent of this overlay is to protect this area from encroaching development pressures. Currently the district restricts the development of gated communities, golf courses, and resorts. It also prohibits development features that restrict access to water and other culturally significant locations, and franchise design.

Family Compound Option: The family compound option allows longtime rural residents to protect a rural way of life, especially prevalent in the Gullah community, where family members cluster development on family owned or heir's property. The family compound option allows property owners a density bonus for family dwelling units, which can be built either on the applicant's property without being subdivided, or on property subdivided and conveyed to the family members.

GULLAH/GEECHEE CULTURAL HERITAGE CORRIDOR (NATIONAL PARK SERVICE)

With the passage of the National Heritage Areas Act of 2006 (S. 203), the Gullah/Geechee Cultural Heritage Corridor was designated by the National Park Service along the coast from Wilmington, North Carolina to Jacksonville, Florida. The purpose of this heritage corridor is the following:

- To recognize the important contributions made to American history and culture by the Gullah/Geechee.
- To assist federal, state and local governments, grassroots organizations and public and private entities in interpreting the story of the Gullah/Geechee culture and preserving Gullah/Geechee folklore, arts, crafts, and music.
- To assist in identifying and preserving sites, historical data, artifacts, and objects associated with the Gullah/Geechee culture for the benefit and education of the public.



The Gullah/Geechee Cultural Heritage Corridor Commission.

In 2007, the National Park Service appointed a 15 member Gullah/Geechee Cultural Heritage Corridor Commission that is charged with developing and implementing a management plan for the Heritage Corridor. In 2012, the Commission approved the Gullah Geechee Cultural Heritage Corridor Management Plan for public distribution and submitted the plan to the Department of Interior who approved the plan in 2013.

CONCLUSIONS

Beaufort County's Gullah community continues to make it clear that its cultural resources are not only the historic sites, waterways, sacred grounds, farmlands, open spaces, hunting grounds, and the areas in which traditional events have occurred. The major cultural resource is the people themselves. The primary threat to the long-term viability of Beaufort County's Gullah communities is population growth and development. Responsible land use policies that concentrate new growth in urban areas and protect rural areas from high-density development are the most important policy that can be enacted at the County level. The Cultural Protection Overlay District is a good start in protecting Beaufort County's largest Gullah community on St. Helena Island. It is necessary to continue to evaluate what defines St. Helena Island as a significant traditional cultural landscape, as well as to assess the contribution of the Gullah culture, in order to develop more specific provisions within the overlay district that will result in effective long-term protection for the culturally significant aspects of the island.



Visual and Performing Arts

Beaufort County has a thriving, nationally recognized arts community. It is home to a variety of arts organizations, galleries, theater groups, dance groups, orchestras, jazz ensembles, and vocal groups. While the visual and performing arts are a key component of the region's culture and quality of life, they also contribute to the local economy.

In 1999, a study was conducted to measure the economic impact of visual and performing arts on Beaufort County. At that time, it was determined that direct expenditures of the industry totaled more than $10 million annually[4]. In addition, the study indicated that for every $1 of financial support to the arts by local governments, $6 is returned to the local economy. While this information is dated, it provides some indication of the economic importance of this industry.

PERFORMANCE VENUES



The Hilton Head Symphony Orchestra.

Beaufort County has a number of performing arts facilities that provide venues for both professional performers and grass roots theater groups and musicians. The Arts Center of Coastal Carolina, on Hilton Head Island, includes a 350-seat main theater and two smaller venues for youth and experimental theater. They also have a gallery for the visual arts that provides space for national exhibits, statewide exchanges, and local artists. The May River Theater, located in Bluffton Town Hall, provides a 200 seat venue for plays and other shows.

In northern Beaufort County, the Arts Council of Beaufort County has a 120 seat performance space in its ARTworks Community Art Center in Beaufort. The USCB Performing Arts Center is a 474 seat venue that is used for both local performers and touring professionals. Beaufort Performing Arts, Inc. was established in 2003 by a joint effort between USCB, the City of Beaufort, and several local arts supporters to bring high quality professional entertainment to Beaufort. Other venues in northern Beaufort County include the Frisell Community House at Penn Center, which seats 100, and the Henry C. Chambers Waterfront Park,

[4] *Economic Impact of the Arts on Beaufort County, SC* by Ginnie Kozak, Ivy Lea Consultants, 1999.



The Beaufort Museum is located in the Beaufort Arsenal, which was constructed in 1852.

which offers an open air, covered stage for outdoor concerts. The Beaufort County School District has several auditoriums in its high schools and middle schools that serve as venues for local and sometimes national performances. The availability of a suitable and affordable venue is a key factor in whether local performing arts groups can remain active.

MUSEUMS

There are a number of museums in Beaufort County that interpret the region's historic, cultural and natural heritage:

- Verdier House: The Verdier House (ca. 1790), maintained by the non-profit Historic Beaufort Foundation, is restored and furnished with artifacts appropriate to the Federal era.
- Beaufort Museum: The Beaufort Museum, also owned and maintained by the Historic Beaufort Foundation, is located in the Beaufort Arsenal, the County's oldest civic structure. The building's main elements were constructed in 1852 atop a 1798 tabby first floor. The exhibits include an eclectic conglomeration of materials, both local and foreign, collected during the museum's earlier years.
- Parris Island Museum: The Parris Island Museum, in the War memorial building at the Parris Island Marine Corps Recruit Training Depot exhibits Marine Corps heritage, Sea Island military history, and the establishment of French and Spanish forts on Parris Island.
- York W. Bailey Museum: Located at Penn Center, this museum focuses on the story of the African American residents of the Sea Island.
- Coastal Discovery Museum: Located on Hilton Head Island, this is the County's only natural history museum, although occasional forays into the historical and cultural arena are common.
- Historic Port Royal Foundation Museum: The Historic Port Royal Foundation operates a small museum in the 130-year-old Union Church, which features artifacts and memorabilia from the Town's history.
- Heyward House: The Heyward House was constructed as a summer home for a plantation owner in 1841. Today it is a house-museum operated by the Bluffton Historical Preservation Society and acts as the official Welcome Center for the Town of Bluffton.
- Port Royal Sound Foundation Maritime Center: In 2014, the Port Royal Sound Foundation opened its Maritime Center at the location of the former Lemon Island marina, which features exhibits, classrooms, and interactive learning focused on teh unique environment of Port Royal Sound.
- Santa Elena Foundation Interpretive Center: The Santa Elena Foundation is schedulded to open an interpretive center in the

former Federal Courthouse in Beaufort in 2016. The Foundation is focused on research, preservation, and promotion of the "Lost Century", the 16th Century la Florida settlement that became the colonial Spanish capital in present-day United States.

- Fort Fremont Interpretive Center: Beaufort County is in cooperation with the Friends of Fort Fremont is developing an interpretive center to be housed in a new building on the grounds of Fort Fremont.

EDUCATION AND SUPPORT



Black Box Theater at the ARTworks Community Arts Center in Beaufort.

The Arts Council of Beaufort County is a countywide non-profit that provides support to the visual and performing arts community through the distribution of grant funds from the South Carolina Arts Commission. The Council advocates for the art community by providing classroom space, gallery and reatail space, and a performance venue at their ARTworks Community Arts Center in Beaufort.

CONCLUSIONS

Beaufort County has an active visual and performing arts community. Studies have determined the economic importance of this community and the value in providing financial support for local artists and arts organizations. An important component to an active and creative visual and performing arts community is the availability of accessible, low-cost space available for performance, studios, and galleries. A thorough and systematic inventory and assessment of the County's arts community could be a valuable tool in determining the overall health of this industry and how the County and its municipalities can be better positioned to attract new artists and performers.



Recommendations

Recommendation 6-1: Archaeological and Historic Resources

Beaufort County should continue to emphasize the protection of historic and archaeological resources through a combination of planning, data gathering, land use regulations, and land acquisition. The following strategies are offered to implement this recommendation:

- Continue to review development plans to determine the location of archaeological and historic resources and the potential impact of development on these resources.
- Continue to coordinate with the South Carolina Department of Archives and History on projects that trigger state and federal permits.
- Continue to pursue the acquisition of significant archaeological and historic sites via the Rural and Critical Lands Preservation Program.
- Continue to update the Beaufort County Above Ground Historic Resources Survey.

Recommendation 6-2: Archaeological and Historic Resources – Public Outreach

Beaufort County should work to increase public awareness for local archaeological and historic resources by making presentations to local organizations, civic clubs, and schools; utilizing space in county buildings to exhibit archaeological and historic displays; and utilizing the County's web site to promote local archaeological and historic resources for educational and outreach purposes.



Vernacular residential architecture on Coosaw Island built circa 1935.

Recommendation 6-3: Rural Vernacular Architecture.

Beaufort County should target the preservation of historic rural vernacular architecture by pursuing grants, such as Community Development Block Grants (CDBG) and HOME Investment Partnership Program funds, to rehabilitate older residential structures.



The Town of Bluffton seeks Federal Scenic Highway designation for May River Road (SC 46).

Recommendation 6-4: Scenic Highways and Byways

Beaufort County should preserve and enhance the scenic qualities of its highways and byways by pursuing the following strategies:

- Utilize the Southern Beaufort County Corridor Beautification Board to provide oversight for road widenings, median landscaping, and other alterations within the highway right-of-way that impact the aesthetic qualities of the highway.
- Modify architectural, landscaping and tree preservation standards to better protect and enhance rural scenic qualities.
- Pursue state scenic byway designation for River Road, Martin Luther King Jr. Drive/Lands End Road, and other roads that qualify for this designation.
- Work with the Town of Bluffton's efforts to preserve and enhance the scenic qualities of May River Road (SC 46).
- Provide better coordination with SCDOT and utility companies to ensure that tree trimming and maintenance activities minimize adverse impacts to the aesthetic qualities of the county's scenic highways and byways.
- Create a local scenic highway designation to preserve minor collectors and local roads with tree canopies and other scenic qualities.
  - Inventory the County's remaining canopy roads.
  - Create a management plan for local scenic highways that includes design and tree protection standards along with cooperation with SCDOT and utility companies.
  - Promote public awareness and outreach by creating an interpretive brochure that maps and describes state and local scenic highways.

Recommendation 6-5: Maritime Heritage – Working Waterfronts

Beaufort County should protect and enhance the traditional local seafood industry by proactively working to preserve existing working waterfronts and allowing for the expansion of commercial fishing operations where appropriate.

- Beaufort County should work with OCRM and SCDHEC to form a Commercial Seafood Advisory Committee made up of representatives of the local seafood industry, dock owners, seafood distributors, along with representatives of local governments and SC Sea Grant to continually monitor the status of Beaufort County's local seafood industry.

- Consider the use of the Rural and Critical Land Preservation Program to protect working waterfronts from development pressures by purchasing development rights; or, where deemed appropriate, consider the acquisition of working waterfronts with a long-term lease arrangement to continue active private operation of the waterfront.
- Explore the feasibility of using County waterfront property to support the traditional seafood industry by allowing the location of private seafood processing facilities and other supporting facilities. This should only be considered where sufficient land is available and where such activities would not interfere with public access to the water, or endanger to other seafood harvesting.
- Consider future expansions of the Commercial Fishing Village Overlay District to accommodate any new traditional commercial fishing operations and supporting facilities.

Recommendation 6-6: Maritime Heritage – Recreational Boating and Fishing

Beaufort County should enhance its boat landings to serve the diverse needs of recreational boaters and fishermen and commercial fishermen.

- Beaufort County staff should conduct in-depth surveys to determine who uses the boat landings; which landings are receiving the greatest use; when are the peak demands for boat landing usage; and what are the landings being used for.
- Where sufficient land is available, County staff should make it a priority to enlarge and enhance existing boat landings before considering the creation of new boat landings.
- County staff should promote increased security at boat landings by installing better lighting and exploring the feasibility of installing security cameras.



On-shore fishing on the Broad River Fishing Pier.

Recommendation 6-7: Maritime Heritage – On-shore Fishing

Beaufort County should increase opportunities for on-shore fishing on marshfront and waterfront properties owned by the County or other public entities.

- Where sufficient land is available, Beaufort County should provide fishing piers, crabbing docks, and sea-walls at County boat landings and on other properties with water access potential (Lemon Island, Camp St Mary's, Altamaha, Fort Fremont, etc.).
- Adequate separation of shore-based fishing facilities and boat ramps should be maintained to avoid potential conflicts between users.

Recommendation 6-8: Maritime Heritage – Small Watercraft

Beaufort County should provide more launch areas for small non-motorized (kayaks and canoes) in locations consistent with the *Beaufort County Trails and Blueway Master Plan*.

Recommendation 6-9: Maritime Heritage - Funding

Beaufort County should pursue alternative funding sources for water access facilities.

- The County should seek state and federal funding sources such as OCRM Coastal Access Grants and the DNR Water Recreational Resource Fund.
- Beaufort County should explore the feasibility of a user fee at County boat landings to fund new water access facilities.



Farmland on Pinckney Colony Road preserved by conservation easement by the Rural and Critical Lands Preservation Program.

Recommendation 6-10: Agricultural Heritage – Regulatory Framework

Beaufort County should encourage the clustering of residential subdivisions in rural areas to preserve and promote agricultural and forestry uses on set-aside open spaces.

Recommendation 6-11: Agricultural Heritage – Rural and Critical Lands Preservation Program

Beaufort County should continue to use the Rural and Critical Lands Preservation Program to promote active agriculture and the preservation of agricultural lands:

- Continue to target the purchase of development rights on active agricultural lands.
- Where suitable, consider the lease of County owned properties to those who are interested and actively farming the land.
  - Target family farms and small growers.
  - Promote sustainable agricultural practices (crop diversity, low use of pesticides, protection of soil quality, cover crops, etc.).
  - Make active agriculture a condition of the lease.
- Continue to partner with the USDA and other agencies and organizations to match local funds for the preservation of farmland.

Recommendation 6-12: Agricultural Heritage – Markets

Beaufort County should support local marketing initiatives designed to increase the profitability of small-scale farming by lining up local growers with consumers.



Roadside sign announcing seasonal agricultural offerings at Dempsey Farms on St. Helena Island.

Recommendation 6-13: Agricultural Heritage – Local Foods

Beaufort County should encourage the use of locally grown produce by adopting a local food purchasing program.

- Enact a policy that requires, where feasible, the County purchase and serve local produce (grown and processed within 100 miles of Beaufort County) at the detention center and other County facilities where food is served.
- Beaufort County staff should work with Clemson Extension to research and create a web site with information on locally grown produce and retail establishments and restaurants serving locally grown produce. The web site should promote organizations that advocate local foods such as Lowcountry Local First and Fresh on the Menu.
- Create a coalition consisting of Beaufort County, the Rural and Critical Lands Preservation Program, Penn Center, the Coastal Conservation League and local growers to advocate for local agriculture and identify policies, programs and actions to further local agriculture. Issues to be addressed by the coalition include:
  - Encouraging the Beaufort County School District to serve locally grown produce at its cafeterias.
  - Working with local farmers to make available grade 2 and 3 produce to the food bank.
- Encourage community gardens and farms in urban and suburban areas by removing regulatory barriers.

Recommendation 6-14: Military Heritage

Beaufort County should recognize that the presence of the military is a vital component to the County's history, culture, and economy. The following actions are recommended:

- Continue to enforce standards within the AICUZ contours that discourage development that would adversely affect the mission of the US Marine Corps Air Station.
- Continue to partner with the US Marine Corps to preserve open space around MCAS to protect the facility from undesirable encroachment. This partnering expands the County's efforts to preserve rural and critical land while ensuring the ability of the MCAS to remain militarily viable and vital to the national defense.
- Implement a transfer of development rights (TDR) program to compensate affected property owners within the MCAS Airport Overlay District (MCAS-AO) and continue encroachment partnering acquisition efforts in the vicinity of the Air Station.

- Support the Greater Beaufort Chamber of Commerce's Military Affairs Committee's efforts to promote and lobby for the retention and expansion of the military installations in Beaufort County
- Work cooperatively with the City of Beaufort and the Town of Port Royal to implement the recommendations of the 2015 Lowcountry Joint Land Use Study (JLUS).

Recommendation 6-15: Gullah Culture

Beaufort County should recognize the importance of its local Gullah Community by adopting policies that preserve and promote this unique cultural heritage. The following actions are recommended:

- Continue to recognize the importance of land use policies such as low-density rural zoning and family compounds in preserving and enhancing the traditional land use patterns associated with the Gullah community.
- Conduct an assessment of buildings, archaeological sites, traditionally used roads, waterways, water access points, fishing areas, burial sites, and sacred grounds associated with the Gullah community. This would involve working with community members in order to access the historical and cultural resources that need protection, restoration, and/or maintenance; and seeking funding to preserve these resources in a way that allows the community to be stakeholders in the process. Rural and Critical Lands Preservation Program is a possible vehicle to preserve some of these sites.
- Promote educational outreach to the public in order to foster better stewardship of Beaufort County's cultural and environmental resources.
- Promote a safe pedestrian environment in the Corners Community and other gathering places on St. Helena Island that serve the Gullah community.
- Promote alternative means of transportation, such as transit, pathways, and ferry service to make jobs and services more accessible to the Gullah community.
- County Planning staff should continue to enforce the Cultural Preservation Overlay on St. Helena Island. Determine if additional policies and regulations are needed for the overlay to better implement its purpose.
- Support existing organizations that promote cultural resource protection such as the South Carolina Coastal Community Development Corporation, the Gullah/Geechee Sea Island Coalition, the Cultural Protection Overlay District Committee, the Lowcountry Alliance, and Penn Center.

- Support the National Park Service and the Gullah/Geechee Cultural Heritage Corridor Commission in the implementation of their management plan for the Heritage Corridor.
- County and Zoning staff should develop a brochure designed to assist small rural landowners understand how to subdivide and transfer land. The brochure should explain family compound, policies for small rural landowners, home occupation and home business provisions, cottage industry provisions, etc. The County should consider the designation or creation of a County liaison position to assist rural property owners.

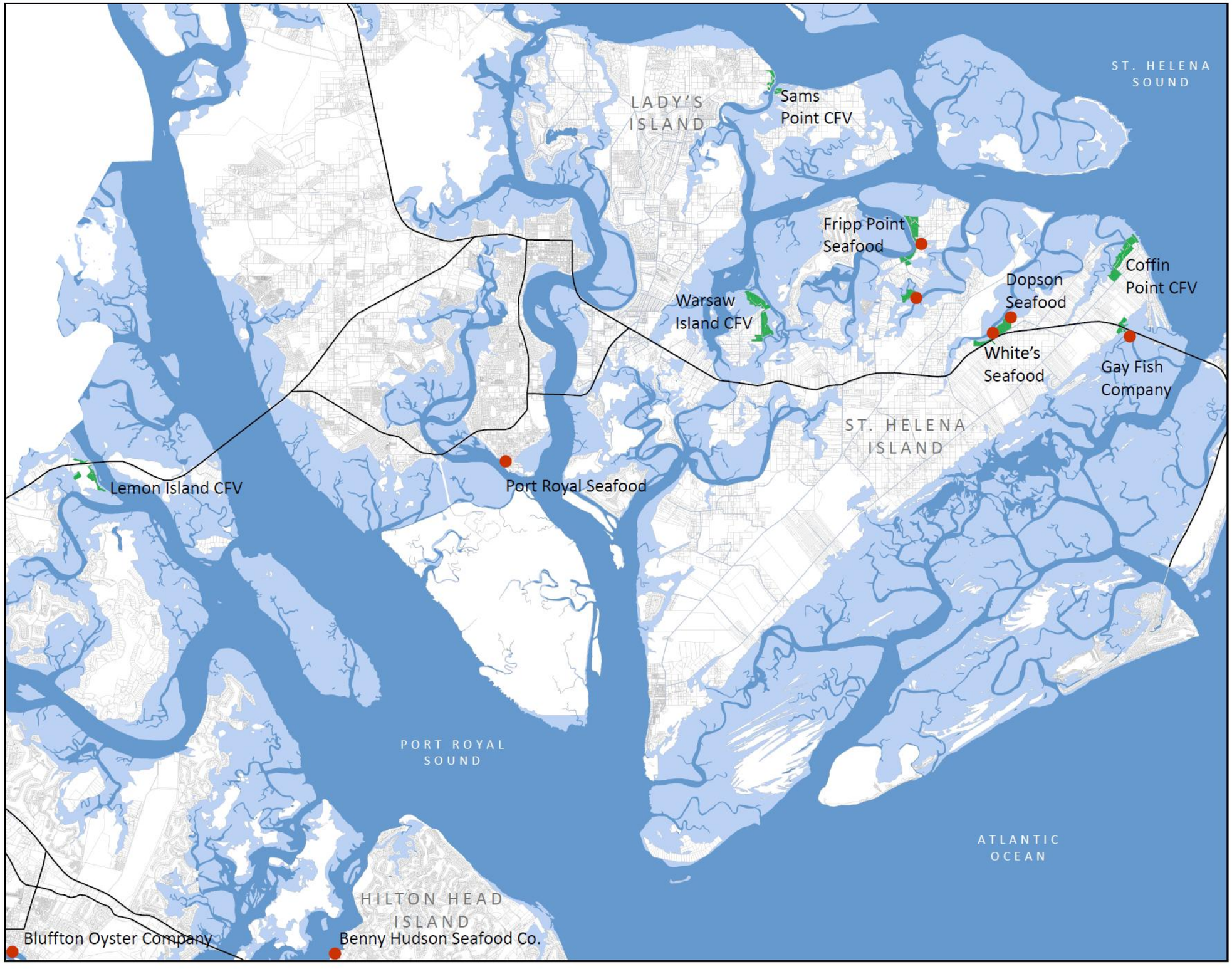
Recommendation 6-16: Visual and Performing Arts

Beaufort County should recognize the importance of its unique visual and performing arts community as both a key component of the County's quality of life and source of economic development by doing the following:

- Provide support for the creation of a Cultural Assessment of Beaufort County that provides a comprehensive identification and analysis of the community's cultural resources and needs.
- Provide local matching funds to the Community Arts Grant Fund to support individual artists, art education programs and local arts organizations.
- Continue to support the creation of venues, classrooms and galleries to showcase new and emerging local artists.
- Continue to provide space in libraries and other County buildings to display the work of local artists.

Chapter 6 Cultural Resources

Map 6-1: Working Waterfronts



Working Waterfront

Commercial Fishing Village Overlay

2010 Beaufort County Comprehensive Plan

7

Beaufort County Comprehensive Plan

Economic Development



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Introduction

The Economic Development chapter serves to provide an analysis of the current economic prosperity of Beaufort County and make recommendations to develop an environment capable of sustaining our existing economy and quality of life. Yet at the same time, this chapter provides a roadmap to programs designed to generate new and alternative job opportunities and an increased tax revenue stream to enable the county to support and deliver essential services.

Beaufort County's economy is far-reaching and benefits from our existing economic drivers – tourism, the military, the retirement industry, residential development, education, and healthcare. The importance of maintaining these industries is vital to our community and acknowledged in this chapter. However, key recommendations to preserve and develop the appropriate environments to sustain the region's quality of life which attracts these industries are covered in depth in the Cultural Resources, Natural Resources and Land Use chapters of this Comprehensive Plan.

The recommendations of this chapter focus on how to build on the county's existing assets while diversifying the economic base. The future depends upon quality job creation that allows citizens to find reasons to remain or settle in Beaufort County in employment that requires knowledge, talent and training and compensates with higher-paying jobs.

Overview

Located in the heart of the Lowcountry, Beaufort County is home to the historic City of Beaufort and the popular resort community of Hilton Head Island, as well as three military bases. It is also situated midway between the celebrated cities of Charleston and Savannah. These attractions, coupled with 30 miles of Atlantic coastline, inlets, rivers and marshlands, has attracted a large influx of new residents over the last decade, making Beaufort County one of the fastest growing counties in South Carolina.

The flood of new residents, some of which are semi or completely retired, and the tremendous growth in tourism, has driven the rise in resort, residential and commercial development, which has in turn created a predominately service-related workforce and a growing population in need of more County services.

The long-term success and viability of Beaufort County depends upon the creation of a larger, more diversified business tax base creating quality jobs for the County's citizens. Beaufort County is well positioned for an aggressive effort to pursue the larger business base while maintaining the quality of life elements that have allowed it to be such an attractive location.

History

Prior to 2001, economic development in Beaufort County was the responsibility of the Beaufort County Planning and Development Corporation. As the County began to witness a rapid increase in population, primarily at that time from early retirees, they recognized the need to attract more business and industry to the area to help diversify the tax base. With the support and assistance of the business community, the Beaufort County Council felt the time was right to reorganize and grow the County's economic development function and voted to separate the economic development operations from the County and form a not-for-profit organization called the Greater Beaufort-Hilton Head Economic Partnership.

On February 7, 2001, the Greater Beaufort-Hilton Head Economic Partnership, Inc. was created as a successor organization to the Beaufort County Planning and Development Corporation. The Partnership, established as a public-private partnership with a Board of Directors that represents government and the private sector, is a South Carolina not-for-profit organized to serve as the economic development arm of Beaufort County. Beaufort County Council authorized the organization to negotiate economic development inducement packages to businesses considering locating in Beaufort County, with the goal of diversifying the County economy while preserving the community's quality of life.

In September 2007, the Partnership completed an extensive marketing and branding analysis study and concluded that the organization would be better represented to its internal and external markets as the Lowcountry Economic Network. The Board of Directors endorsed this new identity and the Partnership is now officially doing business as (dba) the *Lowcountry Economic Network*.

Mission

The Lowcountry Economic Network is a fully connected resource that fosters and manages current and future economic prosperity while maintaining the Lowcountry's atmosphere and lifestyle. The Network's mission is to promote and assist with quality growth and economic development through an alliance with the private sector, creating career path opportunities and expanding the business tax base of Beaufort County.

Goals

The goals of the Network are to reduce the ever-growing burden of residential property taxes on the citizens within the County by strengthening and expanding the business tax base and to provide quality, value-added jobs for the residents of Beaufort County.



Economic Analysis

Beaufort County is fortunate to enjoy one of the lowest unemployment rates in the state as well as the four-county area. However, even with a relatively low unemployment rate, wages invariably do not meet the state average. A large concentration of the working population is employed in traditionally low-paying industries such as retail, leisure, hospitality and trade. Many others seek jobs in the construction field, which although traditionally paying a higher wage and bolstering area employment in the early years of this decade, has seen a decline due to the ongoing downturn in the housing market.

The Lowcountry's unique geography and quality of life has driven the rapid rise in the region's population, particularly in Beaufort County. Much of this population increase has come from early retirees or those persons semi-retired who either telecommute or travel periodically to a major metropolitan area to work. However, considerable portion of their incomes is derived from high-earning pensions, dividends and investments, or consulting fees, coupled with government payments. This increase in a high-earning population has caused per capita income levels to accelerate and rank Beaufort County with the highest per capita income in the state, as well as to be the only South Carolina county to exceed national per capita income levels.

Invariably, rather than analyzing demographic disparities, poverty levels or average annual wages, per capita income is the only measurement taken into consideration by state officials when formulating economic development incentives, or when state and federal funding allocations are made. Therefore, it is imperative that Beaufort County support economic development initiatives that will attract capital investment and high-wage job creation opportunities from outside the county and state, as well as legislation to amend current economic development and social funding measurement qualifications.

Key economic indicators are reviewed in this section to give a snapshot of the County's population and incomes, which ultimately affect the business climate. An in-depth analysis can be found in Appendix 7-A.

Income and Employment

As is evidenced in the following data, a large segment (nearly 55%) of the working (excluding active duty military[1]) population of Beaufort County falls into the top four industry sectors - accommodation and food services, retail trade, health care and social assistance, and construction industries (Figure 7-1). Unlike many areas of the state or nation, these particular industries comprise Beaufort County's 'base' economy. Base activity refers to the production of goods and services that are exported outside the local area, whereas non-base activity refers to goods and services produced locally for local consumption. Beaufort County has a higher percentage of these base activities due to the in-migration of retirees, new residents and tourists as they have earned income and accumulated wealth from outside of the County and an associated purchasing power.

Figure 7-1: Beaufort County Workers By Industry Sector and Total Wages

Description	Total Emp.	% of Emp.	Total Wages (in millions)	% of Wages
Accommodation & Food Services	10,798	18.02	$49.8	10.71
Retail Trade	9,640	16.08	$58.7	12.61
Health Care & Social Assistance	8,108	13.53	$55.7	11.97
Construction	4,323	7.21	$43.6	9.38
Other Services (except Public Administration	3,838	6.40	$27.3	5.88
Administrative, Support, Waste Management & Remediation Serv.	3,501	5.84	$23.9	5.15
Public Administration	3,428	5.72	$39.9	8.57
Professional, Scientific & Technical Services	2,757	4.60	$46.1	9.91
Real Estate, Rental, & Leasing	2,662	4.44	$24.2	5.21
Educational Services	2,645	4.41	$ 5.9	1.28
Arts, Entertainment, & Recreation	2,293	3.83	$12.2	2.63
Finance & Insurance	1,562	2.61	$22.6	4.85
Transportation & Warehousing	1,087	1.81	$ 8.8	1.89
Manufacturing	915	1.53	$ 8.9	1.92
Information	747	1.25	$11.5	2.47
Wholesale Trade	706	1.18	$10.9	2.34
Management of Companies	447	0.75	$10.0	2.16
Agriculture, Forestry & Fishing	320	0.53	$ 2.7	0.58
Utilities	160	0.27	$ 2.3	0.49
TOTAL	**59,936**	**100.00**	**$465.2**	**100.00**

Source: JobsEQ ® Data as of 4th quarter of 2008

[1] These data are based on the Quarterly Census of Employment and Wages (QCEW) provided by the U.S. Department of Labor, Bureau of Labor and Statistics and exclude members of the armed forces and the self-employed.

However, in order for an economy to grow the more traditional base economy, industries that generate wealth from beyond county lines (manufacturing, finance, technology, etc.), must be actively facilitated and recruited. Appendix 7-A (pages 19-24) expands in detail the differences between base and non-base industries and the importance of both to the local economy.

While wages for these industry groups comprise nearly 45% of the total wages earned, the average wage per worker, with the exception of management, tends to be low, which in turn can lead to a greater need for and dependence on social and government-funded services, as well as lower levels of spending which reflect poorly on sales tax revenues. (Figure 7-2)

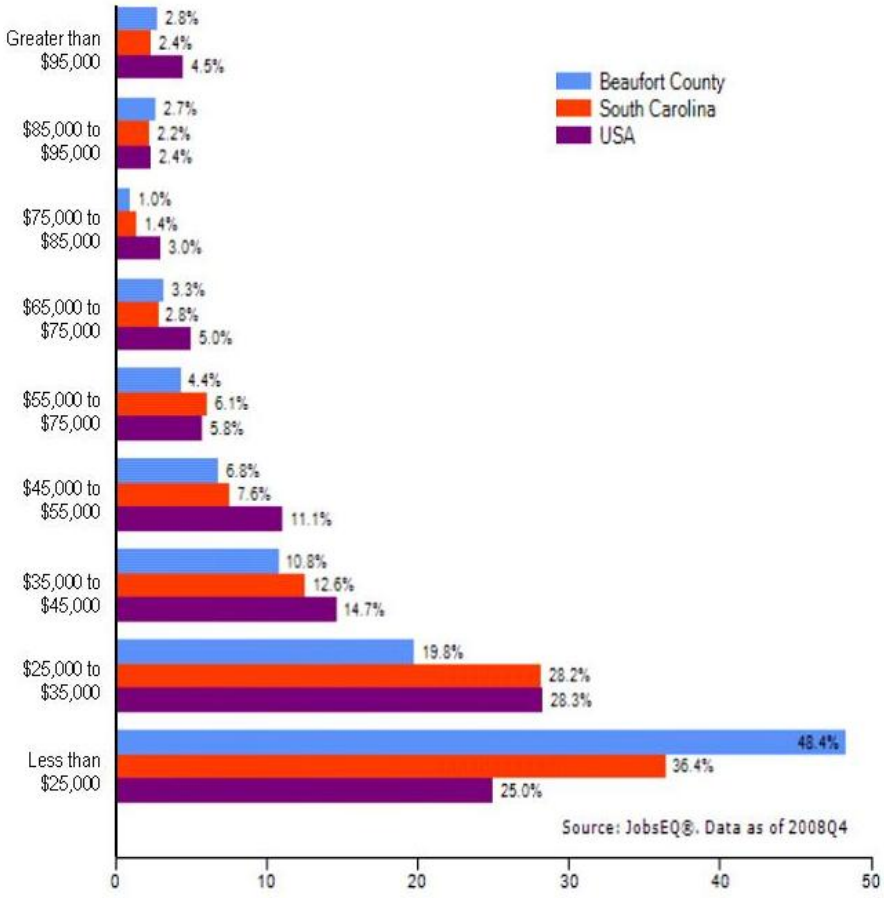
Figure 7-2: Beaufort County Wages by Industry

Industry	Average Weekly Wage (in dollars)
Accommodation & Food Services	353
Arts, Entertainment & Recreation	399
Retail Trade	463
Administrative & Support & Waste Management & Remediation Services	498
Other Services (except Public Administration)	540
Educational Services	550
Transportation & Warehousing	649
Real Estate & Rental & Leasing	700
State Government	702
Health Care & Social Assistance	719
Construction	730
Manufacturing	733
Federal Government	823
Local Government	832
Information	1,014
Professional, Scientific & Technical Services	1,075
Finance & Insurance	1,080
Total-- Private & Government	**619**

Source: JobsEQ ® Data as of 4th quarter of 2008

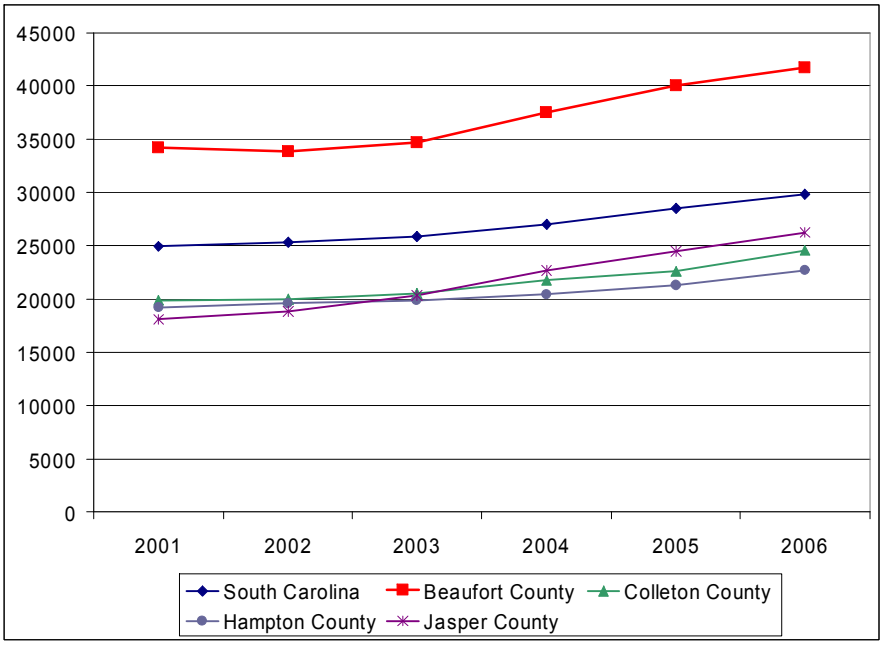
Figure 7-3 further emphasizes the high percentage (43% earning less than $25,000 per year) of Beaufort County citizens that earn below average wages, especially compared to earning levels across the state and the nation.

Figure 7-3: Wage Distribution by Percent Employed



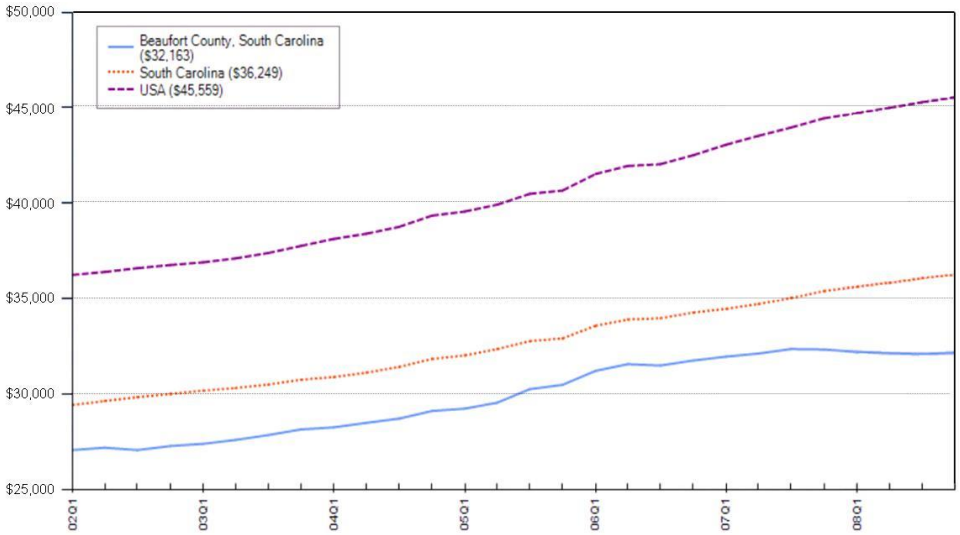
The disparity in incomes is highlighted when comparing annual wages to per capita income levels. While Beaufort County leads the state and the four county region in per capita income (Figure 7-4), the County lags behind the State and the Nation in average annual wages (Figure 7-5). The dialogue and data contained in the Broad Economic Overview of Beaufort County section of Appendix 7-A expand on these differences.

Figure 7-4: Comparison of Growth in Per Capita Income



Source: US Department of Commerce - Bureau of Economic Analysis

Figure 7-5: Comparison of County Average Wages to State and National Averages



Source: JobsEQ ® Data as of 4th quarter of 2008

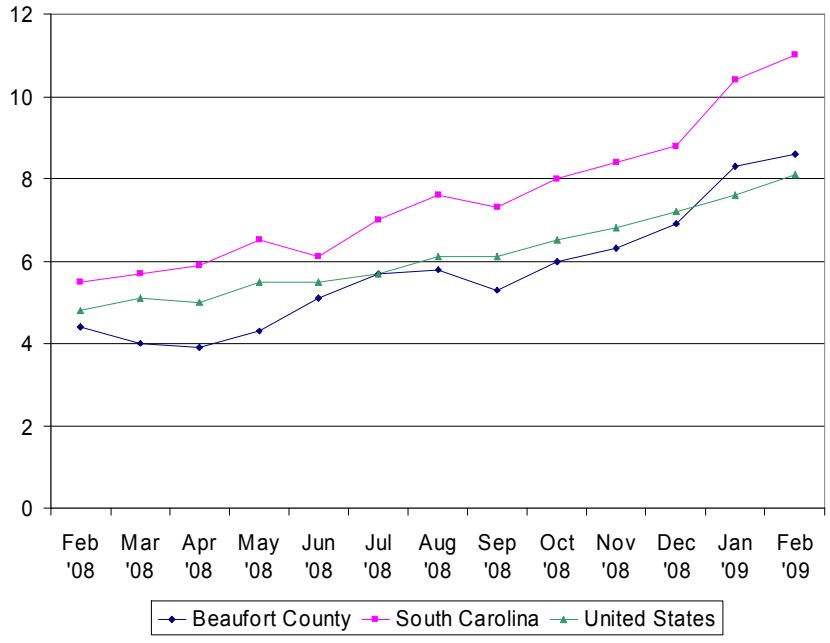
Economic Impact of Military Installations

Although not counted in the data shown, it is important to recognize the significance of the military presence on Beaufort County's economy. An overview of the economic impact of Marine Corps Air Station (MCAS) Beaufort for Fiscal Year 2008 shows a total figure of over $561.5 million. The Department of Defense is one of the largest employers in the County, and the direct economic impact in 2008 included salaries of more than $152.7 million. Therefore, it is important to foster a continued military presence by creating a supportive environment and by attracting advanced military technology and ancillary businesses.

Unemployment

The current recession has caused some of the highest unemployment levels in this area in many years (Figure 7-6) and low-paying industries are often the first to be affected. Therefore, as the economy begins to recover it is even more important to expand the County's base (export) sector to include industries that generate wealth from beyond its borders. These industries are discussed in the Developing Business Climate section of this chapter.

Figure 7-6: Comparison of Unemployment Rates



Conclusions

Beaufort County is in need of new economic development that provides good wages and opportunities for our workforce, and helps diversify our economy. This may include attracting clean business and industries, capital and investment from outside the County and South Carolina, which in turn will ensure the continuance and quality development of our region's existing base industries.



Current Business Climate

Beaufort County is well situated between the ports and airports of Charleston and Savannah, and is close to the proposed Jasper Port terminal, Interstate 95, and the major east coast rail corridor. The quality of life is high and the County is increasingly a destination for early retirees from eastern metropolitan areas. Baby boomers are considering the location prior to retirement in hopes of relocating before property values skyrocket out of their price range. This makes the Lowcountry an attractive option for boomers who own light manufacturing, distribution and logistics operations, professional, and technology-based businesses.

For many years, quality of life has been driving growth in Beaufort County from a tourism, hospitality and subsequently construction perspective. The family which bought a vacation or second home, is now looking for a way to make Beaufort County their permanent residence, often long before traditional retirement age. Moving part or all of their existing business would expedite that transition. The problem is they do not know how to go about it and what resources are available to make it happen.

Existing Business

During the past few years, several small, light manufacturing businesses have moved into Beaufort County and recently the Town of Bluffton was able to attract a national organization that provides diagnostic imaging management services for health insurers. The introduction of these new industries is important, as the once traditional industries of Beaufort County and the Lowcountry – agriculture, fishing and forestry - are on the decline, although efforts to revive and utilize the output from these industries is covered in more depth in the Cultural Resources chapter of this Plan. As outlined in the Workforce section of this chapter, the County is fortunate to have an established professional and skilled workforce such as those in the legal, financial, government, education and healthcare industries or certified trades such as electricians, plumbers, etc., as well as businesses closely tied to our military installations. However, a large proportion of local business is tied in some part to the tourism and service-based industries – hotels,

restaurants, retail – or construction, and is market driven. While professional level and military related commerce remains mostly unaffected, the slowing economy has caused a major downturn in construction affecting many skilled trades persons, and a decline in tourism has occurred.

Existing Business Owners

Currently, over 80 percent of the County's prospect traffic is driven initially by lifestyle choice. This market has been and will continue to be a target for Beaufort County as it brings in the higher-wage jobs and capital investment conducive to our existing economic climate and quality of life priorities, but it can be a difficult market to tap. Many of these business owners live or own property in the numerous gated communities within the County. They either continue to work away from the area to their existing business, returning when they can, or telecommute, unaware of the potential to move their business operations to Beaufort where they have already chosen to live.

Business License Fees

Every for-profit business operating in Beaufort County, including the municipalities, is required to pay an annual business license fee based on a percentage of the organization's annual gross income and calculated on a specified classification scale. While some businesses have objected to the business license fee and/or the rate, the imposition of such fees is not unusual in other counties or states. However, simplifying the process for all businesses, regardless of their location or where their business is conducted within the County, would be advantageous. Consideration should be given to standardizing the rate and classifications across the County and its municipalities as well as the possibility of flexibility in certain rates for incentive purposes.

Available Product

In 2006, the Network acquired 175 developable acres for light to moderate industrial and commercial business at the Beaufort Commerce Park. While the Park is in a desirable and convenient location, no buildings are available for a business looking to expand or relocate. The shortage of warehouse or light industrial space available for immediate occupancy in Beaufort County is critical causing prospective and existing companies to look to other counties or states to meet their needs.

Conclusions

Although both construction and tourism will regain strength as the economy recovers, it is important for Beaufort County to take steps to recognize and encourage growth in the County's existing and emerging industries, as well as attract the type of business that can sustain the

economy well into the future. As the County begins to focus on specific economic development areas, it will be important to create a business friendly environment. One such step would be to develop flexibility within the business license fee program for companies that fit the County's four economic development focus areas - Distribution and Logistics, Aeronautics, Knowledge-Based, and 'Green' (see Developing Business Climate section) as well as standardization of rates and classifications. The County should also take steps to designate properties that are currently under municipal or County control that can be offered to relocating businesses.



Developing Business Climate

The southeast portion of the United States remains the population growth area for baby boomers relocating to warmer climates in preparation for retirement and younger generations making job location decisions based on quality of life elements in this mobile technology based economy. This population surge and shift in how businesses are making decisions requires the traditional economic model to be overhauled.

Regional Focus

Economic development can be defined as significant capital investment by businesses delivering quality jobs that pay at or above the state average wage. It is important to diversify the type of business development in order to sustain the overall local economy. When prospective businesses visit they are interested in what sets the area apart from the rest of the country – product depth and variety and the Lowcountry's quality of life – they do not and should not take into account county lines. Recognizing that opportunities which could greatly benefit Beaufort County may well lie minutes away in an adjacent county, Beaufort County recently took the initiative to join forces with Jasper County and formed the Lowcountry Economic Alliance. Plans are moving forward to include Hampton and eventually Colleton counties. The purpose of the Alliance is to create economic opportunities that will benefit the citizens of the now two, and ultimately four-county region.

Target Industries

As we take into account the business opportunities and attractions Beaufort County and the region has to offer coupled with advances in technology and changing global economies, the Network, working on behalf of the Alliance, has identified four distinct target industry areas.

Distribution & Logistics: The I-95 corridor continues to be the artery that feeds economic activity in this region as well all the major components of an intermodal system with port, rail, and highway infrastructure access. The Savannah port continues to grow, and the

states of South Carolina and Georgia are moving forward with the development of a bi-state port - the Jasper Ocean Terminal. The new port will support the 'Panamax' ships arriving via the Panama Canal and will create increased shipping capacity and a competitive global advantage. The port will be located in Jasper County on the Savannah River and completion is expected by 2014. The ability for Beaufort County to position product near I-95 for distribution and logistics industries is critical in order to capture economic investment and job creation in that growing market.

Aeronautics: Beaufort's Marine Corps Air Station (MCAS) is positioning itself to house the next generation of fighter jet - the F-35 Lightning II, or Joint Strike Fighter. With the arrival of these jets, businesses that support the Joint Strike Fighter will follow and ancillary development around the base will grow. With the Network owning 150 acres at the Beaufort Commerce Park adjacent to the air station, Beaufort County is well positioned to handle the businesses that these jets will bring. MCAS personnel are equipped with significant aircraft maintenance training and high-tech skills, which, as they retire from military service, creates a ready-made workforce to staff aeronautics and precision industries.

Knowledge-Based Industries: With the constant advancements in technology and the expanding global economy, business today can be conducted from virtually anywhere. A knowledge-based business is often thought of purely in its conventional form – computer programming or software engineering. While this is often a correct definition, a more detailed description is an establishment that creates an end product that is primarily dependant upon the professional and intellectual expertise of its workforce and the translation and distribution of its product to various markets. Therefore, a knowledge-based business can encompass professions such as architecture and finance, a call center or a business focused on, technical writing, healthcare, or even art and design. As noted in Appendix 7-A (pages 23-24), some residents and businesses are likely turning to nearby urban centers for some of these services when they are not available locally. This also leads to potential loss of local revenue. For example, many residents travel to Charleston or Savannah for medical services that could potentially be provided locally. Knowledge-Based Industries are environmentally friendly, attract high-wage jobs, and can locate almost anywhere provided the necessary infrastructure is in place. As people tire of traditional city living, they invariably look to relocate to a coastal region such as Beaufort County that offers a superior quality of life. A knowledge-based workforce tends to primarily be comprised of a younger population – 25 – 34 years of age. This key demographic tends to be environmentally conscious and attracted to an area that offers 'quality of place'. They will select the location first, then the job. This requires that the right mix of housing choices, cultural and recreational activities and transportation alternatives are available.

Green Industries: The benefit of green building is gaining recognition nationwide (see Chapter 9: Energy). As protecting our natural resources is a top priority for our region, it is important to capitalize on this movement. Not only will green construction practices help us protect these important resources, it will benefit both the local economy and our environment. Beaufort County needs to adopt initiatives and incentives that promote the use of green technology and construction principles. Public buildings that adopt green practices in remodeling or new construction, as well as in day-to-day operations, encourage the market. The result will be that ancillary businesses that serve the green industry, both through production and maintenance, will follow.

Conclusions

It is important that Beaufort County diversify its tax base and create good jobs for its citizens. The County is fortunate to already have a solid foundation in its military presence and the development of the Jasper Port Terminal. Both position the area well to attract new business from the aeronautics and distribution and logistics industries. Knowledge-based and Green businesses are the way of the future. Beaufort County needs to ensure the right product, infrastructure, permitting processes and incentives are in place to attract these industries and enable them to quickly establish a presence.



Incentives

Beaufort County's direct competition exists up and down the southeast coast in communities with similar growth patterns and quality of life elements. From Jacksonville, Florida to the coasts of Virginia, companies weigh the pros and cons of relocation. State incentive programs, as evidenced by the example contained as Appendix 7-B comparing South Carolina to its neighbors in Georgia and North Carolina, remain fairly comparable, with each state aggressively marketing to site selectors in order to remain in the forefront with key corporations.

Existing State Level Incentives

Under South Carolina state law, counties are vested with the authority to grant incentives to reduce the property tax liability of a potential investor, and/or offset the infrastructure related expenditures of that potential investor.

Qualifications: The state of South Carolina's offers various statutory and discretionary incentives to companies looking to locate or expand in any county of the state. However, qualifying criteria is based on the per capita income of the proposed destination county. Due to the number of retired or semi-retired residents of Beaufort County that have relocated to the County from high-income parts of the country, Beaufort County's per capita income ranks the highest in the state and immediately reduces the incentives available to a prospective company (See Figure 7-4). This also means that Beaufort County is less competitive when it comes to securing grant funds and funding allocations for economic development related infrastructure and project development.

Corporate Headquarters: At the end of the 2008 South Carolina legislative session, an economic development bill included an amendment to the existing law governing incentives for organizations wishing to locate a headquarters facility in the state. The new law now allows a Limited Liability Company (LLC) to be eligible for tax incentives that were previously only available to incorporated companies. One of the key criteria an incoming headquarters must meet in order to qualify

for tax credits is the creation of a minimum of 40 new headquarter jobs which must earn twice the state per capita income. This qualification can be excessive, particularly as companies streamline their human resources.

Jobs Tax Credit: The Job Tax Credit (JTC) is a statutory incentive offered to companies, both existing and new, that create new jobs in the state. The credit is available to companies that establish or expand corporate headquarters, manufacturing, distribution, processing, qualified service-related, or research and development facilities. This credit is extremely beneficial for companies because it is a credit against corporate income taxes, which can eliminate 50 percent of a company's liability. Currently, the state has no provision to make this credit available to knowledge-based businesses, which today make up a large proportion of companies looking to relocate.

Fee-in-Lieu: Expanding or relocating companies may also be able to negotiate a Fee-in-Lieu (FILOT) of property taxes, which can greatly reduce their property tax liability. Although a state-level program, this property tax incentive is offered at the discretion of local governments. Companies investing as little as $2.5 million dollars may negotiate this exemption with the county in which they locate. This 20-year incentive creates significant savings for companies by lowering the assessment ratio from 10.5 percent for manufacturers to as low as 6 percent. Furthermore, the millage may be held lower than if the property were not under a FILOT.

Multi-County Park Agreement (MCIP): In an effort to further attract businesses to the state, a county may establish a Multi-County Park Agreement. Under an MCIP agreement, two counties agree to partner and share property taxes with the partnering county. The agreement also raises the State's Job Tax Credit available to employers by up to $1,000 per job, with no liability to the county. Investors seeking a Fee-in-Lieu often request an MCIP agreement. Currently, the Beaufort Commerce Park and the Technology Park at Buckwalter Place are both included in a Multi-County Park Agreement between Beaufort and Jasper Counties as well as certain properties in the City of Beaufort. Plans are in place to include additional parcels in the City of Beaufort as well as the Town of Port Royal.

Infrastructure Credits: Infrastructure credits may be offered in tandem with a Fee-in-Lieu or as a standalone incentive. Credits, which are taken against an investor's property tax liability, may be utilized under state law to offset an investor's qualifying infrastructure-related expenditures including improvements to utilities serving a project site, real estate expenditures and costs relating to improving real estate.

Existing Local Level Incentives

Development Permitting: A streamlined permitting process is increasingly a critical factor for companies looking to expand or relocate. Beaufort County Planning Department has taken the lead by creating a Development Agreement, which outlines the land use, environmental protection, and permitting regulations governing the Beaufort Commerce Park as well as neighboring industrial parcels. This Development Agreement greatly accelerates the planning and permitting process for organizations developing in the Park. To further enhance the Development Agreement and expedite the development permitting process, the Network has worked with the Beaufort County Planning Department to design an expedited permitting flowchart, which significantly reduces the current permitting time. (See Appendix 7-C) At this time, the flowchart process is available only to properties contained within the Beaufort Commerce Park Development Agreement. However, it is hoped that this process will eventually be extended to govern all property in Beaufort County deemed a priority for economic development. The establishment of such a process will make the prospect of developing in Beaufort County more attractive.

Conclusions

State and local incentives play an important role in the decision-making process when companies look to expand or relocate. Regardless of economic or market changes, it is critical that incentives are reviewed and updated on a regular basis to attract the right industries for the state and our region as well as keep pace with the changing face of business and industry. The state should seriously look to upgrading their incentive package, particularly when it comes to the current Per Capita Income qualification and the minimum headquarters jobs creation requirements. The addition of a specified definition for Knowledge-intensive businesses should be included in the list of businesses qualified for the state Jobs Tax Credit, and to encourage green building practices, an additional tax credit should be included in an MCIP agreement for companies whose new construction meets LEED and Energy Star standards. At the local level, green and sustainable development projects meeting economic development requirements should also be encouraged by streamlining the review processes, as well as creating fee reductions and waivers, and building height or density bonuses.



Workforce

Over the past 10 years, Beaufort County has seen significant growth. The quality of life aspects have attracted many retired or semi-retired individuals to the area, particularly to the southern portion of the County. However, the area has been criticized for its perceived lack of an available workforce trained to meet the skills of today's emerging industries.

Existing Workforce

Beaufort County's working population can be divided into three diverse groups: professional, military and unskilled labor and each brings with them pluses and minuses.

Professional and Skilled: These individuals are experienced, well educated, and hold senior positions in government, education, and healthcare or in other key professions such as law or finance. Many of these citizens have moved to the area from out of state and some still commute, or telecommute to their place of business. However, this demographic is aging and leaving the workforce. Skilled trades persons such as plumbers, electricians, etc. maintain a strong local presence, but the decline of the construction industry has significantly reduced their ability to find sufficient new work to sustain their businesses.

Military: In addition to enlisted personnel, Beaufort County's active military bases employ over 1,800 civilian residents. Each year, over 600 Marines retire or transition out of the Marine Corps Air Station (MCAS) and some 10,000 retired military personnel live within a 40-mile radius of Beaufort County. Former military are a tremendous asset to the region: their specialized training and discipline has equipped them with expertise in information technology, aeronautics, engineering, logistics, etc. and an extremely strong work ethic. The bases also inject an additional valuable resource into our workforce – military spouses. However, because of the transient nature of military life, many military spouses, although often well educated, find it difficult to secure employment.

Unskilled: As noted earlier, the southern portion of Beaufort County has witnessed tremendous growth. This growth has lead to the development of both the tourism industry and retirement communities, which in turn has created job opportunities much of which have been in the low-paying service, food or retail industries. For many of the citizens living in rural northern Beaufort County, faced with minimal economic opportunities in the rural areas, seek employment in the tourism or service-based fields. This particular demographic is poor and, while willing to work, often lacks basic levels of reading and math to seek even an entry-level position in anything other than the service industry.

Cottage Industries

As our population becomes more aware of sustainability and protecting the environment, a workforce opportunity emerges that could help citizens who once worked on or still own small farms or fishing businesses. Rising food and fuel prices along with concerns surrounding the safety and quality of mass-produced food products has led to a growing interest in purchasing and consuming locally grown and produced food. Farmers should be encouraged to produce food items not only for local farmers' markets and grocery outlets, but also for local and regional restaurants as well as school, hospital or other institutional cafeterias (see Chapter 6: Cultural Resources).

Education

Both the University of South Carolina campuses at Beaufort and Bluffton, as well as the Technical College of the Lowcountry are growing rapidly and expanding their facilities and curricula and offer affordable academic and technical programs leading to four-year and associate degrees, diplomas, and certificates. Beaufort County's K-12 schools and the Academy for Career Excellence offer programs designed to prepare the County's young people for college or a meaningful career. However, the region's shortage of employment opportunities other than tourism or the service industry often causes high school and college graduates to seek employment in other regions that offer more interesting and higher-paying jobs, or may not provide sufficient motivation to stay in school. Both situations add to the region's deficit of a young and educated labor pool.

Emerging Workforce Groups

Successful economic development initiatives depend on an available workforce equipped with the skills to support the challenges of today's changing and emerging industries. On the one hand, Beaufort County is suffering from an aging workforce, particularly those highly skilled or in the professional field; and an unskilled labor pool on the other. However, with the proper programs in place, two available workforce pools already exist – military and unskilled. The hundreds of locally

based active military are equipped with highly specialized skills frequently sought by today's businesses. Their spouses also, are invariably well educated. Military personnel historically retire at a much younger age than traditional industry groups, thus creating a much-desired young and talented labor force. Our lower skilled labor pool is hard working and willing to learn a new trade, but lacks the time and resources to acquire the necessary training. They are rooted to the community by culture and family ties and want to remain close by, yet still attain a better standard of living.

Workforce Housing

As house and land prices continue to escalate, many of our residents find it increasingly difficult to find a home in which they can afford to live. Such a high-priced environment is not conducive to attracting new business or the young professional community. It is important to recognize that without affordable housing, our workforce will look for job opportunities outside the area where they can afford to live. Affordable housing is also vital to the delivery of essential services to our community. Teachers, firefighters, and medical personnel are increasingly finding it difficult to afford to live in Beaufort County. Workforce housing needs are analyzed further in Chapter 8: Affordable Housing.

Conclusions

The pool of retiring military puts Beaufort County at an advantage to target the four key industry groups identified earlier, especially the aeronautics industry. By encouraging retired military to remain in the area, their spouses can also seek employment in professions such as healthcare and education, industries that are growing rapidly but at the same time suffering from the retirement of baby-boomers.

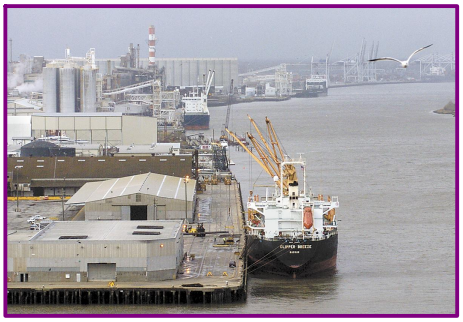
The County's unskilled workers need the most assistance. A mechanism must be developed to assess their education levels, provide any necessary remedial education and develop transferable skills. In order to achieve this goal, Beaufort County must create an environment ready to foster and attract businesses in the identified target industries.

Beaufort County should develop and support programs that create marketing opportunities and outlets that encourage and develop local agricultural and seafood farming industries.

Additionally, all of the County's educational and social resources need to work together with a regional perspective. The County's higher education institutions and K-12 system should tailor their educational offerings to equip our young people with the skills essential to fill the employment needs of today and tomorrow, and, most specifically,

coordinate curriculum and school-to-work training with economic development efforts.

Finally, in order to attract new business and a younger workforce and provide inexpensive housing options for many of our existing citizens providing vital services to the community, Beaufort County should adopt zoning policies that call for a variety of affordable housing options, preferably in a mixed-use environment which would include retail, social and recreational elements.



Land and Infrastructure

In an effort to expand the boundaries for a commercial and industrial presence in Beaufort County, the Network continues to identify strategic sites throughout the region that demonstrate geographic or locational advantages in furthering economic development. Land has already been acquired and prepared for development at the Beaufort Commerce Park, and other viable property is available at Beaufort Town Center, Buckwalter Place in Bluffton, and the Millennium Center in Port Royal. These and other properties have been placed in Multi-County Park agreements helping to make them more attractive to prospective businesses. Despite these efforts, the County still falls short, especially when it comes to existing space suitable for light industry or warehousing purposes.

Jasper Port Terminal

As the region prepares for the onset of the Jasper Port Terminal, it must be ready long before the first ships dock. Studies are underway to identify the immediate need for highway and rail access, but it is equally important to identify, acquire and develop property suitable to meet the needs of the distribution, logistics, and warehousing industry, which will be a key element of the port's operations. As the Port of Savannah looks to expand, the need for additional logistics and warehousing property will exacerbate the space requirements of the already overburdened Savannah area. Therefore, in addition to companies needing space adjacent to the Jasper Port Terminal, other companies will be looking for logistics and industrial parks within a short distance to the Savannah port. These companies in turn will create spin-off businesses, intensifying the need for speculative buildings, commercial and retail space.

To help meet the region's need for speculative space and commercial or industrial land, Beaufort County has formed an Alliance with Jasper County. This is a positive strategic move and will enable both counties to capitalize on the growth at the existing ports of Savannah and Charleston as well as the new Jasper Port Terminal. When looking at a particular geographic area, prospective businesses rarely consider county boundaries. The Alliance affords the ability to offer product in

either Beaufort or Jasper County. As port traffic expands together with growth along the Interstate 95 corridor, Beaufort County should support the expansion of the Alliance to include Hampton and Colleton Counties.

Airport Infrastructure

When employers and businesses consider expanding their operations, proximity to a commercial service airport or a first-class general aviation facility is among the top factors they consider. Airports located in close proximity to business travelers' final destinations provide added value and flexibility to their schedules in today's highly competitive global market place. Recognizing this benefit, many national and international corporations cite the convenience of a commercial service or general aviation airport as a major factor in determining where to locate their executive, operations or manufacturing facilities. Beaufort County is fortunate to have a commercial airport on Hilton Head Island and a General Aviation facility at Lady's Island Airport as well as developable land on or adjacent to each facility. But, both airports face serious issues. Wider and extended runways, improved navigational systems and an increase in the number of or the addition of secure hangars are minimal requirements for both airports to bring them up to current safety, design and capacity standards and avoid loss of business and tax revenue. Neither airport can accommodate mid-size or larger commercial jets or the more modern, but actively used, corporate charter jets, all of which require a runway length of at least 5,000 feet from a safety, and insurance, perspective. It is important to the economic vitality of Beaufort County and to recruiting new business that the County expedite the completion of the Airport Master Plans, initiated in 2009, and consider the recommendations in a timely manner.

Conclusions

Beaufort County stands to benefit from its proximity to Interstate-95 and the ports of Savannah and Charleston. The new Jasper Port will increase the County's economic development opportunities for the next 20 or more years, yet its geographic placement will not overburden our environment or quality of life. It is imperative that Beaufort County joins forces with the Lowcountry Economic Alliance to prepare itself, the region and its infrastructure ahead of the new port's opening, and the Port of Savannah expansion. This means acquiring and developing land for logistics and distribution purposes and ensuring no roadblocks exist in the zoning and permitting process. Critical to the economic future of Beaufort County is the upgrade and expansion of both the County's airports, as well as the development of each airport's infrastructure. Without both, companies will look to relocate elsewhere, even tourism will slow, and the County's revenues will decline.



Recommendations

The recommendations proposed in each chapter of this Comprehensive Plan have one common theme: a strong desire to preserve and enhance the key driver of Beaufort County's community and economy, our quality of life. The goals of the Economic Development chapter are no different. The recommendations are intended to protect the County's assets, which not only include our environment, history, and culture, but also its base economy of tourism, the military, residential development, and healthcare; while at the same time creating opportunities to build upon these assets and bolster the economy with new and environmentally friendly businesses.

Recommendation 7-1: Current Business Climate

Beaufort County is in need of new economic development that will complement and promote its current base economy and which draws capital and investment from outside the County and South Carolina, provides good wages and opportunities for our citizens, and increases tax revenues. To assist the economic development efforts of the Lowcountry Economic Network, Beaufort County should:

- Consider the flexibility to develop a business license fee reduction program as an incentive for companies that fit the County's four economic development focus areas. Fees should be reduced based on job creation and capital investment.
- Consider the standardization of business license fee rates and classifications across Beaufort County and each of its municipalities.
- Beaufort County should ensure that there is a sufficient quantity of suitably located land zoned for non-retail commercial uses that promote the region's economic health and diversity. Non-retail commercial uses include the following: business parks, research and development centers, product assembly, distribution centers, cottage industries, and light and moderate industrial uses.
- Together with the staff of each local municipality, the Beaufort County Planning Department should inventory the existing supply of appropriately zoned land available for non-retail commercial development within Beaufort County and its municipalities.

- Where appropriate, expand non-retail commercially zoned properties within the Airport Overlay Districts.
- Provide more flexibility in commercial zoning districts to permit smaller non-retail commercial uses such as small assembly facilities, small light industrial operations, or contractor's offices, that do not adversely impact surrounding retail uses.

Recommendation 7-2: Developing Business Climate – Target Industries

Beaufort County should take the following steps to recognize and encourage growth in the County's existing and emerging industries, as well as attract the type of business that can sustain the economy well into the future.

- Commit resources to construct infrastructure and provide new and renovated light industrial buildings to attract companies interested in locating or expanding in the region.
- Identify properties under municipal and County control that can be offered to relocating businesses.
- Encourage the planning, development and permitting of mixed-use developments which attract young professionals.
- Support the planning, development and permitting of a visual and cultural arts community, which are essential to attracting and retaining young professionals and enhancing the County's quality of life.
- Ensure that all business locations have the ability to offer broadband and wireless Internet capabilities.
- Develop an accelerated building permit process for commercial and industrial projects that intend to meet either LEED or Energy Star certification levels.
- Consider offering incentives such as sustainable development bonuses on height and density for projects that meet LEED and Energy Star standards, as well as fee reductions and waivers.

Recommendation 7-3: State Level Incentives

State and local incentives play an important role in the decision-making process when companies look to expand or relocate. Regardless of economic or market changes, it is critical that incentives are reviewed and updated on a regular basis to attract the right industries for the state and our region as well as keep pace with the changing face of business and industry. Beaufort County should take the following actions to improve state level incentives:

- Support legislation that would amend the current South Carolina economic development qualifying criteria from a Per Capita Income

base to an Average Regional Wage base, which would more accurately reflect the income levels of the region's working population.

- Support legislation to amend the South Carolina job creation qualifications for a company headquarters relocation to allow that, once the capital investment requirement has been met, the minimum of job creation level and Per Capita Income levels be adjusted to require that a minimum of10 percent of a headquarters' corporate payroll be dedicated to the relocating headquarters' employees who earn twice the state Per Capita Income.
- Support a legislative amendment to include a specified definition for Knowledge-intensive businesses to be included in the list of businesses qualified for the South Carolina Jobs Tax Credit.
- Support a legislative amendment to add a tax credit to a Multi-County Park agreement for companies whose new construction meets LEED and Energy Star standards. The tax credit should be based on the level of green building certification.

Recommendation 7-4: Workforce

To address the County's diverse workforce needs Beaufort County should take the following steps:

- Support initiatives to identify the skills of former and transitioning military and current military spouses, and coordinate job placement with local and regional businesses.
- Beaufort County should fund a permanent full-time Workforce Liaison position. The goal will be to continue the work begun under the pilot program and expand the geographic scope to include all low-income, low-skill pockets of Beaufort County.
- Develop and support programs that create marketing opportunities and outlets that encourage and develop local agricultural and seafood farming industries.
- Support initiatives and policy changes that would empower the Beaufort County School Board, the Academy for Career Excellence, the Technical College of the Lowcountry and both local campuses of the University of South Carolina to work together to develop regional education program designed to match the skills requirements of the County's target industries, as well as coordinate curriculum and school-to-work training with economic development efforts.
- Develop strategies and policies that would promote the development of a variety of affordable housing options to meet the County's diverse housing needs, with particular emphasis on mixed-use environments which are proven to attract young professionals.

Recommendation 7-5: Regional Economic Development Strategies

Beaufort County should support efforts by the Lowcountry Economic Network and the Lowcountry Economic Alliance to increase the available land and infrastructure needed to support the region's economic development efforts and expand the area's marketing reach to our target industries.

- In preparation for the development and opening of the new Jasper Port Terminal and the expansion of the Port of Savannah, Beaufort County should support the efforts of the Lowcountry Economic Alliance to acquire and develop land for distribution and warehousing purposes.
- In tandem with land and infrastructure acquisition, appropriate zoning and fast-track permitting should be in place to encourage and ease the development process.
- Beaufort County should be open to expanding the structure of the existing Lowcountry Economic Alliance between Beaufort and Jasper counties, to include Hampton and Colleton counties.

Recommendation 7-6: Airport Infrastructure

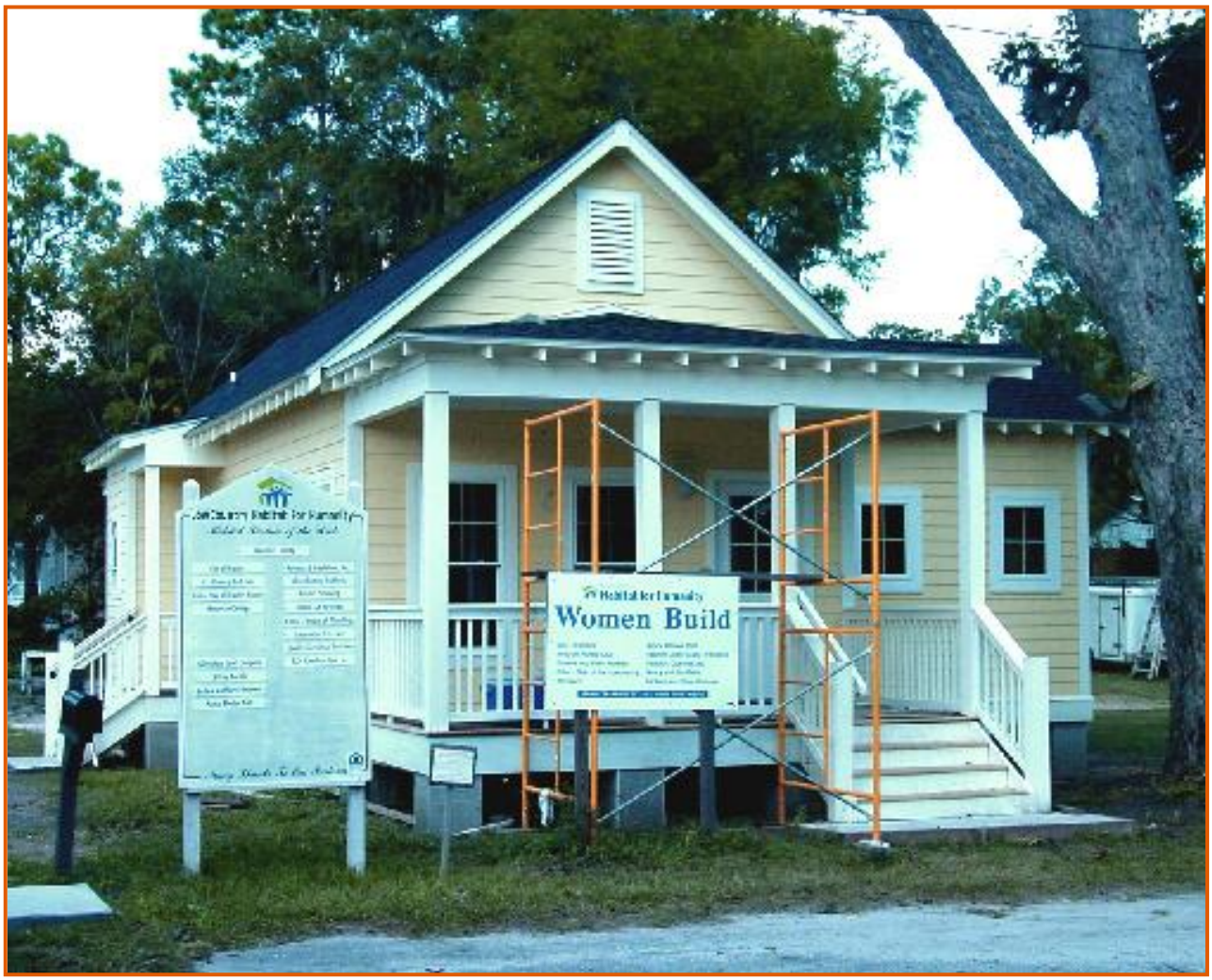
In order to remain competitive with airports in neighboring counties or states and meet key site selection criteria of expanding or relocating businesses or company headquarters, both Hilton Head Island and Lady's Island Airports need to be recognized and positioned as economic development assets. The Beaufort County Airports Master Plan should consider the following economic development goals:

- Update both airports' navigation systems to meet the needs of more sophisticated aircraft.
- Increase the number, size, and capacity of hangars available for long-term and short-term lease. To meet insurance requirements, hangars should be secure and insulated.
- Create incentives – tied to the County's target industries - designed to entice private investment in the acquisition and development of sites adjacent to Beaufort County's two airports.
- Reduce the County's personal property tax rates for registered based-aircraft.

8

Beaufort County Comprehensive Plan

Affordable Housing



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Introduction

The beauty, coastal amenities, and temperate climate of the Lowcountry have attracted large numbers of new residents to Beaufort County, which has consistently been one of the fastest growing counties in South Carolina. More recently, commercial development has followed population growth, thereby creating high demand for service and retail employees and competition for existing workforce housing.

While Beaufort County has the highest HUD defined median income in South Carolina, middle-to-low income wage earners attracted to the County by job growth often have difficulty entering the housing market. While many developers have concentrated on the profitable retirement and high-end resort housing markets, fewer are producing workforce housing. While home prices leveled off with the recent economic slowdown, tightened credit resulting from the national mortgage-lending crisis has the potential to further exacerbate the challenge of homeownership in Beaufort County. As the economic cycle resumes, home prices are resuming a rate of escalation similar to before the downturn. Mortgage credit, however, may not come as easily, making the role of the public and non-profit sectors more important than ever.

The County's continued prosperity, diversity, and desirability has necessitated an active role by the public sector in encouraging affordable housing. By continuing to shoulder that responsibility, Beaufort County is building a sustainable future for tourism and other major industries, protecting its military bases, and continuing to be a desirable place to live for people of all income levels.

VISION

The vision of the Affordable Housing Element is to maintain and enhance the diversity of Beaufort County by providing the opportunity for people of all income levels to live and work in the County by doing the following:

- Build and maintain a consensus on policies and strategies to meet the needs for workforce and other forms of affordable housing in

Beaufort County through the leadership of the Lowcountry Affordable Housing Coalition.

- Ensure private sector development of workforce housing through effective incentives, and if necessary inclusionary zoning.
- Enhance the capacity of the non-profit sector to assist in the provision of affordable housing, especially where there are gaps in private sector production.
- Ensure a variety of housing types to accommodate the full range of income, age, cultural groups, disabilities, and special needs in the community.
- In concert with the Future Land Use Plan, ensure that most affordable housing is located within a short commuting distance of major concentrations of employment and commercial uses.
- Pursue regional cooperation of public and non-profit agencies in meeting area housing needs.

DEFINITIONS

The term "affordable housing" is used in many contexts and has various connotations. For that reason, it is important to define basic terms at the beginning of a discussion of the subject. For a more detailed lexicon on housing terms used by the housing industry, non-profit housing service providers, and housing policy makers, see Appendix 8-A

Federal (HUD) Definitions: Many housing definitions have been established by the U.S. Department of Housing and Urban Development (HUD), and are applied consistently at all levels of government. HUD's categories apply to housing whose monthly costs (mortgage, taxes, insurance, and/or rent) do not exceed 30% of household income. For household income, HUD determines a jurisdiction's median income for various family sizes.

Table 8-1: HUD-Based Definitions of Affordable Housing

Housing Category	Definition
Moderate Income Housing	Affordable for a household earning a gross income of no greater than 120% of the county median income ($53,900 to $82,680).
Low Income Housing	Affordable for a household earning a gross income of no greater than 80% of the county median income ($33,700 to $53,900).
Very Low Income Housing	Affordable for a household earning a gross income of no greater than 50% of the county median income ($24,350 to $33,700).

Extremely Low Income Housing	Affordable for a household earning a gross income of no greater than 30% of the county median income (under $24,250).

Source: US Department of Housing and Urban Development. Income ranges are based on 2015 HUD defined median income ($68,900) for a Beaufort County family of four.



Beaufort County Definitions: While HUD definitions are precise in order to administer nationwide programs, Beaufort County's definitions reflect the uniqueness or complexity of local conditions. As illustrated in the diagram, there are three major areas of housing needs with unique local definitions. Each of the three areas overlaps to some degree.

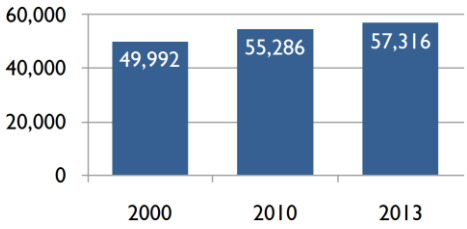
- Affordable Housing: Beaufort County defines affordable housing as housing that is affordable to a person or family earning 80% or less of the County's current area median income and spends no more than 35% of their gross income for housing costs. Housing costs includes principal, interest, taxes, and insurance. This definition is consistent with HUD guidelines, except that Beaufort County has adopted a 35% housing-to-income ratio rather than 30%.
- Workforce Housing: Local housing practitioners refer to "workforce housing" as housing that is affordable up to 120% area median income. In 2008, the Beaufort County Affordable Housing Consortium agreed to refer to workforce housing as housing that is affordable to private and public sector workers with incomes at or below that of teachers and public safety workers. More specifically, the guideline encompassed an income range of 65% to 120% of the area median income.
- Special Needs Housing: Segments of the population that require attention from the County to meet their needs include persons with developmental disabilities, persons with handicaps and injuries, homeless people, the frail elderly, victims of abuse, and persons in various forms of rehabilitation.



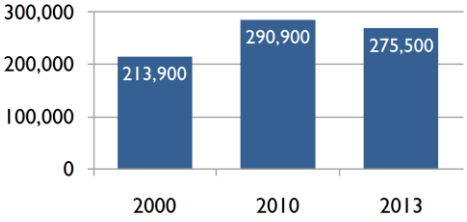
Technical Analysis

The following sub-section provides a summary and analysis of housing data and trends from the 2000 and 2010 U.S. Census and from the 2006 American Community Survey conducted by the Bureau of the Census. More detailed information on population and housing growth rates can be found in the Appendix 8-A along with detailed housing data by political subdivision and census tract.

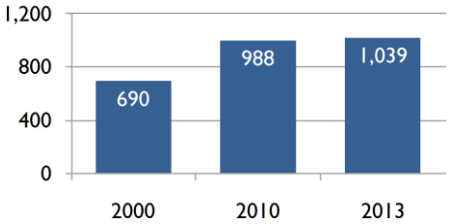
Median Income Trend, Beaufort County



Median Value Owner Occupied Housing Trend, Beaufort County



Median Gross Rent Trend, Beaufort County



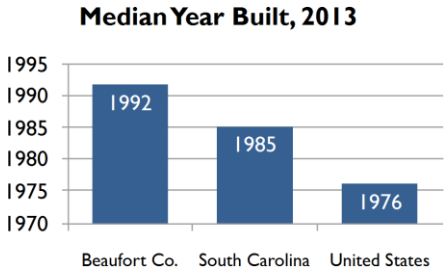
HOUSING AFFORDABILITY GAP

Housing costs in Beaufort County, which are relatively high for the region, are growing at a greater pace than income. The tables in the sidebar reveal that in 2013, median housing costs were 100% higher in Beaufort County than the average for South Carolina, while median household income was only 28% higher. Between 2000 and 2013 (the most recent data from the American Community Survey), the County's median income grew by only 14.6% while median rent increased by 50%. The median value of owner-occupied housing, however, increased during the same period by 64%. This disparity varies within Beaufort County. Median income in northern Beaufort County is only 78% of the County average. This disparity further deepens when comparing median income in the rural areas of St. Helena Island and Sheldon Township which is only 58% that of the county as a whole. The latter has the lowest median household income in the county (by census tract geography) at $32,973.

AGE OF HOUSING STOCK

When compared to state and national averages, Beaufort County has a relatively small supply of older housing, which in many other markets, is a significant source of low cost housing. The median year in which housing was built in Beaufort County according to the 2013 American Community Survey was 1992. By contrast, the median year was 1985 statewide and 1976 nationwide. The relatively low supply of older housing potentially drives first time buyers to seek newer, more expensive housing.

SUBSTANDARD HOUSING



The Workforce Housing Needs Assessment[1] estimated that 4,430 housing units in Beaufort County were substandard. This number includes 3,584 conventional "stick-built" homes and 846 mobile homes. The largest number of substandard units was on Port Royal Island. Other concentrations of substandard units were in Sheldon Township and St. Helena Island.

MOBILE HOMES

According to the 2013 American Community Survey, 10.3% (9,624 units) of Beaufort County's housing stock consisted of mobile homes. While this countywide figure is lower than the state average (16.8%), a majority of the County's mobile homes are located in northern Beaufort County where they make up 21.3% of the occupied housing stock. Mobile homes in northern Beaufort County are concentrated in Sheldon Township, Burton, Grays Hill, and St. Helena Island. While mobile homes fill an important niche in the affordable housing market, they are financed at higher interest rates than site-built housing and depreciate over time, preventing owners from building wealth from their housing investment.

HOUSING TENURE

Beaufort County has a slightly higher rate of homeownership (70.6%) than the state (69.3%) and national (65.1%) averages. Rates of homeownership vary within the County. In northern Beaufort County, owner occupancy falls within the state and national range at 62.9% compared to 75.9% in southern Beaufort County. While the high owner-occupancy rate in southern Beaufort County is generally acknowledged as desirable, the recent housing crisis has demonstrated that an over-emphasis on homeownership can potentially lure families to purchase housing that is beyond their means and increase the risk of future foreclosures. Moreover, if rental units and high-density residential development are not available near areas of high employment, low-to-moderate income workers may be priced out of the market. Another consequence may take the form of extended-family or even multi-family occupancy of single-family units.

VACANCY RATES

Vacancy rates in Beaufort County (30.6%), which are higher than national (12.5%) and state (16.9%) averages, are largely a result of the County's tourism and second home market. On Hilton Head Island, 42%

[1] Workforce Housing Needs Assessment, Beaufort County, SC, GVA Marquette Advisors, March 2004

of the housing units serve the second home and occasional occupancy markets. The seasonal fluctuation of tourism, especially in Southern Beaufort County, creates a higher demand for workforce housing in the summer months.

HOUSING FORECLOSURES

Prior to the recent recession, in response to high housing costs, many Beaufort County homebuyers took advantage of subprime loans, adjustable rate mortgages, and lax mortgage application standards. The downturn of both the economy and the housing market led to an increase in the rate of foreclosures. At the peak of the housing crisis in the first half of 2010, nearly 1,800 homes in Beaufort County faced some stage of foreclosure, according to RealtyTrac. This situation has greatly improved with only 595 Beaufort County properties in foreclosure during the first half of 2015. However, Beaufort County's housing affordability gap makes the region vulnerable to future housing downturns.

CONCLUSIONS

An analysis of housing data reveals some of the affordable housing challenges that Beaufort County faces. Growth in housing prices has far exceeded income growth, making it more difficult for working families to find affordable housing in proximity to employment. This is especially a concern in southern Beaufort County where housing costs are higher and there is a concentration of retail and service employment. Beaufort County has a relatively small supply of older housing and rental housing, which in many other markets provides a significant source of affordable housing. In northern Beaufort County where housing is generally less expensive, rural areas are threatened with a deteriorating and depreciating housing stock.



Land Use Policies Affecting Housing

The Beaufort County Comprehensive Plan, municipal comprehensive plans and the Northern and Southern Beaufort County Regional Plans have influenced the location and supply of affordable housing. They also serve as a framework for future affordable housing strategies. The following section provides a brief summary of prevailing land use policies in southern and northern Beaufort County.

SOUTHERN BEAUFORT COUNTY

Hilton Head Island and Bluffton are major employment destinations for the region. Yet prevailing residential development patterns in southern Beaufort County are largely low density. For example, the residential density of Sea Pines, on Hilton Head Island, nets at 1.21 dwelling units per acre. Old Bluffton, the only traditional town center that predates the automobile era has a residential density of 1.28 dwelling units per acre. While there are localized instances of moderate and high-density development, the overall trend of developing at a low density will likely continue into the future if existing approved developments build out accordingly.

Several factors have led to low-density development in southern Beaufort County. Beginning with Sea Pines on Hilton Head Island, master-planned, amenity-based resort and retirement developments have proven to be both popular and profitable. In addition, due to the unique natural qualities of the Lowcountry, Beaufort County, Bluffton and Hilton Head Island have emphasized environmentally sensitive development, to limit its adverse impacts on water quality and to work around natural features. More recently, increased traffic congestion and the inability to maintain existing levels of services for parks, schools and libraries have alerted local governments to control and limit overall buildout numbers in southern Beaufort County. On a positive note, there has been an increase in the Bluffton area of houses built since 2000 that are affordable to the moderate to middle income range. The number of residential units in Bluffton increased from 501 in 2000 to 5,552 in 2014. Developments such as Pine Ridge, Pinecrest, Bluffton Park and the Farm have added to the supply of workforce housing in southern Beaufort County.

NORTHERN BEAUFORT COUNTY

Land Use policies in northern Beaufort County delineate a future growth boundary that focuses new growth in well-defined areas, preserving over 60% of the land area of northern Beaufort County for rural density and uses. Within the growth boundaries, which include the City of Beaufort and the Town of Port Royal, higher density development has been more successful in providing a diversity of housing types at a range of costs in proximity to places of employment.

Beyond the growth boundaries, north of the Whale Branch River and on St. Helena Island, residential density is largely restricted to one dwelling unit per three acres. Family compounds, which are a traditional settlement pattern in rural Beaufort County, are a primary source of affordable housing in these areas. Most of the family compounds are located on heirs' property, property with no clear title, which has been inhabited by a family for decades. This settlement pattern not only provides affordable housing, it provides an extended family support, which stabilizes and preserves the county's rural communities. Community Preservation Areas in rural Northern Beaufort County allow for higher density residential and mixed-use development and, therefore, have potential to provide additional affordable housing opportunities. These areas include Dale, north of the Whale Branch River, and the Corner's Community on St. Helena Island (other CP areas in the north may also have affordable housing potential).

CONCLUSIONS

Southern Beaufort County is a major employment center for the region with a concentration of service and retail jobs. However, prevailing low-density development patterns have contributed to higher housing costs, hindered the effectiveness of public transportation, and therefore, pushed affordable housing further from places of employment. Affordable housing strategies in southern Beaufort County will need to be sensitive to other issues of concern in the region, such as traffic congestion and water quality. Therefore, housing policies for the region will need to emphasize higher-density, mixed-use, transit-friendly development that promotes internal trip capture and reduced vehicle miles traveled in order to make affordable housing accessible to employment.

While land use policies in northern Beaufort County are more conducive to siting affordable housing near employment, there are unique housing issues in rural areas that warrant special attention, such as clearing titles for heirs' property, housing rehabilitation, and appropriate affordable housing options in light of low-density land use regulations.



Housing Needs Assessment

Affordable housing is a complex issue that affects a large cross-section of Beaufort County's population. At one end of the affordable housing equation, there is a concern that the region will be unable to recruit an adequate workforce of teachers, fire fighters, nurses and other professionals due to limited housing choices. At the other end of the equation, many Beaufort County residents live in unsafe or over-crowded housing and are in need of housing rehabilitation or other housing options within their means.

The question of quantifying Beaufort County's affordable housing needs was first posed in the 2002 Assessment of the 1997 Comprehensive Plan, which recommended the County conduct a detailed housing needs assessment from which affordable housing goals can be derived. The Workforce Housing Needs Assessment, drafted in 2004, provided recommendations for the number of workforce housing units that would be necessary to construct in order to address the projected population growth between 2004 and 2009. The study also broke down housing needs according to planning areas within the County.

In addition to the Needs Assessment, during the summer of 2008, the Beaufort County staff commissioned an informed respondent survey to obtain essential information for this chapter from experienced local housing professionals and policy makers. The survey was designed to assess the needs of the range of population segments in the County, to determine the appropriate strategies, policies and programs that deliver affordable housing. The results of this survey, summarized in Appendix 8-B, have helped to inform the needs documented in this section.



WORKFORCE HOUSING

Those who hold workforce jobs - construction workers, hotel front desk clerks, police officers, teachers, government employees, nurses, and other service employees are vital to Beaufort County's economy. Those earning workforce wages fill the majority of jobs in nearly every sector of the economy, especially tourism, services, retail trade, and construction jobs, the primary employment sectors in Beaufort County. An inadequate supply of affordable workforce housing not only affects the quality of life for those working in Beaufort County, it can cause labor shortages and eventually decrease the competitiveness of the region's economy.

In 2008, the Beaufort County Affordable Housing Consortium agreed to refer to workforce housing as housing that is affordable to private and public sector workers with an income ranging from 65% to 120% of the County's median income. For a family of four, this income range

translates to approximately $44,785 to $82,680 annually[3]. According to the 2013 American Community Survey, roughly 28% of Beaufort County households had incomes in this range. Beaufort County is projected to gain 15,129 households between 2015 and 2030. Based on these projections, 4,236 (282 units per year) will need to be affordable to this income range.

Needs vary widely within this large segment of the population. While, rental housing is particularly important to recent arrivals and singles who may not be prepared to commit to home ownership, starter housing is vital to young singles and families who require a small down payment and low monthly payments to enter the housing market. The informed respondent survey revealed a particularly strong need for housing for single mothers and older single workers. The survey also revealed that older working individuals and couples, an expanding demographic are in need of downsized housing including small lot single family houses, townhouses, and condominiums.

In a positive trend for workforce housing, much of the residential development in the Bluffton area built since 2000 has been affordable to the moderate to middle income range. The number of residential units in Bluffton increased from 501 in 2000 to 5,552 in 20014. Developments such as Pine Ridge, Pinecrest, Bluffton Park and the Farm have added to the supply of workforce housing in southern Beaufort County. In northern Beaufort County, new developments in Port Royal and Burton such as Azalea Square, Shadow Moss and Mint Farms have also added to the supply of workforce housing.

SENIOR HOUSING

This category includes working, disabled, and retired people generally 65 years of age and older. The first Baby Boomers reached age 65 in 2011, which is anticipated to spark a wave of demand for small lot single-family housing and multi-family housing. Empty-nester couples and other Baby Boomers approaching their senior years are also increasingly interested in housing options for low-maintenance living. A greater range of housing types will be essential to meet this anticipated demographic phenomenon.

While many affluent retirees move into planned communities with a range of support services, most seniors are dependent on conventional forms of housing at convenient locations, preferably with ready access

[3] Based on 2015 HUD defined median income for Beaufort County - $68,900.

to retail and services. More infill development for elderly residents, whether working or retired, is needed in urban locations near the facilities they frequent, especially assisted living and continuing care facilities. Special high-density provisions may be required to accommodate this need.

DISABILITIES AND SPECIAL NEEDS HOUSING

A number of populations within Beaufort County have special housing needs. These groups include developmentally and physically disabled persons, the mentally ill, the frail elderly, homeless persons, victims of domestic violence, persons recovering from substance abuse, and persons transitioning from incarceration. Their needs often fall into three categories: temporary, transitional, and permanent. Increasing the range of housing types available in the county, including residential units within mixed-use districts, is necessary to provide special needs housing.

Developmentally disabled persons are among those specifically protected from discrimination by federal law. They are permitted to reside in residential group homes of six or fewer residents in any residential district. Challenges facing this population are primarily funding, coordination, and social services. The Beaufort County Department of Disabilities and Special Needs (DSN) provides most of these support services, which include community residential care facilities for up to 15 people with high medical or behavioral needs, community training home II facilities for four higher functioning individuals, community training home I facilities (foster home settings for adults), and supported living facilities for four individuals who have their own home or apartment with 24-hour staff available. Housing for mentally ill is provided through Coastal Empire Mental Health.

HOMELESS

According to the Human Services Alliance the most recent comprehensive count indicated that there are 435 documented homeless in Beaufort County. This number includes both homeless living on the street and “couch hoppers”, those without a home staying with family or friends. Beaufort County lacks an emergency homeless shelter for men. The closest shelters are in Savannah, Charleston and Walterboro. There are local agencies that assist specific homeless populations. Family Promise works with area churches to provide temporary housing to families; the Child Abuse Prevention Association (CAPA) provides housing for homeless children; and Citizens Opposed to Domestic Abuse (CODA) provides services to victims of domestic violence.

RURAL HOUSING

While many of the housing needs in rural Beaufort County parallel those of the more urbanized areas, there are several unique challenges that warrant addressing rural housing needs as a separate topic. The rural areas of Beaufort County tend to have a larger proportion of low and moderate income households and substandard housing. Much of the existing affordable rural housing is supplied in the form of family compounds on heirs' property. Under state law, land that is handed down without a will is legally owned by all the descendants in common. Heirs' property rights are vulnerable due to the potential for conflict among multiple heirs and the likelihood that such a conflict would result in a loss of the land. Also, without clear title to the land, residents of heirs' property have difficulty obtaining mortgages. The influx of people into the County has increased development pressures in the rural areas threatening traditional settlement patterns and raising the prospect of higher taxes due to increasing property values. At the same time, existing zoning and land use policies favor the preservation of rural areas placing constraints on traditional affordable housing options for rural residents. Therefore, the principal housing needs in the rural areas are to protect and preserve the settlement patterns that provide rural residents with affordable housing options (i.e. family compounds and small subdivisions), and to rehabilitate substandard housing to allow low and moderate income residents to remain in their own homes.

VERY LOW AND EXTREMELY LOW INCOME HOUSING

County households with very low and extremely low incomes, defined by HUD as earning less than 50% and 30% of County median income, respectively, are severely constrained in their housing options. Many are rural residents living in older mobile homes or substandard housing. Others live throughout the county in dilapidated structures and in overcrowded conditions.

Beaufort Housing Authority (BHA) is a major institutional provider of housing for very low and extremely low income households. BHA owns and operates 293 public housing units and administers 574 Section 8 vouchers. While BHA is able to meet a substantial part of the need of very low and extremely low income households, it does not have the resources to accommodate all needy households. In November 2015, there were 168 households on the waiting list for public housing and 714 on the waiting list for Section 8 vouchers. Non-profit sector initiatives may be required to complement BHA housing and increase the level of effort in housing rehabilitation critical for very low and extremely low income households.

MILITARY HOUSING

The military installations in northern Beaufort County employ over 12% of the County's labor force. The military provides 1,718 single-family units at Laurel Bay, Parris Island, and on the Naval Hospital site for active military. Over 200 units have been built since 2003, new single-family units offer contemporary conveniences and square footage comparable to private housing (some units are 2,300 square feet and larger).

The housing needs of the military workforce tend to mirror those of the workforce in general. Civilian employees and military households who live off base primarily reside in the City of Beaufort, the Town of Port Royal, Lady's Island, and unincorporated Port Royal Island, and have benefited from several new moderately priced developments in the Shell Point and Burton areas. While currently the housing needs of the military are largely served by base housing and the existing civilian housing stock, an increase in forces in the area could, at least temporarily, increase demand for civilian housing.



Barriers to the Creation of Affordable Housing

In order to discuss affordable housing strategies, it is necessary to analyze some additional factors that have led to a limited supply of affordable housing in Beaufort County. The 2004 Workforce Housing Needs Assessment provided a summary of primary barriers to the development of affordable housing in Beaufort County, which are provided below.

LAND COST

Because of strong market demand for high-end housing in Beaufort County, the county has seen a dramatic increase in the construction of housing for affluent buyers during the past decade. This has driven up the cost of land throughout the county, particularly along the water and along key transportation corridors.

LAND SUPPLY

The Workforce Housing Needs Assessment concluded that there is an adequate supply of land in the county to accommodate residential development. However, while large tracts of undeveloped land remain within the county, most of these areas are far removed from key workforce job centers in Hilton Head, Bluffton, Beaufort and Port Royal. Further, the cost of extending water and sewer infrastructure to these areas adversely impacts the affordability of housing.

CONSTRUCTION COST

Construction cost increases have outpaced income growth in the region. The cost of materials is rising dramatically. Construction labor cost is also more expensive in Beaufort County compared to other parts of the state. Hurricane standards in the Beaufort County area also contribute to higher construction costs, as do tap fees and impact fees.

MARKET DYNAMICS

There has been a strong demand for high-end housing throughout the county, which provides a higher return to a developer versus lower priced housing.

INSUFFICIENT DEVELOPMENT INCENTIVES

Current density bonuses are apparently insufficient to generate increased affordable housing development activity. With land costs on the rise and demand still strong for upscale housing, the available density bonuses simply do not create the economics of scale needed to generate comparable economic returns from affordable housing construction.

THE SECTION 42 HOUSING TAX CREDIT ALLOCATION PROCESS

The South Carolina Housing Finance Agency currently administers the allocation of tax credits, the primary source for gap financing in support of workforce housing development throughout the state. The tax credit application process is very competitive, and the state's allocation system is based upon a competitive application process that favors projects in counties with lower median incomes.

ZONING REGULATIONS

There is a short supply of land zoned for high-density housing development within the unincorporated county. Based on market need, there appears to be a shortage of areas that would allow for cluster development on small lots and higher density apartment development, particularly along key transportation corridors. The county's goal of maintaining rural character and preserving open space and the natural environment in the county's outlying areas through zoning restrictions needs to be balanced with the need to construct affordable housing.

ANTI-GROWTH SENTIMENT

An anti-growth sentiment still prevails with a portion of the citizenry and there has been a general desire for lower, not greater, density. In addition, there is a strong public sentiment to preserve open space. NIMBYism (Not In My Back Yard) has been a deterrent and has created controversy surrounding most affordable housing communities, including Section 42 housing projects and even market rate apartments.



Existing and Proposed Housing Strategies

New strategies must take into account that affordable housing is not a single form of housing for a single targeted income range. There are many population segments in the county with a wide range of housing needs. A variety of strategies is therefore required to address the needs of various market segments. Each area is discussed subsequently. In order to address the complexity of the problem, housing strategies must take several forms. Among these are *regulatory*, *institutional*, and *educational* strategies.

REGULATORY STRATEGIES

Regulatory strategies available to the County fall primarily in the area of planning policies, zoning regulations, and incentives. With the adoption of the Community Development Code (CDC), Beaufort County moved away from direct incentives targeting affordable housing to a broader approach to encourage a diversity of housing types to address the broad spectrum of housing needs.

- Transect Zones: In urbanizing areas of the county, the CDC has a palette of form-based districts that place greater emphasis on building walkable communities and promoting a diversity of housing choices. These districts create greater flexibility for developing affordable housing on infill and redevelopment areas by removing minimum site area and density requirements while offering a variety of housing options and small minimum lot sizes.

Figure 8-1: Permitted Housing Types within Transect Zones

Housing Type	T3 Edge	T3 Hamlet Neighbor-hood	T3 Neighbor-hood	T4 Hamlet Center	T4 Neighbor-hood Center
Single-Family	X	X	X	X	X
Accessory Dwelling Unit	X	X	X	X	X
Duplex		X	X	X	X
Cottage Court			X	X	X
Townhouse				X	X
Mansion Apartment			X	X	X
Apartment House				X	X

- Traditional Community Plan (TCP): The TCP is development provision designed to promote walkable communities and a diversity of housing types in areas of the county that are zoned with conventional districts.

- Accessory Dwelling Units (ADU): ADUs provide the option for more affordable housing while at the same time giving homeowners additional income opportunities. With the adoption of the CDC, the right to build ADUs was expanded to all zoning districts with the exception of T1 Natural Preserve and S1 Industrial. In T2 and conventional districts ADUs are limited to no more than 1,000 square feet. In all districts except T2, ADUs are required to be in a carriage house building type.

- Family Compounds: The principal mechanism to preserve and create affordable housing in the rural areas is the Family Compound. This option allows property owners a density bonus for established family dwelling units arranged in a historic cluster pattern. Applicants must provide the county with information showing that the property has been in one's family for no less than 50 years. The additional dwelling units must also be built for persons related to the owner by blood, marriage or adoption.

- Rural Community Preservation Districts: The Community Preservation (CP) districts located in rural communities allow for higher density than the surrounding rural areas. At the same time, they still have many undeveloped tracts and, therefore, represent an opportunity for workforce and affordable housing.

INSTITUTIONAL STRATEGIES

Institutional strategies generally involve public and non-profit entities expending funds to provide affordable housing construction, rehabilitation, down-payment assistance, and other housing services. Institutional strategies also include interagency cooperation and public/non-profit cooperation to optimize the provision of housing and services. The Lowcountry Affordable Housing Coalition (LAHC) is a group of governmental, non-profit, and private organizations that serves this role by providing education, advocacy and coordination to help increase affordable housing opportunities in Beaufort County.

Existing Institutional Strategies: The following is a summary of some of the institutional strategies in use in Beaufort County.

- Affordable Housing Program: In 2001, Beaufort County demonstrated a commitment to assist in resolving the affordable housing shortage by designating $500,000 for an Affordable Housing Program (AHP). Down payment assistance, project

subsidies, housing development incentives, and technical development services were offered through this program.

- Low Income Tax Credits: In terms of sheer number of affordable housing units, the Low Income Tax Credit program has been highly successful in Beaufort County. Most tax credits are provided through the federal Low Income housing Tax Credit (LIHTC) program, which provides funding for the development costs of low-income housing by allowing a taxpayer to take a federal tax credit equal to a large percentage of the cost of development of the low-income rental units. Development capital is raised by "syndicating" the credit to an investor. The developer proposes the project to the state in a competitive process and lines up an investor to contribute capital to the development company that owns the project in exchange for tax credits. Tax credit projects developed in Beaufort County include Laurel Hills (72 units for age 62 and over), Shell Point Apartments (72 units), Mossy Oaks Village (96 units), and Port Royal Apartments in Port Royal; Hallmark Homes (72 units) and May River Village (108 units) in Bluffton; and Ashley Pointe (56 units), Sea Pointe (56 units) and Pond Place in the City of Beaufort (36 units for age 62 and over).

- Habitat for Humanity: Habitat for Humanity is an international, non-profit, Christian housing ministry with two local non-profit affiliates. The Lowcountry Habitat for Humanity serves northern Beaufort County and has constructed 42 homes since 1990. The Hilton Head Regional Habitat for Humanity has constructed 95 homes, 62 of which are in the Brendan Woods subdivision in Bluffton. In 2014, work began on the first phase of the Glen, a 16-unit single-family subdivision on Hilton Head Island developed by Habitat for Humanity. The second phase may include between 20 and 25 additional homes. Both agencies have indicated that access to affordable land is their greatest obstacle to constructing new housing.

Proposed Institutional Strategies: The Lowcountry Affordable Housing Coalition has discussed the feasibility of exploring several new institutional strategies.

- Affordable Housing Trust Fund: Housing Trust Funds are distinct funds established by local governments that dedicate revenue to support affordable housing. The key to establishing a Housing Trust Fund is to identify a dedicated revenue source to allow the County or region to better plan for housing programs.

- Community Land Trust: A land trust for affordable housing would be an agreement whereby the County or non-profit established to administer the land trust agrees to hold ownership of a piece of real

property to be developed as affordable housing by another party. An example would be if the County purchased land for Habitat for Humanity or another non-profit entity to develop affordable housing.

- Home-to-Work Program: The Consortium is exploring the feasibility of a home-to-work program in which employers participated in workforce housing development.
- HUD Good Neighbor Next Door Program: The Consortium is investigating the potential to designate a HUD-approved revitalization area for participation in the Good Neighbor Next Door Program, which allows law enforcement personnel, firefighters, EMS personnel, and teachers to purchase homes acquired by HUD through an FHA foreclosure at half price. Newer HUD programs authorized in 2008 in response to the collapse of the housing market are also being investigated by the AHP.

EDUCATIONAL STRATEGIES

Educational strategies, primarily in the form of homebuyer counseling, have been an essential part of the County's affordable housing effort. This effort is crucial and needs to be improved in two areas. First, a consistent source of funding must be identified. Agencies currently providing this service have long waiting lists and very little funding. Second, more effort needs to go into financial literacy education to prepare inexperienced, low-to-moderate income households with the financial discipline required for homeownership. Financial literacy education should take the form of intensive classes for first-time homebuyers that lead to a certificate of completion. While general homebuyer counseling covers financial literacy, it is not sufficient to prepare many households for the demands of homeownership.



Recommendations

The following recommendations are provided to maintain forward momentum to the County's workforce and affordable housing programs. Recommendations 8-1 through 8-5 address the overarching policy framework that should govern affordable housing initiatives. Recommendations 8-6 and 8-7 address regulatory revisions and new provisions to facilitate the creation of affordable housing. The remaining recommendations address affordable housing programs both initiated by the County and through cooperation with non-profits and other organizations.

Recommendation 8-1: Relationship to Other Policies

Beaufort County recognizes the relationship between its affordable housing goals and other chapters of this plan. Therefore, the following policies are recommended:

- Affordable housing should be located in areas that are accessible to employment, services and public transportation.
- Different affordable housing approaches should be established in urban and rural areas.
  - In urban areas affordable housing strategies should be focused on constructing new workforce housing and low/moderate income housing and on the rehabilitation of existing housing structures. Affordable housing in urban areas should be targeted in infill sites near employment opportunities and services.
  - In rural areas affordable housing strategies should be focused on the rehabilitation of existing houses for low/moderate income homeowners, eliminating barriers to expanding existing family compounds, and assisting families in clearing titles to heirs' property.
- LEED, EarthCraft and other green building programs should be encouraged for affordable housing developments to reduce the utility costs for low and moderate-income households.

Recommendation 8-2: Full Spectrum of Affordable Housing

Beaufort County should ensure that affordable housing production meets the needs of the full range of demographic segments in Beaufort County, with respect to income levels, age, cultural traditions, disabilities, and special needs.

- Develop targets for housing needs for each segment of the population, and monitor affordable housing production annually by segment to ensure that all needs are being addressed.
- Maintain an inventory of all affordable and workforce housing units in the County. The inventory should include the location, structure type, and target income range for each housing unit.
- Increase assistance to area non-profits in order to boost production of affordable housing for segments of the population with incomes or needs not addressed by the private sector .
- Require homes for people with disabilities and special needs to be included in affordable housing developments. Such homes should be designed with special considerations in the interior and externally indistinguishable from other single-family housing.
- Mix housing types within developments wherever possible to accommodate various incomes, ages, and special needs.

Recommendation 8-3: Regional Approach to Affordable Housing

Beaufort County should adopt a regional, inter-governmental approach to affordable housing

- Identify “common denominators” in approaches to affordable housing with Jasper, Hampton, Colleton, and Chatham Counties.
- Determine on a regional basis where emerging urban centers will be located, and what their role will be in providing affordable housing.
- Develop a tiered plan for regional transportation that serves the needs of the wider, multi-county region while also increasing service to emerging higher density areas.

Recommendation 8-4: Monitor Demographic Trends

Beaufort County should monitor demographic trends to determine future housing needs.

- Beaufort County should plan for the housing needs of older single persons and couples by encouraging gradual increases in production

of small lot subdivisions, townhouses, and multi-family development.

- Beaufort County should plan for the housing needs of a young labor force that will be increasingly needed to replace the Baby Boom population while meeting the retail and service needs of an aging population. Vibrant, mixed use developments may be increasingly important to attract and retain younger employees in a regionally competitive labor market.
- Beaufort County should update its Housing Needs Assessment.

Recommendation 8-5: Address Barriers to Affordable Housing

Beaufort County, in cooperation with local municipalities and the Lowcountry Affordable Housing Coalition will continue to work to eliminate barriers to developing affordable and workforce housing.

- Beaufort County shall work with local municipalities to identify land zoned to accommodate affordable and workforce housing at higher densities, particularly multifamily housing.
- Beaufort County will review the application of hook-up and impact fees to affordable housing development and seek a method of waiving all or part of those fees or paying the fees with funds reserved for that purpose in the proposed Affordable Housing Trust Fund (see Recommendation 8-9).

Recommendation 8-6: Revisit and Refine Existing Affordable Housing Regulatory Environment

Beaufort County shall continually evaluate its regulatory environment to determine its effectiveness in fostering the creation of workforce housing units.

Recommendation 8-7: Mixed-Use Affordable Communities

Beaufort County should encourage mixed-use development at higher intensity nodes along the County's major travel corridors to allow for the creation of affordable housing that is accessible to employment, services and public transportation.

- The location of mixed-use communities should be near employment centers, located on potential transit lines, and contextually suitable for multi-story development at higher densities than typically found in Beaufort County.

- Mixed-use communities should be encouraged to be LEED certified to lower utility costs for low and moderate income residents.
- Transit should be planned into such development to minimize traffic impact.
- Employer-based rental housing could be part of such developments with employers participating by leasing units and subletting them to employees.
- Development of mixed-use affordable communities would likely require both public/private and intergovernmental coordination.

Recommendation 8-8: Lowcountry Affordable Housing Coalition

Beaufort County should provide continued support to the Lowcountry Affordable Housing Coalition as the principal forum for consensus on affordable housing issues. Support includes continuing to provide a Housing Coordinator position and by committing staff support from other related departments when needed.

Recommendation 8-9: Dedicated Funding Source

Beaufort County should establish an ongoing dedicated funding source to assist in local affordable housing initiatives. The County should consider establishing a housing trust fund in order to pool limited resources, manage dedicated funding, and to prioritize and manage affordable housing initiatives.

Recommendation 8-10: Land Acqusition

Elevate land acquisition for affordable housing to a high priority utilizing Housing Trust Fund.

- Identify a permanent funding stream for land acquisition
- Establish a Community Land Trust to acquire land for affordable housing.
- Ensure that the Community Land Trust operates within the framework of the Comprehensive Plan by targeting infill sites in areas where there is existing infrastructure and close proximity to employment, services, and public transportation.
- Partner with Habitat for Humanity and other organizations that build affordable housing.

Recommendation 8-11: Coordinate and Integrate Efforts of Non-profits

Beaufort County should work with non-profit organizations to ensure that a wide range of housing needs are being addressed countywide and that there is no duplication of services.

- Beaufort County should support applications from non-profits (and for profit) organizations that apply for state and federal funding for the purpose of constructing and/or rehabilitating affordable housing.
- Beaufort County should consider supporting the creation of a "vertically-integrated" non-profit community development corporation (CDC) that would address all aspects of the development and provision of affordable housing including:
  - Identifying eligible homeowners (or renters);
  - Offering homebuyer counseling and financial education;
  - Planning new developments; and
  - Constructing new houses.

  Beaufort County should consider an existing entity such as the Beaufort Housing Authority to play this role since they have countywide jurisdiction.

Recommendation 8-12: Housing Rehabilitation

Beaufort County should make home repair and replacement of substandard housing a housing priority to further the recommendations outlined in the 2004 Workforce Needs Assessment.

- The County should ensure that the maximum amount of CDBG, HOME and other applicable grants are sought annually by the County, its municipalities and non-profits to fund housing rehabilitation.
- Beaufort County should partner with the Lowcountry Council of Governments and the municipalities to conduct a comprehensive housing survey for the purpose of identifying substandard dwelling units.
- Beaufort County should partner with agencies and non-profits that are best equipped to administer housing rehabilitation programs.
- Beaufort County should target the preservation of historic rural vernacular architecture.

Recommendation 8-13: Housing Foreclosures and Neighborhood Stabilization

Beaufort County should monitor and pursue state and federal grants aimed at reducing housing foreclosures and stabilizing neighborhoods.

Recommendation 8-14: Rural Affordable Housing Approaches

The following actions are recommended to promote affordable housing in rural areas.

- Target the rehabilitation of rural housing in order to allow low and moderate income families to remain in housing.
- Increase the level of effort to clear titles for heirs' property through capacity-building grants to the non-profit sector. The effort may be directed through the United Way, Penn Center, and similar organizations. Lack of clear title prevents owners from obtaining mortgages, home equity loans, and grants for property rehab and weatherization. It also prevents equity formation and perpetuates poverty.
- Promote Rural Community Preservation areas as a location for small-scale affordable housing developments.

9

Beaufort County Comprehensive Plan

Energy



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Introduction

Energy usage and conservation is a growing topic of concern nationally and in Beaufort County, which is a significant consumer of both petroleum and electricity. While its natural beauty and amenities have made the County a desirable place to live, the availability of reasonably priced electricity to power air-conditioning has made the County a bearable place to live during the summer months. County residents and visitors also rely almost solely on private automobiles to commute to work and to conduct the most basic of errands. These factors point to the need to create new policies and reevaluate existing policies that affect the amount of energy that is consumed locally and to explore opportunities to locally produce alternative forms of energy.

STATE AND LOCAL OVERVIEW

South Carolina's per capita electricity consumption is among the highest in the United States due to high demand for electric air-conditioning during hot summer months, and the widespread use of electricity for home heating during typically mild winter months. Nearly three-fifths of South Carolina households use electricity as their primary energy source for home heating. In 2014 , the state was ranked as the eighth largest electricity user per person in the United States.[1]

Nuclear power accounts for more than one-half of South Carolina's electricity generation. With four active nuclear power plants and two new reactors under construction, South Carolina is among the top nuclear power producers in the United States. Coal fuels about two-fifths of net electricity generation. South Carolina has no coalmines, and coal-fired power plants rely on supplies from other states. South Carolina's only substantial energy resource is its system of rivers and lakes, which offers modest hydroelectric power from facilities located in several river and lake basins. Other opportunities for renewable energy lie primarily in the state's off-shore wind and solar resources.

[1] Energy Administration – State Energy Profiles http://www.eia.gov/state/?sid=SC

The suppliers of electricity in Beaufort County, Palmetto Electric Cooperative and South Carolina Electric and Gas (SCE&G), rely primarily on coal-powered generators. Palmetto Electric, which serves roughly 68,000 customers in Beaufort, Jasper, and Hampton Counties, buys power from state-owned Santee Cooper through the Central Electric Power Cooperative. Santee Cooper generates about 80% of its electricity from coal-fired power plants. SCE&G, which serves 48,300 customers in Beaufort and Jasper counties, generates its own electricity, with about 65 percent of it from coal.

In response to energy and climate concerns, in 2007, Governor Sanfordestablished the South Carolina Climate, Energy & Commerce Advisory Committee (CECAC). The Committee produced a final report in 2008 that identified a comprehensive set of 51 sustainable policies specific for South Carolina. Many of these policies are appropriate for local government to implement, and are therefore referenced in this document where applicable.

VISION

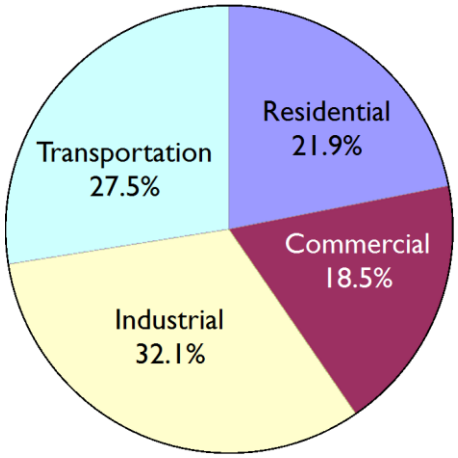
The vision of the Energy element is to lower Beaufort County's energy dependency by reducing local energy consumption and facilitating local renewable energy production by doing the following:

- Promoting energy efficiency by assessing Beaufort County's facilities and operations and implementing changes to reduce energy consumption;
- Providing incentives for the private sector to invest in green technologies;
- Implementing land use and transportation policies that reduce trip lengths, encourage walking and cycling, and facilitate improved public transportation;
- Overcoming regulatory barriers that create unnecessary obstacles to green building practices and renewable energy generation;
- Facilitating educational outreach to promote energy efficiency and green technology.



Land Use and Transportation Policies

Land use and transportation policies have significant potential over the long term to reduce energy use in Beaufort County. Nationally, the transportation sector accounted for nearly 27.5% of total energy consumption in 2014 (see chart in sidebar). In Beaufort County, this percentage is likely higher due to a relatively small local industrial sector. There is a direct relationship between average vehicle miles traveled (VMTs) and energy use. Therefore, reducing the amount that we drive can greatly reduce the amount of energy we use. Over the last 25 years, cheap gasoline has led to a lax attitude about how much we drive. Nationally between 1980 and 2010, VMTs increased by 98% while population only increased by 36%. Much of our driving habits are a direct result of development patterns. The difference between these two rates is largely attributable to growth in auto-oriented development and land use/transportation related issues, such as the availability and convenience of pedestrian and cycling facilities and public transportation. Fluctuating fuel costs present concerns about the sustainability of sprawl from an energy standpoint. Beaufort County's built environment is predominantly auto-oriented. Therefore, developing policies that reduce VMTs, provide transportation choices, and promote mixed-use pedestrian friendly development in key locations are vital to Beaufort County's long-term sustainability both as a place to live and to visit.



This chart represents national energy consumption in 2014 by end-use sector.

LAND USE

Local government land use policies provide both the vision and the framework of our built environment. Policies that prescribe strict separation of land uses and low-density development in central areas where infrastructure is available promote sprawl and increase trip lengths. Policies that promote mixed-use developments, integrated bike and pedestrian trails, a street system of interconnected roads, and higher density development at the right locations, reduce sprawl and VMTs. Less VMTs means less energy expended.

Existing Land Use Patterns: Outside of Downtown Beaufort, Port Royal, Bluffton's original square mile, Habersham, and a handful of other traditional neighborhood developments, prevailing land use patterns in

Beaufort County are auto-oriented. Owning an automobile is a necessity to perform the most basic of errands for most County residents.

Walk Score™ is a private company that provides a search tool through its website that assigns a numerical walkability score to any address in the United States. The service calculates the walkability of an address by locating nearby stores, restaurants, schools, parks, and other destinations and assigning points based on the quantity and distance of these destinations to the address. Scores between 50 and 69 indicate that the community is somewhat walkable. Scores below 50 indicate auto dependency. Four Beaufort County addresses were entered into Walk Score™ representing traditional pedestrian oriented neighborhoods. The results indicated that—Beaufort County's pedestrian-friendly neighborhoods are nominally walkable and currently lack the variety and mix of uses necessary to significantly reduce auto dependency (see Figure 9-1).

Figure 9-1: Walk Score™ Results for Selected Pedestrian-Oriented Neighborhoods

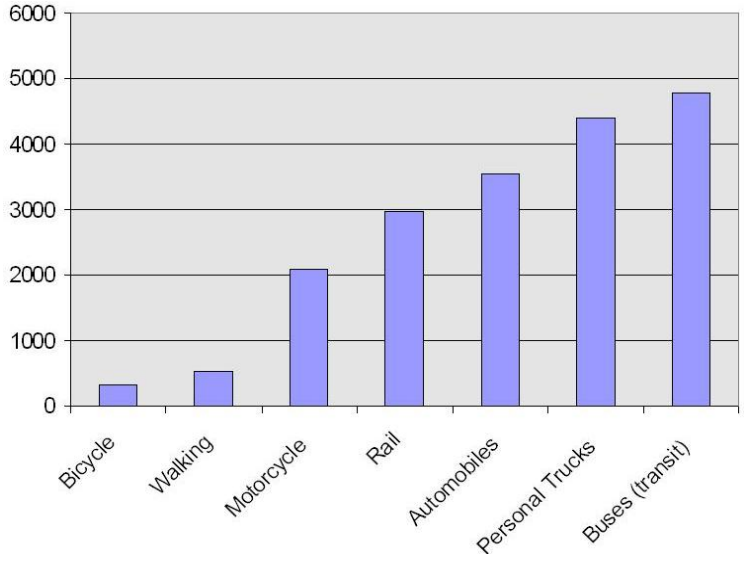
Location	Address	Walk Score™
Downtown Beaufort	700 Bay Street	61
Port Royal	1601 E. Paris Av.	47
Downtown Bluffton	2 Boundary St.	53
Habersham	46 Market St.	50

This quick analysis points to the need to promote more infill developments and a greater variety of uses within the County's existing pedestrian oriented neighborhoods. It is important to note, however that currently the greatest concentrations of retail, restaurants and other destinations are in auto-oriented shopping centers that lack pedestrian infrastructure, and are too far from residential areas Therefore, another important strategy is to identify key auto-oriented shopping areas to target for redevelopment into mixed-use, pedestrian and transit friendly communities to bring jobs, retail and other services in proximity to residents.

Energy Reducing Future Land Use Policies: Many of Beaufort County's future land use policies, outlined in Chapter 4 of this plan, are designed to reduce sprawl, promote community character, and promote transportation choices. These policies also help to reduce VMTs, and therefore, promote reduction in energy usage. One of the main goals of the Future Land Use chapter is to maintain a distinct regional form of compact urban and suburban development surrounded by rural development, designed to maximize the efficiency of regional infrastructure and the avoidance of sprawl. Mixed-use developments are encouraged to promote pedestrian access to services and facilities

while providing internal trip capture to minimize the traffic impact of these developments. Bike and pedestrian trails are encouraged to link schools, shopping areas, employment and other destinations. Infill and redevelopment is directed to municipalities and areas adjoining municipalities.

Figure 9-2. Energy Consumption (BTUs per Passenger Mile) for Selected Modes of Transportation[1]



TRANSPORTATION

As stated above, automobiles are responsible for a large portion of the total energy used in Beaufort County. As shown in Figure 9-2, above, travel by private automobile and trucks is very energy intensive. In addition to land use strategies designed to reduce VMTs and automobile dependency, transportation policies designed to reduce congestion, reduce travel demand and promote alternative modes of transportation, also help to reduce energy consumption.

Maximizing Road Network Efficiency: Automobiles are the most efficient when they operate at steady, relatively low speeds (35-45 mph) with no stops. Optimizing the timing of existing signals and installing advanced control equipment on arterial travel corridors can significantly reduce traffic congestion and fuel use. Access management techniques including maximizing signal spacing; maximizing intersection and driveway spacing; providing deceleration lanes; sharing driveway access; providing frontage and backside access roads; and requiring interconnectivity, also assist in fuel conservation.

Interconnectivity: The energy required for travel between two points is largely dependent upon the length of the route. Providing a network of fully connected streets allows the use of shorter and more direct routes. Whenever possible, designs for new developments should include connections (i.e., streets, bikeways and sidewalks) to existing developments and connections should be added between older developments. When compared to a conventional suburban network of cul-de-sacs and collector streets that funnel all traffic to arterials, a grid street pattern can reduce VMTs within a development by up to 60%.[1]

Travel Demand Management: Transportation policies designed to reduce travel demand such as promoting telecommuting, flexible work hours, carpool matching, and vanpool services have beneficial affects on energy usage as well.

Alternative Transportation Modes: Public transit is an energy efficient transportation mode when it is well used and its buses are full of passengers. Transit systems are most likely to be used when a rider's origin and destination are located within walking distance of a transit station or stop. People living close to transit, within one-quarter to one-half mile, are two to four times more likely than the general population to use this option to commute to work. In preparation for population growth and densification in the growth areas, a thorough demographic and destination site analysis should be done to identify proper placement of future transit stations. The amount of commercial space, number of employees, and residential density needed to support cost-effective transit and reduce automobile commuting varies greatly between communities.

Bicycle and pedestrian trails are well developed in the Town of Hilton Head Island, in the Bluffton area along the Buckwalter and Bluffton Parkways, and within the urbanized areas of Beaufort and Port Royal, but efforts have been more modest to non-existent in other areas of the County.

Alternative means of transportation can be made safer and more attractive by redesigning streets and intersections within intensively developed areas to give equal priority to pedestrians, cyclists, buses, and automobiles. Important features of pedestrian and cyclist friendly streets include narrower street widths, on-street parking and less disruptive placement of off-street parking, pedestrian protection at intersections, convenient and safe locations for transit stops, and more attractive sidewalk designs.

[1] California Energy Commission. Energy Aware Planning Guide. California Energy Commission, January 1993.



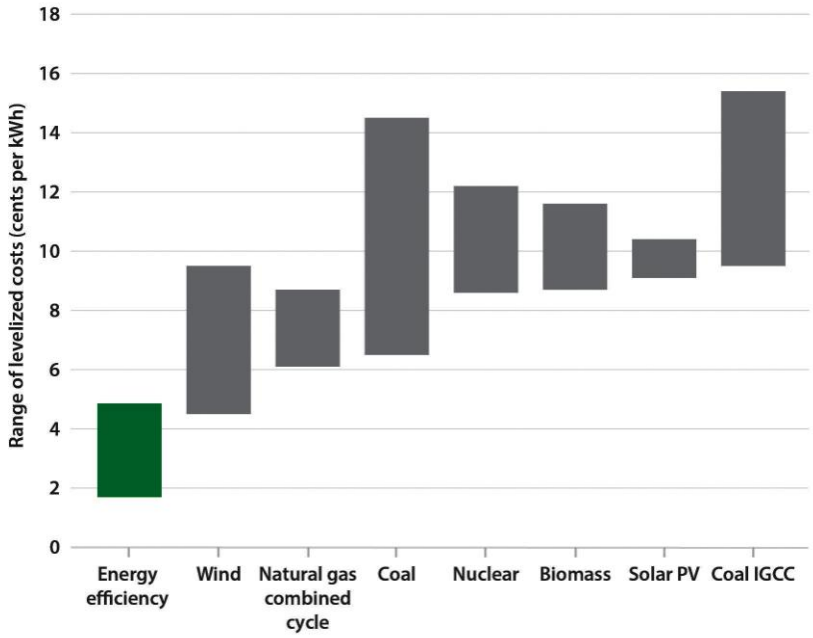
Energy Efficiency

When addressing energy issues, achieving energy efficiency should be the first consideration, especially at the County level. Energy efficiency is accomplished when less energy is used to provide the same service. For example, a well-insulated building allows the occupants to enjoy the same room temperature while using less energy for heating and cooling. This is achieved by a combination of changing technologies and behavior. Measures include the use of efficient and appropriately sized HVAC systems, proper insulation, efficient appliances, high performance windows, and low wattage lighting. When compared to the cost and effort to increase energy production, efficiency is the "low hanging fruit" of the energy equation. It is much like the old adage, "a penny saved is a penny earned." Or to quote the American Council for an Energy Efficient Economy (ACEEE), "the cheapest energy is the energy you don't have to produce in the first place." The ACEEE has determined that energy efficiency programs aimed at reducing energy are much more cost effective than investing in new conventional power plants and alternative energy sources (See Figure 9-3)[1] .

The state and federal governments along with the non-profit sector offer local governments several comprehensive programs to assist in energy conservation and efficiency. For example, ENERGY STAR, a joint program of the US Environmental Protection Agency and the US Department of Energy, promotes the use of energy efficient products and practices. The South Carolina Energy Office (SCEO) provides technical assistance, financial assistance, educational outreach, and grants and loans to citizens, businesses, and local governments to promote energy efficiency.

[1] The Best Value for America's Energy Dollar: A National Review of the Cost of Utility Energy Efficiency Programs, American Council for an Energy Efficient Economy (ACEEE), March 2014

Figure 9-3: Comparison of Cost of Power Generation Versus Energy Conservation



Summary of Programs offered by SCEO

ConserFund loan program: Loans can be used for the implementation or upgrade of energy management and control systems; modification or installation of HVAC systems; and other energy cost-savings improvements.

Energy Efficiency Revolving Loan (EERL): The EERL can be used by local and state governments purchase energy efficient equipment, retrofit existing equipment, and other projects that achieve promote energy efficiency.

Carolina Energy Manager (CEM) Training: This is a classroom training program to prepare qualified energy managers for the Certified Energy Manager (CEM) certification examination.

Energy Audits: Energy audits consist of a walk-through assessment of building energy costs and efficiency, which identify recommendations for savings, cost analysis, and any operation and maintenance needs.

Utility Bill Analysis Program: SCEO will review utility bills to find billing errors or misapplied rates and to obtain refunds of overcharges from the utility providers.

Source: www.energy.sc.gov

ENERGY AUDITS AND ENERGY PERFORMANCE CONTRACTS

An energy audit is an inspection, survey and analysis of energy performance and usage in a building or group of buildings designed to identify opportunities to reduce energy consumption while maintaining the same level of service. Typically, an energy audit looks at insulation, windows, the HVAC system, lighting and appliances to determine opportunities for energy savings. Energy audits are often achieved through a performance contract with an energy service company. Under a performance contract, a building owner, such as Beaufort County, would enter into an agreement with an energy service company to perform an energy audit and to make the energy saving improvements at no up front cost to the owner. Over the contract period (typically 5 to 20 years), the savings from reduced utility bills are used to pay for the facility improvements. The City of Charleston entered into an energy performance contract in 2001, which is projected to eventually result in a 16% reduction in energy and gas usage and $18.4 million in energy and operational savings.

GREEN BUILDING

Green building is a general term that refers to construction techniques that promote the efficient use of energy, water, and other resources; that protect the health of occupants; and that reduce waste, pollution, and other adverse environmental impacts.

Green Building Codes: An effective way for local governments to promote green building is through its building codes. Beaufort County adheres to the International Building Code (IBC) as mandated by the State of South Carolina. Beaufort County Codes Department enforces the International Energy Conservation Code (IECC) in commercial buildings only. The State of South Carolina has not adopted the IECC for one and two family dwellings. Green building rating systems typically use the IECC code requirements as relative baseline requirements, then require higher standards in some areas, but also contain an array of additional requirements, which are not currently addressed in the IECC codes. The International Code Council has joined with National Association of Homebuilders in the development of the ICC 700-2008 National Green Building Standard (NGBS) for residences and has developed an Inspector of Green Building Technologies certification exam. Beaufort County's current strategy is to adopt a voluntary approach to promoting green building standards until the statewide uniform green building code is adopted and can be enforced.[1]

Green Building Rating Systems: The most well known green building rating system is the Leadership in Energy and Environmental Design (LEED) developed by the US Green Building Council. LEED was created to provide a common standard of measurement for green building by establishing a scoring system based on required prerequisites and credits. A total of 100 points can be achieved by meeting requirements in the six following categories:

- Sustainable sites
- Water efficiency
- Energy and atmosphere
- Materials and resources
- Indoor environmental quality
- Innovation in materials and design

The four levels of certification are shown in Table 9-4 below.

[1] Beaufort County Building Codes Department.

Figure 9-4: LEED Rating System for Four Levels of Certification

Rating	Points
Certified	40-49
Silver	50-59
Gold	60-69
Platinum	86 and above

The first LEED certified building in Beaufort County was completed in 2008 by the Beaufort Jasper Water & Sewer Authority (BJWSA). Since then, many other projects have received LEED certification including Pritchardville Elementary, the CareCore Headquarters Building, Tanger Factory Outlet Center 1, South Island Public Service District, and Beaufort Town Center. The Technical College of the Lowcountry (TCL) is a two-year college serving the needs of about 8,500 students in Beaufort, Colleton, Hampton, and Jasper Counties. TCL is developing a LEED "Green" Building Construction Training and Employment Project, which will provide participants with education and training for certification as an Alternative Energy Construction Technician (AECT).

CONCLUSION

There are two general strategies that Beaufort County should consider to promote energy efficiency and green building. First, the County should lead by example. This strategy would include performing and implementing an energy audit; requiring all new County buildings, renovations, and additions to be LEED certified; and encouraging other local governments and public agencies to do likewise. The second strategy is to encourage energy efficiency in the private sector by a combination of incentives, educational outreach, and removing any unnecessary regulatory barriers.



Renewable Energy

Renewable energy is energy generated from natural resources, such as sunlight, wind, and tides, which are naturally replenished. As energy costs rise, there is a growing market nationally for many forms of renewable energy. Beaufort County with its many days of sunshine, offshore winds and large tidal range has unique opportunities to faciltate and promote the generation of renewable energy.

SOLAR

With an average of 230 days of sunshine, solar power has great potential in Beaufort County. This section discusses two forms of harnessing heat and energy from the sun. Photovoltaic (PV) arrays, which are glassy rooftop panels that produce electricity and can connect directly to the electric grid. Solar hot water heaters rely on sunlight to heat a glycol solution that cycles through a heat exchanger. PV arrays do not work well in shade, but hot water heaters keep collecting sunlight in ambient light. Tax incentives and net metering legislation at the federal and state level have created a favorable environment for future development of solar energy. Beaufort County can further assist by removing regulatory barriers to the placement of solar collectors, and to advocate for the removal of similar restrictions in private covenants.

Tax Incentives: The Federal government currently offers a 30% Solar Investment Tax Credit for solar power for both residential and commercial projects. The tax credit has no monetary cap for residential solar electric installations and provides an important incentive to homeowners to invest in solar energy. The current extension of the tax credits eventually reduces the credit 10% for commercial and 0% for residential by 2023. In addition, South Carolina allows taxpayers to receive a 25% tax credit for the amount expended for the purchase and installation of solar generating devices.

Distributed Energy Resource Program Act: In 2014, South Carolina passed the Distributed Energy Resource Program Act (Act 236). The legislation allows net metering where electricity users with rooftop solar systems can sell back excess power for a full, one-to-one retail credit

from utility companies. The bill also allows homes and businesses to lease solar systems from independent solar companies. This allows a homeowner to have solar panels installed at little or no up-front cost and save money on electricity over the term of the lease. The solar companies benefit by earning tax credits and selling the homeowner electricity. Both of these provisions increase options and reduce costs for homeowners and businesses who wish to solar power.

BIOMASS

Biomass refers to biological material such as wood, yard waste and construction debris. Currently biomass and wood wastes in Beaufort County are incinerated with no energy recovery or are placed in a construction and demolition (C&D) landfill. In fiscal year 2011, the County collected 6,627 tons of yard waste and 61,081 tons of Class Two Waste which includes C & D waste. Two options for beneficial reuse of these materials are incineration with energy recovery and composting to produce a commercial mulch product for local landscaping.

Incineration with Energy Recovery: The types of materials that could be used as a fuel are yard waste (home and commercial landscape trimmings, grass cuttings), C&D waste (home and commercial building excess wood materials), screened woody demolition waste, and tree trimmings by utility companies and SCDOT. Organic wastes may be highly variable in energy content and in content of inerts. Economic feasibility will depend on site availability, public acceptance, federal and state policy and subsidies, and cooperation with electricity providers (net metering and access to the grid). A suitable scale for such a facility would require a source of feed stocks from several surrounding counties.

BIODIESEL

Biodiesel is a non-petroleum-based diesel fuel made from vegetable oil or animal fat (tallow), and from cellulosic materials in trees, shrubs, and crops. Biodiesel can be used, alone or blended with conventional diesel fuel, in unmodified diesel-engine vehicles. In the United States, the predominant source of biodiesel feed stock is soybean oil. Other oil from corn, cottonseed, canola, flax, sunflower and peanut, also can be used but are more expensive than soybean oil. Animal-derived products such as tallow are another source as is recycled oil and grease from restaurants and food processing plants.

Feasibility of Biodiesel Production in Beaufort County: In Beaufort County and surrounding areas, cellulosic materials from wood waste may be the most significant feed stock, as is recycled restaurant oil and grease. In fiscal year 2008, 357 tons of unprocessed waste cooking oil

was collected in the County. This has the potential to produce about 94,000 gallons of biodiesel. [1]

Use of cellulosic feed stocks will require the additional processing step of gasification. The gasified material is then reconstituted into biodiesel and other fuels.

WIND, WAVE AND TIDAL ENERGY

The South Carolina Energy Office, Clemson and Coastal Carolina Universities, and the Savannah River National Lab are cooperating to research the potential for generating wind energy off the coast. Issues to be addressed include identification of the needs and barriers of integrating offshore wind energy into the power grid; identification of technology that can transfer the power to the shore; and establishment of a state task force to determine the economic and environmental effects of wind energy and create a permitting process for wind farms in state waters. In the pilot project, the state hopes to build an 80-megawatt wind farm of between 12 and 15 turbines about 3 miles off shore. The wind farm location would most likely be between Charleston and North Carolina because the mean wind speeds are highest there. One megawatt of wind power can produce enough electricity to serve 250 to 300 homes on average each day. The pilot project could serve between 20,000 and 24,000 homes. Researchers are predicting that the pilot project could be in operation within a five year time period.

In addition to the wind farm concept, as part of the same study, data will be obtained on wave and tidal energy potential using a buoy observation network that will measure wind, wave, tide and current resources at six offshore locations in two lines and water level and winds at two locations along the two lines.[2]

[1] http://www.oregon.gov/ODA/do_reports_biodiesel.shtml Assumes that 7.6 pounds of fat will produce one gallon of biodiesel

[2] Hartwig, Erica, Technical Contact, South Carolina Roadmap to Gigawatt-Scale Coastal Clean Energy Generation: Transmission, Regulation and Demonstration PROJECT NARRATIVE; South Carolina Energy Office 2008.



Other Energy and Sustainability Issues

Recycling, water conservation and local foods initiatives are discussed in greater detail in other chapters of this plan. However, each of these issues has a significant energy saving component, which is discussed below.

RECYCLING

Recycling of household and commercial waste is more energy efficient than disposing solid waste and producing new materials. The steps in supplying recycled materials to industry (including collection, processing and transportation) typically use less energy than the steps in supplying virgin materials to industry (including extraction, refining, transportation, and processing). Additional energy savings associated with recycling are gained in the manufacturing process itself, since the materials have already undergone processing. For example, recycling used aluminum cans requires only about five percent of the energy needed to produce aluminum from bauxite. These savings far outweigh the energy created as a by-product of incineration or disposing of the materials in a landfill.[1]

Beaufort County currently collects recycled materials at its 12 convenience centers located throughout the County. As the County explores mandating franchised curbside solid waste collection in higher density areas, the County should also consider curbside recycled materials collection in the same areas.

WATER CONSERVATION

Efficient water use can also reduce the amount of energy needed to treat wastewater, resulting in less energy demand and, therefore, fewer harmful byproducts from power plants. Most people realize that hot water uses up energy, but supplying and treating cold water requires a significant amount of energy too. American public water supply and treatment facilities consume about 56 billion kilowatt-hours per year—enough electricity to power more than 5 million homes for an entire

[1] Environmental Benefits of Recycling SCDHEC http://www.scdhec.gov/HomeAndEnvironment/Recycling/WhyRecycle/

year. Consequently, letting a faucet run for five minutes uses about as much energy as letting a 60-watt light bulb burn for 14 hours.[1]

Beaufort Jasper Water & Sewer Authority (BJWSA): BJWSA, which provides drinking water for a majority of County residents, conducts an active public education program implementing 'WaterSense', a partnership program sponsored by the EPA designed to facilitate the efforts of its customers to save water and protect the environment.[2] During the County's hot summers, irrigation causes a significant increase in water usage and, as a result, a great demand on our water system. BJWSA addresses this water demand issue by using its treated effluent to irrigate local golf courses. BJWSA serves 12 golf courses from its Cherry Point Water Reclamation Facility with two more scheduled to come on line soon. In the spring of 2008, BJWSA began their first water reuse service for the residential lots, common areas, landscaped medians, and the golf course at the Tradition Hilton Head community located in Jasper County. Treated effluent is also provided to the Secession Golf Course on Lady's Island, the May River Golf Club at Palmetto Bluff, the two golf courses on Dataw Island and a portion of Henry's Sod Farm on St. Helena Island.

Hilton Head Island Public Service Districts: The Public Service Districts on Hilton Head Island facilitate water conservation by providing water to customers on a conservation rate structure. This means that the customers who use more water pay more per gallon. This structure has been in place for over 10 years. As an additional conservation measure, the Town of Hilton Head Island has an Irrigation Ordinance that puts restrictions on the use of water for irrigation purposes for both homes and businesses.

LOCAL FOODS INITIATIVES

The way food is produced and transported has an impact on the environment and energy consumption. The term, "food miles" refers to the distance that food travels from the farm on which it is produced to the kitchen in which it is being consumed. Food travels between 1,500 to 2,500 miles every time that it is delivered to the consumer[5]. Chapter 6 of this plan outlines County policies that support the economic viability of local agriculture and commercial fishing. Initiatives include purchasing conservation easements on active farmland and working waterfronts, and supporting local farmers markets.

[1] http://www3.epa.gov/watersense/our_water/why_water_efficiency.html
[2] http://www3.epa.gov/watersense/about_us/index.html
[5] Iles, A. (2005). Learning in sustainable agriculture: Food miles and missing objects.



Recommendations

Recommendation 9-1: Energy Committee

Beaufort County should designate the Natural Resources/Land Management Committee of Beaufort County Council to oversee the prioritization and implementation of the recommendations of this chapter.

Recommendation 9-2: Relationship to Other Policies

Beaufort County recognizes that many other policies in this plan have the added benefit of reducing energy demand and promoting energy efficiency. These policies include the following:

- Land Use Policies: Land Use policies that reduce sprawl, reduce VMTs and promote transportation choices also promote reduction in energy usage. These policies include growth boundaries; promoting higher density mixed use communities in proximity to employment and services; promoting connectivity; promoting sidewalks and pathways; encouraging infill and redevelopment; and preserving rural areas.
- Transportation Policies: Transportation policies designed to reduce congestion, reduce travel demand, and promote alternative modes of transportation help to reduce overall energy consumption. These policies include access management standards, signal timing, signal spacing, requiring interconnectivity, travel demand management (telecommuting, flexible work hours, carpooling), and improving public transportation and pedestrian and cycling facilities.
- Local Foods Initiatives: Policies that promote local agriculture; the local seafood industry; and promote the marketing and distribution of locally grown and produced food reduce energy consumption by reducing food transport.
- Recycling: Local policies that encourage local recycling indirectly promote energy savings because producing products from recycled materials generally uses less energy than from raw materials.

Recommendation 9-3: Education, Technical Assistance and Training

Beaufort County should facilitate educational outreach, training and technical assistance to promote energy efficiency and the use of alternative energy sources.

Recommendation 9-4: Utilize Available Technical Assistance and Expertise

Beaufort County should utilize existing state, federal, and non-profit resources to promote energy efficiency and renewable energy resources. Beaufort County should utilize available services from the South Carolina Energy Office, ENERGY STAR, and other state and federal resources.

Recommendation 9-5: Energy Efficiency - County Energy Audit

Beaufort County should conduct an energy audit for all County facilities (existing, undergoing renovation, and under design).

- The County should consider entering into an energy performance contract with an Energy Service Company to perform the audit and implement the improvements.
- The Audit should include an evaluation of the feasibility of using renewable energy, such as wind and solar, to reduce energy costs in County facilities.

Recommendation 9-6: Energy Efficiency – Other Internal County Policies

Beaufort County should evaluate all County operations to promote energy efficiency and to reduce energy consumption.

- Convert the County fleet to more fuel-efficient vehicles.
  1. Inventory the existing fleet to determine the vehicle function needs for each department and the miles per gallon for each vehicle
  2. Develop minimum efficiency standards (miles per gallon) for each vehicle class as part of the County's procurement policy.
  3. Identify older and disproportionately inefficient vehicles that need to be replaced or eliminated.
  4. Maintain vehicles at optimal efficiency.
- Location of County Facilities: Evaluate the impact on vehicle miles traveled (VMTs) when siting new County facilities.
- Online Services: Expand the provision of on-line services, where practical, to reduce or eliminate the need for the public to travel to County facilities.

- Telecommuting and Teleconferencing Policy: Develop a telecommuting policy for County employees for who it is a viable management work option to reduce VMTs by employees commuting to and from work. Encourage the use of teleconferencing where it is a viable alternative to in-person meetings.
- Walking and Cycling to Work: Provide support facilities at County buildings to promote walking and cycling to work. Support facilities may include bike racks, lockers, changing areas and showers.
- Ride Sharing: Facilitate ride sharing among County employees. Utilize the County's GIS capabilities to provide information to optimize ride sharing arrangements based on location of employee residences. Explore possible incentives to encourage ride sharing.
- Curbside Solid Waste Collection: In moderate to high density areas, provide curbside solid waste collection and recycling. Mandated franchised curbside pickup in these areas would be more fuel-efficient by eliminating individual trips to convenience centers and would encourage more recycling.

Recommendation 9-7: Energy Efficiency – Outdoor Lighting

Beaufort County should establish minimum requirements for outdoor lighting that enhance visibility and public safety by preventing uncontrolled intrusion into adjacent properties and the natural environment for purposes of promoting energy conservation and preserving the County's night sky, which is valuable natural resource important to the County's character.

Recommendation 9-8: Green Building – Green Building Codes

Beaufort County should adopt a voluntary approach to promoting green building code standards until the statewide uniform green building code is adopted and can be enforced.

Recommendation 9-9: Green Building - LEED

Beaufort County should facilitate green building through a combination of leading by example, educational outreach, and providing incentives to encourage LEED construction in the private sector.

- When planning future community facilities (or major renovations and additions to existing facilities), where practical, Beaufort County should register the proposed project, and gain certification under the U.S. Green Building Council's "Leadership in Energy and Environmental Design" (LEED) program (see Recommendation 11-5).

- Encourage the municipalities, the Beaufort County School District, and other local public and non-profit entities to construct LEED certified facilities.
- Explore possible tax incentives and other provisions to encourage the private sector to construct LEED buildings.
- Evaluate existing and future land use and building regulations to ensure that they do not place unreasonable barriers to providing site and building features designed to merit LEED credits (e.g. rain barrels, cisterns, and green roofs).

Recommendation 9-10: Green Building - Low Income Weatherization

Beaufort County should support low-income weatherization programs such as the Weatherization Assistance Program offered throught the US Department of Energy, and assist local agencies who are implementing these programs to seek all available state and federal funds that are available.

Recommendation 9-11: Renewable Energy - Remove Regulatory Barriers

Beaufort County should analyze its development regulations to remove any unnecessary regulatory barriers that deter local renewable energy generation. Beaufort County also should assist private communities in overcoming barriers placed by restrictive covenants.

Recommendation 9-12: Renewable Energy - State and Federal Legislation

Beaufort County should monitor and support state and federal legislation that promotes energy efficiency and renewable or alternative energy sources.

Recommendation 9-13: Renewable Energy – County Initiatives

Beaufort County should explore both the opportunities and the financial feasibility of generating biodiesel or electricity from local resources such as wood waste, municipal solid waste, and oil and grease from restaurants. It should also explore the feasibility of appropriate scale solar and wind opportunities. Introduction of these technologies to the County could be in the form of pilot plants.

10 *Beaufort County Comprehensive Plan*
Transportation



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Introduction

Traffic congestion on Beaufort County's roadways is the most tangible and noticeable indicator of the impact on quality of life caused by new growth. Both Beaufort County residents and visitors rely heavily on private automobiles as their sole means of transportation. According to the 2000 US Census, 86% of Beaufort County commuters rely on automobiles to get to work of which 85% were occupied by one person. This automobile dependence can largely be attributed to historical growth patterns in the county that favored low-density decentralized development. As a result, a vast majority of the resources devoted to addressing transportation issues have been directed towards road projects. There is approximately $334 million in committed and planned transportation improvements identified and funded to address existing and future transportation needs. Additional projects planned amount to approximately $701 million, but are not yet funded. These transportation capital improvements will go a long way towards satisfying future travel demand. However, based on growth projections, even once these improvements are made; there will still be approximately 30 miles of failing roads in the year 2025.

While the county and the region will continually need to improve its road network to keep up with new growth, several factors challenge the sustainability of the current levels of commitment to fund and implement transportation improvements:

- The magnitude of funding needs for large-scale transportation improvements;
- Other growth related capital improvement needs (schools, parks, libraries, general government, etc.) that are competing for the same funds; and
- The potential degradation of the county's environmental and aesthetic qualities.

Therefore, this chapter offers the following strategies to maximize the efficiency of the county's road network while promoting policies and alternative transportation choices to reduce our dependency on automobile transportation.

- Continue to work cooperatively with the municipalities, neighboring counties, and SCDOT to identify, fund, and implement needed road improvements;
- Preserve road capacity by adopting, applying and enforcing policies to manage access and reduce vehicle miles traveled (VMT's);
- Support and fund projects and programs that promote a diversity of transportation choices;
- Adopt land use policies that encourage internal trip capture and promote development whose location and density are suitable to support public transportation and other alternative modes of transportation; and
- Require new road projects to minimize their adverse environmental impacts and enhance the county's aesthetic qualities.



Existing and Planned Road Network

Beaufort County has over 2,000 miles of roads ranging from major arterials such as US 278 to unpaved private roads. In 2004 Beaufort County adopted a Road Functional Classification Map (see Map 10-1) for the purposes of establishing the role of key roadways and intersections; to help in the establishment of access management standards; and to help in prioritizing project funding.

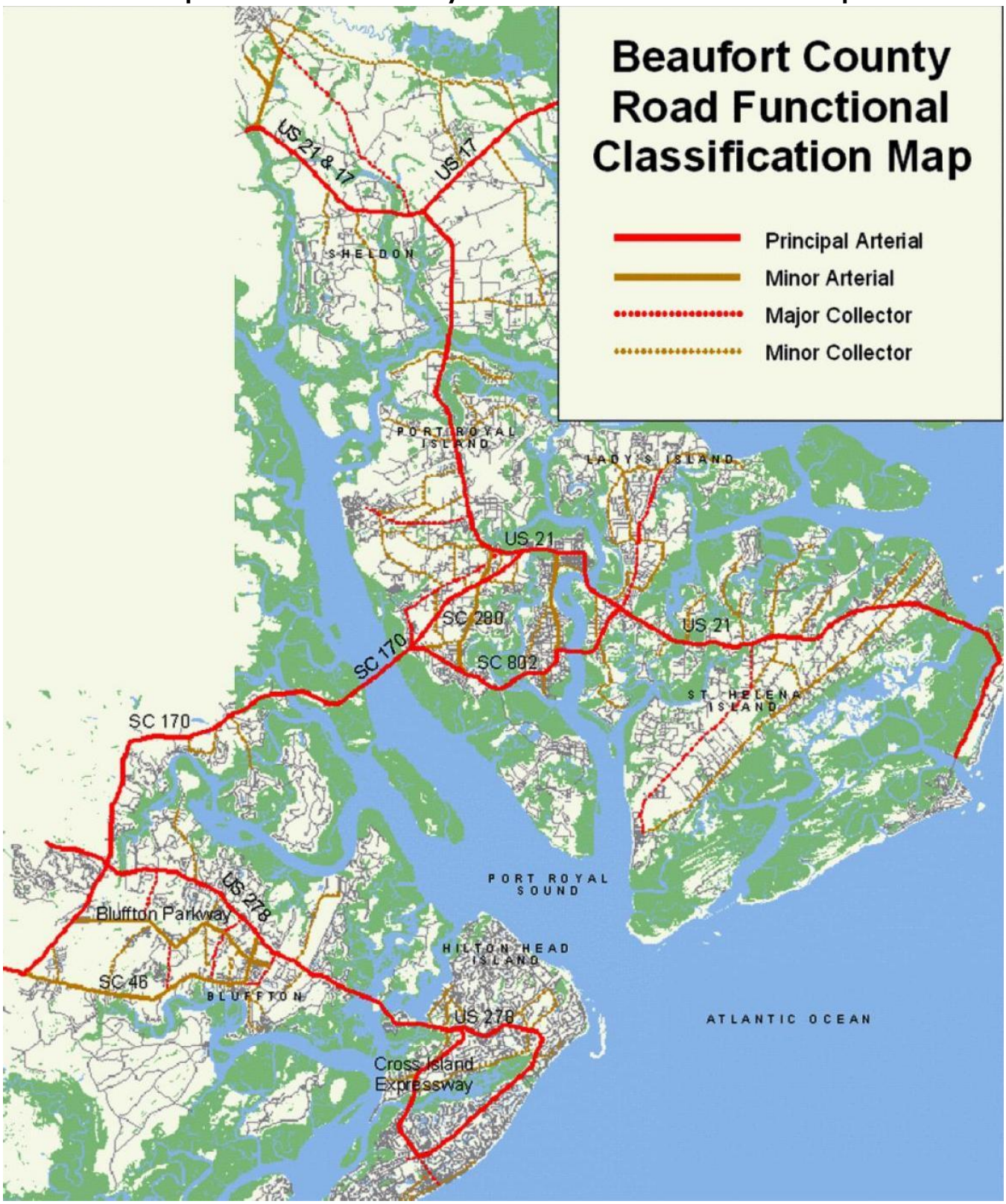
Level of Service

Level of Service (LOS) is a term used in describing how well a particular roadway or intersection is functioning in terms of speed; travel time; freedom to maneuver; traffic interruptions; and comfort and convenience. Six LOS letters designate each level of quality of vehicular flow, from A to F, with LOS "A" representing the best operating conditions and LOS "F" the worst. Beaufort County has decided as a matter of policy that in order to maintain an acceptable quality of life in the region, conditions on its road network should not fall below LOS "D". However, environmental and community constraints limit the capability to improve some areas of the County. Thus, it is not feasible or practical to provide LOS "D" conditions on all roads. In these cases improvements to complementary travel modes such as transit, pedestrian, or bicycle, as well as efficient use of the existing infrastructure through signal coordination and access management can provide significant benefit to reducing congestion and/or providing travel alternatives.

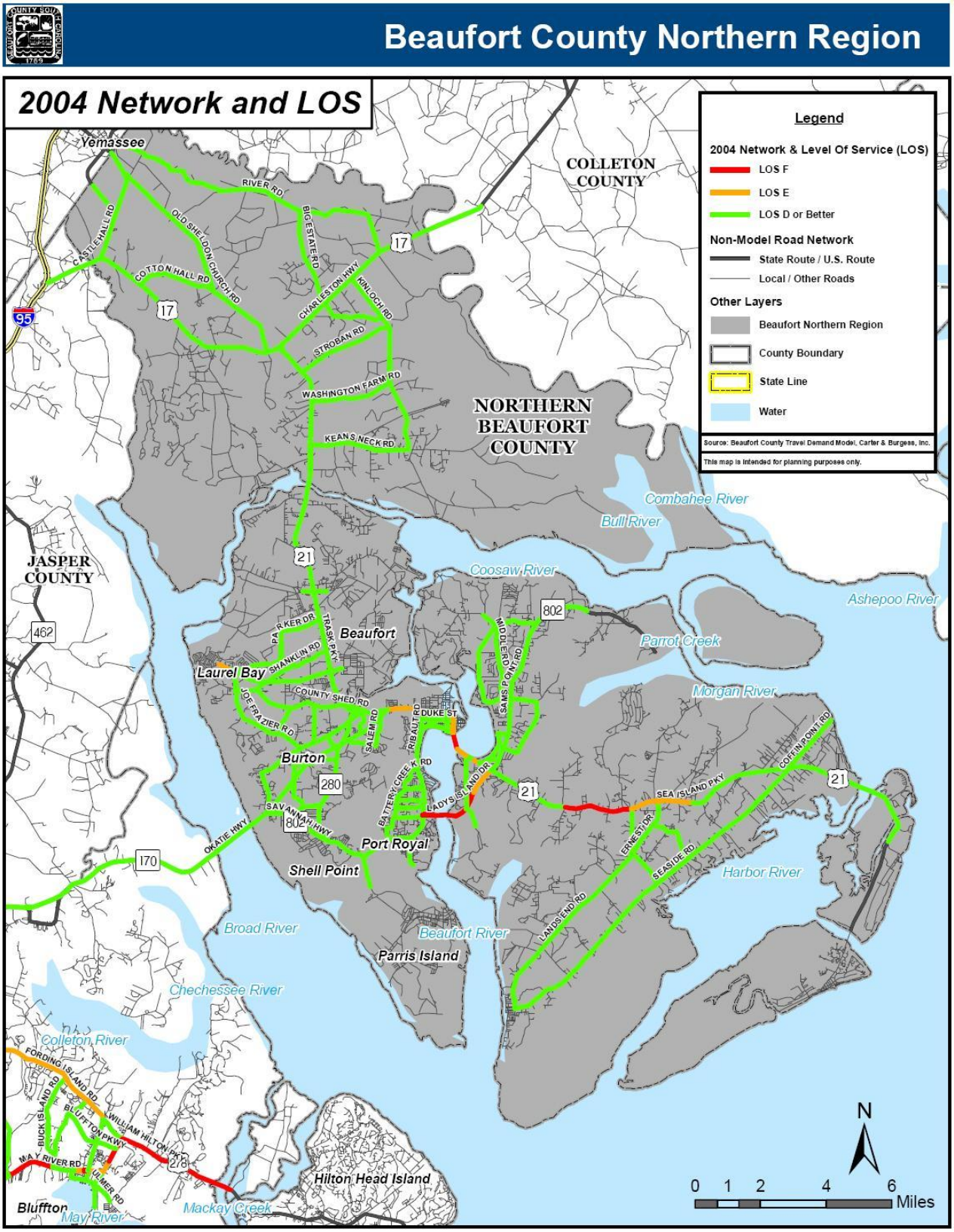
Traffic Volumes and Trends

In 2005, when Beaufort County updated its Travel Demand Model (TransCAD), over 20 miles of roads were determined to be at LOS E or F. Maps 10-2 and 10-3 show the year 2004 conditions along roads in Beaufort County for the Northern Region and Southern Region, respectively. Failing roads included US 278 from the Hilton Head Island bridge to Simmonsville Road, SC 46 south of US 278, US 21 east of SC 170 through Downtown Beaufort, both Beaufort River crossings in

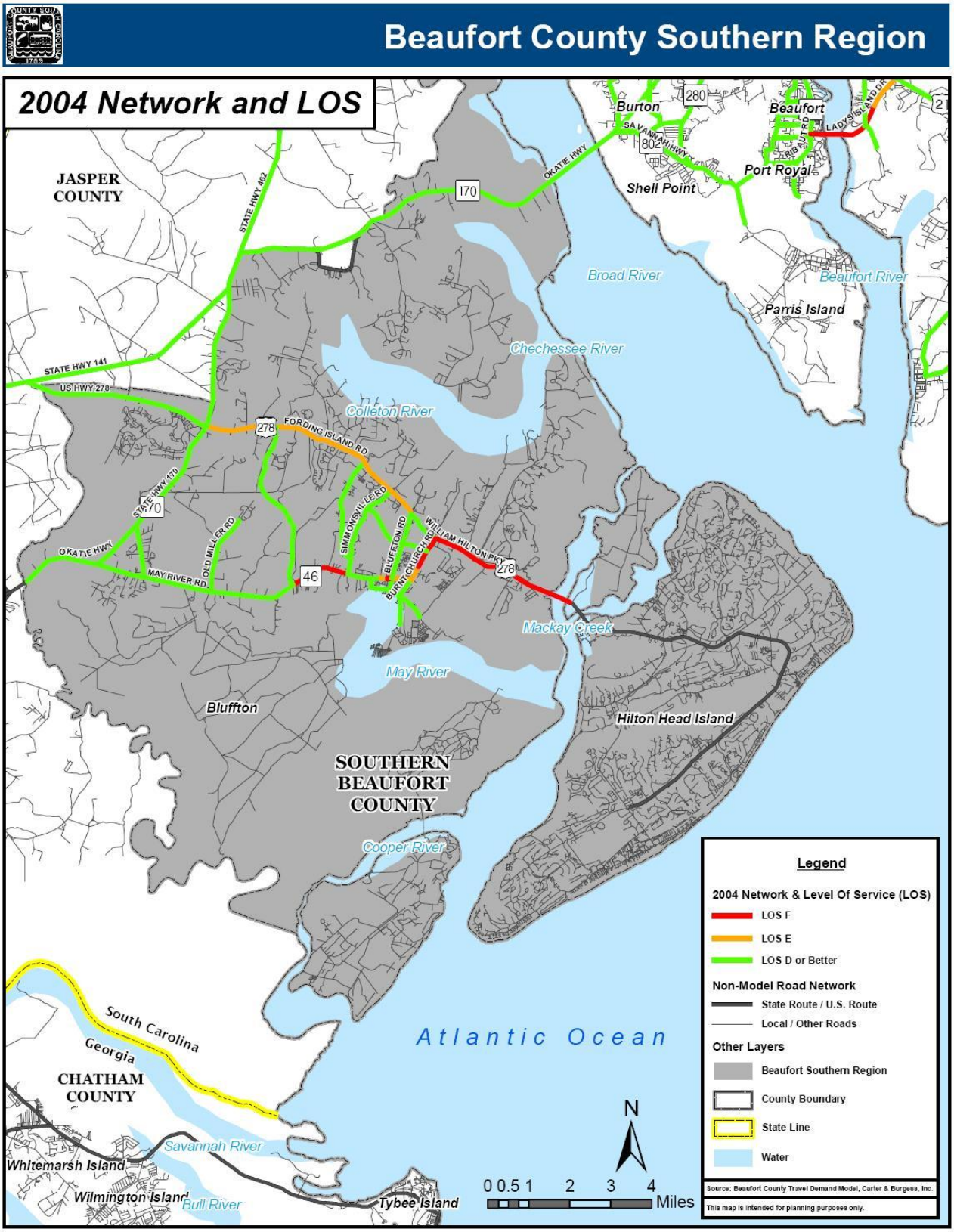
Map 10-1: Beaufort County Road Functional Classification Map



Map 10-2: 2004 Conditions on Northern Beaufort County's Road Network



Map 10-3: 2004 Conditions on Southern Beaufort County's Road Network



Beaufort, and US 21 on St. Helena Island. Since the model was developed, two major road improvements have been completed that help address these deficiencies. They are the widening of US 278 to 6 lanes from the Hilton Head Island bridge to Simmonsville Road and the construction of Bluffton Parkway from SC 170 to Simmonsville Road. While these two improvements have addressed current deficiencies, it is important to note that as of 2007, traffic volumes on US 278 east of Simmonsville Road have reached the roadway's 6-lane capacity of 60,000 trips per day. In addition, other roadway improvements in northern and southern Beaufort County are planned, but have not yet been implemented.

Committed Road Improvements

In order to address existing and projected road deficiencies, various projects are committed (planned with funding identified) to address transportation needs in Beaufort County. These projects are shown below in Table 10-1.



U.S. 278 was widened to six lanes between the Hilton Head Bridge to Simmonsville to increase capacity to accommodate existing and future traffic demands.

Table 10-1: Committed and Funded Road Projects

Project	Description	Estimated Cost
US 17 Widening	Widening from Gardens Corner to the Combahee River	$92,000,000
US 278 Signal System, ITS Architecture Plan & street lighting	From Jasper Co. to HHI. Upgrade signals, expand system.	$1,100,000
Burnt Church Road Phase I Widening	Bluffton: Widen to 4 lane divided from US 278 to Bluffton Pkwy.	$3,000,000
SC 46 Widening	Bluffton: Widen to 4 lane divided from US 278 to Bluffton Village	$8,372,000
US 21/SC 802 Connector	Planned new connector road (4 lanes divided)	$6,500,000
Bluffton Parkway Phases 5A & 5B	New 4-lane divided road from Burnt Church Road to Buckingham and from Buckwalter Pkwy to Buck Island	$60,500,000
Squire Pope Rd./US 278	Intersection improvement with additional through lanes on US 278 on HHI	$2,000,000
Boundary Street Parallel Rd.	New 2-lane road with Boundary St. improv.	$22,000,000
SC 802 Intersection Improvements	Planned improvements along Ribaut Rd.	$2,265,000
US 278 (W. Hilton Pkwy) Resurfacing	Resurfacing, pathways, intersection improvements and drainage	$7,310,000
Simmonsville Road Widening	Widen to 4 lane divided From US 278 to Bluffton Pkwy.	$8,000,000
US 21/SC 802 & Savannah Hwy. widening	Widen to 4 lane divided for Savannah Hwy; new parallel bridge over Beaufort River	$42,700,000
US 278 Widening, Phases 2 & 3	Widen to 6 lane divided from Simmonsville Rd. to SC 170 with intersection improv.	$40,000,000
SC 170 Widening	Widen to 4 lane and/or to 6 lane divided from SC 46 to Tidewatch	$26,000,000
Lady's Island Intersection Improv.	Intersection improvements at Sams Point/Brickyard Point/Holly Hall Intersection	$360,000
US 21 Widening (St. Helena I.)	Widening to three lanes on St. Helena Island	$12,300,000

Source: Beaufort County Engineering Department

The committed improvements are included in the County's existing plus committed (E+C) roadway network. The roadway LOS was determined based on comparison of the future year 2025 roadway volumes, determined through the County's travel demand model, using the future roadway capacity, with committed improvements. Maps 10-4 and 10-5 show the year 2025 conditions with committed projects in place for the Northern Region and Southern Region, respectively.

Although the projects currently committed for construction will provide a valuable impact on mobility and congestion relief, additional deficiencies remain with the E+C transportation improvements in place. These include significant deficiencies along the US 21 corridor from Lady's Island through Laurel Bay Road and along Joe Frazier Road in northern Beaufort County. Significant deficiencies in southern Beaufort County include US 278 from Hilton Head Island to McGarvey's Corner(SC 170), SC 170 throughout southern Beaufort County, and May River Road (SC 46) from SC 170 to Downtown Bluffton.



Peak hour traffic conditions on U.S. 278 that have prompted road improvements in southern Beaufort County

Additional Improvements to Address 2025 Needs

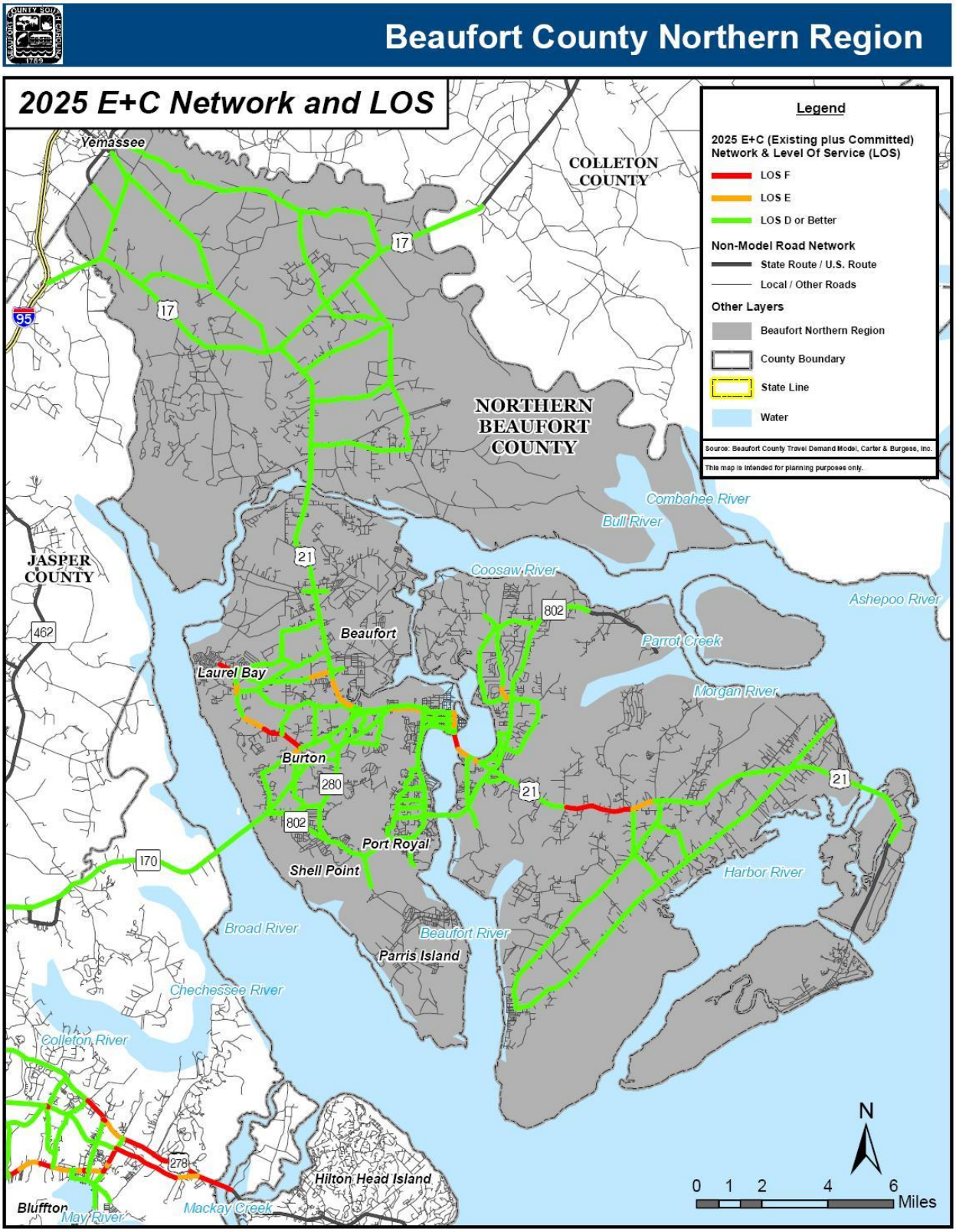
Beyond those planned and committed improvements in the County as shown in Table 10-1, additional improvements are required to help the area accommodate and adequately facilitate forecast traffic volumes by the year 2025. These additional projects, which include road improvements, transit, travel demand management, pedestrian, bicycle, and access management were identified in the Northern and Southern Regional Plans. The road projects are shown in Table 10-2.

Where it is not feasible or practical to provide LOS "D" conditions via road improvements alone, improvements to complementary travel modes such as transit, pedestrian, or bicycle were recommended. In addition, improvements to make efficient use of the existing infrastructure through signal coordination and access management were also recommended to help reduce congestion and/or provide travel alternatives. These types of recommended improvements are shown in Table 10-3. Maps 10-6 and 10-7 show the year 2025 conditions with additional planned projects in place for the Northern Region and Southern Region, respectively.

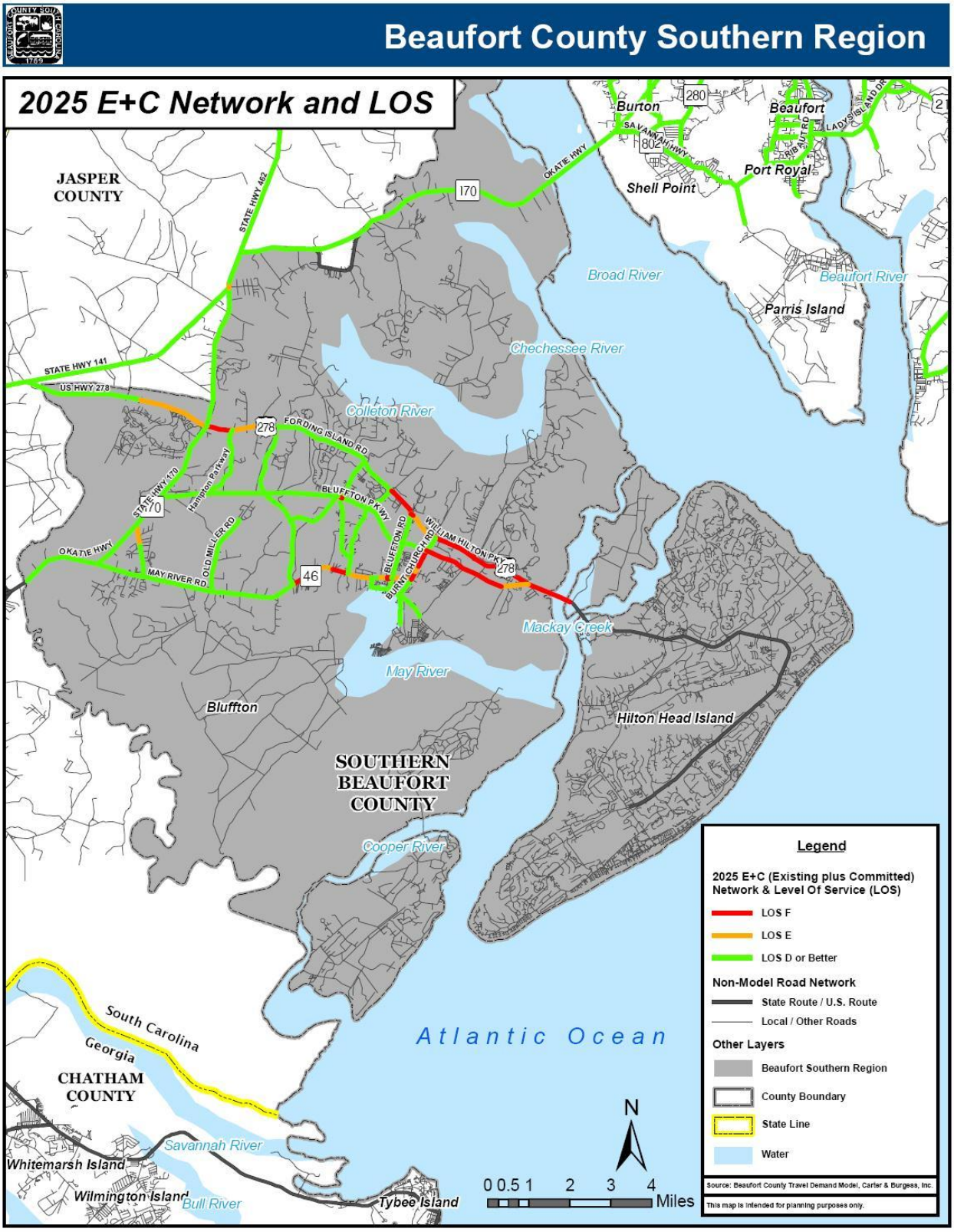
Road Project Funding

The extensive list of committed and planned transportation improvements is a result of a cooperative effort between the county and its municipalities to aggressively pursue a variety of revenue sources to fund these improvements. While historically the principal source of

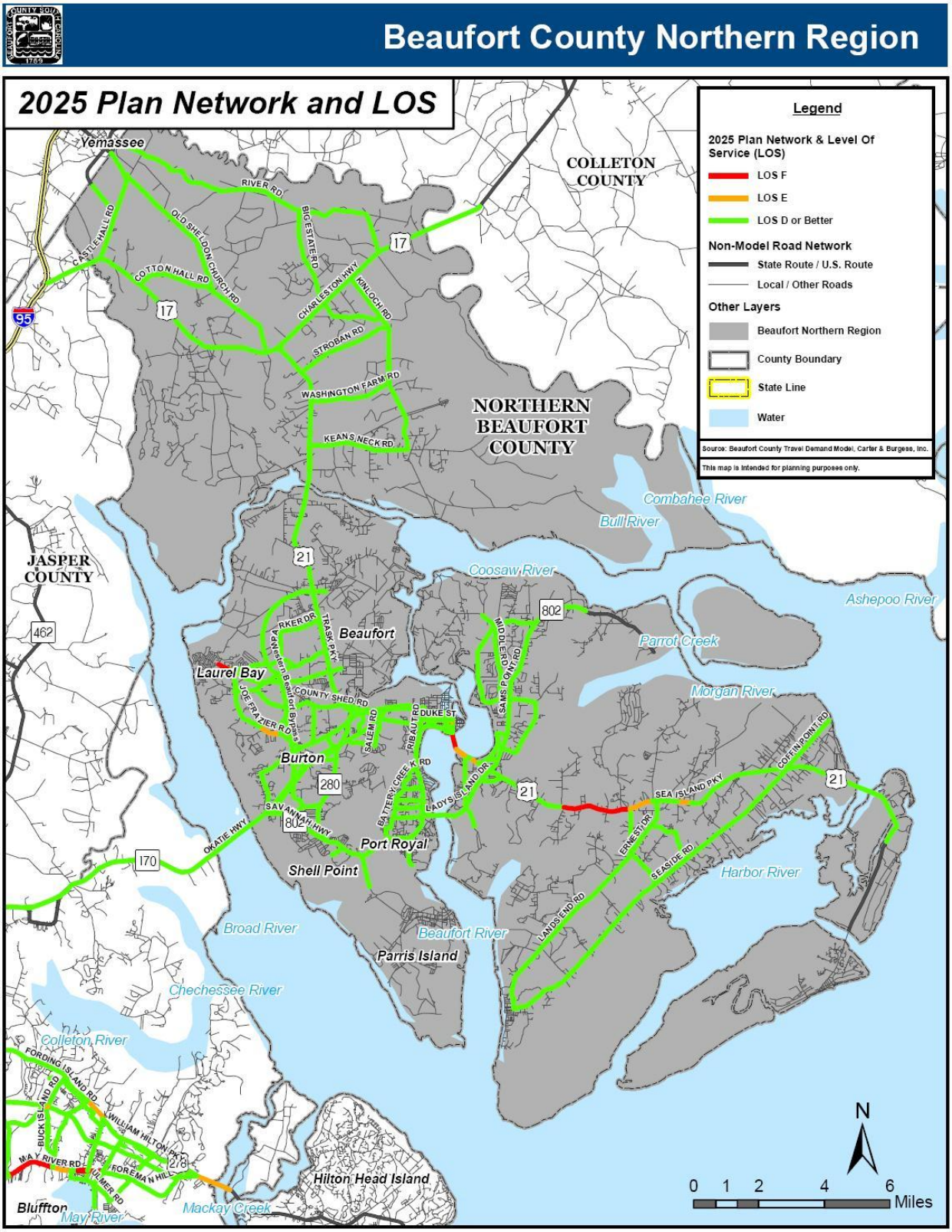
Map 10-4: 2025 Projected Conditions on Northern Beaufort County's Road Network – with Existing and Committed (E+C) Projects



Map 10-5: 2025 Projected Conditions on Southern Beaufort County's Road Network – with Existing and Committed (E+C) Projects



Map 10-6: 2025 Projected Conditions on Northern Beaufort County's Road Network – with Existing and Committed (E+C) and Planned Projects



Map 10-7: 2025 Projected Conditions on Southern Beaufort County's Road Network – with Existing and Committed (E+C) and Planned Projects

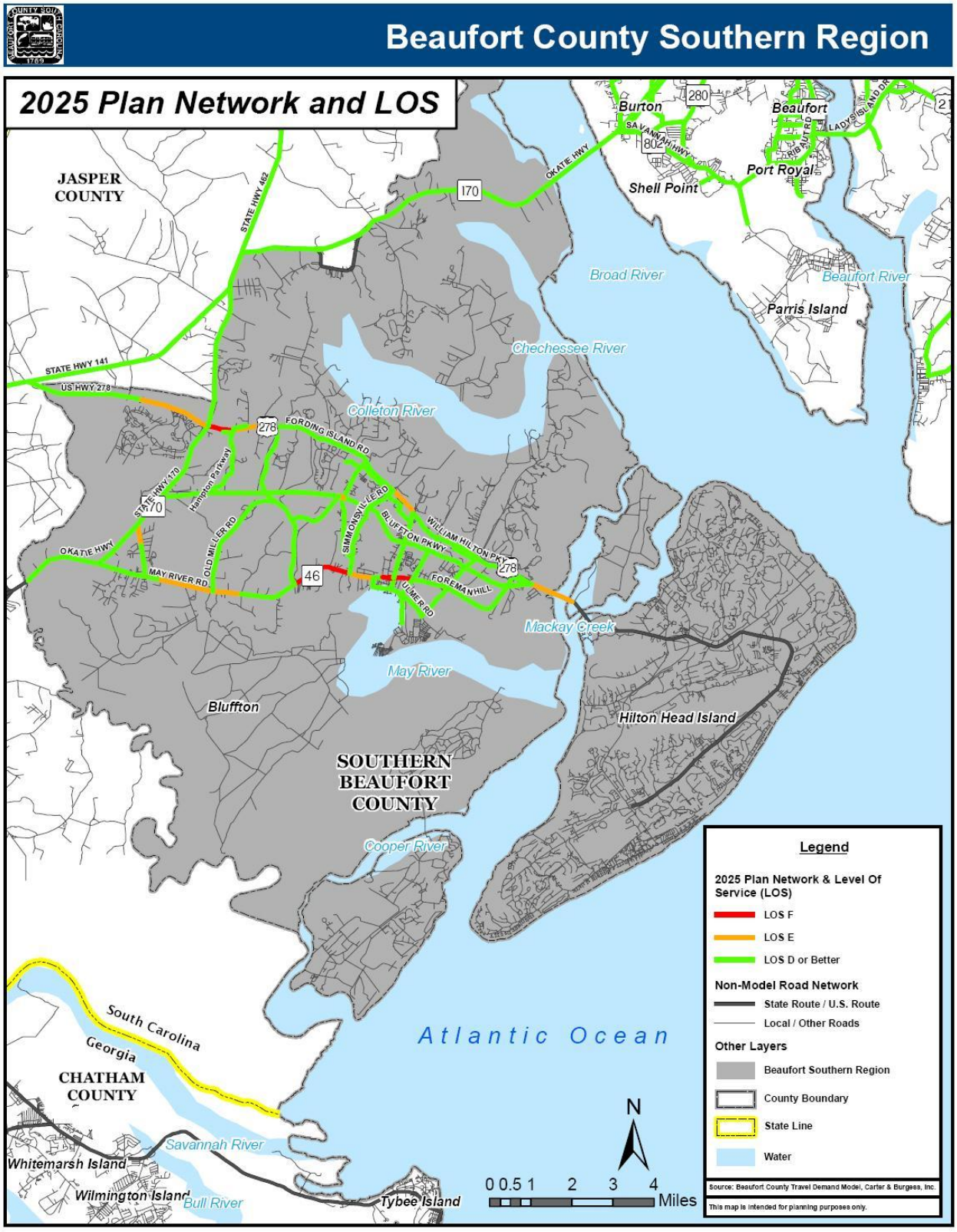


Table 10-2: Additional Planned Transportation Improvements to Address 2025 Needs

Project	Description	Estimated Cost
US 278 Frontage Roads	7 frontage road projects from the Gatherings to Graves Road along with access improve.	$13,600,000
US 21 Business Improvements Planning & Design	Road connectivity, access management, bike/ped, streetscaping improvements from Ladys Island to SC 802	$12,000,000
Malphrus Rd/US 278 & Foreman Hill Rd Connection	New 2 lane road connecting Foreman Hill with Malphrus Rd and widening at US 278	$3,800,000
Northern Beaufort Bypass	Construction of a new highway from US 21 to Sams Point Road	$216,000,000
SC 170 Robert Smalls Pkwy	Road connectivity and parallel collector roads from SC 802 to SC 280	$14,000,000
Old Miller Road Extension	New collector roadway for connectivity from Grande Oaks to Lake Point Drive	$1,000,000
Joe Frazier Road Improvements	Turn lanes, access management, and bike/ped improve. from Cherokee Farms to Broad R.	$5,000,000
US 278 Widening, Phase 4	Widening to 6 lane divided from SC 170 to SC 141	$16,000,000
Bluffton Pkwy, Phase 6	New 4 lane divided roadway from SC 170 to I-95	$40,000,000
Buck Island Road Widening	Widening to provide 3 lanes from US 278 to Bluffton Pkwy	$8,000,000
Bruin Road Extension	New 2 lane connector from Burnt Church Rd to Buckingham Plantation	$15,000,000
Burnt Church Road Widening Phase 2	Widen to 4 lane divided from Bluffton Pkwy to Bruin Rd	$5,000,000
Western Beaufort Bypass	New highway from US 21 to SC 170	$50,000,000
US 21 Widening	Widen to 6 lane divided from Broad River Blvd to Clarendon Rd	$40,000,000
Midtown Drive & Broad River Dr Connection	New 2 lane road for connectivity from Midtown Drive to Broad River Drive	$1,000,000
US 278 Bridge Widening	From Fording Island to Hilton Head Island to 6 lanes divided	$155,000,000
SC 170 /SC 46 Widening	From SC 170 to Jasper County to 4 lanes divided	$15,000,000
Ribaut Road Connection	From SC 170 to Ribaut Rd (using old rail line)	$10,000,000
Commerce Park Improvements	Intersection improvements and resurfacing	$2,500,000
Port Royal-Yemassee Rail Trail	Construction of multi-use trail	$10,000,000
SC 802 Improvements	Construct turning lanes and intersection improvements along SC 802 north of US 21[4]	$5,500,000
SC 280 Improvements	Turning lanes and intersection improve. along SC 280 from SC 170 to Mink Point Blvd.	$4,400,000
Street Design	Provide "complete streets" design for US 21	$576,000

Source: Beaufort County Engineering Department

Table 10-3: Recommended Alternative Modes of Transportation Plans, Projects, and Programs

Project	Description	Estimated Cost
Transit Circulator	Provide transit circulator to connect Lady's Island and Downtown Beaufort	$7,537,400
	Provide transit circulator to connect Lady's Island and Downtown Beaufort	$9,065,500
TDM Coordinator	Provide travel demand management coordinator	$1,120,000
	Provide travel demand management coordinator	$1,400,000
Park & Ride Lots	Provide Park-and-Ride Lots along SC 802 at US 21 and Brickyard area	$1,200,000
LRTA Transit Service	Service for commuters, students on loop urbanized area of Northern Beaufort and connections on SC 170 to Southern Beaufort/US 278 and Park & Ride	$10,000,000
Pedestrian & Bicycle Connections	Construct local pedestrian and bicycle connections (SC 170 at SC 280 / US 21 at SC 280 / US 21 at SC 170 / US21 at SC 802 / SC 802 at Ribaut Road / SC 280 at Palamino Drive)	$7,680,000
Prepare Access Management Plan	US 21 south of the Beaufort River to St. Helena Island (selected areas)	$150,000
	SC 170 from US 21 to the Broad River	$165,000
	Joe Frazier Road from SC 170 to Laurel Bay Road	$175,000
	SC 280 from SC 170 to Mink Point Boulevard	$100,000
Implement Access Management Plan	US 21 south of the Beaufort River to St. Helena Island	$3,000,000
	SC 170 from US 21 to the Broad River	$3,300,000
	Joe Frazier Road from SC 170 to Laurel Bay Road	See SC 280 Improvements
	SC 280 from SC 170 to Mink Point Boulevard	See Joe Frazier Rd Improvements

Source: Carter and Burgess

road funding for Beaufort County as well as all South Carolina local governments was the South Carolina Department of Transportation (SCDOT) through its Statewide Transportation Improvement Program (STIP), in more recent times (the past decade), as growth in the area grew at dramatic rates, state funding has not been able to keep up with the need for new road improvements and local governments have had to be more active in seeking additional funding sources (see Table 10-4)

- Impact Fees: Beaufort County with cooperation from the Town of Bluffton and the Town of Hilton Head Island first adopted its transportation impact fee ordinance for southern Beaufort County in 1999. In 2006 these fees were revised to reflect updated growth projections and the resulting demand for more transportation improvements. The current fee is set at $175.15 per vehicle mile traveled ($3,067 for a single family dwelling). In 2004, Beaufort County, the City of Beaufort and the Town of Port Royal adopted impact fees for northern Beaufort County set at $81 per trip generated ($775 per single family dwelling).

Together, these fees are projected to generate over $109 million in revenue for road improvements over the next 20 years.

- Capital Projects Sales Tax: In November 2006, Beaufort County voters approved a referendum (after two unsuccessful efforts in 2002 and 2004) to enact a 1-cent sales tax to fund countywide transportation improvements. Over the 5 years this tax is in effect, it is anticipated to generate over $152 million in revenue for road improvements.
- Federal Earmarks: Beaufort County was successful in securing over $30 million in federal earmarks to cover road widening and intersection improvements along US 278.
- Admissions Tax: An Admissions tax was enacted by County Council in 2005. The 2½% tax that is charged on all admissions to places of amusement (movie theaters, swimming pools, golf courses, nightclubs, professional sporting events, bowling alleys, etc.) is projected to generate over $6 million in revenue for road improvements.

Table 10-4: Existing Funding Sources for Road Projects

Funding Source	Revenue Generated (in thousands)
Capital Projects Sales Tax	$152,000
South County Impact Fees	$89,270
North County Impact Fees	$20,532
Federal Earmarks	$30,650
Admissions Fees	$6,233
State/Guideshare	$3,600
Local/Other*	$17,756
Total	**$316,441**

*Includes Municipal Impact Development Fees from the Town of Bluffton and Hospitality Tax from the Town of Hilton Head Island



Existing Tools and Policies to Address Transportation Demand

Given the tremendous cost to keep up with growing transportation demands, it is important for the County and municipalities to use planning tools and policies that help reduce vehicle miles traveled (VMT's) and to maximize the existing capacity of the county's road network. These tools, such as access management standards, traffic impact analysis ordinances, traffic modeling, and intelligent transportation systems will not increase road capacity, but can be used to maximize the existing capacity of the road network and insure that the system is being used as efficiently as possible.

Access Management Standards and Corridor Planning

Effective access management standards benefit a community by reducing accidents, increasing roadway capacity, providing better access to businesses, and improving mobility. Access management techniques include maximizing signal spacing; coordinating and timing signals; maximizing intersection and driveway spacing; providing deceleration lanes; sharing driveway access; providing frontage and backside access roads; and requiring road interconnectivity. Corridor access management plans that prescribe access management policies have been completed and adopted along the following roadways:

- US 278 between McGarvey's Corner to the bridge to Hilton Head Island;
- Robert Smalls Parkway (SC 170) between SC 802 to the Broad River Bridge: This is a joint plan between the City of Beaufort, Town of Port Royal and Beaufort County; and
- SC 170 (Oldfield to McGarvey's Corner) and US 278 (McGarvey's Corner west to the Jasper County line: This plan was also adopted by Jasper County.

Additional access management plans for Buckwalter Parkway and Bluffton Parkway are currently being drafted.

Intelligent Transportation Systems (ITS)

There are three components to Beaufort County's existing Intelligent Transportation System (ITS): video surveillance, response vehicles, and radio advisory broadcasts. The County operates 51 surveillance cameras along its major highways offering live video of traffic conditions to the county's Emergency Management Department. Based on the images, the department can send vehicles to remove wrecked or stranded vehicles, place electronic message boards to alert drivers to detour options, and broadcast traffic conditions over designated AM radio stations. The system helps officials respond quickly to unforeseen events, and thereby minimize delays for motorists (and, accordingly, helps maintain the maximum traffic-carrying capacity of these roadways). Images from the cameras are also placed on the county's web site allowing motorists the ability to assess traffic situations before leaving home. The county has begun a study of a comprehensive ITS "architecture" that effectively integrates the traffic cameras with signal timing and message boards in order to adequately address traffic conditions.

Travel Demand Modeling

Beaufort County adopted its first travel demand model in 1999. The model was revised in 2005 and converted to use TransCAD travel demand software which is GIS based. The model, which is based on growth projections derived from approved development and the comprehensive plans of the county and its municipalities, allows the county to forecast future traffic volumes along its roadways. Therefore, the model enables the county to plan for road projects that provide sufficient growth capacity to meet projected demand. It is important to note that large scale changes in future land use assumptions resulting from annexations and/or rezonings may require the model to be updated to remain effective.

Traffic Impact Analysis Ordinances

Beaufort County's Traffic Impact Analysis Ordinance requires developers to determine the impact of their proposed development on the road network and provide mitigation, if necessary. The performance standard to determine whether mitigation is needed is LOS "D" along affected roadways and intersections. Typical improvements recommended by a traffic impact analysis include the provision of turning and deceleration lanes, the installation of traffic signals, and sharing access with adjoining developments.

LAND PRESERVATION

Beaufort County and the Town of Hilton Head Island both have aggressive pursued land purchase programs aimed in part at removing land from potential development that could otherwise add to our traffic volumes. Table 10-5 provides a summary of the impact of these programs on the amount of land removed from potential development

Table 10-5: Summary of Preserved Land Removed from Potential Development

Program	Acres Acquired	Dwelling Units Removed from Development	Commercial Sq. Ft. Removed from Development
Rural and Critical Lands Preservation Program	10,647	2,233	1,190,000
Hilton Head Land Acquisition Program	1,165	4,210*	4,350,000
Total	**11,812**	**6,443**	**5,540,000**

Source: Trust for Public Lands and the Town Hilton Head Island Planning Department
*Includes timeshare units

LAND USE POLICIES

Generally, two types of land use policies are effective in reducing VMT's:

- Policies directed at promoting internal trip capture by allowing or requiring mixed use development and
- Policies that promote centralized, high-density development that facilitates the use of public transportation.



Alternative Modes of Transportation

As stated above, county residents are almost solely dependent on automobiles to move about in the region. Therefore, promoting alternative transportation options provides the following benefits:

- It removes potential VMT's from the county's roadways; and
- It promotes the county's quality of life by offering residents and visitors a choice of transportation modes.

Public Transportation

Palmetto Breeze (formerly Lowcountry Regional Transit Authority) is the public transit provider for Beaufort County and the surrounding region (Jasper, Allendale, Colleton and Hampton Counties). Palmetto Breeze has historically focused on bringing rural residents to jobs in Beaufort County via fixed route commuter lines, two of which only operate during the summer months that operate in one direction during peak periods taking commuters to their workplaces in the morning and returning them to their communities in the evening. The Bluffton headquarters of Palmetto Breeze serves as a transfer center for commuters. In FY 2006 Palmetto Breeze had 25 active vehicles providing more than 230,000 passenger trips. Palmetto Breeze receives federal rural transit funding under the Federal Transit Administration (FTA) Section 5311 funding program. Local funding is provided by the five member counties with over 76% of the contributions coming from Beaufort County and the Town of Hilton Head Island.

Based on recommendations from the Lowcountry Public Transit Coordination Feasibility Study (2003) Palmetto Breeze is pursuing the development of a regularly scheduled mainline bus service along US 278 from I-95 in Hardeeville to Coligny Circle on Hilton Head Island. Palmetto Breeze plans to enhance this service with collector routes in the Bluffton area and park-and-ride lots. Future bus routes planned in Beaufort County include providing mainline service along SC 170 from US 278 to northern Beaufort County with eventual loop/connectors and park-and-ride lots.

The Northern Beaufort County Regional Plan determined that a transit route could potentially reduce the number of vehicles on the Woods Memorial Bridge and the McTeer Bridge, both of which are projected to operate below LOS D in the year 2025. A circulator between these areas would need to operate with frequent service/short headways to be effective in attracting riders to switch modes from automobile use. In addition to transit service, a program to provide an organized approach to teleworking, flexible work hours, carpool matching, and vanpool services is recommended for the Downtown Beaufort and Port Royal areas. A second program to focus on the U.S. Marine Air Station carpooling is also recommended. The transit and travel demand management strategies will require more detailed study to determine the anticipated level of benefits and feasibility.

Bicycle and Pedestrian Trails



The abandoned Port Royal to Yemassee rail line provides an excellent opportunity to establish a bicycle and pedestrian transportation corridor.

Bicycle and pedestrian trails promote walking, running and cycling as viable alternatives to automobile transportation. The Town of Hilton Head Island has been a leader in the region in this regard with over 51 miles of public multi-use trails and over 23 additional miles planned in their 10-year CIP. Efforts elsewhere in Beaufort County have been more modest. The Town of Bluffton has implemented the 5-mile New River Trail. Also, Buckwalter Parkway and Bluffton Parkway were designed and constructed with multi-use pathways to add over 10 linear miles of multi-use trails to the network.

In 2003, the county adopted the *Beaufort County Trails and Blueway Master Plan* that depicts routes for the development of a trail and blueway network. The plan prioritizes the establishment of a trail on the abandoned Port Royal to Yemassee rail line and the establishment of a trail on a water line easement that connects Parris Island to Burton Wells Park and to the US Marine Corps Air Station. The plan also promotes multi-use trails along the county's major corridors (US 278, SC 170 and US 21).

In addition to multi-use trails, the City of Beaufort, the Town of Port Royal, and the Town of Bluffton all promote the building of sidewalks to create an integrated pathway system in their respective municipalities.

Water Transportation

Ferry service is a possible alternative mode of transportation given the region's many navigable waterways and the potential to reduce travel demands on US 278 and SC 170. Effective ferry terminals would require sizable waterfront property for parking and multi-modal facilities to transport people from the terminal to places of employment. Funding and commute times are also obstacles that need to be overcome in order to make ferry service a viable alternative to

automobile transportation. Given the transportation constraints under which the region is operating, however, this is another option that might require further consideration.

Small ferries exist that connect Hilton Head Island to neighboring Daufuskie Island, which are privately owned and operated. Beaufort County and the School District also contract for ferry service for residents. Other private services exist for moving goods and materials to and from Daufuskie Island, Bull Island and other islands without road access.



Other Transportation Issues

Emergency Evacuation

Hurricanes are a reality along the Southeast coast and Beaufort County, while remaining relatively unscathed over the last 50 years, is still vulnerable to their destructive power. Beaufort County has an emergency evacuation plan that directs traffic along designated routes to get people inland as quickly as possible in the event of an evacuation.

Table 10-6: 2007 Estimated Evacuation Times

Traffic Control	Northern Beaufort County	Southern Beaufort County
No Traffic Contols	5.8 to 15.7 hrs.	12.3 to 26.7 hrs.
3-lanes out, 1-lane in on US 278 and US 21	5.3 to 12.7 hrs.	9.5 to 19.0 hrs.
4-lane contra flow on US 278 and US 21	5.1 to 11.4 hrs.	8.7 to 18.4 hrs.

*Based on the 2007 Hurricane Evacuation Route Clearance Time Analysis (PBS & J)

Table 10-6 summarizes projected evacuation times. Estimated evacuation times in northern Beaufort County are significantly shorter than those in the southern part of the county. Therefore, the Emergency Evacuation Department recommends allowing some movement of the southern Beaufort County traffic north across the Broad River Bridge to evacuate through the northern corridor. Evacuation times are not only effected by the conditions inside of Beaufort County. The roadway conditions and the amount of development in Jasper and Hampton Counties are an important factor in the movement of evacuation traffic inland. For example, the Traditions development in Hardeeville when completed has been projected to increase estimated evacuation times of Beaufort County residents by 5%. Conversely, the widening of SC 68 in Hampton to 4 lanes will facilitate the movement of northern Beaufort County traffic.

AIRPORTS

Beaufort County owns and operates two airports: the Hilton Head Island Airport and the Beaufort County (Lady's Island) Airport. Oversight is provided by the Aviation Advisory Board which is appointed by County Council. Financially, both airports operate as an enterprise fund.

- Hilton Head Island Airport (HXD): The Hilton Head Island Airport is owned and operated by Beaufort County. Facilities include a 4,300-foot runway with two parallel taxiways, one commercial and two general aviation terminals, an air traffic control tower, and professionally trained and equipped fire, crash and rescue teams. The Hilton Head Island Airport Master Plan (2001, Wilbur Smith Associates) calls for a new aircraft rescue and fire fighting station, renovations to the air carrier terminal, new taxiways, a heliport, additional aircraft hangars, and tree obstruction removal.
- Beaufort County Airport (Lady's Island): The Beaufort County Airport has a 3,430 foot runway. Unlike the Hilton Head Island Airport, this airport serves only private planes and the County's Mosquito Control aircraft. In order to serve increased demand and a growing population, the airport department recommends widening and grooving the runway, relocating the parking area, extending sewer to the airport, constructing a parallel taxiway, installing a heliport, expanding the terminal and providing additional hangars. A new master plan will be developed for this airport which will also include an evaluation of the adequacy of the existing runway length to meet future needs.

Regional Transportation Framework

Over the last 10 years, Beaufort County and its municipalities have taken steps in cooperating on planning, funding, and implementing transportation improvements.

Regional Plans

Southern Beaufort County Regional Plan: This plan was an important vehicle in calling out the magnitude of the southern region's transportation issues. The plan identified $222 million worth of transportation improvements necessary to address existing and future deficiencies and only $95 million in dedicated revenue sources to pay for these improvements. The plan is partly credited for the success of the 2006 Capital Projects Sales Tax referendum and the revision of transportation impact fees which together are projected to raise over $165 million to help close the funding gap. The plan called for formalized and coordinated multi-jurisdictional transportation planning at both the elected official and staff levels to identify needed improvements, secure funding, and to jointly plan for access management and alternative transportation modes.

Northern Beaufort County Regional Plan: In northern Beaufort County, the message was slightly different. While the northern region still faced significant transportation needs, the plan emphasized the consideration of alternative transportation policies and programs to address transportation demands. The plan first looked at how future road capacity could be preserved and enhanced by pursuing the following transportation strategies:

- Public Transportation
- Travel Demand Management
- Pedestrian and bicycle connections
- Access management
- Intersection operational improvements

The plan also identified future municipal growth boundaries for the municipalities north of the Broad River. The plan outlines a policy to analyze and mitigate the impacts on the regional road network of annexations and/or zoning amendments resulting in more intense development that occur within the growth boundaries.

Beaufort County Transportation Advisory Group (BCTAG)

BCTAG is a policy advisory group made up of elected officials from Beaufort County, its municipalities, SCDOT, the Sheriff's Department, the Beaufort County Transportation Committee, and Palmetto Breeze. BCTAG reviews and offers recommendations on transportation improvements, funding options and transportation planning initiatives such as access management plans.

Northern and Southern Beaufort County Highway Improvement Teams

These staff level working groups were formed at the suggestion of local officials and are made up of planners and engineers of each of the local governments; in addition to representatives from SCDOT, Lowcountry Council of Governments, and the Beaufort County Department of Emergency Management. These staff level working groups meet monthly to address a number of regional transportation issues. The most important accomplishment has been the development of a Roadways Capital Improvement Plan for countywide transportation projects. This effort has led in part to the current list of committed and planned transportation projects (Tables 10-1 and 10-2).

Lowcountry Regional Transportation Plan

This plan, which was prepared by the Lowcountry Council of Governments, identifies and prioritizes transportation improvements for the Lowcountry region (Beaufort, Colleton, Hampton and Jasper Counties). This plan influences the projects and priorities identified in the state's Long Range Transportation Improvement Plan (STIP).

Recommendations

Recommendation 10-1: Level of Service

Beaufort County shall recognize LOS "D" as the standard that should be maintained on its road network and the standard upon which traffic impact analysis should be conducted and the road impact fee ordinance should be based.

Recommendation 10-2: Regional Transportation Planning and Programming

Beaufort County, along with its municipalities, should formalize through an intergovernmental agreement a regional transportation process that coordinates transportation planning with land use planning and forecasts, and to address: data collection, monitoring, modeling, planning, prioritizing, funding, and implementing issues related to the County's road network.

- Staff Working Groups: The County will formalize both the Southern and Northern Beaufort County Highway Improvement Teams through intergovernmental agreements.
- Neighboring Counties: Beaufort County will engage in coordinated regional transportation planning with Jasper County, the Lowcountry Council of Governments, and other neighboring counties and municipalities.
- Joint Review of Major Projects: Beaufort County will work with its municipalities and adjoining counties on developing and implementing joint review of proposed developments of regional impact (DRI) prior to their approvals to ensure the proposal does not have an adverse impact on the region's road network. The County and its municipalities will codify requirements for review and/or mitigation of extra-local transportation impacts on the road network by requiring all projects that trigger traffic impact analysis requirements to be circulated to all local engineering departments. DRI's consist of developments over 200,000 square feet of commercial and/or 250 dwelling units.

- Required Update of Travel Demand Model: The county and its municipalities shall adopt policies that when annexations and/or zoning amendments occur that result in a net increase of over 200,000 square feet of commercial or 250 dwelling units, the applicant is required to update the growth projections in the county's travel demand model.

Recommendation 10-3: Committed Road Improvements

Beaufort County will work cooperatively with its municipalities, SCDOT and other agencies to effectively complete the projects identified in Table 10-1.

Recommendation 10-4: Fund and Implement Additional Transportation Improvements

Beaufort County will work cooperatively with its municipalities and neighboring counties to plan, fund, and implement transportation improvements identified in Table 10-2 necessary to address future demands. These projects include but are not limited to the following:

1. US 21 Widening from SC 170 to Clarendon Rd (6 lanes) – The US 21 corridor experiences significant capacity limitations that are beyond those effectively addressed with the alternatives to capacity expansion examined. Further, significant growth management would be needed to reduce trip making to mitigate deficiencies along the corridor. Therefore, widening SC 21is recommended to accommodate these travel needs. This should be designed as a "complete streets" application to include automobile, pedestrian, bicycle, and transit considerations, as well as landscaping.
2. US 21 to SC 170 – Western Bypass (Planning, feasibility analysis, and right-of-way for a 2 lane road with turn lanes and bicycle lanes) – This connection will provide a link from the US 21 corridor to the SC 170 and SC 802 corridors. This connection has the potential to relieve US 21 for traffic traveling to/from SC 170, as well as serving some traffic along US 21 north of Beaufort that is destined for Port Royal, Lady's Island, or St. Helena Island. This project will provide the planning and analysis for consideration of this alternative for application beyond year 2025.
3. Third Crossing of Beaufort River (Planning, feasibility analysis, and right-of-way for additional Lady's Island Crossing) – The capital project sales tax currently provides funding for a possible alignment (the northern bypass) for a third crossing from Lady's Island to the mainland. Pursuant to Federal concept definition/NEPA requirements, this feasibility study would include analysis of the mobility, economic, and

community/environmental impacts and benefits of various alignment options.

4. New Connector Road from SC 170 to Ribaut Road (2 lanes with bike lanes) – This road would connect from SC 170 near Neil Road eastward via an abandoned rail corridor toward Downtown Beaufort. This linkage would provide direct relief to the congested section of US 21 between SC 170 and Ribaut Road, as well as provide a bicycle connection through the area. In order to minimize long distance through travel, the roadway cross section and speed design should be that of a collector road for local connectivity.
5. Intersection and Roadway Operational Improvements – Implementation of turning lanes at appropriate locations and intersection improvements to enhance flow at bottleneck intersections could free underutilized capacity along key corridors. Operational improvements are recommended in the following areas:
   - SC 802 north of US 21
   - Joe Frazier Road from Broad River Road to Laurel Bay Road
   - SC 280 from SC 170 to Mink Point Boulevard
6. US 278 Frontage Roads – Seven frontage road projects for interparcel connectivity and access improvements with median closures/modifications have been identified between the Gatherings and Graves Road. These projects should help relieve congestion on US 278 and increase average speeds on the mainline with the median closures
7. Malphrus Road/US 278 & Foreman Hill Road Connection – A new 2-lane road would connect Foreman Hill with Malphrus Road and include a widening at US 278 from US 278 to Ulmer Road. The increased connectivity proposed to alleviate bottlenecks in the near vicinity and on US 278.
8. US 278 Widening, Phase 4 – This project would have US 278 widened to 6 lanes divided from SC 170 to SC 141 with limited access to adjacent land uses. This widening would help regional travel by reducing congestion and limiting mainline traffic interference from side streets.

Recommendation 10-5: Transportation Improvements for Beaufort Commerce Park

In order to promote the Beaufort Commerce Park as an attractive location for light industrial development, Beaufort County will provide the roadway infrastructure improvements necessary to facilitate ingress and egress from the location. Beaufort County, in conjunction with the Lowcountry Economic Network, has conducted an analysis of existing

and future traffic conditions in the vicinity of the Beaufort Commerce Park development area, located east of US 21 at Parker Drive. The Lowcountry Economic Network is interested in promoting this location to provide a location for light industry to expand in northern Beaufort County. The site is on approximately 177 acres (with 132 acres of developable land); located north and west of Bay Pines Road and Parker Drive, respectively. Commerce Park is expected to employ approximately 400 workers. Transportation improvements include:

- Traffic signals and/or turn lane improvements at:
  - US 21 at Parker Drive
  - US 21 at Shanklin Road
  - Bay Pines Road at Parker Drive
  - Bay Pines Road at Shanklin Road
  - Schork Road and Parker Drive
  - Bay Pines Road at Schein Loop
- If a traffic signal is not feasible at the intersection of US 21 at Shanklin Road, consideration should be given to limiting the intersection to right-in/right-out only, and roadway and intersection improvements along Stanley Farm Road between Shanklin Road and Laurel Bay Road should be considered.
- Repaving/reconstruction of Parker Dr and the widening of Schein Loop and Schork Rd.

Recommendation 10-6: Identify and Pursue Future Funding Sources

Beaufort County will work cooperatively with the state and federal governments to develop a strategy to fund existing and future transportation capital improvements needs on the County's road network to maintain the adopted LOS standard in a way that is environmentally and context sensitive, so that the image and character of the county is maintained, to the maximum extent practicable.

1) Funding Strategy: Beaufort County will develop a coordinated funding strategy to fund County road improvements.
   - Encourage local elected officials and staff members to lobby the state and federal governments for additional funds for regional transportation projects.
   - Hold an additional referendum to establish a 1% capital projects sales tax for the maximum 7 year term after the current sales tax expires. An additional 7 year term would generate roughly $175 million at for transportation projects countywide.
   - Lobby the State Legislature to enable a local option gas tax. A 5 cents tax could potentially generate $44 million over a 15 year period for Beaufort County.

- Work with the Town of Port Royal and the City of Beaufort to revise transportation impact fees for northern Beaufort County

2) Joint Funding: Because of the relationship between new growth and development and its impact on the County's road network, Beaufort County, its municipalities, and Jasper County, to the maximum extent practicable, will establish funding arrangements in which the local governments jointly fund the needed capital transportation projects on the County's road network.

Recommendation 10-7: Tools and Policies to Reduce Vehicle Miles Traveled (VMT's)

Beaufort County will work cooperatively to develop strategies to reduce VMT's on the County's road network.

1) Access Management: Beaufort County will coordinate access management standards to improve the efficiency of the County's road network, especially along shared corridors. Those standards will address signal spacing, signal timing and control, driveway spacing, driveway design, deceleration lanes, shared driveway access, frontage roads, and connectivity standards. Access management is recommended on the following corridors:

- SC 46 (May River Road)
- Bluffton Parkway
- Buckwalter Parkway
- US 21 north of SC 170
- US 21 south of the Beaufort River to St. Helena Island
- SC 170 from US 21 to the Broad River
- Joe Frazier Road from SC 170 to Laurel Bay Road
- SC 280 from SC 170 to Mink Point Boulevard

2) Intelligent Transportation Systems (ITS): Beaufort County shall develop a plan to establish an Intelligent Transportation Systems architecture that will provide a framework that will guide development of an ITS system on the County's road network. Beaufort County will implement the recommendations of this plan through an ITS Strategic Plan.

3) Land Use Policies: Beaufort County, where appropriate, should adopt land use policies, such as regulations to encourage mixed use development at higher intensity nodes that result in reduced VMT's on the County's road network, more pronounced connectivity standards, and adequate public facility standards. In addition, Beaufort County will further evaluate and consider, where appropriate, rate of growth regulations.

4) Land Acquisition: Beaufort County and its municipalities will continue to coordinate their efforts to identify and purchase land in order to remove it from potential development. This is a growth management tool that can reduce future transportation demand and be coordinated with other goals and objectives to protect open space and environmentally sensitive lands.

5) Travel Demand Management: Beaufort County should consider a program to provide an organized approach to telecommuting, flexible work hours, carpool matching, and vanpool services is recommended for the downtown Beaufort, Port Royal, Hilton Head Island and downtown Bluffton. A second program to focus on U.S. Marine Air Station and Parris Island carpooling is also recommended. The transit and travel demand management strategies will require more detailed study to determine the anticipated level of benefits and feasibility.

Recommendation 10-8: Context Sensitive Design

Beaufort County will work cooperatively with its municipalities to maintain and enhance regional commercial travel corridors and scenic corridors to promote a positive image of the region, and to protect regional character and quality of life, environmental quality, and aesthetics.

- Regional Travel Corridors: Beaufort County will work cooperatively with its municipalities to develop consistent architectural, landscaping, lighting and signage standards and establish coordinated review, administration, and enforcement of development to maintain a strong community aesthetic and function along the county's regional travel corridors.
- Scenic Corridors: Beaufort County will work cooperatively with its municipalities to establish coordinated review, administration, and enforcement of development to maintain the views along the following regional scenic corridors: May River Road (SC 46) and Old Sheldon Church Road.
- Innovative Road Construction Techniques: Beaufort County will adopt standards to protect the network of open spaces, discussed in the Natural Assets and Natural Constraints to Growth Report, including innovative road construction techniques to link wildlife habitat and preserve wetlands.
- Traffic Calming: Beaufort County should fund and conduct a traffic calming study to identify and evaluate appropriate strategies to meet Beaufort County's needs. Included in the study should be research of potential state and nationwide strategies, and a recommended list of potentially successful tactics that can be incorporated into a recommended countywide traffic calming policy. The policy should then be converted to zoning ordinance regulations for implementation.

Recommendation 10-9: Public Transportation

Beaufort County will place an emphasis on the expansion of public transportation as an alternative means of transportation in the region.

- US 278/Bluffton Parkway Mainline Service: Beaufort County should support Palmetto Breeze's efforts to develop a regularly scheduled mainline bus service along US 278 from I-95 in Hardeeville to Coligny Circle on Hilton Head Island; and plans to enhance this service with collector routes in the Bluffton area and park-and-ride lots.
- SC 170 Mainline Service (Northern Beaufort County): Beaufort County should support Palmetto Breeze's efforts to develop a regularly scheduled mainline bus service along SC 170 from US 278 to northern Beaufort County with eventual loop/connectors and park-and-ride lots.
- Circulator: Beaufort County should consider a transit route that could reduce the trip making across the Woods Memorial Bridge and McTeer Bridge. A circulator between these areas would need to operate with frequent service/short headways to be effective in attracting riders to switch modes from automobile use.

Recommendation 10-10: Non-motorized Transportation

Beaufort County and its municipalities will coordinate and place additional emphasis on expansion and implementation of a multi-use pathway, sidewalk, and bike lane system through the Southern Beaufort Greenway Plan, and the Beaufort County Trails and Blueways Master Plan.

- Port Royal to Yemassee Rail/Trail: Establish a rail/trail on the abandon Port Royal to Yemassee rail corridor. Implementation of this corridor is recommended to provide an alternative transportation mode for those along the US 21 corridor. This corridor would provide a trail that is separated from automobile traffic, enhancing safety for all users over on-street bike lanes or "share the road" designations.
- Roadway Improvements: Incorporate the Beaufort County Trails and Blueways Master Plan into roadway improvement plans for SCDOT, the county and its municipalities and include these plans for purposes of right-of-way acquisitions, design and funding.
- Safe Routes to School Program: Beaufort County will work with the School District to promote making walking and bicycling a safe option for children traveling to school.
- New Development: Residential and commercial developments shall be required to include pedestrian and bicycle facilities to provide connectivity within their development and adjacent areas.

Of prime importance is connection to the Beaufort County trail and pathway system.

- Utility Corridors: Beaufort County should partner with utility providers to identify utility corridors that have the potential to be used for pathways.

Recommendation 10-11: Emergency Evacuation

Beaufort County should work cooperatively with its municipalities, inland counties and the state to ensure that emergency evacuation times are minimized.

- Hurricane Evacuation Route Clearance Time Analysis: Beaufort County should implement the recommendations of the Hurricane Evacuation Route Clearance Time Analysis.
- Inland Counties: Beaufort County should cooperatively with Jasper and Hampton Counties to support initiatives that reduce evacuation times.
    1. Beaufort County supports the widening of SC 68 in Hampton County to facilitate the emergency evacuation of northern Beaufort County residents.
    2. Beaufort County will work cooperatively with Jasper County, the City of Hardeeville and LCOG

11 *Beaufort County Comprehensive Plan*

Community Facilities



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Introduction

The SC Local Government Comprehensive Planning Enabling Act (1994) requires a community facilities element "which considers water supply, treatment, and distribution; sewage system and wastewater treatment; solid waste collection and disposal, fire protection, emergency medical services, and general government facilities; education facilities; and libraries and other cultural facilities."

Some of these services are provided by County Departments. These include the General Government, the Detention Center, Emergency Management, EMS, Libraries, Parks and Recreation, and Solid Waste/Recycling. For each of these community facilities, this chapter provides an assessment of existing conditions, projects future needs and provides recommendations on how to implement and fund these recommendations.

The remaining community facilities addressed in this chapter are provided by other government agencies that are fully or partially autonomous of County Government in planning and budgeting issues. These facilities include fire protection, schools, water supply and waste water treatment. For these facilities, recommendations are focused on issues of mutual concern shared between Beaufort County and these governmental agencies.



General Government

Beaufort County has expanded its facilities over the past 20 years to accommodate growing service demands due to population growth. While this chapter analyzes the impacts of existing and projected population growth on specific County services (Detention Center, Emergency Management, EMS, Libraries, Parks and Recreation, and Solid Waste/Recycling), the impact of growth has affected all County services and departments.

Northern Beaufort County

During the years 1987-1993 the County constructed the Government Center at 100 Ribaut Road in Beaufort for the purposes of consolidating most of its administrative and judicial functions into a central area at the County seat. Over the last five years, Beaufort County has outgrown that space. In 2003, the County moved its engineering department and development services administrator to the Beaufort Industrial Village (BIV). Since that time other departments followed suit and two new office buildings were constructed, one is under construction, and one more is planned for the BIV.

Southern Beaufort County

Beaufort County first added a satellite office outside the Town of Bluffton in 1978 to accommodate the increasing need for services in that area of the County. Among the County departments that have offices in Bluffton are Building Codes, Parks and Leisure Services, Public Works, Alcohol and Drug Abuse, other County health agencies, and the Magistrate's Office. To respond to the increasing demands for County services in southern Beaufort County, the County now occupies 18,000 square feet of space in the Myrtle Park Professional Center on Bluffton Parkway. Beaufort County also occupies approximately 24,000 square feet on Hilton Head Island with offices for the magistrate, probate court and sheriff's deputies who are contracted to work in the Town.

CONCLUSION

Beaufort County's rapid growth rate over the last 20 years has greatly increased the space needs for general government offices. While these growth trends are anticipated to continue over the next 20 years, the expansion of the municipalities will have an uneven impact on the demand for specific County services. Some County departments, such as the Assessors will continue to expand with population growth, while other departments, such as Building Codes may experience a tapering off in demand due to more growth occurring within municipal boundaries.



Due to rapid growth in population in southern Beaufort County there has been a trend to locate more services in that region. By way of departmental survey, it is estimated that 97,000 square feet of additional office space will be needed to house the South County General Administration Building by the year 2017. The survey also recommended 60,000 square feet of space for the Beaufort County Alliance for Human Services and the Shared Space Initiative; and 24,000 square feet for an additional animal control facility in southern Beaufort County.

In northern Beaufort County the Sheriff's Office and Emergency Management have outgrown their existing Law Enforcement Center at 2001 Duke Street behind the Government Center. Within the existing Law Enforcement Center, personnel are sharing offices, closets have been converted to offices, and there is no storage space. Likewise, the Detention Center is in need of expansion. Inmates are housed in the gymnasium and temporary cots are placed on the ground in cells designated for one person.

With thousands of square feet of building space planned, Beaufort County has an opportunity to incorporate energy and resource-efficient principles into existing, new and renovated structures. This approach will allow Beaufort County to leverage both energy and cost savings, while improving the overall work environment within its buildings. This reduces the environmental impact of construction-related activities while producing ongoing savings to the taxpayer.

RECOMMENDATIONS

The recommendations in this section apply to all Beaufort County services and facilities.

Recommendation 11-1: Monitoring and Evaluation of Space Needs

Beaufort County should continually monitor and evaluate the space demands for its departments while being mindful of the impact of both

population growth and municipal annexations on the need for County services.

Recommendation 11-2: New Law Enforcement Center

Beaufort County should construct a new Law Enforcement Center that will consolidate all the space needs for the Sheriff's Department and provide additional space at that site to house the Emergency Management Department, the Emergency Medical Services (EMS) headquarters, and the Management Information Systems (MIS) Department.

Recommendation 11-3: Southern Beaufort County Offices

Beaufort County should expand its services in southern Beaufort County to better serve the needs of its residents in that region.

Recommendation 11-4: Consistency with Other Chapters of the Beaufort County Comprehensive Plan

Beaufort County should ensure that the location and quality of development of its new and existing facilities meet the Land Use and Natural Resources goals of its Comprehensive Plan.

- New County facilities should have high architectural, site design, and landscaping standards:
- New County facilities should adhere to strong environmental standards working around the natural features of the site and providing effective stormwater management; and
- Existing facilities should be brought up to these standards when renovated or expanded.

Recommendation 11-5: Energy and Resource Efficient Design

When planning future community facilities (or major renovations to existing facilities) Beaufort County should register the proposed project, and gain certification under the U.S. Green Building Council's "Leadership in Energy and Environmental Design" (LEED) program, or meet similar standards of development (i.e. EarthCraft).

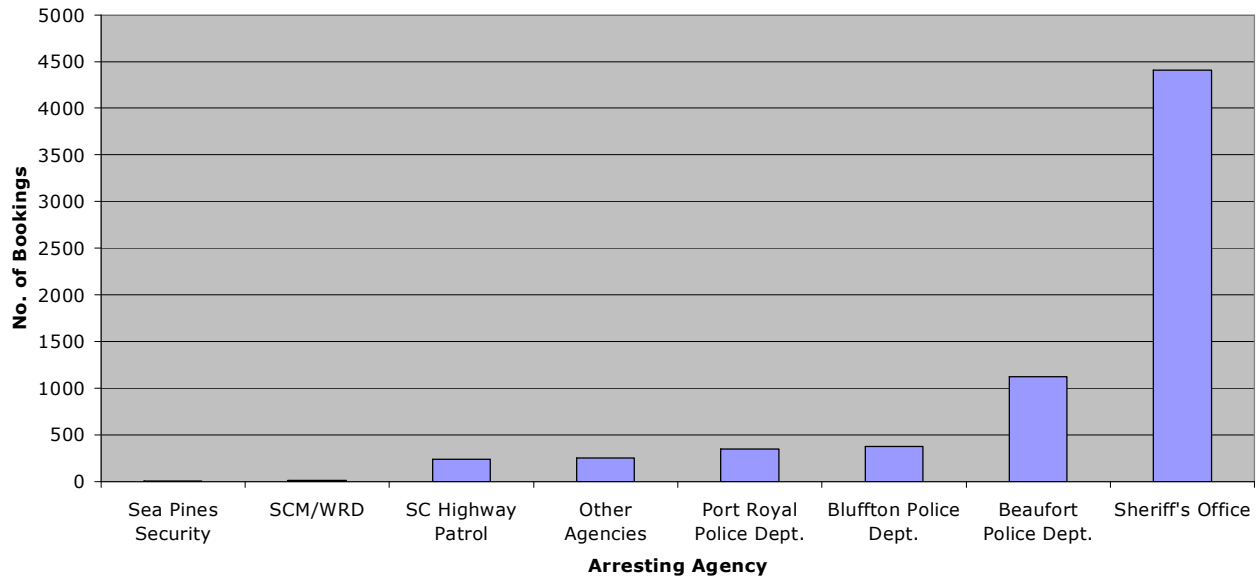
Detention Center

The Detention Center was built in 1992 and houses inmates that have been arrested by various law enforcement agencies. Inmates are held in the Detention Center for pretrial, sentencing, or are being kept for other agencies. In FY 2006, a total of 6,754 inmates were booked. The major booking agency was the Beaufort County Sheriff's Office.

Detention Center Capacity

The capacity system is based on two terms, rated and operational. The rated capacity of the facility is 255 with an operational capacity of 204. The reason for the difference between rated and operational capacities is due to classification of inmates. There are various classifications of inmates requiring separate housing. These include male, female, super max, maximum, close, medium, and minimum security.

Figure 11-1: Beaufort County Detention Center Admissions CY2006



For example, the Female Housing Unit has 40 beds and if the Center only has 20 female inmates, then the extra 20 beds cannot be utilized for male inmates. The average monthly population has increased from 80 in 1992 to 288 in 2006. Average length of stay is also an important factor that affects the Detention Center population. The longer people stay in the facility, the higher the average daily population gets. The average length of stay has increased from five days in 1992 to 16 days in 2006. A Beaufort County Correctional Study completed in 2000 by Carter Goble Associates, predicts, based on an average of five forecast models, that the average daily population will be 276 inmates by 2015. In 2006, the average monthly population was already 288.

Work Release

Work release allows sentenced inmates to work regular jobs in the community while serving their sentences. Often inmates in these programs are required to help defray the cost of their incarceration and make court ordered payments. During non-working hours, the work release inmates return to the housing unit to "serve their time".

A work release facility and operation provide the courts with an effective alternative to strict incarcerations, one that enables the defendant to contribute financially to family financial obligations while incarcerated. For a work release program to function effectively, work release inmates should be housed away from the general detention center population. Currently, there is no true work release program available in Beaufort County. The inmates who could be "work release" are housed with the general Center population and may go out to work on civic projects such as general maintenance, but are not paid for their efforts.

Juvenile Detention

Beaufort County does not have facilities to house juvenile offenders. Beaufort County juveniles who are arrested and placed in pre-trial detention are transported to the State's juvenile justice facility in Columbia - a round trip of 300 miles. This distance makes it difficult for the families of the juvenile offenders to visit and support them. The costs to Beaufort County associated with this activity include transportation (two sworn officers must accompany each juvenile) and a per diem charge submitted to the Office of Juvenile Justice. To assess the exact costs, the number of committals, number of detention days, boarding costs, and transport cost must be known.

Juvenile detention facilities are costly to operate, especially as stand-alone facilities. State requirements include a security staffing to detainee ratio of 1:8, exclusive of staff involved in local juvenile transports. A staff person who is dedicated to the juvenile function must administer

the program. An education program must be provided and counseling staff must be available.

FUNDING

Funding for the Detention Center comes from the General Fund based on an annual budget that is prepared by Detention Center staff. A recent Capital Funding gap analysis identified that a capital investment of $12,000,000 is needed to maintain current levels of service as a result of future growth in Beaufort County. The Detention Center currently has a 255 bed rated capacity and this study determined that an additional 227 beds will be needed.

CONCLUSIONS

The most recent Beaufort County Correctional Planning study was completed in 2000 and conditions have changed since then. Over the past 15 years, the average daily population has risen by 360 %. It is obvious that Beaufort County's Detention Facility capacity should be increased. To help the community function to support families of incarcerated persons, other correctional needs should be addressed as well, including the development of a true work release facility and increase in Beaufort County Juvenile Detention capacity.

RECOMMENDATIONS

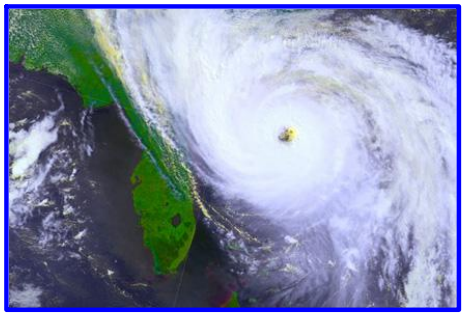
Recommendation 11-6: Assess Current Conditions

County Council should direct Detention Center staff to conduct a study to assess current conditions at the Detention Center. The study should include:

- A prediction of the adult Detention Center population over the next 20 years and estimate of the space needed to house them.
- A mechanism to set up a work release program that is separate from the general population and allows inmates to earn money to contribute to fiduciary responsibilities.
- An assessment of juvenile detention rate and costs over the past 10 years including future predictions for the next 20 years. The assessment should consider local agreements with surrounding counties to hold their juvenile detainees to help justify the expense of a juvenile detention facility to be sited within the confines of the Beaufort County Detention Center.
- County Council should implement measures necessary to carry forth an action based on the results of the study.

Recommendation 11-7: Expanded Detention Center

County Council should direct the Sheriff's Office and the Detention Center to coordinate the possible relocation of the Law Enforcement Center and expansion of the Detention Center (see Recommendation 11-2).



Emergency Management

The Beaufort County Emergency Management Department was created in 1961 to establish, develop, coordinate, and provide for civil defense and emergency preparation in the County. The Department employs 70 persons responsible for daily operations. These operations include:

- Emergency preparedness;
- Operation of Central Dispatch and the E-911 Program*;
- Enforcement of the Beaufort County Hazardous Materials Ordinance;
- Coordination of the Hazardous Materials Response Team;
- Managing communication equipment for fire, police and EMS; and
- Issuance of all house addressing to ensure that correct data is available for Central Dispatch and 911.

The Department is housed in the County's Law Enforcement Center within the Government Complex. The Emergency Management Department has outgrown its existing office space. Closet space is being used as office space; there is no storage space; and training facilities are not adequate.

Dispatch Center

Beaufort County's consolidated Dispatch Center was built in 1989 and is housed in the County's Law Enforcement Center, within the Government Complex. The Center provides state-of-the-art technology and communications capabilities. The Center provides dispatching services for all County and Municipal Law Enforcement Agencies, Fire Departments, Emergency Medical Services, and a variety of other public safety agencies. The Town of Hilton Head Island has its own Dispatch Center, which dispatches fire and EMS units for the Town and Daufuskie Island.

Traffic Management Center

The County operates 43 surveillance cameras along its major highways offering live video of traffic conditions to the County's Emergency

Management Department. Based on the images, the Department can send vehicles to remove wrecked or stranded vehicles, place electronic message boards to alert drivers to detour options, and broadcast traffic conditions over designated AM radio stations. The system helps officials respond quickly to unforeseen events, and thereby minimize delays for motorists (and, accordingly, helps maintain the maximum traffic-carrying capacity of these roadways). Images from the cameras are also placed on the County's web site allowing motorists to assess traffic situations before leaving home. The County is planning on funding a study that will recommend a comprehensive Intelligent Transportation System "architecture" that effectively integrates the traffic cameras with signal timing and message boards to respond to traffic conditions. The Department is working on transitioning the operational hours of the Traffic Management Center from six days per week of service to seven days per week.

EMERGENCY EVACUATION

Hurricanes are a reality along the Southeast coast and Beaufort County, while remaining relatively unscathed over the last 50 years, is still vulnerable to their destructive power. Beaufort County has an emergency evacuation plan that directs traffic along designated routes to get people inland as quickly as possible in the event of an evacuation. Table 11-2 summarizes projected evacuation times. Estimated evacuation times in northern Beaufort County are significantly shorter than those in the southern part of the county.

Table 11-2: 2007 Estimated Evacuation Times

Traffic Control	Northern Beaufort County	Southern Beaufort County
No Traffic Contols	5.8 to 15.7 hrs.	12.3 to 26.7 hrs.
3-lanes out, 1-lane in on US 278 and US 21	5.3 to 12.7 hrs.	9.5 to 19.0 hrs.
4-lane contra flow on US 278 and US 21	5.1 to 11.4 hrs.	8.7 to 18.4 hrs.

*Based on the 2007 Hurricane Evacuation Route Clearance Time Analysis (PBS & J)

Therefore, the Emergency Evacuation Department recommends allowing some movement of the southern Beaufort County traffic north across the Broad River Bridge to evacuate through the northern corridor. Evacuation times are not only affected by the conditions inside of Beaufort County. The roadway conditions and future development in Jasper and Hampton Counties are an important factor in the movement of evacuation traffic inland. For example, the Traditions development in Hardeeville when completed has been projected to increase estimated evacuation times of Beaufort County residents by 5%. Conversely, the widening of SC 68 in Hampton to four lanes will facilitate the movement of northern Beaufort County traffic.

FUNDING

The Emergency Management Department serves as an emergency dispatcher for all municipalities in the County except for the Town of Hilton Head. Funding for the Department comes from the County's general fund, the CIP fund, municipalities, and state and federal sources.

CONCLUSIONS

The Emergency Management Department currently lacks adequate space to provide for its existing operations. Future growth in Beaufort County will create the need for additional office space and updated equipment.

In addition to new office space, an upgrade of the county radio and mobile data communications system is needed. The Beaufort County 800 MHz trunking system is the primary means of radio communications for local government within Beaufort County. It is used on a daily basis for all public safety agencies and local governments to maintain and control their operations. Under the FCC order for rebanding the 800 MHz radio spectrum it will be necessary for Beaufort County to change its radios to meet the new frequency requirements. The radio infrastructure to include the base stations and controllers will have to be changed within the next three years as they are out of production and parts and support will no longer be available. Upon completion of rebanding and upgrading the infrastructure the system will be a digital system meeting APCO 25 standards. This will allow Beaufort County to maintain interoperability with state and other government systems.

Finally, the Department's computer aided dispatch (CAD) system is over 15 years old and does not have the ability to adopt new technology. CAD also serves as the base to support other software that provides records management to all public safety agencies and management software for the Detention Center.

RECOMMENDATIONS

Recommendation 11-8: Relocate the Emergency Management Department to the proposed Law Enforcement Center

The County should build an appropriate facility to house the Emergency Management Department within or attached to the proposed Law Enforcement Center (see Recommendation 11-2).

- The Emergency Management Department needs to undergo a thorough inventory of its existing and future space and operation needs and plan for adequate floor space within the proposed Law Enforcement Center. This inventory should include the

Department's needs for the safe housing of delicate equipment, training areas, and storage.

Recommendation 11-9: Radio Central System and Computer Aided Dispatch (CAD) Replacement

In order to maintain interoperability with state and other government systems, Beaufort County should replace its Radio Central control system and its computer aided dispatch (CAD) system.

Recommendation 11-10: Emergency Evacuation

Beaufort County should work cooperatively with its municipalities, inland counties and the state to ensure that emergency evacuation times are minimized.

- Hurricane Evacuation Route Clearance Time Analysis: Beaufort County should implement the recommendations of the Hurricane Evacuation Route Clearance Time Analysis.
- Inland Counties: Beaufort County should work cooperatively with Jasper and Hampton Counties to support initiatives that reduce evacuation times.
    1. Beaufort County should support the widening of SC 68 in Hampton County to facilitate the emergency evacuation of northern Beaufort County residents.
    2. Beaufort County should work cooperatively with Jasper County, the City of Hardeeville and LCOG.



Emergency Medical Services

The Beaufort County Emergency Medical Services (EMS) Department serves all areas of Beaufort County with the exception of the Town of Hilton Head Island. These services include emergency medical care and transport; and inter-hospital transport from Beaufort Memorial Hospital and the U.S. Naval Hospital to hospitals in Charleston and Savannah. EMS does not provide routine convalescent transportation, such as taking patients home from the hospital, clinics, or private doctors' offices. The Emergency Management Department provides dispatching for EMS at the Law Enforcement Center.

Existing Facilities

EMS operates 11 stations throughout the county (see Map 11-1). With the exception of the Headquarters station on Depot Road in Beaufort, the EMS stations are housed within fire stations in the various fire

Table 11-3: Stations and EMS Vehicles

EMS Unit	Purpose	Location	Station Address
EMS 1	Ambulance	Beaufort	2727 Depot Rd.
EMS 2	Ambulance	Beaufort	602 Parris Island Gtwy.
EMS 3	Ambulance	Dale	66 Kean Neck Rd.
EMS 4	Ambulance	Daufuskie	400 Haig Point Rd.
EMS 5	Ambulance	St. Helena	1617 Sea Island Pkwy.
EMS 6	Ambulance	Bluffton	1 Bridge Rd.
EMS 7	Ambulance	Beaufort	733 Sam's Point Rd.
EMS 8	Ambulance	Sun City	25 William Pope
EMS 9	Ambulance	Callawassie	155 Callawassie Dr.
EMS 25	QRV	Fripp Island	291 Tarpon Blvd.
EMS 26	QRV	Sheldon	5 Fire Station Rd.
EMS 21	Director	Beaufort	2727 Depot Rd.
EMS 22	Deputy Dir.	Beaufort	2727 Depot Rd.
EMS 23	Training/QRV	Beaufort	2727 Depot Rd.
EMS 24	Supervisor/QRV	Beaufort	2727 Depot Rd.

districts. Currently there is a ratio of 2-3 fire stations per ambulance in most fire districts. The headquarters station at 2727 Depot Road houses the administrative staff along with the training room and supply storage. System-wide equipment includes nine primary ambulances, two quick response vehicles (QRV's) and seven back-up ambulances. Nine stations have a full ambulance with a minimum of two emergency medical technicians (EMT's), one of which is certified at the paramedic level, the most advanced certification for a pre-hospital care provider. In addition, EMS operates two QRV's staffed with one paramedic which provide emergency medical services but cannot transport patients. All stations are equipped to provide advanced life support services. There are currently 74 full-time, 14 part-time and six volunteer staff members. Full-time field personnel work 24-hour on and 48-hours off shift rotation, with the first 24 of the 48 subject to recall.

LEVEL OF SERVICE



EMS operates two QRV's staffed with one paramedic which provide emergency medical services but cannot transport patients.

EMS response time to any service area in the County is eight to ten minutes. The Department's goal is a five minute response time Countywide. In order to keep response time to a minimum, the EMS stations operate on a tiered response system based on ambulance relocation. Ambulances in Beaufort County are frequently relocated to strategic locations to provide better response time when other ambulances are busy. This helps to ensure that all areas of the County receive the best coverage possible.

FUTURE NEEDS

In 2007, EMS upgraded their billing and patient data collection system to electronic means. This has streamlined operations and increased efficiency; however, more wireless transmission locations ("hot spots") are needed throughout the County so that the EMT's can provide patient care reports and billing information to the headquarters when out in the field.

The need for new station locations is determined by call volume trends in different areas of the County. New stations are being considered at the proposed Palmetto Bluff fire station in the Bluffton Fire District and possibly at an additional site on Lady's Island.

The Department's headquarters, which also house in-service training space and supply storage, are outdated and currently are not serving the Department's needs.

FUNDING

Funding for EMS comes from the County general fund. A user fee collected from clients is deposited into the general fund. In 2006, EMS collected $1,621,000 in fees.

CONCLUSIONS

Co-locating the EMS stations at fire stations has worked well for the Department. The EMS staff are able maximize coverage and response time by utilizing a tier system based on ambulance relocation. Continual monitoring and upgrades by the EMS staff provide Beaufort County one of the best equipped EMS departments in South Carolina. However, the deteriorated condition of the administration building at 2727 Depot Road is not serving the Department's current needs.

RECOMMENDATIONS

Recommendation 11-11: New EMS Stations

The Beaufort County EMS Department should work with the Bluffton Fire District and the Lady's Island Fire District to collocate three new EMS stations to respond to future call volume trends in those areas of the County.

Recommendation 11-12: House EMS headquarters in the proposed Law Enforcement Center

Beaufort County should include the EMS administrative offices, training center and storage space needs in the planned Law Enforcement Center (LEC) complex. In addition to EMS, other related departments including the Dispatch System, Emergency Services and Traffic Management should be housed in the new LEC. This will allow for efficient communication regarding shared requirements.



Libraries

Beaufort County has a countywide system of libraries that serve the unincorporated county and its municipalities. The system consists of five branches with a total of 89,783 square feet of building space. Collectively, the branch facilities house 230,910 items, which include books, reference volumes, DVD's, cassettes and CD's.

The Beaufort County library system operates as a fiscal and administrative department of County government and employs 57 full time and 27 part time persons. The Beaufort County Library Board of Trustees acts as an advisory body to County Council. The Board establishes library policy, monitors library operations, and makes recommendations to County Council concerning budget and planning and development.

Library Facilities

Three of the County's five branches are located in northern Beaufort County and two are in southern Beaufort County. Table 11-4 provides a summary of Beaufort County's Library System.

Table 11-4: Summary of Library Facilities in Beaufort County

Facility	Square Ft.	Staffing (full-time/part-time)	Collection Items
Beaufort*	34,000	31/8	84,900
Lobeco	4,000	4/1	19,800
St. Helena	1,000	1/2	9,700
Bluffton	25,000	11/8	37,200
Hilton Head I.	26,000	10/8	85,100
Total	**90,000**	**57/27**	**236,700**

*Includes administrative and technical office space and staff.

Library Facilities Size and Locational Criteria

The Library's current policy is to favor larger regional facilities that offer comprehensive services. This means fewer but larger facilities to ensure consistent comprehensive service among the branches. The Library has outlined several criteria for site location that include access and visibility

from an arterial highway, proximity to commercial properties, access to sewer and water, and avoidance of flood prone areas.

Level of Service Standards

In the past, Beaufort County adopted the level of service for library building space as 0.6 square feet per capita for planning purposes. Several trends are driving the need for more library building space. The influx of technology in libraries has created the need for more space for computer work stations. Also, public libraries are increasingly becoming centers for community activities requiring large meeting spaces and smaller conference rooms for special programs such as after school homework centers. Therefore, current national standards recommend a per capita building level of service between 1.25 and 1.6 square feet. Beaufort County has also adopted a level of service standard of 3.5 collection items per capita.



The 25,000 square foot Bluffton Library was opened in 2002.

Library Facilities Master Plan

The Beaufort County Library Facilities Master Plan recommends adopting a 1.25 square foot per capita building space level of service. Applying this higher level of service, the plan proposes three

Table 11-5: Planned Library Facilities

Planned Library Facility and Location	Square Footage
New St. Helena Branch, Penn Center	21,100
Burton Wells Branch, move admin/tech offices from Beaufort, Burton Wells Park	46,200
Hilton Head Branch – addition	21,800
Beaufort Branch- renovation	12,500
New Lady's Island Branch, no site identified	19,100
New Okatie Branch, Okatie Center	29,500
New Pritchardville Branch, no site identified	29,500
Lobeco – addition	4,400

Source: Library Facilities Master Plan, Beaufort County Library Department

renovations/additions and five new libraries to be constructed over the next 10 years to meet both existing deficiencies and future population growth. The cost of these proposed facilities along with the necessary collection materials and furniture, fixtures and equipment is estimated to be over $74 million. Table 11-5 lists the major projects to be completed in the next 10 years.

Funding

Approximately 90% of the Beaufort County Public Library's funding comes from County funds. Operations and maintenance costs are paid for from the County's general fund. Capital costs are funded with

impact fees. In 1999, Beaufort County passed an impact fee ordinance for libraries which was later revised in 2006. The fees pay for the impact of future development on library facilities; specifically building space, collection materials, furniture/fixtures & equipment, and land. Based on projected population growth, the fees are estimated to generate approximately $16 million in revenue. Most of the remaining funds will have to come from the State of South Carolina through appropriations and competitive grants. The Friends of the Library also helps the Library through cash contributions, book sales, and volunteer services.

CONCLUSION

A comparison of Beaufort County's Library facilities to recommended national level of service standards shows that the county is deficient in meeting current needs let alone the demands of future population growth. The Library Facilities Master Plan indicates that it will cost over $74 million to meet these needs in capital costs alone. Library impact fees, which can only be applied to future facilities needs, are estimated to generate approximately $16 million leaving $58 million in capital needs unfunded. Therefore, the County will need to aggressively pursue additional funding sources to close this gap.

RECOMMENDATIONS

Recommendation 11-13: Level of Service

This plan recommends the following levels of service for libraries:

- Building Space: 1.25 square feet per capita
- Collection Materials: 3.5 items per capita

Recommendation 11-14: Address the Funding Gap

This plan recommends the following strategy for closing the projected funding gap of $58 million to meet existing and future needs for library facilities:

- Continually pursue outside funding sources, such as foundations, and state and federal grants;
- Initiate capital campaigns to solicit funding for individual library building projects from corporate and private donors; and
- Utilize the Capital Projects Sales Tax to fund capital needs for libraries. This would be pursued via countywide referendum once the existing Capital Projects Sales Tax expires in 2012.



Parks, Recreation, and Open Space

Beaufort County's parks, facilities, recreation programs and open spaces are an important component of the region's quality of life and also provide an important means of making the County's natural amenities accessible to both residents and visitors. Beaufort County's rapid population growth and change in demographics require the County to continually reevaluate its park facilities, services, and programs to respond to these changes. Future population growth will also have a significant impact on the ability of the County's ability to respond to increased demands for regional park land and facilities. This section provides a summary of Beaufort County's existing park network, park facilities, recreation programs and open space, and provides recommendations on the quantity and type of parks to address future population growth.

Existing Park Land and Facilities

This plan categorizes Beaufort County Parks into four distinct types: neighborhood parks, community parks, regional parks and special use parks. Table 11-6 provides a general description of the ideal acreage and mix of facilities for each park type. Beaufort County has over 1,243 acres of County and municipal parks. This regional park network is enhanced by Hunting Island State Park, Pinckney Island National Wildlife Refuge, and the Victoria Bluff Heritage Preserve which make up over 7,225 acres. Beaufort County park facilities include ball fields, tennis courts, basketball courts, community centers, gymnasiums, swimming pools, skate parks, walking trails, playgrounds, and picnic areas. Appendix A provides a complete inventory of these parks along with the facilities located in each of the parks. The locations of these parks are shown on Maps 11-2 and 11-3. The quantity and acreage of each park type is summarized in Table 11-7 below.

Table 11-6: Beaufort County Park Types

Park Type and Description	Acreage	Description and Typical Park Facilities*
Neighborhood	1-5 acres	Playground; Basketball Court; Picnic Facilities; Restrooms; Open Green Space
Community	25+	Community Center; Playground; Basketball Court; Picnic Facilities; Restrooms; Open Green Space; Tennis Courts; Baseball/Softball Fields; Soccer/Football Fields; Walking/Bike Trail
Regional	75+	Athletic Complexes (Soccer, Baseball, Football, Tennis); Recreation Centers (Administration, Fitness, Racquetball, Meeting Rooms, Classrooms, etc.); Walking Trails; Bike Trails; Picnic Areas; Basketball Courts; Playgrounds; Amphitheater; Open Green Space; other amenities per community desires
Special Use	varies	Nature Center, Beach access, archaeological and historic sites, Kayak Launching area; Horse Trails; etc.

Source: Beaufort County Department of Parks and Leisure Services (PALS)
*PALS typically works with the public to determine desired facilities for individual parks.



Jarvis Creek Community Park located on Hilton Head Island is an innovative approach to solving a much needed stormwater drainage problem while protecting water quality, preserving and enhancing the natural environment, and providing a much needed passive recreation area for the island.

Table 11-7: Existing Park Land in Beaufort County

Park Type	Quantity	Acreage
Pocket*	23	27.3
Neighborhood	24	137.7
Community	13	376.5
Regional	4	474.0
Special Use**	16	7453.0
Total	80	8468.5

*The pocket parks in this inventory are owned and maintained by the municipalities
**Includes Hunting island State Park, Pinckney Island National Wildlife Refuge and Victoria Bluff

In addition to park facilities, some recreational facilities are offered by the Beaufort County School District. A good example is the school complex on Hilton Head Island which provides the community with various athletic amenities. In order to maximize County resources, PALS has proposed an official agreement with the School District and its staff to permit the greatest possible use of school facilities to increase the quality and consistency of youth recreation opportunities and to permit the greatest possible use of school facilities by the general public. PALS has an existing contract to utilize the Marine Corps Community Services (MCCS) fields and facilities when the military is involved with County leagues and programs.

FUTURE PARK NEEDS

Based on an analysis of population growth and current park inventory, the future park needs are summarized in Tables 11-8 and 11-9.

Table 11-8: Future Park Needs in Northern Beaufort County and the Greater Bluffton Area

Park Type	Park Name or Location	Existing Land Available	Land Needed
Port Royal Island			
Neighborhood	Jericho Wells Park	5	
	Port of Port Royal[1]	15	
	Grays Hill Area		10
	Clarendon Plantation	10	
	Seabrook/Stuart Point		10
Community	Southside Park[2]	12	
Regional	Burton Wells Park[3]	312	
Special Use	McLeod Farms	95	
Lady's Island			
Neighborhood	Northern Lady's Island		10
	Southern Lady's Island		10
Community	Crystal Lake Park	20	
	Northern Lady's Island		25
St. Helena Island			
Neighborhood	Coffin Point	2.3[4]	
	Ann Fripp		10
	Warsaw		10
	Eddings Point	2	
Special Use	Fort Fremont	15	
Sheldon			
Neighborhood	Sheldon/Paige Pt. Area		10
Community	Lobeco		25
Greater Bluffton Area			
Neighborhood	Camp St. Mary's[5]	9.8	
	Palmetto Bluff Park	10	
	Alljoy Road/Ulmer area		10
	Daufuskie Island Park	4	
Community	Jones Estate	70	
	Berkeley Hall	20	
	Okatie Park		25
	Victoria Bluff area		25
Regional	Buckwalter Park[6]	142	
	Okatie Preserve	119	
Special Use	Altamaha	100	
	Lemon Island	573	
		Total Land Needed	**180**

[1] To be developed by the Town of Port Royal
[2] To be developed by the City of Beaufort
[3] Future Phases include additional ballfields, a tennis complex and trails
[4] Old Waterslide Property
[5] Kayak Dock on site, remaining site is undeveloped as a park
[6] Future Phases include the development of additional soccer fields, a recreation center, aquatics center, baseball complex, tennis center and passive uses

In northern Beaufort County and in the greater Bluffton Area, 180 additional acres of park land needs to be acquired to serve future demand for park land. The Town of Hilton Head Island Comprehensive Plan identified the need for 253 additional acres of park land to serve future needs on the Island. Land purchased through the Town's Land Acquisition Program could potentially be used for these needed parks.

Table 11-9: Future Park Needs on Hilton Head Island

Park Type	Quantity Needed	Acres per Park Type	Total Acres Needed
Neighborhood	14	1-5	35
Community	3	20-80	150
Regional	1	50-85	68
		Total Acreage Needed	253

Source: Town of Hilton Head Island Comprehensive Plan, Parks and Recreation Element (2005)



PALS recreational programs include competitive sports such as youth football, cheerleading, soccer, basketball, softball and adult softball and soccer.

Recreational Programs and Activities

PALS operates numerous programs in a wide variety of activities. Recreational programs include competitive sports such as youth football, cheerleading, soccer, basketball, softball, and adult softball and soccer. PALS offers swimming lessons as well as lifeguard and water safety courses. PALS also offers after school programs, senior citizen programs along with activities such as aerobics, yoga and tae kwon do. Many of these programs are run in cooperation with area agencies and groups. For example, PALS offers the "Learn to Swim" program in conjunction with the School District aimed at teaching elementary-age school children how to swim.

Administration, Maintenance and Oversight

PALS is a County department that is currently administered by two directors divided between northern and southern Beaufort County. Maintenance of the County parks is the responsibility of the Public Works Department. There are 33 facilities under the jurisdiction of PALS. Many of the facilities and programs in southern Beaufort County are owned by one jurisdiction and operated and maintained by another (see Appendix A). Oversight of PALS is provided by a nine member advisory board appointed by County Council that establishes fees and provides advice and recommendations on policy and programs.

Parks and Recreation Funding

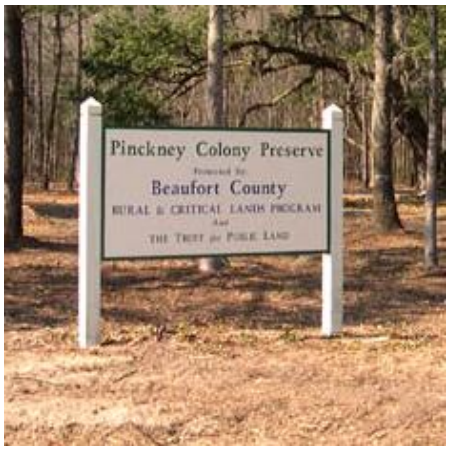
General Fund: Funding for PALS activities and park maintenance comes from the County's general fund. The two PALS directors set the budget for northern and southern Beaufort County programmatic activities. The director of Public Works sets the budget for maintenance of PALS facilities. Both departments are represented on the committee responsible for developing the county's capital improvements program.

Impact Fees: Park facilities and land needs that result from new development are funded in part by impact fees. Impact fees have been established in five service areas within the County.

Table 11-10: Parks and Recreation Facilities Development Impact Fee Schedule by Service Area

Service Area	Fee per Dwelling Unit
Town of Hilton Head	$627
Town of Bluffton; Bluffton-Okatie	$1,385
City of Beaufort; Town of Port Royal; Port Royal Island	$81
Lady's Island	$429
St. Helena Island	$775

Based on future growth projections for the year 2025, park impact fees are projected to generate approximately $39 million in revenue.



The Beaufort County Rural and Critical Land Preservation Program has purchased over 350 acres of land that have the potential to be developed for passive recreation uses.

Funding for Land Acquisition: The Beaufort County Rural and Critical Land Preservation Program has purchased over 350 acres of land that have the potential to be developed for passive recreation uses. Properties falling in this category include Fort Fremont, Crystal Lake, Lemon Island, Altamaha, Okatie Preserve, and Pinckney Colony Reserve. The program restricts the use of lands purchased through this program to passive uses. The Town of Hilton Head Island's Land Acquisition Program is a good source of future park land on the island.

Private Sources: Private developers have donated much of the existing active parkland in the Bluffton Area as part of Development Agreements. The Town of Bluffton, through development agreements acquired the land for Oscar Frazier Park; Buckwalter Regional Park; 10 acres in Palmetto Bluff and 90 acres in the Jones Tract for the development of future parks. The Town also acquired $750,000 for the design and construction of these park facilities.

Revenue Generating Park Amenities: Other than the occasional rental of athletic fields, this revenue source is largely untapped in Beaufort County. Many municipal and county park systems provide such amenities as water parks, campgrounds, meeting facilities, and picnic shelter rentals. If successfully conceived and managed, these amenities have the potential not only to pay for themselves, but also to provide additional revenue to cover facilities that do not generate revenue.

PUBLIC ACCESS TO WATER

Beaufort has over 44 miles of coastline and approximately half of the area of the County is comprised of creeks, bays, and salt marshes. Providing public access to this amenity is vital to both the quality of life for the area's residents and to the economic health of the region's tourism industry.



Beaches are public lands that serve as a linear special use park.

Beach Access: Between mean high tide and the water, beaches are public lands that are under the jurisdiction of the SCDHEC Office of Coastal Resource Management (OCRM). This area serves as a linear special use park. In southern Beaufort County, Hilton Head Island has nine public access points with approximately 1,400 parking spaces along its 19 miles of beaches. Daufuskie Island has approximately 3 ½ miles of beach with only one public access point. In northern Beaufort County, only Hunting Island State Park's three miles of beach is easily accessible. Public access to the beaches of Harbor and Fripp Islands is highly restricted with only Harbor Island requiring a gate fee and very limited parking.

Boat Landings: The Beaufort County Public Works Department maintains and manages 26 public boat ramps, six public recreational water accesses, and eight fishing piers to facilitate the public in pursuit of water activities. The locations of these facilities are identified on Map 11-4. Special events such as the Beaufort Water Festival, the Governor's Cup, shrimp baiting season, cobia season, and other similar events create high demand for the County's existing facilities. In 2007, SCDHEC/OCRM published the *South Carolina Five Coastal County Boat Ramp Study*. This study provided a detailed assessment of the County's existing boat landings and provided the following general findings and recommendations

- There is a major need for more parking at existing boat ramps;
- Existing boat landings need to be upgraded and repaired with new restrooms, more trash disposal, and better lighting;
- Certain accesses should be designated for non-motorized uses such as fishing, crabbing, kayaking, canoeing, and viewing; and
- Passenger cars should not park in car/trailer parking spaces

The study also provides detailed, site-specific recommendations for improvements to each of the County's boat landings.

MULTI-USE PATHWAYS AND TRAILS

Multi-use pathways and trails typically serve a diversity of transportation needs. Walking, running and cycling are activities enjoyed by both very young and older residents. The Town of Hilton Head Island has developed over 51 miles of public multi-use trails and over 23 additional miles planned in their 10-year CIP. Efforts elsewhere in Beaufort

County include the 5-mile New River Trail, and multi-use pathways along Buckwalter Parkway and Bluffton Parkway.

In 2003, the County adopted the *Beaufort County Trails and Blueway Master Plan* that depicts routes for the development of a trail and blueway network. The plan prioritizes the establishment of a trail on the abandoned Port Royal to Yemassee rail line and the establishment of a trail on a water line easement that connects Parris Island to Burton Wells Park and to the US Marine Corps Air Station. The plan also promotes multi-use trails along the County's major corridors (US 278, SC 170 and US 21).

CONCLUSIONS

Beaufort County is faced with the duel challenge of upgrading its current recreation facilities to serve existing demands and expanding its park network to serve future population growth. Many of the County's existing facilities are outdated and must be upgraded or replaced. New park facilities only add to the maintenance burden. The Beaufort County Parks, Recreation and Open Space Plan was completed in 1995 and adopted as part of the 1997 Comprehensive Plan. The Plan set forth specific per capita level of service goals for each park type and for recreation facilities. Development and demographic trends over the last 10 years and changes in park management call for the need to develop a new parks master plan that provides for strategies to improve existing facilities while expanding the park network to serve future growth.

In the last 10 years, the County has moved toward offering more passive park amenities, due in part to the acquisition of over 350 acres of land through the Rural and Critical Lands Preservation Program. While this additional park land has the potential to expand and diversify the County's park network, stewardship of the property needs to be planned and budgeted so that appropriate management activities are taking place and the property is being protected in an environmentally responsible fashion.

RECOMMENDATIONS

Recommendation 11-15: Parks Master Plan

Beaufort County Council should develop a new parks, recreation and open space master plan. The Master Plan should include the following:

- An analysis of existing park facilities and programs and a survey of residents to determine demands for park services;
- A detailed analysis of current maintenance conditions, type of programs and/or facilities offered, the annual visitation of each facility, and the annual cost to maintain each park;
- A list of future park and recreation needs;
- A park maintenance plan;

- Identification of park equity issues as well as inclusion of the stewardship responsibility associated with the Rural and Critical Lands Preservation program
- Review of the current park management organizational structure and recommendations for reorganization if warranted;
- Analysis of existing and future funding sources that include identification of state and federal funding to support parks and recreation programs; and
- Oversight by a stakeholders group representing a diverse group of citizens.

Recommendation 11-16: Improve Existing Recreational Facilities

Beaufort County should make the best use of its existing recreational facilities by upgrading and improving existing parkland and facilities so that residents may use them to their fullest potential.

- A team of County officials consisting of members of the Public Services Committee of County Council, PALS, the PALS Advisory Board, Public Works and the Risk Management Office should be assembled to evaluate the current conditions of park facilities. This evaluation should lead to a prioritized list of repairs and upgrades and the costs associated with these improvements. This information would greatly assist staff and elected officials in determining annual budget needs for existing park maintenance. This information would also assist in determining future maintenance costs and manpower requirements before additional parks or facilities are added.

Recommendation 11-17: Develop New Parks and Recreation Facilities

Beaufort County should develop additional regional, community, and neighborhood parks to meet current and future recreation needs and to serve different geographic areas.

- Implement future phases of Beaufort County's two existing regional parks – Burton Wells Park and Buckwalter Park.
- Provide recreation facilities for park lands that are currently undeveloped. These lands include Camp St. Mary's, Okatie Preserve, Jones Tract Park, Altamaha, Crystal Lake, Fort Fremont, and Jericho Wells Park.
- Purchase land and develop recreational facilities for additional neighborhood and community parks as indicated in Table 11-8.

Recommendation 11-18: Marsh and Water Access

Beaufort County should improve and increase public access to water and marshes by improving access on waterfront and marsh front properties currently owned by the County or other public entities; by purchasing additional waterfront and marsh front properties through the Rural and Critical Lands Preservation Program; and by providing incentives to encourage public access to the water in private developments.

Recommendation 11-19: Boat Landings

Beaufort County should direct staff to review, prioritize and implement the recommendations of the *South Carolina Five Coastal County Boat Ramp Study.*

Recommendation 11-20: Multi-Use Pathways and Trails

Beaufort County and its municipalities should coordinate and place additional emphasis on expansion and implementation of a multi-use pathway system through the Southern Beaufort Greenway Plan, and the Beaufort County Trails and Blueways Master Plan.

- Identify a strategy for prioritizing, phasing, funding, and accomplishing the identified needs.
- Establish a rail/trail on the abandoned Port Royal to Yemassee rail corridor. Implementation of this corridor is recommended to provide an alternative transportation mode for those along the US 21 corridor. This corridor would provide a trail that is separated from automobile traffic, enhancing safety for all users.
- Incorporate the Beaufort County Trails and Blueways Master Plan into roadway improvement plans for SCDOT, the County and its municipalities and include these plans for purposes of right-of-way acquisitions, design and funding.

Recommendation 11-21: Management of Passive Parks

Beaufort County should provide a park stewardship position to manage the County's passive park land. Passive park lands include those parks purchased through the Rural and Critical Lands Preservation Program and passive uses in the County's two regional parks.

Recommendation 11-22: Identify and Pursue Future Funding Sources

Beaufort County should develop a strategy to fund existing and future park needs by expanding on existing funding options and seeking new sources of funding.

- Impact Fees: Revise Beaufort County's park impact fees to reflect the most recent population growth estimates and future park needs.
- Grants: Aggressively seek state and federal grants to support County recreation facilities and programs
- Joint Recreation Facilities: Work with the Beaufort County School District and other recreation providers to maximize the number of recreation facilities available to county residents.
- Joint Purchasing: Work with other agencies and departments that have land needs, such as the School District, to jointly purchase land for needed facilities. Combine resources with other recreation providers to jointly purchase expensive, labor saving equipment needed for high quality field maintenance and used on a seasonal basis.
- Private Sources: Require large developments to provide usable, active parkland and associated recreation facilities.
- Revenue Generating Park Amenities: Pursue park facilities that generate revenue via user fees. These facilities include water parks, campgrounds, tennis facilities, and picnic shelters.



Sheriff's Office

The Sheriff's Office currently employs 191 law enforcement officers and 22 administrative personnel. The upper tier of the organizational ladder of the Sheriff's Office includes a drug analysis lab, an evidence section, the Office of Professional Responsibility, a training/support section, a recruiting section, the Reserve Deputy Sheriff Program, and a crime prevention specialist. The Enforcement Division is divided into northern and southern sections and includes a coroner's office liaison. The chief activities of the Enforcement Division are patrol, investigations, joint enforcement traffic team, marine and beach patrol, animal control, the Airport Security Program, litter control, victim's advocacy, and sex offender registry. The Administrative Division covers warrants, civil process, courthouse security, auditor's liaison, criminal records, criminal negotiation team, "Crime Stoppers", multi-jurisdictional drug task force, the K-9 unit, special assignments unit, special weapons & tactics (SWAT) unit, dive team, and the robot team.

Sheriff Facilities

The Sheriff's Office is located at the County Government Center in the Law Enforcement Center at 2001 Duke Street in Beaufort. There is also a substation south of the Broad River that serves Hilton Head Island. Services to the Town of Hilton Head Island are provided on a contractual basis. The main facilities are both outdated and inadequate for the current needs of the Sheriff's Office. There is no general storage space at the facility because several storerooms have been converted to offices. Many offices are shared by multiple officers. There is no interview room or location where victims or suspects can be interviewed in private. The building's roof leaks in multiple places and the HVAC system rarely works properly. There are several smaller substations around the County that service the patrol officers during their shifts with computer access. The Drug Analysis Lab is housed on the University of South Carolina Beaufort New River Campus on Rt. 278. The DNA Lab is scheduled to be in the Beaufort Jasper Water Services Authority building on the corner of Rt. 170 and Snake Rd.

CONCLUSIONS

The Sheriff's Office has outgrown its existing Law Enforcement Center at 2001 Duke Street behind the Government Center. Within the existing Law Enforcement Center, personnel are sharing offices, closets have been converted to offices, and there is no storage space.

Due to the unique nature of Beaufort County, it is difficult to apply national guidelines relating the number of sworn law enforcement officers per capita of population. The most critical factor in determining the number of deputies needed is the County's geography. Beaufort is a county of islands, creating long travel distances and times between two locales that may only be separated by a few hundred yards of water. The County also supports a high level of seasonal tourism and an increasing population base. These factors also contribute to the difficulty in adapting commonly accepted guidelines regarding level of service.

RECOMMENDATION

Recommendation 11-23: New Law Enforcement Center

Beaufort County should construct a new Law Enforcement Center that will consolidate all the space needs for the Sheriff's Department (see Recommendation 11-2).



Solid Waste and Recycling

Solid waste management consists of three separate activities: collection, disposal, and recycling. In Beaufort County, public collection of solid waste and recycling is handled by the Public Works Department through a system of 12 staffed convenience centers (collection facilities) and one un-staffed convenience center on Daufuskie Island (see Map 11-5). The County finances the operations of all convenience centers and residential solid waste disposal and recycling.

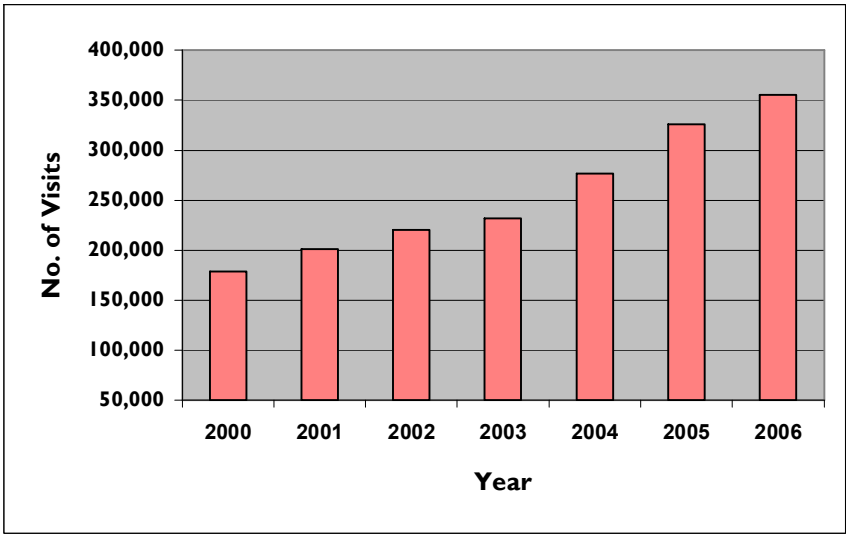
The City of Beaufort, Town of Port Royal, and the Town of Bluffton provide curbside solid waste and recycling collection. Residents of the unincorporated areas of the county and Hilton Head Island who desire curbside collection of household solid waste must contract with private companies for those services.

Convenience Centers

Although the convenience center concept works well in rural communities, in high traffic areas there are limits to how much waste can be collected at satellite stations and transported to a landfill. This is partially due to the logistics of emptying and replacing waste containers. Under the current setup, the County is required to staff, maintain, manage collection, and pay for disposal of items from the convenience centers. Five of the 12 convenience centers – Hilton Head, Gate, Shanklin, St. Helena, Bluffton, and Lady's Island – account for 80 % of the convenience center traffic. For example, the number of vehicles visiting the Hilton Head convenience center has increased from about 175,000 in 2000 to over 350,000 vehicles (or 83 vehicles per hour) in 2006, a 50% increase in traffic (Figure 11-11).

The high traffic volume combined with the limited weekend hours of the landfill used by the County, over burdens the system on weekends. These factors create a constant challenge for County staff and contractors to keep up with the volume of waste to be handled.

Figure 11-11: Increase in Traffic Volume at the Hilton Head Convenience Center.



In 2000, as part of it's solid waste management planning process, Beaufort County determined that the density of single-family households and the amount of solid waste generated in Solid Waste Districts 6 (Burton) and 7 (Lady's Island) warranted consideration of providing curbside collection services to households in these districts. Curbside collection costs and various system parameters, including public vs. private collection services have been analyzed to determine whether curbside collection is warranted. Industry estimates to justify curbside pick-up is 40-50 residents per square mile. The 2007 dwelling population densities in the nine solid waste districts all satisfy that criteria. The highest residential population densities in the unincorporated districts within the County are Burton, Bluffton, and Lady's Island. The transfer to curbside collection would reduce the need for household garbage and recycling collection at the Gate, Shanklin, Lady's Island, Bluffton, and Pritchardville convenience centers. Hilton Head Island also has a very high population density with no mandated curbside pick-up, but this area is under the jurisdiction of the Town of Hilton Head.

SOLID WASTE DISPOSAL

The County's solid waste is disposed of at Hickory Hill Landfill. Approximately 138,700 tons of solid waste were disposed of in FY 2007. Construction and demolition material is diverted to one of the two construction and demolition landfill sites utilized by the County. One, Barnwell Resources, is located in Beaufort County. The other, Oakwood Landfill, is in Jasper County. Yard waste from the municipalities and convenience centers is disposed of by incineration at

Greenspace Inc., in Jasper County or disposed of in one of the construction and demolition landfills.

Hickory Hill Landfill is owned by Waste Management and located in Jasper County. The County has a contract to deliver (or cause to be delivered) at least 117,203 tons per year of solid waste through June, 2010. The Hickory Hill Landfill has an estimated lifetime of 20 years. The tipping fee is high compared to what other local governments in the region are paying. It is not feasible to develop a new landfill in Beaufort County due to multiple factors that include the geology of the area; existing state laws that prevent the establishment of new landfills within 75 miles radius of an existing landfill; and the high cost of land.

In 2005, in an Evaluation of Solid Waste Management Alternatives, a directive to the County was to build a transfer station to facilitate use of alternative facilities for Beaufort County's waste. The primary reason for using a transfer station is to reduce the cost of transporting waste to other facilities. Six facilities within a 175 mile radius were identified as possible Beaufort County disposal sites. The process of developing transfer capacity will take approximately four years. A transfer station would prolong the life of Hickory Hill as well as offer alternatives to Beaufort County for waste disposal and help to control disposal costs in the future.

RECYCLING

Recycling is one strategy to reduce the amount of solid waste that enters the Hickory Hill Landfill. The County has a contract with the Hickory Hills Materials Recovery Facility (MRF) which is owned by Waste Management Inc. and located at their Jasper County complex. The MRF processes recyclables collected at the convenience centers as well as recyclables collected through other programs in the County. There are two means of providing recycling services to residents – convenience centers and curbside collection. Drop-off services and curbside collection should not be considered "either/or" options. The two methods should be used in the County to complement each other and increase participation and recovery.

Recycling at Convenience Centers: Recycling opportunities are available at eight of the twelve convenience centers. The eight centers that recycle do not accept all materials for recycling. For example, only four convenience centers recycle tires and white goods. Even though the Solid Waste and Recycling Department interacts in the community to educate and promote the use of the County's centers for recycling and reuse, lack of convenience is a major barrier to widespread recycling.

Curbside Recycling: Curbside collection is the most effective method to ensure high participation and recovery rates. Curbside

recycling service is provided by the City of Beaufort, Town of Port Royal, and Town of Bluffton, and is available in some Planned Unit Developments serviced by contract with private companies. The Town of Hilton Head provides no mandated curbside collection opportunities for solid waste or recycling to citizens yet generates about 30% of the residential waste in Beaufort County.

FUNDING

The County pays for the entire cost of residential solid waste disposal. The cost of commercial solid waste disposal is paid by the generator. The source of funding for County Solid Waste and Recycling Program is the general fund. The budget is based on recommendations from the Solid Waste Manager. The Department also receives grants to help promote recycling from the South Carolina Department of Health and Environmental Control as well as from other sources.

OVERSIGHT

The county is divided into nine Solid Waste Districts to facilitate management, services and control costs. In 1996, Beaufort County Council established the Solid Waste and Recycling Board, a volunteer citizen board, to advise Council on all aspects of public solid waste management and to develop a comprehensive plan for Solid Waste Management that was approved in 2000. An Evaluation of Solid Waste Management Alternatives was completed in 2005. A comprehensive data set on all solid waste and recycling activities to facilitate analysis and planning has also been developed.

CONCLUSIONS

Population density and the size of municipalities within Beaufort County have changed drastically in the past 20 years and, therefore, methods of solid waste and recycling management must change to provide for future needs. Residents who live in unincorporated areas and on Hilton Head Island must haul their recyclables to a convenience center. This extra step makes many citizens chose to dispose of items with the household garbage that could otherwise be recycled. Dwelling unit densities have increased to the point in all solid waste districts where curbside pick-up of solid waste and recycling is reasonable. Convenience centers will continue to work well in rural communities where, due to low population density, it is not feasible to provide curbside collection. In urban areas, however, their future role will likely be to complement curbside collection by providing a disposal site for items that are not easily picked up curbside.

Beaufort County currently has one disposal and recycling option, the Hickory Hill landfill and MRF, owned and operated by a single company and located in Jasper County. The disposal fee is higher than others in

the area and the estimated life of the landfill is approximately 20 years. The contract will be renegotiated in 2010, so the timing is right to increase the County's solid waste disposal options. It is unfeasible to develop a landfill in Beaufort County and there is an abundance of capacity in landfills in the greater region. Therefore, the best option is to develop capacity to send waste to an existing landfill by building a transfer station in the county.

RECOMMENDATIONS

Recommendation 11-24: Future Disposal Sites

County Council should direct its staff to design and implement a plan for provision of multiple disposal alternatives for the County.

- The County should continue efforts to form alliances with neighboring counties to develop alternative methods for waste disposal and recycling.
- The County should initiate the placement of a transfer station and a MRF in Beaufort County to provide an alternative to disposal and recycling at the Hickory Hill Landfill and MRF.

Recommendation 11-25: Provide Curbside Collection in High Density Areas

County Council should direct County staff to explore means of initiating mandated curbside pick-up for solid waste and recycling in Districts 6, 7, and 9; and encouraging the Town of Hilton Head to provide or require curbside pick-up.

- The County should explore an exclusive franchise system, allowing haulers to bid on servicing an entire Solid Waste District or a designated area within the Solid Waste District if not feasible for one hauler to service the entire district. This will help to reduce costs for citizens and decrease truck traffic in residential neighborhoods.
- The County should work with the Town to explore the provision of mandatory franchised curbside and recycling collection administered by the Town of Hilton Head
- The County should increase the efficiency and capacity of its high-usage convenience centers by installing trash compacting equipment to complement curbside collection.

Recommendation 11-26: Recycling of Yard Waste

County Council should direct staff to continue to pursue recycling options for yard waste as an alternative to placement in a construction and demolition landfill or incineration.



Fire Protection

Fire services in Beaufort County are offered by nine separate providers including three municipal fire departments, five special purpose tax districts, and one public service district. All emergency dispatching in the county is coordinated from the County's Law Enforcement Center (LEC), except for the Town of Hilton Head Island which has its own dispatch system.

Table 11-12: Beaufort County Fire Protection Providers

Municipal Fire Departments	City of Beaufort/Town of Port Royal Town of Hilton Head Island Town of Yemassee
Special Purpose Tax District	Burton Lady's Island/St. Helena Sheldon Bluffton Township Daufuskie Island
Public Service District	Fripp Island

Table 11-13 provides a summary of the personnel, area and population served and number of calls received by each of the fire protection providers. Over 400 certified firefighters, paid and volunteer, staff a total of 32 stations throughout Beaufort County. The Town of Hilton Head and Bluffton District serves the largest population of about 41,000. The Bluffton and Burton Districts serve the largest areas of about 245 square miles and the Fripp Island District serves the smallest area of 5 square miles. Map 11-1 shows the boundaries of the areas served by the fire districts and the locations of existing and proposed stations.

ISO Rating

The Insurance Services Office (ISO) has established a Public Protection Classification System commonly used to review the firefighting capabilities of individual communities. The best rating is 1 and the worst is 10. Areas with mixed urban and rural receive two ratings, the first number indicating urban, and the second rural. Ten percent of the

districts' overall score is based on how well the fire department receives and dispatches fire alarms, 50 % of the score is based on fire department operations, and 40 % is based on the community's water supply. The County's municipal areas generally have a low ISO rating while the rural areas have high ISO ratings (Table 11-13).

Table 11-13: Beaufort County fire protection summary by district.

District	ISO Rating	Personnel Paid/Vol.	Area (sq. mile)	Pop. Served	No. of Calls 2006
HHI	3	105/0	54	41,039*	6,026
Bluffton	5	106/30	246	40,500	3,640
LI/SH	4/9	64/10	140	25,000	1,909
Burton	4/9	50/10	240	24,000	2,591
BFT/PR	Bft 2/PR 3	38/35	18.2	21,000	2,300
Sheldon	5	15/27	83	5,000	607
Fripp Island	5	19/29	5	800	218
Yemassee	5	0/9	6.2	712	198
Daufuskie Island	5	12/17	8	427	

* plus 48,398 seasonal population

Existing Capital Facilities

Table 11-14 provides a summary of the capital facilities of each of the fire protection providers.

Table 11-14: Summary of Existing Capital Facilities

Fire Protection Provider	# of Stations	Total Sq. Ft.	Summary of Apparatus
Hilton Head Island	7	60,406	9 pumpers, 2 aerials, 32 other fire vehicles
Bluffton	7	37,091	8 pumpers, 3 tankers, 1 aerial
Lady's Island/St. Helena	5	27,800	8 pumpers, 1 tanker, 2 aerials, 2 squad, 4 service vehicles, 5 other vehicles
Burton	5	29,900	7 pumpers, 1 tanker, 2 aerials, 1 squad, 1 service vehicle, 5 other vehicles, 2 jet ski
City of Beaufort	3	18,100	5 pumpers, 2 reserve pumpers, 3 aerials, 2 special purpose, 2 service squads, 8 administrative vehicles, 1 boat
Sheldon	2	8,200	3 pumpers, 2 tankers, 2 squad, 4 other vehicles
Fripp Island	1	10,000	2 pumpers, 1 squad, 1 service vehicle, 1 other vehicle
Yemassee	1	7,500	3 pumpers, 1 tanker, 1 squad
Daufuskie Island	1 plus 1 substation	7,700	1 pumper, 2 tankers, 1 aerial, 1 service vehicle

PROJECTED FUTURE CAPITAL NEEDS

Based on anticipated future population growth, the Bluffton District has the largest future capital needs with plans for eight more stations to be constructed within the next 20 years. The Lady's Island/St. Helena district has the next highest construction requirement with plans for three new stations. Burton and Sheldon districts both plan for construction of two new stations. Other districts will be renovating, upgrading and replacing existing stations.

Table 11-15: Summary of Future Capital Needs

Fire District	# of Stations	Total Sq. Ft.	Summary of Apparatus
Hilton Head Island	4 replacements, 1 training facility	48,000	10 pumpers, 2 aerials
Bluffton	8	56,000	7 pumpers, 1 aerial
Lady's Island/St. Helena	3 new, 1 replacement, 1 renovation	30,500	5 pumpers, 1 tanker, 1 aerial, 5 other vehicles
Burton	2	13,800	4 pumpers, 1 tanker, 2 aerials, 1 service vehicle, 5 other vehicles
City of Beaufort/Port Royal	1 station, 1 maintenance fac., and 1 training fac.	25,000	
Sheldon	2 new, 1 upgrade	12,500	2 pumpers, 1 tanker, 1 aerial, 2 squad, 1 service vehicle
Fripp Island	None planned		1 pumper, 1 aerial, 1 squad, 1 service, 1 other
Yemassee	1 upgrade	5,000	1 pumper, 1 tanker, 1 squad, 1 service, 1 other vehicle
Daufuskie	None planned		None planned

FUNDING

The Bluffton Township Fire District is authorized to fund both operating/maintenance expenses and capital infrastructure costs through property tax millage. The 2006 millage rates of the District are 20.3 per $1000 of assessed value for operations and 0.70 per $1000 of assessed value for debt service on capital needs. The Burton, Lady's Island/St. Helena, Sheldon and Daufuskie districts also receive their funding from tax levies. Burton has the highest rate at 51.9. Millage rates are listed in Table 11-16.

In addition to property tax revenue, the Bluffton, Burton and Lady's Island/St. Helena Fire Districts each receive impact fees to pay for future capital needs generated by projected future growth.

Table 11-16: Property tax levies on assessed value to fund Beaufort County Fire Districts in 2006.

	Bluffton	Burton	LI/SH	Sheldon	Daufuskie
Operations Millage	20.3	51.9	28.9	34.9	29.7
Debt Service Millage	0.7	6.0	1.4	2.5	2.6

Hilton Head Rescue Fire Department funding comes from the Town's General Fund operations, and as such, is funded through general revenues such as property and hospitality taxes. The Town currently pledges a portion of the hospitality tax to pay debt service for fire rescue projects. The hospitality tax is a 1% tax on the sale of prepared meals and beverages. This source is currently generating approximately $2.3 million annually, of which approximately $696,000 is being used for fire/rescue debt service. The City of Beaufort and Town of Yemassee fire departments are also funded from their municipal general fund operations. Fripp Island is a public service district and their funding comes from property taxes levied only on Fripp Island.



Fire Districts and Future Municipal Growth

Beaufort County, the City of Beaufort, and the Town of Port Royal have delineated their future municipal boundaries to include all of Port Royal Island and Lady's Island. These municipal boundaries encompass all of the Burton Fire District's service area and roughly half of the Lady's Island/St. Helena Fire District's service area. In 2000, the Burton Fire District entered in to a 10-year court ordered contractual agreement to provide fire and emergency medical services to areas that were annexed by the City of Beaufort and Port Royal. Burton and the Beaufort/Port Royal fire districts cooperate to provide emergency responses on Port Royal Island. While, the increased number of calls places an additional burden on the Burton Fire district, to date, Burton has not had to add more staff or equipment to service the current contract.

Conclusions

The fire districts are well aware of the changing population needs in Beaufort County and are making appropriate plans for the future by monitoring their service districts. The greatest capital needs are with the Bluffton Fire District, which is planning to build five to eight new stations over the next 20 years. Lady's Island/St. Helena, Burton, and Sheldon all have 2-3 new facilities planned for construction. The remaining districts are planning to maintain, replace or renovate existing facilities.

While the Town of Hilton, the City of Beaufort and the Town of Port Royal each have acceptable ISO ratings of 2 and 3, the rural areas located within the Lady's Island/St. Helena and the Burton districts have very poor ISO ratings.

Although the Burton Fire District currently provides fire and emergency medical services to properties within its service area that were annexed by the City of Beaufort and Port Royal, a longer term agreement needs to be explored that outlines the future roles of the municipal fire departments and the Burton and Lady's Island/St. Helena Fire Districts.

RECOMMENDATIONS



Recommendation 11-27: Land Use and Population Projections

Beaufort County should work cooperatively with the fire districts and other fire protection providers to provide updated land use and population projections to be used by the fire districts to project future capital needs.

Recommendation 11-28: Improve ISO Ratings

Beaufort County should support the fire districts efforts to improve ISO ratings by providing excellent dispatching services, improving upon and enforcing building codes, and supporting public water improvements in areas with inadequate water pressure.

Recommendation 11-29: Cooperative Future Planning with Municipalities

Beaufort County should encourage the Burton and Lady's Island/St. Helena Fire Districts to work cooperatively with the City of Beaufort and Town of Port Royal to determine the future roles of those two fire districts.



Public Schools

The Beaufort County School District is composed of 18 elementary schools, six middle schools, and four high schools. The District currently serves over 19,000 students countywide and employs approximately 2,500 persons.

Existing School Capacity and Enrollment

Table 11-17 provides a comparison of student enrollment data for the '06-'07 school year broken down by cluster and school type. Clusters

Table 11-17: Existing School Capacity and Enrollment by Cluster

School Types by Cluster	Capacity*	'06-'07 Enrollment*	% Utilized
Beaufort Cluster			
Elementary (7)	3,622	2,844	78.5
Middle (2)	1,881	1,312	69.8
High (1)	1,595	1,591	99.7
Total	7,098	5,747	80.9
Battery Creek Cluster			
Elementary (5)	2,831	2,061	72.8
Middle (2)	1,951	1,055	54.1
High (1)	1,505	1,358	90.2
Total	6,287	4,474	71.2
Bluffton Cluster			
Elementary (3)	2,066	2,571	124.4
Middle (1)	909	1,010	111.1
High (1)	1,452	1,345	92.6
Total	4,427	4,926	111.3
Hilton Head Island Cluster			
Elementary (4)	2,423	1,990	82.1
Middle (1)	1,007	944	93.7
High (1)	1,400	1,148	82.0
Total	4,830	4,082	84.5

*Source: Programs, Demographics and Facilities Plan, 2007, Associated Planning & Research, Inc.,
**Source: Beaufort County School District

are the way the School District organizes schools geographically. Generally each cluster serves one high school. Existing deficiencies in school capacity have their greatest concentration in the Bluffton Cluster which has been experiencing the highest rate of population growth. There are additional localized deficiencies at Coosa Elementary in northern Lady's Island which is currently operating at 135% of capacity; and at Beaufort High School and Battery Creek High School, which are operating very close to capacity. To address existing school deficiencies, the District has committed to build three new schools – Bluffton Middle School and Red Cedar Elementary School in Bluffton and Whale Branch High School in the Seabrook area of northern Port Royal Island (Table 11-18).



PROJECTED FUTURE ENROLLMENT AND FACILITY NEEDS

In 2007 the Beaufort County School District contracted with Associated Planning and Research, Inc. to conduct a 5-year facilities planning report. The report recommends the construction of two new elementary schools in Bluffton and one new elementary school in northern Lady's Island over the next five years. The report also recommends that the District should plan for the construction of a new middle school and high school in the Bluffton area over the next 10 years.

Table 11-18: Proposed New Schools to address Existing Deficiencies and Future Needs

Proposed School	Location	Capacity
New Schools Under Construction		
Red Cedar Elementary	Bluffton (Shults Tract)	800
Bluffton Middle	Bluffton (Shults Tract)	950
Whale Branch High School	Port Royal Island (Seabrook)	650
5-Year Plan Recommendations*		
M.C. Riley Early Learning Center	Bluffton	400
Bluffton Early Learning Center	Bluffton	400
Jones Tract Elementary School	Bluffton (Jones Tract)	800
Future Elementary School	Bluffton (SC 170 & Bluffton Parkway)	800
Northern Lady's Island Elementary School	Lady's Island (north of Coosa Elementary)	800
5-10 Recommendations*		
New Middle School	Bluffton (SC 170 & Bluffton Parkway)	950
New High School	Bluffton (SC 170 & Bluffton Parkway)	1500

*Source: Programs, Demographics and Facilities Plan, Associated Planning and Research, 2007



CONCLUSIONS

Based on projected student enrollment estimates, the Beaufort County School District will need to construct five new schools and two early learning centers to serve population growth over the next 10 years. The magnitude of this public facility need has several regional implications:

- Approximately $330 million will be needed to cover land and school facility costs over the next 10 years. The District and local governments will need to actively seek alternative funding sources to cover these capital costs.
- The District will need to purchase 115.5 acres of land for future school sites. These sites will need to be accessible to future student populations and be consistent with local land use plans. Therefore, the School District needs to work cooperatively with County and municipal planners to choose appropriate future school sites.
- The School District will be seeking new school sites in high growth areas of the county where vacant land is both scarce and expensive. Other community service providers such as parks, libraries, and fire protection will also need to site additional facilities in these areas.

RECOMMENDATIONS

Recommendation 11-30: Funding of Capital Needs

Beaufort County should work cooperatively with the School District to seek alternative funding sources to pay for future school facilities.

- School Impact Fees: The County and the School District should lobby the State Legislature to enable local governments to establish impact fees for schools.

Recommendation 11-31: Cooperative Planning

Beaufort County should work cooperatively with the School District to coordinate the timing and siting of future school facilities.

- Intergovernmental Agreement: The County and the School District should formalize process for coordinating school planning through an intergovernmental agreement
- Coordinated Growth Tracking: Beaufort County and the School District should work together to maintain a common regional growth tracking system, combining a land demand and land use forecasting model with other regional models (such as the transportation model) to be used by the School District to project future facility needs.

- Review of Major Development Projects: Beaufort County should work cooperatively with the School District and the municipalities to develop and implement a procedure where major development proposals are reviewed by the School District prior to their approvals to ensure the proposal does not have an adverse impact on current school capacity.
- Future School Sites: The County and the School District should work cooperatively to locate future school sites that are consistent with County and municipal land use plans. The County will encourage cooperation between the School District and other community facility providers (parks, libraries, fire protection) to coordinate future land purchases to serve mutual needs.

Recommendation 11-32: Pedestrian Friendly Schools

Beaufort County should coordinate with the School District to organize public policy and public infrastructure commitments to promote neighborhood and pedestrian friendly schools.

- Location of Schools: Beaufort County should work cooperatively with the School District to seek future school sites that are located in close proximity or within residential areas so children can walk to school.
- Development Standards: Beaufort County should establish development standards that require a strong pedestrian orientation in residential areas so that pedestrian ways are available for children to safely walk to school.



Water Supply And Wastewater Treatment

The primary provider of water and wastewater treatment in Beaufort County is the Beaufort-Jasper Water & Sewer Authority (BJWSA). BJWSA is a Special Purpose District independent from Beaufort County and created in 1954 by the State Legislature. The Authority was initially charged with the development of a long-term, reliable supply of water for Beaufort and Jasper Counties. In 1972, the enabling legislation was amended to include the responsibility of wastewater treatment. Financing for the Authority is based on revenue bonds, since the Authority does not have the power of taxation. BJWSA has, since 1987, utilized impact fees to assist in financing the construction and extension of infrastructure. These fees are charged to developers as part of any new development.

WATER SUPPLY



Water services in Beaufort County are currently provided by approximately 16 public and private agencies, including six governments, four public service districts, and six private water companies. Although the County has a variety of different water retailers, most of them utilize the same source of water, the Savannah River, as distributed by BJWSA, which maintains all water transmission lines.

SOURCES OF DRINKING WATER

Surface Sources: The Savannah River is the primary source of drinking water in Beaufort County. BJWSA operates two treatment plants in Jasper County that supply Beaufort County residents and businesses with an average of approximately 20 million gallons per day (MGD) and a maximum demand of39 million MGD, representing over 75% of the county's water.

Table 11-19: Sources of Drinking Water in Beaufort County

Water Source	Provider	Area Served	Current Maximum Daily Demand (MGD)
Savannah River – Purrysburg Plant	BJWSA	Greater Bluffton Area, northern Hilton Head Island	15.0
Savannah River – Chelsea Plant	BJWSA	Okatie, Port Royal I., Lady's I., St. Helena I.	24.0
Upper Floridian, Middle Floridian and Cretaceous Aquifers	Hilton Head PSD #1; South Island PSD; Broad Creek PSD	Hilton Head Island	10.5
Private Wells		Sheldon Twp., Sawmill Creek, Pritchardville, golf course and landscape irrigation	n/a

According to the Water and Wastewater Master Plan (2005 BJWSA) water demands are estimated to double over the next 20 years to as much as an average of 56 MGD and a maximum daily demand of 96 MGD. BJWSA is currently permitted to withdraw 100 MGD from the river. While safe yield of the Savannah River appears to be adequate over the next 20 years, the capacity of the river would be limited if the City of Atlanta is permitted to tap the river as a water resource. While the State of Georgia currently prohibits Atlanta to access the Savannah River, South Carolina seeks to reach agreement with Georgia concerning the ultimate allocation of the river for drinking water.

Public Groundwater Sources: On Hilton Head Island, three public service districts (PSD's) supply approximately 10.5 MGD from the Upper and Middle Floridian Aquifers and the Cretaceous Aquifer. Water from the Middle Floridian Aquifer and the Cretaceous Aquifer require reverse osmosis to remove salt and other minerals from the water to make it potable. Both the PSD #1 and the Broad Creek PSD supplement their groundwater supply with surface water purchased wholesale from BJWSA.

Private Wells: Private wells provide drinking water to residents and businesses in Sheldon Township (north of the Whale Branch River) and in portions of Pritchardville and Sawmill Creek in southern Beaufort

County. Irrigation of golf courses and other heavily landscaped areas also creates a demand for groundwater resources.

THREATS TO GROUNDWATER QUALITY

Beaufort County lies above the northernmost reaches of the Floridian Aquifer, which historically has supplied the region with a reliable source of water. Since the late 1970's, however, concerns have been raised over the issue of saltwater intrusion into the aquifer. Several extensive studies conducted in the 1980's led to the conclusion that the 14.5 million gallons per day of groundwater on Hilton Head Island that was being pumped was reducing the upward pressure of the freshwater in the aquifer that normally prevented saltwater intrusion. Since the 1980's, over $40 million has been spent in southern Beaufort County to provide alternative sources of drinking water primarily from the Savannah River.

As part of the "Sound Science Initiative", Georgia contracted with the South Carolina DHEC to provide monitoring wells in Southern Beaufort County. The wells revealed that there are three separate points of saltwater intrusion into the aquifer in the county; one underlying northern Hilton Head Island, one underlying the Pinckney Island National Wildlife Refuge, and one under the Moss Creek area. These infiltration points are threatening water quality for those residents in areas like Sawmill Creek, and Pritchardville that are on private wells and for developments still using groundwater for irrigation.

WASTEWATER TREATMENT



Wastewater treatment services in Beaufort County are primarily provided by BJWSA via four wastewater treatment plants – Cherry Point and Palmetto Bluff in southern Beaufort County and Port Royal and St. Helena in northern Beaufort County. The Town of Hilton Head Island is served by three Public Service Districts which each have their own wastewater treatment plant. The USMC Air Station, Laurel Bay and Parris Island are currently served by individual wastewater treatment plants owned and operated by the Department of Defense. Independent wastewater treatment facilities and individual on-lot septic systems serve the remainder of the county.

PUBLIC WASTEWATER TREATMENT

BJWSA is the primary provider of public wastewater treatment in Beaufort County. Hilton Head Island is served by its three public service districts.

Section 208 Plan: The relationship between Beaufort County and BJWSA is addressed by Section 208 of the Federal Clean Water Act 1972, which requires development of water pollution abatement plans and designation of planning, management and service agencies to

implement those plans. The Lowcountry Council of Governments (LCOG) has been designated as the Water Quality Planning Agency for Beaufort, Colleton, Hampton, and Jasper counties. LCOG prepares and revises the Lowcountry Areawide Water Quality Management Plan which provides the regional framework and policies for all management and service agencies with the region.

Beaufort County Council is the management agency for the unincorporated areas of the County. As part of its management responsibilities, Beaufort County must approve the location of new treatment facilities, and ensure compliance and consistency regarding location, operation and maintenance of treatment facilities with the Lowcountry Areawide Water Quality Management Plan and any local plans, especially the Comprehensive Plan.



Disposal of Treated Wastewater: BJWSA and other major utilities utilize two basic methods for the disposal of treated wastewater: direct discharge to surface waters and wetlands and land disposal.

- Surface Water Discharge: In Beaufort County, surface water disposal of sewage effluent is limited primarily to the Beaufort River and the Great Swamp (Laurel Bay currently discharges effluent into the Broad River).
- Land Application: The remainder of the effluent in Beaufort County is disposed of by land application. Cherry Point, St. Helena and Palmetto Bluff deliver treated effluent to golf courses for irrigation. Land application of properly treated effluent benefits the supply of groundwater by reducing the demand for groundwater for irrigation while helping to recharge the aquifer.

PACKAGE TREATMENT FACILITIES

In addition to public wastewater treatment facilities, there are several large, privately owned and operated package treatment facilities. These include Callawasie Island, Spring Island, Moss Creek, Pleasant Point, Harbor Island, Fripp Island and two plants on Daufuskie Island. Most of the package treatment plants currently operating in Beaufort County were constructed between 1950-1986 by private developers. These plants have generally experienced problems because of age and inconsistent maintenance. There are, however, situations in which small plants are desirable. Properly constructed and maintained small plants may be the only solution for sewage disposal in areas where the installation of regional sewer is too costly, such as in Community Preservation areas in rural parts of the county. If regional service becomes available, these systems should be removed from service within a reasonable period of time and flow diverted to the permanent facility where the sewage can be more efficiently treated to a higher quality.

INDIVIDUAL ON-LOT SEPTIC SYSTEMS

The remainder of Beaufort County residents are served by individual on-lot septic systems. Of all the methods of wastewater treatment, on-lot septic systems have the greatest potential to adversely affect surface and ground water quality. While on-lot septic systems are common in rural areas where it is often impractical to extend public sewer, Beaufort County has many moderate density "suburban" communities that are still served by individual septic systems (see Map 11-6 and 11-7). Many of these systems are not functioning properly. A 1995 Systems Performance Survey conducted by the South Carolina Department of Health and Environmental Control (SCDHEC) on Individual Onsite Wastewater Treatment and Disposal Systems documented a 31 % malfunction rate among those systems surveyed in Beaufort County. The report concluded that "the region with the greatest limitations for onsite treatment and disposal is the coastal plain." [5]

The *Beaufort County Special Area Management Plan (SAMP*) recognized this water quality concern and recommended the development of a comprehensive on-site disposal system program. The SAMP recognized that State septic system requirements do not account for the Lowcountry's high water table and do not control density of individual septic systems. These two factors heighten the risk of degrading water quality. The SAMP called for the adoption of more stringent septic system standards and for regular programs of inspection and maintenance to be implemented by Beaufort County. To help facilitate this recommendation, from 2000 to 2004, cooperative efforts between Beaufort County OCRM, Clemson Extension, SC Sea Grant and SCDHEC produced the *Onsite Septic System Inspector Training Program* and a comprehensive *Beaufort County OSDS Management Plan* prepared by The National Environment Services Center (NESC). To date, however, the County has not implemented this program.

RECOMMENDATIONS

Recommendation 11-33: Preserve Groundwater Quality

Beaufort County should support efforts to preserve groundwater quality by reducing and eliminating heavy usage of groundwater resources in southern Beaufort County.

[5] DHEC, *1995 Systems Performance Survey, Individual Onsite Wastewater Treatment and Disposal Systems, Final Report*, Division of Onsite Wastewater Management, 1995.

- Beaufort County should require all new major development to hook up to public water supply to place no further strain on groundwater resources.
- Beaufort County should encourage existing heavy users of groundwater to partner with BJWSA to use treated effluent for irrigation of golf courses and other landscaped areas.

Recommendation 11-34: Reduce Demand for Irrigation

Beaufort County should encourage the use of native plants and xeriscape landscape practices to reduce demand for the use of both ground and surface water for irrigation.

Recommendation 11-35: Extension of Public Water

Beaufort County should support the extension of public water in the Seabrook/Stuart Point CP, Dale CP, the Pritchardville CP, and other rural communities that are currently served by private wells.

- Beaufort County Council should work with the Lowcountry Council of Governments and other agencies to pursue grants to assist affected low and moderate income residents with water service lines and tap-in fees.
- The County should work with BJWSA to ensure that future water lines are adequately sized for fire protection.

Recommendation 11-36: Address Concentrations of On-lot Septic Systems

Beaufort County will work with BJWSA to identify and prioritize areas with the highest concentration of on-lot septic systems to be connected to public sewer.

- Areas with concentrations of septic systems need to be prioritized based on two factors: the number and density of on-lot septic systems and the environmental sensitivity of the surrounding region. Based on prioritization of these sites Beaufort County should support BJWSA to extend public sewer to those areas receiving the highest priorities.
- Beaufort County should work with the Lowcountry Council of Governments and other agencies to pursue grants to assist affected low and moderate income residents with laterals and tap-in fees.

Recommendation 11-37: Address SAMP Recommendation for Onsite Wastewater Treatment and Disposal Systems (OSDS)

Beaufort County should organize a task force to implement the Onsite Wastewater Treatment and Disposal Systems recommendations of the SAMP. Representatives should include municipalities, local DHEC offices, Natural Resource Conservation Service-USDA, BJWSA, Beaufort County Stormwater Utility Board, and Beaufort County Department of Public Works. This OSDS task force should address these SAMP recommendations:

1. Develop inspection and maintenance standards by the establishment of a wastewater management district that addresses all septic systems in the county.
2. Develop a comprehensive on-site wastewater disposal management program.
3. Develop innovative standards for on-site wastewater disposal.
4. Develop new standards for household appliances.
5. Adopt a manual of alternative Onsite Wastewater Treatment and Disposal Systems.
6. Review DHEC Regulations 61-56 to identify duplications in recommendations prior to the enactment of a county Onsite Wastewater Treatment and Disposal Systems ordinance.

Recommendation 11-38: Limit Expansion of Sewage Lines to Land Within the Growth Areas

Beaufort County should not target the expansion and location of new regional sewage collection and transmission facilities in rural areas except where a documented public health or environmental safety issue has been identified.

Chapter 11 — Community Facilities



Map 11-1
Fire Protection & EMS

LEGEND

- Existing Fire Station
- Proposed Fire Station
- EMS Facility
- Beaufort County Boundary
- Fire District Boundary

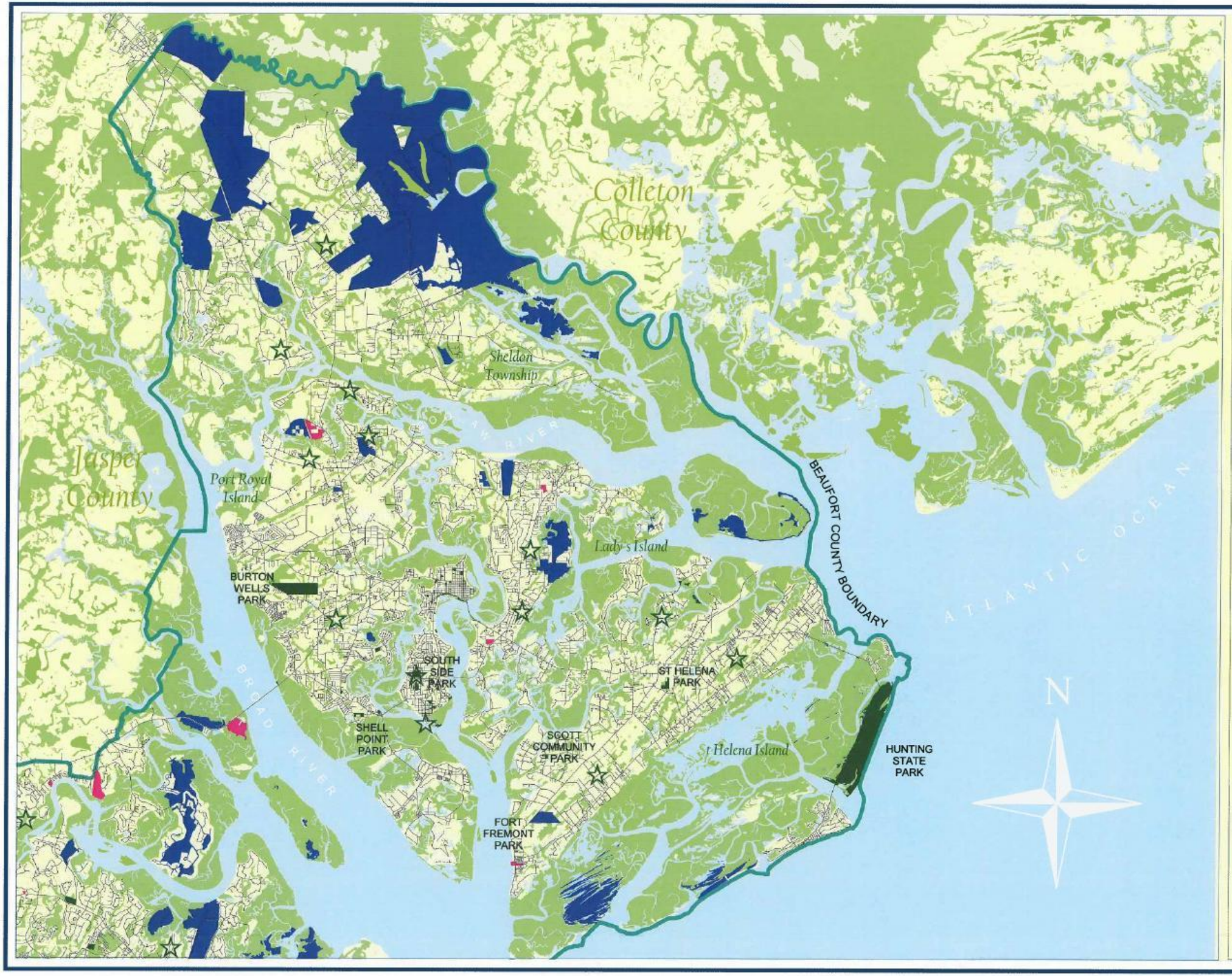
2010
Beaufort County Comprehensive Plan

Chapter 11
Community Facilities

Map
Map 11-2

Parks & Preserved Land

Northern Beaufort County



LEGEND

- Preserved Land
- Park
- Undeveloped Park or Potential Park Area
- ☆ Proposed Park

2010
Beaufort County Comprehensive Plan



Chapter 11
Community Facilities

Map 11-3
Parks & Preserved Land

Southern Beaufort County

LEGEND

- Preserved Land
- Park
- Undeveloped Park or Potential Park Area
- ☆ Proposed Park

2010
Beaufort County Comprehensive Plan

1695

Chapter 11

Community Facilities

Map 11- 4

Boat Landings



LEGEND

- Existing Boat Landing
- Proposed Boat Landing
- Proposed Improvements

2010
Beaufort County Comprehensive Plan

1696

Chapter 11
Community Facilities



Map 11-5

Solid Waste Districts & Facilities

LEGEND

- Convenience Drop-Off Center
- Landfill
- Un-manned Drop-Off Center
- Generalized District Boundaries

2010
Beaufort County Comprehensive Plan

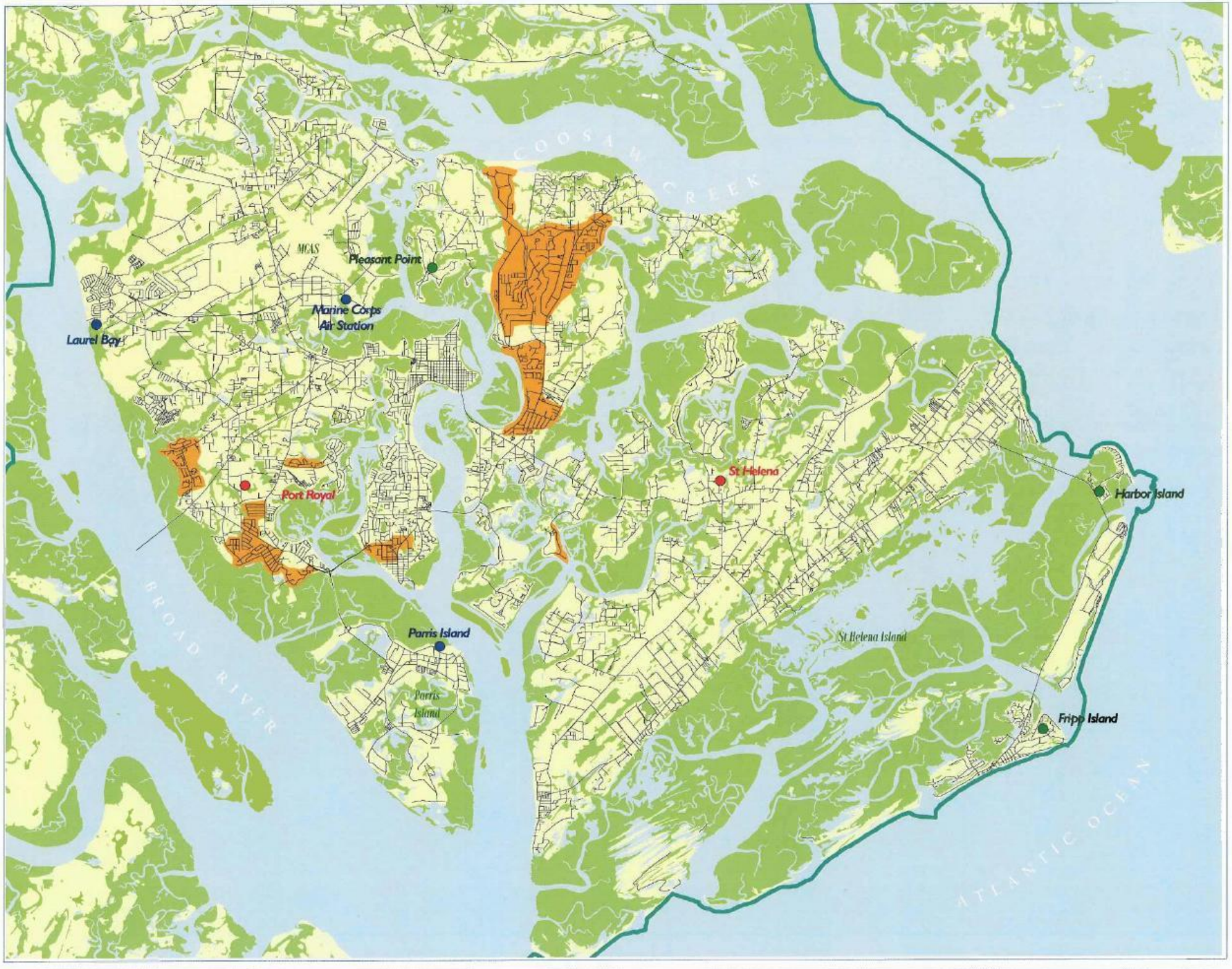
1697

Chapter 11
Community Facilities

Map 11- 6

Wastewater Treatment Plants

Northern Beaufort County



LEGEND

- Public Wastewater Treatment
- Miltitary Wastewater Treatment
- Private Treatment Facility
- Septic System Concentrations of On-lot

2010
Beaufort County Comprehensive Plan

Chapter 11

Community Facilities

Map 11-7

Wastewater Treatment Plants

Southern Beaufort County



LEGEND

- Public Wastewater Treatment
- Miltitary Wastewater Treatment
- Private Treatment Facility

Septic System Concentrations of On-lot

2010
Beaufort County Comprehensive Plan

12 *Beaufort County Comprehensive Plan*

Priority Investment

Priority Investment

The purpose of the Priority Investment Element is to tie the capital improvement needs identified in other elements to forecasted revenues for the next ten years. It is, in essence, a ten-year Capital Improvements Plan that is meant to guide the County's five-year Capital Improvements Program (CIP) and annual budgeting processes.

South Carolina Priority Investment Act (PIA)

In June 2007, the governor signed into law the South Carolina Priority Investment Act (PIA). The PIA consists of amendments to the 1994 Local Government Comprehensive Planning Enabling Act. One of the amendments adds the Priority Investment Element to the list of required elements for local comprehensive plans. The PIA states the following regarding this new element:

> "A priority investment element [is required] that analyzes the likely federal, state, and local funds available for public infrastructure and facilities during the next ten years, and recommends the projects for expenditure of those funds during the next ten years for needed public infrastructure and facilities such as water, sewer, roads, and schools. The recommendation of those projects for public expenditure must be done through coordination with adjacent and relevant jurisdictions and agencies. For the purposes of this item, 'adjacent and relevant jurisdictions and agencies' means those counties, municipalities, public service districts, school districts, public and private utilities, transportation agencies, and other public entities that are affected by or have planning authority over the public project. For the purposes of this item, 'coordination' means written notification by the local planning commission or its staff to adjacent and relevant jurisdictions and agencies of the proposed projects and the opportunity for adjacent and relevant jurisdictions and agencies to provide comment to the planning commission or its staff concerning the proposed projects. Failure of the planning commission or its staff to identify or notify an adjacent or relevant jurisdiction or agency does not invalidate the local comprehensive plan and does not give rise to a civil cause of action."

PROCESS

To prepare the list of public infrastructure projects, County Departments were contacted and asked to provide a prioritized list of capital improvements based on needs identified in the Community Facilities and Transportation Elements as well as those facilities needed to maintain existing service levels and repair/replace obsolete or worn out facilities.

10-YEAR CAPITAL IMPROVEMENTS PLAN

The result of this process is a 10-year Capital Improvements Plan (CIP) (Appendix 12-A). The projects are listed by department, construction date, facility costs, and, where appropriate, annual operating expenses. Projected revenues are shown in Appendix 12-B. The detailed schedule of road projects is provided in Appendix 12-C. The projects in the 10-year CIP represent the best efforts of County departments to identify and prioritize capital needs to address existing deficiencies and future needs. The inclusion of projects in the 10-year CIP, however, does not connote de-facto approval of the items or their priorities. Further analysis, prioritization, and review of projects will need to occur prior to the actual implementation of the capital projects.

FUNDING GAP

Appendix B provides a comparison of capital project needs and projected revenues over the next 10 years. Table 12-1 summarizes the projected funding gap.

Table 12-1: Beaufort County Capital and Road Projects Projected 10-Year Funding Gap

	Projected Revenue[1]	Projected Cost[1]	Funding Gap[1]
County Capital Projects	$229,400	$365,800	$136,400
Road Projects	$360,200	$624,700	$264,500
Total	**$589,600**	**$990,500**	**$400,900**

[1] in thousands

The primary source of revenue for county capital projects are General Obligation Bonds (G.O. Bonds). G.O. Bonds are secured by the County's projected future property tax revenue stream. The State of South Carolina limits the amount that local governments can borrow through G.O Bonds to 8% of the assessed value of the County's taxable property. Beaufort County pays approximately $5 million annually toward existing debt and increases it's bonding capacity by about $5 million annually due to increases in assessed property value. Therefore, once the County exhausts its existing bonding capacity of $39 million, only an additional $10 million can be borrowed annually. To issue

bonds in excess of the 8 percent limitation would require the County to hold a referendum.

Impact fees are the other major revenue source for county capital projects. While Beaufort County has enacted impact fees for roads, parks and libraries, revenue from impact fees can only fund the cost the County will incur to provide capital improvements to accommodate new development. Impact fees cannot be used to address existing capital deficiencies. Impact fees also cannot be used to establish a higher level of service for future projects than what is currently being provided.

NEXT STEPS

Beaufort County department heads should continue to meet over the next year to further refine the Capital Improvements Plan. County staff will need to establish a methodology to prioritize capital improvements that are required to achieve and maintain desired levels of service and to repair and replace public facilities. County staff will also need to identify additional sources of revenue to fund the refined list of capital projects.

RECOMMENDATIONS

Recommendation 12-1: Determine Needed Capital Improvements

Beaufort County should establish a methodology to prioritize capital improvements required to achieve and maintain desired levels of service and to repair and replace public facilities. This methodology should take into account both capital costs and the cost to operate and maintain proposed capital improvements in order to achieve the best use of funds and potential overall cost savings.

- Beaufort County should set the relative priorities among types of public facilities as follows:
  - Priority 1 – New public facilities and improvements to existing facilities that eliminate public hazards.
  - Priority 2 – The repair, renovation or replacement of obsolete or worn out facilities that are necessary to achieve or maintain existing levels of service.
  - Priority 3 – New and expanded facilities that reduce or eliminate existing deficiencies in levels of service.
  - Priority 4 – New and expanded facilities necessary to serve new development and redevelopment projected during the next five years.

- Beaufort County shall develop and annually update a five-year Capital Improvements Program (CIP) that plans for needed capital facilities that are within the fiscal capability of the County.
- Beaufort County shall prepare as part of the annual budget process a Capital Improvements Budget (CIB) that lists appropriations for the capital improvements projects in the first year of the CIP.

Recommendation 12-2: Develop a Funding Strategy

Beaufort County should develop a coordinated funding strategy to fund needed capital projects. Possible future revenue sources may include, but are not limited to:

- G.O. Bonds: Seek Additional funding from G.O. bonds by holding a referendum to exceed the County's 8% bonding capacity;
- Impact Fees: Revise existing transportation, park, and library impact fees;
- Capital Projects Sales Tax: Hold a referendum to establish a 1% capital projects sales tax once the current tax expires; and
- Grants: Seek additional funding through private, state and federal grants.
- User Fees: Consider user fees for county services where appropriate or feasible.

Recommendation 12-3: Coordination with Other Agencies and Jurisdictions

Beaufort County shall coordinate the provision of capital improvements with other relevant agencies and jurisdictions.

- Beaufort County shall coordinate the provision of public facilities with municipalities in Beaufort County, surrounding counties and municipalities, and the Beaufort County School District.
- Beaufort County shall coordinate with the Beaufort-Jasper Water & Sewer Authority, the State Department of Transportation and other state agencies as necessary regarding proposed capital improvements.

Appendix 12-A: 10-Year Capital Improvements Plan

Item #	Title of Project	Item Cost	Project Rollup Cost	Priority	CIP Expenditures 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Funding Sources	Annual Operating Expenses: Salaries and Benefits	Facility O&M Cost	Total	Effective Date
	Public Safety																		
1	Public Safety Misc. Improvements		$1,383,866		$1,383,866														
	Detention Center - Create additional housing Capacity	$150,000		1												$0	$0	$0	
	Animal Control Improvements (Small Building)	$753,866		3												$0	$0	$0	
	Administration Building - Security improvements	$270,000		1												$0	$0	$0	
	Myrtle Park Bluffton Office - Security Improvements	$85,000		1												$0	$0	$0	
	Rear Chemical Storage Building (Up-Fits)	$25,000		2												$0	$0	$0	
	New Helicopter Hangar (Up-Fits)	$100,000		3												$0	$0	$0	
2	Courthouse - Security system replacement, exterior improvements	$1,100,000	$1,100,000	1	$1,100,000											$0	$0	$0	
3	Animal Shelter - Southern Beaufort County		$4,600,000			$4,600,000													
	Construction of a 24,000 sf Facility	$3,600,000		2												$558,000	$400,000	$958,000	2011
	Land (10 acres)	$1,000,000		2												$0	$0	$0	
4	Detention Center Expansion - Property		$3,000,000			$3,000,000													
	Purchase alternate housing site	$350,000		1												$0	$0	$0	
	Design of duplex apartment	$110,000		1												$0	$0	$0	
	Construction of duplex apartment	$1,716,000		1												$0	$0	$0	
	Buy Smith property	$300,000		1												$0	$0	$0	
	Relocate residents	$24,000		1												$0	$0	$0	
	Realign Marsh Drive	$250,000		1												$0	$0	$0	
	A&E Fees	$250,000		1												$0	$0	$0	
5	Detention Center Expansion - Construction		$10,000,000	1												$1,500,000	$500,000	$2,000,000	2014
	A&E Fees	$1,000,000				$1,000,000													
	Construction	$9,000,000					$9,000,000												
6	LEC, EM, EMS and MIS Complex @ $43,863,234																		
	24 Acres for LEC, EM, EMS and MIS Complex	$15,600,000	$15,600,000	1	$15,600,000														
	Demo & Site Work for LEC, EM, EMS and MIS Complex	$1,982,304	$1,982,304	1		$1,982,304													
	Construction 70,000 sf for LEC & EM Facility	$17,500,000	$17,500,000	1		$17,500,000										$60,000	$90,000	$150,000	2012
	Sheriff's Office (50,000 sf)																		
	Emergency Management Center (20,000 sf)																		
	Construction 35,000 sf for EMS & MIS Facility	$8,356,000	$8,356,000	1			$8,356,000												
	EMS (17,500 sf) - Relocation of Existing Facility															$0	$0	$0	2012
	MIS (17,500 sf) - Relocation of Existing Facility															$0	$50,000	$50,000	2012
	A&E Fees		$1,500,000	1															
	LEC	$1,000,000			$1,000,000														
	EMS	$500,000				$500,000													
	Sale of Depot Road Facility	($500,000)	($500,000)	1			($500,000)									$0	($50,000)	($50,000)	2012
	Arthur Horne Building		$2,450,000	1		$2,450,000													
	Building Improvements for Magistrates	$2,450,000														$0	$15,000	$15,000	2011
7	EMS Facilities within Fire Stations																		
	2010		$791,000			$791,000													
	EMS Station Palmetto Bluff - New Fire Station	$416,000		2												$346,856	$10,568	$357,424	2011
	EMS Station Lady's Island - LISH FD HQ Renovations	$375,000		2												$346,856	$10,188	$357,044	2011
	2014		$440,000							$440,000									
	EMS Station Burton Area - New Fire Station	$440,000		2												$348,581	$15,548	$364,129	2015
	Subtotal	$68,203,170																	
	DSN																		
8	DSN - Build 2 New CTH Homes North of the Broad River		$820,928		$820,928														
	Replacement of Ivy Lane CTH Home	$410,464		1												$0	$0	$0	2010
	Replacement of Broad River CTH Home	$410,464		1												$0	$0	$0	2010
9	DSN - Purchase 5 Apartments/Townhouses for Supported Living	$725,000	$725,000	2	$725,000										$1M from SCDDSN	$135,047	$30,293	$165,340	2011
															Remainder from				
10	DSN - Build 2 New CTH Homes in Bluffton		$842,928												Fed & State				
	Bluffton 1	$421,500		1		421,500									Grants & G.O.	$155,931	$79,607	$235,538	2011
	Bluffton 2	$421,428		2			421,428								Bonds	$155,931	$79,607	$235,538	2012

Appendix 12-A: 10-Year Capital Improvements Plan

Item #	Title of Project	Item Cost	Project Rollup Cost	Priority	CIP Expenditures 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Funding Sources	Annual Operating Expenses: Salaries and Benefits	Facility O&M Cost	Total	Effective Date
11	Administration Building / Program Building - Funded in 2008 CIP	$0	$0												2008 CIP	$140,000	$50,000	$190,000	2009
	Subtotal	$2,388,856																	
	Emergency Management																		
12	Misc. Improvements		$1,835,000			$1,835,000													
	TMC Cameras	$400,000		3												$0	$10,000	$10,000	2011
	Mobile Data Computer Replacements	$500,000		3												$0	$0	$0	2011
	ITS Camera Installation (Hurricane Evacuations)	$500,000		3												$0	$10,000	$10,000	2011
	Automatic Vehicle Locator	$435,000		3												$0	$49,500	$49,500	2011
13	Radio Central Control System Replacement, Phase I & II		$9,000,000																
	Phase I	$5,300,000		1		5,300,000										$0	$451,000	$451,000	2011
	Phase II	$3,700,000		1			$3,700,000									$0	$167,000	$167,000	2011
14	Computer Aided Dispatch (CAD) Replacement	$5,000,000	$5,000,000	1				$5,000,000											
15	Outdoor Warning System - Funded in 2008 CIP	$0	$0	1											2008 CIP	$0	$22,240	$22,240	2009
	Subtotal	$15,835,000																	
	Boat Landings																		
16	Boat Landings - 2009		$1,650,000		$1,650,000														
	White Hall Boat Landing - Parking Improvements	$750,000		2												$0	$1,000	$1,000	2010
	Port Royal Boat Landing - Parking Improvements	$750,000		2											DNR Funds /	$0	$1,000	$1,000	2010
	Alljoy Boat Landing - Float/dock system improvements	$150,000		2											G.O. Bonds	$0	$1,000	$1,000	2010
17	Boat Landings - 2010		$650,000			$650,000													
	White Hall Boat Landing - Ramp/Float/Dock Improvements	$325,000		2											DNR Funds /	$0	$1,000	$1,000	2011
	Wallace Creek Boat Landing - Ramp/Float/Dock	$325,000		2											G.O. Bonds	$0	$1,000	$1,000	2011
18	Boat Landings - 2011		$1,975,000				$1,975,000												
	Station Creek Boat Landing - Ramp/Float/Dock	$150,000		2												$0	$1,000	$1,000	2012
	Hilton Head Island - New Facility	$1,500,000		3											DNR Funds /	$0	$1,000	$1,000	2012
	C.C. Haigh Jr. Boat Landing - Ramp/Float/Dock	$325,000		2											G.O. Bonds	$0	$1,000	$1,000	2012
19	Boat Landings - 2012		$3,250,000					$3,250,000											
	Alljoy Boat Landing - Parking Improvements	$1,000,000		2												$0	$1,000	$1,000	2013
	Lady's Island (Whitehall) Boat Landing - Parking Improvements	$750,000		2												$0	$1,000	$1,000	2013
	Fort Frederick Access Road Improvements	$750,000		2											DNR Funds /	$0	$1,000	$1,000	2013
	Sands Boat Landing - Parking Improvements	$750,000		2											G.O. Bonds	$0	$1,000	$1,000	2013
20	Boat Landings - 2013		$3,000,000						$3,000,000										
	May River Boat Landing - New Facility	$1,800,000		3											DNR Funds /	$0	$1,000	$1,000	2014
	Station Creek Boat Landing - Parking Improvements	$1,200,000		2											G.O. Bonds	$0	$1,000	$1,000	2014
21	Boat Landings - 2014		$2,600,000							$2,600,000									
	Broad River Boat Landing - New Facility	$2,000,000		3											DNR Funds /	$0	$1,000	$1,000	2015
	Sams Point Boat Landing - Parking Improvements	$600,000		2											G.O. Bonds	$0	$1,000	$1,000	2015
22	Boat Landings - 2015		$2,850,000								$2,850,000								
	New River Boat Landing - New Facility	$1,500,000		3												$0	$1,000	$1,000	2016
	Brickyard Point Boat Landing - Parking Improvements	$600,000		2											DNR Funds /	$0	$1,000	$1,000	2016
	Russ Point Boat Landing - Parking Improvements	$750,000		2											G.O. Bonds	$0	$1,000	$1,000	2016
23	Boat Landings - 2016		$3,050,000									$3,050,000							
	Okatie River - New Facility (Access from SC 170)	$750,000		3												$0	$1,000	$1,000	2017
	Grays Hill Boat Landing - Parking Improvements	$800,000		2											DNR Funds /	$0	$1,000	$1,000	2017
	Combahee Boat Landing - New Facility	$1,500,000		3											CIP G.O. Bonds	$0	$1,000	$1,000	2017
24	Boat Landings - 2017		$2,500,000										$2,500,000						
	Warsaw Island Boat Landing - New Facility	$1,000,000		3											DNR Funds /	$0	$1,000	$1,000	2018
	Village or Coffin Creek - New Facility	$1,500,000		3											G.O. Bonds	$0	$1,000	$1,000	2018
	Subtotal	$21,525,000																	
	Public Works																		
25	PW - CIP		$2,442,000																
	Storm Water Utility - New Addition	$227,000		2	$227,000										Stormwater Utility	$0	$0	$0	2010
	Grounds Maintenance - New Office Building	$340,000		2	$340,000										G.O. Bonds	$0	$0	$0	2010
	Public Works Office - Expansion / Improvements	$825,000		2		$825,000									G.O. Bonds	$0	$4,500	$4,500	2011

Appendix 12-A: 10-Year Capital Improvements Plan

Item #	Title of Project	Item Cost	Project Rollup Cost	Priority	CIP Expenditures 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Funding Sources	Annual Operating Expenses: Salaries and Benefits	Facility O&M Cost	Total	Effective Date
	Grounds Maintenance - New Storage / Equipment Shed	$125,000		2		$125,000									G.O. Bonds	$0	$1,000	$1,000	2011
	General Support / Roads & Drainage North - New Office	$340,000		3				$340,000							G.O. Bonds	$0	$3,000	$3,000	2013
	Facility Maintenance - New Workshop / Warehouse	$230,000		2				$230,000							G.O. Bonds	$0	$0	$0	2013
	Grounds Maintenance - Burton Wells Maintenance Shed	$145,000		3						$145,000					G.O. Bonds	$0	$500	$500	2015
	Public Works South Office - Addition / Improvements	$210,000		2						$210,000					G.O. Bonds	$0	$0	$0	2015
26	Regional Solid Waste Transfer Facility																		
	Land		$1,525,000			$1,525,000													
	Property Acquisition (20 Acres @ 50,000 / Acre)	$1,000,000		2											G.O. Bonds	$0	$0	$0	2011
	Pre-Development Costs	$525,000		2											G.O. Bonds	$0	$0	$0	2011
	Construction & Equipment		$4,726,375				$4,726,375												
	Constructing Transfer Station	$2,200,000		3											G.O. Bonds	$120,000	$0	$120,000	2012
	(Reduced Disposal Fees will Offset O&M)																		
	Constructing MRF	$1,100,000		2											G.O. Bonds	$120,000	$0	$120,000	2012
	(Revenue Generated will Offset O&M)																		
	Equipping Transfer Station	$1,026,375		3											G.O. Bonds	$0	$0	$0	2012
	Equipping MRF	$400,000		2											G.O. Bonds	$0	$0	$0	2012
27	Modernization of 3 Convenience Centers		$1,000,000																
	St. Helena Facility	$333,333		2						$333,333					G.O. Bonds	$0	$0	$0	2015
	Hilton Head Facility	$333,333		2							$333,333				G.O. Bonds	$0	$0	$0	2016
	Simmonsville Facility	$333,334		2								$333,334			G.O. Bonds	$0	$0	$0	2017
	Subtotal	$9,693,375																	
	Libraries																		
28	Beaufort Library		$2,379,760		$2,379,760														
	Renovation - Beaufort Br. Phase II	1,189,880		1											G.O. Bonds	$0	$0	$0	2010
	Renovation - Beaufort Br. Phase I	1,189,880		1											G.O. Bonds	$0	$0	$0	2010
29	New Regional Library - N. Beaufort Co. (St. Helena)	$7,170,000	$7,170,000	1	$7,170,000										See Note below title	$396,000	$355,000	$751,000	2010
	Note: Funding Sources: Impact Fees Grants G.O. Bonds & Donations																		
30	Lobeco - New Branch		$2,309,140										$2,309,140			$102,615	$112,385	$215,000	2018
	Renovation and Add-on	$2,009,140		2											25% Impact Fees 75% G.O. Bonds				
	Land Purchase	$300,000		2															
31	Pritchardville - New Branch		$10,520,000						$10,520,000							$496,000	$355,000	$851,000	2014
	Land Purchase	$2,000,000		1															
	Development & Construction Cost	$8,520,000		1															
32	Okatie - New Branch		$10,520,000							$10,520,000						$496,000	$355,000	$851,000	2015
	Land Purchase	$2,000,000		2															
	Development & Construction Cost	$8,520,000		2															
33	Lady's Island - New Branch		$8,400,000									$8,400,000			25% Impact Fees 75% G.O. Bonds	$496,000	$355,000	$851,000	2017
	Land Purchase	$2,000,000		2															
	Development & Construction Cost	$6,400,000		2															
34	Hilton Head Island - New Branch (Renovation and Add-on)	$10,700,000	$10,700,000	2				$10,700,000								$0	$331,875	$331,875	2013
35	Burton Wells		$16,950,000	1		$16,950,000													
	New Branch	$14,500,000														$567,740	$654,535	$1,222,275	2011
	Move Tech Office, Admin & IT	$2,450,000														$0	$77,725	$77,725	2011
36	Renovation at Beaufort Library Phase III		$5,200,000				$5,200,000								G.O. Bonds	$0	$0	$0	2012
	Renovation and Add-on	$4,000,000		1															
	Parking																		
	Land Cost	$200,000		1															
	Facility (50 spaces)	$1,000,000		1															
	Subtotal	$74,148,900																	
	Administrative Office Space																		
37	South County General Administration Building																		
	Land (5 acres)	$1,000,000	$1,000,000	1	$1,000,000										G.O. Bonds/ Lease Revenue				
	Construction of 31,798 sf Facility	$7,154,550	$7,154,550	1		$7,154,550										$0	($38,000)	($38,000)	2011
	Current Lease: $338,000 - New Operating Cost: $300,000																		
	Net Operational Difference: (38,000)																		
	Construction of 97,908 sf Addition or Facility	$22,029,300	$22,029,300	3							$22,029,300				G.O. Bonds	$7,300,000	$1,900,000	$9,200,000	2016

Appendix 12-A: 10-Year Capital Improvements Plan

Item #	Title of Project	Item Cost	Project Rollup Cost	Priority	CIP Expenditures 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Funding Sources	Annual Operating Expenses: Salaries and Benefits	Facility O&M Cost	Total	Effective Date
38	South County Human Services Building														G.O. Bonds/ Lease Revenue				
	Land (5 acres)	$1,000,000	$1,000,000	3									$1,000,000						
39	Construction of 60,000 sf Facility	$13,500,000	$13,500,000	3										$13,500,000	G.O. Bonds	$0	$0	$0	2019
40	Voter Registration / Warehouse BIV #6		$1,750,000			$1,750,000									G.O. Bonds	$0	($30,000)	($30,000)	2011
	Construction of 10,000 sf Facility	$1,750,000		2															
	Current O&M: $50,000 - Projected O&M: $20,000																		
	Net Operational Difference: (30,000)																		
	Subtotal	$46,433,850																	
	Planning																		
41	Fishing Village - Option Selection and Cost Development TBD	$4,200,000	$4,200,000	3					$4,200,000						G.O. Bonds	Offset by Revenues		Creates Revenue	2014
	Subtotal	$4,200,000																	
	PALS - South																		
42	Buckwalter Park - One Year Soccer Field and Light 3	$1,500,000	$1,500,000	1	$1,500,000										G.O. / Imp. fees	$0	$35,000	$35,000	2010
43	Buckwalter Park - Complete Rec Center	$2,300,000	$2,300,000	1	$2,300,000										G.O. / Imp. fees	$70,000	$50,000	$120,000	2010
44	Buckwalter Park - Aquatics Center	$5,000,000	$5,000,000	1		$5,000,000									G.O. / Imp. fees	$350,000	$110,000	$460,000	2011
45	Buckwalter Park - Baseball Complex	$5,800,000	$5,800,000	1			$5,800,000								G.O. / Imp. fees	$70,000	$45,000	$115,000	2012
46	Develop Camp St. Marys	$4,500,000	$4,500,000	2				$4,500,000							G.O. / Imp. fees	$70,000	$60,000	$130,000	2013
47	Purchase 25 Acres in Okatie	$1,900,000	$1,900,000	2					$1,900,000						G.O. / Imp. fees	$35,000	$35,000	$70,000	2014
48	Develop Daufuskie Park	$1,400,000	$1,400,000	2															
49	Okatie Park Development	$5,000,000	$5,000,000	2						$5,000,000					G.O. / Imp. fees	$70,000	$25,000	$95,000	2015
50	Develop Jones Tract Park	$5,000,000	$5,000,000	2							$5,000,000				G.O. / Imp. fees	$70,000	$25,000	$95,000	2016
51	Develop Okatie Preserve	$4,000,000	$4,000,000	2								$4,000,000			G.O. / Imp. fees	$105,000	$15,000	$120,000	2017
52	Buckwalter Tennis Center	$2,500,000	$2,500,000	3									$2,500,000		G.O. Bonds	Leased Facility / No Cost			2018
53	Complete Buckwalter Passive Areas	$2,000,000	$2,000,000	3										$2,000,000	G.O. / Imp. fees	$35,000	$10,000	$45,000	2019
54	Develop Altamaha		$450,000											$450,000		$35,000	$10,000	$45,000	2019
	Phase I	$450,000		3											State Funds Donor Funds G.O. Bonds				
	Phase II	TBD		3															
	Subtotal	$41,350,000																	
	PALS - North																		
55	Lady's Island Park Development (Crystal Lake - land)	$1,500,000	$1,500,000	1	$1,500,000										G.O. / Imp. fees	$150,000	$75,000	$225,000	2010
56	Improvements to Existing Facilities		$1,000,000		$1,000,000														
	Bladen Street Tennis Courts - Lights	$150,000		2											G.O. Bonds	$0	$0	$0	2010
	Bladen Street Tennis Courts - Resurfacing	$500,000		2											G.O. Bonds	$0	$0	$0	2010
	Indoor Pools Resurfacing	$200,000		2											G.O. Bonds	$0	$0	$0	2010
	Mink Point Center Improvements	$150,000		2											G.O. Bonds	$0	$0	$0	2010
57	Lady's Island Community Park Phase I	$1,000,000	$1,000,000	1	$1,000,000										G.O. Bonds	$100,000	$125,000	$225,000	2010
58	Improvements to Existing Facilities		$1,000,000			$1,000,000									G.O. Bonds	$0	$0	$0	2011
	Agnes Major Center Expansion	$500,000		2															
	Scott Center Restroom / Picnic Shelter	$200,000		2															
	Greene Street Center Parking Lot Resurfacing	$100,000		2															
	Gloria Potts' Center Restroom & Picnic Shelter	$200,000		2															
59	Fort Fremont Park Phase II Ranger Station / RR	$1,100,000	$1,100,000	3		$1,100,000									G.O. Bonds	$150,000	$75,000	$225,000	2011
60	Lady's Island Community Park Phase II	$1,000,000	$1,000,000	1		$1,000,000									G.O. / Impact 30%	$0	$0	$0	2011

Appendix 12-A: 10-Year Capital Improvements Plan

Item #	Title of Project	Item Cost	Project Rollup Cost	Priority	CIP Expenditures										Funding Sources	Annual Operating Expenses			
					2009	2010	2011	2012	2013	2014	2015	2016	2017	2018		Salaries and Benefits	Facility O&M Cost	Total	Effective Date
61	Burton Wells Phase III (Adult Complex)	$2,200,000	$2,200,000	2			$2,200,000								G.O. Bonds	$0	$25,000	$25,000	2012
62	St. Helena Park Expansion	$1,600,000	$1,600,000	2				$1,600,000							G.O. / Impact 25%	$85,000	$50,000	$135,000	2013
63	Lady's Island Community Park Phase III	$1,800,000	$1,800,000	1					$1,800,000						CIP / Impact 25%	$0	$25,000	$25,000	2014
64	Burton Wells Tennis Complex	$1,500,000	$1,500,000	3						$1,500,000					G.O. Bonds	$75,000	$50,000	$125,000	2015
65	Grays Hill Neighborhood Park	$1,700,000	$1,700,000	3							$1,700,000				G.O. / Impact 25%	$85,000	$50,000	$135,000	2016
66	Lands End Neighborhood Park	$1,700,000	$1,700,000	3							$1,700,000				G.O. / Impact	$85,000	$50,000	$135,000	2016
67	Lobeco Community Park	$1,200,000	$1,200,000	2								$1,200,000			G.O. / Impact	$85,000	$50,000	$135,000	2017
68	Castle Rock / Jericho Park	$2,400,000	$2,400,000	3									$2,400,000		G.O. / Impact 25%	$85,000	$50,000	$135,000	2018
69	Gloria Potts' Park Expansion	$1,100,000	$1,100,000	2										$1,100,000	G.O. Bonds	$0	$25,000	$25,000	2019
70	Burton Wells Park Phase IV (Road) Necessary to Accommodate New Library	$1,500,000	$1,500,000	1		$1,500,000									G.O. Bonds	$0	$5,000	$5,000	2011
	Subtotal	$23,300,000																	
	Hilton Head Island Airport																		
71	Tree Obstruction Removal / Mitigation (South)	$1,000,000	$1,000,000	1	$1,000,000										95% FAA Grants 2.5% State Grants 2.5% Airport Enterprise Fund	$0	$5,000	$5,000	2010
72	New Aircraft Rescue & Fire Fighting Station	$1,300,000	$1,300,000	1	$1,300,000											$0	$10,000	$10,000	2010
73	Tree Obstruction Removal / Mitigation (North)	$4,000,000	$4,000,000	1		$4,000,000										$0	$15,000	$15,000	2011
74	Air Carrier Terminal Expansion / Renovations	$1,500,000	$1,500,000	2		$1,500,000										$0	$10,000	$10,000	2011
75	Tree Obstruction Removal / Mitigation (Sides)	$2,000,000	$2,000,000	1			$2,000,000									$0	$7,500	$7,500	2012
76	Commercial Terminal Automobile Parking Expansion	$1,400,000	$1,400,000	2			$1,400,000									$0	$3,000	$3,000	2012
77	New Taxiways / Apron Expansion / Heliport	$2,800,000	$2,800,000	2				$2,800,000								$0	$5,000	$5,000	2013
78	Land Acquisition (Dillon Road)	$1,700,000	$1,700,000	3					$1,700,000							$0	$0	$0	2014
79	Precision Approach (ILS) Equipment Installation	$3,000,000	$3,000,000	2						$3,000,000						$0	$15,000	$15,000	2015
80	Runway / Taxiway Rehabilitation	$5,000,000	$5,000,000	2							$5,000,000					$0	$0	$0	2016
81	Aircraft Hangars	$2,500,000	$2,500,000	2								$2,500,000				$0	$15,000	$15,000	2017
82	Land Acquisition (Summit Drive)	$9,000,000	$9,000,000	3									$9,000,000			$0	$0	$0	2018
	Subtotal	$35,200,000																	
	Beaufort County Airport (at Lady's Island)																		
83	Tree Obstruction Removal / Mitigation	$1,000,000	$1,000,000	1	$1,000,000										95% FAA Grants 2.5% State Grants 2.5% Airport Enterprise Fund	$0	$1,000	$1,000	2010
84	Runway Overlay / Widening / Grooving	$1,900,000	$1,900,000	1		$1,900,000										$0	$0	$0	2011
85	Parking Lot Relocation / Sanitary Sewer	$1,000,000	$1,000,000	1			$1,000,000									$0	$3,600	$3,600	2012
86	Parallel Taxiway / Apron Expansion / Heliport	$1,800,000	$1,800,000	2				$1,800,000								$0	$5,000	$5,000	2013
87	Runway Extension	$15,000,000	$15,000,000	2					$15,000,000							$0	$5,000	$5,000	2014
88	Terminal Expansion	$1,400,000	$1,400,000	2						$1,400,000						$0	$8,000	$8,000	2015
89	Apron Expansion / Fuel Farm Upgrade	$1,300,000	$1,300,000	2							$1,300,000					$0	$3,000	$3,000	2016
90	Aircraft Hangars	$1,500,000	$1,500,000	2								$1,500,000				$0	$10,000	$10,000	2017
	Subtotal	$24,900,000																	
	NON-ROAD TOTALS	$367,178,151	$367,178,151		$43,998,563	$85,361,364	$45,280,814	$30,222,012	$38,122,013	$25,150,347	$39,914,648	$20,985,350	$19,711,157	$17,052,018		$15,651,557	$7,648,171	$23,299,728	

Appendix 12-B: 10-Year CIP Projected Revenues

Projected County Capital Project Revenues	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
Existing Debt Capacity	$39,003,390										**$39,003,390**
New Debt Capacity resulting from annual debt payments	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	**$50,000,000**
New Debt Capacity resulting from increases in assessed value	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	**$50,000,000**
Federal and State Grants for Airport Capital Facilities	$3,300,000	$7,400,000	$4,400,000	$4,600,000	$16,700,000	$4,400,000	$6,300,000	$4,000,000	$9,000,000	$0	**$60,100,000**
Library Impact Fees	$0	$4,237,500	$0	$2,675,000	$2,630,000	$2,630,000	$0	$2,100,000	$577,285	$0	**$14,849,785**
Park Impact Fees (Northern Beaufort County)	$1,140,000	$1,500,000	$174,000	$1,350,000	$570,000	$1,500,000	$1,500,000	$1,200,000	$750,000	$735,000	**$10,419,000**
Park Impact Fees (Southern Beaufort County)	$0	$600,000	$660,000	$480,000	$540,000	$450,000	$1,020,000	$360,000	$720,000	$220,000	**$5,050,000**
TOTAL COUNTY CAPITAL PROJECT REVENUES	**$53,443,390**	**$23,737,500**	**$15,234,000**	**$19,105,000**	**$30,440,000**	**$18,980,000**	**$18,820,000**	**$17,660,000**	**$21,047,285**	**$10,955,000**	**$229,422,175**
TOTAL COUNTY CAPITAL PROJECT EXPENSES	**$43,998,563**	**$85,361,364**	**$45,280,814**	**$30,222,012**	**$38,122,013**	**$25,150,347**	**$39,914,648**	**$20,985,350**	**$19,711,157**	**$17,052,018**	**$365,798,286**
COUNTY CAPITAL PROJECT SURPLUS/(DEFICIT)	**$9,444,827**	**($61,623,864)**	**($30,046,814)**	**($11,117,012)**	**($7,682,013)**	**($6,170,347)**	**($21,094,648)**	**($3,325,350)**	**$1,336,128**	**($6,097,018)**	**($136,376,111)**

Projected Transportation Project Revenues	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
Sales Tax	$150,000	$7,100,000	$14,325,000	$26,050,000	$43,960,000	$40,450,000	$20,040,000	$0	$0	$0	**$152,075,000**
South County Road Impact Fees	$800,000	$1,300,000	$5,700,000	$12,200,000	$9,990,000	$15,100,000	$9,835,000	$8,325,000	$6,000,000	$0	**$69,250,000**
North County Road Impact Fees	$1,342,750	$2,387,750	$2,780,000	$3,210,000	$4,000,000	$2,700,000	$2,400,000	$1,500,000	$1,000,000	$0	**$21,320,500**
Congressional Earmark	$394,000	$14,896,000	$4,090,000	$2,810,000	$8,510,000	$0	$0	$0	$0	$0	**$30,700,000**
Guideshare/SCDOT	$500,000	$13,225,000	$23,325,000	$39,700,000	$700,000	$700,000	$700,000	$0	$0	$0	**$78,850,000**
Tag-CTC Funds	$40,000	$0	$0	$210,000	$0	$0	$0	$0	$0	$0	**$250,000**
Enhancement Grants	$0	$0	$200,000	$0	$0	$0	$0	$0	$0	$0	**$200,000**
Town of Hilton Head Island	$0	$0	$500,000	$300,000	$300,000	$0	$0	$0	$0	$0	**$1,100,000**
Traffic Mitigation	$93,000	$0	$0	$550,000	$140,000	$300,000	$350,000	$300,000	$0	$0	**$1,733,000**
Admissions Fees	$0	$0	$985,000	$1,700,000	$300,000	$300,000	$0	$0	$0	$0	**$3,285,000**
Additional Revenues	$0	$0	$0	$0	$0	$0	$760,000	$700,000	$0	$0	**$1,460,000**
TOTAL ROAD PROJECT REVENUES	**$3,319,750**	**$38,908,750**	**$51,905,000**	**$86,730,000**	**$67,900,000**	**$59,550,000**	**$34,085,000**	**$10,825,000**	**$7,000,000**	**$0**	**$360,223,500**
TOTAL ROAD PROJECT EXPENSES	**$52,010,000**	**$86,730,000**	**$67,900,000**	**$61,250,000**	**$46,535,000**	**$56,775,000**	**$76,500,000**	**$74,000,000**	**$56,000,000**	**$47,000,000**	**$624,700,000**
ROAD PROJECT SURPLUS/(DEFICIT)	**($48,690,250)**	**($47,821,250)**	**($15,995,000)**	**$25,480,000**	**$21,365,000**	**$2,775,000**	**($42,415,000)**	**($63,175,000)**	**($49,000,000)**	**($47,000,000)**	**($264,476,500)**

Source:Beaufort County Controller; Beaufort County Engineering Department

Appendix 12-C: 2007 Road CIP Schedule

Project Number	Project Name	FY 08/09				FY 09/10				FY 10/11				FY11/12				FY 12/13			
		PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals
1	US 17 Widening	$300,000	$0	$23,550,000	$23,850,000	$0	$0	$40,000,000	$40,000,000	$0	$0	$1,000,000	$1,000,000	$0	$0	$1,000,000	$1,000,000	$0	$0	$0	$0
2	US 278 Signal System & ITS Architecture Plan & Street Lighting	$200,000	$0	$220,000	$420,000	$0	$0	$120,000	$120,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	Burnt Church Road Phase 1 Widening	$0	$0	$1,470,000	$1,470,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	SC 46 Widening[10]	$0	$0	$3,300,000	$3,300,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	US 21/SC 802 Connector	$0	$750,000	$750,000	$1,500,000	$0	$0	$3,460,000	$3,460,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
6	Bluffton Parkway Phase 5A and 5B	$400,000	$4,000,000	$0	$4,400,000	$400,000	$5,000,000	$7,600,000	$13,000,000	$0	$0	$20,000,000	$20,000,000	$0	$0	$20,000,000	$20,000,000	$0	$0	$0	$0
7	Squire Pope Rd/US 278	$0	$0	$680,000	$680,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
8	US 21 (Boundary Street) Improvements & Parallel Road	$750,000	$1,000,000	$0	$1,750,000	$550,000	$4,000,000	$500,000	$5,050,000	$250,000	$3,000,000	$3,500,000	$6,750,000	$100,000	$0	$3,650,000	$3,750,000	$100,000	$0	$4,000,000	$4,100,000
9	SC 802 (Ribaut Road) Improvements	$0	$0	$1,640,000	$1,640,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	US 278 (W.H. Pkwy) Resurfacing	$0	$0	$1,600,000	$1,600,000	$0	$0	$1,500,000	$1,500,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
11	US 278 Frontage Roads	$300,000	$1,000,000	$250,000	$1,550,000	$150,000	$1,500,000	$1,050,000	$2,700,000	$100,000	$1,500,000	$1,900,000	$3,500,000	$50,000	$500,000	$1,850,000	$2,400,000	$0	$0	$2,250,000	$2,250,000
12	Simmonsville Road Widening	$0	$1,500,000	$2,000,000	$3,500,000	$0	$0	$3,300,000	$3,300,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
13	US 21/SC 802 Widening & Savannah Hwy Widening	$750,000	$500,000	$0	$1,250,000	$750,000	$2,000,000	$3,000,000	$5,750,000	$0	$3,500,000	$10,000,000	$13,500,000	$0	$0	$13,000,000	$13,000,000	$0	$0	$8,450,000	$8,450,000
14	US 278 Widening, Phase2&3	$800,000	$500,000	$0	$1,300,000	$800,000	$2,500,000	$0	$3,300,000	$450,000	$3,000,000	$8,000,000	$11,450,000	$0	$0	$10,000,000	$10,000,000	$0	$0	$13,350,000	$13,350,000
15	SC 170 Widening	$0	$2,700,000	$0	$2,700,000	$700,000	$2,000,000	$3,900,000	$6,600,000	$0	$1,000,000	$8,000,000	$9,000,000	$0	$0	$7,200,000	$7,200,000	$0	$0	$0	$0
16	US 21 Business Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$500,000	$0	$0	$500,000	$0	$1,000,000	$0	$1,000,000
17	Malphrus Road/US 278 & Foreman Hill Road Connection	$0	$0	$0	$0	$50,000	$250,000	$0	$300,000	$0	$0	$1,200,000	$1,200,000	$0	$0	$0	$0	$0	$0	$2,260,000	$2,260,000
18	Northern Beaufort ByPass	$500,000	$0	$0	$500,000	$1,000,000	$0	$0	$1,000,000	$1,000,000	$0	$0	$1,000,000	$0	$1,500,000	$0	$1,500,000	$0	$2,000,000	$0	$2,000,000
19	SC 170 Robert Smalls Parkway	$50,000	$100,000	$150,000	$300,000	$50,000	$100,000	$500,000	$650,000	$0	$0	$500,000	$500,000	$0	$0	$400,000	$400,000	$250,000	$0	$0	$250,000
20	Old Miller Road Extension	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$100,000	$0	$0	$100,000	$25,000	$150,000	$500,000	$675,000
21	Transit Service (LRTA)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
22	Joe Frazier Road Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$200,000	$0	$0	$200,000	$50,000	$250,000	$0	$300,000
23	Sam's Point Rd/Brickyard/Holly Hall Intersection	$0	$50,000	$250,000	$300,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
24	US 278 Widening, Phase 4	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
25	Bluffton Parkway, Phase 6	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,000,000	$0	$0	$2,000,000
26	Buck Island Road Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$500,000	$0	$0	$500,000
27	Bruin Road Extension	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$200,000	$0	$0	$200,000	$200,000	$500,000	$0	$700,000
28	Burnt Church Road Widening Phase 2	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
29	Western Beaufort ByPass	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
30	US 21 Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
31	Midtown Drive & Broad River Drive Connection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	US 278 Bridge Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
33	SC46/SC170 Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
34	Robert Smalls to Ribaut Rd Connector	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
35	Commerce Park Roadway Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$250,000	$250,000	$0	$500,000	$0	$0	$1,000,000	$1,000,000
36	Beaufort-Yemassee Rail-Trail	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$500,000	$0	$0	$500,000	$200,000	$1,000,000	$6,500,000	$7,700,000
	TOTALS	$4,050,000	$12,100,000	$35,860,000	$52,010,000	$4,450,000	$17,350,000	$64,930,000	$86,730,000	$1,800,000	$12,000,000	$54,100,000	$67,900,000	$1,900,000	$2,250,000	$57,100,000	$61,250,000	$3,325,000	$4,900,000	$38,310,000	$46,535,000

Appendix 12-C: 2007 Road CIP Schedule

Project Number	Project Name	FY 13/14				FY 14/15				FY 15/16				FY 16/17				FY 17/18				TOTALS
		PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals	
1	US 17 Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$92,000,000
2	US 278 Signal System & ITS Architecture Plan & Street Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,100,000
3	Burnt Church Road Phase 1 Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,200,000
4	SC 46 Widening [9]	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,000,000
5	US 21/SC 802 Connector	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,515,500
6	Bluffton Parkway Phase 5A and 5B	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$60,000,000
7	Squire Pope Rd/US 278	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,000,000
8	US 21 (Boundary Street) Improvements & Parallel Road	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$22,000,000
9	SC 802 (Ribaut Road) Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,265,000
10	US 278 (W.H. Pkwy) Resurfacing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,700,000
11	US 278 Frontage Roads	$0	$0	$1,000,000	$1,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$13,600,000
12	Simmonsville Road Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$8,000,000
13	US 21/SC 802 Widening & Sevannah Hwy Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$42,700,000
14	US 278 Widening, Phase2&3	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$40,000,000
15	SC 170 Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$26,200,000
16	US 21 Business Improvements	$0	$0	$5,000,000	$5,000,000	$0	$0	$5,000,000	$5,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$11,593,000
17	Malphrus Road/US 278 & Foreman Hill Road Connection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,800,000
18	Northern Beaufort ByPass	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,000,000
19	SC 170 Robert Smalls Parkway	$150,000	$1,000,000	$0	$1,150,000	$0	$1,000,000	$2,000,000	$3,000,000	$0	$0	$2,000,000	$2,000,000	$0	$0	$2,000,000	$2,000,000	$0	$0	$2,000,000	$2,000,000	$12,400,000
20	Old Miller Road Extension	$0	$0	$225,000	$225,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,000,000
21	Transit Service (LRTA)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
22	Joe Frazier Road Improvements	$0	$0	$1,500,000	$1,500,000	$0	$0	$2,000,000	$2,000,000	$0	$0	$1,000,000	$1,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$5,000,000
23	Sam's Point Rd/Brickyard/Holly Hall Intersection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$360,000
24	US 278 Widening, Phase 4	$1,000,000	$1,000,000	$0	$2,000,000	$0	$1,000,000	$3,000,000	$4,000,000	$0	$0	$5,000,000	$5,000,000	$0	$0	$5,000,000	$5,000,000	$0	$0	$0	$0	$16,000,000
25	Bluffton Parkway, Phase 6	$0	$3,000,000	$5,000,000	$8,000,000	$0	$0	$15,000,000	$15,000,000	$0	$0	$15,000,000	$15,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$40,000,000
26	Buck Island Road Widening	$0	$2,000,000	$0	$2,000,000	$0	$0	$3,000,000	$3,000,000	$0	$0	$2,500,000	$2,500,000	$0	$0	$0	$0	$0	$0	$0	$0	$8,000,000
27	Bruin Road Extension	$100,000	$0	$6,000,000	$6,100,000	$0	$0	$6,000,000	$6,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,000,000
28	Burnt Church Road Widening Phase 2	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
29	Western Beaufort ByPass	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
30	US 21 Widening				$0	$1,500,000	$3,500,000	$5,000,000	$10,000,000			$10,000,000	$10,000,000			$10,000,000	$10,000,000			$10,000,000	$10,000,000	$40,000,000
31	Midtown Drive & Broad River Drive Connection				$0	$100,000	$300,000	$100,000	$500,000			$500,000	$500,000				$0				$0	$1,000,000
32	US 278 Bridge Widening	$5,000,000	$5,000,000	$15,000,000	$25,000,000			$25,000,000	$25,000,000			$35,000,000	$35,000,000			$35,000,000	$35,000,000			$35,000,000	$35,000,000	$155,000,000
33	SC46/SC170 Widening				$0				$0	$0	$0	$0	$0			$0	$0				$0	$0
34	Robert Smalls to Ribaut Rd Connector				$0	$1,000,000	$2,000,000		$3,000,000			$3,000,000	$3,000,000			$4,000,000	$4,000,000				$0	$10,000,000
35	Commerce Park Roadway Improvements			$1,000,000	$1,000,000				$0				$0				$0				$0	$2,500,000
36	Beaufort-Yemassee Rail-Trail			$1,800,000	$1,800,000				$0				$0				$0				$0	$10,000,000
	TOTALS	$6,250,000	$12,000,000	$36,525,000	$56,775,000	$2,600,000	$7,800,000	$66,100,000	$76,500,000	$0	$0	$74,000,000	$74,000,000	$0	$0	$56,000,000	$56,000,000	$0	$0	$47,000,000	$47,000,000	$666,933,500

Appendix 4-A
Dale Community Preservation Plan

Purpose

The Dale Community Plan is designed to serve as a general guide for the development of the community. It addresses land use, recreational opportunities, traffic circulation and design. As a policy document, appended to the County's Comprehensive Plan, this plan is to be used to guide zoning, subdivision, facilities funding and design, and community development decisions made by government officials and agencies. The Dale Community Plan serves as a foundation and the structure upon which more detailed policies, standards and master plans may be developed.

Process

The solutions to the issues, which this plan analyzes, have emerged as a result of a continuing dialogue with a wide range of participants, which began a year ago. The goal and activities represent the creativity of Dale residents.

Listed below are the goals and actions derived from the many issues debated during the Dale Community Preservation planning process. The goals reflect what Dale residents believe will help to build the community. Through a series of public meetings Dale residents identified important issues to be addressed, each related primarily to the issue of growth and land use. The fundamental question was how to accommodate growth while maintaining the character of the community. Specifically the Dale community had concerns about and asked the CP committee to consider the following:

1. What mix of land uses and development densities are desirable?
2. What kinds of businesses are most appropriate and where should they be located?
3. How can we improve recreational opportunities?
4. How do we establish safe connections to activity areas such as the school and the store?
5. What is the potential for passive recreational facilities and improvements at Wimbee Landing Creek?

Based on the information gathered and detailed questions posed by the community, four key areas of concern emerged: land use, recreational opportunities, traffic circulation and design.

Goals and Actions

General Land Use Goals: Ensure that new development and redevelopment maintains and enhances the character of Dale.

- Provide access to local commercial services by developing a mixed used district along Keans Neck Road that encourages the integration of residential, commercial, civic and public uses.

- Permit commercial uses at a scale that maintains compatibility with residential uses; require new buildings to respect the character of the community.
- Maintain diversity in the type and the character of development and promote various opportunities in the type and the cost of housing.
- Prohibit Planned Communities on sites adjacent to Keans Neck Road.
- Develop an appropriate sign ordinance for the Dale area.
- Identify future needs and requirements for public facilities and lands.
- Pursue available funding sources at the State and the Federal levels to provide for public services and facilities.

Parks and Recreation Goals: Provide recreational opportunity through the use of a quality park system utilizing county, school district and private resources. Recreation facilities should be safe and of a high quality.

- Make a special effort to acquire additional parkland around the Dale Community Center Park to accommodate further facilities and passive recreation.
- Develop the Dale Greenway Plan in conjunction with the countywide greenway system.
- Investigate the development of passive recreational facilities at Wimbee Landing Creek.
- Provide public places and open spaces that complement the public realm and create identifiable focal points within the Mixed- use district.

Transportation and Traffic Circulation Goals: Provide a transportation system that effectively and safely accommodates pedestrians and motorists.

- Develop techniques that calm traffic speeds and reduce cut-through traffic along Keans Neck Road in order to improve pedestrian, bicyclist, and motorist safety.
- Improve the design and location of bus stops by emphasizing pedestrian access and integrating transit stops into the surrounding neighborhood.
- Implement traffic calming measures, such as textured paving and chokers along Keans Neck Road and major intersections.
- Balance the needs of motorists, pedestrians and bicyclists with walking paths, narrow roadways to calm traffic, continuous bicycle routes, ample and accessible at-grade pedestrian crossings and landscaped parkways to separate pedestrians and traffic.
- Improve pedestrian connections to activity centers such as the school and the corner store by providing greenway connections from adjacent neighborhoods.
- Support commercial development, which is planned as a total concept to include access points, internal circulation, and parking, may be better coordinated.
- Separate sidewalks from the roadway by planting strips wide enough to support trees.

- Pave Wimbee Landing Creek Road (that portion west of Kim Lock Road) to serve as an alternate route for Keans Neck Road. The paving of Wimbee Landing Creek Road is to be of a higher priority than other roads in the Dale area.

Design Goals: A safe and aesthetically pleasing community through the orderly and efficient development of land

- Create a strong "sense of place".
- Enhance entryways to the community.
- Implement a streetscape program that creates a visually attractive, safe and comfortable street and gives scale and definition to the public realm.
- Select medium sized trees, which provide canopy, shade and distinctive foliage or flower as the community theme tree.
- Provide public amenities such as planters, lighting, trash receptacles, bicycle racks, sheltered bus stops and information kiosks that are functional and aesthetically integrated into the streetscape for pedestrian comfort, convenience and safety.
- Provide public art for aesthetics and contemplation.
- Identify ways to build upon the history of the Dale area and identify sites for historic markers.

The Dale Community Plan provides a goal and policy framework for guiding community development, promoting high-quality public facilities. Nevertheless, the Plan should not be viewed as a static document. It is meant to be reviewed, debated, and modified as necessary to account for changing conditions and community values.

Implementation

The time and effort spent in producing this Plan is worth nothing without implementation. It is implementation and agreement on methods of implementation that will bring the Plan to life and initiate an evolution of activity that will move the Dale community toward the fulfillment of its goals. This section outlines the activities that must be pursued to carry out the Plan.

Preparation and adoption of the Plan is a beginning step in its implementation. Its basic purpose is to provide a guide for specific action. The Implementation Plan identifies techniques, strategies, and methods for carrying out the recommendations contained in the Dale Community Plan. The major implementation processes described include the Dale Community Preservation Land Development Standards, the County's Capital Improvement program, the annual review and update process, general plan update and specific implementation program.

Dale Community Preservation Land Development Standards: The Dale Community Preservation Land Development Standards is a regulatory tool used to define districts within the Community Preservation area for the purpose of controlling and guiding land use and development. These standards are the primary instrument for implementing land use policies. The County's review and adoption of the land development standards are important first steps in plan implementation.

Capital Improvements Program: Another tool for implementing the plan is the Capital Improvements Program (CIP), which establishes schedules and priorities for all public improvement projects within a five-year period. The County first prepares a list of all public improvements that will be required in the next five years, including transportation and community facility projects. Then all projects are reviewed, priorities are assigned, cost estimates prepared, and potential funding sources identified.

The CIP typically schedules the implementation of a range of specific projects related to the Comprehensive Plan and Community Plans, particularly the restoration and upgrading of existing utilities and infrastructure facilities. Construction of public facilities and infrastructure is an important link between the development of Dale and the implementation of the Dale Community Plan. Based on an annual review, the CIP shall be reexamined for consistency with the goals and actions of this Plan. The CIP shall also be revised to include projects identified within the Dale Community Plan. In this way, the CIP serves as a financial planning document as well as a physical-planning document. It permits the construction of improvements identified in the Dale Community Plan.

The five-year CIP shall be used to enable the implementation of the Dale Community Plan policies in a manner that is consistent with the goals and actions identified. The CIP can also be used to implement growth strategies in the Dale Community Plan by locating and programming public facilities and infrastructure for lands within the approved Dale Community Preservation area. Finally, by stipulating the desired community projects and improvements, the Dale Community Plan provides the guide for desirable public facilities and services.

Annual Review: The county administrator shall submit an annual report to Beaufort County Council on the status of the Plan and the progress of its application. By going through this process, it is possible to regularly reexamine the plan's premises and evaluate progress made on its implementation. Implementation actions may need to be modified as additional information is received. The county's administration department along with the lead departments identified in Table 1 is also responsible for monitoring the implementation of the Dale Community Plan.

The annual review process provides an opportunity to update and refine the policies expressed in the Dale Community Plan and to monitor and evaluate the progress of the implementation strategies and programs incorporated therein. This process is the vehicle by which the county, private property owners, developers, community groups or individual citizens request changes to the goals and actions of the Dale Community Plan. The review and amendment process includes citizen participation, through community meetings to familiarize Dale residents with the amendment proposals and at formal public hearings before the Planning Commission and County Council.

General Plan Update: The Dale Community Plan reflects a ten-year planning period. This period allows for the systematic implementation of desired projects, land use patterns, and installation of required public improvements. To provide for flexibility and responsiveness to change, the Plan also should be comprehensively reviewed and revised, if appropriate, at four-year intervals. This periodic update enables the Plan always to maintain at least a 10-year time frame.

The update of the Plan is not synonymous with a total revision. Once adopted, the Plan establishes a basic policy framework that must be followed over time. The purpose of reviewing the Plan at intervals is to allow it to adjust to changing conditions, the availability of more recent planning data, and shifts in community values. When revisions to the Plan are proposed, Dale residents and property owners should be invited to participate in the formulation of the changes.

Implementation Actions

1. **Identify Grants:** Ensure that new development and redevelopment maintains and enhances the character of Dale.

   Federal and State grants-in-aid are available to assist with land use planning facility improvements and other services and improvements. Coordinating grant proposals with the Plan directives is a positive step toward accomplishing the Plan's goals. Most grants require matching funds for the receiving municipality. The County's contribution may be met by in-kind contributions from various departments and also through departmental budgets. Additional sources for funding are:

   A. Community Development Block Grant (CDBG): The Community Development Block Grant Program is funded by the U.S. Department of Housing and Urban development and provides assistance for programs and projects directly aimed at the type of projects identified in the Dale Community Plan. The Community Development Block Grant funding is allocated on an annual basis and can be uses for a variety of projects contemplated in The Dale Community Plan.

   B. Beaufort County Transportation Committee(C Funds): This funding source is generated from gasoline sales tax funds appropriated to the county from the state and administered by the Beaufort County Transportation Committee. Permitted projects include road paving, sidewalks, curb improvements, walking paths, bus shelters and road signage. Projects other than road paving projects require a "special project application" which is accepted each three years.

   C. The Beaufort County Tree Fund: Funds generated from projects where the Development Review Team determines that the required replacement of trees is not feasible or not desirable, such reductions are subject to a general forestation fee. The funds collected through this forestation fee may be used by the County to plant trees and other landscaping in highway medians, along roads, and general landscaping such as those identified in the Dale Community Plan.

   D. The Land Preservation Board: This advisory board was established to protect rural and critical lands through the Purchase of Development Rights, voluntary programs and other mechanisms. The Board is mandated to establish criteria and ranking system to rank land parcels, which are approved by County Council. Beaufort County currently levies and

designates 2 mills in ad valorem taxes in order to acquire land for conservation, farmland protection and open space preservation. The County Council is considering a proposition to authorize the County to issue 40 million dollars in general obligation bonds to acquire lands for preservation and retire the bond debt.

II. **Prioritize Projects and Add to CIP:** Table I summarizes the implementation actions recommended in The Dale Community Plan. In addition, the projects are prioritized, a responsible department is assigned and the timing for implementation of the specific action is noted.

III. **Schedule Implementation:** The implementation of the Dale Community Plan will be monitored. Some items are expected to be completed quickly. For others, especially those items that need additional funding, it may be harder to schedule a firm completion date. Nevertheless, the status of every item proposed in the Plan will be tracked. A check date, if not a completion date, will be set for each item. This tracking chart will be updated regularly, as more information becomes available and as the status of each project changes. An update report is scheduled for the Fall of 2001 to summarize the overall implementation status of the plan's recommendations.

IV. **Commitment and Support:** Thus, while the Dale Community Plan provides the framework for community development, the everyday action of the County shapes the community. The manner in which the Plan is implemented is the real test of the County's commitment to the goals, objectives, and policies.

By adopting the Plan, the County Council will demonstrate the County's commitment to the implementation of the Plan. However, every action item listed in this plan will require separate and specific implementation. Adoption of the Plan does not begin the implementation of any item. The implementation will require specific actions by the Dale community, the County and other agencies. The Plan will be supported and implemented by:

- County Boards, Commissions and Staff: The numerous boards and commissions of the County will look to The Dale Community Plan when they need guidance about the neighborhood. The Planning Commission will already know if a proposed zoning change in the Dale CP area is appropriate and supported by the residents and businesses of the community. Additionally, County staff will use the Plan as a guidance document for review of projects and programs.
- County Department Budgets: Each year every County department puts together a budget that states the department's priorities for the coming year. By bringing the strengths and desires of the community to the attention of County departments, the Dale Community Plan will help them prioritize those projects that help safeguard the community's assets while addressing its needs. Allocating dollars to certain programs and activities inevitably results in setting policy priorities, which are critical to the implementation of the Dale Community Plan. The budget instructions to department heads shall require that proposed expenditures include reference to items in the Plan that will be implemented with the funds.

- Capital Improvement Projects: There are many projects in the communities that require major capital expenditure. In these instances, the guidance provided by the plan will be critical to guarantee the project will proceed in a fashion that keeps in mind the overall long term interests of the community.
- Other Agencies and Organizations: Other agencies and organizations outside County government will play an essential role in the implementation of the Plan. As these agencies look for public input, the Dale Community Plan will be available as a clearly articulated vision of the direction the community desires to go.
- Community Monitoring of Implementation: The Community Planning Process has established a healthy dialogue among local residents concerning the future of the community. A number of citizens have thus far been involved in planning discussions. Dale has always been characterized by active citizen involvement, and this should continue to be standard policy. The planning process will affect everyone in the community, and everyone should contribute to planning decisions. The Dale Community Plan Implementation Tracking Chart (Appendix A, included in the back pocket) provides a way to easily check the status of the implementation of the plan. For each action proposed in the plan, the chart lists the contact, the estimated cost, the current status and comments. This chart will be updated by the Dale CP group, as the status of the projects change and as new information is available.

Conclusion

The purpose of planning is implementation. The Dale Community Plan identifies the overall development needs in Dale, the tasks involved in addressing them, the various parties who should perform these tasks, and the level of participation sought from these parties. The Dale community group should continue to advocate for themselves, their community and the plan. The ultimate success of the Dale Community Plan will be determined, in large part by the collective efforts of this group, along with Beaufort County Council, the county administrator, the planning department, and concerned citizens in general.

Appendix 4-B
St. Helena Corners Area Community Preservation Plan

History

"In the 1520's a ship from Spain traveled up the marsh strewn coast of the Atlantic and the crew breathed in the clean salt filled air. As Francisco Gordillo looked out over the land and sea, his eyes captured a scene of beauty. This reminded him of a saint, Santa Elena, so he decided to name this place for her, 'Punta de Santa Elena.' This area went from Edisto, South Carolina to Savannah, Georgia and was surrounded by St. Helena Sound, the Combahee River, the Savannah River, and the Atlantic Ocean." (Goodwine p. 1-2)

The beauty of St. Helena Island continued to impress visitors for many years as they arrived on this Sea Island, which is the last of the viable Gullah/Geechee communities in the Sea Island chain. This island is well known as the home of many historic people and places. From some events on the island, visitors have often heard these words:

"Oh, none in all the world before
Were ever as glad we!
We're free on Carolina's shore,
We're all at home and free.

Thou Friend and Helper of the poor,
Who suffered for our sake,
To open every prison door,
And every yoke to break!

Bend low Thy pitying face and mild,
And help us sing and pray;
The hand that blessed the little child,
Upon our foreheads lay.
We hear no more the driver's horn,
No more the whip we fear,
This holy day that saw Thee born
Was never half so dear.

The very oaks are greener clad,
The waters t smile;
Oh, never shone a day so glad
On sweet St. Helena's Isle.

We praise Thee in our songs today,
To Thee in prayer we call,
Make swift the feet and straight the way

Of freedom unto all.

Come once again, O blessed Lord!
Come walking on the sea!
And let the mainlands hear the word
That set the island free!

[Saint Helena Hymn by John Greenleaf Whittier*]*

Freedom has been something that people long sought on St. Helena Island. The first days of freedom when the Cusabos, Dataws, and others had this island as their homeland. They later shared this homeland with enslaved Africans who would later be known as "Gullahs" and "Geechees." Yes, but these who were enslaved would also know this as a place of freedom and make it home!

The guns sounded for the beginning of the Civil War sending the European people that had enslaved the Africans on these islands to seek refuge in other places. "Since the 'owners' of the land had abandoned St. Helena and the surrounding area, they were not around when it came time for land to be auctioned due to unpaid taxes. After much ado over whether or not former 'slaves' should be allowed to bid and what price would be reasonable for the Gullahs and Geechees. 'On March 9, 1863, exactly one year after the arrival of the Gideonites at Beaufort the first land sales took place.' (Rose 214) 76,775 acres were put up for sale of which 16,479 were bought by individuals and the rest was allotted to the government.

The average price that individuals paid was $1 per acre. 'Several plantations, about 2,000 acres of land, were purchased cooperatively by Negroes, who by pooling their small savings were able to preserve their right to live and work on their own places.' (Rose 215) This was the beginning of 'true' independence for St. Helena's Gullahs and Geechees." (Goodwine p. 38-39)

In seeking to protect such independence and culture and to encourage its continued existence, a Cultural Protection Overlay District (CPO) was established as a part of the Zoning District Standards Ordinance. This district serves to:

"The Cultural Protection Overlay (CPO) District is established to provide opportunities to protect natural and/or natural resources found on St. Helena Island. The Comprehensive Plan provides "actions" to be undertaken, which would prevent rural gentrification and displacement of residents. The intent of the CPO District is to protect St. Helena and the Gullah culture from encroaching development pressures. Rapid in-migration would substantially alter the traditional social and cultural character of this area, as new residents represent different values and customs. The gentrification of the island would result in a greater demand for urban services and eventually to the urbanization of the island. This can be particularly acute on St. Helena Island where maintaining the traditional lifestyle becomes cost prohibitive because of the value of land for development.

The CPO District provides additional zoning and development standards based on meeting the following criteria:

- The omnipresence of an ethnic heritage
- Historic structures, settlements, and land use patterns
- Archeological sites
- Significant cultural features and sites"

Many now come to St. Helena Island to dwell there and appreciate its natural and historic beauty. The uniqueness of St. Helena is in its community. "Anyone can live on land, but it is different when the spirit of the land lives in the person. Those who are proud Gullah/Geechee islanders of St. Helena have the land in them along with 'Gawd.' They celebrate the land, the language, the heritage, the community, the family, 'ourstory,' and their survival on a daily basis." (Goodwine p. 51)
One place that St. Helena Islanders have always celebrated their culture and community is the Corner Area Community of the island. In this area exist a number of historic buildings that have changed ownership over the years, but have never ceased from being major points of gathering and community empowerment. Thus, the Corner Area is definitely a place that should be preserved.

The Corner Area Community Preservation District encompasses the Corner Community, the eastern portion of the Fuller Community, and the western portion of Indian Hill. Hence the name "Corner Area" instead of simply the "Corner CP District." All three of the communities have unique stories of their own. Indian Hill has its name due to the Native American mound that many St. Helena Island natives recall playing on as they grew up. The Fuller Community was one of the many rice plantations on St. Helena Island in its hey day.

The Corners Area is seen by all that venture to St. Helena Island. However, even as many journey through it to head to the Penn Center Landmark Historic District which is next to the Corners Area Community Preservation District, they are not aware of the history that they drive by, through, and over. In the Corner Community there are several National Historic Register Sites including:

- Dr. York Bailey's House
- The Green which has been renamed "Dr. Martin L. King Memorial Park"
- Packing Shed
- Knights of Wise Men Hall
- Corner Store
- Bishop Store

The stories of these buildings and grounds and what they mean to the community cannot be truly felt from the written text. Why the old oak trees have their long Spanish beards and why Old Polowana Road serves as a community landmark can be felt in the interactions of the people of St. Helena. Thus, the Corners Area Community Preservation District has been designed to encourage the continued sustainability of the story of this rich island and to have it always be told through the people.

The Corners Area Community Preservation District is designed as a pedestrian friendly district with a Public Market District in the center of it. As visitors journey to St. Helena Island, the Corners Area Community Preservation District is a place where they will have a chance to interact with the people that actually preserve the community through history, business, crafts, and the unique heritage of the Gullah/Geechee community.[1]

Written by Marquetta L. Goodwine

Purpose

The Corners Area Plan is designed to serve as a general guide for the development of the community. It addresses land use, historic and cultural preservation, recreational opportunities, traffic circulation and design. As a policy document, appended to the County's Comprehensive Plan, this plan is to be used to guide zoning, subdivision, facilities funding and design, and community development decisions made by government officials and agencies. The Corners Area Plan serves as a foundation and the structure upon which more detailed policies, standards and master plans may be developed.

Process

In 1999 The Corners Area Community Preservation Committee of 12 members, representing the St Helena community was charged with reviewing planning issues; defining a vision; formulating standards for residential and commercial development and developing techniques for historic and cultural preservation for the Corners Area. Significantly, this group provided a critical sounding board for proposals and contributed countless hours of input over the course of about 140 meetings. The solutions to the issues, which this plan analyzes, have emerged as a result of a continuing dialogue with a wide range of participants. To assist the Corners Area CP Committee in its deliberations during its 2-1/2 years of involvement, the Committee sponsored a series of community forums and organized a community workshop. The goal and activities represent the creativity of St Helena residents.

Listed below are the goals and actions derived from the many issues debated during the development of the Corners Area Plan. The Plan reflect what residents believe will help to build the community and preserve the areas culture. Through the planning process the committee identified several important issues to be addressed, each related primarily to the issue of growth and land use.

The fundamental question was how to accommodate growth while maintaining the character of the community and preserving the culture, especially as this process relates to the CPO District. Specifically the Committee had concerns about the following:

- What mix of land uses and development densities are desirable?
- What kinds of businesses are most appropriate and where should they be located?

[1] Gullah/Geechee: The Survival of Africa's Seed in the Winds of the Diaspora Volume I: St. Helena's Serenity ©1995 by Marquetta L. Goodwine; Rehearsal for Reconstruction: The Port Royal Experiment ©1976 by Willie Lee Rose

- What improvements should be made to MLK Park?
- The nature of Highway 21 through the Corners Area
- How to preserve the history of the Corners Area

These issues were all addressed within the framework of keeping in line with the rural character of St. Helena Island and preserving the Gullah/Geechee culture.

Goals and Actions

Community Identity and Design

GOAL: *To make St. Helena's unique cultural heritage central to the development of the Corners Area and ensure that new development respects the rural and historic character of the area.*

Actions:

- Integrate, rather than isolate, housing, shops, workplaces, and public uses that are all essential to the daily life of St Helena's residents.
- Establish design standards that visually and functionally enhance the Corners Area and promote walkable roads for interaction amongst community members and island visitors.
- Develop standards that prevent new buildings from dominating the community's historic structures. The footprint of new buildings visible from Highway 21 can be no larger than 5,000-sq. ft., excluding porches; building height can be no greater than 35 feet and two stories.
- Preserve valuable natural features and scenic features, such as oaks, waterways and canopy roads within the Community Preservation Area.
- Clearly, define the CP boundaries to distinguish between commercial areas and the surrounding rural and agricultural areas.
- Develop appropriate building design and parking strategies. Shared or community parking areas are encouraged.
- Encourage building design and architecture that create visual interest and public open space along roads, maintain an attractive rural environment, and promote informal surveillance of public spaces by building occupants.
- Encourage building design and architecture that emulate the Corners Area building traditions.
- Develop unique sign standards for the Community Preservation Area

General Land Use

GOAL: *To reinforce the Corners Area's importance as the community's historic, cultural, and civic heart, by proactively encouraging a mixture of compatible commercial, residential, civic, and recreational uses to increase community interaction and gathering opportunities.*

Actions:

- Verify that proposed development standards advance the goals of the Cultural Protection Overlay District.
- Limit permitted commercial use size, scale and type to encourage service mainly to St. Helena residents.
- Establish a minimum setback standard that permits buildings to be built close to the road. This slows traffic and creates a pedestrian friendly public space.
- Develop a Public Market District within the Corners Area Community Preservation District. Its purpose is to create a pedestrian-friendly commercial center that retains the character of a rural crossroads, with open green spaces, scenic vistas, a minimum of asphalt paving, preserved historic structures, and community gathering places.
- Limit the amount and visibility of parking from Highway 21.
- Limit residential use to single-family units, duplexes and commercial apartments. Allow accessory dwelling units.
- Acquire land within the Public Market District suitable and sufficient for the development of a public library and additional public service facilities.

Economic Viability

GOAL: *To create conditions that allow and promote programs that foster entrepreneurial opportunities for St. Helena residents.*

Actions:

- Broaden the diversity of goods and services offered to and by St. Helena residents to prevent local sales from "leaking" to surrounding communities.
- Provide an open and inviting business climate for local businesses.
- Promote the retention of existing businesses and the attraction of new local businesses that will serve the St. Helena Community.
- Promote the expansion and enhancement of economic informational resources.
- Promote diverse employment opportunities that support local residents and enable residents to live and work on St Helena.
- Reserve adequate land to accommodate commercial development, sufficient to meet the needs for goods and services for the island and to create jobs.
- Support efforts and investment to upgrade the physical appearance of the Corners by:

1) Developing design criteria to unify the Corners;
2) Promoting pedestrian circulation through the area;
3) Establishing standards for walking paths; and
4) Defining standards for attractive and adequate parking facilities.

Road Design

GOAL: *Develop guidelines for road designs that meet travel demands but also create a safe and pleasant walking environment.*

The road design should "calm", or slow, traffic in the Corners Area through a variety of techniques that have the effect of slowing through traffic, without compromising safety, emergency access, and reasonable flows. Examples of traffic slowing techniques include narrow traffic lanes, changes in road texture to reduce speed and pedestrian crosswalks.

Actions:

- Encourage proper planning for movement of goods to commercial properties. Connector roads that provide access to commercial development shall be designed to accommodate commercial vehicles.
- Retain certain roads as unpaved roads in order to preserve their particular character and beauty. Specifically, preserve the vista down Old Polawana Road, all buildings there must be set back an appropriate distance, with a vegetative screen that makes them invisible from U.S. 21.
- Monitor conditions at key intersections and identify needed improvements to maintain acceptable levels of service and/or safety.
- Provide opportunities for St. Helena residents, visitors and employees to circulate about the Public Market without total reliance on the automobile.
- Develop design criteria for road crossings, signage, building material and building placement.
- Develop design standards for the enhancement of parking lots, which should include (but are not limited to):
  1) Placing parking lots away from streets;
  2) Requiring landscaping and shade trees; and
  3) Defining appropriate heights and design of lighting along pedestrian walkways and roads, and adjacent to residential uses.

- Modify existing ordinances and develop design standards to minimize the size of parking lots. Strategies that should be considered include, but are not limited to:
  1) Sharing parking among nearby uses; and
  2) Designing for regular parking demands rather than peak periods (e.g. Heritage Days events).

Historic Preservation

GOAL: *Preserve the cultural resources of the Corners Area.*

Actions:

- Identify and preserve significant cultural or historical sites or structures within the Corners Area.
- Promote public awareness of and support for historic preservation, and encourage both visual and physical access to historic properties, whenever appropriate.
- Continue to encourage efforts, both public and private, to preserve the Corners historical and cultural heritage. Property owners should be encouraged to nominate eligible properties for listing in local, state, and federal registers of historic places. As part of this program, owners of eligible historic properties should be informed of State and federal preservation programs and ways to participate in tax incentive programs for historic restoration.

- Encourage the reuse of architecturally interesting or historical buildings in a manner that preserves their historic architectural merit.
- Encourage programs that advance public education efforts regarding the history and heritage of St. Helena.

Implementation Programs

The time and effort spent in producing this Plan is worth nothing without implementation. It is implementation and agreement on methods of implementation that will bring the Plan to life and initiate an evolution of activity that will move the Corners Area community toward the fulfillment of its goals. This section outlines the activities that must be pursued to carry out the Plan.

Preparation and adoption of the Plan is a beginning step in its implementation. Its basic purpose is to provide a guide for specific action. The Implementation Plan identifies techniques, strategies, and methods for carrying out the recommendations contained in the Corners Area Plan. The major implementation processes described include the Corners Area Community Preservation Land Development Standards, the County's Capital Improvement program, the annual review and update process, general plan update and specific implementation program.

Corners Area Community Preservation Land Development Standards: The Corners Area Community Preservation Land Development Standards is a regulatory tool used to define districts within the Community Preservation Area for the purpose of controlling and guiding land use and development. These standards are the primary instrument for implementing land use policies. The County's review and adoption of the land development standards are important first steps in plan implementation.

Capital Improvements Program: Another tool for implementing the plan is the Capital Improvements Program (CIP), which establishes schedules and priorities for all public improvement projects within a five-year period. The County first prepares a list of all public improvements that will be required in the next five years, including transportation and community facility projects. Then all projects are reviewed, priorities are assigned, cost estimates prepared, and potential funding sources identified.

The CIP typically schedules the implementation of a range of specific projects related to the Comprehensive Plan and Community Plans, particularly the restoration and upgrading of existing utilities and infrastructure facilities. Construction of public facilities and infrastructure is an important link between the development of Corners Area and the implementation of the Corners Area Plan. Based on an annual review, the CIP shall be reexamined for consistency with the goals and actions of this Plan. The CIP shall also be revised to include projects identified within the Corners Area Plan. In this way, the CIP serves as a financial planning document as well as a physical-planning document. It permits the construction of improvements identified in the Corners Area Plan.

The five-year CIP shall be used to enable the implementation of the Corners Area Plan policies in a manner which is consistent with the goals and actions identified. The CIP can also be used to implement growth strategies in the Corners Area Plan by locating and programming public facilities and infrastructure for lands within the approved

Corners Area Community Preservation area. Finally, by stipulating the desired community projects and improvements, the Corners Area Plan provides the guide for desirable public facilities and services.

Annual Review: To insure timely implementation of the Corners Area Plan, it shall be reviewed annually in accordance with Section B.3.of the Comprehensive Plan (pp. 13-14). The annual review process provides an opportunity to update and refine the policies expressed in the Corners Area Plan and to monitor and evaluate the progress of the implementation strategies and programs incorporated therein. This process is the vehicle by which the county, private property owners, developers, community groups or individual citizens request changes to the goals and actions of the Corners Area Plan. The review and amendment process includes citizen participation, through community meetings to familiarize Corners Area residents with the amendment proposals and at formal public hearings before the Planning Commission and County Council. The county's administration department along with the lead departments identified in Table 1 is also responsible for monitoring the implementation of the Corners Area Plan.

General Plan Update: The Corners Area Plan reflects a ten-year planning period. This period allows for the systematic implementation of desired projects, land use patterns, and installation of required public improvements. To provide for flexibility and responsiveness to change, the Plan also should be comprehensively reviewed and revised, if appropriate, at four-year intervals. This periodic update enables the Plan always to maintain at least a 10-year time frame.

The update of the Plan in not synonymous with total revision. Once adopted, the Plan establishes a basic policy framework that must be followed over time. The purpose of reviewing the Plan at intervals is to allow it to adjust to changing conditions, the availability of more recent planning data, and shifts in community values. When revisions to the Plan are proposed, Corners Area residents and property owners should be invited to participate in the formulation of the changes.

Implementation Actions

1. **Identify Grants:** Federal and State grants-in-aid are available to assist with land use planning, facility improvements, historic preservation and other services and improvements. Coordinating grant proposals with the Plan directives is a positive step toward accomplishing the Plan's goals. Most grants require matching funds for the receiving municipality. The County's contribution may be met by in-kind contributions from various departments and also through departmental budgets. Additional sources for funding are:

    A. Community Development Block Grant (CDBG): The Community Development Block Grant Program is funded by the U.S. Department of Housing and Urban development and provides assistance for programs and projects directly aimed at the type of projects identified in the Corners Area Plan. The Community Development Block Grant funding is allocated on an annual basis and can be uses for a variety of projects contemplated in The Corners Area Plan.

B. Beaufort County Transportation Committee(C Funds): This funding source is generated from gasoline sales tax funds appropriated to the county from the state and administered by the Beaufort County Transportation Committee. Permitted projects include road paving, sidewalks, curb improvements, walking paths, bus shelters and road signage. Projects other than road paving projects require a "special project application" which are accepted once every three years.

C. The Beaufort County Tree Fund: Funds generated from projects where the Development Review Team determines that the required replacement of trees is not feasible or not desirable, such reductions are subject to a general forestation fee. The funds collected through this forestation fee may be used by the County to plant trees and other landscaping in roadways medians such as those identified in the Corners Area Plan.

D. The Land Preservation Board: This advisory board was established to protect rural and critical lands through the Purchase of Development Rights, voluntary programs and other mechanisms. The Board is mandated to establish criteria and ranking system to rank land parcels, which are approved by County Council. Beaufort County currently levies and designates 2 mills in ad valorem taxes in order to acquire land for conservation, farmland protection and open space preservation. The County Council has authorized the County to issue 40 million dollars in general obligation bonds to acquire lands for preservation and retire the bond debt.

E. A-Tax Funds: These are the tax accommodation funds, which are granted to various projects once per year. These funds are taken from the money spent on hotels and restaurants and then used for community projects in the county. The funds can be applied for through Beaufort County.

F. Survey and Planning and Development Grants: The "Survey and Planning Grant" as well as the "Development Grant" are available once a year through the South Carolina Department of Archives and History. The first grant is provided to historic buildings for projects involving surveying, restoration, and maintenance of them and their grounds. The latter is provided for community projects that focus on developing a particular project for a community in South Carolina. The project can include producing a report or pamphlet for the community. Given that historic structures in the Corners Community are on the National Register of Historic Places, projects that relate to them are eligible for these two grants.

II. Prioritize Projects and Add to CIP: Table I summarizes the implementation actions recommended in The Corners Area Plan. In addition, the projects are prioritized, a responsible department is assigned and the timing for implementation of the specific action is noted.

III. Schedule Implementation: The implementation of the Corners Area Plan will be monitored. Some items are expected to be completed quickly. For others, especially those items that need additional funding, it may be harder to schedule a firm completion date. Nevertheless, the status of every item proposed in the Plan will be tracked. A check date, if not a completion date, will be set for each item. This tracking chart will be updated regularly, as more information becomes available and as the status of each project changes. An update report is scheduled for the Fall of 2002 to summarize the overall implementation status of the plan's recommendations.

IV. Commitment and Support: While the Corners Area Plan provides the framework for community development, the everyday action of the County shapes the community. The manner in which the Plan is implemented is the real test of the County's commitment to the goals, objectives, and policies.

By adopting the Plan, the County Council will demonstrate the County's commitment to the implementation of the Plan. However, every action item listed in this plan will require separate and specific implementation. Adoption of the Plan does not begin the implementation of any item. The implementation will require specific actions by the Corners Area community, the County and other agencies. The Plan will be supported and implemented by:

- County Boards, Commissions and Staff: The numerous boards and commissions of the County will look to The Corners Area Plan when they need guidance about the neighborhood. The Planning Commission will already know if a proposed zoning change in the Corners Area CP area is appropriate and supported by the residents and businesses of the community. Additionally, County staff will use the Plan as a guidance document for review of projects and programs.
- Department Budgets: Each year every County department puts together a budget that states the department's priorities for the coming year. By bringing the strengths and desires of the community to the attention of County departments, the Corners Area Plan will help them prioritize those projects that help safeguard the community's assets while addressing its needs. Allocating dollars to certain programs and activities inevitably results in setting policy priorities which are critical to the implementation of the Corners Area Plan. The budget instructions to department heads shall require that proposed expenditures include reference to items in the Plan that will be implemented with the funds.
- Capital Improvement Projects: There are many projects in the community that require major capital expenditure. In these instances, the guidance provided by the plan will be critical to guarantee the project will proceed in a fashion that keeps in mind the overall long-term interests of the community.
- Other Agencies and Organizations: Other agencies and organizations outside County government will play an essential role in the implementation of the Plan. As these agencies look for public input, the Corners Area Plan will be available as a clearly articulated vision of the direction the community desires to go.

- Community Monitoring of Implementation: The Community Planning Process has established a healthy dialogue among local residents concerning the future of the community. A number of citizens have thus far been involved in planning discussions. Corners Area has always been characterized by active citizen involvement, and this should continue to be standard policy. The planning process will affect everyone in the community, and everyone should contribute to planning decisions. The Corners Area Plan Implementation Tracking Chart (Appendix A, included in the back pocket) provides a way to easily check the status of the implementation of the plan. For each action proposed in the plan, the chart lists the contact, the estimated cost, the current status and comments. This chart will be updated by the Corners Area CP group, as the status of the projects change and as new information is available.

Conclusion

The purpose of planning is implementation. The Corners Area Plan identifies the overall development needs in the Corners Area. The tasks involved in addressing them, the various parties who should perform these tasks, and the level of participation sought from these parties. The Corners Area CP committee should continue to advocate for themselves, their community and the plan. The ultimate success of the Corners Area plan will be determined, in large part by the collective efforts of this group, along with Beaufort County Council, the county administrator, the planning department, and concerned citizens in general.

Table 1

THE CORNERS AREA IMPLEMENTATION PLAN						
Activity	**Priority**	**Time Frame (To begin implementation of item from adoption of Plan)**	**Cost Estimate**	**Implementer**	**Executive Response**	**Possible Funding Source**
Land Acquisition for Library	H-1	0-1 year	$800,000			
Entry Signage	H-2	0-2 year	$5,200 (4 signs at $1,300 each) (Design & Professional fees) $728.00			
Historical Markers	H-3	0-2 year	$4,600 (4 signs at $400 & 2 at 1,500 each) (Design & Professional fees) $644.00			
Improvements to Martin Luther King Jr. Park						
Community Board	M-4	0-3 years	$15,000 (Design & Professional fees) $2,100			
Flagpole	M-5	0-3 years	$3,000 (Design & Professional fees) $450			
Gazebo	L-6	0-5 years	$35,000 (Design & Professional fees) $4,900			
Bust of MLK Jr.	L-7	0-5 years	$13,000 (Design & Professional fees) $1,450			
Total High Priority	$811,172					
Total Medium Priority	$20,550					
Total Long Term Priority	$54,350					
Contingency 15%	$13,291					
TOTAL	**$899,363**					

Appendix 4-C
Shell Point Community Preservation Plan

The Shell Point Regional Plan is a joint effort between Beaufort County and the Town of Port Royal to plan for the future of the Shell Point Region in a manner that will be consistent across jurisdictional boundaries. The plan originated with the Shell Point residents who expressed an interest in having more say in zoning and land development decisions that had an impact on the quality of life in their neighborhood. On February 28, 2000, Beaufort County Council amended its Comprehensive Plan and Zoning and Development Standards Ordinance to designate the neighborhood as a Community Preservation District. The Town of Port Royal, a key player in the future of the Shell Point Region, became a joint partner in the planning process.

Purpose

The purpose of the Shell Point Plan is to serve as a policy document for the development of the Shell Point Community. As a policy document appended to both the Beaufort County Comprehensive Plan and the Town of Port Royal Comprehensive Plan, the Shell Point Regional Plan is to be used to guide zoning, subdivision, facilities funding, design and community development decisions for both governing bodies.

Future Land Use

Goal: *To guide future growth in the Shell Point Community to be consistent with the goals of the Port Royal and Beaufort County Comprehensive Plans while protecting the existing residential areas from the adverse impacts of incompatible land uses.*

The Future Land Use Plan proposes three future land use classifications – Community Commercial, Neighborhood Commercial, and Residential. The location of the following future land use classifications can be found on ***Map #1****:*

Community Commercial: This Future Land Use classification contains retail and service businesses that primarily serve Shell Point area residents, but also may serve those in Port Royal, Mossy Oaks, and the Broad River Bluff neighborhoods. Businesses are meant to be accessible by car and foot. Buildings are encouraged to locate in proximity to and address the street. Requiring the parking areas to locate at the sides and rear of buildings will achieve this goal. In addition, franchise architecture is discouraged. Buildings should reflect the architectural character of the Lowcountry. Innovative, high-quality design and development is encouraged.

Neighborhood Commercial: These commercial uses should be of a size, scale and type that will serve the surrounding neighborhood, and will not create a negative impact on the quiet and safety of the surrounding residential areas. The size, scale and architecture of buildings should be compatible with that of the surrounding residential areas. Businesses are meant to be accessible by car and foot.

Residential Infill Development: To protect the integrity of existing neighborhood residential areas, infill development in existing subdivisions shall be compatible with the surrounding neighborhood. Larger parcels (5 acres and above) have option to incorporate mixed uses and housing types by using the Planned Community Option.

Planned Communities: In order to further the Traditional Neighborhood Development goals of both the County's and Town's Comprehensive Plan, this plan offers, for parcels 5 acres or greater, a Planned Community option that incorporates a mix of uses and housing types arranged in a pedestrian scale. Planned Communities would be permitted as a Special Use or Conditional Use in the areas designated as Residential in the Future Land Use Map ***(Map #1)*** and would require the submission of a master plan and review by an appointed board. ***Map #2*** provides a conceptual layout of a hypothetical Planned Community. The following elements apply to Planned Communities:

- The internal street network needs to be interconnected and individual block sizes need to be small. The individual developments must connect to the established road network of the surrounding neighborhood and provide stub streets to future developments. Streets will equitably serve the needs of the pedestrian, the bicycle, and the automobile.
- 15% of the gross site area shall be set aside as open space. Open space includes parks, greens, trails, etc. Planned Communities shall work around natural features such as wetlands and mature forests. Public access to the marsh front is encouraged through the use of public docks and the termination of streets at the marsh front.
- A 25-foot wide, thickly vegetated buffer between established neighborhoods and incompatible uses within the Planned Community will be required. A buffer is not required if uses and intensity at edges of Planned Developments are at the same scale as surrounding developed neighborhoods.
- All lots share a frontage line with a street or square. Average lot frontage width must be narrow enough to allow for a pedestrian scale of development.
- Individual houses should address the street by incorporating such elements as porches and front stoops. Unless Vehicular access to dwellings should be via alleys with garages and parking pads located at the rear of the principle dwelling. Where this is not possible, garages and parking pads are to be located behind the front wall of the principle dwelling. Accessory Dwelling Units are permitted and encouraged.
- Within the Planned Community, similar land categories shall generally front across streets. Dissimilar categories shall abut at rear lot lines.
- A maximum of 30% of the Planned Community may be designated for commercial use. Parking lots shall be located at the rear and sides of commercial buildings. Small retail shops, barber shops, medical and dental offices, ice cream parlors, coffee shops, bakeries, delis, with building footprint limited to 5,000 square feet.

Parks, Natural Resources, and Wetlands

Goal: *To provide for recreational, aesthetic and fitness opportunities for Shell Point Area residents by enhancing the current park facilities and improving connections between residential neighborhoods and existing parks.*

Goal: *To encourage the preservation of sensitive ecological areas and marsh access through careful site plan review and selective public purchases.*

Improvements to Shell Point Park: Shell Point Park occupies 14 ½ acres in the vicinity of Broad River Drive. The park is owned and maintained by the Beaufort County Parks and Leisure Service (PALS) and currently contains a walking trail, two tennis courts and an open field that is used for soccer. This plan proposes to provide additional amenities that are consistent with the passive nature of Shell Point Park.

- Recommended Park Improvements: Please refer to ***Map #3*** for the location of the recommended improvements listed below.
  1) Provide a playground in the western portion of the Park near Broad River Drive.
  2) Construct restroom facilities near the parking area where the existing septic system can be utilized.
  3) Provide a more formalized parking area constructed of a pervious material. The parking lot will need to be situated so that the existing septic system drain field is not affected.
  4) Construct a picnic shelter in the vicinity of the parking area. The shelter should be placed beneath the existing tree canopy with minimal removal of overstory trees. The shelter should be connected to the existing trail network.
  5) Extend the existing trail network into the undeveloped, County-owned wooded area at the eastern end of the park. The trail should be constructed with minimum removal of vegetation. This plan recommends that this portion of the trail be constructed of a pervious material such as wood chips.
  6) Provide signage at the eastern park entrance off of Broad River Drive.

- Establish a direct pedestrian and vehicular link from Parris Island Gateway (SC 280/802) to Shell Point Park: The recommended location of this access is through the Midtown Shopping Center (Bi-lo) property. This location provides a direct link to the existing parking area. A sign at the future Parris Island Gateway entrance is recommended.
- Explore the future use of the existing stormwater detention ponds at the Lowcountry Medical Group and Midtown Shopping Center sites: These ponds offer an excellent opportunity for a public/private partnership that would, in effect, expand the park boundaries. Issues that need further study include ways to lessen the liability that the ponds present. Some recommended solutions include decreasing the bank slope to prevent persons from being trapped in the pond or providing impenetrable wetland vegetation at the pond perimeter to prevent entry.
- Monitor parking demand at the western end of the park: There is currently no formal parking at the western end of Shell Point Park along Broad River Drive. The installation of a playground may increase the demand for parking in this area. The average number of vehicles informally parking in this area should be monitored by the Shell Point Regional Planning Committee to determine whether the future provision of a parking lot is warranted.

Improvements to Battery Creek Boat Landing: The Battery Creek Boat Landing provides one of the finest marsh views in this part of the County. This plan recognizes that the Battery Creek Boat Landing receives heavy use by boaters, but is underutilized

as a passive recreation area. Please refer to ***Map #4*** for the location of the recommended improvements listed below.

- Provide a combined picnic pavilion and restroom facility: The location of this facility should provide views of Battery Creek and the Russell Bell Bridge. A small-scale pavilion with two picnic tables is recommended. Picnic tables are recommended for the wooded area surrounded by the parking lot.
- Stabilize the riverbank in the area south of the boat ramp: This portion of the riverbank is eroding and sending trees into Battery Creek. Stabilizing the riverbank would help preserve the only available County-controlled area of high ground where views of the creek can be enjoyed. It is recommended that PALS work with the Beaufort County Planning Department to devise an effective and environmentally sensitive solution to this problem.
- Provide a vegetative buffer along the Battery Creek Marina property line: It is recommended to screen from view the outdoor boat storage area of the Marina. Native shrubs such as wax myrtle and yaupon holly and vines such as Carolina jessamine would be most effective and require little maintenance once established. Additional river buffer vegetation along the riverbank is also recommended.
- Formalize the parking area: A clear delineation of parking areas is recommended to protect natural areas and to keep vehicles adequately set back from the riverbank.

Improvements to Jericho Park: This five-acre property was acquired by the County from the Federal Government in the 1970's with the stipulation that it be used only for recreational uses. The PALS department has recommended that it be used as a passive park. This parcel is one of a series of parcels that was used to provide water to the Marine Corps Air Station and the Parris Island Depot. ***Map #5*** shows the location of the improvements described below.

- Installation of a parking area, trails, and picnic tables: Development of this small park is meant to be as non-intrusive as possible. Designated parking for several cars, two or three picnic tables, and an interpretive trail is recommended for this park.
- Pump House Restoration: There is a pump house located on the southeast corner of this property. This structure may be eligible for the National Register of Historic Places. This plan recommends that historic designation for this site, along with the other remaining wells and pump houses associated with the provision of water to Parris Island be pursued by the Beaufort County Planning Department in conjunction with the Parris Island Museum. Pursuant to historic designation, the pump house should be restored and an historical marker should be provided.

Pleasure Boat Landing: There is a 2 ½ acre parcel in the Shell Point Subdivision near the intersection of Broad River Drive and Shell Point Road that was designated in the original plat to be used as a "pleasure boat landing" for the subdivision residents. This parcel has never been developed and offers the opportunity to provide marsh front access for neighborhood residents. This plan recommends that the Shell Point Neighborhood Association explore the feasibility of developing this site as a private park for use by subdivision residents and guests. A boat landing is not practical for this site due to its distance from deep water. A small dock to be used for launching kayaks, crabbing, and marsh viewing is recommended.

Greenways: The County is in the early stages of assembling a Beaufort County Greenway Master Plan. Shell Point needs to be an integral part of that Master Plan by providing connections from the City of Beaufort, the Town of Port Royal, Burton and eventually to South of the Broad River. By utilizing existing easements, sidewalks, neighborhood roads, and potential acquired easements or property a series of connections throughout the community can be realized. The following specific elements below are shown on ***Map #6***.

- BJWSA Water Line Easement: The Beaufort-Jasper Water Sewer Authority has a water line easement that extends from the Shell Point Area near the Bonaire Estates Subdivision all the way to Burton Wells Park and north to Laurel Bay Road. This easement should be an integral element in a countywide greenways network.
- System of wetlands between Baynard and Scipio Roads: A series of tidal wetlands extend from the Broad River Marsh into Shell Point Area beyond Savannah Highway (SC 802). This plan recommends that public access be provided along this natural amenity and be integrated into the countywide greenways network.

Preservation of Wetlands and Marsh Views: Several properties exist in the Shell Point area that should be protected for environmental quality issues (i.e. migratory waterfowl and songbird roosting and nesting habitat), critical wetlands and passive public access to the tidal creeks and marshes that surround Shell Point. This plan recommends that Planned Communities be evaluated so that public access and views of the marsh are set aside through the provision of public docks, parks and street vistas. The neighborhood or community as a whole could provide funding and possibly partner with the County and/or Town to purchase areas of ecological significance and public access points.

Transportation

Goal: *To promote safe and convenient vehicular travel on neighborhood roads and along state highways while enhancing the aesthetic appeal of their connection with the community.*

Improvements to 280/802 Intersection: This plan recognizes that this intersection is rife with problems and eventually will warrant a traffic signal or some other solution. It is recommended that Beaufort County, the SC Department of Transportation and neighborhood residents work together to strike a solution to this intersection that will provide the following:

- An orderly flow of traffic coming from Port Royal and proceeding to the Broad River Bridge via Savannah Highway (SC 802).
- A reduction of conflicts with local streets in the vicinity of the intersection (Cypress St., Grafton, Dr. and Shell Point Road).
- Consideration of an alternative form of intersection such as a traffic circle.

Improvements to Baynard/Shell Point Road Intersection: This intersection currently has one stop sign for eastbound traffic from Shell Point Road extension. There is no protection for traffic continuing west across the intersection to Shell Point Road extension. Two possibilities could correct this problem:

- A "Through Traffic Yield" sign for westbound traffic continuing toward the Shell Point extension would not adversely affect the more voluminous traffic turning northbound onto Baynard from Shell Point.
- A Stop Sign could be placed on the southbound side of Baynard to protect vehicles that would continue westbound along Shell Point (there are only five homes on this extension).

802 Savannah Highway Cross-section: The SC Department of Transportation currently has no plans to widen Savannah Highway (SC 802). However, this highway provides an important link to those traveling from Port Royal and Lady's Island to Southern Beaufort County. It is highly likely that it will be widened at some future date as the County continues to grow. This plan recommends that future widening include landscaped medians along the entire length of the segment, pedestrian walkways set apart from the roadway, and street trees ***(Map #5).***

Street Connectivity: This plan recommends that future subdivisions and developments be evaluated on their effectiveness in establishing an interconnected grid network of local streets. This goal will be facilitated through the development review process when Planned Communities and other subdivisions are evaluated.

Vistas: Select advantageous highway views and promote the preservation and enhancement of vistas at these locations. The intention is to retain visual reinforcement of the natural setting of the region, even in the face of road widening or site development. Several vista opportunities are at locations where creek and wetland incursions abut and traverse three segments of SC 802, two segments of Grober Hill Road and one wide vista remains on SC 280 just north of Picket Fences.

Economic Development and Community Enhancement

Goal: *To provide for the economic development of marginalized commercial properties by offering the greatest amount of site plan flexibility, providing for shared parking, and making public sector investments that optimize private sector opportunities.*

Shell Point Plaza Area: The Shell Point Plaza area at the intersection of Parris Island Gateway (SC 280) and Savannah Highway (SC 802) is the traditional and geographical center of the Shell Point Community. In order to strengthen the civic and commercial qualities of this area, this plan recommends the following projects (refer to ***Map #5***):

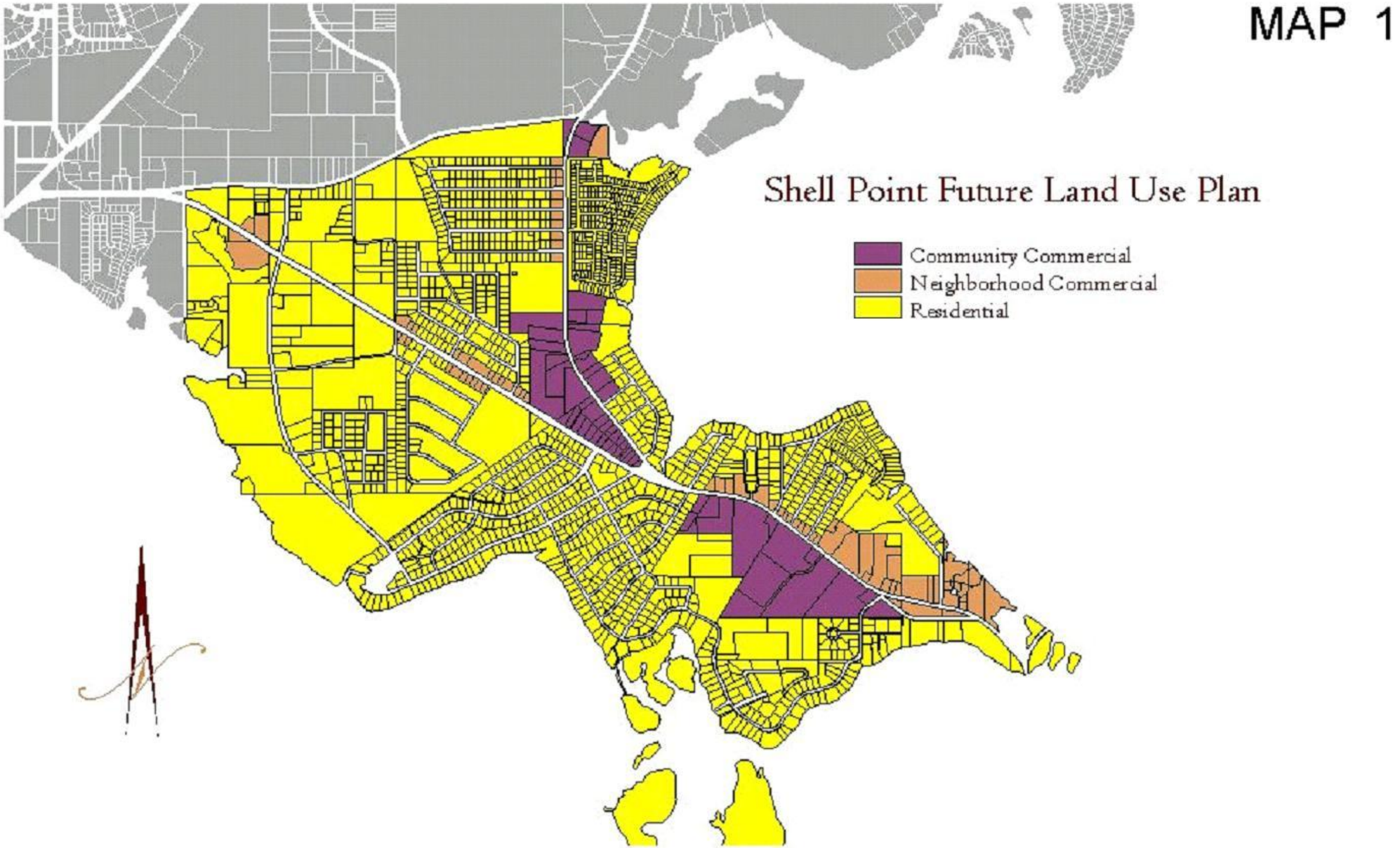
- Future Library Branch Location: The Beaufort County Department of Library Services, in their long term Capital Improvements Plan (1999), proposes to construct a library branch to serve the Shell Point, Burton, Broad River and Chechessie areas when population has reached a threshold to warrant a new branch. The Library is also interested in relocating its administrative offices to this future branch. The Library has outlined several criteria for site location that include access and visibility from an arterial highway, proximity to commercial properties, access to sewer and water, and avoidance of flood prone areas. This plan recommends locating the library branch in proximity to Shell Point Plaza and Jericho Park. This location would give the library visibility on two highway corridors, spur commercial redevelopment in the Shell Point Plaza area, and give greater visibility to Jericho Park. This site is also outside of the floodplain. At a minimum, the site

should accommodate 20,000 square feet of library space and 15,000 square feet of office space.

- Shared Parking Facility: As a library branch is developed in this area, a shared parking facility serving the library, park and nearby businesses should be considered. This would help promote well-planned commercial redevelopment in the area and reduce site costs for individual businesses.
- Future Street: A street running along the southern property line of Jericho Park connecting Parris Island Gateway to Savannah highway is recommended. This would provide access to the future library branch and park from both highways.

Battery Creek Boat Landing/Marina Boulevard: There is an interesting mixture of commercial, residential and recreational land uses in the vicinity of the Battery Creek Boat Landing. This area was adversely affected by the construction of the Russell Bell Bridge and the widening of Parris Island Gateway. This plan proposes to assist in the revitalization of this area by providing better visibility from Parris Island Gateway and removing some of the awkward elements that resulted when the road bed of Parris Gateway was shifted to the south. Refer to ***Map #4*** for the location of the following improvements.

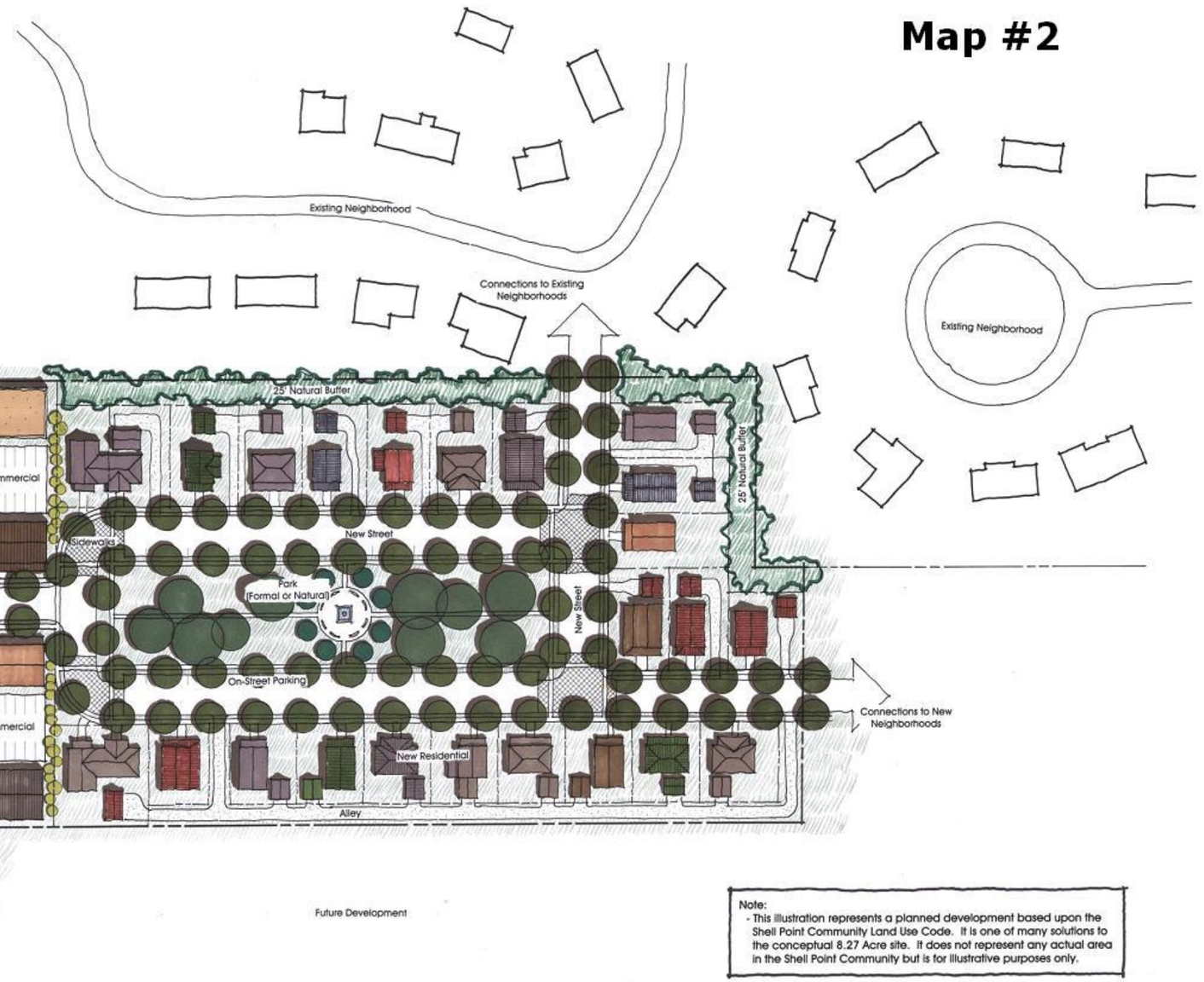
MAP 1


Shell Point Future Land Use Plan
Community Commercial
Neighborhood Commercial
Residential

Map #2

Planned Unit Development: Land Use Table

Area	Land	Percentage of Total	Permitted by Land Use
Residential	3.33 Ac.	40.27%	No Restrictions
Commercial	0.89 Ac.	10.76%	2%-30%
Open Space (Park and Buffers)	1.48 Ac.	17.90%	15% Min.
Street R.O.W.	2.57 Ac.	31.08%	No Restrictions
Total	8.27 Ac.	100.00%	



Conceptual Residential Development
1:50

0' 12.5' 25' 50' 100'

Note:
- This illustration represents a planned development based upon the Shell Point Community Land Use Code. It is one of many solutions to the conceptual 8.27 Acre site. It does not represent any actual area in the Shell Point Community but is for illustrative purposes only.

Shell Point Community Plan

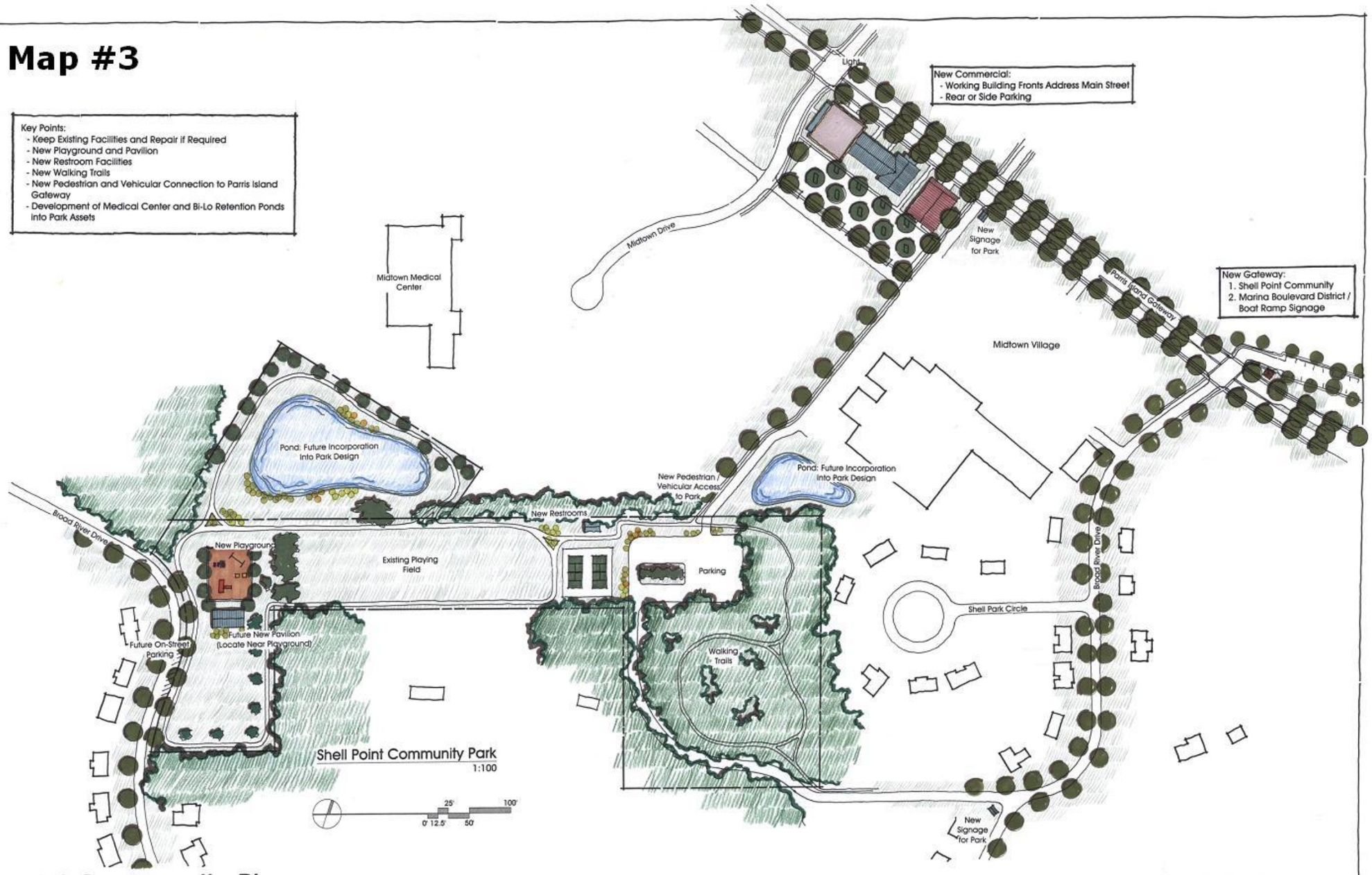
Beaufort County, South Carolina

Studio 3 Architects, llc

Conceptual Residential Development

Map #3

Key Points:
- Keep Existing Facilities and Repair if Required
- New Playground and Pavilion
- New Restroom Facilities
- New Walking Trails
- New Pedestrian and Vehicular Connection to Parris Island Gateway
- Development of Medical Center and Bi-Lo Retention Ponds into Park Assets



Shell Point Community Plan

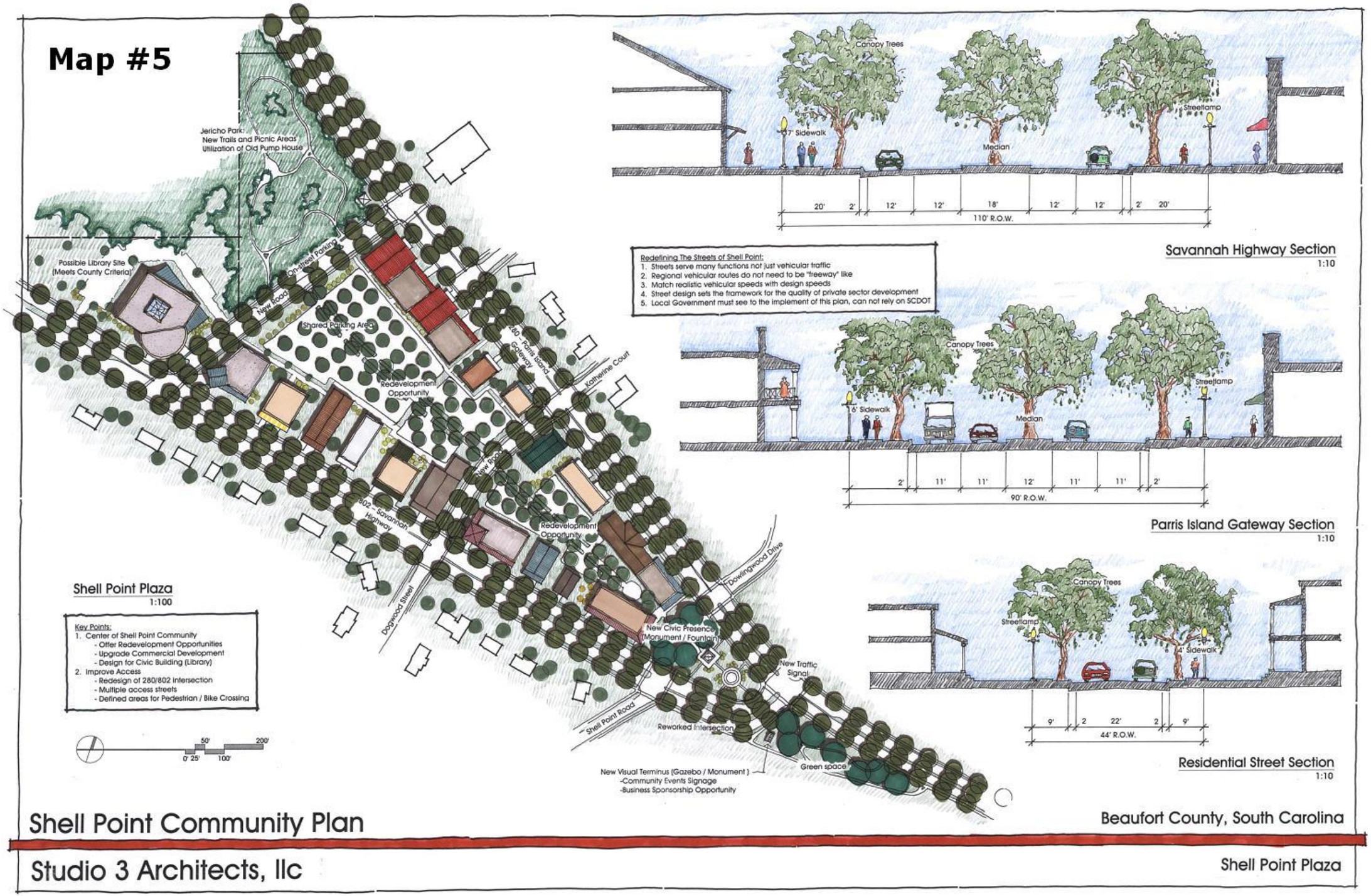
Beaufort County, South Carolina

Studio 3 Architects llc

Shell Point Community Park


Gateway / Signage Prototype:
- Use to Denote Marina Boulevard District
- Use to Define Borders of Shell Point Community
- Business Sponsorship Opportunities
- Civic Display Uses
Gateway Perspective
nts
Marina Boulevard
On-Street Parking
New Streetscape
New Businesses
Service Alley
Parking
75' Vegetated Buffer
Natural Gas Pumping Station
Parris Island Gateway
Shell Point Boat Landing
1:50
Key Points:
- Reorganize Existing Layout
- Add Basic Facilities
- New "Water Oriented" Business District
0 12.5 25 50 100
New Visual Screening
Full Canopy Screening
Battery Creek
Picnic Area
Future Erosion Control
New Restroom and Covered Shelter Area
New Signage/ Entry Landscaping
Shell Point Community Plan
Beaufort County, South Carolina
Studio 3 Architects, llc
Shell Point Boat Landing

Map #5


Jericho Park
New Trails and Picnic Areas
Utilization of Old Pump House
Possible Library Site
(Meets County Criteria)
On-street Parking
New Road
Shared Parking Area
Redevelopment Opportunity
280 - Parris Island Gateway
Katherine Court
New Road
802 - Savannah Highway
Redevelopment Opportunity
Dogwood Street
Dowlingwood Drive
New Civic Presence (Monument / Fountain)
New Traffic Signal
Shell Point Road
Reworked Intersection
Green space
New Visual Terminus (Gazebo / Monument)
-Community Events Signage
-Business Sponsorship Opportunity
Canopy Trees
7' Sidewalk
Median
Streetlamp
20' 2' 12' 12' 18' 12' 12' 2' 20'
110' R.O.W.
Savannah Highway Section
1:10
Redefining The Streets of Shell Point:
1. Streets serve many functions not just vehicular traffic
2. Regional vehicular routes do not need to be "freeway" like
3. Match realistic vehicular speeds with design speeds
4. Street design sets the framework for the quality of private sector development
5. Local Government must see to the implement of this plan, can not rely on SCDOT
Canopy Trees
6' Sidewalk
Median
Streetlamp
2' 11' 11' 12' 11' 11' 2'
90' R.O.W.
Parris Island Gateway Section
1:10
Shell Point Plaza
1:100
Key Points:
1. Center of Shell Point Community
- Offer Redevelopment Opportunities
- Upgrade Commercial Development
- Design for Civic Building (Library)
2. Improve Access
- Redesign of 280/802 Intersection
- Multiple access streets
- Defined areas for Pedestrian / Bike Crossing
0' 25' 50' 100' 200'
Canopy Trees
Streetlamp
4' Sidewalk
9' 2 22' 2 9'
44' R.O.W.
Residential Street Section
1:10
Shell Point Community Plan
Beaufort County, South Carolina
Studio 3 Architects, llc
Shell Point Plaza

Appendix 4-D
Seabrook – Stuart Point Plan

Purpose

The purpose of the Seabrook-Stuart Point (SSP) Plan is to articulate a direction for future growth and development within the communities of Seabrook and Stuart Point. The Plan addresses land use, recreational opportunities, and community design. The adoption of this plan and its policy statements forms the basis of land use regulations for the community. The plan, as a policy document appended to the County's Comprehensive Plan, is to be used to guide zoning, subdivision, facilities funding and design, and community development decisions made by government officials and agencies. The SSP Plan serves as a foundation and the structure upon which more detailed policies, standards and master plans may be developed. The plan also provides direction to residents, the business community, and investors concerning private development proposals and the location of public facilities.

The goal of the SSP Community Plan is to direct growth into two districts.

1. The mixed-use district is intended to serve the commercial, service and civic needs of local residents. This district also allows higher density residential uses centered on the Whale Branch Middle and Elementary Schools. This district, by directing commercial activity and higher density residential uses into a center, which allows the rest of the community to retain its semi-rural character and natural resources.
2. The residential district is to remain primarily semi-rural residential with generous open space. Opportunities for home occupations, cottage industries and resource-based activities continue to be encouraged throughout both districts.

Current Conditions

The SSP community is a place where a rural way of life still prevails. Commercial businesses are small and locally owned, open space and expansive views are plentiful, and the population is not increasing.

Process

The SSP community planning process was undertaken as part of Beaufort County's Community Preservation Planning Program and has sought to build consensus around a community-defined approach to the future of Seabrook and Stuart Point. The solutions to the issues, which this plan analyzes, have emerged as a result of a continuing dialogue with a wide range of participants, which began two years ago. The goal and activities represent the creativity of the SSP residents.

Listed below are the goals and actions derived from the many issues debated during the SSP Community Preservation planning process. The goals reflect what residents believe will help to build the community. Through a series of public meetings SSP residents

identified important issues to be addressed, each related primarily to the issue of growth and land use. The fundamental question was how to accommodate growth while maintaining the character of the community. Specifically the community had concerns about, and asked the CP committee to consider, the following:

1) How to encourage the provision of water service?
2) What mix of land uses and development densities are desirable?
3) What kinds of businesses are most appropriate and where should they be located?
4) How can we improve recreational opportunities?

Based on the information gathered and detailed questions posed by the community, four key areas of concern emerged: land use, recreational opportunities, water service and community design.

Goals and Actions

The SSP community is a place where a rural way of life still prevails. Commercial businesses are small and locally owned, open space and expansive views are plentiful, and the population is not increasing.

General Land Use Goals: Land should be used to the optimum benefit of the environment and the community. In order for relatives to be accommodated as part of an extended household, permission is often sought for an additional living unit connected to the main dwelling or upon the same lot. These are usually referred to as accessory dwelling units or granny flats. This can be in circumstances where a completely separate unit of accommodation would not comply with the normal criteria regarding density, access, space around dwellings and residential amenities. Such proposals are usually extensions, but may be conversions, of outbuildings. They will be treated sympathetically, provided they meet the setback requirements.

Goal: *Ensure that new development and redevelopment maintains and enhances the semi-rural character of Seabrook and Stuart Point.*

- Provide access to local commercial services by developing a mixed used district, centered on the Whale Branch Middle School, which encourages the integration of residential, commercial, civic and public uses while preserving the rural character.
- Permit commercial uses at a scale and intensity that maintains compatibility with residential uses; require new buildings to respect the character of the community.
- Maintain diversity in the type and the character of development and promote various opportunities in the type and the cost of housing.
- Place location limitations and design standards on the development of multifamily uses.
- Develop an appropriate sign ordinance for the SSP area.
- Pursue available funding sources at the State level to provide for public services and facilities, in particular water service.
- Develop design standards to ensure that new development is well designed and in keeping with their surroundings and their adverse impacts upon the character and amenity of the community is avoided.

- Allocate land for commercial development that is closely related to the amount needed by the community.
- Allow accessory dwelling units.
- Develop standards to encourage affordable housing in planned communities. Some of the larger housing sites, where a planned community may be developed, should accommodate a mixture of dwelling types and sizes including a substantial proportion of homes suitable for smaller households.

Parks and Recreation Goals: Provide recreational opportunity through the use of a quality park system utilizing county, and school district resources. Recreation facilities should be safe and of a high quality. Additional recreational services should be developed around existing facilities, the Seabrook community center and the Whale Branch Middle and Elementary schools.

Goal: *Provide recreational opportunity through the use of a quality park system.*

- Encourage the development of shared recreational facilities at Whale Branch Middle and Elementary schools.
- Make a special effort to assist the Whale Branch Middle and Elementary Schools in developing their trail and recreational program.
- Investigate the development of passive recreational facilities at area schools.
- Provide public places and open spaces that complement the public realm and create identifiable focal points within the Seabrook–Stuart Point Mixed-Use District.

Design Goals: Visual compatibility is an objective measure that will be developed based upon the County's vision of rural character. It should be assured through development regulations and design standards, for example, density, size and location of clusters, screening from the roadway, and other requirements. Design elements or features such as marshes, existing vegetation, mature landscaping, historic farmsteads, archaeological sites and even open fields can maintain a semi-rural characteristics if included as part of a development. The design elements of the rural built environment include traditional buildings such as barns, farmhouses, traditional shops, feed stores, and roadside stands. Commercial development can be built to resemble traditional rural buildings to blend in with rural character.

Well-designed buildings fit in with their surroundings and satisfy the needs of the occupants and the general public. Good design can help promote sustainable development, improve the quality of the existing environment and, thereby, attract businesses and investment. Encouragement will be given to appropriate rural design. There will be considerable scope for originality and innovative architectural solutions. Good design relates well to its surroundings, enhances the quality of experience for its users, and contributes to public enjoyment of an area. Visually intrusive development, on the other hand, can spoil the quality of the environment for all. Seabrook and Stuart Point residents recognize that good quality rural design helps to create, sustain and improve the quality of the rural environment. The economic and social values of maintaining an attractive rural environment for businesses and visitors are equally

acknowledged. However, visual compatibility should not be used to preclude traditional rural uses by focusing on "prettiness."

Goal: *Develop a safe and aesthetically pleasing rural community through the orderly development of land and appropriate rural design and uses.*

- Preserve groups of buildings of special character, architectural quality and/or historic interest, particularly the McLeod Farmstead.
- Create a strong "sense of place".
- Enhance entryways to the community.
- Implement a streetscape program that creates a visually attractive, safe and comfortable street and gives scale and definition to the public realm.
- Provide sheltered bus stops along the Lowcountry Regional Transportation Authority bus route.
- Identify ways to build upon the history of Seabrook and identify sites for historic markers.
- Develop standards for the quality of design, permitted building materials to be used, site design, layout and scale of buildings.

The SSP Plan provides a goal and policy framework for guiding community development and promoting high-quality public facilities. Nevertheless, the Plan should not be viewed as a static document. It is meant to be reviewed, debated and modified as necessary to account for changing conditions and community values.

Implementation

The time and effort spent in producing this Plan is worth nothing without implementation. It is implementation and agreement on methods of implementation that will bring the Plan to life and initiate an evolution of activity that will move the SSP community toward the fulfillment of its goals. This section outlines the activities that must be pursued to carry out the Plan.

Preparation and adoption of the Plan is a beginning step in its implementation. Its basic purpose is to provide a guide for specific action. The Implementation Plan identifies techniques, strategies, and methods for carrying out the recommendations contained in the SSP Plan. The major implementation processes described include the SSP Community Preservation Land Development Standards, the County's Capital Improvement Program, the annual review and update process, general plan update and specific implementation program.

The SSP Community Preservation Land Development Standards: The SSP Community Preservation Land Development Standards is a regulatory tool used to define districts within the Community Preservation area for the purpose of controlling and guiding land use and development. These standards are the primary instrument for implementing land use policies. The County's review and adoption of the land development standards are important first steps in this plan's implementation.

Capital Improvements Program: Another tool for implementing the Plan is the Capital Improvements Program (CIP) which establishes schedules and priorities for all public improvement projects within a five-year period. The County first prepares a list of all public improvements that will be required in the next five years, including transportation and community facility projects. Then all projects are reviewed, priorities are assigned, cost estimates prepared, and potential funding sources identified.

The CIP typically schedules the implementation of a range of specific projects related to the Comprehensive Plan and Community Plans, particularly the restoration and upgrading of existing utilities and infrastructure facilities. Construction of public facilities and infrastructure is an important link between the development of SSP and the implementation of the SSP Plan. Based on an annual review, the CIP shall be reexamined for consistency with the goals and actions of this Plan. The CIP shall also be revised to include projects identified within the SSP Plan. In this way, the CIP serves as a financial planning document as well as a physical-planning document. It permits the construction of improvements identified in the SSP Plan.

The five-year CIP shall be used to enable the implementation of the SSP Plan policies in a manner which is consistent with the goals and actions identified. The CIP can also be used to implement growth strategies in the SSP Plan by locating and programming public facilities and infrastructure for lands within the approved SSP Community Preservation area. Finally, by stipulating the desired community projects and improvements, the SSP Plan provides the guide for desirable public facilities and services.

Annual Review: The county administrator shall submit an annual report to Beaufort County Council on the status of the Plan and the progress of its application. By going through this process, it is possible to regularly reexamine the plan's premises and evaluate progress made on its implementation. Implementation actions may need to be modified as additional information is received. The County Administrator, along with the lead departments identified in Table 1, is also responsible for monitoring the implementation of the SSP Plan.

The annual review process provides an opportunity to update and refine the policies expressed in the SSP Plan and to monitor and evaluate the progress of the implementation strategies and programs incorporated therein. This process is the vehicle by which the county, private property owners, developers, community groups or individual citizens request changes to the goals and actions of the SSP Plan. The review and amendment process includes citizen participation, through community meetings to familiarize SSP residents with the amendment proposals and at formal public hearings before the Planning Commission and County Council.

General Plan Update: The SSP Plan reflects a ten-year planning period. This period allows for the systematic implementation of desired projects, land use patterns, and installation of required public improvements. To provide for flexibility and responsiveness to change, the Plan also should be comprehensively reviewed and revised, if appropriate, at four-year intervals. This periodic update enables the Plan always to maintain at least a 10-year time frame.

The update of the Plan in not synonymous with total revision. Once adopted, the Plan establishes a basic policy framework that must be followed over time. The purpose of

reviewing the Plan at intervals is to allow it to adjust to changing conditions, the availability of more recent planning data, and shifts in community values. When revisions to the Plan are proposed, SSP residents and property owners should be invited to participate in the formulation of the changes.

Implementation Actions

I: Identify Grants: Federal and State grants-in-aid are available to assist with land use planning facility improvements and other services and improvements. Coordinating grant proposals with the directives of the Plan is a positive step toward accomplishing the goals of the Plan. Most grants require matching funds by the receiving municipality. The County's contribution may be met by in-kind contributions from various departments and also through departmental budgets. Additional sources for funding are:

(A) Community Development Block Grant (CDBG): The Community Development Block Grant Program is funded by the U.S. Department of Housing and Urban development and provides assistance for programs and projects directly aimed at the type of projects identified in the SSP Plan. The Community Development Block Grant funding is allocated on an annual basis and can be used for a variety of projects contemplated in The SSP Plan.

(B) Beaufort County Transportation Committee (C Funds.): This funding source is generated from gasoline sales tax funds appropriated to the county from the state and administered by the Beaufort County Transportation Committee. Permitted projects includes road paving, sidewalks, curb improvements, walking paths, bus shelters and road signage. Projects other than road paving projects require a "special project application" which are accepted every three years.

(C) The Beaufort County Tree Fund: There are funds generated from projects where the Development Review Team determined that the required replacement of trees was not feasible or not desirable, such reductions are subject to a general forestation fee. The funds collected through this forestation fee may be used by the County to plant trees and other landscaping in highway medians and along roads, and to provide general landscaping such as those identified in the SSP Plan.

(D) The Rural & Critical Land Preservation Board: This advisory board was established to protect rural and critical lands through the Purchase of Development Rights, voluntary programs and other mechanisms. The Board is mandated to establish criteria and a ranking system to rank land parcels, that are approved by County Council. Beaufort County currently levies and designates 2 mills in ad valorem taxes in order to acquire land for conservation, farmland protection, and open space preservation.

II. Prioritize Projects and Add to CIP: Table I summarizes the implementation actions recommended in The SSP Plan. In addition, the

projects are prioritized, a responsible department is assigned, and the timing for implementation of the specific action is noted.

III. Schedule Implementation: The implementation of the SSP Plan will be monitored. Some items are expected to be completed quickly. For others, especially those items that need additional funding, it may be harder to schedule a firm completion date. Nevertheless, the status of every item proposed in the Plan will be tracked. A check date, if not a completion date, will be set for each item. This tracking chart will be updated regularly, as more information becomes available and as the status of each project changes. An update report is scheduled for the Fall of 2001 to summarize the overall implementation status of the recommendations of the SSP Plan.

IV. Commitment and Support: Thus, while the SSP Plan provides the framework for community development, the everyday action of the County shapes the community. The manner in which the Plan is implemented is the real test of the County's commitment to the goals, objectives, and policies.

By adopting the Plan, the County Council will demonstrate the County's commitment to the implementation of the Plan. However, every action item listed in this Plan will require separate and specific implementation. Adoption of the Plan does not begin the implementation of any item. The implementation will require specific actions by the SSP community, the County and other agencies. The Plan will be supported and implemented by:

- County Boards, Commissions, and Staff: The numerous boards and commissions of the County will look to The SSP Plan when they need guidance about the neighborhood. The Planning Commission will already know if a proposed zoning change in the SSP CP area is appropriate and supported by the residents and businesses of the community. Additionally, County staff will use the Plan as a guidance document for review of projects and programs.
- County Department Budgets: Each year every County department puts together a budget that states the department's priorities for the coming year. By bringing the strengths and desires of the community to the attention of County departments, the SSP Plan will help them prioritize those projects that help safeguard the community's assets while addressing its needs. Allocating dollars to certain programs and activities inevitably results in setting policy priorities that are critical to the implementation of the SSP Plan. The budget instructions to department heads shall require that proposed expenditures include reference to items in the Plan that will be implemented with the funds.
- Capital Improvement Projects: There are many projects in the communities that require major capital expenditure. In these instances, the guidance provided by the Plan will be critical to

guarantee the project will proceed in a fashion that keeps in mind the overall long term interests of the community.

- Other Agencies and Organizations: Other agencies and organizations outside County government will play an essential role in the implementation of the Plan. As these agencies look for public input, the SSP Plan will be available as a clearly articulated vision of the direction the community desires to go.
- Community Monitoring of Implementation: The Community Planning Process has established a healthy dialogue among local residents concerning the future of the community. A number of citizens have thus far been involved in planning discussions. SSP has always been characterized by active citizen involvement, and this should continue to be standard policy. The planning process will affect everyone in the community, and everyone should contribute to planning decisions. The SSP Plan Implementation Tracking Chart (Appendix A, included in the back packet) provides a way to easily check the status of the implementation of the Plan. For each action proposed in the plan, the chart lists the contact, the estimated cost, the current status and comments. This chart will be updated by the SSPCP group as the status of the projects change and as new information is available.

Conclusion

The SSP planning process has been an extensive collaborative two-year project, that has created a substantial body of work. The process was conducted in conjunction with Beaufort County's Community Preservation Planning Program and was directed by the SSP Community Preservation Committee with assistance from County staff and a professional design consultant team. Public outreach was extensive and many community issues and ideas were identified. The Plan was created to address these issues and provide a five to seven-year framework for action.

The purpose of planning is implementation. The SSP Plan identifies the overall development needs in SSP, the tasks involved in addressing them, the various parties who should perform these tasks, and the level of participation sought from these parties. The SSP community group should continue to advocate for themselves, their community, and the Plan. The ultimate success of the SSP Plan will be determined, in large part by the collective efforts of this group, along with Beaufort County Council, the County Administrator, the Planning Division, and concerned citizens in general.

Appendix 4-E
The Alljoy Road Community Preservation Plan

The purpose of the Alljoy Road Community Preservation Plan is to articulate a direction for future growth and development within neighborhoods along Alljoy Road. The Plan addresses land use, transportation and recreational opportunities. The adoption of this Plan and its policy statements form the base on which land use regulations for the community will be developed.

The Planning Process

The process began with a community meeting held on November 24, 2003. At that time, residents interested in serving on the Alljoy Road Community Preservation Committee submitted their names. Candidates were clustered around neighborhoods within the community: Brighton Beach, Crystal Beach, Estill Beach, and Palmetto Beach. At a follow up meeting held on December 8, 2003, residents voted on Committee candidates. The eleven-member group that was elected to form the Committee represents a variety of interests and geographic locations within the community.

For the following six months, the Alljoy Road Community Preservation Committee met to carefully discuss issues pertinent to the community. Such issues included:

- Preserving the eclectic residential character of the community
- Conserving undeveloped land
- Extension of public sewer to the community
- Proposed County transportation projects
- Paving of County roads
- Providing for more parks and multi-use trails
- Gaining better local control of the Brighton Beach boat landing and waterfront.

Representatives from the Beaufort County Engineering Division, the Trust for Public Lands, the Town of Bluffton, Greater Bluffton Pathways, the Town of Bluffton Community Development Department, owners of non-conforming commercial and industrial uses and others spoke to the Committee to address these and other issues.

On September 13, 2004 the Committee presented the Draft Alljoy Road Community Preservation Plan at a public hearing. Comments made concerning the Plan were discussed and incorporated into the final Plan. Following Committee approval, the Plan will be submitted for approval to the Beaufort County Planning Commission and then to the Beaufort County Council for adoption as a policy document appended to Beaufort County's Comprehensive Plan. It will then be used to guide zoning, subdivision, facilities funding and community development in the Alljoy Road Community.

Community Goals

The setting of goals to achieve specific objectives is critical during the preparation of a plan to address existing conditions and direct future growth and development in a community. Implementation is vital to the success of any plan.

Based on community input at both public meetings and intense discussions of the issues facing the community listed above, the following goals were identified. Specific actions that can be undertaken to achieve this Plan's goals and the parties that should accomplish them are also included.

Future Land Use: The Alljoy Road community can be separated into two distinct types of development: the residential area that follows Alljoy Road and the waterfront (the preservation district) and the area along Burnt Church Road and Ulmer Road (a mixed use district). The parcel located at the intersection of Burnt Church, Alljoy and Ulmer roads was specifically included in the residential district as it serves as a gateway to the community. A separate goal for each of these districts was prepared.

Alljoy Road Community Preservation District

GOAL: *Encourage infill residential development that furthers the neighborhood's eclectic character and continues the predominant single-family residential character of the neighborhood, while discouraging commercial and high-density residential uses.*

To meet this goal, the Committee will prepare a zoning district with the following characteristics:

- Density: To be set by minimum lot size.
- Minimum lot size: 14,520 square feet (⅓ acre) for sites with sewer service and 21,780 square feet (½ acre) for sites without sewer service.
- Permitted uses: Single-family detached homes, duplexes, accessory dwelling units, home daycare, and public services.
- Limited uses: Bed and breakfasts, home occupations, home businesses and outdoor recreation
- Special uses: Barge landings, outdoor recreation.
- Limiting standards: These will be based on and may exceed the standards included in the Beaufort County Zoning and Development Standards Ordinance.

    1. Limiting standards for barge landings should include the following standards at a minimum in addition to:
        - No new barge landings shall be permitted.
        - Barge landings cannot be used for commercial ferries.
        - Barge landings cannot be used as docks for commercial tour boats, charters, ecotourism or kayak rental.
        - No permanent or temporary structures may be erected for the operation of the barge landing
        - Areas for outdoor storage or staging of materials shall be screened from view from neighboring properties.

2. Civic and social organizations should be limited to a total floor area of 5,000 square feet.

3. Limiting standards for home occupations and home businesses should be clearly incidental to the residential use. These uses should not compromise community integrity by adversely affecting traffic or parking. Standards for storage, signage, design, and hazardous materials use must also be developed.

4. No specific limiting criteria have been delineated for outdoor recreation. However, it should be identified as a special use and, as such, be reviewed by the Zoning Board of Appeals under the criteria for special uses included in Section 106-555 of the ZDSO.

Alljoy Road Office Commercial/Mixed-Use District

GOAL: *Accommodate existing land uses along Burnt Church Road and Ulmer Road and encourage the development of small office and commercial uses that generate only low traffic volumes.*

To meet this goal, the Committee will prepare a zoning district with the following characteristics:

- Minimum Lot Size: one-fourth acre for non-residential uses, one-third acre for single family and duplexes, 2,500 square feet for townhouses.
- Mixed uses: To encourage a pattern of mixed-use development similar to the traditional center of the Town of Bluffton, residential uses and commercial uses are permitted in this district.
- Permitted residential uses: Single-family detached, townhouses, duplexes, accessory dwelling units, home businesses.
- Permitted commercial uses: A variety of retail and services uses that primarily serve their immediate neighborhoods (Neighborhood Commercial). To reduce traffic impacts and to maintain existing scale of development, each of these is limited to a footprint of 5,000 square feet in floor area and a building height of 35 feet.
- Limited uses: Home occupations, home businesses, bed and breakfasts.
- Special uses: Commercial apartments, planned communities, daycare (commercial and adult).
- Bufferyards: Allow buildings to address the street or provide a 20-foot wide bufferyard. The existing scale of development dictates that setbacks may be included in the bufferyard.
- Outdoor storage: Area devoted to outdoor storage cannot exceed 10 percent of gross floor area. Outdoor storage must be screened from view of neighboring properties and nothing may be stored vertically that exceeds 12 feet in height.

Public Sewer

GOAL: *Extend sewer service to all parts of the Alljoy Beach Community.*

During the first half of 2004 two referenda were held by BJWSA to garner support for the extension of public sewer into the Brighton Beach neighborhood. Both referenda failed due to lack of response from residents. One of the obstacles to achieving a positive response is the high number of seasonal residents and absentee homeowners in the area.

Community leaders need to garner support for public sewer among area residents and landowners during the one-year post-referendum waiting period. The Committee should work with Beaufort-Jasper Water/Sewer Authority (BJWSA) to identify other methods of funding besides another referendum. The Alljoy Road CP Committee should lead this effort with assistance from the County Planning Department.

Although grant monies are difficult to secure, an effort should be initiated by the Beaufort County Grants Administrator to find funding for this project.

Road Improvements

GOAL: *Discourage truck traffic on Foreman Hill Road when it is extended to US 278.*

There is a concern that when Foreman Hill Road is extended to US 278, there will be a significant increase of truck traffic on the road because it would provide a shortcut to SC 46. The increase would make the intersection of Ulmer, Burnt Church and Alljoy roads even more difficult to navigate than it already is. When the County Engineering Department begins the design phase of the Foreman Hill Road extension, a dialogue with the Alljoy community should be opened, optimally through the CP Committee with assistance from the County Planning Department. At this time methods available for reducing truck traffic on Foreman Hill Road can be addressed.

Another issue that was addressed was the paving of dirt roads. Beaufort County has included the following Alljoy area unpaved roads in a contract to be awarded in December 2004:

- Allendale Street
- Brunson Street
- Carolyn Lane
- Castlepoint Road
- Croaker Street
- Fairfax Street
- Fisherman Lane
- Flounder Street
- Garnett Street
- Luray Street
- Mullet Street
- Sailors Choice
- Trout Street

Based on comments received by the Beaufort County Deputy Engineer during a CP Committee meeting, many of these roads will be modified to a narrower width and several will be one-way roads with appropriate signage.

Multi-use Trails

GOAL: *Construct a multi-use trail through the Alljoy community for recreational use and to enable cycling as an alternative means of transportation*

The Committee supports a multi-purpose trail that consists of a paved extended shoulder located on Alljoy Road. The proposed course for the trail would start at the intersection of Alljoy Road and Burnt Church Road; proceed east to the intersection of Alljoy Road and Shad Road; proceed north on Shad Road to Ulmer Road; and proceed west along Ulmer Road to the intersection with Burnt Church Road.

The Alljoy Road CP Committee should provide Greater Bluffton Pathways with a copy of this Community Preservation Plan with a request that the Alljoy Road trail be added to their future pathways network plan as well as future trail planning and funding activities. SCDOT should also be apprised of the proposed trail so it may be included in planning for future repaving efforts.

Parks

GOAL: *Increase parkland in the Alljoy community.*

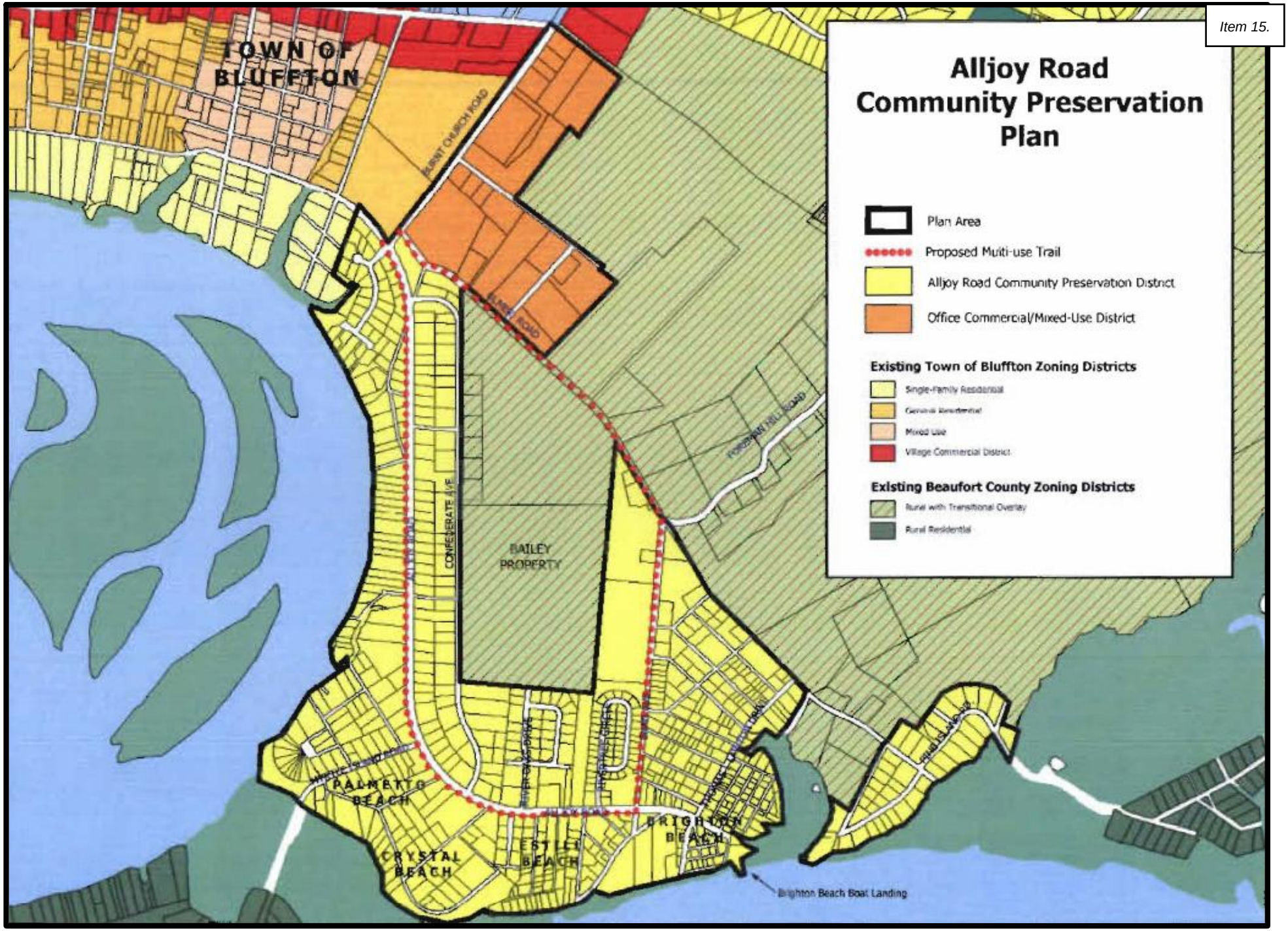
The CP Committee recognizes that there is a shortage of parkland in Southern Beaufort County, especially in the area east of the Town of Bluffton. This Plan proposes an amendment to the Beaufort County's Greenprint map to include the 53-acre parcel, owned by Raymond Bailey, that is surrounded by the Alljoy Road Community Preservation Area on the west, south and east (PIN# R600 039 00B 0147 0000). A request for this parkland addition has been submitted to Beaufort County by the CP Committee and is undergoing the review and approval process.

Brighton Beach Boat Landing

GOAL: *Improve the enjoyment of the Brighton Beach boat landing for all users and enhance public safety by increasing law enforcement patrols or other means.*

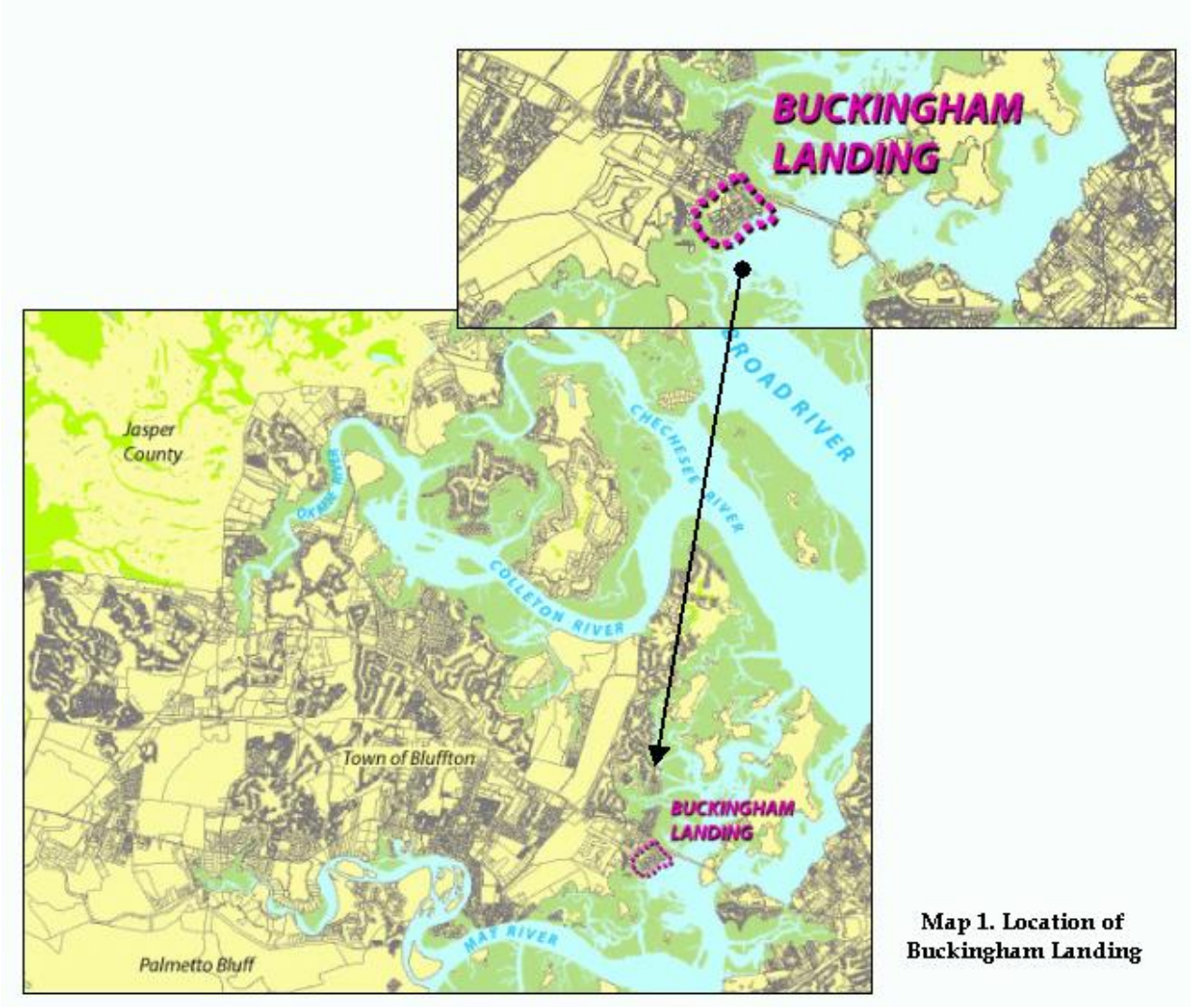
The residents in the vicinity of the Brighton Beach Boat Landing only direct access to public recreation is at the Brighton Beach Boat Landing and beach area. Residents are concerned with increased occurrences of rowdy behavior, public consumption of alcohol, uncontrolled pets and littering in the waterfront area. The addition of a park in the Alljoy area, as described in Goal 5, could alleviate some of the Landing's traffic and reduce disruptive behavior and littering.

This Plan supports continuing a dialogue with the Beaufort County Sheriff's Department to adequately address these concerns, such as enforcement of leash laws and prohibition of glass. Additional patrols at the Landing should be put into effect to protect this community's health and safety.


TOWN OF BLUFFTON
Alljoy Road Community Preservation Plan
Plan Area
Proposed Multi-use Trail
Alljoy Road Community Preservation District
Office Commercial/Mixed-Use District
Existing Town of Bluffton Zoning Districts
Single-Family Residential
Mixed Use
Village Commercial District
Existing Beaufort County Zoning Districts
Rural with Transitional Overlay
Rural Residential
BAILEY PROPERTY
CONFEDERATE AVE
PALMETTO BEACH
CRYSTAL BEACH
ESTIEL BEACH
BRIGHTON BEACH
Brighton Beach Boat Landing

Appendix 4-F
The Buckingham Landing Community Preservation Plan

The purpose of the Buckingham Landing Community Preservation Plan is to define the neighborhood's existing character and convey the residents' vision of its future. The Plan addresses public safety, transportation, land use, the environment and recreational opportunities. Also included is an examination of mitigation activities to minimize impacts resulting from the construction of the restaurant at the end of Fording Island Extension. The adoption of this Plan and its policy statements form the base on which land use regulations for the community will be developed. The Buckingham Landing community is shown in Maps 1 and 2.



Map 1. Location of Buckingham Landing


U S 278 to Hilton Head Island
FORDING ISLAND RD EXT
N
W
E
S
Buckingham Landing Community Preservation Plan
Rev/05/08/09
Page 2 of 19

The Planning Process

A community meeting was held on May 3, 2006 to initiate the Community Preservation (CP) process. At that time, residents interested in serving on the Buckingham Landing Community Preservation Committee submitted their names. An eleven-member group was selected from the submittals to form the CP Committee.

At the community meeting, a list of issues facing the community were identified and discussed. These issues form the framework for the CP Plan:

- Public safety
- Transportation, including vehicular access to the neighborhood, the condition of local roads and barge usage at the public boat ramp
- Environmental standards
- Land use, including impacts from the construction and operation of the new restaurant and housing
- Historic preservation
- Recreational activities and access to the boat ramp.

The Buckingham Landing CP Committee held meetings twice a month beginning on June 27, 2006. Guest speakers included Colin Kinton of Beaufort County Engineering; Fran and Bill Marscher, residents of Buckingham Landing and initiators of the Clean Water Task Force; Eddie Bellamy, Director of Beaufort County Public Works; Audra Antonacci, Codes Enforcement Supervisor; Capt. Marvin Morrison and SSgt. Larry Swigart, Sheriff's Office; and Dick Duell, Senior Engineer of the Beaufort-Jasper Water-Sewer Authority.

The CP Committee presented the Final Draft Buckingham Landing Community Preservation Plan and ordinances at a public hearing on February 6, 2007. Comments made concerning the Plan were discussed and incorporated into the Final documents. The Plan is then submitted to the Beaufort County Planning Commission for approval and then to the Beaufort County Council for adoption as a policy document appended to Beaufort County's Comprehensive Plan. It will be used to guide zoning, subdivision and facilities funding in Buckingham Landing.

Community Issues and Goals

Based on community input at both public meetings and intense discussions of the issues listed above, the following goals were identified. Specific actions to be undertaken to achieve each goal are also included. In some instances, the CP Committee has taken the opportunity to accomplish some of the specific actions through dialog with County staff and other speakers at Committee meetings.

Public Safety: The primary goal for every community is the safety of its residents. For Buckingham Landing issues of public safety include addressing speed and traffic patterns within the neighborhood and reducing crime. Another public safety factor to be considered is the Landing's single-entrance character. Vehicular traffic can only enter and leave the community through the intersection at fording Island Road Extension and US 278. Until restaurant construction began, this limited traffic to residents and those using the public boat landing. Any future designs for alternate roadways through the

area should maintain a single entrance/exit to Buckingham Landing to keep traffic counts as low as possible.

- Speed limits: Community residents and Committee members agree that speed limits must be lowered on neighborhood roads to protect children, walkers, pets as well as the drivers themselves. Existing speed limits are 30 miles per hour on Fording Island Road Extension and Big Oak Drive (State roads) and 25 miles per hour on all other roads (owned and maintained by Beaufort County). CP Committee members asked the Sheriff's Office representative and the County's Public Works Director to work on reducing speed limits to the lowest permitted rate.
- Impacts to traffic from construction and operation of the restaurant: Vehicles entering the neighborhood during construction of the restaurant at the end of Fording Island Road Extension are traveling at relatively high rates of speed through the narrow roads. The drivers travel through the community to make a loop, arriving back onto Fording Island Road Extension to position themselves to enter the construction site in reverse. The completion of restaurant construction will greatly reduce the number of heavy trucks traveling the neighborhood, but trips by delivery vehicles during restaurant operations will remain high. Increased enforcement of speed limits may inspire drivers to use lower speeds while traveling through the community, improving public safety.



Photo 1. Restaurant as Seen from Public Boat Landing

Based on trip generation manuals, the restaurant, when opened, can be expected to double existing traffic (adding between 20 and 65 cars during peak hours of operation), especially in the first few months after opening and during peak tourist seasons. This potential traffic increase and its accompanying safety issues (pedestrian safety, speeding, accidents, illegal parking, and such) is a major concern for neighbors. These safety impacts are based on the existing number of parking spaces permitted with restaurant development. Restaurant owners, managers and patrons must be limited to using the parking spaces permitted under the existing development design. Permitting the restaurant additional parking spaces on or near the property will significantly increase traffic impacts and increase safety hazards for the community's children and pedestrians.

Residents near Alljoy Beach had similar problems with on-street parking by visitors to the beach. After a study conducted by SCDOT, "No Parking" signs were put up by the County near Alljoy Beach because there was an issue of public safety – the presence of parked cars limited access by emergency vehicles. Captain Morrison has requested SCDOT conduct a similar public safety study for Buckingham Landing.

GOAL: *Improve safety on Buckingham Landing roads for children, pedestrians, and drivers.*

1) Request lower speed limits for community roads and additional enforcement for these lower speeds.
2) Request that SCDOT prepare a public safety analysis for Buckingham Landing with special attention to impacts from restaurant operation.
3) Request additional enforcement to eliminate the use of neighborhood roads by heavy trucks.
4) Eliminate all on-street parking within Buckingham Landing by ordinance and enforcement.
5) Send a copy of this Community Plan to members of the Development Review Team to notify them of the strong community opposition to additional parking at or near the restaurant.
6) Request SCDOT and Beaufort County to install safety signs such as "Children at Play" and "No Through Traffic."
7) Work with Beaufort County Engineering and SCDOT to arrive at the best practicable solution to the traffic safety issues at US 278, while maintaining a single entrance to the community.

- Crime: According the Beaufort County Sheriff's Office, crime rates in Buckingham Landing are very low, residents disagree. At one CP Committee meeting, representatives of the Beaufort County Sheriff's Office attended and the group discussed crime in the neighborhood. Committee members asked for "more of a presence" from the Sheriff's Office for crime deterrence. The Committee was told that when calling the Sheriff's Office to report a crime, get an incident number. This number is required for any follow-up or further investigation of a crime. For example, if someone parks illegally on your property, you can have the car towed. But, the tow truck driver will require an incident number. Also, if a Beaufort County resident witnesses a crime, (s)he has the right to make a police report and go to the Magistrate's court to get a warrant for the perpetrator's arrest.

GOAL: *Reduce crime in Buckingham Landing.*

1) Request increased enforcement patrols from the Beaufort County Sheriff.
2) Ask Beaufort County to erect signs at the public landing that describe rules for use of the landing and the consequences of rule-breaking.
3) Establish a Neighborhood Watch.

- Fire prevention: Currently, there are no water lines on the Island and consequently, no fire protection in the form of hydrants. The provision of water to the restaurant will bring water lines and hydrants along Fording Island Road Extension. In the interest of public safety, liwater lines should be installed throughout the community to provide for a higher level of fire protection.

  GOAL: *Increase fire protection in Buckingham Landing.*

  Actively pursue installation of public water within the community.

Transportation: Buckingham Landing is only accessible by land at the intersection of US 278 and Fording Island Road Extension. Residents prefer this single-entrance arrangement as it virtually eliminates through traffic. There is water access to the community at the public boat landing at the end of Fording Island Road Extension. Recreational and commercial boaters using the public landing once produced the only additional traffic on the neighborhood's roads.

- Vehicular traffic – US 278: Two significant occurrences have changed traffic patterns: the widening and re-structuring of US 278 and construction of the restaurant. Making a turn onto the very heavily-traveled US 278 from Buckingham Landing has been a long-standing problem. The widening and re-structuring of US 278 is almost completed. Under the re-structuring of the road, many access crossings have been closed and traffic is forced to travel past their destination and make a u-turn to get back to the original destination. The access point to the Kangaroo gas station just east of the intersection of US 278 and Fording Island Road Extension has been closed and the cross-over point at the intersection, Buckingham Landing's only access point, is now the designated u-turn for access to the gas station. This has not only increased the number of vehicles using this access point, but has complicated traffic patterns and increased drivers' risk of accident.

  Colin Kinton of Beaufort County Engineering attended a CP Committee meeting and listened to the complaints and comments offered by Committee members and visitors. Because the widening project was nearing completion, there was little that could be done to improve access to the community. However, within a week of the meeting, Mr. Kinton had arranged to have concrete traffic control devices installed at the US 278/Fording Island Road Extension intersection as shown in Figure 1.

  Another part of the intersection's problems is that the cross-over lies within a depression created by the first widening of US 278, limiting the visibility of on-coming traffic to those within the cross-over. Any future road work in this section of US 278 must include elimination of this depression.



Figure 1. New Traffic Control Devices at the Intersection of US 278 and Fording Island Road Extension

- Vehicular traffic – Bluffton Parkway: Plans for the Bluffton Parkway, a limited-access road paralleling fording Island Road (US 278), were underway when the Buckingham Landing CP project began. A public meeting to discuss potential alignments for the Parkway. Proposed designs did not indicate any plans for a connection with US 278 near Buckingham Landing. Because the intersection of US 278 and Fording Island Road Extension is becoming more dangerous with the increase in both travel lanes and traffic, the Committee decided that preliminary alignments should at least consider a connection to Buckingham Landing. The Community Planner was tasked with presenting the community's request to the Parkway Steering Committee. At the next public meeting for the Parkway, the designs for Phase 5-A (the portion nearest Hilton Head Island) indicated two possible linkages to US 278 via a flying bridge passing near the Landing that would allow direct access to the Landing to the Parkway. One of these proposed designs is shown in Figure 2. The most recent proposed road alignment shows the Parkway's flying bridge passing near Buckingham Landing, without direct access from the Landing to the Parkway (Figure 3).

  This new design has disadvantages to the residents of Buckingham Landing including the continued use of a dangerous intersection, increased activity near that intersection (the merging lanes dropping more east-bound traffic). Using an access like the one pictured in Figure 2 would possibly be less expensive than the one in figure 3, with no requirement for flying bridges. In addition, access such as Figure 2 would likely remove one obstacle to even traffic flow, the convenience mart and produce stand. These activities currently attract many motorists, most of whom cross traffic to enter and exit. Clearly, the more beneficial access to Buckingham Landing would be a separate access similar to that in Figure 2.

  An important issue concerning vehicular access is the importance of maintaining a single access point to the community. If direct access to the Bluffton Parkway becomes open to Buckingham Landing residents, the access point at Fording Island

Road Extension must be closed. If, not, the Landing will become a short cut resulting in heavy through-traffic and increased threats to public safety.



Figure 2. Bluffton Parkway Phase 5 Alternative Alignment 3, October 2006



Figure 3. Alignment of Bluffton Parkway Phase 5, March 2007

GOAL: *Improve external vehicular access to the community while maintaining the neighborhood's single-entrance character.*

1) Hold discussions with Beaufort County Engineers concerning improving direct access to Buckingham Landing via US 278 until such time as the Bluffton Parkway is completed with direct access to Buckingham Landing.
2) Closely follow plans for the Bluffton Parkway and become active in asking for direct linkages between the Parkway and Buckingham Landing .

3) If direct access to Buckingham Landing becomes available from the Bluffton Parkway, ensure that the access to US 278 is sealed.

Residential Land Use: Because Buckingham Landing is an established community with few lots left open for development, the CP Committee decided that any new land use ordinance should be designed to preserve the existing eclectic character of the neighborhood.

GOAL: *Maintaining the existing character of Buckingham Landing.*

Prepare a zoning district with the following characteristics:

- Density: To be set by minimum lot size.
- Minimum lot size: No less than 10,890 square feet for lots connected to public sewer and 14,520 square feet for lots with septic systems.
- Permitted uses: Single-family detached homes, home daycare for children, public boat landings.
- Limited uses: Duplexes, accessory dwelling units, bed and breakfasts, home-based businesses.
- Special uses: None.
- Limiting standards: These will be based on and may exceed the standards included in the Beaufort County Zoning and Development Standards Ordinance.

Commercial Land Use: Currently, there are five lots in the CP district on which are existing commercial activities. These are shown in Figure 4. All five parcels contain nonconforming uses:

- Parcel #1: R600-041-000-0002-0000: This one-acre parcel is situated at the intersection of US 278 (Fording Island Road) and Fording Island Road Extension. It has direct access to US 278 and is currently home to a store/produce stand. The store has been permitted as a traditional shop, which is defined as a small store (less than 1,500 square feet) that sells grocery items and household supplies.

- Parcel #2: R600-041-000-002B-0000: Adjacent to parcel #1, this parcel (1.57 acres in size) also has direct access to US 278. Existing land use includes a gas station with a convenience store.



Figure 4. Nonconforming Parcels

- Parcel #3: R600-041-000-0046-0000 – Located on Vine Street along the northern edge of the Island, existing land use on this parcel is a rental services company that provides plants for weddings and other activities. There are living quarters on the 1.12-acre parcel, but the owner is not in residence.

- Parcels #4 and #5: R600-041-000-0009-0000 and R600-041-000-0008-0000 – On the water's edge at the end of Fording Island Road Extension, these parcels are adjacent to the County's public boat landing. A restaurant is currently under construction on the one-acre site. The property owner of these parcels disagreed with the County as to his right to develop the parcels as he was permitted under a development permit granted him in 1988.

  The 1999 Beaufort County Zoning and Development Standards Ordinance (ZDSO) contained a process through which a property owner could appeal decisions made by zoning officials on "vested rights." The 1994 South Carolina Local Government Comprehensive Planning and Enabling Act did not address resolution of vested rights disputes. That has since been rectified and the County's process deleted in favor of the State's ordinance.

  In general, granting a property owner vested rights in a development means that (s)he can construct the project as though it was being built at the time of application, under the regulations in place at that time. Vested rights are usually granted to a developer who has at least partially completed the project before

abandonment.

The Buckingham Landing parcel appeal was made before a Hearing Officer selected for that specific purpose by the County Administrator, John Kachmar. Judge Finney, retired Chief Justice of the South Carolina Supreme Court, heard the case. Attorneys for the County and the property owner presented their sides of the argument and the Judge made his decision, which was binding on the participants. Thus, the property owner was permitted to construct a restaurant in accordance with a development plan submitted to the County in 1988.

While the restaurant is permitted to be constructed following land use regulations in place in 1988, there are two standards that have been developed since that time and that are applicable to this project: current lighting standards and signage standards. The new development must also comply with existing nuisance ordinances, especially regarding noise abatement. Parking is required to be on-site under both sets of zoning ordinances.

- Zoning the Existing Commercial Uses: None of the above parcels contains uses that conform to the existing Community Preservation land use ordinance. In this respect, the uses are considered to be nonconforming and subject to specific certain limitations (ZDSO Table 106-9):

  1) "Disturbed area expansion" is limited to 15% of the parcel within required setbacks and with maximum feasible buffers.
  2) Nonconforming uses can become conforming by correcting the unconformity or by approval of a special use permit. (Please note, this does not apply to parcels #4 and #5.)
  3) Nonconforming use with damage greater than 50% of their market value shall be replaced by conforming uses.
  4) Any partially destroyed nonconforming use shall be considered abandoned if substantial reconstruction of the damaged use has not been initiated within 180 days of the destruction date. Abandoned uses shall only be replaced with conforming uses and structures.
  5) Any nonconforming use shall be considered abandoned if vacant or unused for 120 days. Abandoned uses shall only be replaced with conforming uses and structures.

  For each of the above parcels, the CP Committee had to select one of the following zoning solutions for each of these parcels:

  1) Keep the parcel within the Buckingham Landing CP District and create a commercial zoning district that would apply to one or all of the above parcels, thereby making the use conforming.
  2) Keep the parcel within the Buckingham Landing CP District, which will be residential uses only, thereby creating a nonconforming use.
  3) Exclude the parcel from the CP District and request rezoning of the parcel to Commercial Regional, an existing Beaufort County zoning district.

  The Buckingham Landing CP Committee unanimously voted to keep the CP District

outline as it is currently designated, creating five non-conforming (grandfathered) parcels.

GOAL: *Prepare and ordinance that will not permit commercial uses in Buckingham Landing.*

1) Write a new zoning ordinance that permits only residential uses and home-based businesses.

Home-based Businesses: Several changes in business and technology over the past few years have changed home businesses, but zoning definitions have not always kept pace. Remote-location telecommuting and internet sales activities don't fit well into existing land use ordinances. Many residents in Buckingham Landing use their homes as a base of operations for a business. Residents would like to continue to operate these businesses and to do so with the fewest impacts on other residents. Currently, Beaufort County has three categories of home-based businesses and each is a limited use. No single one of these types of home businesses fits the needs of the residents or their visions for the future land uses within the community. The following presents some of the issues involved with each of the existing types:

- Home occupation: A business located entirely within a home, but not exceeding 25 percent of the home's total floor space. This specific floor space requirement is difficult to enforce. The designation also does not allow the use of accessory structures for the business or the hiring of additional employees.
- Home business: This category extends activity to accessory units and up to three employees as long as the operator (not specifically the owner) of the business resides on or adjacent to the property. Residents of Buckingham Landing believe that the property and business owner should also be the primary resident of the property.
- Cottage industry: Light industrial uses located on a minimum 10-acre lot with a residential unit on the lot. The industry can have up to six employees and the operator must reside on or adjacent to the property. The Committee decided that the uses included under "light industrial" in the ZDSO are too intense for Buckingham Landing.

For these reasons, the Buckingham Landing CP Committee decided that their best course would be to tailor a definition of home-based business specifically to fit the community.

GOAL: *Limit new commercial activities to home-based businesses. Encourage home-based business by easing restrictions on these activities while still maintaining the residential character of the community.*

- Prepare a zoning district with the following characteristics at a minimum:

1) Commercial activity: Not permitted.
2) Home-based businesses: Owner must reside on premises; limited hours of operation; neighborhood compatibility; no nuisances created; screened outside

storage; limited signage; no on-street parking; appropriate permits and licenses still required.

Environmental Standards: Buckingham Landing is a small peninsula on the far eastern end of the mainland surrounded by Mackay Creek and its wetlands (Map 1). Mackay Creek and its tributaries are part of the Broad River estuary, a drowned river valley system and the largest of the Sea Island Coastal Region estuaries, covering 219 square kilometers. A water quality monitoring plan was initiated in 1999 for the Broad river system. Monitoring results at water quality station 20-07, located at the bridge near Buckingham Landing, showed that water here met standards for an Approved classification, meaning that shellfish harvested at this location are approved for human consumption (SCDHEC 2006).

SCDHEC concluded that the Broad River estuary is affected by three major sources of pollution: nonpoint source pollution (stormwater runoff), sewage treatment and disposal systems, and boating impacts (primarily improper discharge of untreated or partially treated sewage).

For Buckingham Landing, stormwater runoff is the major pathway for pollutants to enter the marshes and waterways. Other contamination sources include fecal coliform from pets and wildlife, failing septic systems, and drainage from roads and other impervious surfaces. Committee members have reported that a large amount of trash from the Kangaroo station and fruit stand ends up in the neighborhood and in local waterways, another source of contamination. Stormwater management systems also need to function properly.

Methods for reducing nonpoint source pollution within Buckingham Landing include lessening the amount of impervious surfaces, keeping development and land disturbance away from wetlands, reducing neighborhood chemical usage (fertilizers, pesticides and herbicides), inform residents of the impacts arising from filling in or otherwise altering stormwater drainage ditches.

Because many of the lots on Buckingham Landing are small, there may be no room for alternate drain fields when an on-site sewer system fails. At some point it will also be important for residents to consider connecting to a public sewer system. Public water access may become necessary if salt water intrusion into the local aquifer begins to affect neighborhood wells.

The environmental impacts from barge usage are caused by actual landings of barges on land. Because almost all barge use at Buckingham Landing is via cranes, the impact from barge traffic is minimal.

GOAL: *Maintain the community's character and quality of life through protection of the local ecology and surrounding shellfish waters.*

- Prepare a zoning ordinance that will maintain the existing low-density residential character of the neighborhood.

  1) Permit only single-family, duplex, and accessory dwelling units.

2) Limit commercial use to home-based businesses.
3) Establish minimum lot sizes based on the availability of public sewer.

- Ask the County and BJWSA for assistance in obtaining funding and/or payment methods to assist residents to hook up to public water and sewer.
- Support existing river buffer zone restrictions including setbacks and maximum structure footprints.
- Oppose construction of parking in setbacks from the critical line.
- Provide education to residents concerning limiting impacts to local waterways, including information about:

1) Impacts from landscape chemicals and how to lessen these impacts.
2) The use of pervious materials rather than impervious materials.
3) The importance of maintaining septic systems and drain fields.

- Assist Beaufort County in maintaining a storm water management system that both prevents flooding and prevents pollution from moving to nearby waterways.

1) Inform Public Works when ditches become clogged and when flooding occurs.
2) Educate neighbors in the importance of keeping drainage ditches maintained.

Historic Preservation: For decades Buckingham Landing served as a primary access point to Hilton Head Island, with ferry service for passengers and barges for cargo. Private ferries like theClivedon (Hilton Head Island , 1998) provided regular service connections between Hilton Head Island and the mainland in the late 1800s that augmented the services provided by bateau owners since transport between Hilton Head Island and the mainland was needed.

In 1953, a State-operated car ferry began running from Buckingham Landing to Jenkins Island on Hilton Head. The first ferry, theGay Times, held four cars and the second,Pocahontas , held nine. The cost to ride was 10 cents per person and $1.25 per car (Hilton Head Island , 1998). Some evidence of the earlier residences and other structures on Buckingham Landing are visible as tabby remnants. Tabby is a concrete made from lime, sand and oyster shells. The largest collection of tabby remnants is located on the smaller of the two parcels on which the restaurant is being constructed. When the first development review was completed on the proposed project in 1988, the State Historic Preservation Office was requested to evaluate these tabby remains.



Photo 2. One of the Remaining Pieces of Tabby on Buckingham Landing

The person in charge of these as the top tabby determinations, regarded expert in South Carolina at the time indicated that the tabby group did not quality as a significant historic structure. However, they do represent the last remaining evidence of historical properties in Buckingham Landing, so they have community historical significance. The approved plan for restaurant construction shows that the tabby ruins are to remain standing within the restaurant parking lot. Building Codes personnel have been making frequent checks for construction compliance and should include the status of the tabby as part of their observations.

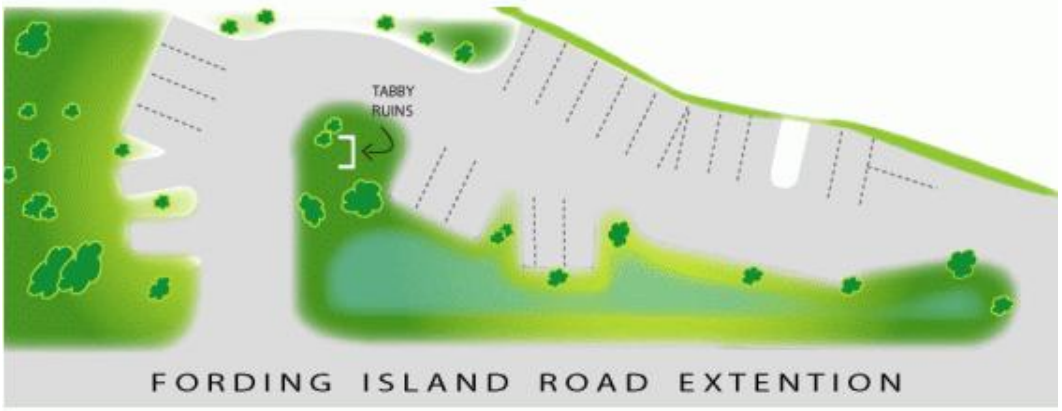


Figure 5. Sketch of Tabby Protection in Approved Restaurant Plans

GOAL: *Request that Beaufort County ensure the preservation of the tabby ruins.*

- Send copies of the approved Community Plan to those involved in monitoring restaurant construction.

Public Recreation: Currently, public recreation in Buckingham Landing is limited to the public landing. There are no parks or other forms of active or passive recreation except those activities provided to owners of waterfront property, who have virtually unlimited access to water sports. There is no existing public pressure to expand County recreational activities to the community. However, there is a significant demand that opportunities for private usage of the existing landing be shared equally with commercial users of the same landing.

GOAL: *Ensure that ample public access at the boat landing is maintained.*

- Review the proposed Beaufort County public boat landing ordinance amendments and make comments as appropriate.
- Address public parking issues when preparing the new land use ordinance.

Public Water and Sewer: The Committee was asked to address "other issues" as they arose. The only significant "other issue" to come out of the CP Committee meetings was access to public water and sewer. As discussed in Section 6Environmental Standards, to ensure continued high water quality near the Landing, there will come a time that on-site disposal systems should be replaced and homes connected to public sewer. Also, continued draw down on the Floridan Aquifer may result in saltwater intrusion into community wells, requiring connection to public water systems.

Mr. Dick Duell, a representative from Beaufort-Jasper Water and Sewer Authority (BJWSA) attended a CP Committee meeting to discuss the current status of water and sewer access to the Community. Current restaurant plans call for an 8" water line following Fording Island Road Extension. This line will tie into the pump station at the restaurant property and then return to the convenience store where it will connect with a 24" water line. BJWSA will put a 4" forced main in now if the community expresses "enough interest".

Also, BJWSA intends to run a 2" forced main for sewer transfer between the restaurant pump station and the convenience store. Because Fording Island Road Extension has just been repaved, the preferred utility line construction method would be to install water along one side of the road and sewer along the other.

Providing service to the entire community would be costly. Six thousand feet of 8" pipe would be needed to serve the neighborhood at a cost of approximately $10,000 for water service alone, and approximately $20,000 for both water and sewer (sewer cannot be installed separately. Meter fees (meter installation charges) are $500 per parcel. Current upkeep charges for grinder pumps total $27 a month; however, this is anticipated to drop to $10 in the near future. Attaching fees may be paid over time. There is some grant funding available, however, most are aimed at low-to moderate-income families.

BJWSA will consider providing water and/or sewer service to a neighborhood on the basis of a referendum with one vote per parcel owner. If at least 75 percent of the neighborhood property owners vote on a referendum for water/sewer service, BJWSA will consider the project. If at least 60 percent of that 75 percent vote in favor of the

referendum BJWSA approves the project. Once approved, every resident must tie in. If the referendum fails, but at least 50percent of the neighborhood voted for the project, a new referendum can be put up for a vote after 12 months. If less than 50 percent voted, the neighborhood must wait at least 2 years to hold another referendum.

GOAL: *Work toward installation of public water and sewer in the community.*

- Write a letter to BJWSA indicating community interest in the installation of a 4" forced main in place of the currently planned 2" line. Initiate additional contacts as needed to prove there is "enough interest" in the community for the project.
- Contact the BJWSA public communications staff member to initiate a referendum process.
- Request the Beaufort County Grants Administrator to investigate and apply for all appropriate utility grants.

Plan implementation: The Community Preservation Committee has identified the above goals and objectives as fundamentally important for maintaining and improving the Buckingham Landing community's character and the health and safety of its residents. Many of the above objectives were completed during the preparation of the Plan and ordinance. To ensure that existing momentum is not lost for achieving the community's goals, the CP Committee has agreed to continue meeting on a quarterly basis at a minimum. Committee members can also call meeting to address immediate concerns.

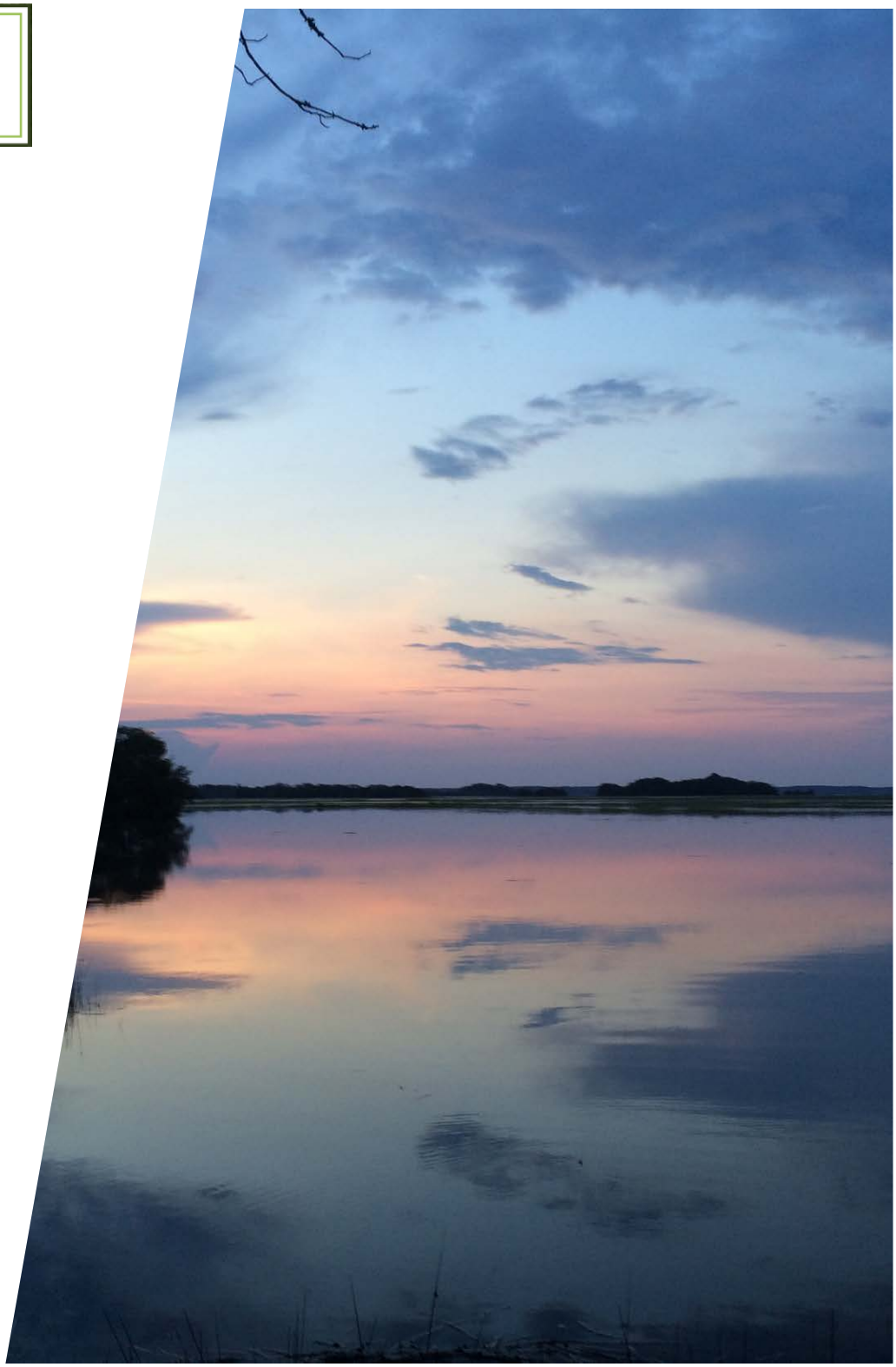


Figure 6. The Future We're Trying to Avoid

Daufuskie Island Council

BEAUFORT COUNTY SOUTH CAROLINA 1769

THE DAUFUSKIE ISLAND PLAN



May, 2018

RS&H

COMPLETE Communities

EPG ECOLOGICAL PLANNING GROUP

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In compliance with the South Carolina planning legislation, South Carolina statute 6-29-510(A) for local governments, the Daufuskie Island Comprehensive Plan was prepared through a collaborative and coordinated community effort. The Project Advisory Committee and members of the community participated in workshops, public meetings, and surveys throughout the process and devoted countless hours of effort in the development of the plan. This intensive level of effort by members of the community ensures that the plan aligns with the community's vision for the future.

This plan was also developed in full coordination with Beaufort County planning staff and has been developed to be consistent with the County planning process and existing Comprehensive Plan.

DAUFUSKIE ISLAND COUNCIL
RESOLUTION

A RESOLUTION TO ACCEPT AND TRANSMIT THE DAUFUSKIE ISLAND MASTER PLAN UPDATE AND THE DAUFUSKIE ISLAND PLAN CODE UPDATE

WHEREAS, the Daufuskie Island Council and the Daufuskie Island Council's Committee on the Daufuskie Island Plan and Code have completed the update to the existing Daufuskie Island Plan and Code; and

WHEREAS, the documents were prepared according to the requirements found in the South Carolina Local Government Comprehensive Planning Enabling Act and consistent with the Beaufort County Comprehensive Plan and Community Development Code; BE IT THEREFORE

RESOLVED, that the Daufuskie Island Council does accept and hereby transmit the updated Daufuskie Island Master Plan and Daufuskie Island Code to Beaufort County for review and adoption.

BY: Deborah Smith

Deborah Smith, Chairperson

DATE: May 15, 2018



Chapter One:
INTRODUCTION

CHAPTER 1: INTRODUCTION

A comprehensive plan is the guide that outlines the vision for the future of a community and includes the policies and tools for achieving that vision. South Carolina legislation requires the existence and periodic update of the comprehensive plan under South Carolina statute 6-29-510(A) for local governments. Although Daufuskie Island is not incorporated and is governed by Beaufort County, it is a significant and unique area, separated from the rest of the County by water. As such, it faces challenges, as well as opportunities, that are specific to the Island.

According to legislation, the comprehensive plan is required to include the following elements:

- Inventory of existing conditions
- Statement of needs and goals, including a vision statement that establishes the future desires of the community
- Implementation strategies

In addition to the elements identified above, the state planning legislation also identifies specific and relative community elements, including the requirement that the plan should be developed with broad-based community input and participation. The following elements are required to be included in the plan by statute 6-29-510(D).

- Population
    - Includes historical demographic data and characteristics and trends, which provides an understanding of the existing conditions and future potential of the area
- Economic Development
    - Includes historic data and characteristics regarding workforce, available employment and other relevant factors affecting the economy, such as tourism
- Natural Resources
    - Includes information on the environment and any unique assets or resources within the community
- Cultural Resources
    - Includes information on historic structures and other community features that relate to the cultural aspects of the community
- Community Facilities
    - Includes data and information on community infrastructure, assets and services
- Housing
    - Includes data and information of existing housing stock and characteristics

- Land Use
    - Includes considerations of the development characteristics and land use categories
- Transportation
    - Includes information regarding existing and planned multimodal transportation facilities and infrastructure
- Priority Investment
    - Includes the action plan for implementation of recommendations

The state legislation also requires the periodic update of the comprehensive plan. These updates may occur as often as needed for specific elements to address changing conditions, however a full evaluation of the comprehensive plan should occur every five years.
With the South Carolina planning legislation having been in place for decades, there is a recognition and local planning is a critical element in meeting the interests of the State.

The foundation of the plan should be fact-based information that enables tracking of policy implementation within the community, as well as the creation of a stable environment for business and industry, property owners, and members of the community. The plan provides communities with the tools to implement focused economic development strategies and initiatives that ultimately support the local vision for the future as well as the state's role.

The minimum planning standards and procedures for comprehensive plans incorporate the existing conditions within the community, the identification of needs and goals, and implementation strategies that support communities in meeting their aspirational goals.
The development of the existing Daufuskie Island Plan and Code began as a citizen-driven process in 2005 focused on Beaufort County's Community Preservation initiative. The planning effort encompassed numerous committee and community meetings and a charrette in 2007. The planning process culminated in the completion of the Plan and Code in 2009 and final adoption by Beaufort County in 2010. In light of length of time since the adoption and the changing economic and development conditions, the Daufuskie Island Council initiated a plan review and update.

This plan update was completed within the framework of the state planning requirements and in full coordination with Beaufort County. This approach was designed to ensure that the updated Daufuskie Island Plan is better aligned with the Beaufort County planning efforts and provides a springboard for implementation of the recommendations and strategies.

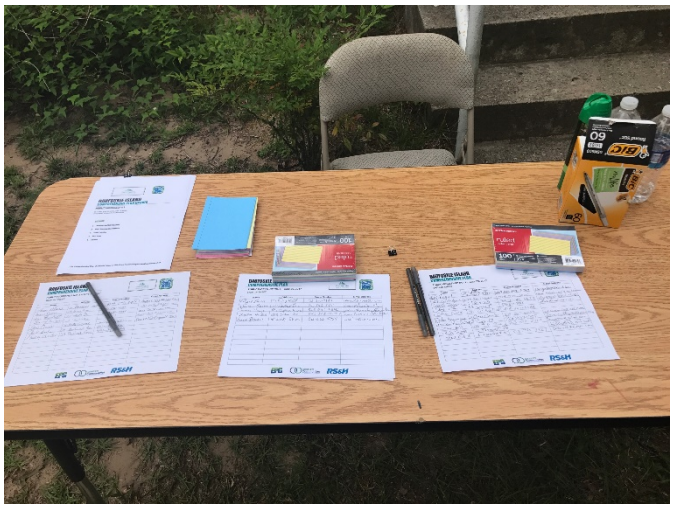
The Daufuskie Island Council undertook this plan update in 2017. A Council Subcommittee was formed to lead the update of the existing plan and included both elected members of the council, as well as members of the community. This Council Subcommittee served as the

Project Advisory Committee, or Steering Committee, for the update throughout the process and provided guidance and direction during the planning process. During the plan development, Daufuskie Island Council elections were held, which resulted in some changes in the committee membership. Members of the Council subcommittee for the plan update are found in Table 1.

TABLE 1. DAUFUSKIE ISLAND COUNCIL SUBCOMMITTEE/PLAN PROJECT ADVISORY COMMITTEE MEMBERS

Deborah Smith, Committee Chair	Member, Daufuskie Island Council
Darnell Brawner / Erin Quinn	Member, Daufuskie Island Council
Sallie Ann Robinson	Member, Daufuskie Island Council
John Schartner	Member, Daufuskie Island Council
Leann Coulter	Community Member
Martha Hutton	Community Member
Andy Mason	Community Member
Geof Jenkins	Community Member





Chapter Two:
COMMUNITY PARTICIPATION

CHAPTER 2: COMMUNITY PARTICIPATION

Community engagement and participation is the foundation of the development of a community plan. The engagement process must be broad-based and inclusive, educational and informative, and provide numerous opportunities for citizen participation and feedback. This planning effort for the update of the Daufuskie plan included numerous opportunities for feedback, including community workshops, public meetings, community surveys, and individual input from citizens. The following describes the participation and input process for the plan development.

Government Coordination

Because Daufuskie Island is not incorporated and ultimately governed by Beaufort County, the coordination with County planning staff throughout the planning process was critical. In addition, status updates were provided to the pertinent Beaufort County committees and planning commission.

May 11, 2017: Beaufort County Coordination Meeting

The project team and PAC chairperson met with the Beaufort County Planning staff to provide an overview of the planning process and plan update. This meeting ensured the coordination from the beginning of the update process with the County staff and also provided the County with the opportunity to provide feedback and input on the proposed plan update.

June 5, 2017: Beaufort County Planning Commission

The project team provided a presentation to the Beaufort County Planning Commission at the regularly scheduled meeting in June, 2017. This presentation provided the Planning Commission members with an introduction to the project team, the plan update process and the schedule. The Planning Commission is one of the County committees that will be responsible for reviewing the plan update and making a recommendation to the County Council for adoption.

June 19, 2017: Beaufort County Natural Resources Committee

The project team provided a presentation to the Beaufort County Natural Resources Committee at the regularly scheduled meeting in June, 2017. This presentation provided the Committee members with an introduction to the project team, the plan update process and the schedule. The Natural Resources Committee is one of the County committees that will be responsible for reviewing the plan update and making a recommendation to the County Council for adoption.

February 5, 2018: Beaufort County Planning Commission

The project team provided a presentation on the status of the plan update to the Beaufort County Planning Commission. The presentation included an overview of the activities to date, and update on the project schedule and the remaining steps in the plan update. The meeting was originally scheduled for January, 2018, but the meeting was cancelled due to inclement weather.

Additional Presentations

Daufuskie Island Council

The Daufuskie Island Council is the elected body that provides input to the County regarding Island issues, needs, and concerns. With the plan update initiative coming from the Council, the coordination and ongoing provision of project status and updates was also a critical element.

The Council holds its regular meetings on the third Tuesday of each month. Project team members or the Chair of the PAC provided updates regarding the development of the plan at each of these monthly meetings and were available to answer questions regarding the plan update.

Project Advisory Committee

The Daufuskie Island Council Subcommittee served as the Project Advisory Committee (PAC). This committee met regularly throughout the process to review detailed information and technical data and provided direction and guidance for moving the plan forward. The PAC meetings were open to the public and were typically very well attended by community members.

April 18, 2017:

This PAC meeting was focused on a review of the approach for the update of the plan and the designation of the Daufuskie Island Council Subcommittee as the Project Advisory Committee.

July 18, 2017:

This PAC meeting reviewed the results of the first public meeting held June 29, 2017. A review and summary of previous/existing plans, including the Conceptual Master Plan Charrette Report developed by Clemson Institute for Economic and Community Development, was completed and presented, as well as the draft vision statement, which was developed based on the results of the community workshop.

August 19, 2017:

At this meeting, the PAC reviewed the preliminary survey results, provided data and information on the identification of existing conditions, and background information and examples of character areas and development strategies

November 27, 2017:

This PAC meeting agenda included the presentation of the results from the community workshop held on October 2, 2017. This information included the draft character areas compiled from the workshop break-out groups, as well as the identified draft development strategies for each character area and the overall development strategies for the island.

January 14, 2018:

This meeting, originally scheduled for December, was postponed until January due to scheduling conflicts. This meeting included a final review of the character areas and development strategies and the results of the second community survey. The PAC also reviewed the zoning densities in the existing code.

February 18, 2018:

At this meeting, the PAC had the opportunity to review the highlights of the draft plan update and draft code update. The project team provided an overview and the draft plan posted online to provide the opportunity for a more in-depth review. The PAC also scheduled a timeframe for the next community workshop.

March 18, 2018:

At this meeting, the PAC reviewed the updated plan document. The project team provided documentation of how comments received were addressed. The draft of the updated Island Code was also presented for review, comment and feedback.

May 7, 2018:

At this meeting, the PAC reviewed the final draft of the plan and code. The project team provided documentation of how comments received were addressed. The PAC accepted the final drafts and recommended submittal to the Daufuskie Island Council for acceptance.

Community Workshops

The community workshops provided an interactive, open forum for participation and input from community members. These workshops were tailored to obtain input on specific areas of the plan and included break-out sessions and work group activities for participants. These meetings, held at Mary Fields School, each had approximately 25-35 participants.

June 29, 2017: Community Workshop # 1

The first community workshop was held on June 29th. At this workshop, a presentation providing an overview of the comprehensive planning process and schedule and a more detailed overview of the Daufuskie Plan update was provided. The attendees were divided into breakout groups for a facilitated discussion on the issues facing the island, as well as community priorities. Attendees were provided with example vision statements from other bridgeless island communities and coastal communities. Results from the breakout groups were posted and attendees used "sticky dots" to identify their top priorities. The results of the workshop were tabulated and incorporated into the first community survey.

October 2, 2017: Community Workshop # 2

The second community workshop was held on October 2nd. Originally scheduled for August 28th, the meeting was postponed due to inclement weather and high winds. At this workshop, a review of the survey results was provided, along with an overview of the existing conditions on the island. The attendees were also provided with an overview of character areas. Participants were divided into work groups, each with a map and markers. Group members identified character areas on the island, along with the defining characteristics of each identified area, as well as development strategies.

April 16, 2018: Community Workshop # 3

The third community workshop was held April 16th at the Mary Fields School. At this workshop, the draft code was reviewed in detail, as well as the draft plan. Handouts were provided for participants as well as posters placed on the walls providing information. The posters remained up, as well as handouts available, at the Daufuskie Island Council meeting held the following evening. Comments were accepted on both the plan and the code and the comment period was held through April 27th.

Surveys

In order to be as inclusive as possible, two community surveys were developed and hosted both on-line and hard copy versions. These surveys included information and ideas generated from the workshops and provided community members who were unable to attend the meetings the opportunity to provide feedback, as well as those who did attend the opportunity to provide additional input.

Survey # 1

The first survey was developed based on the results from the community workshop held on June 29, 2017. This survey, using the online survey tool, SurveyMonkey@ was developed to obtain additional feedback from the community. The survey requested the following information from the respondent:

- demographic information
- island residential status
- ranking of the priorities identified for the island
- community characteristics
- top three favorite things about living on Daufuskie Island
- agreement/disagreement with the draft Island Vision

The survey was open from July 25, 2017 through August 24, 2017. Although the survey was not restricted to one response per device due to the potential for one computer serving a household with several users, the IP addresses were scanned at the completion of the survey. The scan showed there were no anomalies in the responses from each IP address. The largest multiple responses from one computer resulted from the hard copy surveys being incorporated by the project team into the online survey.

There were 368 total respondents which included both online and paper copy responses. The key findings of the survey were a focus on community character and the preservation of that character through compatibility of growth and a sustainable economy. The results also focused on the preservation of community assets, including environmental/natural resources. The top three things that respondents identified as their favorite things about Daufuskie were:

- geographic location/no bridge
- quietness
- slower pace of life.

The vast majority of respondents (89%) agreed with the draft vision statement, which is found in Chapter 3.

Survey # 2

The second survey was an online survey that resulted from the character areas, development strategies and zoning densities presented at the PAC meeting on November 27, 2017. This detailed material required a more in-depth review and the survey was designed to facilitate feedback on the character areas, development strategies and existing zoning and allowable densities,

The second survey was open for approximately two weeks, from December 1st through December 12th. There were 33 respondents to this survey; while a much lower response rate than the first survey, the response rate was approximately 10%. The survey results were presented to the PAC at their meeting on January 14, 2018. The survey results showed a significant majority of the respondents agreed with each of the character areas, development strategies and densities.

The results from both surveys are found in the Appendix.

Additional Input

In addition to the formal opportunities for input and feedback, the project team was provided community input on an individual basis, primarily by island property owners and residents who were unable to make the community meetings. A supplemental public meeting was held on the weekend of December 9- 10, 2017 to provide an additional opportunity for informing the members of the public, including those unable to attend either PAC meetings or the community workshops. The information provided at this meeting included the presentation provided at the PAC meeting on November 27th and at the Daufuskie Island Council meeting on December 28th. In addition, maps and materials were posted on the bulletin board at Mary Fields School, along with project team and PAC member contact information.

All meetings and input opportunities were advertised on the Daufuskie Island Council website, on NextDoor Daufuskie, and with flyers posted in strategic areas of the island. All related presentations and meeting materials have been posted on the Daufuskie Island Council website and are found in the Appendix.



Chapter Three:

VISION AND GOALS

CHAPTER 3: VISION AND GOALS

One of the most critical steps in the development of a plan is the identification of the community's vision for the future. This vision provides the framework for the plan and is based on community input obtained early in the planning process.

Plan Review

At the first community workshop held on June 29, 2017, a review of the visions contained in existing plans that are pertinent to Daufuskie Island was presented. This information was designed to help the community understand the focus These plans and visions included the following.

Beaufort County Comprehensive Plan

The overall vision for the Beaufort County Comprehensive Plan is:
"Promote safe and healthy communities that preserve and build on the County's unique sense of place; and promote sustainable economic opportunities that allow all County residents the thrive and prosper."
The Beaufort County Plan also included eight vision statements:

- *Preserve the natural beauty*
- *Create new industries and jobs for a strong economy*
- *Build better roads and encourage two-wheeled and two-footed travel*
- *Preserve the rich cultural heritage*
- *Permit development while maintaining sense of place*
- *Create parks and conserve open spaces*
- *Ensure affordable housing for all residents*
- *Provide public services without breaking the bank*

Tourism Product Development Concept for the Lowcountry Region Strategy and Plan

The Tourism Product Development Concept for the Lowcountry Region, developed by the South Carolina Parks, Recreation and Tourism Department included a specific focus on Daufuskie Island. The elements identified as important considerations include:

"Even by the extremely high standards of the Lowcountry, Daufuskie Island represents a unique asset. As an ecotourism destination, further large scale real estate development should be prohibited, and strict zoning controls placed on the development of new structures. Sustainable energy and transport options and recycling for the Island should be developed, and unsealed roadways left in their present condition. Consideration should be given to the designation of an historic area in order to identify and preserve a zone where examples of the Island's unique architecture may be relocated and preserved."

Daufuskie Island Plan

The current Daufuskie Island Plan does not contain an overarching vision statement. However, there are identified goals for specific elements summarized in Table 2.

TABLE 2. DAUFUSKIE ISLAND PLAN ELEMENTS

Development Patterns
• Preserve land • Promote traditional development patterns
Ferry Service
• Improve service • Establish intense development around ferry embarkation sites
Island Transportation
• Improve transportation in a contextual manner
Tourism and Wayfinding
• Improve wayfinding infrastructure • Cross-promote tourism interests
Housing
• Increase opportunities for obtainable housing
Historic Resources
• Heighten historic preservation • Heighten land conservation efforts
Civic Sites
• Create small gathering spaces • Create significant civic spaces
Economy
• Expand the economy • Promote additional means of economic control and oversight
Sustainability
• Establish sustainable benchmarks and targets

Daufuskie Island Conceptual Master Plan Charrette Report

This report, developed by the Clemson Institute for Economic and Community Development included the identification of focused development recommendations and a Daufuskie Island Covenant. These recommendations and covenant were developed in recognition of the uniqueness of Daufuskie Island.

Development Recommendations:

- Maintain Haig Point Road as currently configured, with parallel path for walking, bicycles and golf carts

- Protection of neighborhoods outside of the resort plantations and emphasizing Daufuskie style of land use/architecture
- Mixed use district at south end of the island at county dock area
- New public landing in the island center (Melrose/Freeport area) to become main portal
- Updated zoning categories allowing small retail/businesses particularly in the center portal and southern portal areas

Daufuskie Island Covenant:

We, the people of Daufuskie Island, promise

To preserve our traditional island way of life while preparing our community for a prosperous future by guiding responsible growth in a way that allows our community values to remain constant.

Furthermore, we dedicate ourselves

- To making decisions that respect and preserve our natural resources;
- To enhancing and protecting our cultural and historic resources;
- To lead in the practices of civic engagement, environmental conservation, economic diversity, and sustainable development;
- To giving all generations opportunities to improve their quality of life,
- To preserve our island values while welcoming newcomers and new opportunities with open arms.

Therefore, in order to cultivate a more livable community, we hereby pledge from this day forward to support these endeavors by:

Participating in creative dialogue, listening with open minds, and giving our time, talent, and resources as necessary.

Finally, as stewards of our own future, striving to be citizens in the truest since of the word, existing on an island with no bridges connecting us elsewhere, we dedicate ourselves

- *To being connected*
- *To each other,*
- *To our children,*
- *To our elders,*
- *To our collective memory,*
- *To our environment,*
- *To our economy,*
- *To our island,*

Now and forevermore.

In addition to the review of the existing plans relating to Daufuskie Island, the meeting participants were provided with example local government vision statements from coastal communities throughout the southeast, as well as from bridge-less island communities throughout the country. These vision statements provided background for the meeting participants as they worked to develop elements of the vision statement and priorities for the island.

The results of the workshop were compiled into a draft vision statement, which was included in the first survey. Eighty-nine percent of the 368 survey respondents agreed with the vision statement. Based on feedback and comments, the Project Advisory Committee finalized the vision statement.

Daufuskie Island Vision

"Daufuskie is a pristine sea island with extraordinary natural, cultural and historic resources. Our vision is to support balanced, mindful growth that provides a sustainable economy, while preserving our unique and diverse community character, rural sense of place, and secluded island lifestyle. While recognizing property owners' rights to reasonable use of their land, we will minimize the threat to our natural environment, cultural and historic resources, and ensure the preservation of Daufuskie Island's natural beauty."

Goals and Priorities

Workshop participants were also asked to identify and prioritize aspects of the community considered crucial to preserve, maintain and enhance for the future of the Island. The results from the workshop were incorporated into the first survey in order to obtain additional and more broad-based feedback on establishing the goals and priorities of the Island.
The primary priority and focus centered around the preservation of the existing character of the community and slower, more rural pace of life enjoyed by residents. The following were identified as overall goals and priorities, which together with the vision, form the framework for the development of the plan and the action steps needed to achieve the vision, goals and priorities.

- Preservation of community character
- Balance growth and development with the existing community character
- Promote a sustainable economy compatible with existing community character
- Preserve and enhance community assets, including the natural beauty of the island
- Promote environmental stewardship
- Preserve the island history and culture, including a focus on the native Gullah heritage

The major contributors to the island community character were identified as:

- Natural beauty and coastal environment
- Lack of large commercial/retail developments
- Quietness
- Slower pace of life
- Rustic/rural character
- Community involvement/sense of community
- Geographic location/lack of a bridge



Chapter Four:

EXISTING CONDITIONS

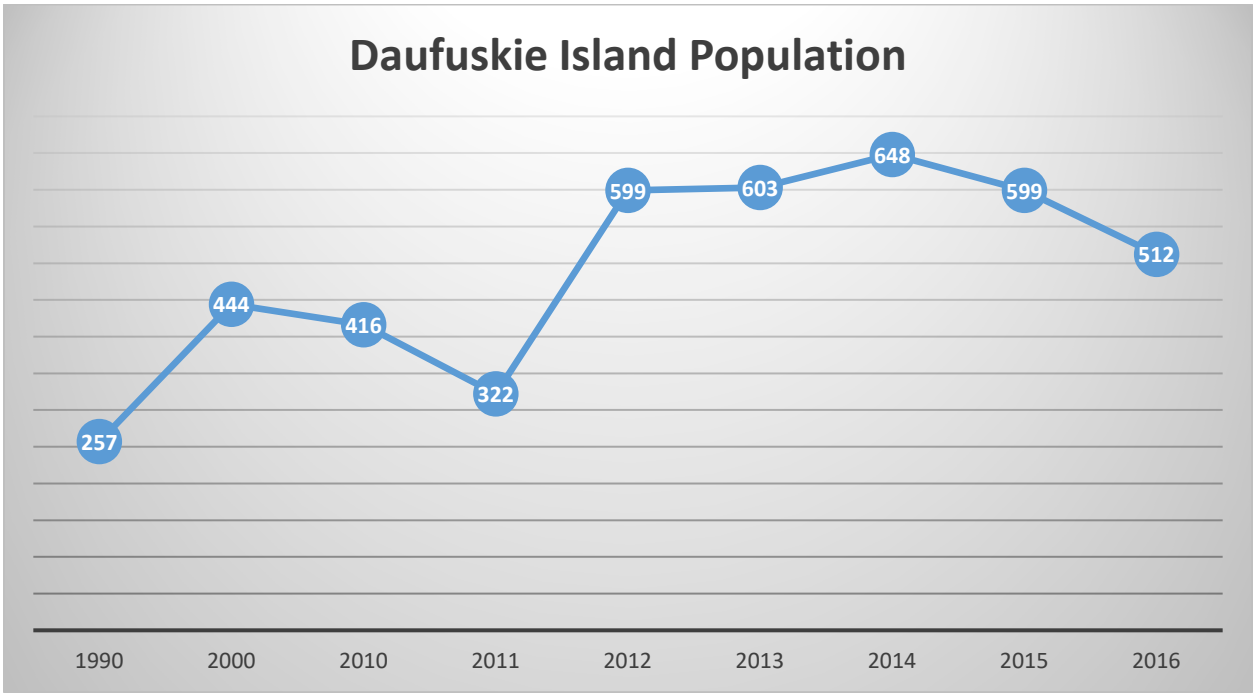
CHAPTER 4: EXISTING CONDITIONS

In order to appropriately plan for the future, there must be an understanding of the Island's existing conditions. Each of the required elements identified in the comprehensive planning legislation has been analyzed and the existing conditions developed.

Population

The full time residential population of Daufuskie Island has fluctuated over the last several decades. The population had dwindled to less than 100 residents before the advent of the resort developments in the late 1980s. The population began to grow, with 257 residents in 1990 based on the US Census decennial survey. Given the logistical requirements of living on a bridge-less island, the population has continued to fluctuate, reaching a peak high in 2014, with an estimated 648 residents according to the US Census American Community Survey. Since then, the estimated population on the island is an estimated 512 in 2016. The graph in Figure 1 depicts the population fluctuations since 1990. The data is also shown in Table 3, along with the percent change in the population.

FIGURE 1. DAUFUSKIE ISLAND POPULATION



Source: US Census and American Community Survey

TABLE 3. POPULATION PERCENT CHANGE (1990-2016)

Year	Population	% Change
1990	257	----
2000	444	72.76%
2010	416	-6.31%
2011*	322	-22.60%
2012*	599	86.02%
2013*	603	0.67%
2014*	648	7.46%
2015*	599	-7.56%
2016*	512	-14.52%

**US Census / American Community Survey Estimates*

In addition to the full time residential population, Daufuskie Island has a relatively significant part-time population of property owners who come to the island on weekends, or when it is possible for them to spend time on the Island. This population number also swells significantly during the high tourist season that typically extends from the end of May through September. The tourist season population includes both overnight guests, as well as a significant number of day-trippers coming the Island from the surrounding areas, such as Hilton Head, Bluffton and Savannah.

Demographics

The demographic breakdown of the population was identified for 2010 and the estimates for 2016. Table 4. shows the comparison of the population age and sex. The racial make-up of the population was identified as primarily Caucasian (93.5%), African American at 5.3% and Asian at 0.5%. Those identifying themselves as two or more races made up 1.3% of the population.

TABLE 4. DEMOGRAPHIC DATA - 2016

2016			
Age	Total %	% Male	% Female
Under 5 years	1.2%	0.0%	2.3%
5 to 9 years	5.1%	5.1%	5.1%
10 to 19 years	0.0%	0.0%	0.0%
20 to 29 years	4.1%	4.7%	3.5%
30 to 39 years	11.3%	12.1%	10.6%
40 to 49 years	0.0%	0.0%	0.0%
50 to 59 years	5.0%	4.6%	5.4%

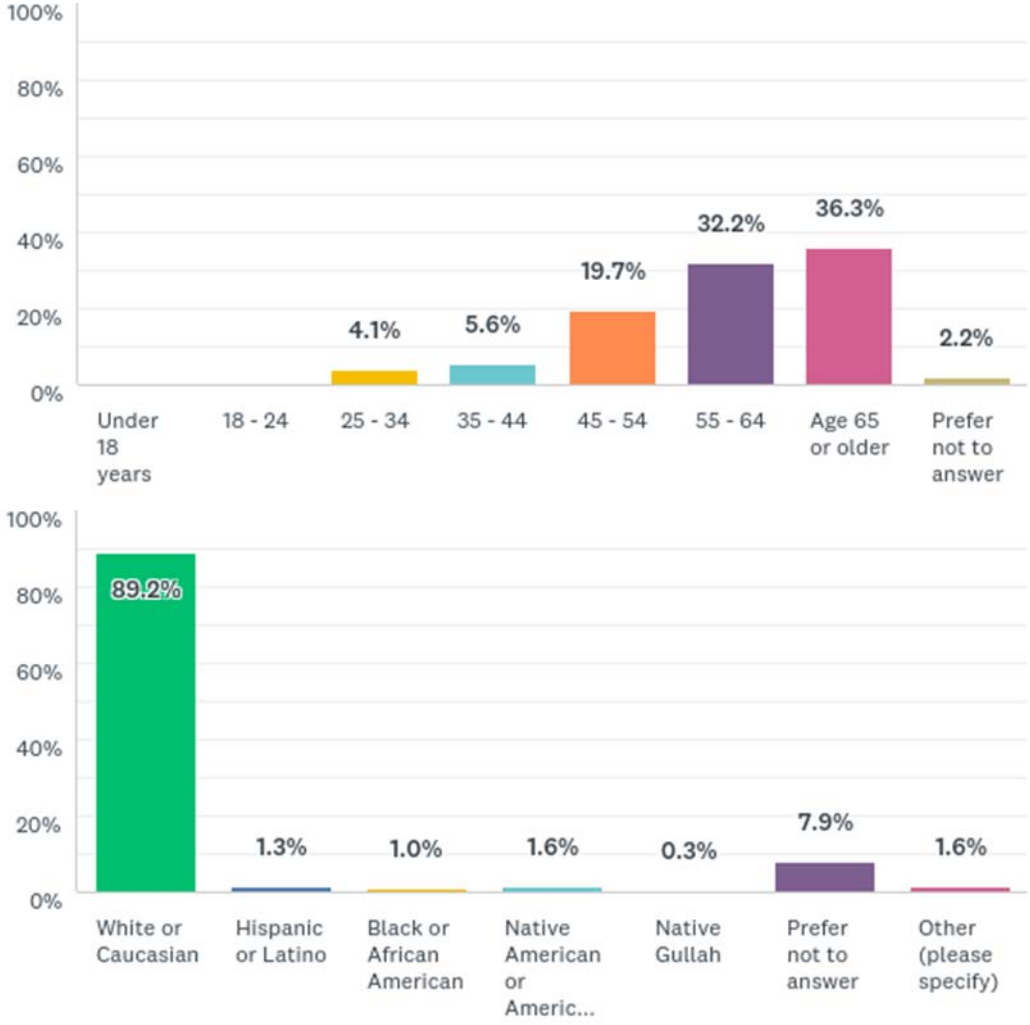
60 to 69 years	23.8%	25.8%	21.9%
70 to 79 years	39.7%	35.2%	44.1%
Over 80 years	9.7%	12.5%	7.0%

Source: US Census American Community Survey

Survey Respondents

Of the 368 respondents to the community survey, 89.2% identified themselves as white or Caucasian and 1.0% black or African American; 7.9% preferred not to answer the question. With regard to age, 36.3% of the respondents were age 65 or older and 32.2% were age 55 to 64. The demographics of the survey respondents are shown in Figure 2.

FIGURE 2. SURVEY RESPONDENTS



Population Forecast: Approximate "Build Out" Condition

Forecasting population is an inexact science and based on a variety of assumptions. For this plan, two forecasts were developed for the horizon year of 2035. The first forecast is an

estimated "build-out" condition for the Island, excluding the Planned Unit Developments (PUDs) of Haig Point, Melrose, Oak Ridge and Bloody Point. These PUDs are subject to their approved densities. There are currently a total of 1,891 undeveloped parcels on the Island, of which 735 parcels are outside of the PUDs.

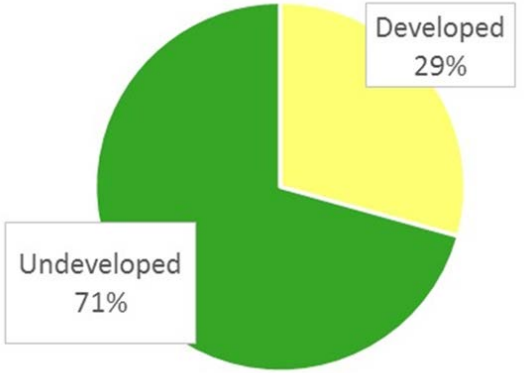
These 735 parcels are currently zoned rural, general urban, suburban, and urban center, each of which has maximum allowable densities. These allowable densities range from one dwelling unit per acre in the rural category to eight dwelling units per acre in the urban center category. Based on the percentage of parcels found in each category and the maximum dwelling units allowed, there is a potential total of 3,055 additional dwelling units on the Island.

Applying the average household size of 2.2 persons per household, the potential population could include an approximate addition of 6,720 persons excluding the PUDs.

Based on the approved PUD densities for Bloody Point, Haig Point, Melrose and Oak Ridge, an additional 2,691 dwelling units are approved, although this figure does include hotels and inns. Applying the same 2.2 persons per household, the additional population from the PUDs at build out is approximately 5,920. When combined with the potential population outside of the PUDs, the build out population on the island is approximately 12,640 persons. The developed and undeveloped parcels are shown in Figure 3.

FIGURE 3. DEVELOPED/UNDEVELOPED PARCELS





Developed Parcels	*592 (24%)*
Undeveloped Parcels	*1,891 (76%)*

Population Forecast: Historical Trend Analysis

With the large fluctuations in population, including both full time residents, as well as vacationers and tourists, a realistic estimate of future population growth is difficult. The previous plan population forecasts were focused on significant population growth, however, the need for ferry use and/or a private boat to access the island and the associated logistics will have an impact on the future population growth. The further development of the PUDs is also in flux given the history of insolvency with regard to Bloody Point and Melrose. Based on the historical trends, the average annual rate of growth in population over the fifteen years from 1990 to 2016 has been 3.65%.

Applying the average yearly growth rate for developing future population projections, the Island population by 2035 would be 1,013 full-time residents, coupled with the continuing swell in population through overnight tourists and day-trippers. While additional development on the Island is uncertain, but likely to occur in some form that will result in an increase in population growth, based on historical trends, those additional increases would likely be offset to some degree by out-migration.

Economic Development

The economy of Daufuskie Island is currently based on tourism and service industries supporting the tourist economic sector, as well as some of the service needs of the island residents. The South Carolina Department of Parks, Recreation and Tourism tracks the economic benefits of tourism throughout the state. While not broken down into geographies smaller than the county level, the impact of tourism on Daufuskie can be understood through the county-level statistics. Beaufort County ranks third in the State behind Horry and Charleston Counties in the generation of tourist/travel expenditures, with tourist generated spending totaling over $1.3 billion in 2016 with local tax receipts totaling over $39 million.

In recent years, there has been an increase in the establishment of small businesses across the Island, which are in addition to those already existing. These businesses include restaurants and coffee shop, artisan shops, and tourist supportive services. While new small businesses have started up, there also have been several economic set-backs for the Island.

The Melrose Resort went through bankruptcy in 2017 and its future is uncertain. The Bloody Point Resort also closed in 2017 due to financial issues. While the resorts experienced financial difficulties, the residential areas of Melrose and Bloody Point are separate entities and not related to the resort/club financial issues. Finally, one of the long-standing restaurants on the Island, which was also a major employer, closed its doors. These recent closures have had a detrimental impact on the economy of the Island.

To address these impacts and to move the economy forward, in early 2018, an initiative was undertaken to provide support to existing businesses and foster and support new endeavors. The Business Alliance is supported by the Clemson University Extension Service and is working on action steps to ensure the Island's economic stability and vitality.

The first community survey provided insights into the economy and employment status of island residents. Of the respondents to the survey, 40.3% indicated they were retired, with 34.4% employed full time. Of the 34.4% of full time employees, 18.8% are self-employed and/or business owners on the island; 56.5% work off the island and 17.2% work on the island from home.

The US Census American Community Survey (2012-2016) estimates support the community survey findings, showing approximately 27% of the population employed full-time. Tables 5, 6 and 7. provide a breakdown of the occupational and industry employment sectors and worker classification.

TABLE 5. OCCUPATIONS

Occupation	Percent of Workforce
Management, Business, Science and Arts	7.8%
Service	45.3%
Sales and Office	18.8%
Natural Resources, Construction, Maintenance	23.4%
Production, Transportation, and Material Moving	4.7%

Source: US Census American Community Survey Estimates
Note: Margin of Error range from +/- 7.2% to +/- 12.9%

TABLE 6. INDUSTRY

Industry	Percent of Workforce
Agriculture, Forestry, Fishing/Hunting/ Mining	0.0%
Construction	38.3%
Manufacturing	7.0%
Wholesale Trade	0.0%
Retail Trade	9.4%
Transportation, Warehousing, Utilities	5.5%
Information	0.0%
Finance and Insurance, Real Estate, Rental/Leasing	2.3%
Professional, Scientific, Management and Administrative and Waste Management Services	7.0%
Educational/Health Care/Social Assistance	15.6%

Arts, Entertainment, Recreation and Accommodation and Food Services	0.0%
Other Services, except Public Administration	14.8%
Public Administration	0.0%

Source: US Census American Community Survey Estimates
Note: Margin of Error range from +/-3% to +/-35%

TABLE 7. WORKER CLASSIFICATION

Class of Worker	Percent of Workforce
Private Wage and Salary Workers	65.6%
Government Workers	14.8%
Self-Employed Workers	19.5%

Source: US Census American Community Survey Estimates
Note: Margin of Error +/- 22%

Table 8 displays the family or household income. The median family income, or middle value, is $128,542.

TABLE 8. FAMILY INCOME

Income Estimate	Percent of Population
Less than $10,000	0.0%
$10,000 to $14,999	0.0%
$15,000 to $24,999	0.0%
$25,000 to $34,999	0.0%
$35,000 to $49,999	13.2%
$50,000 to $74,999	11.0%
$75,000 to $99,999	15.0%
$100,000 to $149,999	18.5%
$150,000 to $199,999	21.6%
Over $200,000	20.7%

Source: US Census American Community Survey Estimates
Note: Margin of Error +/- 13.3%

Natural Resources

As a coastal sea island, Daufuskie Island is home to significant natural resources and scenic viewsheds. A volunteer community organization, the Daufuskie Island Conservancy, was organized in 2005 "exclusively for the education, scientific and charitable purposes related to the study, protection and management of the natural resources of Daufuskie Island and the surrounding ecosystem. The Conservancy has regularly hosted environmental talks,

conducted an environmental survey, implemented an Adopt-A-Road program, and established a sustainable living farm, and is committed to the protection and preservation of the Island's resources.

One of the most significant resources for the Island is the salt marsh, one of the most unique ecosystems and habitats. The primary salt marsh vegetation is Spartina alterniflora and is plentiful in Daufuskie's salt marshes and is one of the few species that thrives in salt water. These marshes serve as a protection for many species, such as shrimp, crab and oysters, by protecting them in their larval or beginning stages.

In addition to the saltwater wetlands, or salt water marsh, Daufuskie also is home to freshwater wetlands. These freshwater wetlands, located in the interior of the island, provide a home to many fish and bird species, as well as vegetation. The saltwater wetlands or marsh comprise 17% of the area of Daufuskie, while the freshwater wetlands comprise 15%. The wetlands are shown in Figure 4.

FIGURE 4. WETLANDS



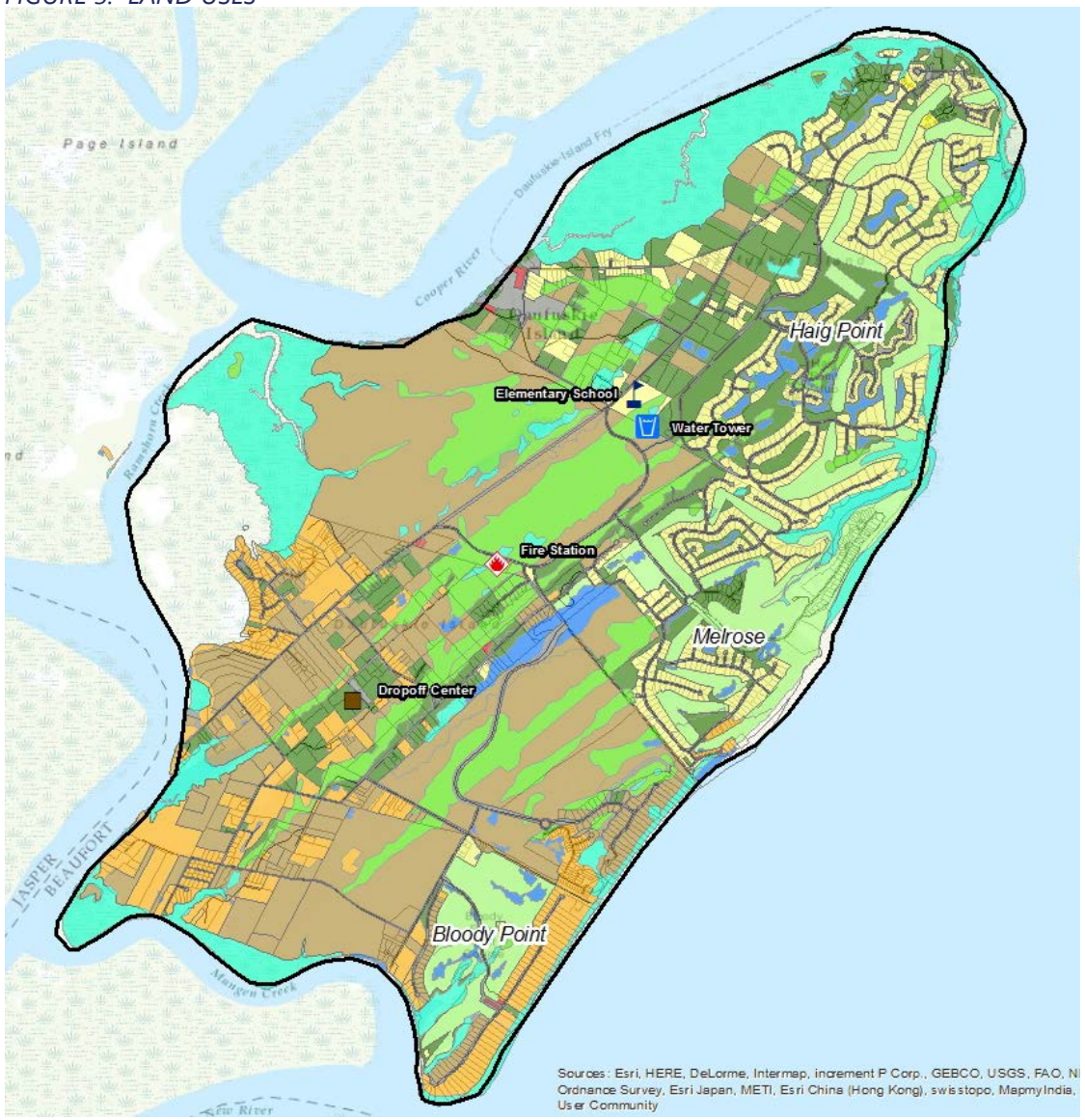
Wetlands

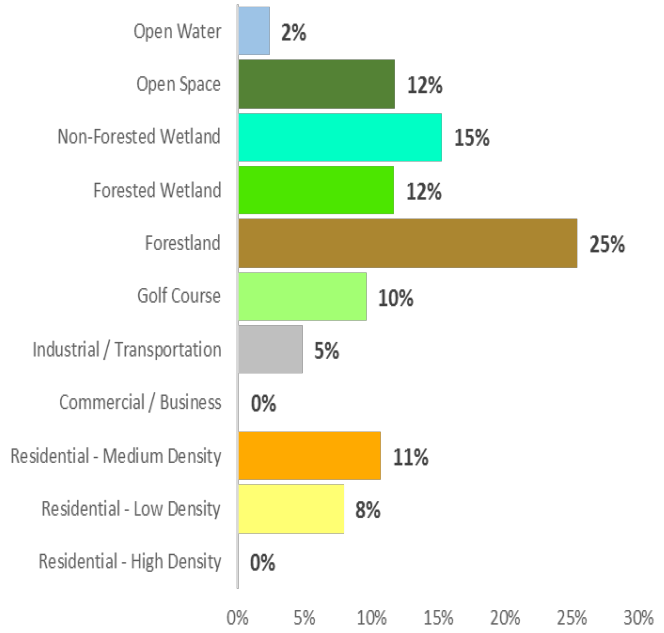
Saltwater	*17%*
Freshwater	*15%*

Another important element of the natural ecosystem is the beach which extends along the eastern side of the Island. The beach and dune system typically serve to protect the inland areas from high seas, waves and hurricanes. However, the beach system has sustained damage from Hurricane Matthew (2016) and Tropical Storm Irma (2017), both of which made landfall in the vicinity.

Coastal forestland is also an important natural resource. These forestlands, which include numerous varieties of trees and other vegetation, serve as a wildlife habitat for a variety of species, such as palmetto, pine, oak and sweetgum. Approximately 25% of the Island is comprised of forestland, shown in brown in Figure 5

FIGURE 5. LAND USES



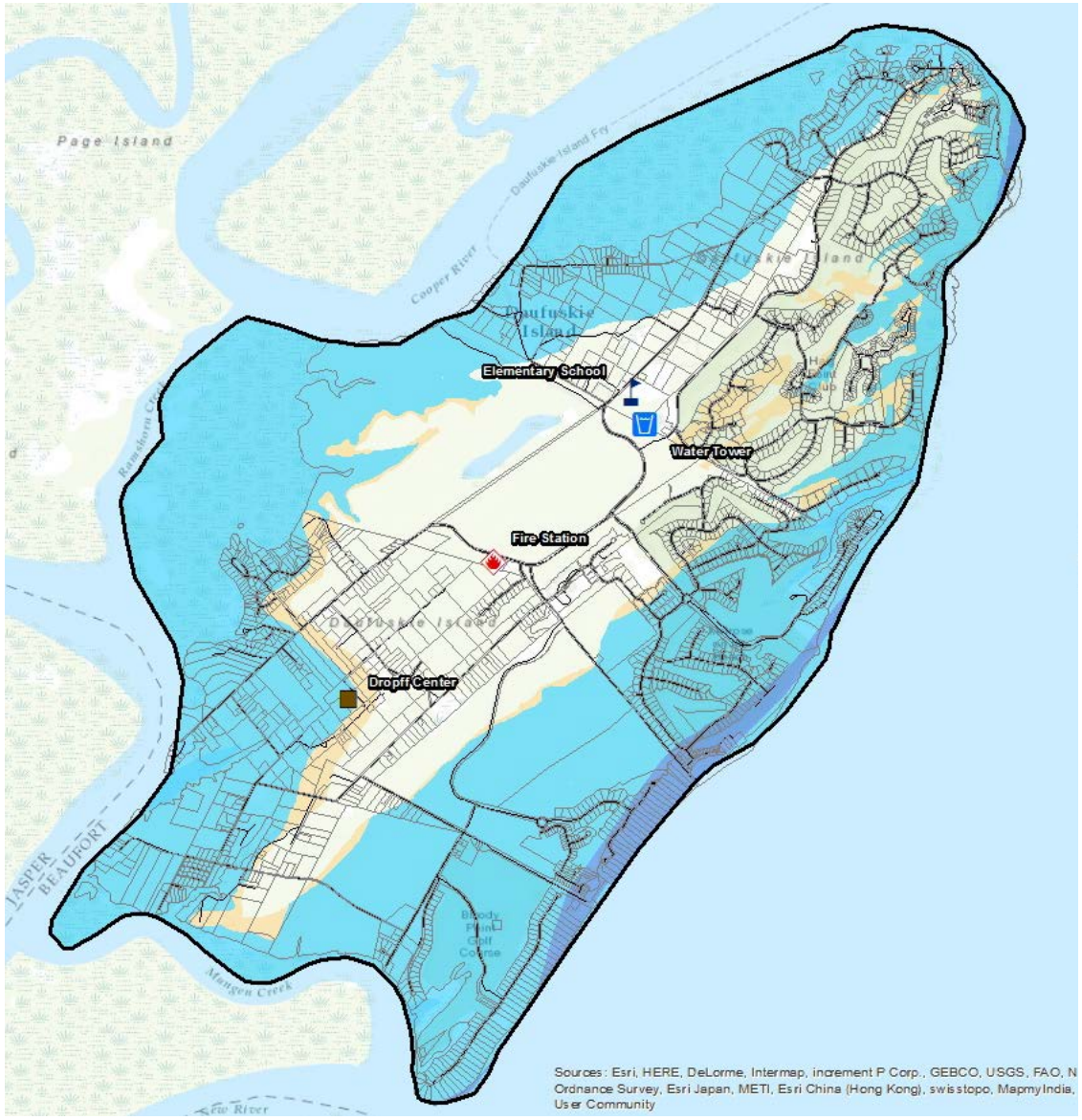


The Island is also home to a wide variety of creatures. The Atlantic Loggerhead, which is a federally threatened species, nests along the beaches of the southeast, including Daufuskie. A dedicated group of volunteers works to identify and protect the nests during the season, which typically begins in late May/early June and continues until mid-August. Both harmless snakes, such as kingsnake, garter snake and rat snake, and poisonous snakes, such as copperhead, rattler and cottonmouth moccasins are found on the Island. Alligators, which have made a comeback due to presence on the endangered list and is still protected, are also present on Daufuskie. According to the South Carolina Department of Health and Environmental Control (SCDHEC), approximately 300 species of birds have been recorded in the state and the vast majority of these birds can be found along the coast. These birds include both permanent residents as well as migratory and include both the threatened Wood Stork and Bald Eagle. A wide variety of animals can also be found on Daufuskie, such as raccoons, otters and white-tailed deer.

Soil types have an impact on development and land use, particularly with the prevalence of septic tank use. According to SCDHEC, the soils in the coastal area fall within the Atlantic Coast Flatwoods land resource area, except for a small portion in Berkeley County. These soils are typically a mix of sand and loam and drain moderately well to poorly.
Daufuskie Island, as a sea island, is prone to flooding and the Special Flood Hazard Areas have been mapped. Sixty-four percent of the island is included in a high risk zone (AE and VE), while 5% is included in a moderate risk zone (X). The remaining 31% of the island is in a low risk flood hazard zone.

In addition to the Special Flood Hazard Areas, the impacts of storm surge on the Island was also identified and mapped. In the event of a Category 1 storm, almost half of the Island (49%) will be impacted. In the event of a Category 5 storm, the entire island would be impacted. The following series of maps in Figures 6 and 7 depict the flood hazard areas and the impacts from storm surge.

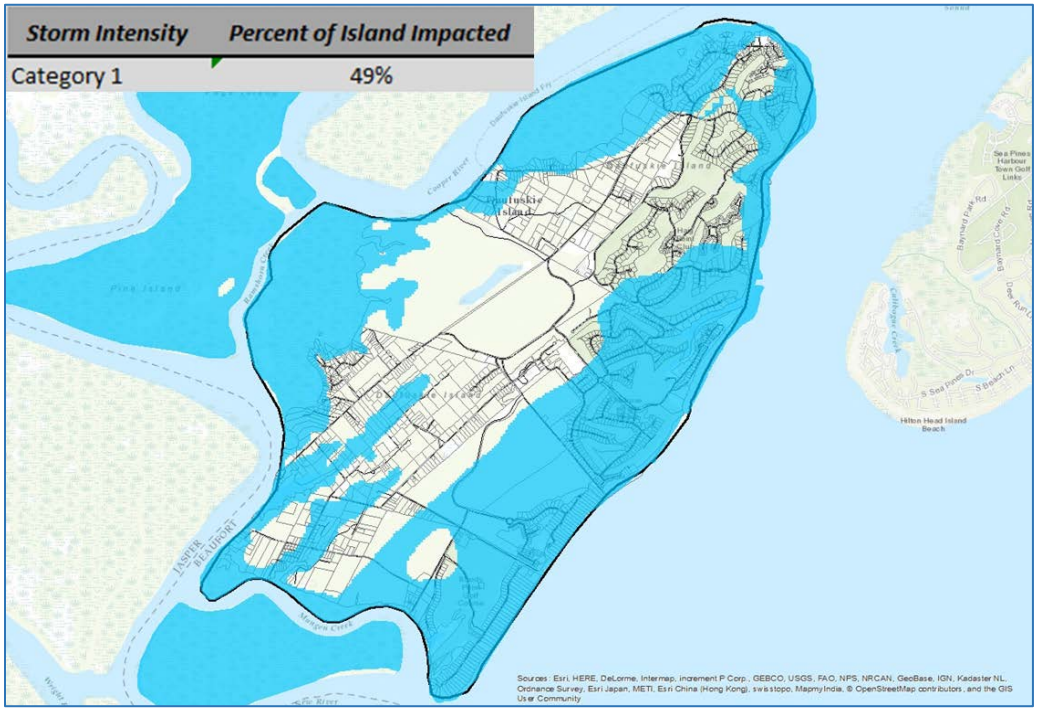
FIGURE 6. FLOOD HAZARD AREAS

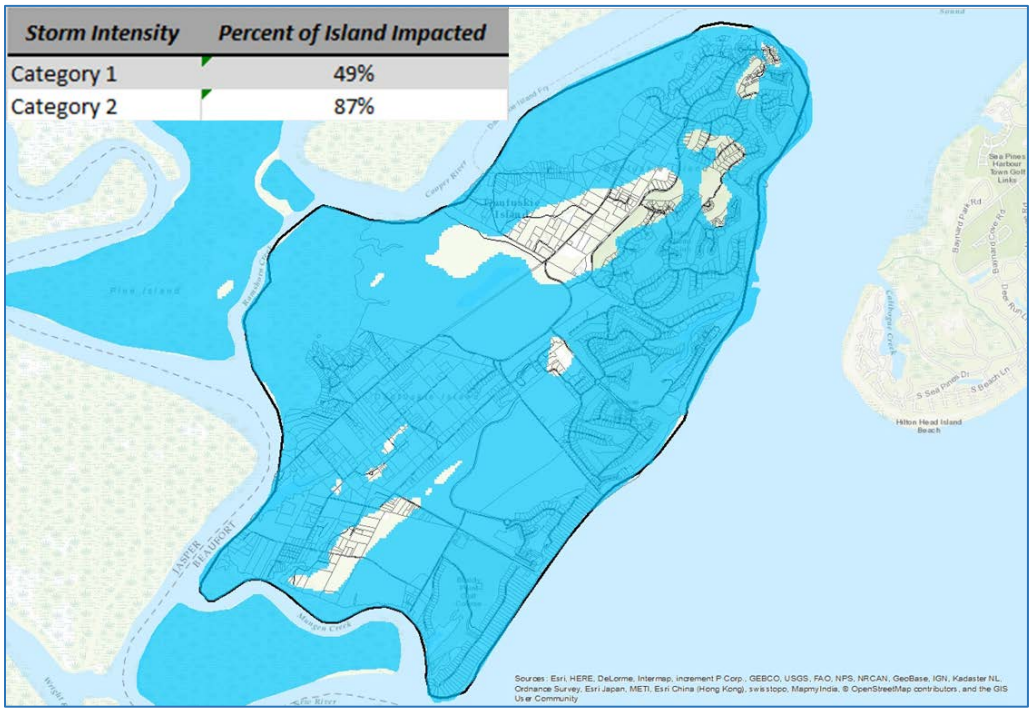


Flood Zones

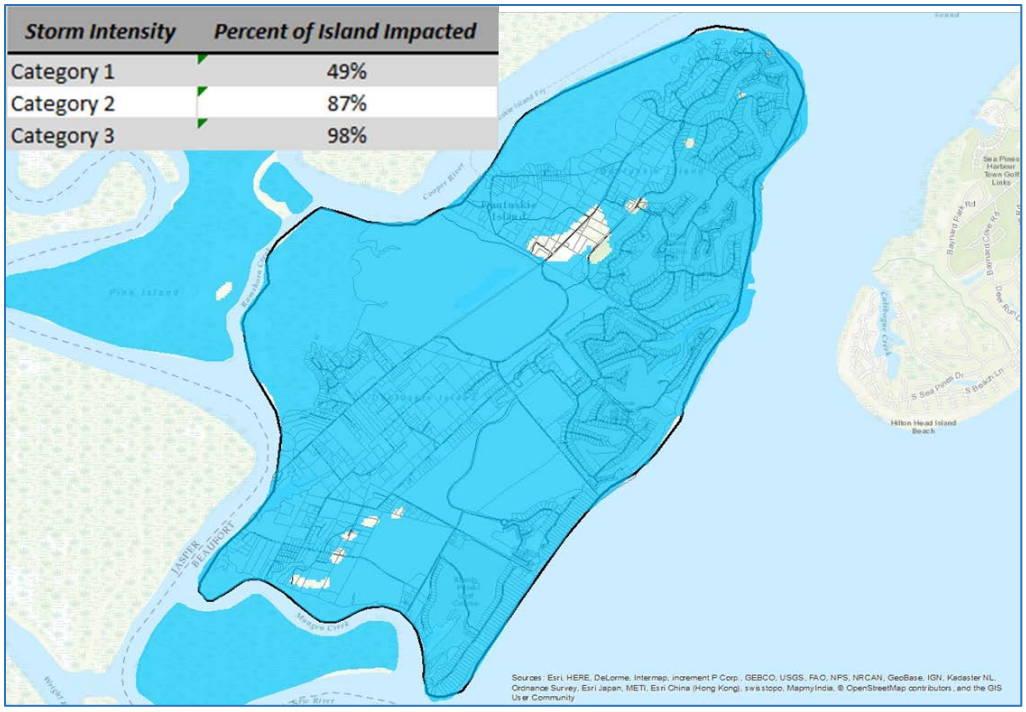
High Risk	*64%*
Moderate Risk	*5%*
Low Risk	*31%*

FIGURE 7. STORM IMPACTS

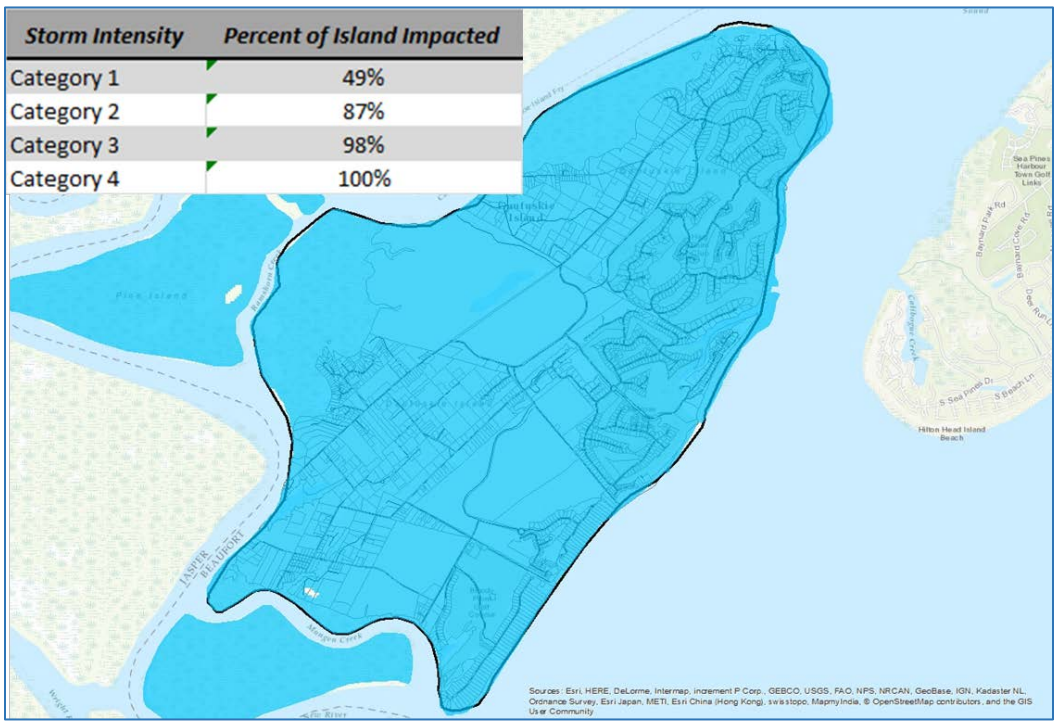




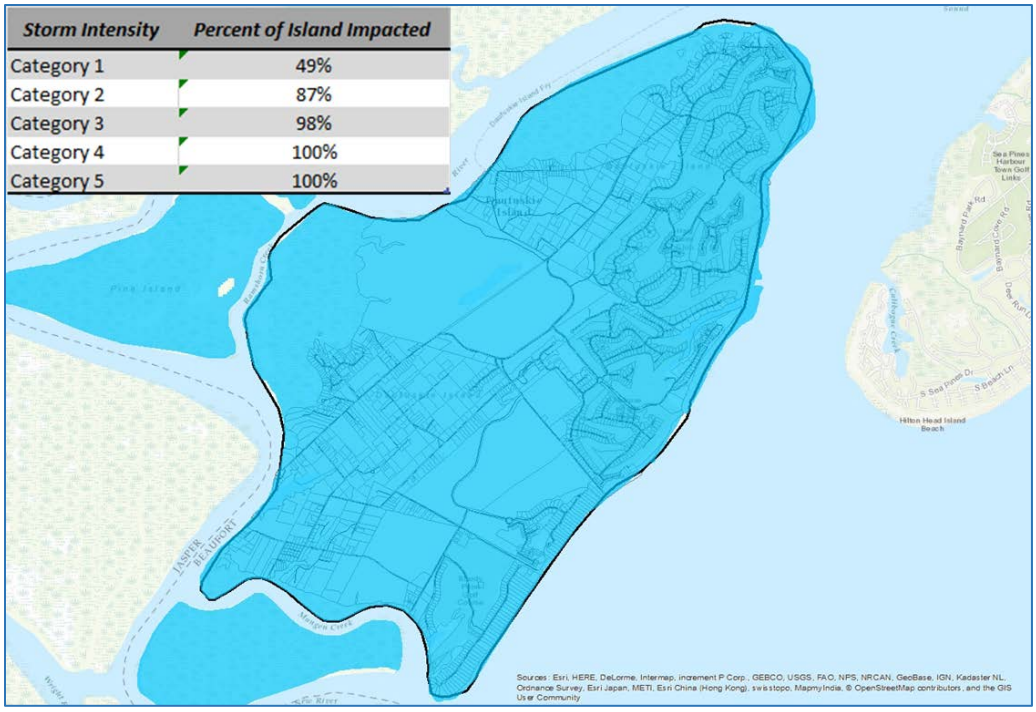
Storm Intensity	Percent of Island Impacted
Category 1	49%
Category 2	87%
Category 3	98%



Storm Intensity	Percent of Island Impacted
Category 1	49%
Category 2	87%
Category 3	98%
Category 4	100%



Storm Intensity	Percent of Island Impacted
Category 1	49%
Category 2	87%
Category 3	98%
Category 4	100%
Category 5	100%



Cultural Resources

In 1984, the US Department of the Interior/National Park Service designated Daufuskie Island as a Historic District and included the Island on the National Register. According to the statement of significance:

"...the district contains 241 contributing properties. Most of the building consist of folk housing. They were constructed from 1890-1930, but reflect a much earlier building technology. Thus, they are significant architecturally as a survival form."

"Other areas of significance are historical in nature. Military engagements of note during the Yemassee and Revolutionary Wars took place on Daufuskie. In addition, buildings, sites, and structures represent Daufuskie's antebellum plantation society based on the cultivation of long staple cotton as well as the history of the island in the early twentieth century when life revolved around the oyster industry, logging, and truck farming operations.
"

"Daufuskie's cultural resources illustrate a three-century long history that has evolved with a minimum of outside influence. Potentially valuable archeological sites and documented historic sites have escaped the ravaging effects of modern development through sheer inaccessibility."

Examples of the key properties identified include:

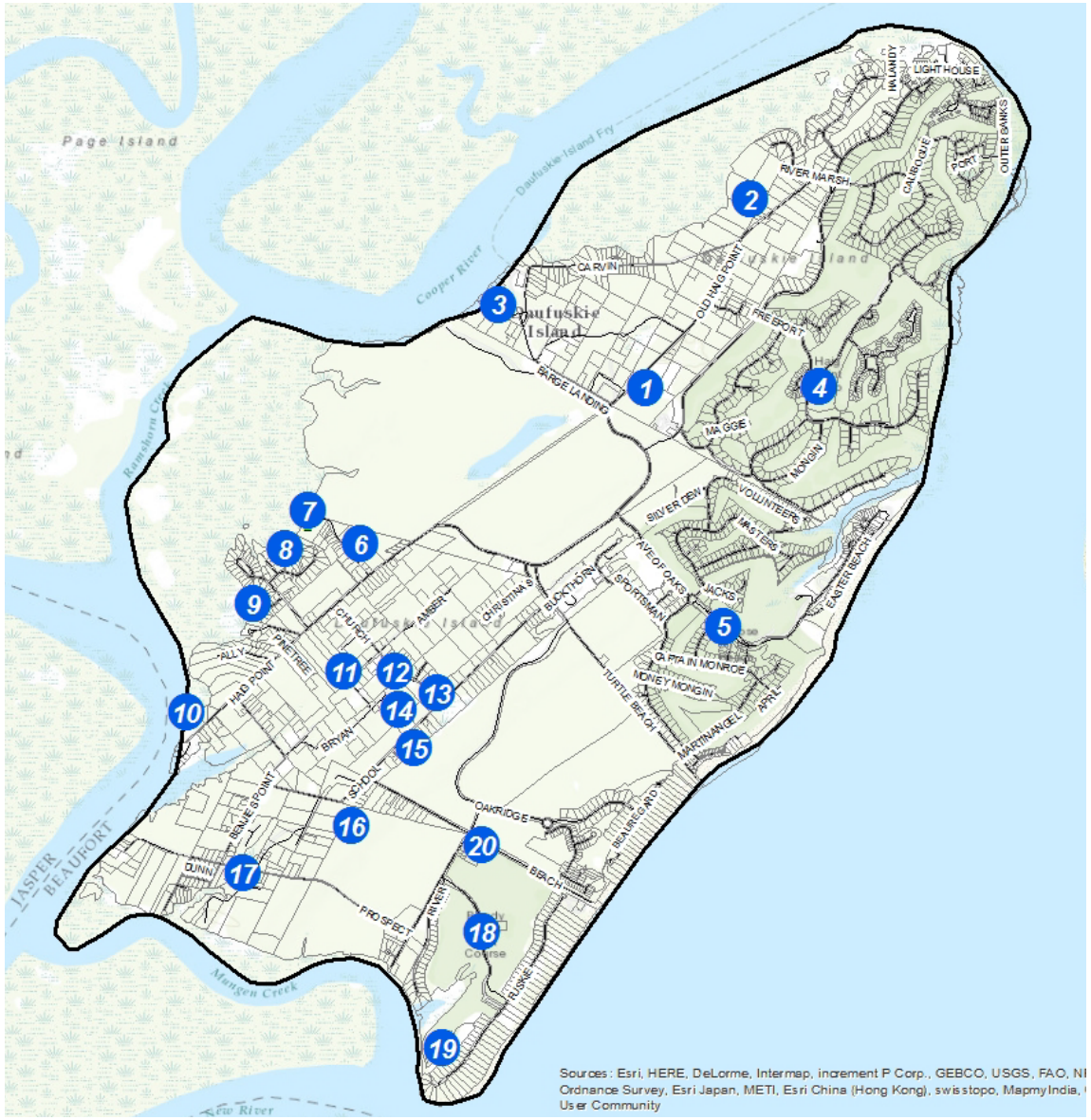
- Haig Point Lighthouse

- Mt. Carmel Baptist Church
- Janie Hamilton School
- First Union African Baptist Church
- Mary Fields School
- Oyster Society Hall
- Cemeteries

In 2001, the Daufuskie Island Historical Foundation was formed in order to preserve and protect the historical and cultural heritage of the Island. According to the Foundation, members have worked to acquire and restore historic buildings, established an Island museum, created a self-guided tour of historic sites and begun an archive of history for the Island.

The significant community cultural and historic features, which include those identified in the National Historic Register, are shown in Figure 8.

FIGURE 8. COMMUNITY CULTURAL AND HISTORIC RESOURCES



1. *Mt. Carmel Baptist Church No. 2*
2. *Tabby Ruin*
3. *Cooper River Cemetery*
4. *Haig Point*
5. *Melrose*
6. *Oyster Union Society Hall*
7. *Hinson White House*
8. *Mary Field Cemetery*
9. *Sarah Grant Home*
10. *Public Dock*
11. *White School House*
12. *The Council Tree*
13. *First Union African Baptist Church*
14. *Mary Fields School*
15. *Frances Jones Home*
16. *Moses Ficklin Cottage and Oak Tree*
17. *Mary Dunn Cemetery*
18. *Bloody Point*
19. *Bloody Point Cemetery*
20. *Bloody Point Lighthouse and Silver Dew Winery*

In addition to the local preservation and enhancement efforts and inclusion on the National Register, the US Department of Interior/National Park Service developed a Special Resource Study and Final Environmental Impact Statement: Low Country Gullah Culture in 2005. This study was authorized by the US Congress to determine the appropriate role for the National Park Service in the preservation of the Gullah Culture in response to the identification of the Gullah/Geechee culture as one of the most endangered historic resources and sites by the National Trust for Historic Preservation in 2004.

The study analyzed the Gullah culture ranging from the North Carolina/South Carolina border to North Florida to evaluate the cultural significance on a national level; to determine how to best protect and interpret the cultural resources; and develop recommendations for Congress on next steps.

The identified preferred alternative from the study was the creation of a National Heritage Area to connect and network cultural resources. The management of the partnership would eventually be managed by a local entity with start-up assistance from the National Park Service. This alternative led to the development of the Gullah Geechee Cultural Heritage Corridor. (https://www.gullahgeecheecorridor.org/)

Community Facilities

Water/Sewer

The Daufuskie Island Utility Company (DIUC) provides water/sewer service to the PUDs, and the service is available to the entire Island. With the mostly rural development patterns of the Island, residents outside of the PUDs primarily utilize individual or community wells and septic tanks for their water and sewer needs. The DIUC is the only water/sewer utility on the Island and provides water through the use of six wells. Wastewater collection and treatment is provided at two locations on the Island.

Solid Waste

The solid waste collection site for Daufuskie Island is located on Frances Jones Boulevard. The site, which only accepts residential refuse, consists of unmanned, open dumpsters. Once the dumpsters are full, they are barged off the Island and replaced with empty dumpsters. Because of the opportunity for illegal dumping with the open and unmanned containers, cameras have been installed to provide video surveillance. For a number of years, the Island has been working towards a "One Island Solution" for addressing solid waste, however, the initiative has not moved forward.

Fire/Emergency Services

Fire and emergency services are provided by the Daufuskie Island Fire and Rescue to the entire Island. The Daufuskie Island Fire District was created for the express purposes of

serving all properties on Daufuskie. The District is governed by the Daufuskie Island Fire District Board, which is comprised of five members appointed by the Beaufort County Council. The fire station is located on Haig Point Road and the staff includes 11 full time paid firefighters and 13 volunteer firefighters. The department also provides Emergency Medical Services to the Island.

The Beaufort County Sheriff's Department is responsible for law enforcement on the Island. There is no permanent officer stationed on Daufuskie, but there are officers assigned to answer calls and to be on the Island periodically.

Educational Facilities

The Daufuskie Island Elementary School is the only school on the Island and serves grades PK-5. Middle and high school students attend school on the mainland in Hilton Head and utilize the Haig Point ferry for transportation to and from the Island. The Daufuskie Island Elementary School, which has two classrooms, enrolls 26 students in 2018, with two full time teachers and four specialty teachers for supplemental subjects such as art and physical education.

According to South Carolina code, the following student teacher ratios shown in Table 9 are required and are currently met by the Daufuskie Island Elementary School; however with any significant student population increase, the capacity of the school would need to be addressed.

TABLE 9. STUDENT/TEACHER RATIO REQUIREMENT

Grade Level	Student/Teacher Ratio
PreK	20:1
K - 3	30:1
4 – 5 (English, Language Arts, Mathematics	30:1
4 - 5 (All other subjects)	35:1

Housing

There is a mix of housing stock on Daufuskie Island, ranging from mobile homes to upscale residences. According to the 2010 US Census, there were 447 housing units, with 133 or 29.8% occupied units and 314 and 70.2% unoccupied units. In 2016, the estimated housing units on the Island had grown to 465, with 227 of those units owner occupied. The characteristics of the units for 2010 and 2016 are shown in Table 10. The largest segment of the housing stock on the island is 1-unit detached housing which comprised 69.4% of the housing stock in 2010 and 85.6% in 2016.

TABLE 10. HOUSING UNITS- 2010 AND 2016

2010			2016		
Units in Structure	Number of Units	Percent of Total	Units in Structure	Number of Units	Percent of Total
1-unit, Detached	310	69.4%	1-unit, Detached	465	85.6%
2-unit, Detached	36	8.1%	2-unit, Detached	3	0.6%
2 units	0	0.0%	2 units	11	2.0%
3-4 units	66	14.8%	3-4 units	0	0.0%
5-9 units	15	3.4%	5-9 units	0	0.0%
10-19 units	0	0.0%	10-19 units	11	2.0%
20 or more units	0	0.0%	20 or more units	3	0.6%
Mobile Home	20	4.5%	Mobile Home	50	9.2%

Source: 2010 US Census and American Community Survey Estimates
Note: ACS Margin of Error ranges from +/-12% to +/-40%

Table 11 depicts the year of construction for the housing structures in 2010. As can be seen from the data, the highest construction period took place between 1980 and 1989, which corresponds to the development of the PUDs.

TABLE 11. YEAR STRUCTURE BUILT - 2010

Year of Construction	Number of Units	Percent of Total
Built 2005 or later	0	0.0%
Built 2000 to 2004	46	10.3%
Built 1990 to 1999	161	36.0%
Built 180 to 1989	200	44.7%
Built 1970 to 1979	0	0.0%
Built 1960 to 1969	26	5.8%
Built 1950 to 1959	0	0.0%
Built 1940-1949	0	0.0%
Built 1939 or earlier	14	3.1%

Source: 2010 US Census

The Census data also identifies that, in 2010 of the 133 owner occupied housing units, 77 units have a mortgage and 56 are without a mortgage. In 2016, the 227 owner occupied housing units were estimated to have 120 units with a mortgage and 107 without a mortgage.

The value of the owner-occupied units showed 15.0% were valued between $50,000 and $99,000, with the largest segment valued between $300,000 and $499,000 at 23.3% of the units. The median value of the housing units is $262,500 in 2010. Table 12 depicts the owner-occupied value of the housing units in 2010.

TABLE 12. VALUE OF OWNER-OCCUPIED UNITES - 2010

Unit Value	Number of Units	Percent of Total
Less than $50,000	0	0.0%
%50,000 to $99,000	20	15.0%
$100,000 to $149,000	6	4.5%
$150,000 to $199,000	23	17.3%
$200,000 to $299,000	28	21.1%
$300,000 to $499,000	31	23.3%
$500,000 to $999,000	15	11.3%
$1,000,000 or more	10	7.5%

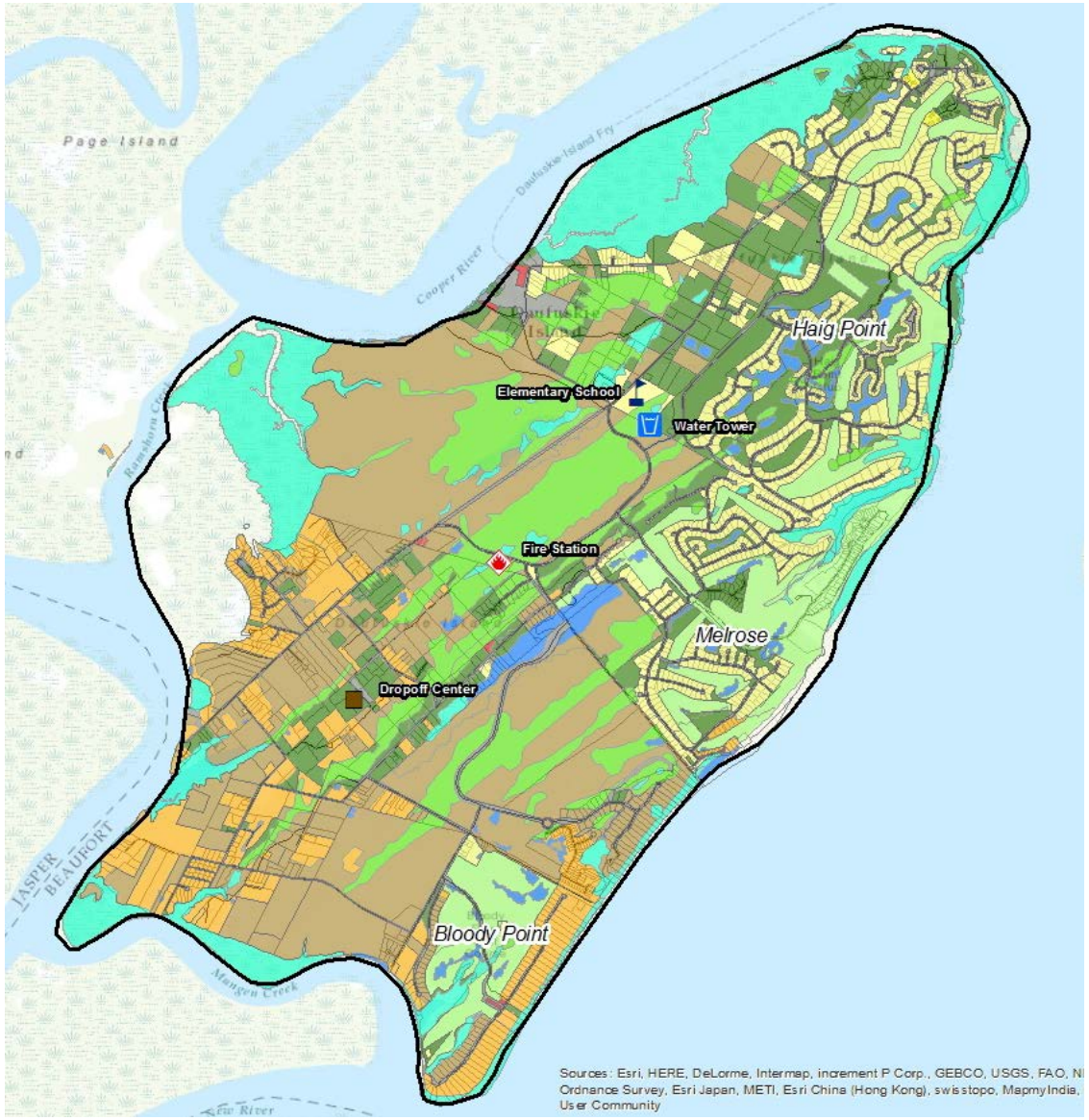
Source: 2010 US Census

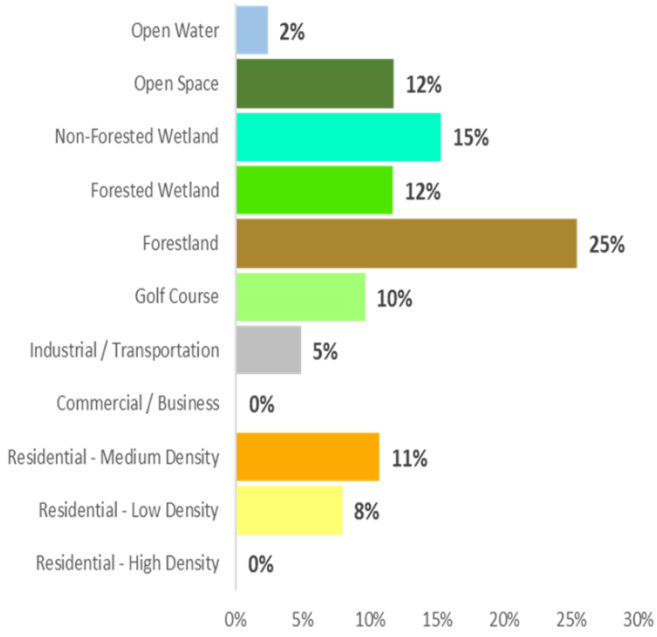
Census figures show that 43.6% of the occupied households reported no vehicle available. However, this figure only includes automobiles and does not include golf carts as a primary vehicle.

Land Use

The current land use on Daufuskie Island reflects its relatively undeveloped state. The largest existing land use is found to be forestland, making up 25% of the land. Wetlands also comprise a significant element of the existing land use, with 15% characterized as non-forested wetlands and 12% characterized as forested wetlands. Open space comprises 12% of the land use. Residential land uses comprise 19% of the land use, with 11% in medium density and 8% in low density. Golf courses comprise 10% of the existing land use, with industrial/transportation category at 5%. Figure 9 depicts the existing land use breakdown.

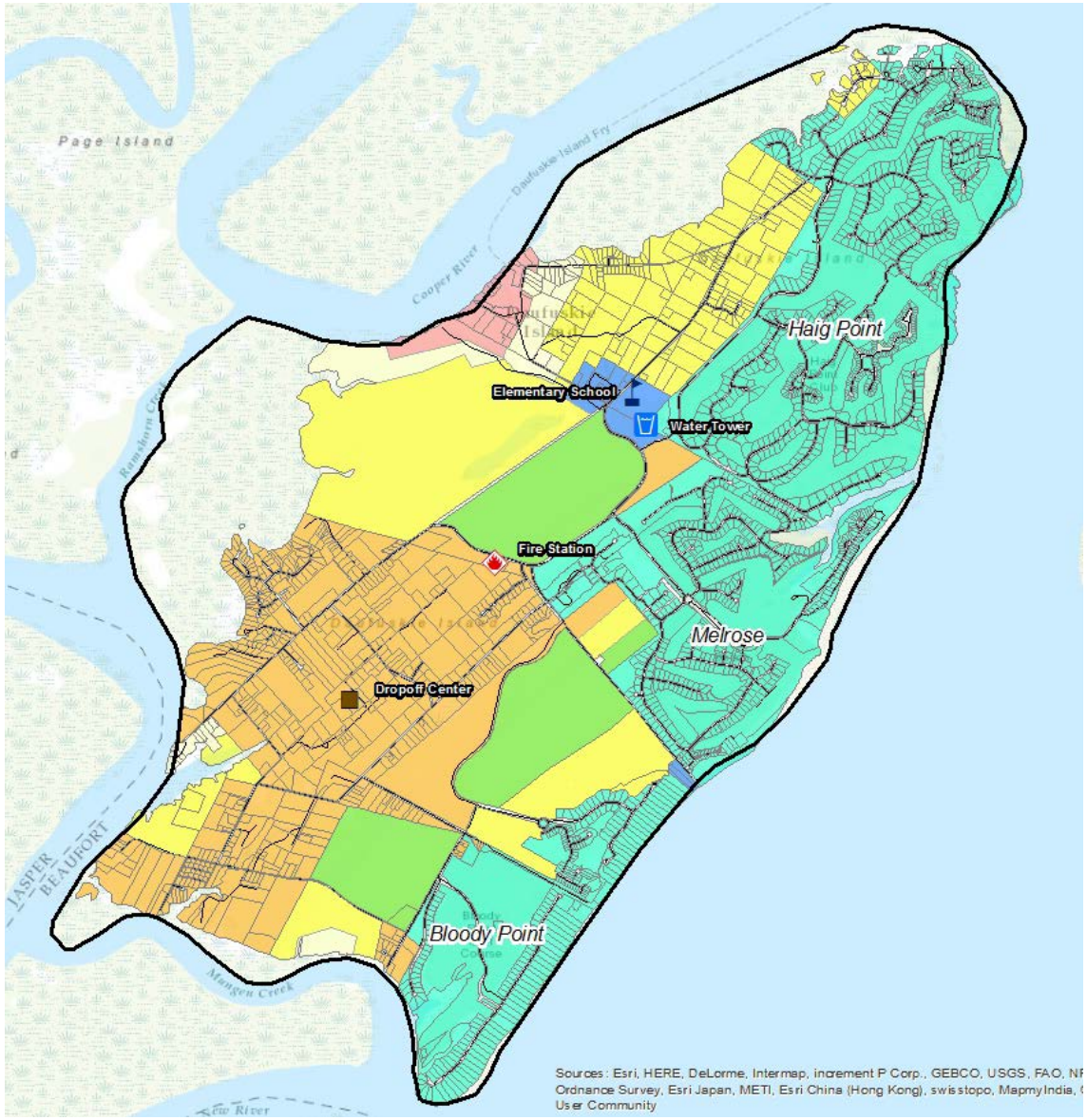
FIGURE 9. LAND USES

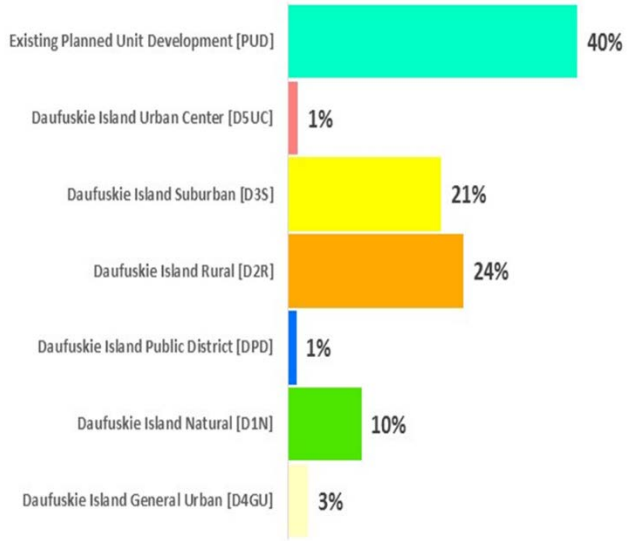




As noted in the population element discussion, there are currently 2,483 parcels identified on the island. Of these parcels 24%, or 592 are developed and 1,891 (76%) are undeveloped. For the Island as a whole, 71% is characterized as undeveloped and 29% as developed. The current zoning classifications on the Island include Planned Unit Development, which comprises 40% of the Island and includes Bloody Point, Haig Point, Melrose and Oak Ridge. The next largest zoning category is Daufuskie Island Rural at 24% and Daufuskie Island Suburban follows at 21%. The Daufuskie Island Natural category comprises 10% of the zoning with General Urban at 3% and Public District and Urban Center both at 1%. The existing zoning classifications are shown in Figure 10.

FIGURE 10. EXISTING ZONING





Transportation

There are several unique components to the transportation on Daufuskie Island. These components include the ferry systems that provide service from the Island to the mainland and the roadway network. In addition, the use of golf carts is a large percentage of the vehicle choice, although automobiles are utilized by many on the island. However, autos and gas-powered golf carts are restricted from use in some of the PUDs.

Roadway Network

The roadway network on Daufuskie Island is a mix of paved roads and unpaved roads and many are maintained by Beaufort County, although the ownership and rights of way are often unclear. Haig Point Road is the major facility providing north-south access and is paved. There is a web of unpaved public roads that serve the majority of the Island, as well as a mix of private drives and roadways. Haig Point Road, which is approximately 2.7 miles in length, joins with Cooper River Landing Road which is also paved and provides access to the Melrose Landing, currently the public ferry embarkation point. Cooper River Landing Road is approximately 0.70 miles in length, bringing the total of paved facilities on the island to about 3.5 miles. The unpaved roads total about 9.5 miles in length. Table 13 provides the breakdown of the paved and unpaved facilities maintained by Beaufort County for over 20 years. In addition to these identified facilities, there are numerous private roadways.

TABLE 13. ROADWAY NETWORK

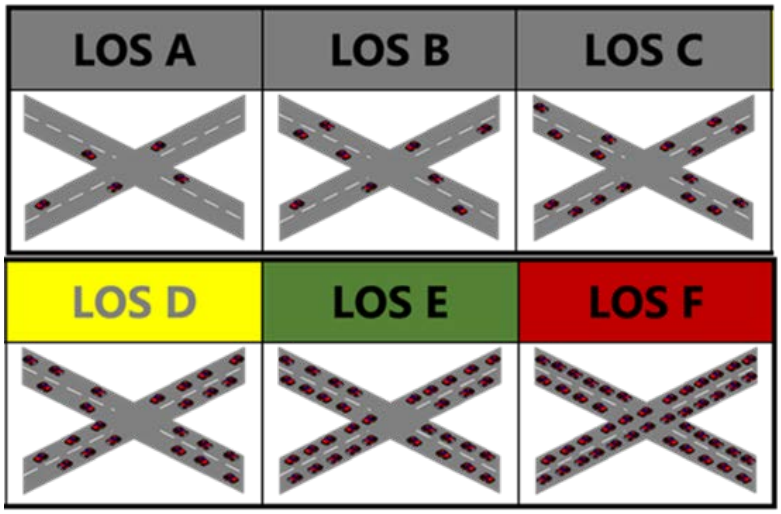
Paved Roadways	
Roadway	Length (in miles)
Haig Point Road	2.72
Cooper River Landing Road	0.70
Total Paved Roadways	3.42

Unpaved Roadways			
Roadway	Length (in miles)	Roadway	Length (in miles)
Freeport Road	0.21	Benji's Point Road	0.86
Carvin Road	0.90	Prospect Road	1.28
Old Haig Point Road	0.87	Pappy's Landing Road	0.78
Church Road	0.61	Beach Road	1.10
Turtle Beach Road	1.08	Frances Jones Road	0.25
School Road	1.58	Maryfield Road	0.23
Total Unpaved Roadways 9.75			

Source: Project Team/Google Earth

Traffic on the roadway network is low in the tourist off-season and increases significantly during the high tourist season and on weekend days. Roadway congestion is classified by Level of Service, which assigns a "grade" of A to F based on the level of congestion. Level of Service A is freeflowing and Level of Service F is gridlock. The graphic in Figure 11 illustrates the Levels of Service.

FIGURE 11. LEVEL OF SERVICE



Source: Georgia Department of Transportation

While formal traffic counts have not been taken, the roadway network on the Island operates at Level of Service A, even in the high tourist season.

Planned Unit Developments

The roadway networks within the PUDs are primarily paved and are maintained by the development associations. Bloody Point, Melrose, and Oak Ridge, originally gated, are currently open developments; Haig Point is the only PUD with active gate restrictions for entrance/exiting the development; however, the other PUDs may be gated in the future based on permitting in place. Table 14 displays the network, in miles, within each PUD.

TABLE 14. PUD TRANSPORTATION NETWORKS

Planned Unit Development	Roadway Network (in miles)
Bloody Point	1.87
Haig Point	9.57
Melrose	8.34
Oak Ridge / Beachfield	2.59

Source: Project Team/Google Earth

Multimodal Transportation

Because of the relatively low traffic volumes and the expectations of drivers to be in a mix of vehicles, particularly with golf carts, the roadway network serves all modes of transportation. Pedestrians and bicyclists successfully utilize the roadway network, although there are no designative pedestrian or bicycle facilities.

As described above, the use of golf carts make up a large percentage of the mode of travel on the Island. The golf carts are expected by automobile drivers and due to the expectations, the mix of vehicles is typically a successful scenario.

Public Ferry System

The Daufuskie Island ferry system is operated on a contract basis for Beaufort County and Palmetto Breeze, the rural transportation provider for Beaufort County and the South Carolina Lowcountry. Currently, the Haig Point Ferry operates the system under contract. The ferry provides connections from the Melrose Landing embarkation point on Cooper River Landing Road to the Hilton Head embarkation point located at Buckingham Landing, off of US 278/Fording Island Road. The ferry trip typically takes approximately 45 minutes to an hour and generally runs on the following schedule:

Departing Hilton Head/Buckingham Landing	Departing Daufuskie/Melrose Landing
7:00 am	8:30 am
10:00 am	11:30 am
1:00 pm	2:30 pm
4:00 pm	5:30 PM
9:00 pm (Fridays only)	10:15 PM (Fridays only)

Source: Daufuskie Island Ferry

According to the *Daufuskie Island Public Ferry Service Passenger* Guide (Nov. 2017), ferry is open to the public, with round trip for members of the general public costing $35.00. There are levels of tickets available for Daufuskie Island residents, part-time residents and property owners.

Level 1 - $2.00 One Way

Available for full time resident students (ages 5 to 18); full time resident seniors (ages 65 and over); and residents or property owners with disabilities

Level 2 - $3.00 One Way

Available for full-time resident homeowners, based on the Beaufort County Assessor's office

Level 3 - $4 One Way

Available for a full-time resident renter

Level 4 - $7 One Way

Available for non full-time property owners or homeowners, based on the Beaufort County Assessor's office

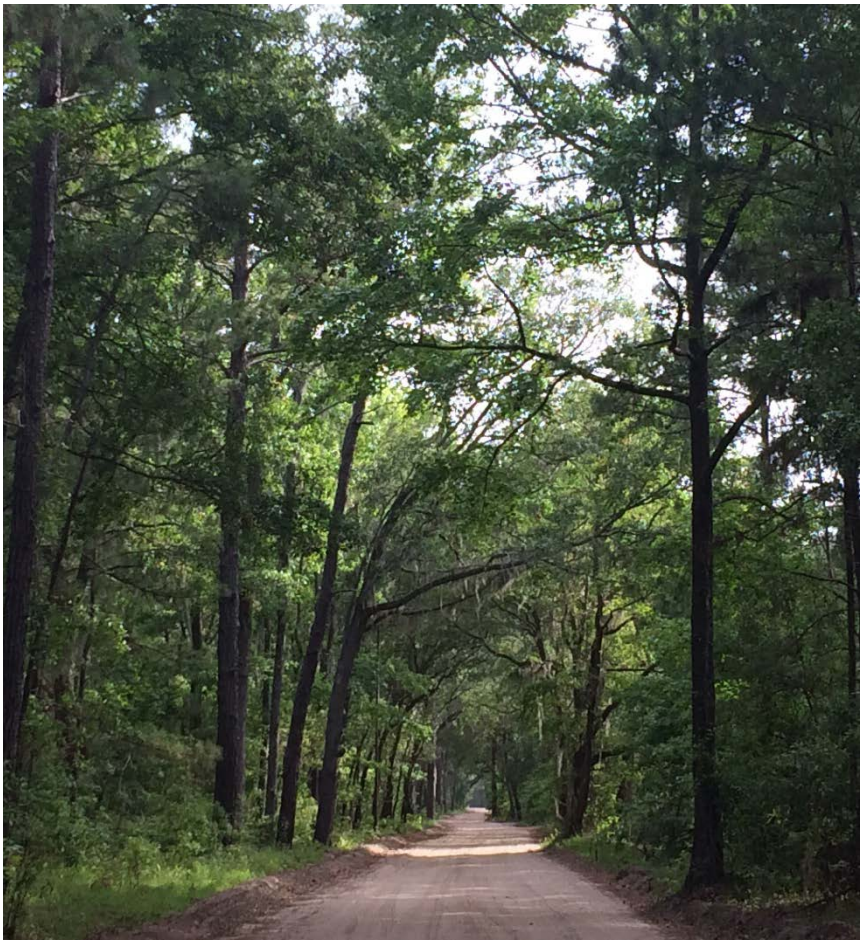
Additional Ferry Options

Calibogue Cruises operates between Hilton Head and Daufuskie Island, providing service from Broad Creek Marina on Hilton Head to the Freeport Marina on Daufuskie. The service

leaves Broad Creek at 10:30 am and 3:30 pm Tuesdays through Fridays and departs Freeport Marina at 11:30 am and 4:30 pm Tuesdays through Fridays. On Saturdays, the service leaves Hilton Head at 11:00 am and 4:00 pm and departs Freeport at noon and 5:00 pm.
There are also other private operators who provide ferry services on a schedule based on customer needs. These ferry services provide access to the public dock facility on Daufuskie and leave from Hilton Head, Bluffton and the Savannah area.

PUD Ferry Options

Haig Point currently operates a ferry to Hilton Head for their members, residents, and their guests. Their service provides access to Hilton Head at their embarkation point near Broad Creek Marina. Bloody Point service to downtown Savannah was discontinued in December, 2017 with the closure of the resort.



Chapter Five:

NEEDS AND OPPORTUNITIES

CHAPTER 5: NEEDS AND OPPORTUNITIES

The identification of the needs and opportunities facing the Island is the first step in the development of strategies to address these needs and capitalize on the opportunities. These strategies will enable the Island to meet the identified goals and achieve the vision for the future. Members of the community provided critical feedback on the needs and opportunities, as well as priorities, during public workshops, meetings and through the community surveys. The following lists the needs and opportunities for each element identified through the planning process for each element.

Population Needs, Issues and Opportunities

- Ability to age in place and remain on the Island
- Lack of diversity in the demographics of the population, particularly focused on the Gullah residential population
- Three distinct population groups and the need of services to support each of these groups
    - Full time and part time island residents
    - Day trippers
    - Longer term vacationers

Economic Development Needs, Issues and Opportunities

- Ability to earn a living
- Build the economy on strengths of the island
- Enhance tourism economy through ecotourism and cultural/historic tourism
- Foster small agri-businesses
- Maintain and foster diverse, unique small businesses
- Meaningful work opportunities on the Island
- Showcase Daufuskie's unique and special qualities
- Basic support services on the Island, such as retail and service amenities

Natural Resources Needs, Issues and Opportunities

- Cleanliness of the island
- Maintain/preserve natural beauty
- Preserve and protect the natural environment
- Preserve open space
- Preserve the undeveloped nature of the Island
- Preserve/protect wildlife and their natural habitats
- Need for vegetative buffers

Cultural/Historic Resources Needs, Issues and Opportunities

- Foster and support the artisan culture and the arts
- Maintain, preserve and protect cultural and historical assets
- Maintain, preserve and protect the Gullah heritage of the Island
- Preserve architectural integrity and diversity

Community Facilities Needs, Issues and Opportunities

- Community meeting space/event space
- Maintain public access to the river and ocean
- Preserve/protect the waterfront and beaches
- Maintain and support the local island school
- Use existing assets for community purposes
- Maintain and support the fire and emergency services on the Island
- Preserve and enhance community spaces, such as public parks
- Local dump/solid waste solution
- Sufficient infrastructure to support growth: community wastewater, underground utilities, sustainable refuse collection, and water supply

Governmental/Intergovernmental Coordination Needs, Issues and Opportunities

- Enhance working relationships with Beaufort County
- Identify other partnerships

Housing Needs, Issues and Opportunities

- Presence of dilapidated housing
- Preservation of the remaining Gullah / historic cottages

Land Use Needs, Issues and Opportunities

Within each jurisdiction, there are smaller areas that have distinct or unique characteristics. The identification of these specific areas, or character areas, are used as a planning tool to address the needs and opportunities that are specific to that area and to develop strategies tailored for that area. The characteristics can be focused on geographical elements, as well as development patterns. The identified character areas serve as a guide for the development of the land use element, zoning and the identification of areas for priority investments.

Character Areas

In the previously adopted plan, Beaufort County crafted future development strategies for the identified zoning districts to address the needs affecting those areas. These previously identified zoning districts formed the basis for the updated character areas for the plan.

Each of the character areas were developed through a community workshop where the participants divided into three working groups. These groups identified the character areas, issues and potential development strategies. In addition to the development strategies identified for each character area, the workshop participants also identified overall development strategies for the Island. The compilation of the work efforts from the breakout groups were presented to the Project Advisory Committee for review and input.

Each of the character areas is described in detail, with the special and defining characteristics that the public wishes to enhance and protect identified. Current zoning classifications within each of the character areas have also been identified and analyzed for their applicability to the character area. The character areas that have been identified include the following:

- South Island Historic
    - Gullah Heritage sub-area is a part of this area
- Mid-island Historic
- North Island Historic
- Village Centers
- Heritage Corridor
- Village Gateway Corridor
- Coastal Mashlands

Although the PUDs are not subject to this current plan, the workshop participants included each of the PUDs as their own character area.

- Haig Point PUD
- Melrose PUD
- Oakridge/Beachfield PUD
- Bloody Point PUD

The character areas are shown on the map on the following page.

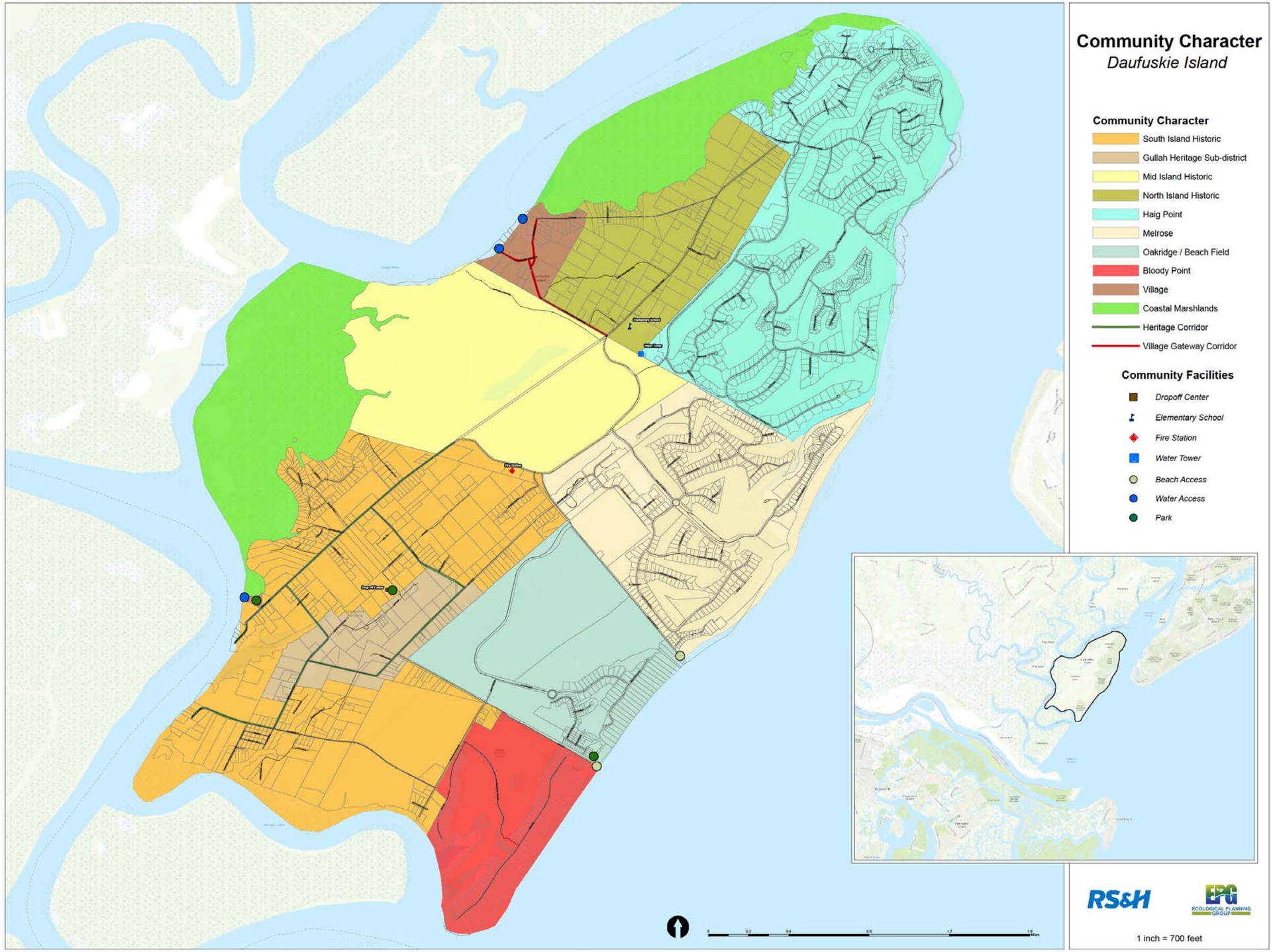

Community Character
Daufuskie Island
Community Character
South Island Historic
Gullah Heritage Sub-district
Mid Island Historic
North Island Historic
Haig Point
Melrose
Oakridge / Beach Field
Bloody Point
Village
Coastal Marshlands
Heritage Corridor
Village Gateway Corridor
Community Facilities
Dropoff Center
Elementary School
Fire Station
Water Tower
Beach Access
Water Access
Park
RS&H
EPG
ECOLOGICAL PLANNING GROUP
1 inch = 700 feet

Table 15 shows each of the character areas along with the current zoning districts, including their general purpose and permitted uses.

TABLE 15. CHARACTER AREAS AND CURRENT ZONING

COMPARISON OF DAUFUSKIE ISLAND CHARACTER AREA AND CURRENT ZONING CLASSIFICATIONS			
Character Area	Current Zoning, General Status and Permitted Development Types		
	Primary Current Daufuskie Island Zoning Classification	General Current Allowable Uses	Current Base Residential Density Allowed
South Island Historic	Rural - D2R	Primarily rural in nature with agricultural uses, residential homes, and adaptive residential commercial uses not to exceed 1,000 square feet. A portion of this area is identified as conservation.	1 DU/Acre (gross)
Mid-Island Historic	Suburban - D3S	Single family homes, small B&B uses allowed, and accessory guest houses permitted, along with small office and commercial uses allowed. A portion of this area is set aside in conservation. Barge landing and permitted portal/marina	3 DU/Acre (gross)
North Island Historic	Suburban - D3S	Single family homes, small B&B uses allowed, and accessory guest houses permitted, along with small office and commercial uses allowed	3 DU/Acre (gross)

Village	General Urban - D4GU and Urban Center - D5UC	Single family and multi-family residential, B&B, Inns and Hotels, along with office and commercial uses	4 DU/Acre (gross) in D4GU and 8 DU/Acre (gross) in D5UC
Heritage Corridor	Rural - D2R	Primarily rural in nature with agricultural uses, residential homes, and adaptive residential commercial uses not to exceed 1,000 square feet	1 DU/Acre (gross)
Village Gateway Corridor	Public District - PD, Suburban - D3S, General Urban - D4GU, and Urban Center - D5UC	Public uses and civic sites as well as the uses identified I n the D3S, D4GU, and D5UC above	Varies
Existing Approved PUDs	Existing Planned Unit Developments - PUD	Uses and densities as allowed by approved PUD. A portion of the Oakridge PUD has been set aside as conservation.	NA
Coastal Marshlands	Natural Preserve - T1NP	NA	NA

Strategies Affecting All Areas

Specific development strategies were identified for each of the individual character areas and were developed to preserve and enhance the existing character within the area. Development strategies that were applicable to all of the character areas were also identified and include the following:

- New development, redevelopment and restoration should be consistent with the existing character of the area in which the development occurs.
- Enhance the pedestrian environment where feasible.
- Historic structures should be preserved whenever possible.
- Prioritize tree preservation to protect the scenic and habitat value of the area.
- Encourage land uses, through clearly defined guidelines, that protect against stormwater pollution including xeriscaping, pervious surfaces and erosion and sedimentation control.
- Require the treatment of stormwater runoff quality and quantity prior to its discharge in the marsh.
- Limit housing density, size and height through zoning.

- Develop and adopt a wayfinding and directional signage plan to ensure consistency throughout the island.
- Encourage consistency with recommended design and architectural standards.
- Restore and maintain the tree canopy.

Character Area: South Island Historic

The South Island Historic character area is a unique rural residential area with some waterfront lots along the New River and Mungen Creek. In addition to the rural residential uses, low impact commercial service uses exist in this area. Most of the remaining Gullah structures lie in the South Historic area.

Characteristics

- Unique low density rural historic area
- Waterfront lots along Mungen Creek and the New River allow private water access
- Public access to water at the County dock
- Scenic views
- Low impact small commercial uses
- Small rural residential structures
- Areas of native Gullah family compounds
- Unpaved roads
- Community facilities
    - Mary Fields School
    - Fire Station
    - Church
    - Regional park at County dock site
- Cemeteries
    - Mary Field
    - White

Issues

- The Dump – location and maintenance
- Lack of buffers
- Abandoned and dilapidated structures
- County dock size/docking space
- Litter

Development Strategies

- The boat ramp, county dock and fishing pier are essential elements and should be preserved.
- Encourage safer pedestrian non-motorized mobility.
- Preserve historic structures whenever possible.
- Provide appropriate incentives for historic restoration projects.
- Preserve the scenic value of the area.
- Encourage preservation and enhancements of remaining Gullah areas
- Define a Gullah heritage area that supports the Gullah architectural styles

Character Area: Mid-Island Historic

A critical Daufuskie Island character area, this historic area consists of the undeveloped, environmentally sensitive areas bordering the Cooper River. A portion of this area has been placed in permanent conservation.

Characteristics

- Undeveloped
- Natural habitats and environmentally sensitive areas
- Waterfront system with freshwater wetlands
- Conservation area
- Water access to Cooper River

Issues

- Development pressures
- Preservation of unique environmental resources

Development Strategies

- Support projects enhancing wildlife habitats.
- Promote the area as a recreation area and eco-tourism destination.
- Preserve the greenspace adjacent the Cooper River and freshwater wetlands.
- Incorporate environmentally sensitive elements for any permitted development

Character Area: North Island Historic

This area is still rural in nature. The primary Island public spaces, such as the school and museum, are within this area. Some river view lots lie along Carvin Road bordering the Cooper River.

Characteristics

- Mix of housing types in a rural setting
- Low density
- Old growth trees
- Contains the public spaces of the Daufuskie Island school and Museum
- Tree canopy
- Unpaved roads
- Historic sites

Issues

- Dilapidated housing structures
- Stormwater runoff

Development Strategies

- Historic structures should be preserved whenever possible
- Enhance the pedestrian environment where feasible

- Preserve old growth trees
- Do not allow intrusion of heavy commercial uses
- Preserve the low-density character of the area
- Ensure any development does not negatively impact coastal marshlands

Character Area: Village Centers

There are two Village character areas that have been identified. The first is the area on the Cooper River that includes the private Freeport Marina and the public ferry access point at the Melrose landing. Freeport is developed with a dock, restaurant, general store and small rental units. The second village center is located at the southern end of the island in the area surrounding the public County dock. This area includes a public park, public restrooms and, until recently, a restaurant and small general store.

Characteristics

- Primary water access points
- Contains the primary commercial land on the island
- Environmentally sensitive areas exist
- Mix of paved and unpaved roads
- Tree canopy
- Cultural amenities
    - Gullah cemetery
    - Marsh Tackies
    - Public park/restrooms
    - Building that housed a restaurant and general store
    - Community gathering space

Issues

- Public ferry dock condition at Melrose dock
- Parking near Freeport is haphazard
- Condition of buildings at the public dock area and closure of the restaurant

Development Strategies

- Encourage village center type developments in this area.
- Promote area as access portals to the island's eco-tourism and low impact recreation destinations.
- Restrict or discourage uses that could contribute to water pollution.

Character Area: Village Gateway Corridor

This corridor runs from Old Haig Point Road to both the Melrose and Freeport marina sites along Cooper River Landing Road and Freeport Road to Carvin Road.

Characteristics

- Paved road connects Old Haig Point Road to Melrose dock
- Existing rural residential is limited along the corridor

- Historic and native housing is adjacent to corridor
- Limited development

Issues

- Litter along roadways

Development Strategies

- The corridor offers the opportunity to provide a mix of neighborhood commercial uses
- Shopping
- Crafts
- Restaurants
- Eco-tourism
- Encourage specialized commercial and mixed-use development along the corridor.
- Establish standards for a maximum percentage of residential use on a per parcel basis to encourage mixed use.
- Enhance pedestrian movements with streetscape improvements.
- Allow for an appropriate mix of retail, residential, and tourism-related uses consistent with the Plan vision.
- Implement traffic calming measures and parking improvements.
- Establish noise and sight buffers between commercial uses and adjacent residential areas.

Character Area: Heritage Corridor

The Heritage Corridor provides the major access routes serving the South Island Historic area and the proposed Gullah Heritage sub-area. It currently serves and links the community farm, the second village center area along with the County Dock and Park, the First African Baptist Church, Mary Fields School, and several small island shops and artist galleries.

Characteristics

- Part of South Historic area
- Significant historic, cultural and natural resources, including historic district designation
- Mix of paved and unpaved roads
- Uses include
    - Traditional cottages
    - Public uses/parks
    - Historic sites
    - Narrow unpaved streets

Issues

- Litter
- Road conditions on the unpaved portion

Development Strategies

- Establish standards and guidelines for signage.

- Provide signage for landmarks and commercial businesses.
- Preserve or restore historic structures whenever possible.
- Provide appropriate incentives for historic restoration projects.
- Ensure continued preservation of old growth trees, parks, and greenspace.
- Consider adoption of architectural standards for historic structures

Character Area: Haig Point PUD

This gated private golf community is located on the northern end of the Island. Amenities include golf, tennis, restaurants, and a private ferry system providing service to Hilton Head for residents, members and their guests.

Characteristics

- Gated community
- No public access
- Private ferry to Hilton Head
- Paved streets
- Golf course community
- Lighthouse and historic areas lie within gated area

Issues

- Public access to historic sites is limited

Development Strategies

- Permit only compatible uses allowed by the approved PUD agreement
- Develop agreements for access to historic sites

Character Area: Melrose PUD

This golf residential community is located on the eastern side of the Island with beach access. The development includes a resort currently owned by Redfish Holdings, LLC.

Characteristics

- Currently non-gated private community
- Low density residential with mix of single family and multi-family
- Community amenities
    - Inn
    - Golf
    - Tennis
    - Horse stables
    - Beach club/pool/restaurant facilities
- Paved roads

Issues

- History of bankruptcy issues
- Closure of community amenities
- Beach erosion
- Maintenance

Development Strategies

- Permit only compatible uses allowed by the approved PUD agreement

Character Area: Oakridge/Beachfield PUDs

This development is located on the eastern side of the Island and has beachfront access. Originally planned as a gated community, there is currently public access to this community.

Characteristics

- Non-gated private community
- Low density residential
- Paved roads
- Mostly undeveloped
- Beach access
- A section is in conservation

Issues

- Beach erosion
- Sensitive to storm surge

Development Strategies

- Permit only compatible uses allowed by the approved PUD agreement

Character Area: Bloody Point PUD

Bloody Point is located on the southern end of the island and has both beach access, as well as waterfront access to Mungen Creek. The most recent owner targeted Savannah as its market and provided ferry service from Bloody Point to downtown Savannah.

Characteristics

- Non-gated private community
- Low density residential
- Community amenities
    - Small Inn
    - Golf/Tennis/Pool
- Paved roads
- Private ferry to Savannah (not in service)
- Historic cemetery site

Issues

- Resort closed due to financial issues

Development Strategies

- Permit only compatible uses allowed by the approved PUD agreement
- Continue to provide public access to the historic cemetery site

Character Area: Coastal Marshlands

The coastal, saltwater marshlands primarily border the Cooper River, Ramshorn Creek and the New River.

Characteristics

- Unique natural environment
- Undeveloped, and not suited for development
- Flooding buffer
- Environmentally sensitive marine and wildlife habitat

Issues

- Impacts from adjacent development
- Stormwater runoff

Development Strategies

- No development should occur within or impacting these areas.

Transportation Needs, Issues and Opportunities

- Dedicated, well-maintained public ferry landing
- Maintain balance of paved/unpaved roads for safety, security, and access
- Reliable and convenient transportation to the Island
- Roadway maintenance
- Increasing automobile presence on the Island may result in the need to have more standard traffic markings/signage



Chapter Six:

ACHIEVING THE VISION

CHAPTER 6: ACHIEVING THE VISION

The Daufuskie Island Comprehensive Plan identifies the action steps that the community, in coordination with Beaufort County, will undertake to achieve the community vision. These action steps are implementable and are included in the following Plan Work Program, which serves as the Priority Investment element required by the comprehensive plan legislation. This work program is specifically targeted for the Daufuskie Island community and recognizes that, as an unincorporated area, the majority of the action steps will be accomplished by volunteer groups, committees and residents and take advantage of the skills and abilities within the community. It will be critical for the implementation of the identified action steps to coordinate closely with Beaufort County

Daufuskie Island Plan Work Program

The action steps and components of the Work Program have been identified to achieve the goals for the Island established during the planning process. Each of the identified action steps are categorized under its intended goal. To identify responsible party for moving the recommended action items forward, the implementation plan is centered on the Daufuskie Island Council and its existing committee structure. These existing committees include:

- Cultural and Historic Preservation
- Island Plan and Code
- External Outreach
- Ferry
- Roads
- Island Amenities
- Solid Waste
- Resources

The restructured committees incorporate all of these existing areas of focus, while combining and/or broadening the scope of interest for some committees. The updated committee structure, which will be standing Council committees, is shown along with the comparison to the existing committee structure and scope is shown in Table 16.

TABLE 16. 2018 COMMITTEE STRUCTURE

2018 Committee	Previous Committee	Scope
Cultural, Historic, and Natural Preservation	Cultural and Historic Preservation	Protection, preservation and enhancement of community cultural and historic resources
Island Plan and Code	Same	Plan implementation
Coordination	External Outreach	Coordination with Beaufort County; local governments; state, local and regional agencies
Transportation	Ferry Roads	Focus on all multimodal transportation needs and infrastructure
Community Facilities and Assets	Island Amenities Solid Waste	Focus on the maintenance, enhancement and development of facilities and infrastructure
Resource Development and Grants	Resource	Focus on marketing, branding, identification of financial resources and grant opportunities
Economic Development	None	Focus on economic development opportunities, promotion and education in coordination with the other committees

The community of Daufuskie Island includes many talented and accomplished residents with numerous contacts who can provide insight and assistance into all of these areas. A network of resources will need to be established that can, and are willing to provide support to each of these committees and their activities.

Daufuskie Island Goals

The following goals, not shown in any priority order, were identified by the community during the planning process:

A. Preservation of community character
B. Balance growth and development with the existing community character
C. Promote a sustainable economy compatible with existing community character
D. Preserve and enhance community assets, including the natural beauty of the island
E. Promote environmental stewardship
F. Preserve the island history and culture, including a focus on the native Gullah heritage

Each of the work items have been structured to assist in achieving these goals. Many of the action items identified will incorporate multiple goals. Each of the items also includes a

timeframe for action and/or if it is an ongoing activity. The identified timeframes are as follows:

- Short-range: 1-2 years
- Mid-Range: 3-5 years
- Long-Range: 5-10 years

Work Plan to Achieve Island Goals

Action Items	Goal Addressed by Action Item	Timeframe	Cost Estimate/Notes
ECONOMIC DEVELOPMENT COMMITTEE			
Promote eco-tourism and off-peak tourism	A,B.C,E	Ongoing	DI Council Committee and Volunteer Time/Eco-Tourism includes both existing peak season and promotion of tourism in off-peak season
Identify group camping sites and ensure sites are in accordance with code	A,B,C,E	Short-Range	DI Council Committee and Volunteer Time/Coordination with Plan Implementation Committee
Develop marketing and branding to effectively market Daufuskie Island as an eco-tourism destination	B,C	Short-Range/Ongoing	DI Council Committee and Volunteer Time/Identify resources for assistance with marketing and branding
Coordinate with existing birding trails and develop amenities for birding trail sites on Daufuskie Island	B,C,D	Mid-Range	DI Council Committee and Volunteer Time/Identify resources and assistance for research and coordination opportunities
Promote agri-business in coordination and cooperation with Daufuskie Community Farm	B,C,D,F	Mid-Range	DI Council Committee and Volunteer Time/Coordinate with Community Farm and other agri-business organizations to understand and develop opportunities
Work with Daufuskie small business initiative and SCORE Association (Service Corps of Retired Executives) to develop a support network and small business incubator	B,C	Long-Range	DI Council Committee and Volunteer Time/Coordinate with SCORE

Action Items	Goal Addressed by Action Item	Timeframe	Cost Estimate/Notes
Provide educational opportunities for the community to understand development requirements, pro-formas, etc.	B,C	Short-Range	DI Council Committee and Volunteer Time/Identify educational resources
Develop economic base to ensure young people can remain on the island and earn a living.	B,C	Ongoing	DI Council Committee and Volunteer Time
COMMUNITY FACILITIES AND ASSETS COMMITTEE			
Continue to work with County and community organizations and members to address the issues with the existing dump site with potential short-term solutions, ie. fencing, manning the facility, covered dumpsters	D,E	Ongoing	DI Council Committee, Community Organization and Citizen Volunteer Time
Continue to coordinate on a long-term, sustainable solid waste facility	D,E	Mid-Range	DI Council Committee, Community Organization and Citizen Volunteer Time
Continue and expand Adopt-A-Road Program	A,D,E	Ongoing	Volunteer time/Coordination with Daufuskie Island Conservancy
Coordinate to include in tourist pamphlets information regarding litter prevention and golf cart safety	A,B,D,E	Short-Range	DI Council Committee and Volunteer Time/Coordination with Existing Businesses with Tourist Information
Organize a volunteer network to maintain public facilities	A,B,D,E	Ongoing	DI Council Committee and Volunteer Time
Ensure roadway and dumpsite grading do not adversely impact environmental resources and drainage	E	Ongoing	DI Council Committee/Coordination with County

Action Items	Goal Addressed by Action Item	Timeframe	Cost Estimate/Notes
Identify services lacking for year-round Island residents, including those needed to serve aging populations, and prioritize need to develop options for meeting the identified needs	B,C	Ongoing	DI Council Committee, Community and Volunteer Time/Coordination with County, Other Organizations to Potentially Meet Needs
PLAN IMPLEMENTATION COMMITTEE			
Update and simplify Island Code	A,B,C,D,E,F	Short-Term	DI Council Committee
Monitor progress of plan recommendations	A,B,C,D,E,F	Ongoing	DI Council Committee
Establish on-island planning advisory board to provide input to County and County Planning Commission regarding Island developments and consistency with code	A,B,C,D,E,F	Short-Term/Ongoing	DI Council Committee
TRANSPORTATION COMMITTEE			
Work with County to identify and implement potential road material that can stabilize the unpaved roads without paving to avoid additional impervious surfaces and drainage issues	A,D,E	Mid-Term	DI Council Committee
Continue to Coordinate with County and Palmetto Breeze to provide stable, consistent, and quality public ferry service	A,B,C	Ongoing	DI Council Committee
Open discussions with SCDOT/Office of Public Transit to gain understanding of transit funding and explore additional options	A,B,C	Short-Term	DI Council Committee

Action Items	Goal Addressed by Action Item	Timeframe	Cost Estimate/Notes
Research other ferry systems' organizational structures, funding mechanisms to identify potential models	A,B,C	Short-Term	DI Council Committee
Continue to coordinate with County on acquisition of rights of way on roads maintained by the County for more than 20 years.	A,B,D,F	Ongoing	DI Council Committee
CULTURAL/HISTORIC/NATURAL PRESERVATION COMMITTEE			
Work with the Gullah Geechee National Heritage Corridor to promote Daufuskie and identify opportunities for heritage preservation and potential funding	A,B,D,F	Ongoing	DI Council Committee/Community Organizations and Community Members Volunteer Time
Coordinate with organizations such as the Preservation SC, Daufuskie Island Historical Foundation and other interested parties and agencies to address preservation of historic Gullah houses and identify grant opportunities	A,B,D,F	Ongoing	DI Council Committee/Community Organizations and Community Members Volunteer Time
Work with and support existing preservation groups on the island	A,B,D,E,F	Ongoing	DI Council Committee/Community Organizations and Community Members Volunteer Time
Meet with Tybee Island officials and SC state agencies to understand grant opportunities for beach renourishment	D,E	Short-Term	DI Council

Action Items	Goal Addressed by Action Item	Timeframe	Cost Estimate/Notes
Coordinate with Beaufort County to conduct a significant tree survey and develop protections within the code for significant trees	A,B,D,E	Mid-Term	DI Council/Beaufort County Staff Time
Continue with existing wayfinding signage	A,B,C,F	Ongoing	DI Council Committee/Community Organizations and Community Members Volunteer Time
COORDINATION COMMITTEE			
Continue close coordination with Beaufort County staff and elected officials on issues affecting Daufuskie Island	A,B,C,D,E,F	Ongoing	DI Council and Committee
Work with Beaufort County, state and regional agencies to identify funding for grants researcher and writer	A,B,C,D,E,F	Short-Term	DI Council and Committee
Establish committee, including Beaufort County officials, to examine and identify governance options for the Island	A,B,C,D,E,F	Mid-Term	DI Council and Committee
Continue to use existing tools to communicate community information (website, social media)	A,B,C,D,E,F	Ongoing	DI Council and Committee
Coordinate with Daufuskie Island Fire and Emergency Services and Beaufort County Emergency Management officials to educate and inform residents on hurricane preparedness	A,B,C,D,E,F	Ongoing	DI Council and Committee

Action Items	Goal Addressed by Action Item	Timeframe	Cost Estimate/Notes
Work with state economic development agencies and tourism agencies for assistance and support in developing programs to capitalize on tourism	A,B,C,D,E,F	Ongoing	DI Council and Committee
RESOURCE DEVELOPMENT AND GRANTS COMMITTEE			
Utilize existing community resources to identify potential grant opportunities	A,B,C,D,E,F	Short-Term	DI Council Committee and Community Organizations
Coordinate with community resources, organizations and businesses to develop major Island festival (in addition to Daufuskie Days)	A,B,C,D,E,F	Short-Term	DI Council Committee, Community Organizations and Businesses
Identify and hire grants researcher/writer (part time)	A,B,C,D,E,F	Long-Term	DI Council/Funding from Organizations, Proceeds from Fund-raisers and Festival



APPENDICES

APPENDICES

- Community Participation Documentation
- Survey Results
- Existing Conditions Mapping

COMMUNITY PARTICIPATION DOCUMENTATION:

Community Workshop # 1

June 29, 2017

THE UPDATE OF THE DAUFUSKIE ISLAND PLAN IS UNDERWAY AND…

WE NEED YOU!

THURSDAY, JUNE 29th

5:00 -6:30 PM

MARY FIELDS SCHOOL

The Daufuskie Island Plan will chart the future course of the Island ***and your participation is vital***. There are several ways to participate:

PUBLIC MEETINGS - ***The first meeting is scheduled for Thursday, June 29th at Mary Fields School, 5:00 PM to 6:30 PM***. Light refreshments will be provided. In addition to this first meeting, there will be a series of additional public meetings over the course of the plan development that will provide interactive opportunities for your feedback and input.

COMMITTEE ON THE DAUFUSKIE ISLAND PLAN AND CODE- This group is a committee of the Daufuskie Island Council established to guide the process of updating the plan and code. This committee of Council will serve as the Project Advisory Committee during the plan development and will meet regularly over the course of the process. These meetings are open to the public and all are welcome to attend. The Committee and the technical project team are listed below.

COMMITTEE ON THE DAUFUSKIE ISLAND PLAN AND CODE

DAUFUSKIE ISLAND COUNCIL MEMBERS	CITIZEN MEMBERS
Deborah Smith, Committee Chair	Leeann Coulter
Darnell Brawner	Martha Hutton
Sallie Ann Robinson	Andy Mason
John Schartner	Geoff Jenkins

PROJECT TEAM

Tony Criscitello, Director, Beaufort County Planning Department
Beverly Davis, AICP
“Sonny” Timmerman, P.E., AICP

DAUFUSKIE ISLAND
COMPREHENSIVE PLAN UPDATE

PUBLIC WORKSHOP #1

Thursday, June 29, 2017 5:00 – 6:30 pm
Mary Fields School, Daufuskie Island

AGENDA:

1. Welcome and Introductions
2. Study Overview Presentation
3. Group Exercise
4. Next Steps
5. Adjourn

The Comprehensive Plan charts the future course of the Island and your participation is vital.



Daufuskie Island Council

BEAUFORT COUNTY SOUTH CAROLINA 1769

DAUFUSKIE ISLAND PLAN AND CODE UPDATE

June 29, 2017



Agenda

- The Plan Update and Process
- Public Involvement/Participation
- Schedule and Key Milestones
- Review of Other Plans: Vision / Goals
- Small Group Exercise
- Next Steps

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Plan Update

» Daufuskie Island Council Initiative
  – Deborah Smith, Chair, Committee on the Daufuskie Island Plan and Code
  – Darnell Brawner, Council Member
  – Sallie Ann Robinson, Council Member
  – John Schartner, Council Member
  – Leeann Coulter, Public Member
  – Martha Hutton, Public Member
  – Andy Mason, Public Member
  – Geoff Jenkins, Public Member

» Council Committee serves as the Project Advisory Committee

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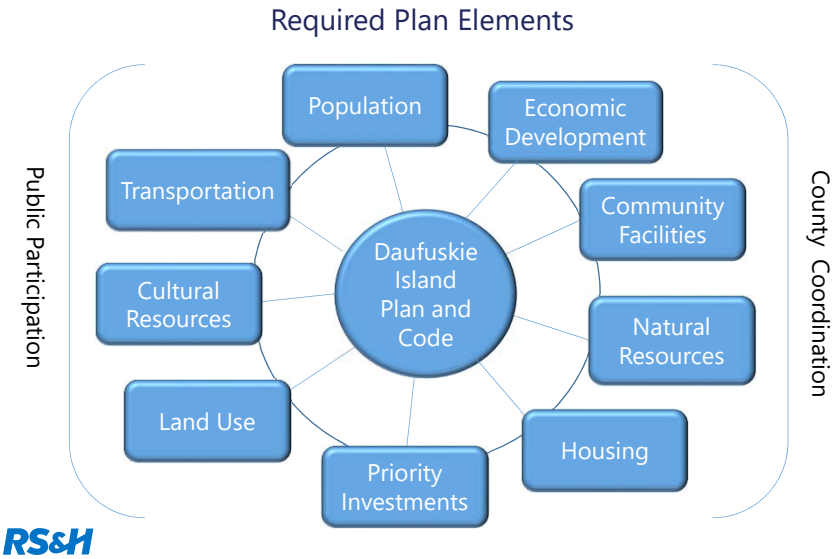
Comprehensive Plan Update Process

» Completed within the Framework of State Planning Requirements and Beaufort County Plan



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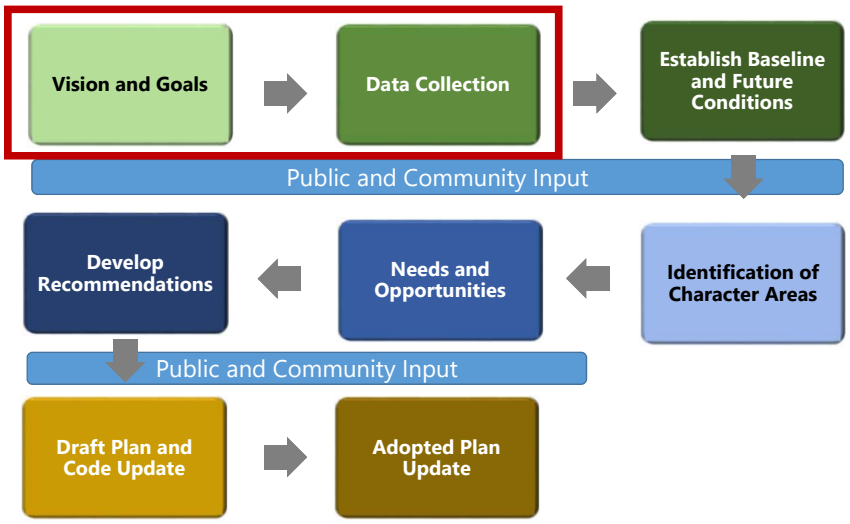
Plan Update Process



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Public Involvement/Participation

- Public/Community Involvement is the Foundation of the Plan Development
- Opportunities for Input
  - Project Advisory Committee
    - *Participants meet regularly throughout the process*
    - *Opportunities for input at the detailed, technical analysis level*
    - *Open to the public*
  - Public/Community Workshops
    - *Meetings held throughout the process*
    - *Interactive and participatory*
    - *Focused at a higher, recommendation level*
  - Daufuskie Council, Beaufort County Council and Planning Commission
    - *Updates throughout the process*

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Public Involvement/Participation

» Public Meetings/Workshops:
- – June 29, 2017
  - *Review of planning process*
  - *Vision Statement*
- – August, 2017
  - *Finalize vision statement*
  - *Character Areas – Needs, Opportunities, Goals*
- – October/November, 2017
  - *Draft Recommendations by Character Areas*
- – January, 2018
  - *Plan Presentation and Needed Code Revisions*
- – March, 2018
  - *Code Revisions*

» Governmental Coordination:
- – Daufuskie Island Council
  - *Monthly Updates*
  - *April, 2018 – Recommendation for Adoption*
- – Beaufort County Council and Planning Commission
  - *Milestone Presentations*
  - *County Council Adoption – May, 2018*

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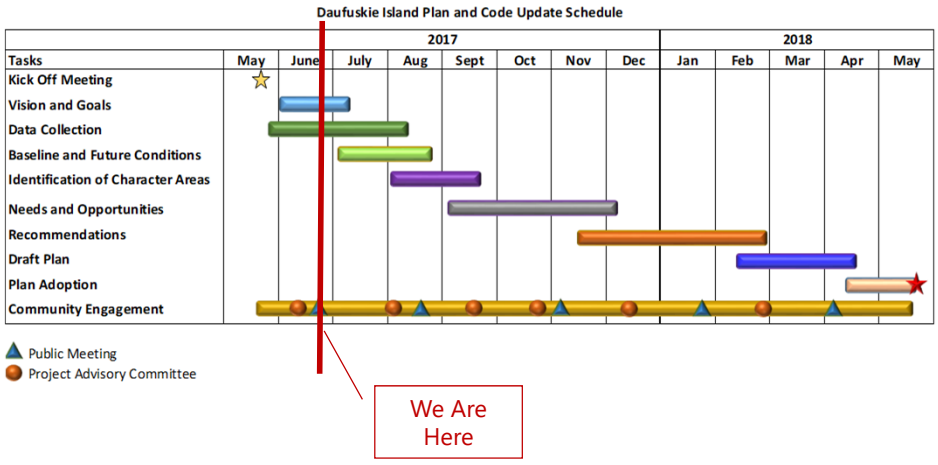
Project Schedule



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QUESTIONS?



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REVIEW OF OTHER PLANS



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Beaufort County Comprehensive Plan

- Overall Vision
  - *" Promote safe and healthy communities that preserve and build on the County's unique sense of place; and promote sustainable economic opportunities that allow all County residents to thrive and prosper"*
- Eight Vision Statements
  - *Preserve the natural beauty*
  - *Create new industries and jobs for a strong economy*
  - *Build better roads and encourage two-wheeled and two-footed travel*
  - *Preserve the rich cultural heritage*
  - *Permit development while maintaining sense of place*
  - *Create parks and conserve open spaces*
  - *Ensure affordable housing for all residents*
  - *Provide public services without breaking the bank*

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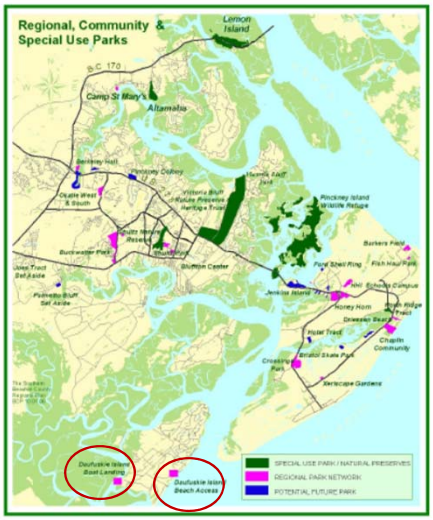
Tourism Product Development Concept for the Lowcountry Region (SC PRT)

- Daufuskie Island
  - *"Even by the extremely high standards of the Lowcountry, Daufuskie Island represents a unique asset.*
  - *As an ecotourism destination, further large scale real estate development should be prohibited, and strict zoning controls placed on the development of new structures.*
  - *Sustainable energy and transport options and recycling for the Island should be developed, and unsealed roadways left in their present condition.*
  - *Consideration should be given to the designation of an historic area in order to identify and preserve a zone where examples of the Island's unique architecture may be relocated and preserved."*

RS&H

Other Plans

- Southern Beaufort County Plan
  - Two regional parks
    - *County Dock site*
    - *Beach Access from Beach Road*
- Gullah Geechee Special Resource Study
  - Documentation of Gullah culture and loss of cultural assets to development
  - Recommendation: Protect resources through establishment of a Gullah/Geechee National Heritage Area



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Other Plans: Addendum 7/10/17

- Daufuskie Island Conceptual Master Plan Charrette Report
  - Clemson Institute for Economic and Community Development
    - *Recognition of Daufuskie's uniqueness*
    - *Focused on development of a plan and zoning recommendations*
      - Maintain Haig Point Road as currently configured, with parallel path for walking, bicycles and golf carts
      - Protection of neighborhoods outside of the resort plantations and emphasizing Daufuskie style of land use/architecture
      - Mixed use district at south end of the island at county dock area
      - New public landing in the island center (Melrose/Freeport area) to become main portal
      - Updated zoning categories allowing small retail/businesses particularly in the center portal and southern portal

RS&H

Other Plans: Addendum 7/10/17

» Daufuskie Island Conceptual Master Plan Charrette Report
  – Clemson Institute for Economic and Community Development

- *"Daufuskie Island Covenant": Similar to a vision statement*
  - Preservation of traditional island way of life while preparing for a prosperous future by responsible growth and maintaining values
  - Preservation of natural, cultural, historic resources
  - Civic engagement, economic diversity, sustainable development
  - Quality of life for generations
  - Welcome newcomers and opportunities while preserving island values

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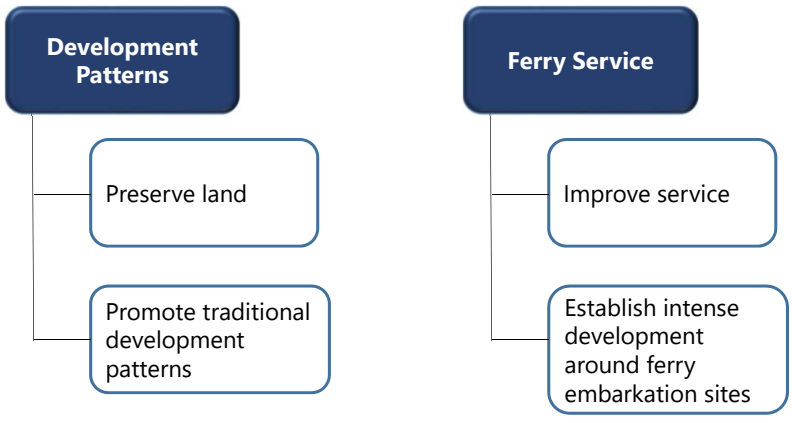
Daufuskie Island Plan



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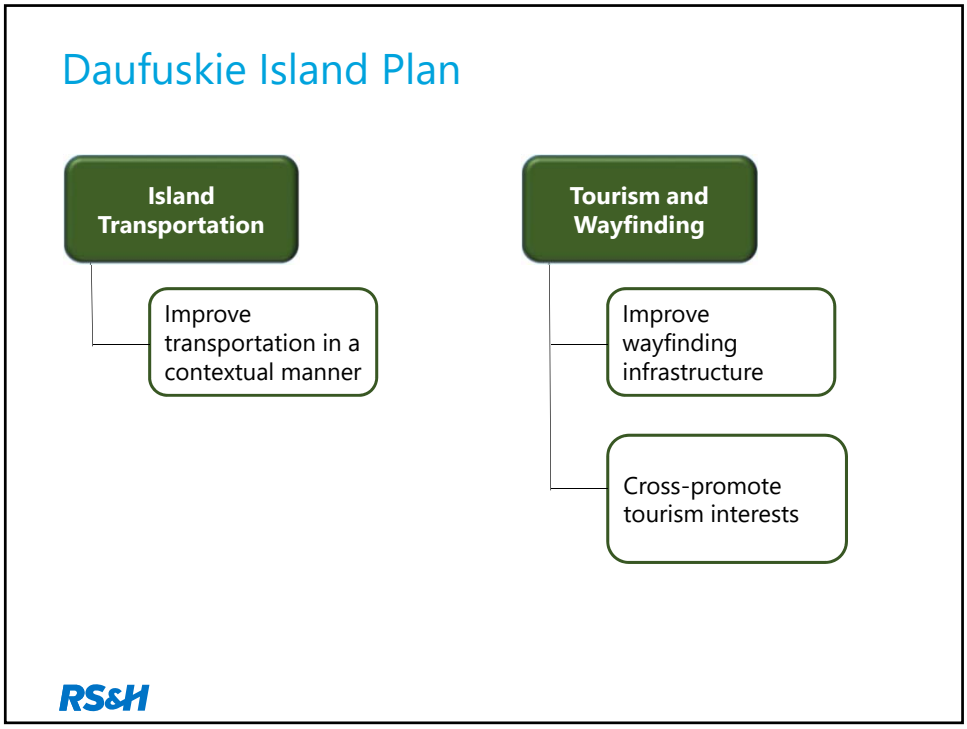
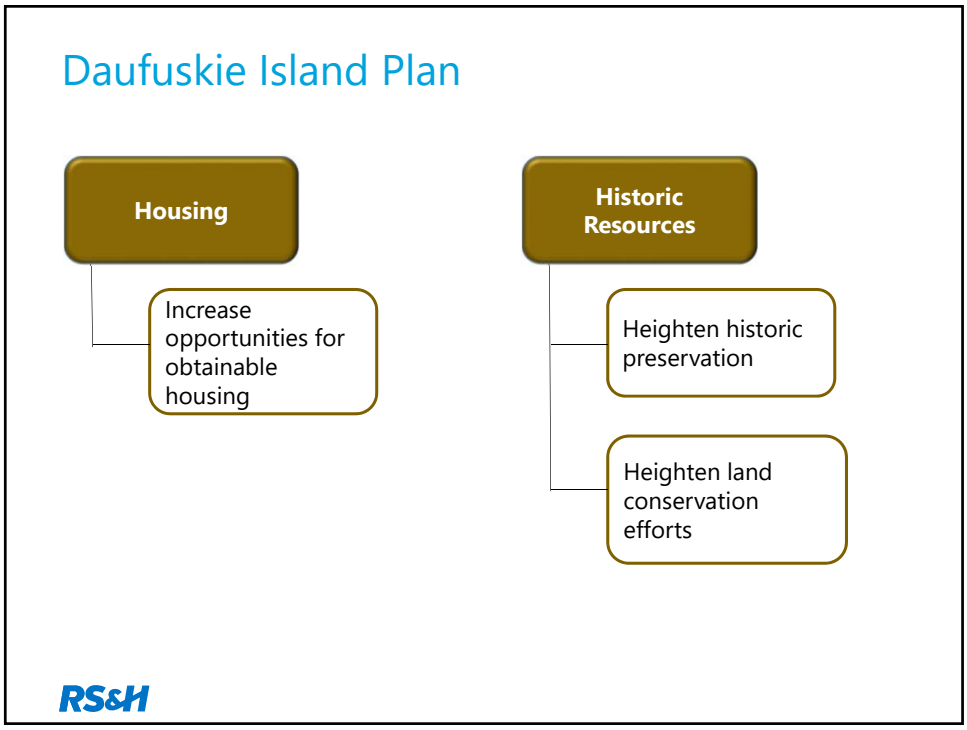

Daufuskie Island Plan
Island Transportation
Improve transportation in a contextual manner
Tourism and Wayfinding
Improve wayfinding infrastructure
Cross-promote tourism interests
RS&H


Daufuskie Island Plan
Housing
Increase opportunities for obtainable housing
Historic Resources
Heighten historic preservation
Heighten land conservation efforts
RS&H

Daufuskie Island Plan

Civic Sites

- Create small gathering places
- Create significant civic spaces

Economy

- Expand the economy
- Promote additional means of economic control and oversight

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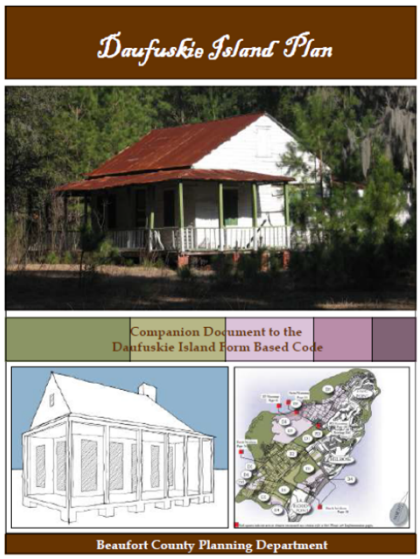
Daufuskie Island Plan

Sustainability

- Establish sustainable benchmarks and targets



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QUESTIONS?



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GROUP EXERCISE



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Group Exercise – Island Vision

- Vision
  - What do we want to be when we grow up?
  - Provides the framework for the plan
- Facilitated Discussion to Develop Vision Statement Elements
  - Brief review of other Vision Statements
  - Identification of priorities
- Group Results will be Displayed and Top Priorities Identified by Participants
  - Sticky dots
- **REMEMBER**
  - **Agree or Disagree…Every opinion is valid**



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Next Steps

- Data Collection
  - Develop existing conditions to present at next public meeting
- Develop draft vision statement based on workshop results and list of priorities
- Disseminate draft vision statement and priorities in a survey (on-line and hard copy) for additional feedback
- Project Advisory Committee meetings – all are welcome!
- Next public meeting (August)
  - Finalize vision statement
  - Existing conditions
  - Identify character areas

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EXAMPLE LOCAL GOVERNMENT VISION STATEMENTS

Tybee Island, GA	As concerned citizens of The City of Tybee Island, we will be conscientious **stewards of our unique historic and cultural heritage, environmental resources, and diverse economic community**. We will also ensure that our **growth does not exceed the Island's carrying capacity.** We will foster a **vibrant, year-round economy** and support our business community in its goal to provide quality services and facilities for both residents and visitors. We will provide increased recreational and educational opportunities for all age groups to **promote Tybee Island as a family-friendly, four season vacation destination, while enhancing the distinctive atmosphere of our Island life.**
Isle of Palms, SC	Isle of Palms has developed into a premier barrier island residential community with a variety of housing styles, commercial uses and recreational facilities and the natural resources that make Isle of Palms such a wonderful place to live and visit remain intact and in good condition. Measures that will **enhance the existing character of the island** as a quality place to live, and **protect the environment** both on and around the island, must be taken **to guide development and preserve the quality of life** for generations to come.
Key West, FL	Our mission is to **protect our natural and built environment** and **honor our local heritage and cultural identity** with citizens actively engaged in the life of our neighborhoods and community. Together we shall **promote ongoing redevelopment of a sustainable economy, quality of life,** and modern city infrastructure. Our government shall act on behalf of the long-term, generational interests of residents and visitors of Key West.
Manteo, NC	Manteo will **maintain its character as a small town occupied year round, with an economy that accommodates intensive tourism** during the summer. The town will **promote limited, planned growth**, encourage the provision of **affordable housing**, and integrate the various parts of the town through a combination of improved traffic management and pedestrian improvements, while celebrating the past history and continuity of life of the early settlers and recent arrivals alike. The town **encourages new building and redevelopment alike respect and maintain their compatibility** with the town's standards and styles.
Franklin County, FL (Apalachicola)	Ensure that the character and location of land uses in Franklin County **minimize the threat to the natural environment or public health, safety, and welfare,** and **maximize the protection of the Apalachicola Bay,** while **respecting individual property rights**.
St Marys, GA	The City of St. Marys goals are to **maintain our welcoming, small-town community atmosphere** as a Georgia gateway and destination; and to remain committed **to investing in our natural and cultural resources** while proactively **planning for continued myriad growth opportunities.** Our priorities include: creating an open and engaging community that is committed to **improving quality of life** through expanding opportunities **for economic development** and implementing policies that will foster **sustainable growth.**

EXAMPLE VISION STATEMENTS: ISLANDS ACCESSIBLE ONLY BY BOAT

Bald Head Island, NC Yr. Round Pop: 177 Area: ~ 9.5 sq. mi. Private ferry operator	Bald Head Island is a residential, family oriented community and major family vacation destination committed to **living in harmony with nature** while being **supportive of activities and services necessary to enhance the quality of life on the island.**
Mackinac Island, MI Yr. Round Pop: 489 Area: ~4 sq. mi. Private ferry operators	**Maintain a high quality of life** for both present and future island residents; **preserve the physical, social, environmental, historical and cultural characteristics** of the island; guide new development in a manner that conserves natural features, **protects environmentally sensitive areas,** and meets the long term needs of the community while **recognize land owners' rights to reasonable use of their land; balance the rate of land development with the available public facilities, services and infrastructure.**
Avalon, CA (Catalina Island) Yr. Round Pop: 3,802 Area: ~ 3 sq. mi. (Village) ~ 76 sq. mi. (Isl.) (85% in Conservancy) Private ferry operators	Maintain a **population size, both residents and visitors, that is consistent with the natural resources, public service and other factors** while continuing to **attract, accommodate and satisfy tourists** upon which the local community is dependent; maintain and **enhance the unique ecology and environmental features**; Exemplify **environmental awareness and stewardship**; provide services to all type of visitors and **maintain the sense of place** that is the draw for tourists and residents alike.
Little Gasparilla Island, FL Yr. Round Pop: ~100 Area: ~ 3 sq. mi. Private water taxi	Little Gasparilla Island is a pristine piece of old Florida, conveniently located minutes from the mainland and its amenities and services. **Quiet, peaceful and uncrowded**, the island is an **informal, yet cooperative collection of residents who cherish the breathtaking beauty of their unique island home and easy-going lifestyle.** The island combines **history, nature and individuality.**
Anderson Island, WA Yr. Round Pop: 1,037 Area: ~ 8 sq. mi. Pierce Co. operated ferry	Anderson Island is a historic and rural residential community with an attractive and compact central node. **Growth on the island is managed to retain the historic and caring character, foster a sense of community and diversity and preserve the natural environment.** Residential and commercial **development is designed to integrate into the natural surroundings and infrastructure and services supports a diversity of resident's needs.**
Guemes Island, WA Yr. Round Pop: 605 Area: ~ 8 sq. mi. Skagit Co. operated ferry	To **allow growth that will conserve the island's groundwater resources, rural character, and sense of community.** Rural character includes both the amenities of the **natural environment** and the **lack of urban-scale development** and applies the non-visual aspects of rural life, including **self-sufficiency, sense of community and mix of land uses**.
Nantucket, MA Yr. Round Pop: 10,000 Area: ~ 49 sq. mi. (40% Cons.) State and private ferries	To **create and sustain a healthy community**, one whose residents have **stability and security with resources protected** for future generations.

Guemes Island Sub-Area Plan: Island Welcome: Capturing the Vision

"As you walk here step gently, enjoy the young raven in the ancient fir tree that shades the cattail marsh just up from the beach

Sense the harmony of the islanders as they go about with an unhurried pace, a kind wave of the hand for all passers by

Admire the quiet. Breathe the peace we all try to preserve for each other; and do no harm here to our place…to our home." – Gary Davis, Guemes Island Poet

TOP FIVE THINGS I LOVE ABOUT DAUFUSKIE ISLAND
PUBLIC MEETING JUNE 29, 2017

HISTORIC DISTRICT (8 Responses)

NATURE/ENVIRONMENT	LOCATION		CHARACTER	SENSE OF COMMUNITY	SAFETY	HISTORY	WATER	ECONOMY
	RURAL LIFESTYLE	GEOGRAPHIC ISOLATION						
Beauty	Low density population	Close to modern stuff	A little wild	Diverse demographics	Safe community	History/Heritage	River and ocean	Home based businesses
Natural Beauty	No traffic	Island is not for everyone	Atmosphere	Friendly People			Waterways	Opportunities for new small businesses
Natural Beauty	No traffic	Location		Friends			Beach	Unique small businesses
Nature	Quiet	Seclusion		People			Water	
Nature and woodlands	Quiet	Separation from the world		People				
Nature- Trees	Quiet and peaceful			People				
Wildlife	Rural			People				
	Sand roads							
	Simplicity							
	Small population							

HAIG POINT (8 Responses)

NATURE/ENVIRONMENT	LOCATION		CHARACTER	SENSE OF COMMUNITY	SAFETY	HISTORY	WATER	ECONOMY
	RURAL LIFESTYLE	GEOGRAPHIC ISOLATION						
Beautiful	Calm/Serene	Inconvenience/commitment to be here	Artisan culture	Community culture	Safety	Historic	Waterfront	Small businesses
Environment	No artificial structure	Insulation	Bugs-Keeps yankees away	Community involvement	Safety			
Environment	No traffic	Isolated but connected	Character/Quirkiness	Diverse community				
Natural beauty	Quiet	No bridge	Distinct areas	Diverse demographics				
Natural beauty	Remoteness/rural	No bridge	No cops	Friendly people				
Natural beauty	Rural	No bridge	Opportunity to be yourself	People				
Nature	Rural	Remote but connected/ease of use	Quality of life	Sense of community				
Wildlife			Slow pace of life	Sense of community				
Wildlife			Uniqueness					

MELROSE (9 Responses)

NATURE/ENVIRONMENT	LOCATION		CHARACTER	SENSE OF COMMUNITY	SAFETY	HISTORY	WATER	ECONOMY
	RURAL LIFESTYLE	GEOGRAPHIC ISOLATION						
Natural beauty	Connection with nature	Island/no bridge	Culture	Community/family	Safety	History	Beautiful beaches	
Natural beauty	Dirt roads	Moat	Distinct areas	Diversity	Safety	History	Beach	
Natural beauty	Golf cart transportation		Distinct communities	Friendly				
Natural beauty	No franchises		Healthy lifestyle	Friendly people				
Natural beauty	No traffic		Unique character	Neighborly				
Natural beauty/diversity	Non-Commercialized		Uniqueness	People				
Wildlife	Not overbuilt/avoid overdevelopment			People				
	Quiet			Sense of community				
	Quiet			Sense of community				
	Quiet/peaceful							
	Remote/undeveloped							
	Retreat/Restorative							
	Rural							
	Rural							
	Uncrowded							
	Uncrowded							
	Undeveloped							

***** NOTE: No participants identified their address in Bloody Point***

GROUP EXERCISE RESULTS: PUBLIC MEETING JUNE 29, 2017

Community Character		Growth/Development		Environment		Economy		Community Assets		History/Culture		Access		Infrastructure	
Balance lifestyle with commercial presence	4	Balance growth with community character	10	Enhance cleanliness	1	Ability to earn a living	3	Community meeting space/event space	1	Continued artisan support: accentuate and highlight	2	No bridge	3	Provide dedicated public ferry landing	2
Beautiful, tree lined roadway network	---	Balance prosperity while maintaining character	4	Maintain/preserve natural beauty	5	Build on strengths of the island	1	Maintain access ot the river	1	Foster the arts	3	Preserve limited access	1	Provide island with sufficient infrastructure to support growth: community wastewater, underground utilities, sustainable refuse collection, water supply	---
Diverse demographics	3	Sensible growth	4	Preserve natural environment	3	Enhance tourism economy	---	Preservation of waterfront	2	Maintain Preserve historical assets	6	Preserve limited access to the island/no bridge	2	Maintain balance of paved/unpaved roads for safety, security, and access	---
Environment not overly commercialized	1			Preserve natural environment and lack of polution and noise	2	Foster small agri-business	---	Preserve beach	---	Preserve historic/cultural assets	1	Preserve remoteness with proximity to "other world"	1	Transportation on and off the island	2
Extraordinary community involvement and welcoming people	1			Preserve open space	---	Increased tourism in a mindful way	2	Preserve local island school	---	Preserve historical and cultural heritage	1			Balance of transportation infrastructure/roads	3
Islanders want to be here and forgo convenience	4			Preserve undeveloped nature	---	Maintain diverse, unique small businesses	6	Preserve local school	---	Preserve history and culture	2				
Keep uniqueness of the island	3			Preserve wildlife	1	Maintain natural resources/expand eco-tourism	---	Preserve public access to waterfront/river/public beach	2	Preserving architectural integrity and diversity	3				
Maintain pace of life	4			Preserve wildlife habitat	2	Provide meaningful work opportunities	2	Use existing assets for community purposes	3						
Maintain quiet	1			Tour space for viewing natural assets	2	Provide sustainable economy that promotes quality of life and maintaining island character	1	Preserve fire/EMT services	---						
Maintain rustic character	---			Vegetative Buffers	---	Showcase Daufuskie opportunities	1	Perserve community spaces (parks, meeting spaces)	2						
Maintain the character	4			Well managed model of natural environment	2	Sustainable tourism	2	Establish good working relationship with Beaufort County	1						
Maintain tight knit community	3														
No big developments	4														
Open community interaction and neighborly															
Perserve diversity	2														
Preserve different character of communities	2														
Preserve eco-system and dirt roads	2														
Preserve friendliness and sense of community	4														
Preserve our way of life	3														
Preserve peace and quiet	3														
Preserve rustic character	1														
Preserve rustic character, homebased businesses, unpaved roads, architecture	3														
Preserve unique, quiet and safe environment	1														
Preseve community culture	1														
Rural character	3														
Rural nature and low density	5														
Safe community	---														
Safety in adventures for children	2														
Support vibrant lifestyle of residents while maintaining the restorative aspects	2														
Total Votes	**66**		**18**		**18**		**18**		**12**		**18**		**7**		**7**

Public Meeting # 1: 6/29/17





Public Meeting # 1: 6/29/17





Public Meeting # 1: 6/29/17





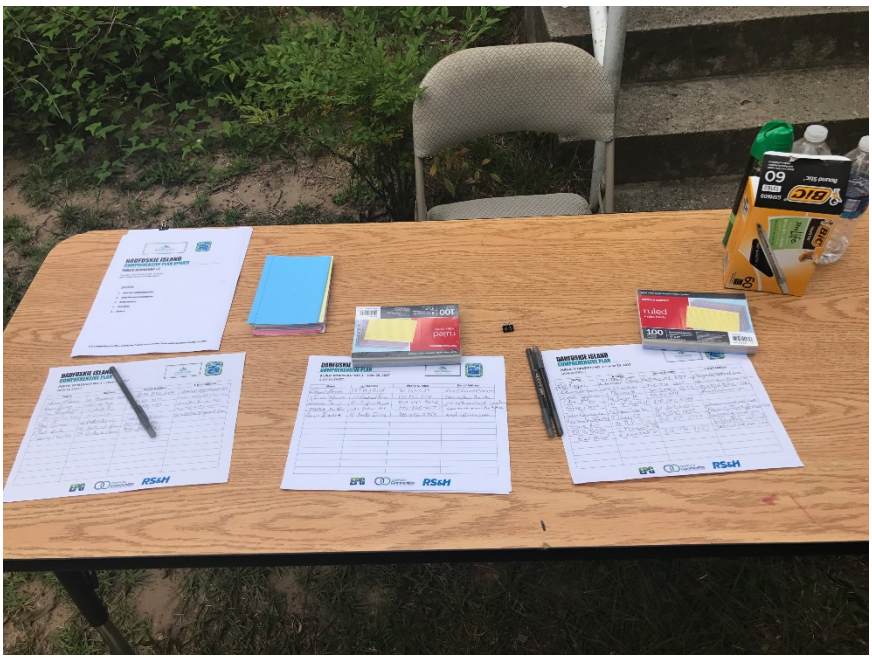
Public Meeting # 1: 6/29/17





Public Meeting # 1: 6/29/17





COMMUNITY PARTICIPATION DOCUMENTATION:

Community Workshop # 2

October 2, 2017

(Postponed from August 28, 2017 due to inclement weather)

DAUFUSKIE ISLAND
COMPREHENSIVE PLAN UPDATE

PUBLIC WORKSHOP #2

Monday, August 28, 2017
Mary Fields School, Daufuskie Island

AGENDA:

1. Welcome and Introductions
2. Study Update and Schedule
3. Survey Results
4. Existing Conditions Overview
5. Character Area Overview
6. Group Exercise
    a. Character Area Identification
    b. Issues
7. Next Steps
8. Adjourn

The Comprehensive Plan charts the future course of the Island and your participation is vital.

DAUFUSKIE ISLAND PLAN AND CODE UPDATE
PUBLIC MEETING – 8/28/17

WHAT IS A CHARACTER AREA?

- Local jurisdictions are comprised of smaller areas that have their own set of defining characteristics
- Planning tool to address specific issues and identify strategies specifically for these areas
- Specific geographic area with the following
  - Unique or special characteristics
  - Potential to evolve into a unique area
  - Require special attention due to unique development issues
- Serves as a guide for land use, zoning, and public investments to ensure the area meets the overall vision

EXAMPLES OF CHARACTER AREAS: TYBEE ISLAND COMPREHENSIVE PLAN

BACK RIVER NEIGHBORHOOD

Characteristics	Issues
• Unique residential neighborhood • Waterfront lots • Beach access along the Back River • Public access to water • Open space • Scenic views • Low impact commercial service uses	• Identification and protection of historic properties • Maintaining unique Tybee sense of place • Protecting the interests of full time residents balanced with tourism • Maintain height limits • Compatible redevelopment with adjacent areas • Limit zoning variances • Zoning ordinance update • Impacts from down-zoning • Maintaining public access to water • Unsafe conditions for pedestrians

BEACHES

Characteristics	Issues
• Undeveloped • Natural, environmentally sensitive • Beachfront and dune system • Recreational opportunities • Protection is critical to the community	• Beach and shoreline protection • Water quality • Emergency/disaster preparedness and rebuilding planning • Preservation/enhancement of the dune system • Jetties remaining in water • Impacts from shipping channel • Lack of/condition of public facilities

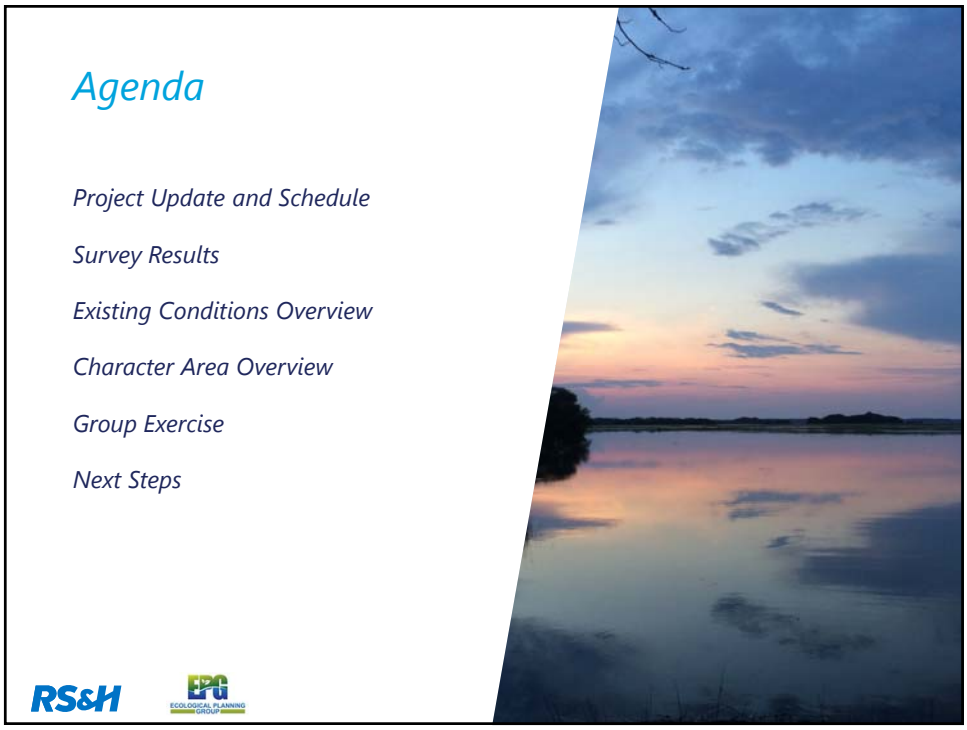


Daufuskie Island Council

BEAUFORT COUNTY SOUTH CAROLINA 1769

DAUFUSKIE ISLAND PLAN AND CODE UPDATE

October 2, 2017



Agenda

- Project Update and Schedule
- Survey Results
- Existing Conditions Overview
- Character Area Overview
- Group Exercise
- Next Steps

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Plan Update

- Daufuskie Island Council Initiative
  - Deborah Smith, Chair, Committee on the Daufuskie Island Plan and Code
  - Darnell Brawner, Council Member
  - Sallie Ann Robinson, Council Member
  - John Schartner, Council Member
  - Leeann Coulter, Public Member
  - Martha Hutton, Public Member
  - Andy Mason, Public Member
  - Geoff Jenkins, Public Member
- Council Committee serves as the Project Advisory Committee

RS&H EPG

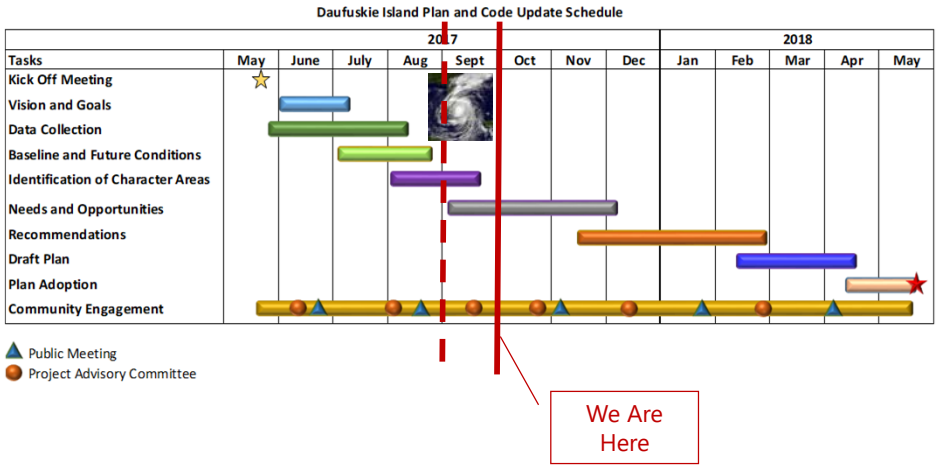
Project Update

- Survey completed and results analyzed
  - Online
  - Hard copy
- Data collection
- Establish existing conditions
- Finalized Vision Statement



RS&H EPG

Project Schedule



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SURVEY RESULTS



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Public Survey Review

The survey was available to the public for approximately one month

- Survey went live on July 25, 2017
- Survey was closed August 24, 2017
- Total 368 participants (including paper copies)
- Total of 314 complete responses

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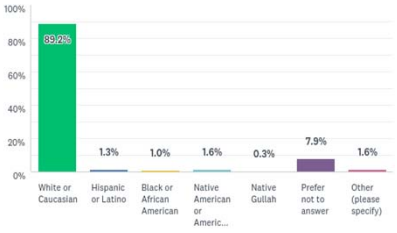
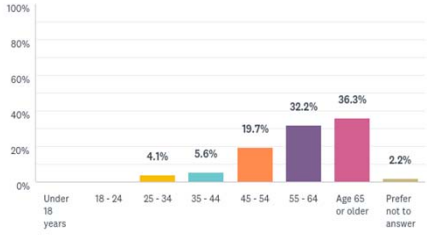
Public Survey Results

Who participated in the public survey?

ANSWER CHOICES	RESPONSES	
Historic District	21.1%	75
Melrose	17.7%	63
Haig Point	51.7%	184
Bloody Point	4.8%	17
N/A, I do not live or own property on Daufuskie Island	4.8%	17
TOTAL		356





- 51.7% Haig Point
- 21.1% Historic District
- 89.2% White or Caucasian
- 68.5% Age 55 or older

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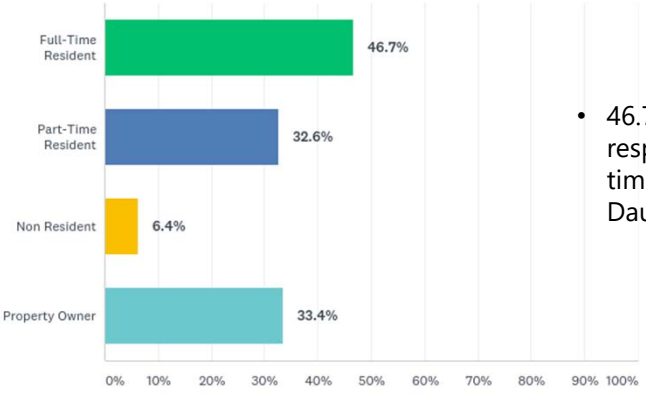
Public Survey Results

What is your status on Daufuskie Island?



- 46.7% of respondents are full-time residents of Daufuskie Island.

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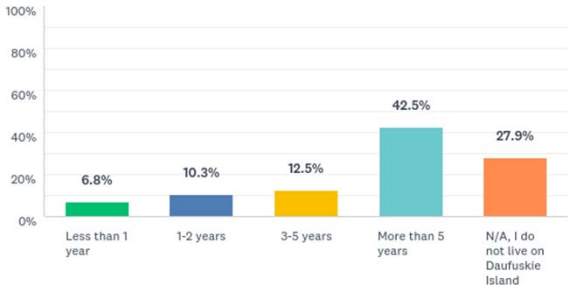
Public Survey Results

If you are a resident, how long have you lived on Daufuskie Island?



- 42.5% have lived on Daufuskie Island for more than 5 years.
- 6.8% have lived on the island for less than one year

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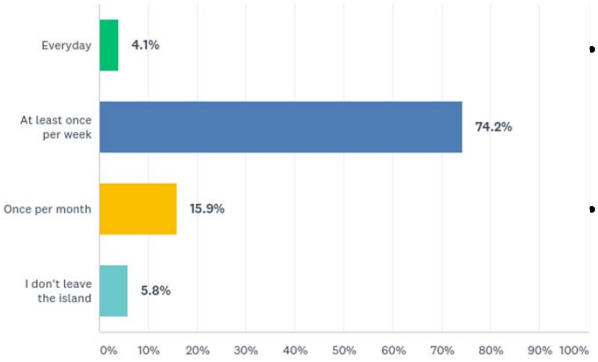
Public Survey Results

How often do you travel between the island and mainland?



- 74.2% travel between the island and the mainland at least once per week.
- 5.8% of the respondents do not leave the island.

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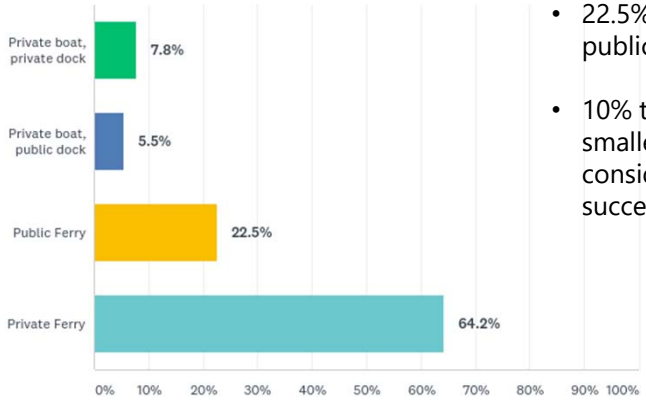
Public Survey Results

How do you typically access the island?



- 22.5% utilize the public ferry
- 10% transit usage in smaller urban areas is considered extremely successful

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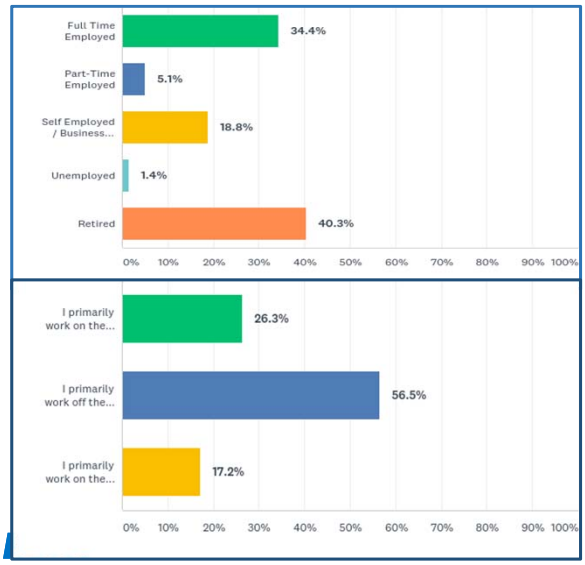
Public Survey Results

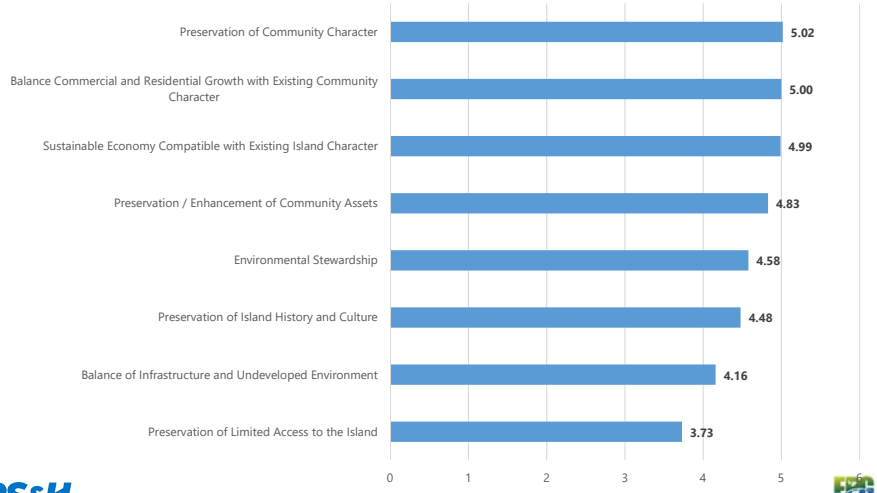
What is your employment status?/ Do you work on or off the island?



- 40.3% are retired
- 34.4% employed full time
- Almost 20% are self-employed
- 56.5% work off the island
- 17.2% work on the island from home

Public Survey Results

Rank on a scale of 1 - 8, (with 1 being the highest priority and 8 being the lowest priority) what aspects of the community should be considered the highest priority?



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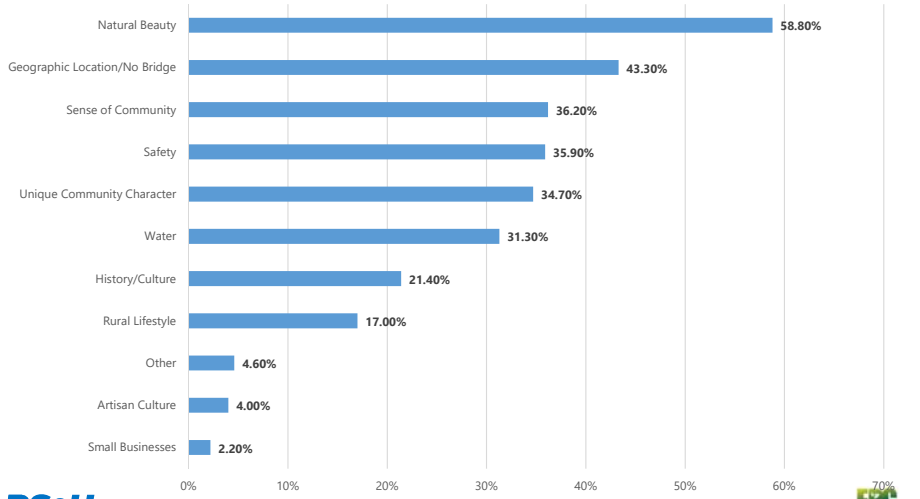
Public Survey Results

What do you love most about living on Daufuskie Island? (Select the top 3)



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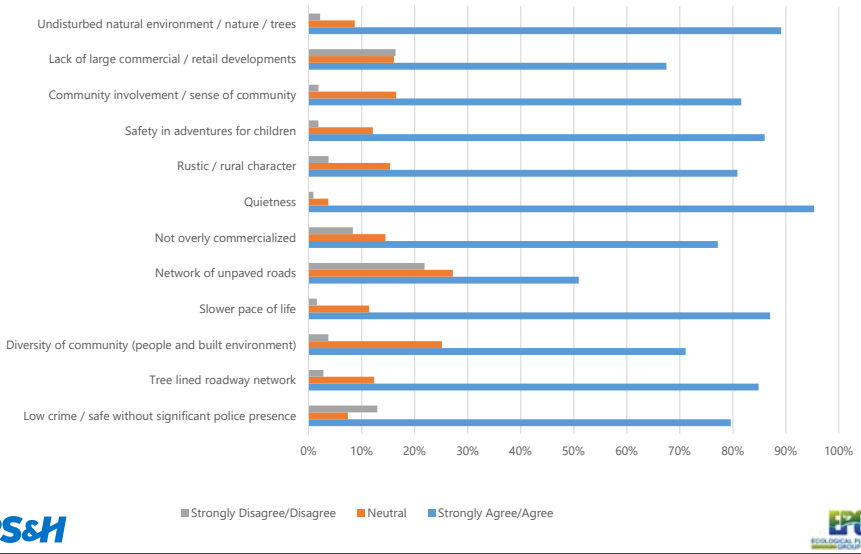
Public Survey Results

Major Contributors to Daufuskie Island's community character.



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Public Survey Results

» Major Contributors to Daufuskie Island Character

– All were considered to be important by respondents

– The top three contributors:

- *Quietness*
- *Undisturbed Natural Environment/Nature/Trees*
- *Slower Pace of Life*

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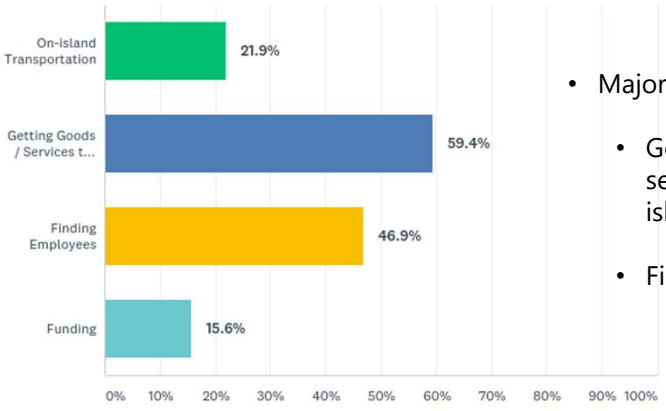
Public Survey Results

What are the major challenges you face as a business owner on the island?



- Major Challenges:
  - Getting goods and services to the island
  - Finding employees

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Public Survey Results

» What do you dislike about Daufuskie?

– Majority of the respondents did not dislike anything about Daufuskie

– Sample comments received multiple times:
  - *Bugs*
  - *Some people want to change it to be like where they came from*
  - *Snakes*
  - *Because I'm not a resident*
  - *Lack of respect/understanding between Island residents, particularly Haig Point and the Historic District residents*

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Key Findings from Survey Results

» Focus on Community Character
  – Preserving the community character
  – Balancing growth with the existing character
  – Sustainable economy compatible with existing character

» Preservation of Community Assets, including the Environment and Natural Beauty

» Respondents Liked:
  – Geographic location/No bridge
  – Quietness
  – Slower pace of life

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VISION



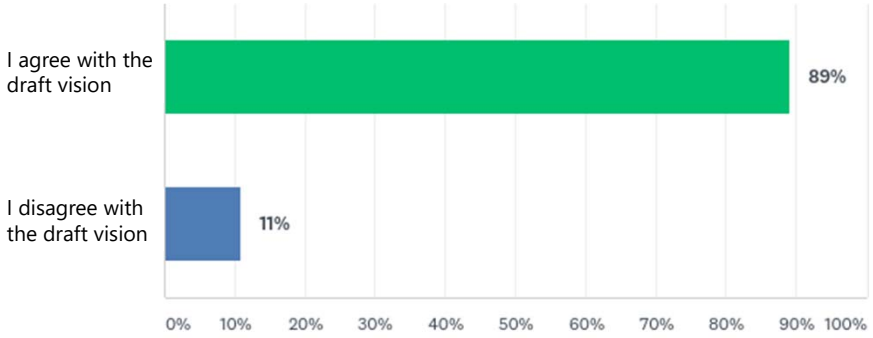
Daufuskie Island Vision

DRAFT VISION

"Daufuskie is a pristine sea island with extraordinary natural, cultural and historic resources. Our vision is to support balanced, mindful growth that provides a sustainable economy, while preserving our unique and diverse community character, rural sense of place, and isolated island lifestyle. While recognizing property owners' rights to reasonable use of their land, we will minimize the threat to our natural environment, cultural and historic resources, and ensure the preservation of Daufuskie Island's natural beauty."

Daufuskie Island Vision

» Survey respondents overwhelmingly agreed with the Vision



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Daufuskie Island Vision

» Sample comments from those who disagreed with the Vision:

- Too long and wordy
- Too short
- Not focused enough; too vague
- Daufuskie is not pristine
- Isolated is not the correct word and has a negative connotation

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Daufuskie Island Vision

» Project Advisory Committee approved the Vision with one change to address comments

FINAL VISION

"Daufuskie is a pristine sea island with extraordinary natural, cultural and historic resources. Our vision is to support balanced, mindful growth that provides a sustainable economy, while preserving our unique and diverse community character, rural sense of place, and ***secluded*** *island lifestyle. While recognizing property owners' rights to reasonable use of their land, we will minimize the threat to our natural environment, cultural and historic resources, and ensure the preservation of Daufuskie Island's natural beauty."*

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EXISTING CONDITIONS



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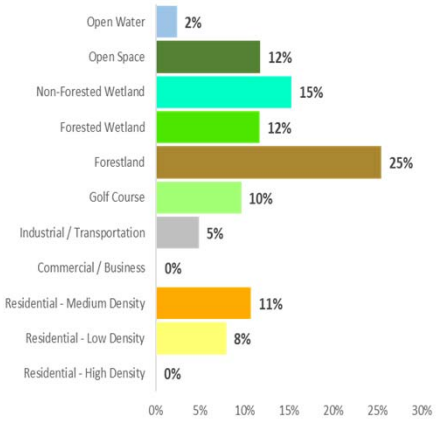
Existing Land Use Breakdown





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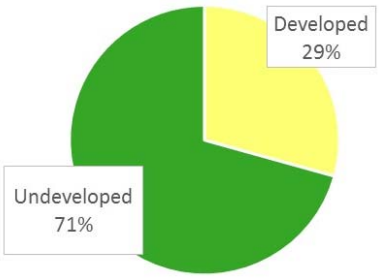
Parcel Development Patterns





Developed Parcels 592 (24%)
Undeveloped Parcels 1,891 (76%)

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Environmental Features

Legend

- Saltwater Wetland
- Freshwater Wetland

Wetlands

Saltwater	*17%*
Freshwater	*15%*



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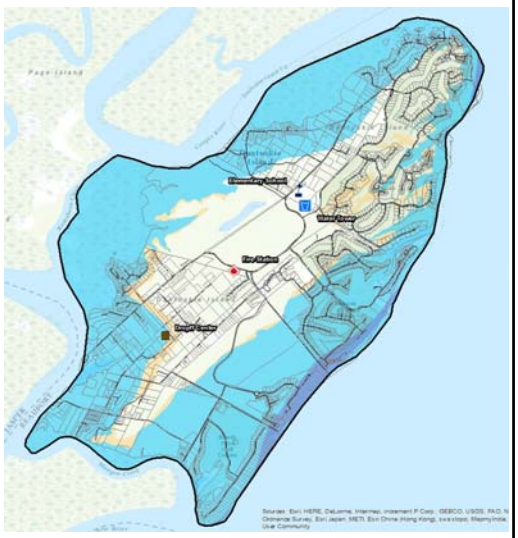
Special Flood Hazard Areas

Legend

- AE
- VE
- X500

Flood Zones

High Risk	*64%*
Moderate Risk	*5%*
Low Risk	*31%*



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Predicted Storm Surge

Storm Intensity	Percent of Island Impacted
Category 1	49%
Category 2	38%
Category 3	11%
Category 4	2%
Category 5	0%

Legend

- Category 1
- Category 2
- Category 3
- Category 4
- Category 5



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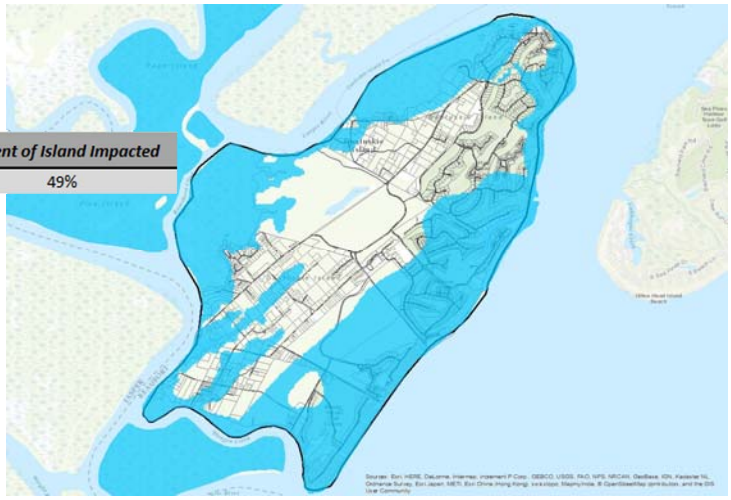
Storm Surge

Category 1

Storm Intensity	Percent of Island Impacted
Category 1	49%



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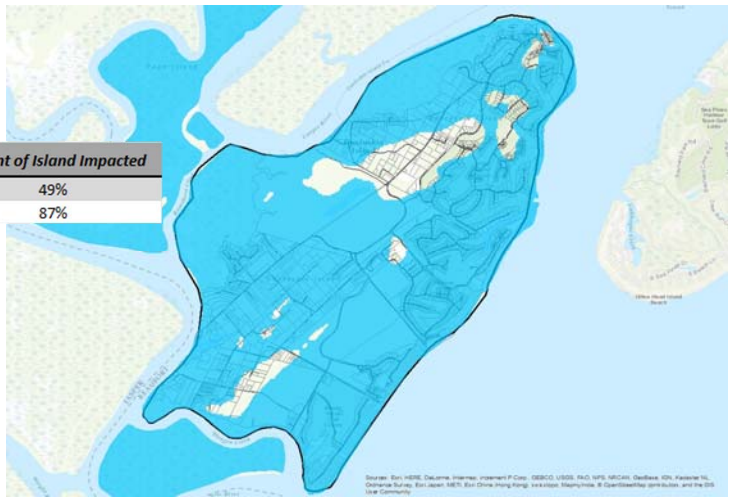
Storm Surge

Category 2

Storm Intensity	Percent of Island Impacted
Category 1	49%
Category 2	87%



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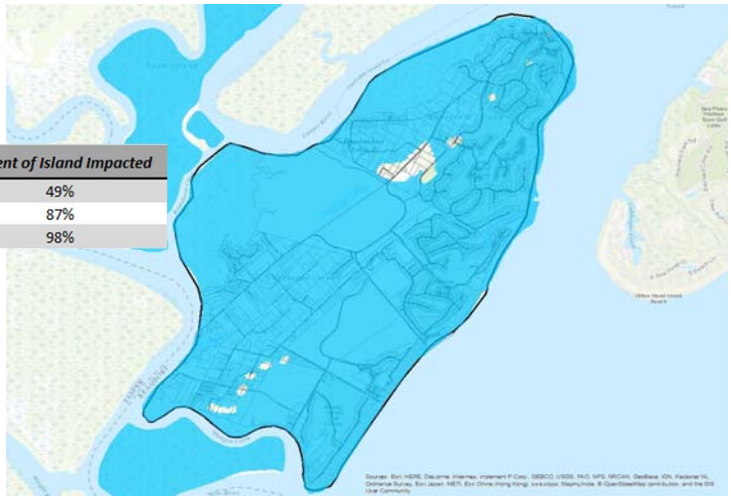
Storm Surge

Category 3

Storm Intensity	Percent of Island Impacted
Category 1	49%
Category 2	87%
Category 3	98%



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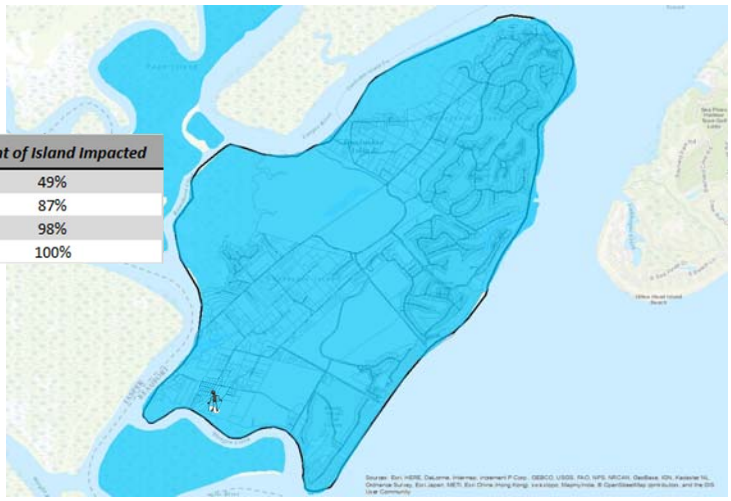
Storm Surge

Category 4

Storm Intensity	Percent of Island Impacted
Category 1	49%
Category 2	87%
Category 3	98%
Category 4	100%



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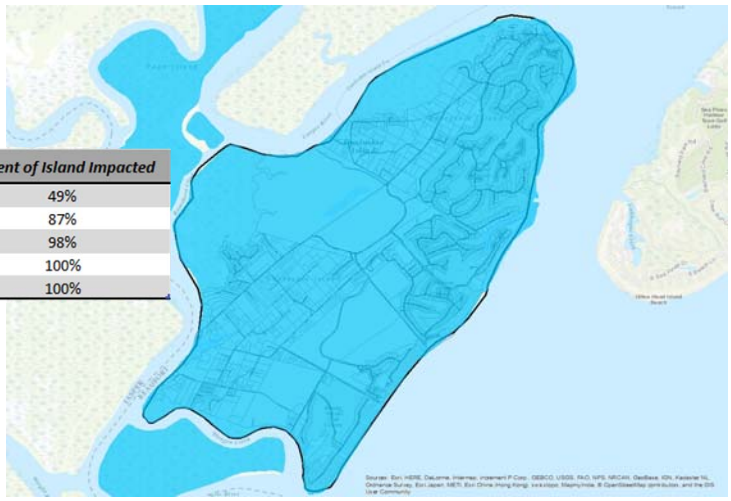
EPG ECOLOGICAL PLANNING GROUP

Storm Surge

Category 5

Storm Intensity	Percent of Island Impacted
Category 1	49%
Category 2	87%
Category 3	98%
Category 4	100%
Category 5	100%



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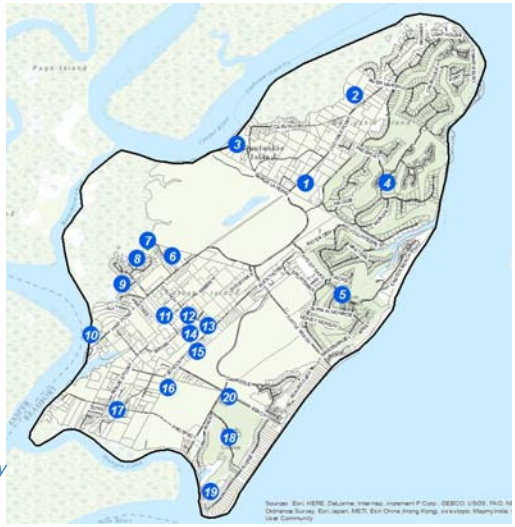
Community Features

1. Mt. Carmel Baptist Church No. 2
2. Tabby Ruin
3. Cooper River Cemetery
4. Haig Point
5. Melrose
6. Oyster Union Society Hall
7. Hinson White House
8. Mary Field Cemetery
9. Sarah Grant Home
10. Public Dock
11. White School House
12. The Council Tree
13. First Union African Baptist Church
14. Mary Fields School
15. Frances Jones Home
16. Moses Ficklin Cottage and Oak Tree
17. Mary Dunn Cemetery
18. Bloody Point
19. Bloody Point Cemetery
20. Bloody Point Lighthouse and Silver Dew Winery



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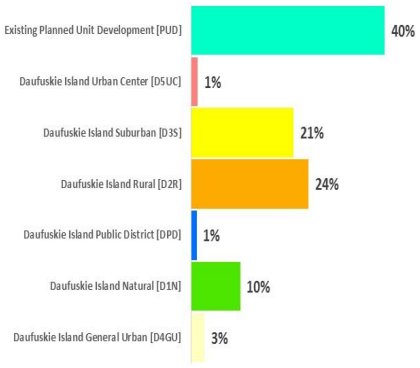
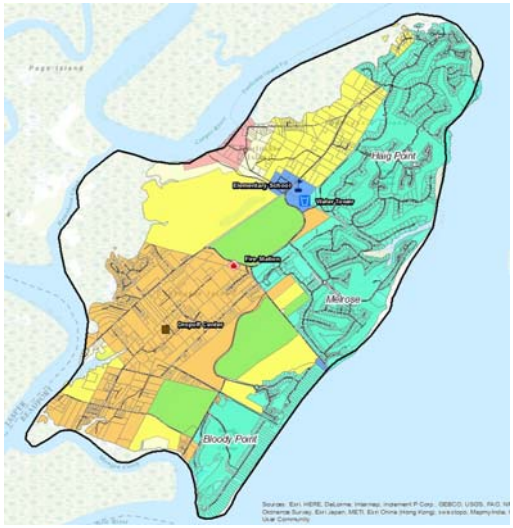
Zoning Classifications





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CHARACTER AREAS



What is a Character Area?

- Planning Tool
  - Smaller areas within jurisdictions
  - Used to address specific issues and develop strategies unique to the character area
- Specific Geographic Area
  - Unique or special characteristics
  - Potential to evolve into a unique area
  - Requires special attention due to unique development issues
- Serves as a guide for land use, zoning and public investment

Example Character Area Map:

Tybee Island



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Next Steps

- Begin development of each plan element
- Develop draft strategies to address the character area issues identified and for each plan element
- Identify elements of the code that need to be updated/revised based on the issues and strategies
- Project Advisory Committee meetings
  - Present project materials for review and direction on an ongoing basis
  - All are welcome to attend
- Next public meeting (Nov/Dec)
  - Present draft strategies and elements of the code for update
  - Obtain feedback and input
  - Revise based on feedback

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QUESTIONS?



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GROUP EXERCISE



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Group Exercise

- Break into work groups at the five tables
- Each table has a map of the island and markers
- Identify the character areas on the map, reach consensus among your group and mark the areas on the map
- Identify the unique/special characteristics of each character area and record on the sheets provided
- Identify the issues facing each of the character areas and record on the sheets provided

GROUND RULES

- Work together and remember that all opinions are valid
- There may be the need to "agree to disagree"…if so, record both
- Be sure to record the characteristics and the issues on the sheets provided

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OCTOBER 2ND WORKSHOP RESULTS

DAUFUSKIE ISLAND DRAFT CHARACTER AREAS WITH CHARACTERISTICS, ISSUES AND STRATEGIES FOR EACH AREA			
Draft Character Area	**Characteristics, Issues and Draft Strategies**		
	Characteristics	**Issues**	**Draft Strategies**
South Island Historic	• Low density rural • Some private access to water • Public access to water at County dock • Small commercial uses • Many unpaved roads • Community facilities • Two cemeteries	• The Island dump • Lack of buffers • Abandoned and dilapidated structures • Litter • County dock has limited docking space and time restrictions	• County park adjacent to dock and county dock should be preserved for the community • Preserve and restore existing historic sites • Preserve and enhance remaining Gullah areas • Define an area that supports Gullah architecture and heritage
Mid Island Historic	• Currently undeveloped • Portion is in conservation • Water access to Cooper River • Natural wildlife habitat and environmentally sensitive area	• Development pressures • Preservation of unique environmental resources • Runoff from development impacts	• Support developments that maintain and preserve wildlife habitats • Preserve environmental resources • Support development that is in keeping with the island character
North Island Historic	• Mix of housing in a rural setting • Tree canopy • Many unpaved roads • Historic sites • Some Gullah areas • Public spaces (school and museum)	• Dilapidated housing structures • Runoff from development impacts	• Preserve historic and Gullah sites • Preserve low density character • Support development that does not impact runoff into rivers and marshes

OCTOBER 2ND WORKSHOP RESULTS

Draft Character Area	Characteristics, Issues and Draft Strategies		
	Characteristics	**Issues**	**Draft Strategies**
Village	• Primary water and ferry access • Largest commercial area on Island • Mix of paved and unpaved roads • Gullah cemetery site	• Condition of dock at Melrose Landing which serves the public ferry • Haphazard parking around Freeport	• Encourage a village center development • Promote area as access portals for the Island • Support development that does not impact runoff into rivers and marshes
Village Gateway Corridor	• Paved roads connect to Melrose dock • Residential is limited along corridor • Currently has limited development	• Currently undeveloped and potential for out of character development • Condition of the Melrose dock • Parking for public and private ferries	• Support development that provides a mix of neighborhood commercial uses and housing • Encourage pedestrian access • Encourage noise and sight buffers between commercial and residential uses
Heritage Corridor	• Serves as access for the South Island Historic area • Serves significant public, historic, cultural and natural resources and sites • Corridor has mix of paved and unpaved roads • Tree canopies	• Development not in character with the area	• Promote standards and guidelines for signs for landmarks and commercial sites • Preserve and/or restore existing historic sites along the corridor • Preservation of old growth trees

OCTOBER 2ND WORKSHOP RESULTS

Draft Character Area	Characteristics, Issues and Draft Strategies		
	Characteristics	**Issues**	**Draft Strategies**
Existing Approved PUDs	• Approved PUD defined	• Conditions at Melrose • Financial instabilities of Melrose and Bloody Point	• Development in accordance with approved PUD ordinances
Coastal Marshlands	• Natural and undeveloped	• Impacts of development on the sensitive environment	• Allow no development • Promote development of adjacent areas that do not adversely impact the environment

Community Character

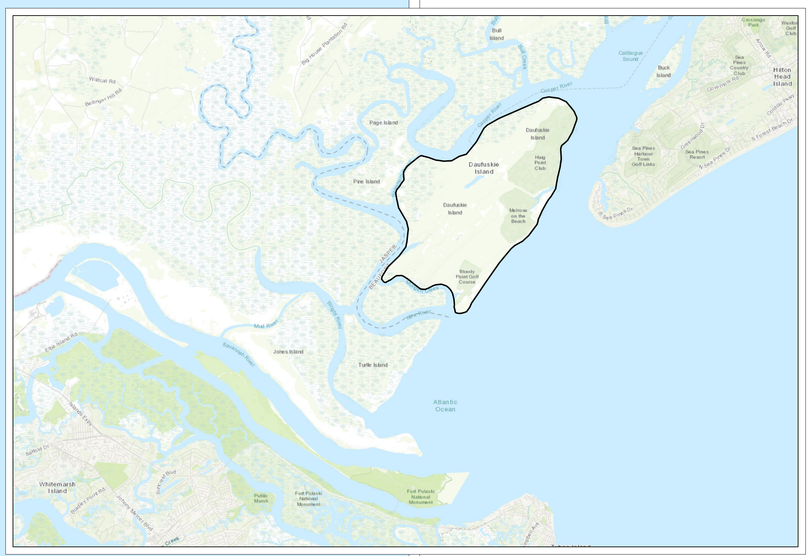
Daufuskie Island

Community Character

- South Island Historic
- Gullah Heritage Sub-district
- Mid Island Historic
- North Island Historic
- Haig Point
- Melrose
- Oakridge / Beach Field
- Bloody Point
- Village
- Coastal Marshlands
- Heritage Corridor
- Village Gateway Corridor

Community Facilities

- *Dropoff Center*
- *Elementary School*
- *Fire Station*
- *Water Tower*
- *Beach Access*
- *Water Access*
- *Park*



1 inch = 700 feet

0 0.25 0.5 1 1.5 2 Miles

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ECOLOGICAL PLANNING GROUP

1908

COMMUNITY PARTICIPATION DOCUMENTATION:

Community Workshop # 3

April 16, 2018

DAUFUSKIE ISLAND PLAN AND CODE UPDATE

PUBLIC MEETING

Monday, April 16th

6:00 PM

MARY FIELDS SCHOOL

MEETING AGENDA:

- **Plan Overview and Schedule**
- **Presentation of the Draft Plan and Code**
- **Public Review and Comment**

Please mark your calendars and be there to review the progress of the plan update and the draft plan and code.

Light refreshments will be provided.

DAUFUSKIE ISLAND
COMPREHENSIVE PLAN UPDATE

PUBLIC WORKSHOP #3

Monday, April 16, 2018
Mary Fields School, Daufuskie Island

AGENDA:

1. Welcome and Introductions
2. Study Update and Schedule
3. Draft Plan and Code Overview
4. Plan and Code Review and Comment
5. Next Steps
6. Adjourn

The Comprehensive Plan charts the future course of the Island and your participation is vital.

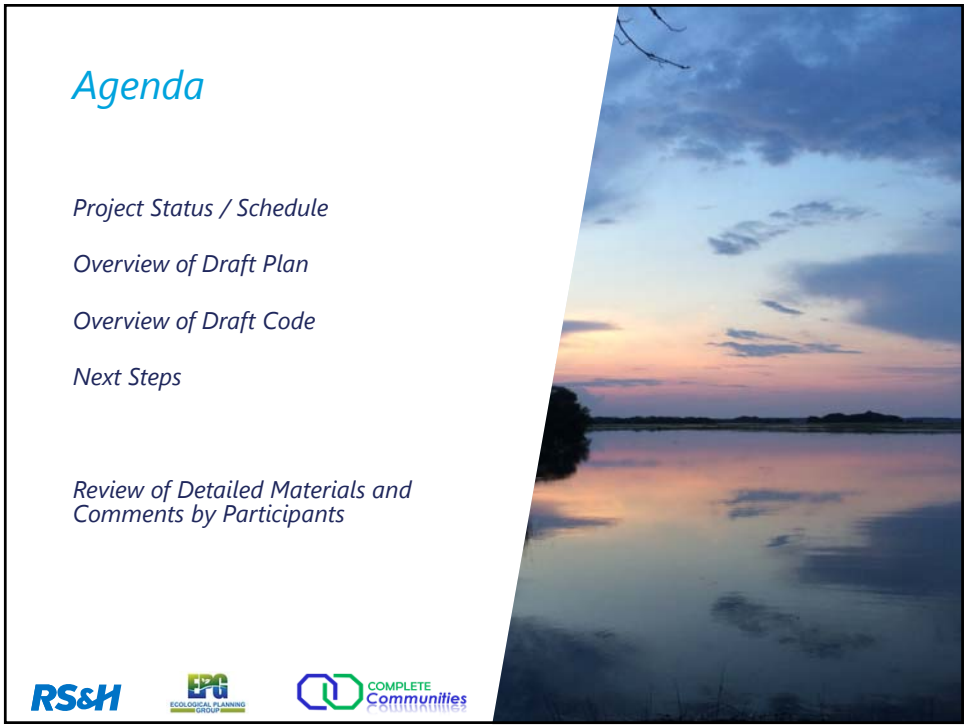


Daufuskie Island Council

BEAUFORT COUNTY SOUTH CAROLINA 1769

DAUFUSKIE ISLAND PLAN AND CODE UPDATE

Public Meeting # 3
April 16, 2018



Agenda

Project Status / Schedule

Overview of Draft Plan

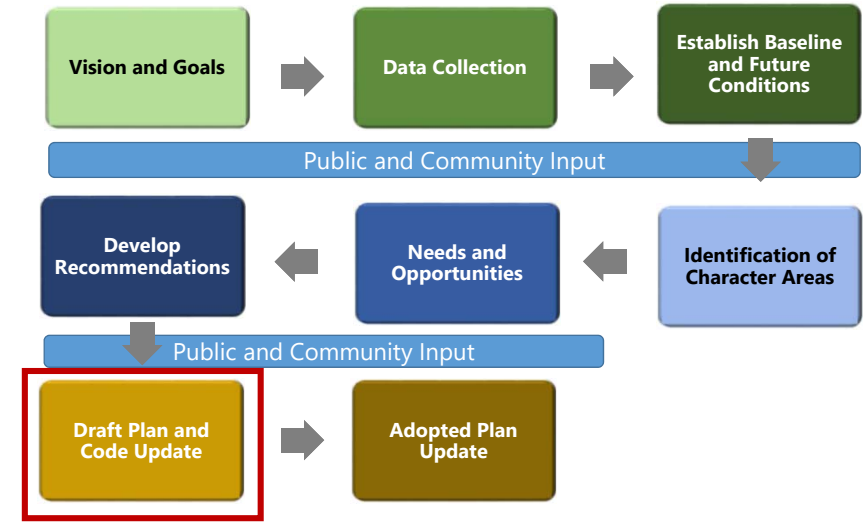
Overview of Draft Code

Next Steps

Review of Detailed Materials and Comments by Participants

RS&H EPG ECOLOGICAL PLANNING GROUP COMPLETE Communities

Status Update



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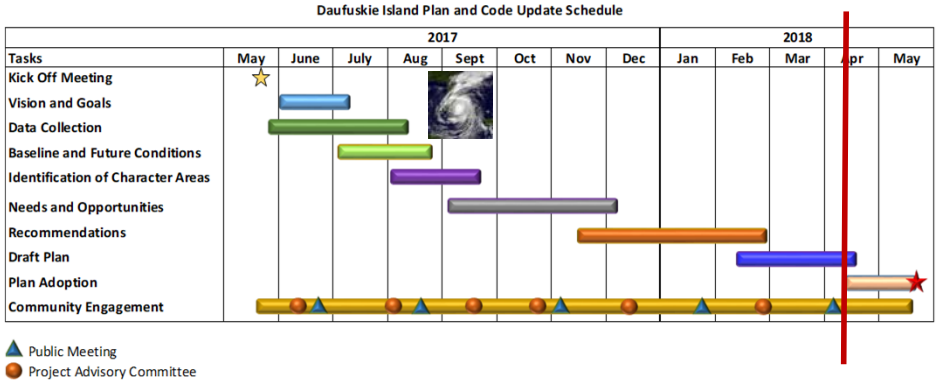
Project Schedule



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Draft Plan Overview

- Developed in accordance with SC planning legislation
  - Inventory of existing conditions
  - Needs, goals, and vision statement
  - Implementation strategies
- Consistency with regulations for ease of incorporation into Beaufort County Comprehensive Plan

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Draft Plan Overview

- Developed in accordance with SC planning legislation
- Nine planning elements
  - Population:
    - *Historical data*
    - *Characteristics and trends*
  - Economic Development:
    - *Historical data*
    - *Employment*
    - *Workforce*
  - Natural Resources:
    - *Environmental assets*
  - Cultural Resources:
    - *Historical and cultural assets*

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Draft Plan Overview

- Developed in accordance with SC planning legislation
- Nine planning elements (continued)
  - Community Facilities:
    - *Infrastructure*
    - *Assets*
    - *Services*
  - Housing:
    - *Existing housing and characteristics*
  - Land Use:
    - *Development characteristics*
  - Transportation:
    - *Facilities and infrastructure*
  - Priority Investment:
    - *Work program for implementation*

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Draft Plan Overview

- Plan Development Tasks
  - Completed and Finalized
    - *Review of existing plans*
    - *Development of Vision, Goals, Priorities*
    - *Development of Existing Conditions by Plan Element*
    - *Development of Needs, Issues and Opportunities by Plan Element*
    - *Identification of Character Areas*
    - *Identification of Development Strategies*
    - *Identification of Action Steps*
  - Draft Plan and Code Update Completed
  - Ongoing
    - *Community and Public Input*
    - *Coordination with Beaufort County*

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Draft Plan Overview

» Plan Chapters

– Chapter 1: Introduction
- *State planning requirements and planning process*

– Chapter 2: Community Participation
- *Documents the participation process*
  - Public Workshops
  - Project Advisory Committee meetings
  - Surveys
  - Additional coordination

Beaufort County Coordination	Community Workshops	Surveys	Project Advisory Committee	Additional Meetings
• 4 Presentations • Ongoing	• 3 Meetings • Final meeting to be scheduled	• 2 Surveys, on-line and hard copy	• 7 meetings • Ongoing	• Additional outreach

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Draft Plan Overview

» Plan Chapters

– Chapter 3: Vision and Goals
- *Reviewed and summarized existing plans*
  - Beaufort County Comprehensive Plan
  - Tourism Product Development Concept for the Lowcountry Region Strategy and Plan
  - Daufuskie Island Plan (1985 and 2010)
  - Daufuskie Island Conceptual Master Plan Charrette Report
  - Daufuskie Island Covenant

- *Goals and Vision*
  - Established through community input
    - Survey
    - Community Workshop

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Draft Plan Overview

» Goals

- Preservation of community character
- Balance growth and development with the existing community character
- Promote a sustainable economy compatible with existing community character
- Preserve and enhance community assets, including the natural beauty of the island
- Promote environmental stewardship
- Preserve the island history and culture, including a focus on the native Gullah heritage

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Draft Plan Overview

» Vision

"Daufuskie is a pristine sea island with extraordinary natural, cultural and historic resources. Our vision is to support balanced, mindful growth that provides a sustainable economy, while preserving our unique and diverse community character, rural sense of place, and secluded island lifestyle. While recognizing property owners' rights to reasonable use of their land, we will minimize the threat to our natural environment, cultural and historic resources, and ensure the preservation of Daufuskie Island's natural beauty."

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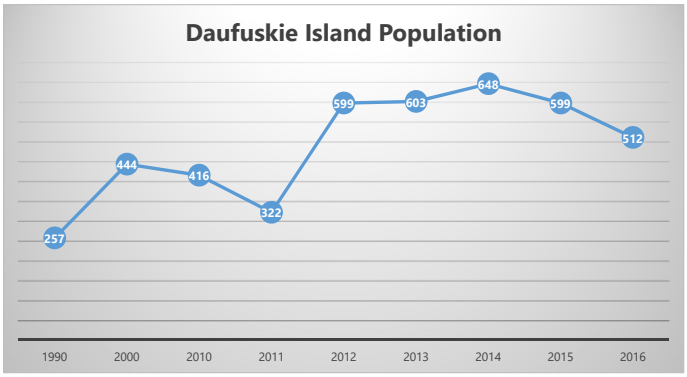
Draft Plan Overview

» Plan Chapters
- – Chapter 4: Existing Conditions
  - • *Inventory for each plan element*
- – Population



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Draft Plan Overview

- – Chapter 4: Existing Conditions

- – Population
  - • *Build Out projection based on approved densities*
    - • 12,640 persons
  - • *Historic trend projection*
    - • 2035: 1,013 persons

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Draft Plan Overview

» Plan Chapters
- – Chapter 4: Existing Conditions
  - • *Inventory for each plan element*
- – Economic Development
- – Natural Resources
- – Cultural Resources
  - • *1984: Daufuskie Island included on the National Historic Register*
  - • *Key properties noted:*
    - • Haig Point Lighthouse
    - • Mt. Carmel Baptist Church
    - • First Union African Church
    - • Mary Fields School
    - • Oyster Society Hall
    - • Cemeteries

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Draft Plan Overview

» Plan Chapters
- – Chapter 4: Existing Conditions
  - • *Inventory for each plan element*
- – Community Facilities
  - • *Water/Sewer*
  - • *Solid Waste*
  - • *Fire/Emergency Services*
  - • *Educational Facilities*
- – Housing
- – Land Use
  - • *Largest existing land uses:*
    - • Forestland
    - • Wetlands
    - • Open Space
    - • Residential

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Draft Plan Overview

» Plan Chapters

– Chapter 4: Existing Conditions

• *Inventory for each plan element*

– Transportation

• *Roadways maintained by Beaufort County for more than 20 years*

Paved Roadways	
Roadway	Length (in miles)
Haig Point Road	2.72
Cooper River Landing Road	0.70
Total Paved Roadways	3.42

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Draft Plan Overview

» Plan Chapters

– Transportation

• *Roadways maintained by Beaufort County for more than 20 years*

Unpaved Roadways			
Roadway	Length (in miles)	Roadway	Length (in miles)
Freeport Road	0.21	Benji's Point Road	0.86
Carvin Road	0.90	Prospect Road	1.28
Old Haig Point Road	0.87	Pappy's Landing Road	0.78
Church Road	0.61	Beach Road	1.10
Turtle Beach Road	1.08	Frances Jones Road	0.25
School Road	1.58	Maryfield Road	0.23
Total Unpaved Roadways 9.75			

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Draft Plan Overview

- Chapter 5: Needs and Opportunities
  - *Needs, issues and opportunities for each plan element*
    - Identified through community participation
  - *Land Use included identification of character areas and development strategies for the Island, as well as each character area*
    - New development, redevelopment and restoration should be consistent with the existing character of the area in which the development occurs.
    - Enhance the pedestrian environment where feasible.
    - Historic structures should be preserved whenever possible.
    - Prioritize tree preservation to protect the scenic and habitat value of the area.
    - Encourage land uses, through clearly defined guidelines, that protect against stormwater pollution including xeriscaping, pervious surfaces and erosion and sedimentation control.
    - Require the treatment of stormwater runoff quality and quantity prior to its discharge in the marsh.
    - Limit housing density, size and height through zoning.

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Draft Plan Overview

» Plan Chapters

- Chapter 6: Achieving the Vision
  - *Work Program*
  - *Elements identified to meet the overall goals*
    - Stratified by timeframe
      - Short-range: 1-2 years
      - Mid-range: 3-5 years
      - Long-range: 5-10 years
    - Responsible parties include Council committees and volunteer groups

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Draft Plan Overview

» Chapter 6: Achieving the Vision
» Example work elements/action items

Economic Development
• Work with small business initiative and SCORE (Service Corps of Retired Executives) to develop support network for small business incubator
Community Facilities and Assets
• Continue to work with County and community organizations to address issues with existing dump site…
Plan Implementation
• Update and simplify Island Code

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Draft Plan Overview

» Chapter 6: Achieving the Vision
» Example work elements/action items

Transportation
• Work with County to identify/implement potential road material to stabilize unpaved roads without paving to avoid additional impervious surfaces and drainage issue
Community Facilities and Assets
• Continue to work with County and community organizations to address issues with existing dump site…
Plan Implementation
• Update and simplify Island Code

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Draft Plan Overview

» Chapter 6: Achieving the Vision
» Example work elements/action items

Cultural/Historic/Natural Preservation
• Coordinate with Beaufort County to conduct a significant tree survey and develop protections within the code for significant trees
Coordination
• Work with Beaufort County, state and regional agencies to identify funding for grants researcher and writer
Resource Development and Grants
• Utilize existing community resources to identify potential grant opportunities

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Code Update

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Draft Code Update Approach

- Simplify the existing Code
- Use existing code as a foundation
- Understandable and user friendly for both Island residents and Beaufort County staff
- Consistency
  - Within the Code
  - With Beaufort County Code

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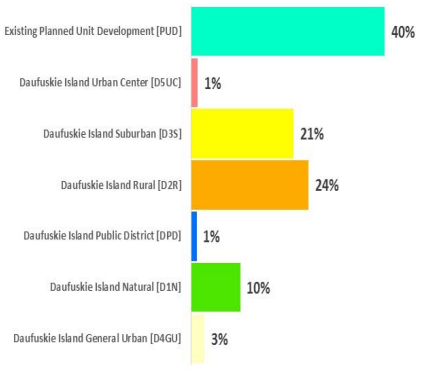
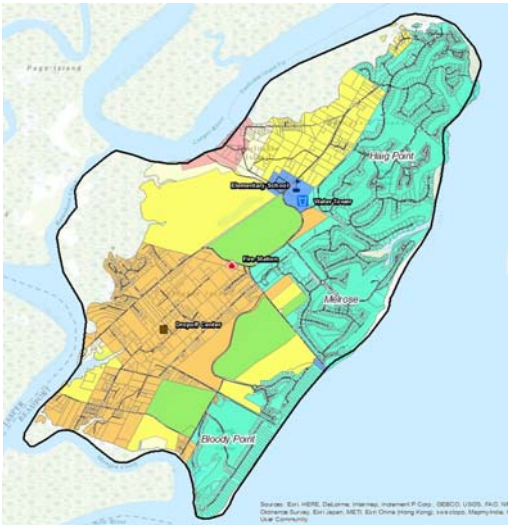
Current Zoning





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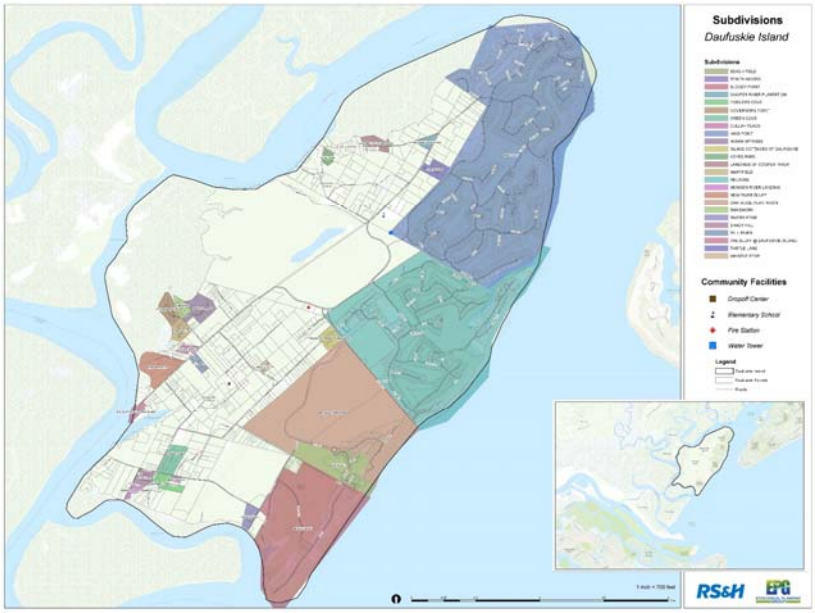
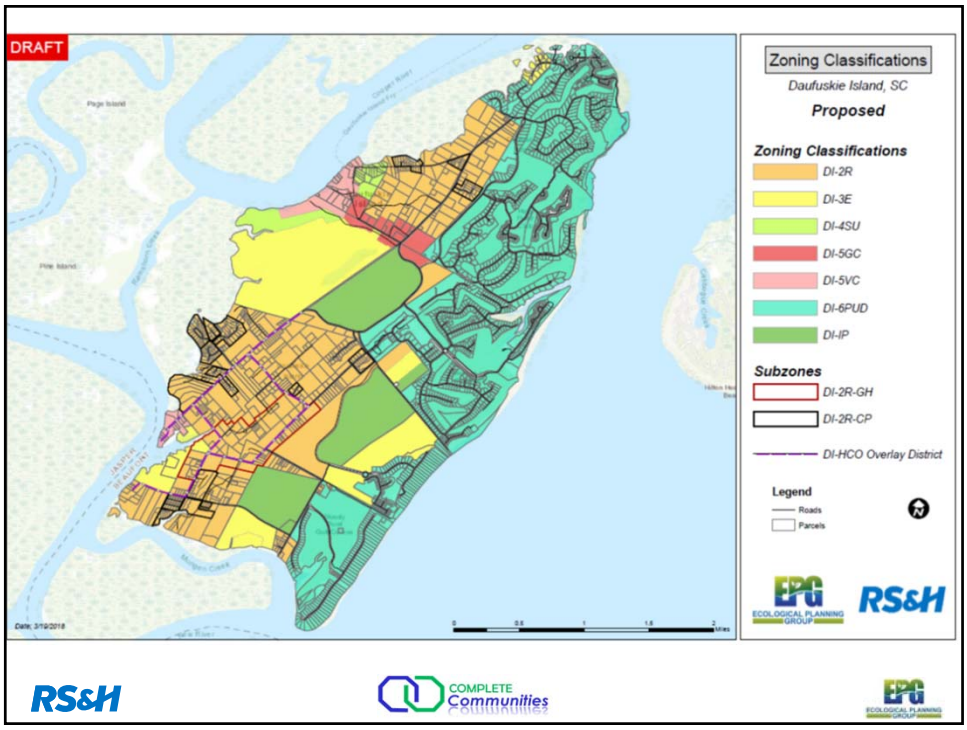
Approved and Platted Subdivisions





COMPARISON OF CURRENT CODE AND DRAFT CODE

CURRENT DAUFUSKIE ISLAND CODE			PROPOSED DAUFUSKIE ISLAND		DIFFERENCES BETWEEN CURRENT AND	
Current Zoning Code	Current Zoning Description	Residential Densities	Proposed Zoning Code	Proposed Zoning Description	Residential Densities	Land Uses and Other
D1	Nature Preserve and Conservation	None, unless permitted by agreement	DI-1P	Nature Preserve and Conservation	None	None
D2R	Rural	1 DU/acre	DI-2R	Rural	None	Architectural standards relaxed
			DI-2R-CP	New sub-district the includes existing approved and platted subdivisions	Likely Increased in Proposed Code	Architectural standards relaxed
			DI-2R-GH	New sub-district, designed to maintain the Gullah Heritage style of development	None	The style of structures is to be Low Country Vernacular
D3S	Suburban	3 DU/acre	DI-3E	Suburban	None	None
D4GU	General Urban	4 DU/acre	DI-4SU	General Urban	None	None
D5UC	Village Center	8 DU/acre	DI-5VC	Village Center	None	Added a second Village Center near County Dock that will allow more uses and increase allowable densities
PD	Public District	4 DU/acre	DI-5GC	Gateway Corridor	None	Additional residential and commercial uses are allowed aand the limits of the zone increased to connect to the Village Center
Existing PUDs	Existing Planned Unit Developments - PUD	NA	DI-6PUD	Existing Planned Unit Developments - PUD	NA	None
D1NP	Coastal Marshlands	None	DI-1NP	Natural Preserve	None	None

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Next Steps

- Participants review materials displayed
- Provide comments tonight or via Project Team or PAC member no later than April 26th
- Project Team will address comments and refine draft plan and code as needed
- PAC meeting to review final plan and code (if needed)
- Last public meeting to review final documents (if needed)
- Present to Daufuskie Island Council for concurrence in May

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Review of Materials

- Various stations with elements of the plan to review
- Work Program handout including plan goals and how the goals are addressed
- Large scale draft zoning map
- Code zoning categories uses and definitions handout
- Comment sheets available to use today or to return by April 26th
- Project team members are available to answer questions and take comments

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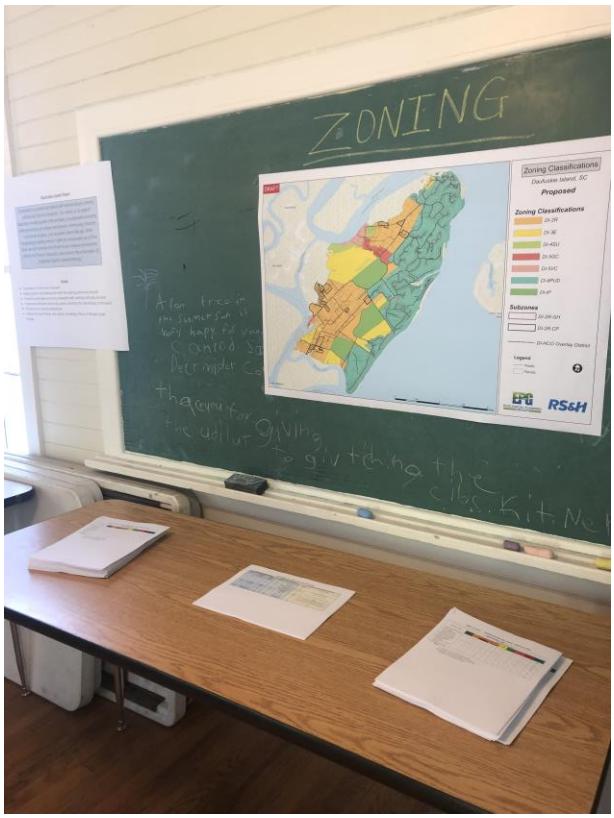
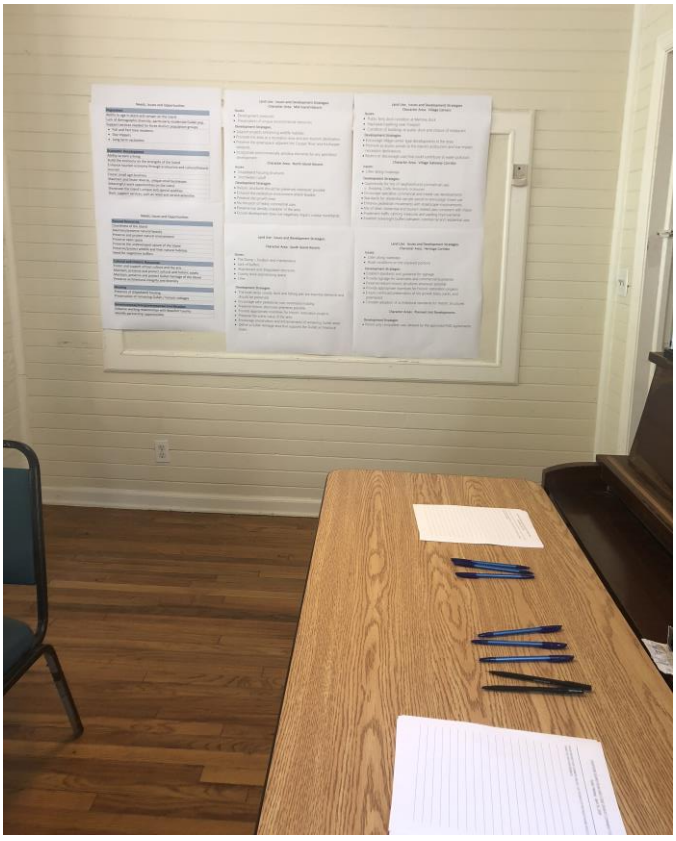
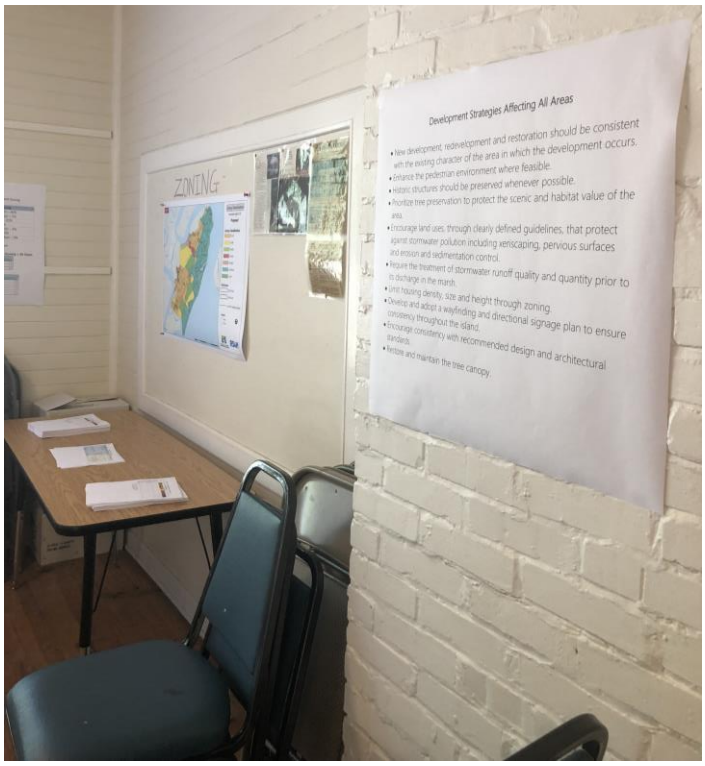
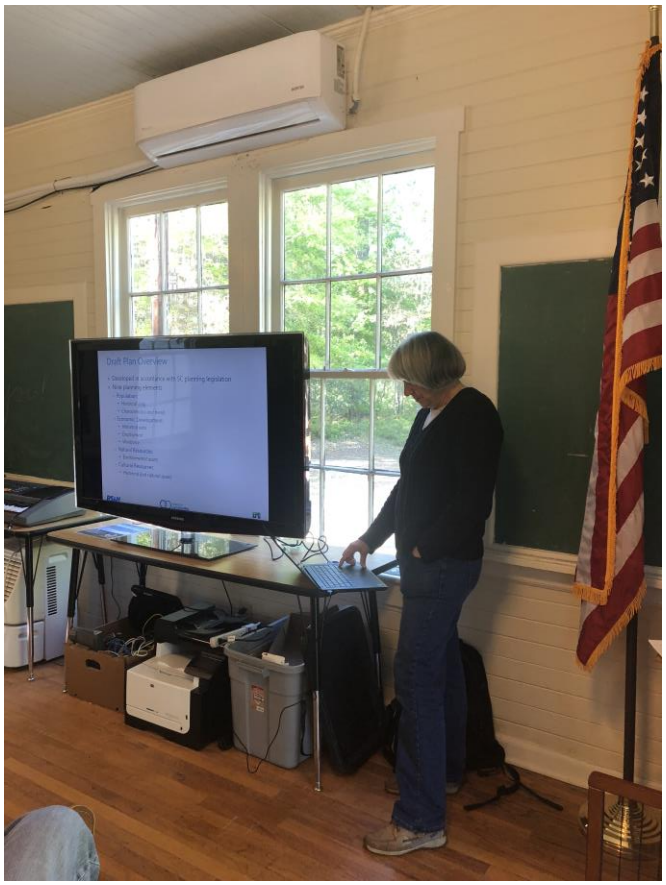
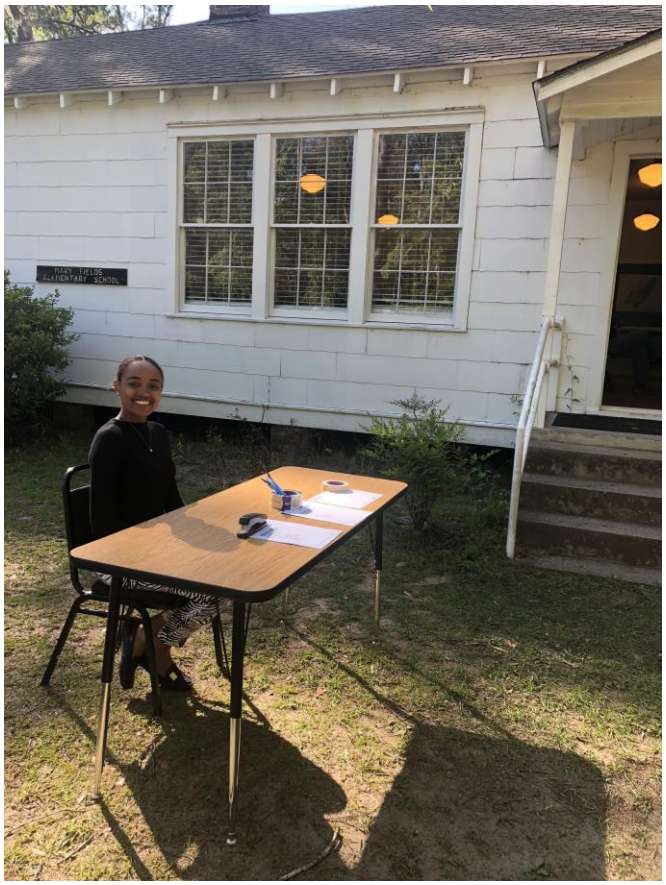

ZONING
Zoning Classifications
Proposed
Zoning Classifications
Subzones
RS&H




ZONING
Development Strategies Affecting All Areas
• New development, redevelopment and restoration should be consistent with the existing character of the area in which the development occurs.
• Enhance the pedestrian environment where feasible.
• Historic structures should be preserved whenever possible.
• Prioritize tree preservation to protect the scenic and habitat value of the area.
• Encourage land uses, through clearly defined guidelines, that protect against stormwater pollution including xeriscaping, pervious surfaces and erosion and sedimentation control.
• Require the treatment of stormwater runoff quality and quantity prior to its discharge in the marsh.
• Limit housing density, size and height through zoning.
• Develop and adopt a wayfinding and directional signage plan to ensure consistency throughout the island.
• Encourage consistency with recommended design and architectural standards.
• Restore and maintain the tree canopy.


Draft Plan Overview


MARY FIELDS
ELEMENTARY SCHOOL




ZONING

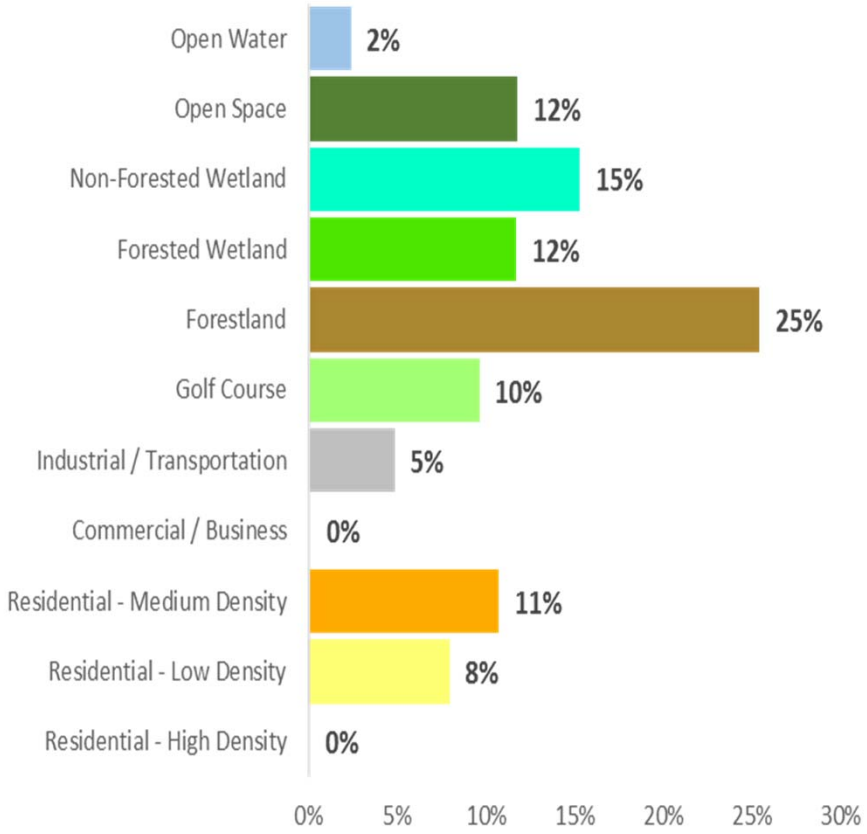


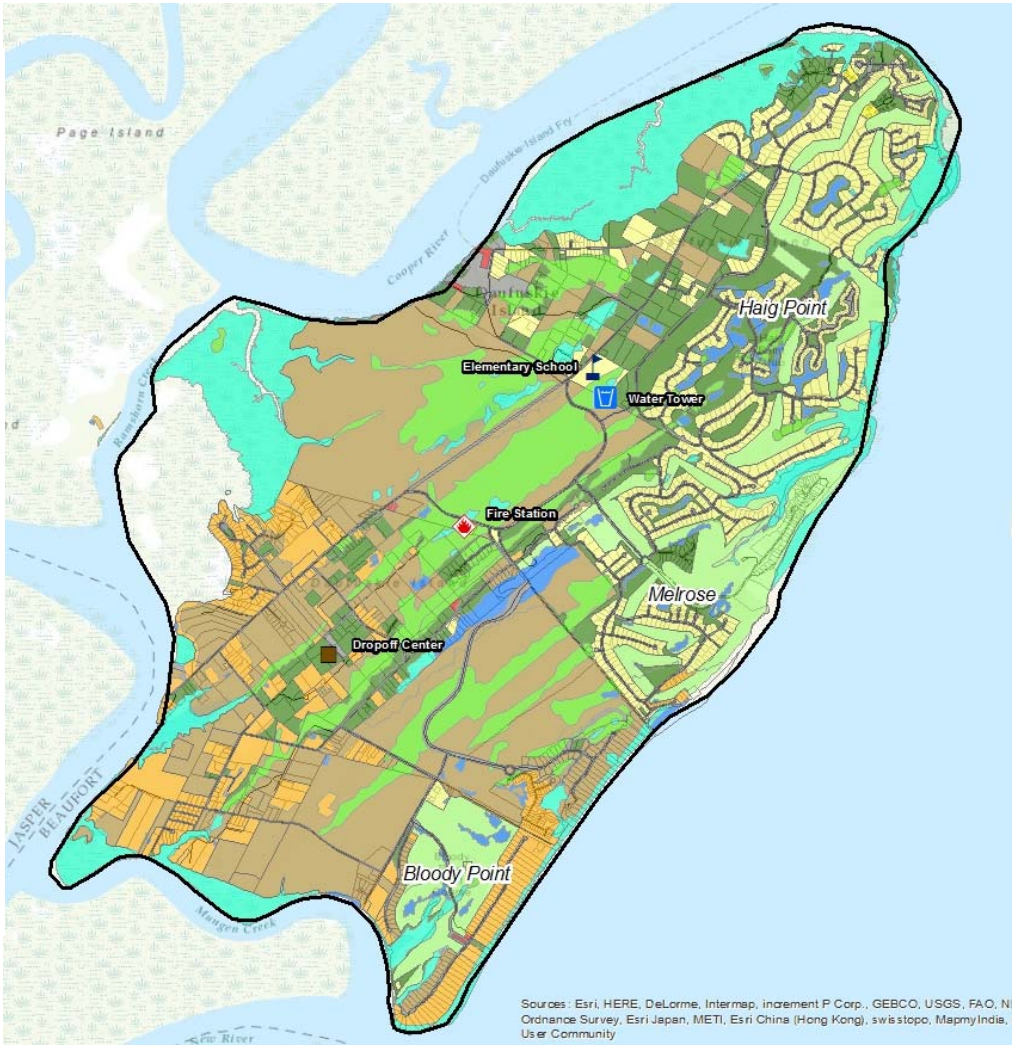

FIRE RESCUE


ZONING

EXISTING CONDITIONS MAPPING

Existing Land Use Breakdown





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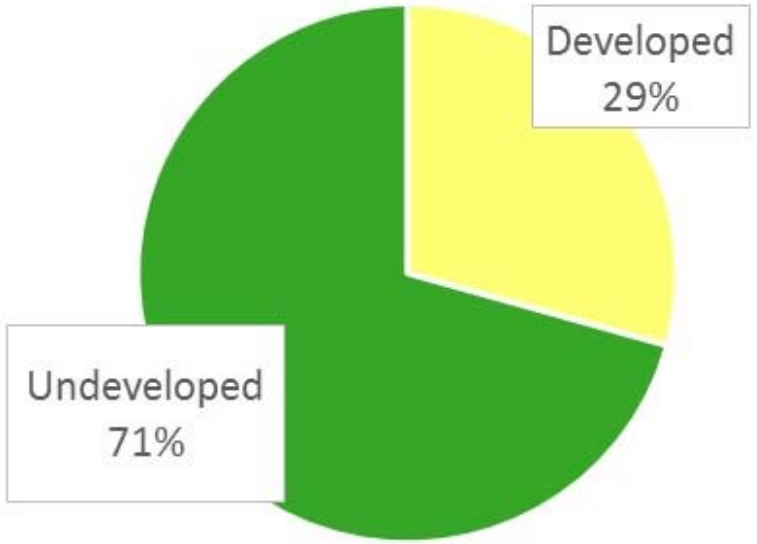
Parcel Development Patterns



Developed Parcels 592 (24%)
Undeveloped Parcels 1,891 (76%)



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Environmental Features

Legend

Saltwater Wetland

Freshwater Wetlands

Wetlands

Saltwater	*17%*
Freshwater	*15%*



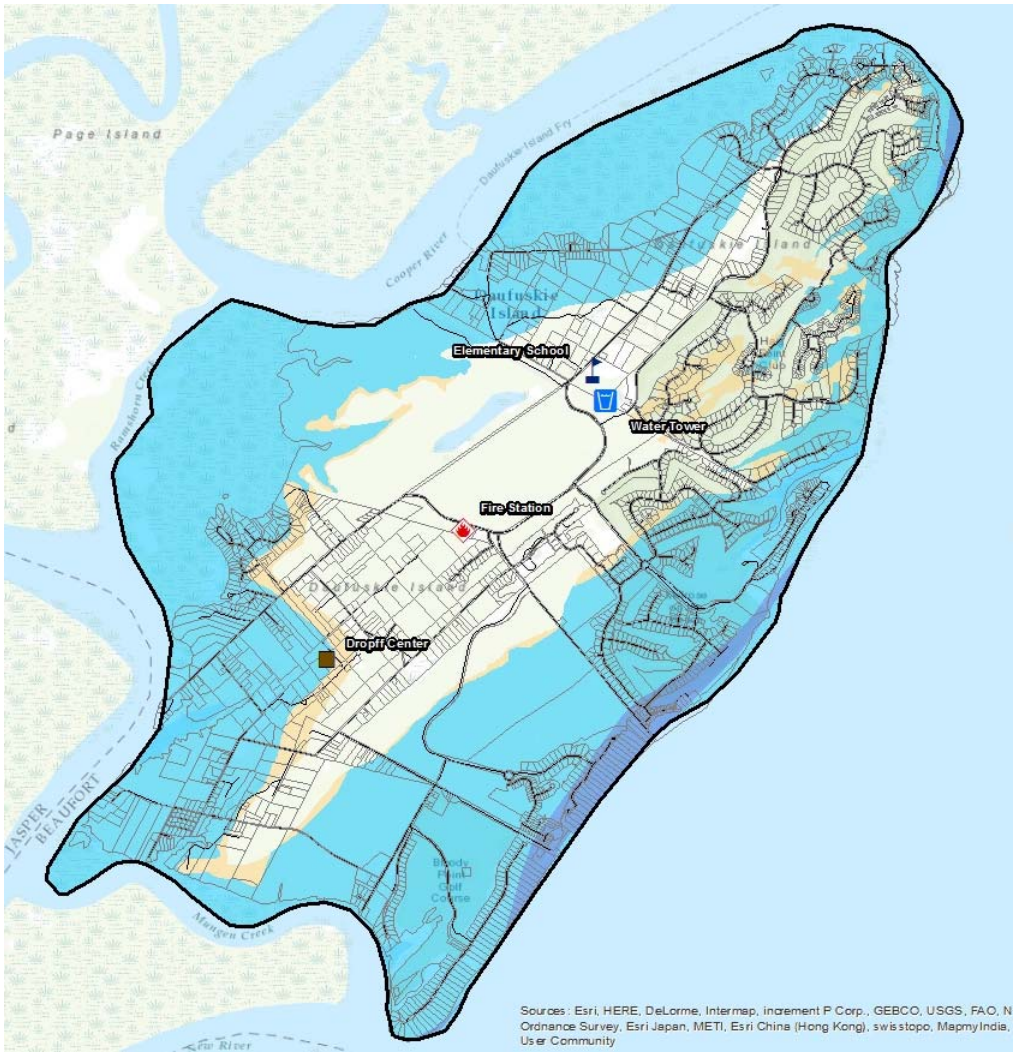
Special Flood Hazard Areas

Legend

- AE
- VE
- X500

Flood Zones

High Risk	*64%*
Moderate Risk	*5%*
Low Risk	*31%*



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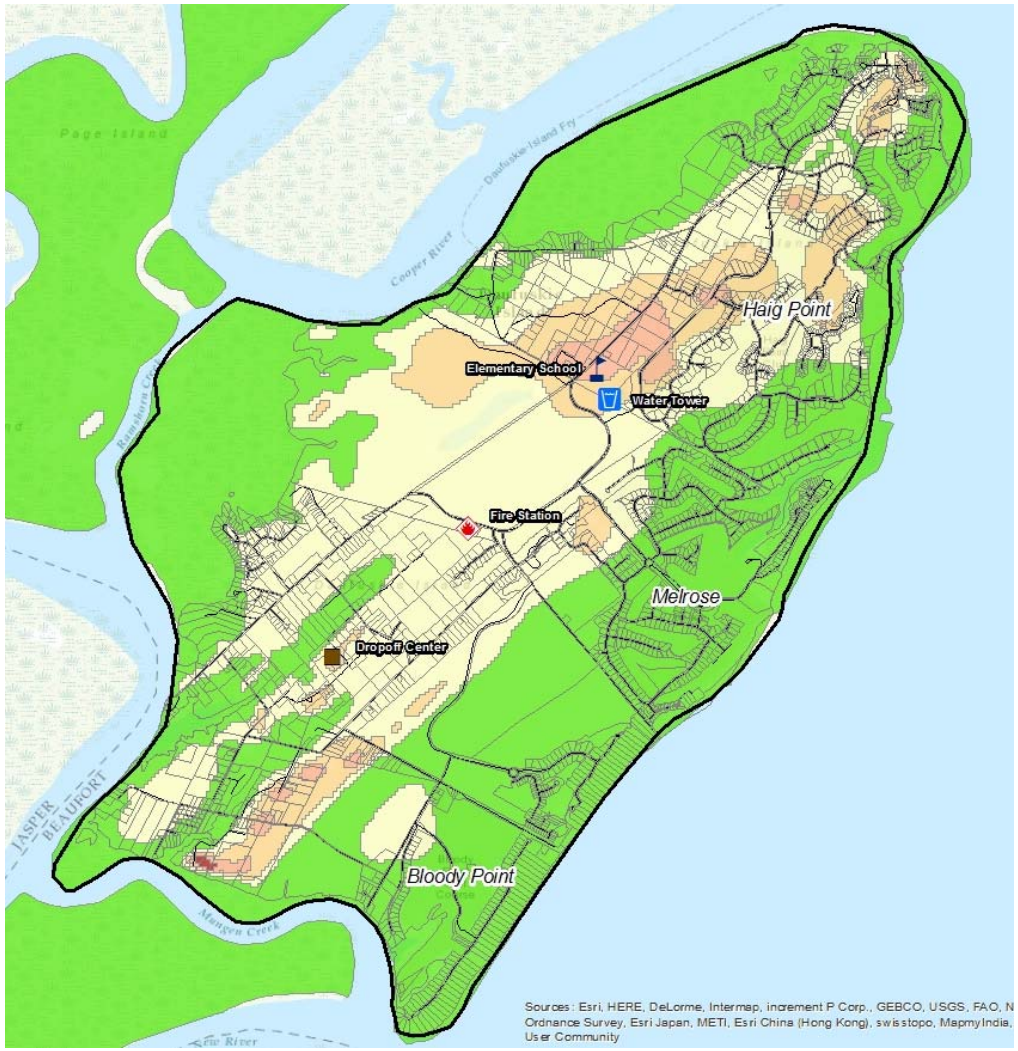
Predicted Storm Surge

Storm Intensity	Percent of Island Impacted
Category 1	49%
Category 2	38%
Category 3	11%
Category 4	2%
Category 5	0%

Legend

- Category 1
- Category 2
- Category 3
- Category 4
- Category 5



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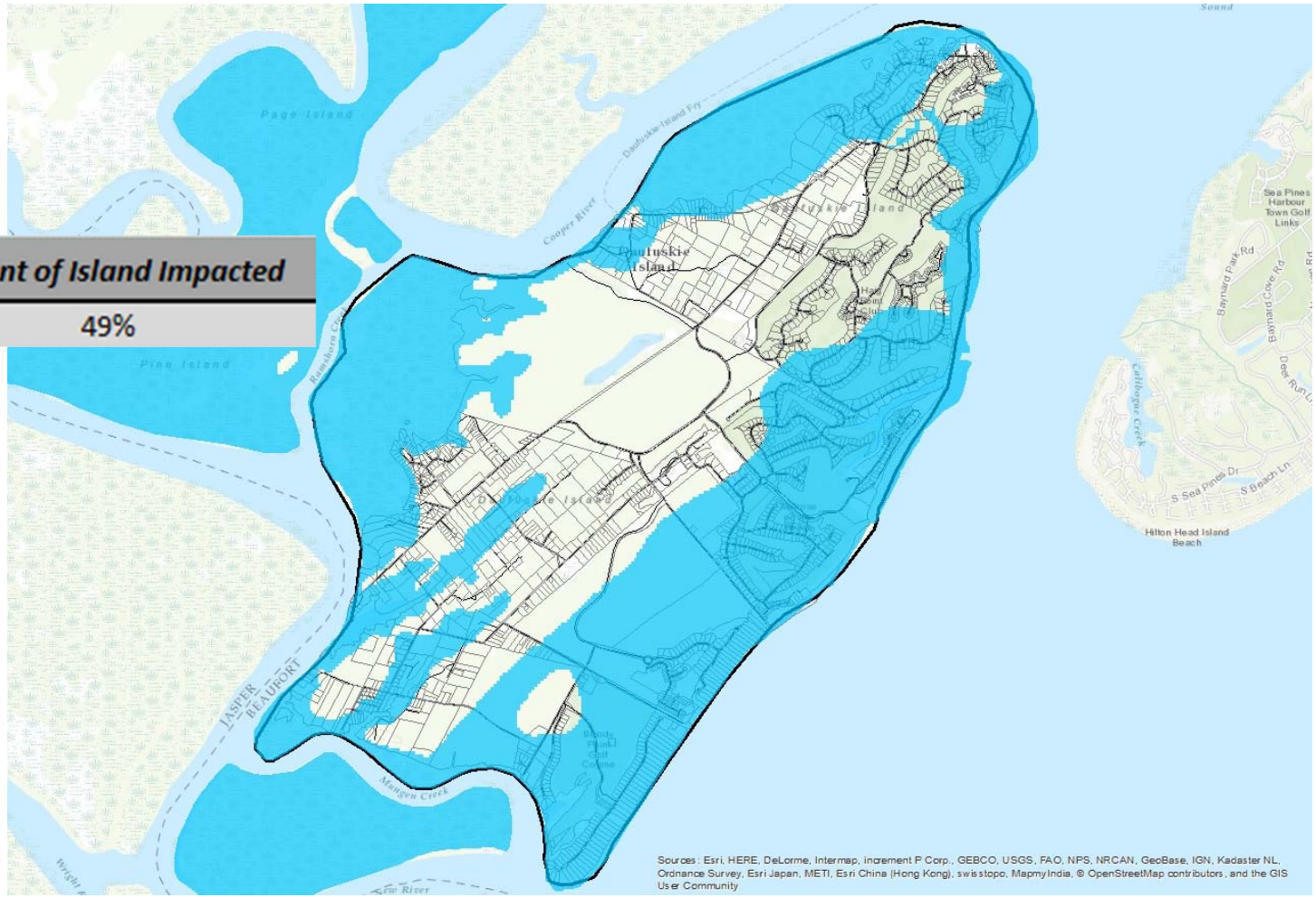
Storm Surge

Category 1

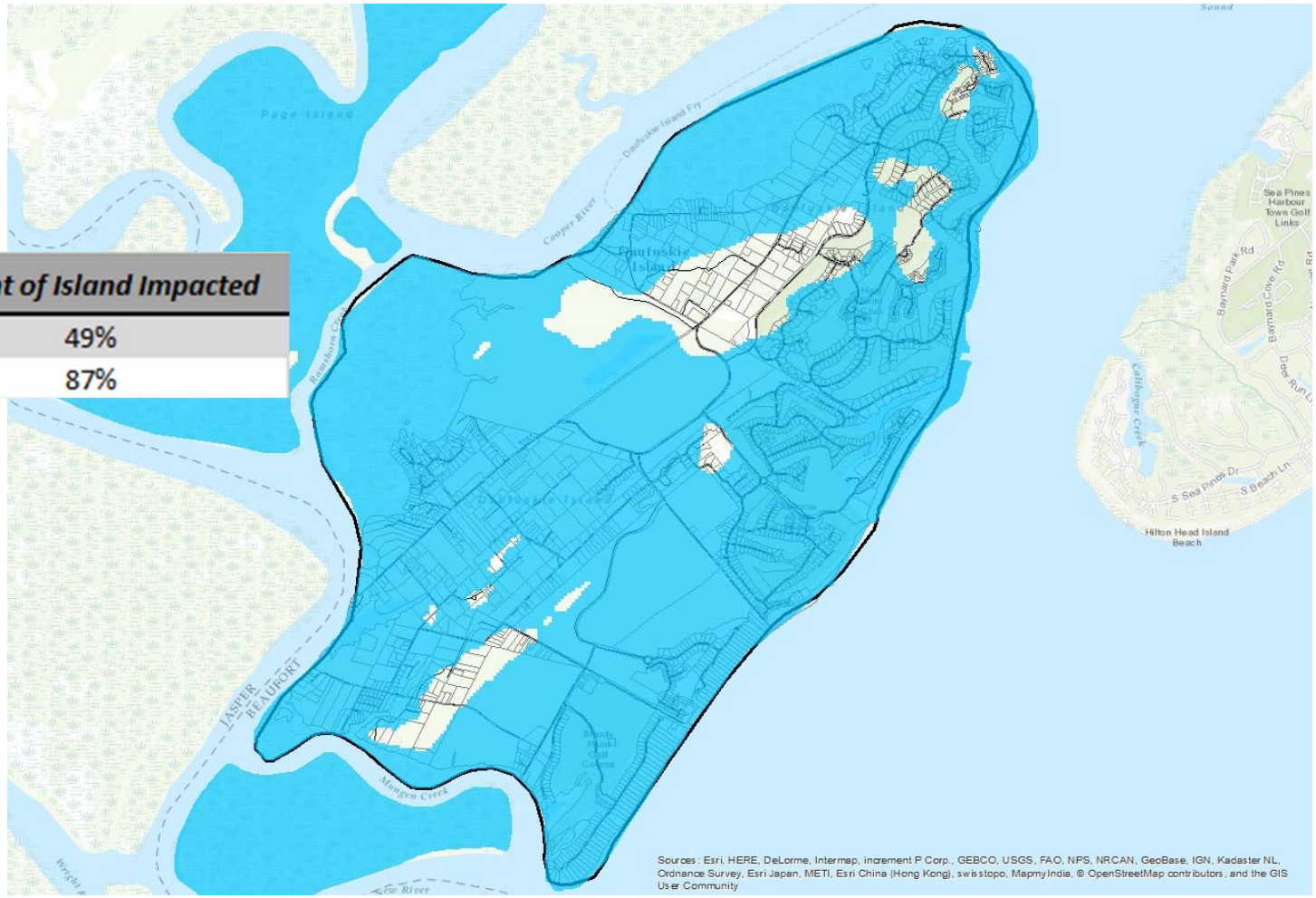
Storm Intensity	Percent of Island Impacted
Category 1	49%



Storm Surge

Category 2

Storm Intensity	Percent of Island Impacted
Category 1	49%
Category 2	87%



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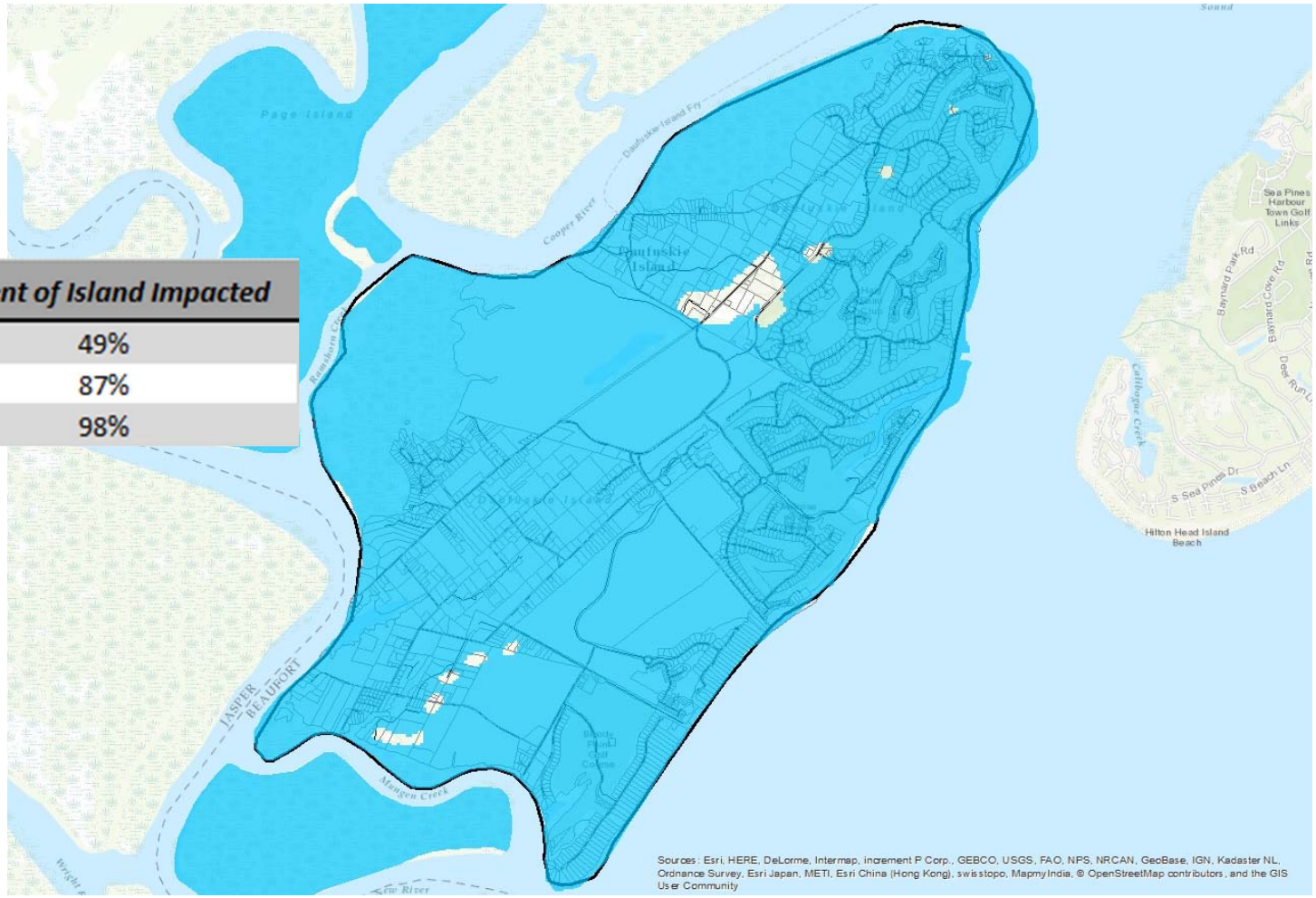
Storm Surge

Category 3

Storm Intensity	Percent of Island Impacted
Category 1	49%
Category 2	87%
Category 3	98%



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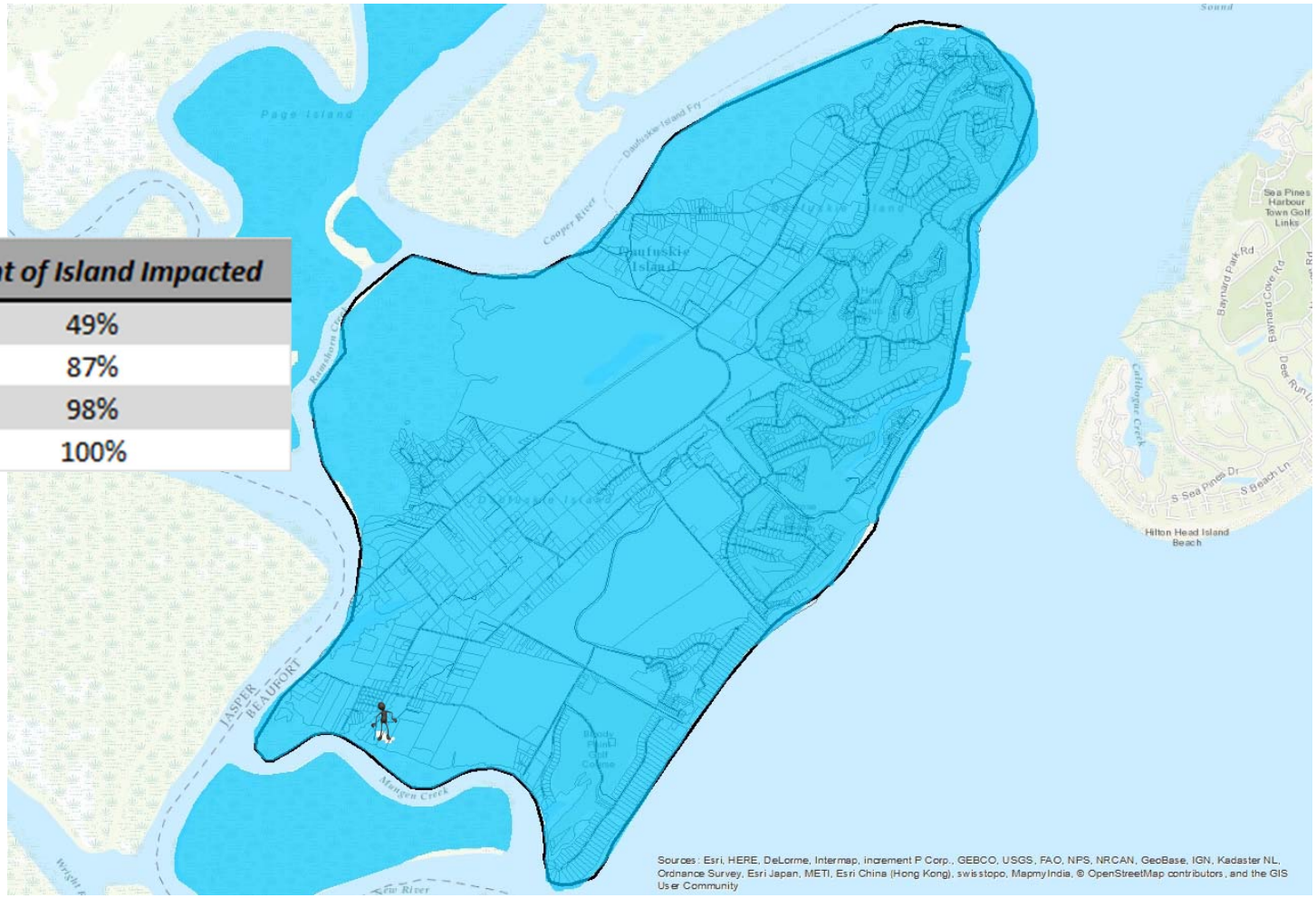
Storm Surge

Category 4

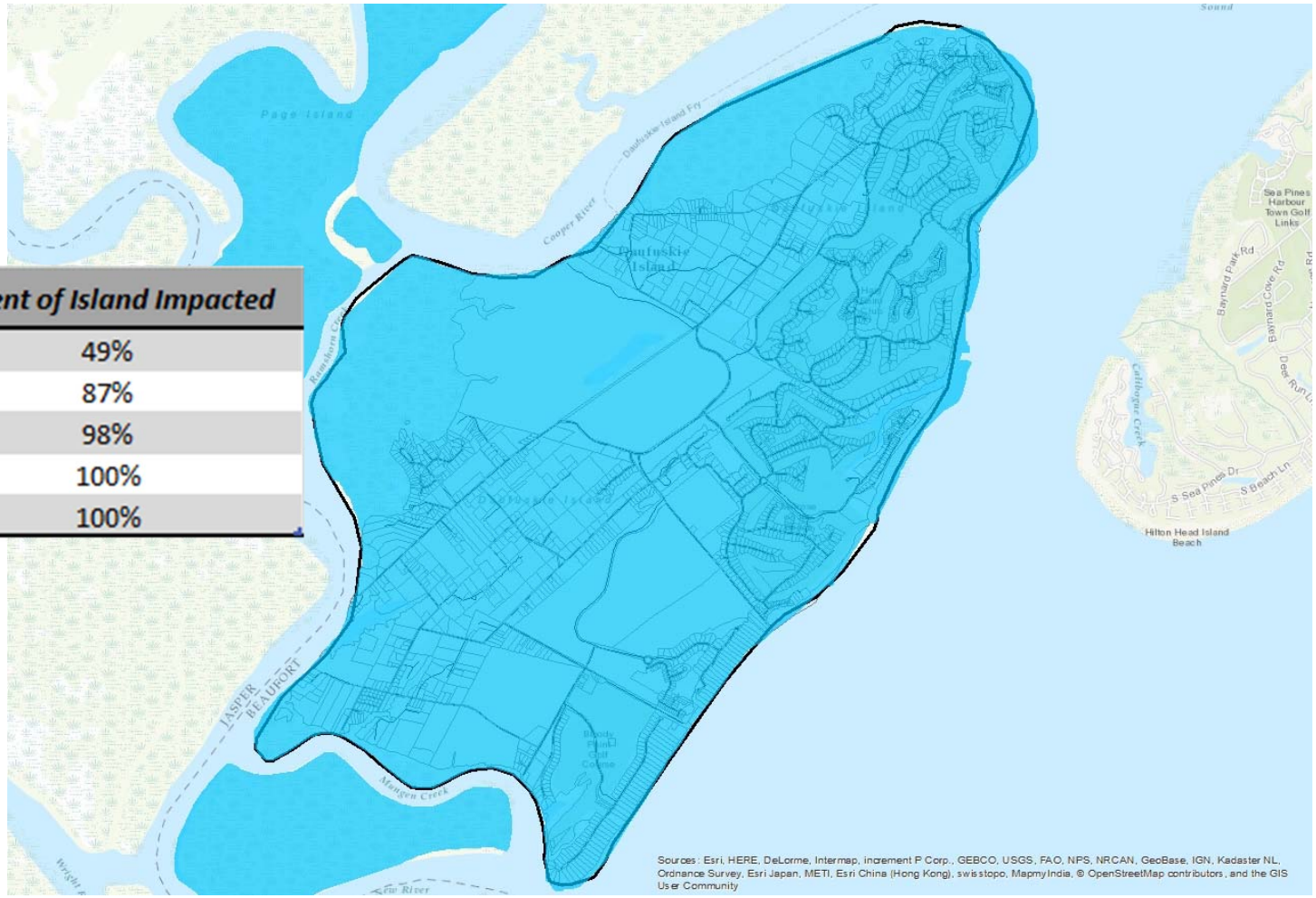
Storm Intensity	Percent of Island Impacted
Category 1	49%
Category 2	87%
Category 3	98%
Category 4	100%



Storm Surge

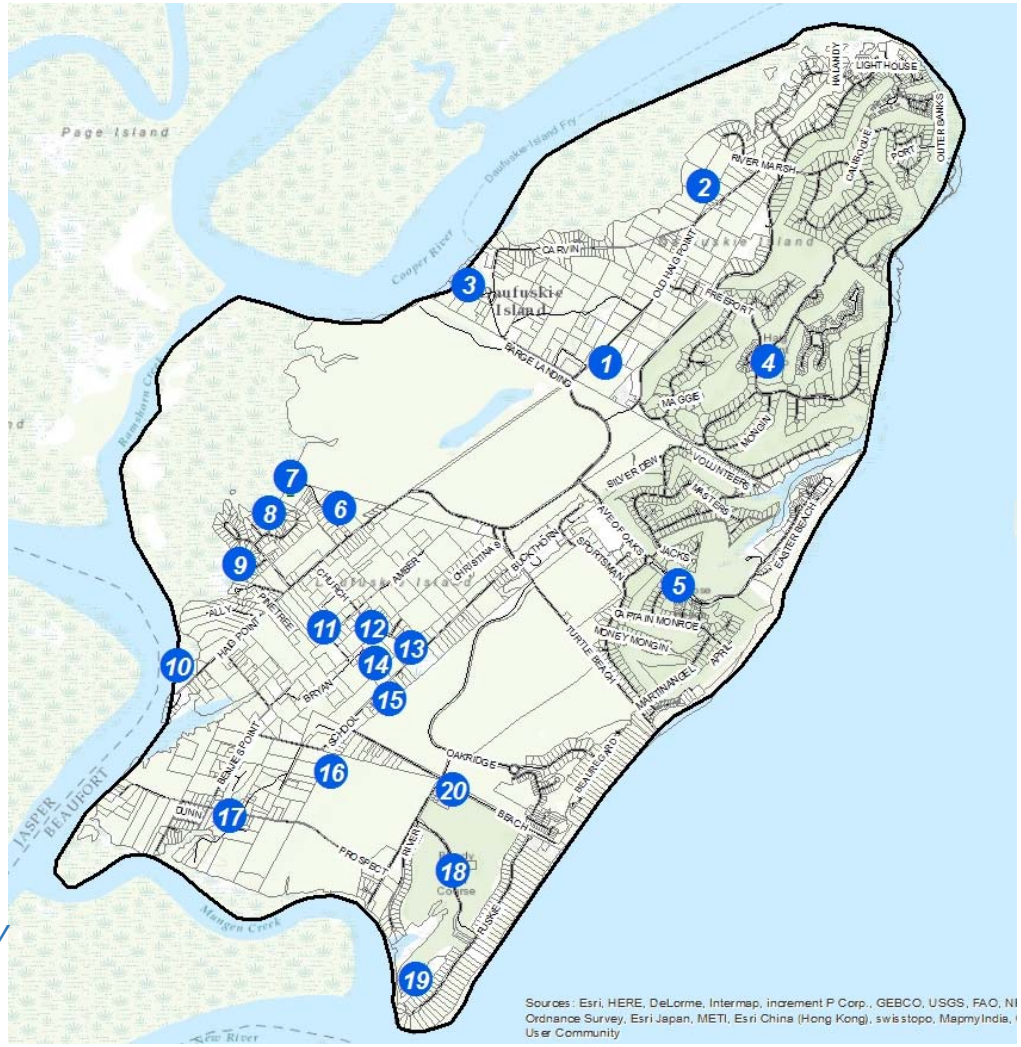
Category 5

Storm Intensity	Percent of Island Impacted
Category 1	49%
Category 2	87%
Category 3	98%
Category 4	100%
Category 5	100%



Community Features

1. *Mt. Carmel Baptist Church No. 2*
2. *Tabby Ruin*
3. *Cooper River Cemetery*
4. *Haig Point*
5. *Melrose*
6. *Oyster Union Society Hall*
7. *Hinson White House*
8. *Mary Field Cemetery*
9. *Sarah Grant Home*
10. *Public Dock*
11. *White School House*
12. *The Council Tree*
13. *First Union African Baptist Church*
14. *Mary Fields School*
15. *Frances Jones Home*
16. *Moses Ficklin Cottage and Oak Tree*
17. *Mary Dunn Cemetery*
18. *Bloody Point*
19. *Bloody Point Cemetery*
20. *Bloody Point Lighthouse and Silver Dew Winery*



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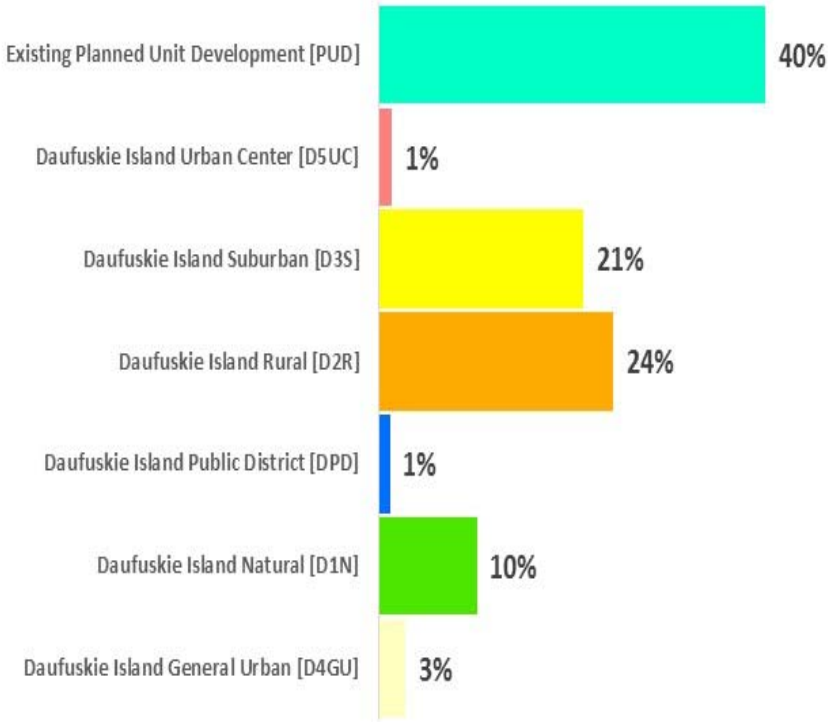
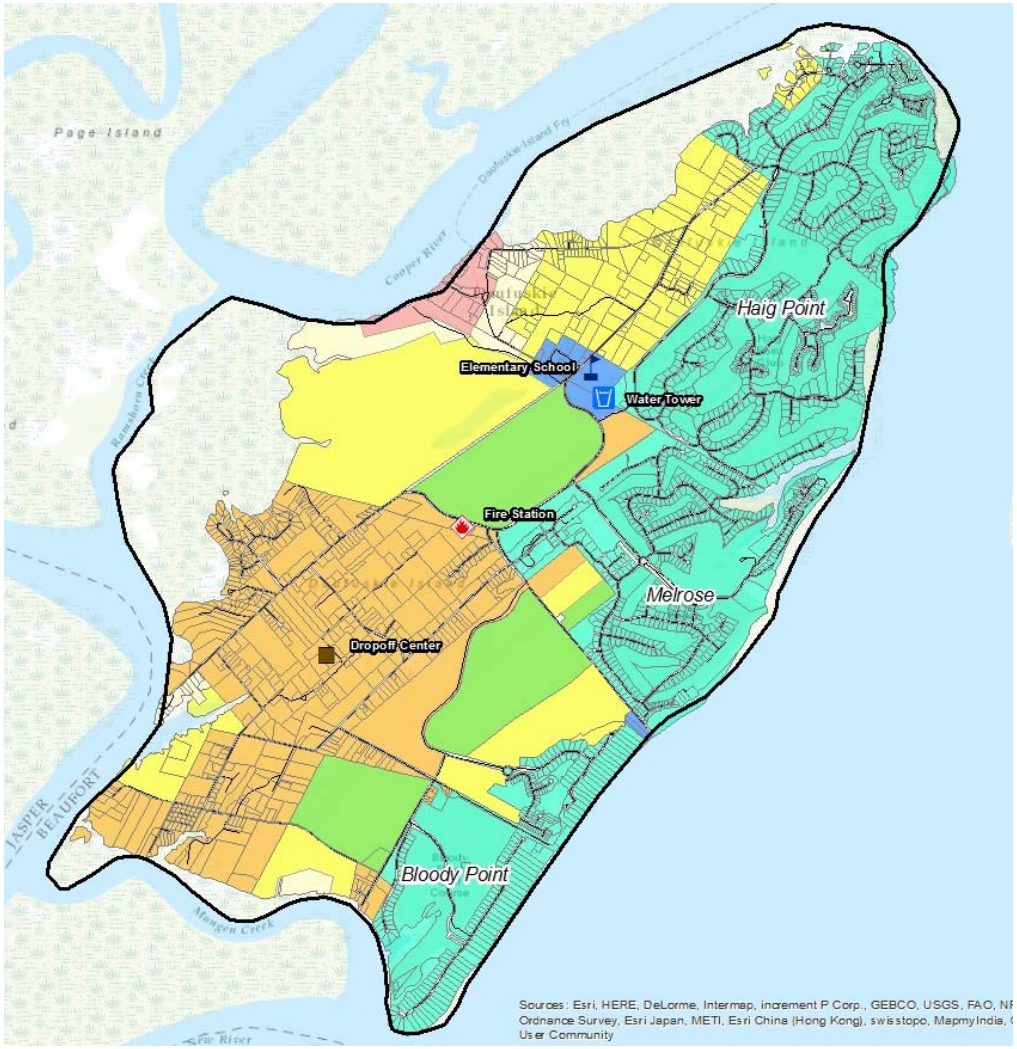
Zoning Classifications





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ECOLOGICAL PLANNING GROUP

SURVEY RESULTS

DAUFUSKIE ISLAND
MASTER PLAN AND CODE UPDATE

SURVEY

HAS YOUR VOICE BEEN HEARD?

Daufuskie Island is currently in the process of updating the Daufuskie Island Plan and Code. Information about the Plan and recent meetings may be viewed at:

www.daufuskiecouncil.com/daufuskie-plan-review

At a public meeting held June 29, 2017 at Mary Fields School, meeting participants identified and prioritized goals for the community to inform the future vision for the island. To ensure broad participation in the planning process, a survey has been placed online. Hard copies are also available. Survey responses will be collected through August 22, 2017.

Please use the following link to access the online survey:

https://www.surveymonkey.com/r/DaufuskieMasterPlan



The Comprehensive Plan charts the future course of the Island and your participation is vital.

Daufuskie Island Plan and Code Update - Public Survey

The Daufuskie Island Council and the Committee on the Daufuskie Island Plan and Code, in coordination with Beaufort County, initiated an update to the Comprehensive Master Plan and Development Code on June 5, 2017. The planning process includes ongoing public and stakeholder involvement that will guide the development of the plan.

The first public meeting was held on June 29, 2017 and this survey is designed to generate additional feedback from the public. Your responses will provide our planning team with a better understanding of current issues and opportunities on the island, along with insights regarding the vision and goals for the future of Daufuskie Island.

The survey should take 10-15 minutes of your time to complete. Please indicate your response in the space provided.

Thank you for your participation and interest.

1. What is your status on Daufuskie Island? Please select all that apply.

☐ Full-Time Resident
☐ Part-Time Resident
☐ Non Resident
☐ Property Owner
☐ Other (Please Specify) _____

2. If you are a resident, how long have you lived on Daufuskie Island?

☐ Less than 1 year
☐ 1-2 years
☐ 3-5 years
☐ More than 5 years
☐ N/A, I do not live on Daufuskie Island

3. Where on the island do you live or own property?

☐ Historic District
☐ Melrose
☐ Haig Point
☐ Bloody Point
☐ Other (Please Specify) _____
☐ N/A, I do not live or own property on Daufuskie Island

4. How often do you travel between the island and mainland?

☐ Everyday
☐ At least once per week
☐ Once per month
☐ I don't leave the island
☐ Other (please specify)_____

5. How do you typically access the island?

☐ Private boat, private dock
☐ Private boat, public dock
☐ Public Ferry
☐ Private Ferry
☐ Other (please specify)_____

6. What is your employment status?

☐ Full Time Employed
☐ Part-Time Employed
☐ Self Employed/Business Owner
☐ Unemployed
☐ Retired

7. If you are employed, do you work on or off the island?

☐ I primarily work on the island
☐ I primarily work off the island
☐ I primarily work on the island (from home)
☐ N/A, I am not currently employed
☐ Other, please specify:_____

8. If you own a business on the island, what kind of business do you own/operate?

☐ Retail / Business and Information
☐ Real Estate & Housing
☐ Food & Hospitality
☐ Agricultural & Forestry / Wildlife
☐ Construction / Utilities / Contracting
☐ Finance & Insurance
☐ Other (Please Specify) _____
☐ N/A, I do not own or operate a business on the island.

9. If you own a business on the island, how many full and part-time employees do you have? Please indicate the number of full-time, part-time, and contract employees in the spaces provided.

____ Full-Time
____ Part-Time
____ Contract Employee
____ N/A, I do not own or operate a business on the island.

10. What are the major challenges you face as a business owner on the island? Please select all that apply.

☐ On-island Transportation
☐ Getting Goods / Services to the Island
☐ Finding Employees
☐ Funding
☐ Other (Please Specify) _____
☐ N/A, I do not own / operate a business on the island.

11. Rank on a scale of 1-8, (with 1 being the highest priority and 8 being the lowest priority) what aspects of the community should be considered highest priority?

	Priority Ranking Highest → Lowest							
Community Goals	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**
Preservation of Community Character								
Environmental Stewardship								
Preservation /Enhancement of Community Assets								
Preservation of Limited Access to the Island								
Balance Commercial and Residential Growth with Existing Community Character								
Sustainable Economy Compatible with Existing Island Character								
Preservation of Island History and Culture								
Balance of Infrastructure and Undeveloped Environment								

12. Preservation of community character was a major concern for citizens who attended the public meeting held in June. Please indicate below if you strongly agree through strongly disagree with the characteristics identified by citizens as major contributors to the Daufuskie Island's community character.

Community Character	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Low crime / safe without significant police presence					
Tree lined roadway network					
Diversity of community (people and built environment)					
Slower pace of life					
Network of unpaved roads					
Not overly commercialized					
Quietness					
Rustic / rural character					
Safety in adventures for children					
Community involvement / sense of community					
Lack of large commercial / retail developments					
Undisturbed natural environment / nature / trees					
Other, please specify:					

13. What do you love most about living on Daufuskie Island? Please select the top three (3).

- ☐ Safety
- ☐ History / Culture
- ☐ Water
- ☐ Sense Of Community / People
- ☐ Unique Community Character
- ☐ Geographic Location / No Bridge
- ☐ Rural Lifestyle
- ☐ Small Businesses
- ☐ Natural Beauty
- ☐ Artisan Culture
- ☐ Other (Please Specify) _____

14. What do you dislike if anything about Daufuskie Island?

_____
_____
_____
_____
_____
_____
_____
_____

☐ I do not dislike anything about Daufuskie.

15. Based on feedback from members of the public and stakeholders during the project kick-off workshop, a draft vison statement was developed. It states that:

"*Daufuskie is a pristine sea island with extraordinary natural, cultural and historic resources. Our vision is to support balanced, mindful growth that provides a sustainable economy, while preserving our unique and diverse community character, rural sense of place, and isolated island lifestyle. While recognizing property owners' rights to reasonable use of their land, we will minimize the threat to our natural environment, cultural and historic resources, and ensure the preservation of Daufuskie Island's natural beauty."*

How do you feel about the draft vision statement for Daufuskie Island?

☐ I agree with the draft vision statement.
☐ I disagree with the draft vision statement.

Please use the space below to provide comments pertaining to the vision statement.

_____
_____
_____
_____
_____

16. What Is Your Age?

☐ Under 18 years
☐ 18-24 years
☐ 25-34 years
☐ 35-44 years
☐ 45-54 years
☐ 55-64 years
☐ Age 65 or older

17. What is your Ethnicity?

☐ White
☐ Hispanic or Latino
☐ Black or African American
☐ Native American or American Indian
☐ Native Gullah
☐ Other (please specify) _____

Thank you for your participation. If you would like for our planning team to contact you regarding the Daufuskie Island Plan update and future participation opportunities, please provide us with your contact information.

Name: _____

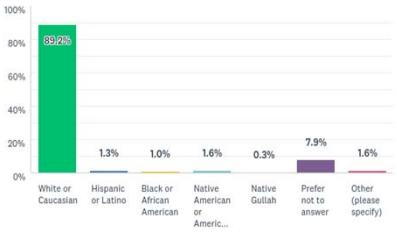
Telephone Number:_____

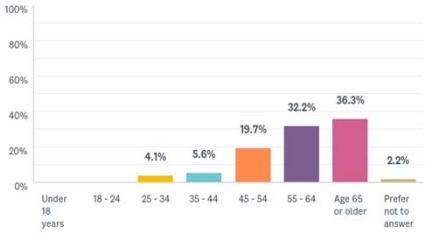
Email Address:_____

Public Survey Results

Who participated in the public survey?

ANSWER CHOICES	RESPONSES	
Historic District	21.1%	75
Melrose	17.7%	63
Haig Point	51.7%	184
Bloody Point	4.8%	17
N/A, I do not live or own property on Daufuskie Island	4.8%	17
TOTAL		356



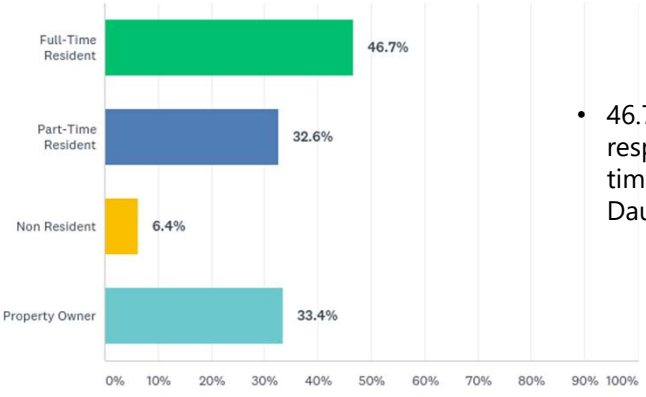


- 51.7% Haig Point
- 21.1% Historic District
- 89.2% White or Caucasian
- 68.5% Age 55 or older

RS&H

Public Survey Results

What is your status on Daufuskie Island?

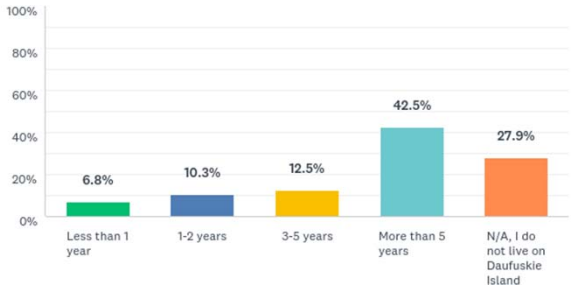


- 46.7% of respondents are full-time residents of Daufuskie Island.

RS&H

Public Survey Results

If you are a resident, how long have you lived on Daufuskie Island?

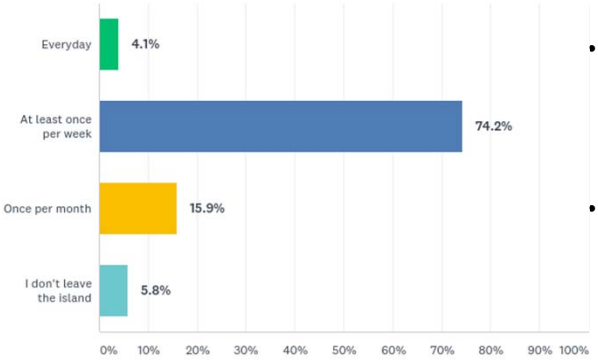


- 42.5% have lived on Daufuskie Island for more than 5 years.
- 6.8% have lived on the island for less than one year

RS&H

Public Survey Results

How often do you travel between the island and mainland?

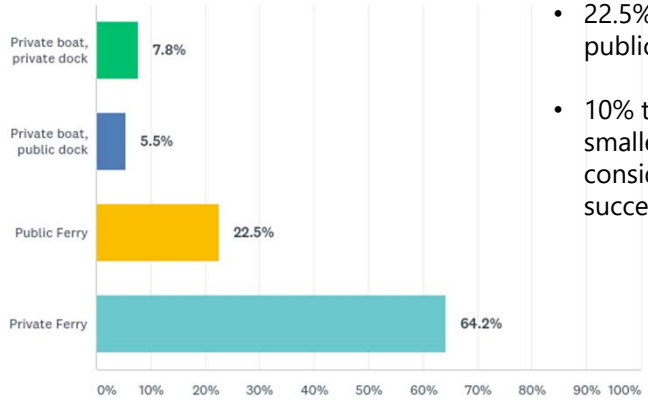


- 74.2% travel between the island and the mainland at least once per week.
- 5.8% of the respondents do not leave the island.

RS&H

Public Survey Results

How do you typically access the island?

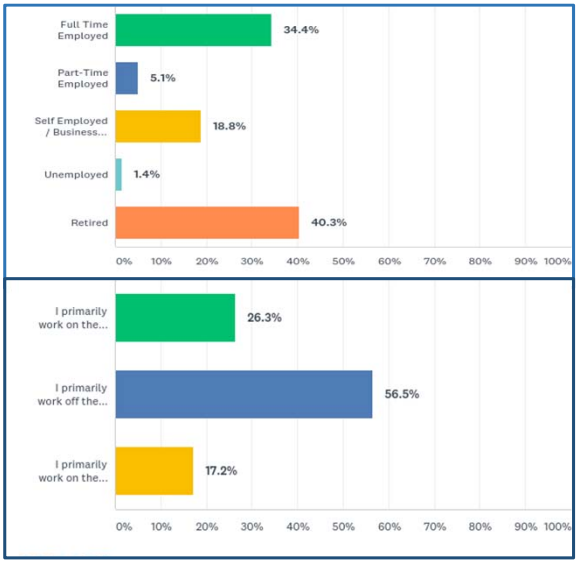


- 22.5% utilize the public ferry
- 10% transit usage in smaller urban areas is considered extremely successful

RS&H

Public Survey Results

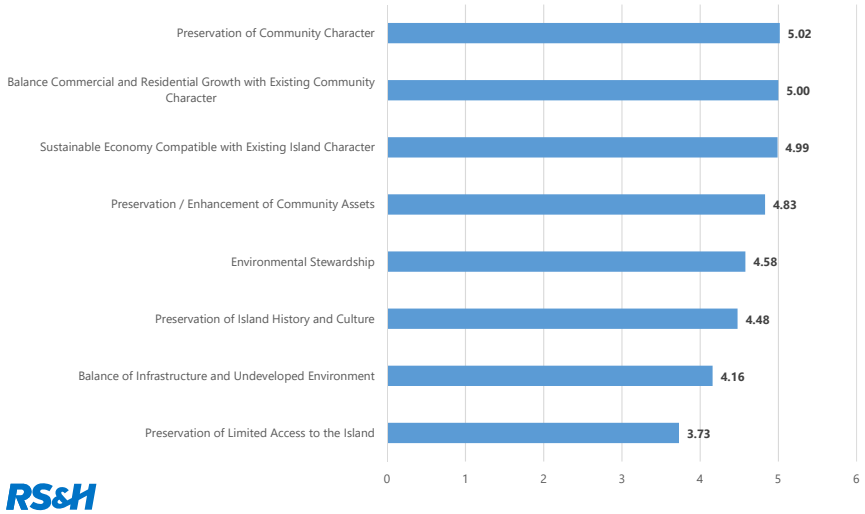
What is your employment status?/ Do you work on or off the island?



- 40.3% are retired
- 34.4% employed full time
- Almost 20% are self-employed
- 56.5% work off the island
- 17.2% work on the island from home

Public Survey Results

Rank on a scale of 1 - 8, (with 1 being the highest priority and 8 being the lowest priority) what aspects of the community should be considered the highest priority?



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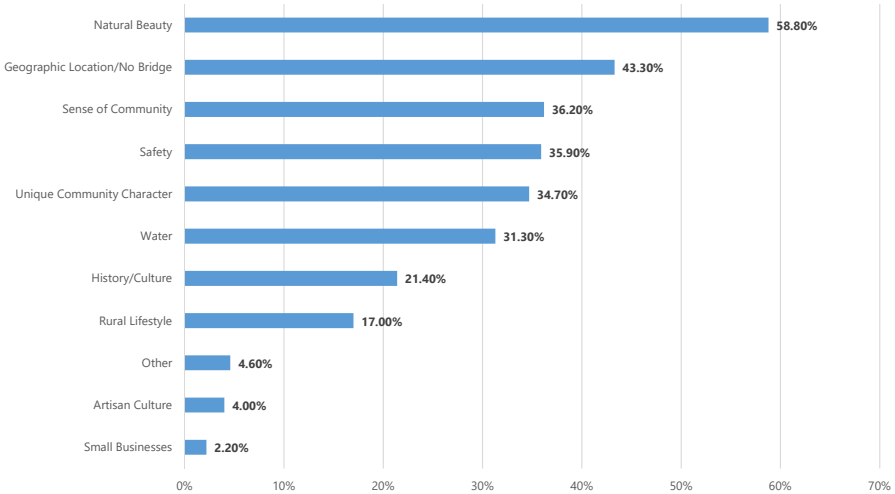
Public Survey Results

What do you love most about living on Daufuskie Island? (Select the top 3)



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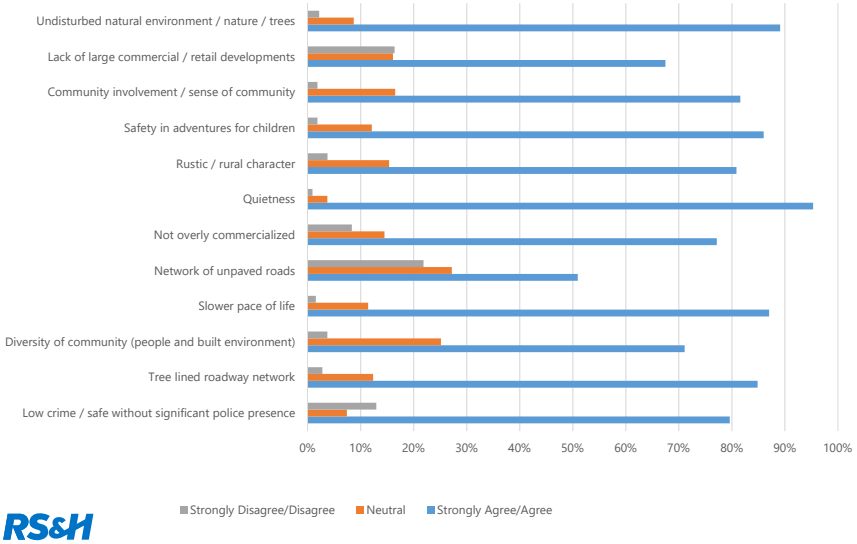
Public Survey Results

Major Contributors to Daufuskie Island's community character.



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Public Survey Results

» Major Contributors to Daufuskie Island Character

– All were considered to be important by respondents

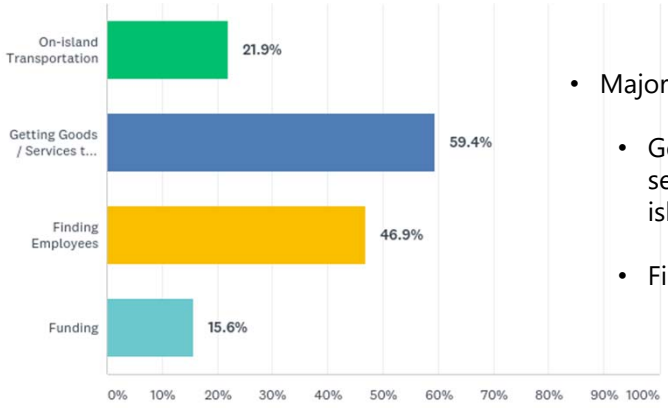
– The top three contributors:

- *Quietness*
- *Undisturbed Natural Environment/Nature/Trees*
- *Slower Pace of Life*

RS&H

Public Survey Results

What are the major challenges you face as a business owner on the island?



- Major Challenges:
  - Getting goods and services to the island
  - Finding employees

RS&H

Public Survey Results

» What do you dislike about Daufuskie?

– Majority of the respondents did not dislike anything about Daufuskie

– Sample comments received multiple times:

- *Bugs*
- *Some people want to change it to be like where they came from*
- *Snakes*
- *Because I'm not a resident*
- *Lack of respect/understanding between Island residents, particularly Haig Point and the Historic District residents*

RS&H

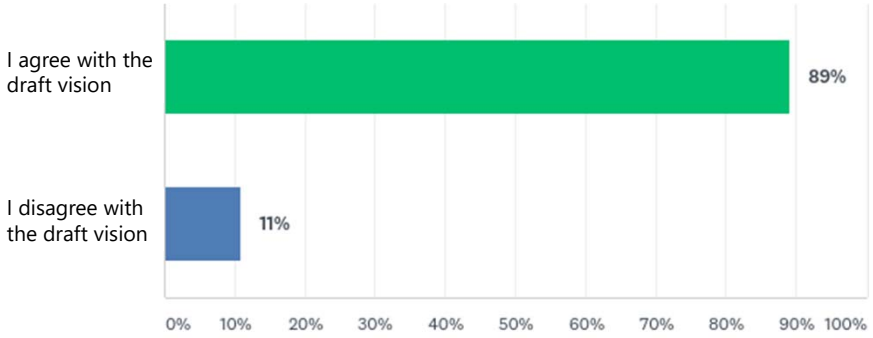
Key Findings from Survey Results

- Focus on Community Character
  - Preserving the community character
  - Balancing growth with the existing character
  - Sustainable economy compatible with existing character
- Preservation of Community Assets, including the Environment and Natural Beauty
- Respondents Liked:
  - Geographic location/No bridge
  - Quietness
  - Slower pace of life

RS&H

Daufuskie Island Vision

» Survey respondents overwhelmingly agreed with the Vision



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Daufuskie Island Vision

» Sample comments from those who disagreed with the Vision:

- Too long and wordy
- Too short
- Not focused enough; too vague
- Daufuskie is not pristine
- Isolated is not the correct word and has a negative connotation

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SECOND SURVEY RESULTS



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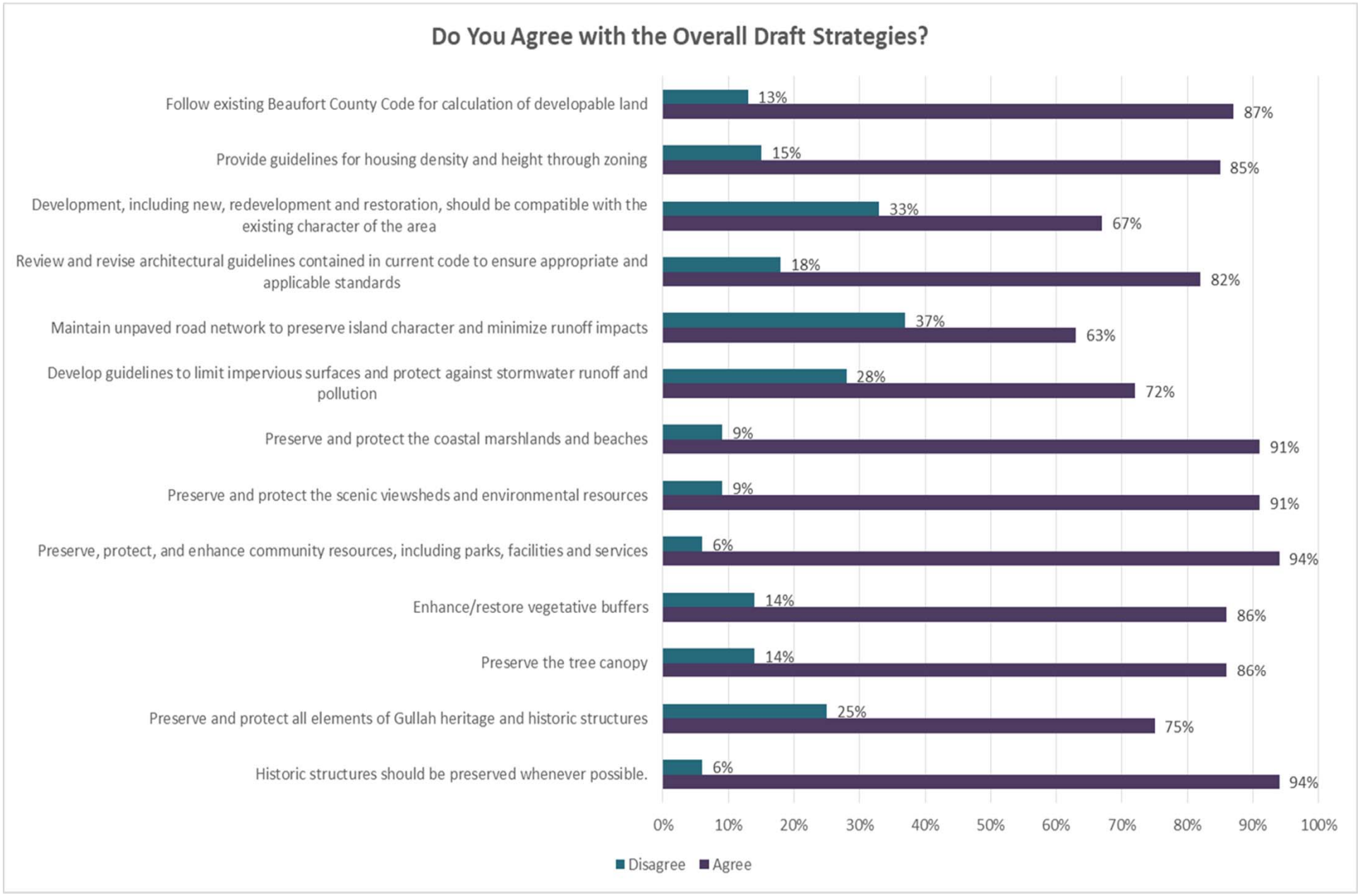
ECOLOGICAL PLANNING GROUP

Second Survey

- Project Advisory Committee meeting: reviewed results from workshop
  - Overall development strategies
  - Character areas
  - Character area development strategies
- Cross-referenced character areas with existing zoning and allowable densities
- Requested feedback
- Developed second survey to facilitate input

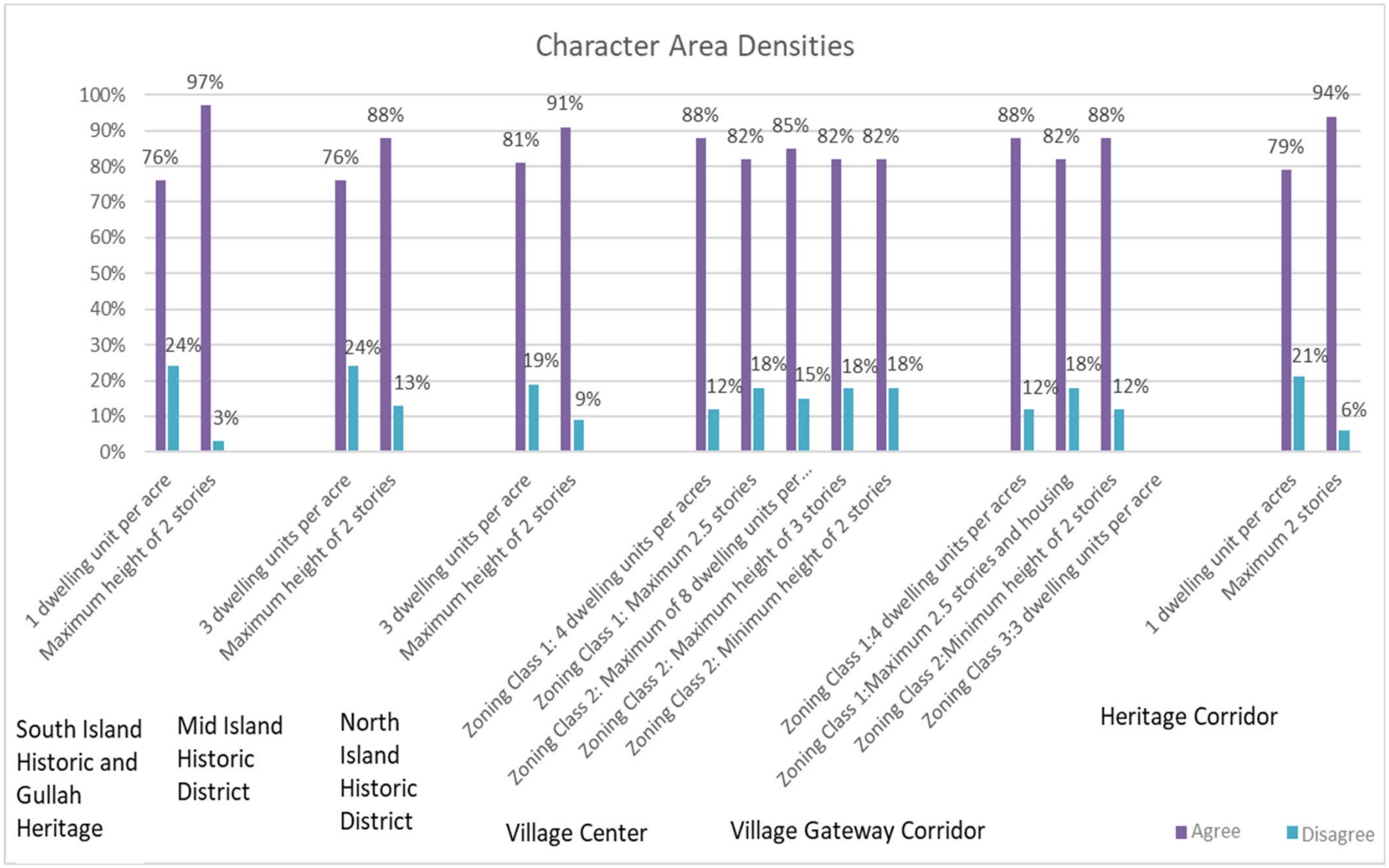
Second Survey

- 33 respondents; approximately 10% response rate
- Survey open from December 1st through December 12th
- Questions designed to obtain feedback on workshop results and existing densities


Do You Agree with the Overall Draft Strategies?
Follow existing Beaufort County Code for calculation of developable land
13%
87%
Provide guidelines for housing density and height through zoning
15%
85%
Development, including new, redevelopment and restoration, should be compatible with the existing character of the area
33%
67%
Review and revise architectural guidelines contained in current code to ensure appropriate and applicable standards
18%
82%
Maintain unpaved road network to preserve island character and minimize runoff impacts
37%
63%
Develop guidelines to limit impervious surfaces and protect against stormwater runoff and pollution
28%
72%
Preserve and protect the coastal marshlands and beaches
9%
91%
Preserve and protect the scenic viewsheds and environmental resources
9%
91%
Preserve, protect, and enhance community resources, including parks, facilities and services
6%
94%
Enhance/restore vegetative buffers
14%
86%
Preserve the tree canopy
14%
86%
Preserve and protect all elements of Gullah heritage and historic structures
25%
75%
Historic structures should be preserved whenever possible.
6%
94%
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
Disagree
Agree

COMMENTS: OVERALL DRAFT STRATEGIES

Although I want to maintain and protect the character of DI, I also want to enable some new development specifically in the Mid Island district. I believe that this development could be done while maintaining the character of DI. I am unclear on the current calculation for developable land.
Increase in commercial endeavors are vital.
General Comment: the wording of all the questions makes it hard not to say YES, so you may not learn much from the survey. I forced a few NO's just so I could provide comments.
More development is needed to move the island forward, although it must be carefully controlled. Commonly used dirt roads should be paved and developers should be encouraged to develop various tracts in a tasteful and aesthetically pleasing way, while preserving our beaches, marshes and as many trees as is practical.
Most of the items above are already addressed by current County zoning as well as ORCM regulations. Additional or different guidelines specific to Daufuskie are unnecessary, potentially confusing and even detrimental to attracting new investment.
Some roads need to be paved and current paved roads need repair
Some of our frequently traveled unpaved roads are dangerous and poorly maintained. The mud following a rainstorm and the dust during dry periods are a huge problem.
Roads should be designed as appropriate for the area they are installed. Unpaved roads while quaint are difficult to maintain and are a problem for golf cart traffic when rutted and wet. Preserving Gullah culture is fine though not at the expense of a failing economy on the island.
Let the island develop to include necessary roadways
What does character of the area mean? Seems vague and subjective.
Preserve "all" Gullah elements etc. may be somewhat excessive....
Many of these questions are a bit misleading as to the degree of what we should attempt to achieve.
The way this is written is slanting the answer toward no development. I favor developing the Webb Tract while respecting our Island's character and history
Not familiar enough with these areas to know impact of any changes to further development
While I answered yes to all, I believe that certain of these are too vague or subjective. For example, depending upon the POV, the "existing character of the island" could mean many things. For some, it could mean maintaining an entirely rural environment which would impede any sort of growth. For clarity, I believe that the character needs more granularity.
County rules are excessive and ridiculous.

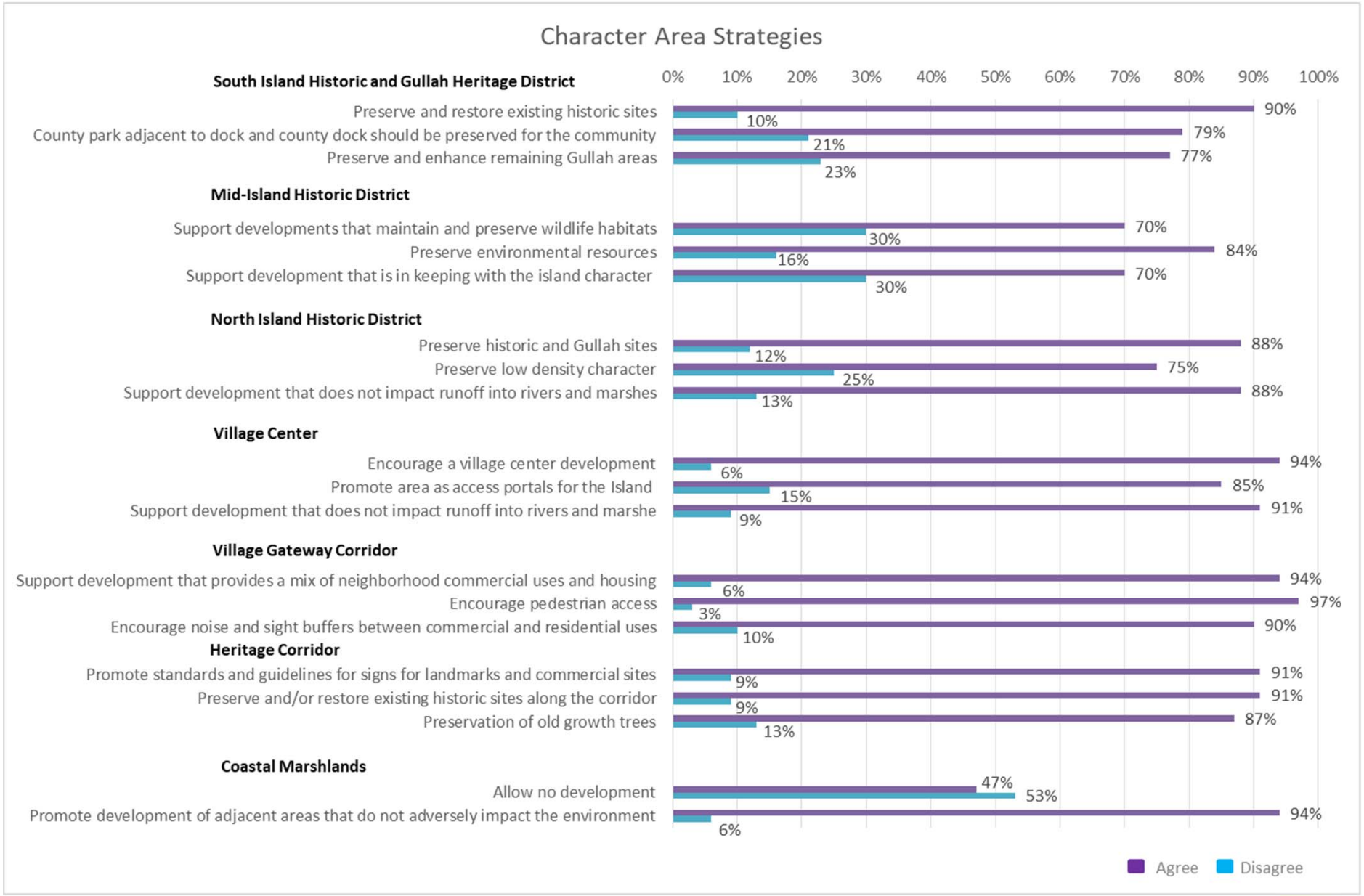

Character Area Densities
100%
90%
80%
70%
60%
50%
40%
30%
20%
10%
0%
76%
24%
97%
3%
76%
24%
88%
13%
81%
19%
91%
9%
88%
12%
82%
18%
85%
15%
82%
18%
82%
18%
88%
12%
82%
18%
88%
12%
79%
21%
94%
6%
1 dwelling unit per acre
Maximum height of 2 stories
3 dwelling units per acre
Maximum height of 2 stories
3 dwelling units per acre
Maximum height of 2 stories
Zoning Class 1: 4 dwelling units per acres
Zoning Class 1: Maximum 2.5 stories
Zoning Class 2: Maximum of 8 dwelling units per...
Zoning Class 2: Maximum height of 3 stories
Zoning Class 2: Minimum height of 2 stories
Zoning Class 1:4 dwelling units per acres
Zoning Class 1:Maximum 2.5 stories and housing
Zoning Class 2:Minimum height of 2 stories
Zoning Class 3:3 dwelling units per acre
1 dwelling unit per acres
Maximum 2 stories
South Island Historic and Gullah Heritage
Mid Island Historic District
North Island Historic District
Village Center
Village Gateway Corridor
Heritage Corridor
Agree
Disagree

COMMENTS: CHARACTER AREA DENSITIES

South Island Historic District and Gullah Heritage Sub-District
2 or 3 per acre is fine
Mid-Island Historic District
3 stories is fine
Only one dwelling
Existing zoning & requirements are adequate.
The Webb Tract is huge- greater density and taller structures in some areas would have no adverse impact
2/acre
Prefer to have buildings spread out, not in clusters.
Just not sure yet
North Island Historic District
Only one unit
Existing zoning & requirements are adequate.
Same answer as for Webb Tract. Land can be developed responsibly in many ways. If one owns a five acre site and agrees to only develop two in return for greater density on the two, we all win.
1 building/ residence per acre
I am not sure where this is? Generally I support density standards.
Should be same as south at 1 dwelling unit per acre
Not sure
Village Center
Existing zoning and requirements are adequate.
Marina boat storage building could be 75' tall
Village should 4 dwellings per acre with max of 2 stories
Sounds like enough for proper development

COMMENTS: CHARACTER AREA DENSITIES (continued)

Village Gateway Corridor
Existing zoning and requirements are adequate.
3-4 dwelling units per acre with max of 2 stories
I would like to think something built would fit in
Heritage Corridor
Thank you for your hard work. Balancing the need to support financial viability with the desire to preserve our island is a difficult task. Progress requires thoughtful change. No change ever leads to a downward spiral.
2 or 3 per acre is fine
Existing zoning and requirements are adequate.
2 per acre
Not sure impact


Character Area Strategies
0%
10%
20%
30%
40%
50%
60%
70%
80%
90%
100%
South Island Historic and Gullah Heritage District
Preserve and restore existing historic sites
90%
10%
County park adjacent to dock and county dock should be preserved for the community
79%
21%
Preserve and enhance remaining Gullah areas
77%
23%
Mid-Island Historic District
Support developments that maintain and preserve wildlife habitats
70%
30%
Preserve environmental resources
84%
16%
Support development that is in keeping with the island character
70%
30%
North Island Historic District
Preserve historic and Gullah sites
88%
12%
Preserve low density character
75%
25%
Support development that does not impact runoff into rivers and marshes
88%
13%
Village Center
Encourage a village center development
94%
6%
Promote area as access portals for the Island
85%
15%
Support development that does not impact runoff into rivers and marshe
91%
9%
Village Gateway Corridor
Support development that provides a mix of neighborhood commercial uses and housing
94%
6%
Encourage pedestrian access
97%
3%
Encourage noise and sight buffers between commercial and residential uses
90%
10%
Heritage Corridor
Promote standards and guidelines for signs for landmarks and commercial sites
91%
9%
Preserve and/or restore existing historic sites along the corridor
91%
9%
Preservation of old growth trees
87%
13%
Coastal Marshlands
Allow no development
47%
53%
Promote development of adjacent areas that do not adversely impact the environment
94%
6%
Agree
Disagree

COMMENTS: CHARACTER AREA DEVELOPMENT STRATEGIES

South Island Historic and Gullah Heritage District
The primary objective is preserving key assets for the community, but if there is a better use that benefits the entire island, it should be considered.
County dock area is an eyesore and should be tastefully improved.
Preservation of county dock area for the community is unnecessary
County dock area could also be utilized as a ferry landing for DI. Changes should not preclude that possibility.
Development in Webb and Oakridge should occur
Preserve but not at taxpayer expense. Preserve but not at the expense of deteriorating the economy of the island. We are already in deep trouble. We cannot help until our own future is assured.
There needs to be limited development to make the Island "livable and sustainable" which it is not today.
Preserve Gullah areas but enhance only through private partnerships.
I support preserving all Gullah heritage as well as enhancing provided enhancing does not mean expanding the Historic District to include the Webb Track etc. That makes no sense.
Not sure where they are and again what impact

COMMENTS: CHARACTER AREA DEVELOPMENT STRATEGIES

Mid-Island Historic District
Of course the interpretation of this is subjective. I believe in maintaining and preserving and also enabling this part of the island to become a marine access location with some limited retail and condo type housing.
Increase in commercial endeavors as well as affordable housing is vital
If there is a development opportunity that will enhance the lives of most residents (a small commercial area with a grocery store, pharmacy, artisan shops, a few new restaurants, etc., then that should be considered despite displacing some wildlife habitat. The term "island character" is like mom and apple pie, but it is subject to interpretation, and I suspect there is a broad range of ideas as to what that really means.
if keeping with the island character is dirt roads and single wide trailers, then no.
I am opposed to any changes affecting the current Webb Tract. This area has been designated as a potential portal into DI and no changes should be considered which would discourage potential investors or development use. This area should not be designated as an historic district with all the restrictions that entails.
I support responsible development of Webb Tract. Has the committee met with the current owner (Pete Lang Group) or the option holder (Roger Freedman); If not - please do before recommending changes to current zoning.
Low income housing will destroy Daufuskie !!!!
Preservation of wildlife habitats should not be used as a means to restrict private property development rights in keeping with existing zoning, density and architectural guidelines. See prior comment: how is "island character" defined?
Again, this makes perfect sense provided it does not go too far and prohibits reasonable development of the island which is badly needed
In concert with developing the Webb Tract.
I plan to build in historic district and would like to think anything I build would fit in
It is difficult to answer no to any of these. That said, if these strategies imply changing the current zoning in this district to something less dense, I disagree. This district has always been viewed as an "island portal" that has the potential for a marina, light commercial & retail and residential. This should be maintained in the revised plan but in keeping with the above strategies. Since this is currently forestland, it is a natural wildlife habitat. Preservation of the natural habitat should not be used a justification to inhibit development.

COMMENTS: CHARACTER AREA DEVELOPMENT STRATEGIES

North Island Historic District
Development with properly managed runoff should be considered when it benefits the island.
Similar answer to Mid-Island Historic district. No changes which would form a barrier to potential development of this area.
Cannot support preservation of low density without knowing what would be restricted. A half-acre lot requirement might be acceptable, but anything greater would unnecessarily inhibit responsible development- and serve no useful purpose.
Development should be encouraged. This makes it sound like all development will create problems.
IF kept to the current zoning areas
All development subject to restrictions of two stories and no more than 3 living units per acre
Not familiar with areas size and impact of this

COMMENTS: CHARACTER AREA DEVELOPMENT STRATEGIES

Village Center
Everything you do costs something - money, fewer trees, more runoff, etc. The costs and benefits to the island need to be properly evaluated.
Runoff is already covered under existing state and federal regulations.
The Character area map has only one "Village" designation and it appears to be the Melrose / Freeport area. Webb Tract should be included.
Access to Daufuskie should be encouraged ONLY to healthy developments and communities. The island cannot afford to encourage people when there isn't a plan to sustain a healthy economic living environment
Enhance what we have
This promotion of the village as an island portal should not be done to the exclusion of the current Webb Tract (renamed Mid-Island Historical: why?) The current zoning of Webb Tract with the vision for this area as the island portal should be preserved.
Development in balance with nature. Not impossible.
This should not be used as a replacement strategy for rezoning the Webb Tract to not be encouraged as a retail village. The vision for the island has always been that Webb Tract be a marine portal. Trying to use this as an acceptable replacement is too limiting.
No to the Webb tract project currently proposed.
Please see my response to "e" above--also applicable here. The Character area map has only one "Village" designation and it appears to be the Melrose / Freeport area. Webb Tract should be included.
Manage the development in such a way that we can all coexist together while getting the benefit of development.
NO to current Webb tract proposal.

COMMENTS: CHARACTER AREA DEVELOPMENT STRATEGIES

Village Gateway Corridor
Please see my response to "e" above--also applicable here. The Character area map has only one “Village" designation and it appears to be the Melrose / Freeport area. Webb Tract should be included.
Manage the development in such a way that we can all coexist together while getting the benefit of development.
NO to current Webb tract proposal.
Heritage Corridor
If this is Cooper River Landing Road --- I cannot support without knowing what we are trying to preserve. I spend an inordinate amount of time picking up trash on Cooper River Landing Road-- people who truly care about DI need to stop using our roads as trash bins.
I think the handmade character of business signs suits Daufuskie and its population. While businesses and landmarks should not be advertised in a way that diminishes the island feel, I don't think it should all look alike.
Provided we have a good definition of Old Growth Tress I also would support this

COMMENTS: CHARACTER AREA DEVELOPMENT STRATEGIES

Coastal Marshlands
Never say never, or NO in this case. Keep an open mind, but only allow such development if there is an overwhelming benefit to the island.
Allowing no development is killing this island
Potential development should be examined on a case by case basis under existing state and federal laws protecting the marshland areas.
Prohibiting responsible development of privately owned land is de facto condemnation -and that would require compensation to the owners. Who will pay that?
If this means prohibiting development of Webb Tract which borders coastal marshlands, I do not agree.
Too broad of statement. The Webb Tract for example should be allowed to be appropriately developed.
All development should be subject to environmental standards/approvals from the State of SC
Like second questions wording better than first
See earlier remarks. We should preserve marshlands but allow development within the guidelines for OCRM critical lines.

ADDITIONAL COMMENTS RECEIVED



RS&H

ECOLOGICAL PLANNING GROUP

ADDITIONAL COMMENTS RECEIVED

- Consider adding a second or third “village” zoning district.
  - Freeport is the logical first choice. Additional options:
    - Intersection of Haig Point Road and Oak Ridge could be “Village Industrial” for mini-storage facility, office-industrial space, a cabinet maker, trade shops, an auto mechanic, hardware store, diner, a builder’s office/warehouse, etc.
    - Area near the church in the proposed Gullah Heritage Sub-District where there is already a coffee shop and Daufuskie Blues. A good place for a post office, hair salon, alterations shop, artisan workshops, etc.
    - Area near the County Dock that is the second port of entry, but traditionally was our primary entry; villages traditionally evolved at transportation hubs.

ADDITIONAL COMMENTS RECEIVED

Commercial Space

- Permitting is difficult and expensive in Beaufort County and are the same for simple structures as for multi-story office buildings.
- Work with County to for updated building code category for “Light Commercial”
- Need simplification of code and requirements to encourage more small businesses

PUDs

- Successful businesses on Daufuskie are proprietor’s businesses as PUDs have failed as resorts, although not residential communities
- Bloody Point and Melrose will eventually be broken up and need to be addressed in the plan update.
    - Apply Daufuskie archetypes apply to help avoid some future new houses looking like they were transplanted from an Atlanta suburb

ADDITIONAL COMMENTS RECEIVED

Density

- Must include discussion of sewer and water.
- For higher density areas, need to build small, affordable sewage treatment facilities and not increase the area served by the DI Utility Company

ADDITIONAL COMMENTS RECEIVED

Achieving the goal of maintaining rural character

- Form-based code has unintended consequences for landowners who are ready to build
- Beaufort County Zoning Department/Director has final approval on how a building looks
- Identify primary roads that have requirement to prove a vegetative buffer exists prior to the issuance of a building permit
- Applicants can:
    - Build to the style required, or
    - Demonstrate there is a vegetative buffer in existence so the look of the structure does not matter

ADDITIONAL COMMENTS RECEIVED

- Focus on keeping the rural character of Daufuskie intact
- Request to rezone a specific property
- Economic Development
    - Daufuskie needs a strong branding and marketing theme to encourage economic development
    - Promote/encourage an eco-tourism based economy

APPENDIX 4H.
MAY RIVER COMMUNITY PRESERVATION (CP) PLAN

MAY RIVER COMMUNITY PRESERVATION DISTRICT PLAN

Purpose

The purpose of the May River Community Preservation Plan is to preserve the unique character of the May River / Highway 46 corridor by articulating a direction for future development of this community. The Plan addresses Natural & Cultural Resources, Land Use, Transportation, and Recreation. As a policy document, appended to the County's Comprehensive Plan, this plan is to be used to guide zoning, subdivision, facilities funding and design, and community development decisions made by government officials and agencies. The May River Community Plan serves as a foundation and the structure upon which more detailed policies, standards and master plans may be developed.

Process

In 2005, a group of concerned citizens (unofficially known as the May River Road Planning Committee) began meeting on a regular basis to identify critical issues affecting the May River / Highway 46 Corridor, as well as potential solutions. The group envisioned their efforts as a precursor to the County's Community Preservation process. The official CP process convened in 2007. Those interested in serving on the committee were asked to submit their names to the County's CP Planner. Citizens from surrounding (unincorporated) communities, as well as those who had served on the May River Road Planning Committee were deemed eligible. At a subsequent meeting, the community selected, by vote, the 13 member May River CP Committee. The Beaufort County Planning Commission approved and appointed the Committee.

The Committee met with representatives from agencies that service or might potentially impact the May River / Highway 46 Corridor (the Trust for Public Lands, the Town of Bluffton, Greater Bluffton Pathways, BJWSA, May River Waterbody Management Plan Project Team, etc.). Through this process the Committee was able to identify issues which they believed were most pertinent to the future of their community. These include:

- Preserving the low density and rural residential character of the corridor
- Preserving the existing rural character along May River Road
- Preserving the environmental integrity of the May River
- Maintaining a clear edge between urbanized areas (Bluffton, Pritchardville) and rural areas (the May River Road corridor)
- Preserving undeveloped lands within the District through acquisition and easements.
- Providing contextual pathways and trails

THE MAY RIVER COMMUNITY PRESERVATION DISTRICT

The majority of issues and goals outlined in this plan relate to preserving the status of the May River Corridor. Both Highway 46 and the May River have a capacity at which point they will reach a tipping point and become unsustainable in their current form. Given all of the approved development in Southern Beaufort County, Highway 46 is predicted by the County to fail by 2025.

Beaufort County and the Town of Bluffton are engaged in a constant effort to keep the May River pristine and healthy. The biggest threat to the river is overdevelopment of the immediate area. Currently, the average density of the entire CP District is just one unit per 8 acres.

The Town and County have committed to the establishment of consistent and compatible zoning regulations along the Highway 46 Corridor. Yet, along the eastern portion of the corridor the two jurisdictions utilize different regulatory tools and zoning. If this is to be the case, it is important that the future land use map for Beaufort County and the Town Of Bluffton are compatible in this area. Otherwise, there will be tremendous pressure for additional annexations.

Recommendation

Protect the unique rural character that exists along the Highway 46 corridor by promoting low intensity development that preserves the district's scenic attributes and rural feel while severely limiting commercial uses.

MAY RIVER CP DISTRICT
DEVELOPMENT INTENSITY & CHARACTER

a. Development North of May River Road

The established density should be one unit per three acres on the north side of May River Road. This is in keeping with the density of Beaufort County's Rural Zoning District. The required open space will be 60% of the site. The minimum lot size is ½ acre.

Should the applicant agree to intense clustering of residences, with 80% open space, then the applicant should receive a bonus that permits them to subdivide at a rate of one unit per two acres. The applicant will be encouraged to construct a range of lot sizes, from ¼ acre cottage lots to 1 acre estate lots.

Connectivity to existing communities shall occur. When developing new neighborhoods open spaces shall be contiguous, usable (greenway with trails, parks, playgrounds, etc), and used to define the neighborhood edge. Whenever possible these lands shall be linked to neighboring green belts and open spaces.

b. Development South of May River Road

Due to the environmental sensitivity of the May River and the anticipated capacity of Highway 46 the established density should be one unit per five acres on the south side of May River Road. It is recommended that the required open space be comprised of 60% of the site. The minimum lot size should be 1 acre, unless the subdivision is on sewer, in which case the minimum lot size should be 1/2 acre.

Unless otherwise noted in the Scenic Road Overlay Standards, all development should reside behind a 100 foot setback (measured from the edge of the ROW), the first 75 feet of which shall be a vegetated buffer with 80% opacity (overstory, understory, and shrubs). Whenever possible the buffer should be comprised of indigenous species, requiring minimal (initial) to no irrigation or replacement. If non-indigenous species are utilized, the buffer shall require the use of irrigation to ensure survival.

1. River Lots

   Waterfront lots in new subdivisions should have a minimum of 250 feet of parallel frontage along the May River or its tributaries. Furthermore, all development should be set back 100 feet from the OCRM Critical line. Existing lots of record should be exempt.

2. Guest Houses

   Existing lots of record of 2 acres in size or greater are permitted one guest house not to exceed 2,000 square feet. A Guest House is deemed to be a part of the main property owner's "compound" and is not intended to be subdivided for other uses. They are for use by the property owner and his/her family and guests only. They should not be used for lease or rent, and should gain their access from the driveway of the principal house.

   Parcels created after the adoption of the May River CP Code that are 5 acres or more in size should be permitted to have one or more Guest Houses. However, the total square footage of all guest dwellings (guest houses) should not exceed 75% of the square footage of the principal house. Furthermore, the total square footage of all guest houses (when added together) should not exceed 5000 square feet.

   This formula allows for the equivalent of two estate homes (principal, and guest house); a "main" house with two "significantly" sized houses (principal, and two guest houses); or a "main" house and three traditionally sized cottages (principal, and three guest houses). Anything more significant essentially establishes the definition of a neighborhood. Construction of the principal dwelling must occur prior to, or in conjunction with any guest houses. Manufactured homes shall not be permitted to be used as guest houses.

MAY RIVER CP DISTRICT
DEVELOPMENT FUNCTION

In order to ensure that this stretch of corridor remains rural it is anticipated that residents will head to Town or to Pritchardville to fulfill their daily needs. Therefore, the CP District should primarily consist of low density residential development. However, a few very low intensity, businesses (in keeping with the character of the roadway) such as farm stands, bed and breakfasts, and home based businesses will be allowed in the district. The design specifications for businesses requiring additional exposure and access will be addressed in the SCENIC ROAD OVERLAY DESIGN STANDARDS.

- Permitted Without Limitations
  - Agricultural
  - Residential
    - Single Family detached
    - Single Family Cluster
    - Family Compound
- Permitted With Limitations
  - Residential
    - Guest House
    - Home Occupation
    - Home Business
  - Commercial and Retail
    - Bed and Breakfast (not in excess of 6 rentable bedrooms)
    - Permanent Produce Stands

MAY RIVER CP DISTRICT
DEVELOPMENT FORM

The Community Preservation District is actually bisected by two geographic features, the May River, and Highway 46. Both the River and the Highway serve as transportation and recreation corridors. These serve as the windows to the District. It is from these vantage points that people interpret the “character” and “feel” of the area. Therefore, the committee recommends the application of two overlay districts specifically aimed at addressing development within these corridors. These overlay districts shall be referred to as the Scenic Road Overlay and the River Overlay.

The boundary for the River Overlay will be measured 500 feet from the critical line and the boundary for the Scenic Road Overlay will extend 500 feet from the centerline of the road respectively. The current Corridor Overlay District regulations (located in Appendix B of the Beaufort County Zoning and Development Standards Ordinance (ZDSO)) will apply to Highway 46 unless they are in direct conflict with regulations found in the Scenic Road Overlay; in which case the Scenic Road overlay supersedes the Corridor Overlay District. The additional standards reflect the area’s natural surroundings and ensure that development portrays a rural context.

Recommendation

Encourage a NATURAL and RURAL aesthetic by promoting context sensitive design standards, preserving the existing tree canopy over and adjacent to the highway, and maintaining the thoroughfare as a two lane highway.

a. Development within the Scenic Road Overlay

1. Regulation / Review

   Within the May River Corridor, only non-residential properties and those places where the public frontage (i.e. road right of way) and the private frontage (i.e. a new neighborhood entranceway) converge shall be reviewed by the Joint Corridor Review Board (JCRB). Such non-residential uses are extremely limited in scope within the Community Preservation District and do not warrant the establishment of an individual review board. The CP Committee will have the right to nominate two additional members to sit in and vote when commercial projects from the May River CP District are heard by the JCRB. The two nominees shall reside in the May River CP District. Ideally, one citizen representative and one "design professional" (employed in a field such as Planner, Urban Designer, Architect, and Landscape Architect) will characterize the representatives from the May River CP District.

2. Aesthetics

   This overlay is intended to give the impression that the Highway 46 corridor primarily bisects lands in an open or cultivated state or that are sparsely settled. Despite the increasing population density of this area, the primary viewshed should make every effort to reflect woodlands and agricultural land.

   It should be recognized that there is a vast difference between a low intensity, formally regulated corridor, and one with a truly "rural" context. Outside of Town, May River Rd. exudes a truly rural context. The informality of the corridor allows for "eclecticism" and promotes a "sense of uniqueness". While the corridor is no longer agricultural, the dominant features are woodlands, wetlands, and scattered vernacular buildings of various setbacks. There is also an undeniable character associated with this Corridor; one that is very much in keeping with the "rural south".

   All new residential development shall reside behind a 100-foot setback (measured from the edge of the right-of-way (ROW)), the first 75 feet of which will include a vegetated buffer with 80% opacity (both overstory & understory and shrubs). The buffer shall be comprised of indigenous species and shall be irrigated and replaced wherever and whenever necessary.

3. Streets and Trails

   Highway 46 is a very heavily traveled roadway that would normally be considered by S.C. Department of Transportation (SCDOT) for widening. In order to prevent

this, every measure possible to slow traffic down while allowing free movement must be attempted. The posted speed should not exceed 45 mph.

Secondary roads should be designed to calm or slow traffic as opposed to promoting its free flow. Promote creative ways to narrow road width and defer to the natural landscape as much as possible. Roads shall not utilize curb and gutter, but rather swales. Turning radii should be shallow unless impeded geographically. “Environmental or green” features and “rural & natural” materials shall be listed and encouraged in the code. Off-road bicycle trails and walkways that are that are pervious, natural, and appropriate for rural settings should be included in every new development. However, to exclude the “resort look” and maintain both the tree canopy and overall rural character they shall be considered for placement off of the road. Sidewalks are only appropriate for small lot clusters, and these should utilize surface materials that are pervious and or natural.

The Community Preservation Committee will form an implementation committee that will meet seasonally as needed. This committee will be charged with implementation (as needed), accessing how the plan is working, and nominating to the County Council two representatives for the JCRB. In terms of the Corridor Overlay, as improvements are made along the highway or communities develop along the highway frontage, this committee will work with various public entities (County, SCDOT, SCE&G) and landowners / developers to examine the burying of existing power lines along the ROW. Portions of this ROW could serve as a trail system or bike lane.

4. Plantings and Lighting
   Plantings in rural areas are typically naturalized and native as opposed to being formal and symmetric. Plantings (landscaping) within the Highway Buffer should native or indigenous species. These require minimal (initial) to no irrigation or replacement. If non-indigenous species are utilized, the buffer shall require the use of irrigation to ensure survival.

   As an ecologically sensitive, rural corridor, overhead lighting should be used only when necessary to address issues of safety. Such lighting should not consist of standard cobra head lights, but rather an aesthetically pleasing alternative. Lighting is anticipated on both signage (private business) and for security purposes (residences). At this scale, Pipe and Post lighting is most appropriate. Within a subdivision, column lighting may also be used; however, it is most appropriate around clustered housing or smaller lots.

5. Fencing, Private Entryway Features, Signage
   Fencing on land that abuts the Highway 46 ROW should be split rail (2, 3, or 4 rails) and maintained in its natural condition, or painted a color currently found along the corridor (i.e. white, Charleston green, black, etc). Living fences composed of wood and wire are also allowed and encouraged both in

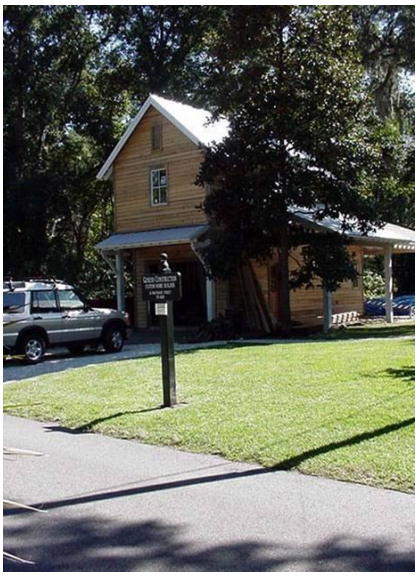
neighborhoods and in lieu of privacy fences. Chain link, metal, or so called “privacy” fences are prohibited. Picket fences, while filled with character, are more indicative of sub-urban housing districts. They are prohibited along Highway 46.




Examples of rural split rail fencing.

Private gatehouses and monumental or ornate entryways are prohibited along the Highway 46 ROW. A break in the fencing, a small hanging sign, and possibly a light is all that is necessary. Those developments requesting additional entryway structures must locate them at least 150’ from the centerline (at the buffer line). All entry features shall be in keeping with the rural nature of the preservation district and shall be approved as part of the JCRB process.

Projecting, wall, and monument type signage should be permitted; however, it is critical that it be of a proper scale and rural character. These items are encouraged to be unique in their composition and made of natural materials (wood, metal, brick, etc).




Examples of rural signage.

Recommendation

Accommodate future development along the May River and discourage visual blight by promoting context sensitive (Lowcountry maritime) and environmentally sound design standards.

b. Development within the Scenic River Overlay

1. Future Development Pattern

   The Scenic River Overlay is intended to ensure that future structures are befitting of their maritime setting and do not overwhelm the corridor both visually and environmentally.

   The Scenic River Overlay should require all development to be setback a minimum of 100 feet from the OCRM critical line. Guidelines will also address vegetation standards, selective clearing criteria, and enforcement provisions. With the exception of the view corridor guidelines found in the ZDSO, the first 50 feet of the 100-foot setback shall be maintained in its natural state.

   A principal residence should not exceed a maximum height of 2.5 stories (35 feet) or 40 feet with appurtenances.

   In order to prevent visual clutter, houses that directly front the river or a tidal creek should maintain a minimum riverfront lot width of 250 feet and locate accessory structures or Guest Cottages on the landward side of the main residence. The setback and lot width negates the need for architectural review of individual residences within the River Overlay.

   If a property is located in both Overlay Districts the primary dwelling may front whichever corridor the applicant chooses. Residential uses on Highway 46 are not part of the JCRB review process.

2. Docks

   Docks will adhere to those standards currently found in the Beaufort County ZDSO under Water Dependent Uses.

Appendix 6-A
Old Sheldon Church Road Scenic Highway Corridor Management Plan

Introduction

The Old Sheldon Church Road (see Area Map) has played an important role in the history of the Lowcountry since Colonial times when the road served the plantations in the area as well as the parishioners of Sheldon Church. Now, in modern times, resources along the road offer glimpses into this past through the remains of the Sheldon Church ruins, the entrances to several historic plantations and views of former rice fields. In addition to its historic importance, the road is also one of the few remaining beautiful canopy roads in the Lowcountry. A long, uninterrupted canopy of trees can be seen along one portion of the road, as well as dense forest and natural wetlands.

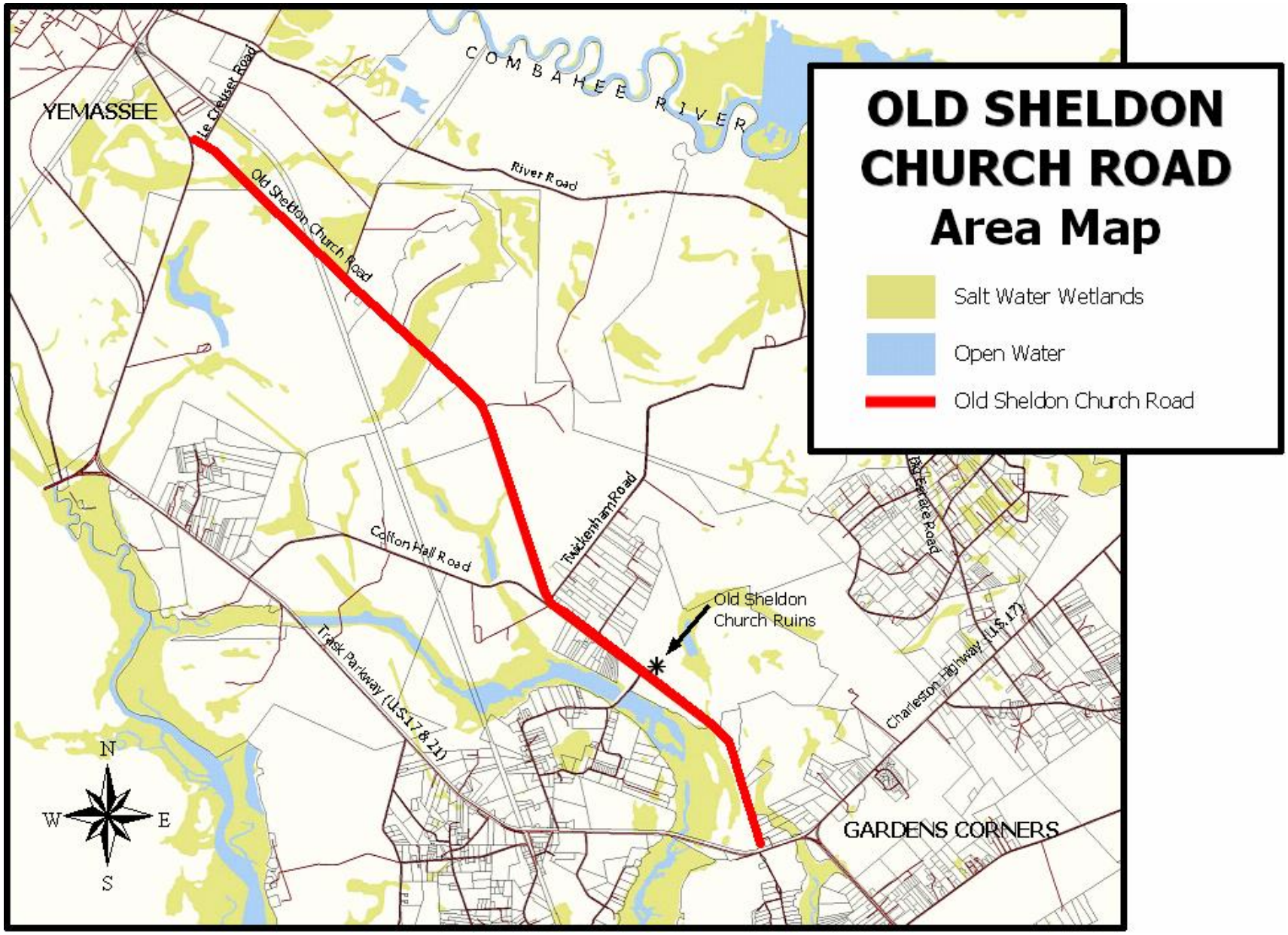
For many years the road was a lightly traveled back road that saw little more than local traffic. In recent years, however, the road has been used as a short cut between I-95 and Beaufort; and traffic, especially heavy truck traffic, has increased. In addition, the rapid growth of Beaufort County could lead to future development that would drastically change the character of this road. An example of this has been a loss of the canopy tree cover along the northwestern portion of the highway, a result of utility line placement. For now, though, most of the Old Sheldon Church Road still has the quiet, natural beauty of the rural landscape that is disappearing at an alarming rate in Beaufort County.

Designation of Old Sheldon Church Road as a Scenic Highway reflects the first critical commitment to preserving this important cultural and environmental area. Growth patterns in Beaufort County, along with large numbers of commuters using the road and a rising number of tourists visiting the Old Sheldon Church ruins, has had a decidedly adverse impact upon this unique road corridor. This management plan is intended to address those factors that could undermine the intrinsic qualities of this roadway in order to preserve the historic character of Old Sheldon Church Road.

Process: In the 1990's, a group led by Mrs. Elizabeth Campbell of Sheldon and consisting of interested individuals from the area began work on having the Old Sheldon Church Road designated a S.C. Scenic Highway. Beaufort County backed the effort of this group and on April 13, 1998, the Beaufort County Council passed a resolution in support of the Scenic Highway designation for Old Sheldon Church Road. The Beaufort County Open Land Trust, Historic Beaufort Foundation, and the South Carolina Coastal Conservation League also provided letters of support.

In 1999, the Old Sheldon Church Road Advisory Committee was formed. Members of the group included landowners and residents of the area, a representative of the Sheldon Fire District, and staff from the Beaufort County Planning Department.

On May 31, 2001, Beaufort County formally applied to the SCDOT for Old Sheldon


OLD SHELDON CHURCH ROAD
Area Map
Salt Water Wetlands
Open Water
Old Sheldon Church Road
COMBAHEE RIVER
YEMASSEE
Le Creuset Road
River Road
Old Sheldon Church Road
Clifton Hall Road
Twickenham Road
Old Sheldon Church Ruins
Trask Parkway (U.S. 17 & 21)
Charleston Highway (U.S. 17)
GARDENS CORNERS
N
W
E
S

Church Road to be designated a State Scenic Byway. On September 24, 2002, the South Carolina Scenic Highway Committee met to consider the application. The Committee made a motion to consider the request and asked for a Corridor Management Plan to be submitted. This motion has been sent to the South Carolina Legislature for approval.

On February 5, 2004, the Sheldon Church Road Advisory Committee approved the draft Corridor Management Plan. The effort to date has involved numerous meetings and consultations with government officials, property owners, private sector representatives, and other interested groups. Included were two members of the S.C. House of Representatives – Rep. Edie Rogers and Rep. Catherine Ceips; John Hardee, SCDOT Commissioner for the 2 nd District; William Ladson, Beaufort County Council; Captain Allan Horton, Beaufort County Sheriff's Department; Wendell Mulligan, SCDOT; Chief Walter Jones, Sheldon Fire District; Tom Chambers, South Carolina Electric & Gas; Reed Armstrong and Jacki Martin, South Carolina Coastal Conservation League; Veronica Miller, Keep Beaufort County Beautiful Coordinator; and Eliza Hill, Member, Northern Beaufort County Corridor Review Board.

Relationship to the Beaufort County Comprehensive Plan: The Beaufort County Comprehensive Plan (1997) recognizes the important role that Old Sheldon Church Road plays both historically and as a scenic area for tourists visiting the Old Sheldon Church ruins, a major point of interest. The Cultural Resources Element of the Comprehensive Plan includes the following policy and action item:

- Policy: Create a safer roadway on Sheldon Church Road and protect the Sheldon Church Ruins.
- Action: Work with the S.C. Department of Transportation and Beaufort County to reduce the speed limit and allowed tonnage on Sheldon Church Road and to designate the road as a South Carolina Scenic Highway.

This management plan is a step toward implementation of this policy and action.

Characteristics of the Corridor

The outstanding cultural, natural, and scenic resources of Old Sheldon Church Road are the primary reasons for its designation as a Scenic Highway, and so are central to this management plan. The road dates to the early 18 th Century, and while no exact date is known for the origination of the road, it may have been in existence as early as 1715, and used by settlers and Indians during the Yemasee War. The Prince William's Parish Church, now known as Old Sheldon Church, was built in 1745, and the road would have also served parishioners of the church and the residents of nearby plantations. Although the road has been paved, few modern buildings have been constructed along it, and the trees lining much of the roadway have been retained, thereby preserving the road's historic integrity.

Cultural Resources: Cultural resources along Old Sheldon Church Road are nationally significant and include the following:

- Sheldon Church Ruins (Prince William's Parish Church): The church was built in 1745, was burned by British troops in 1770, rebuilt in 1826, and then burned again by Federal troops in 1865. The church was never rebuilt again. The church graveyard is the burial ground for members of several prominent South Carolina families including the Bull, Chisolm, Elliott, Fuller and Heyward families. The church is said to be the first conscious effort in America to imitate a Greek temple. It is listed in the National Register of Historic Places and is open to the public.
- Tomotley Plantation: Tomotley has been a plantation since the late 17th Century, with several buildings dating from the late 18th and early 19th Centuries. Tomotley is best known for a spectacular alleé of oaks that was originally planted in 1820. One entrance to Tomotley is on the Old Sheldon Church Road, while another is located nearby on Cotton Hall Road (SC 48). The property also has extensive wetlands that are former rice fields. It is listed in the National Register of Historic Places.
- Brewton Plantation: The magnificent oak alleé to Brewton Plantation is visible from Old Sheldon Church Road. A plantation since John Bull built it in the late 17th Century, Brewton Plantation is named for Miles Brewton, one of the early owners. The present house was built in 1893. It is listed in the National Register of Historic Places.

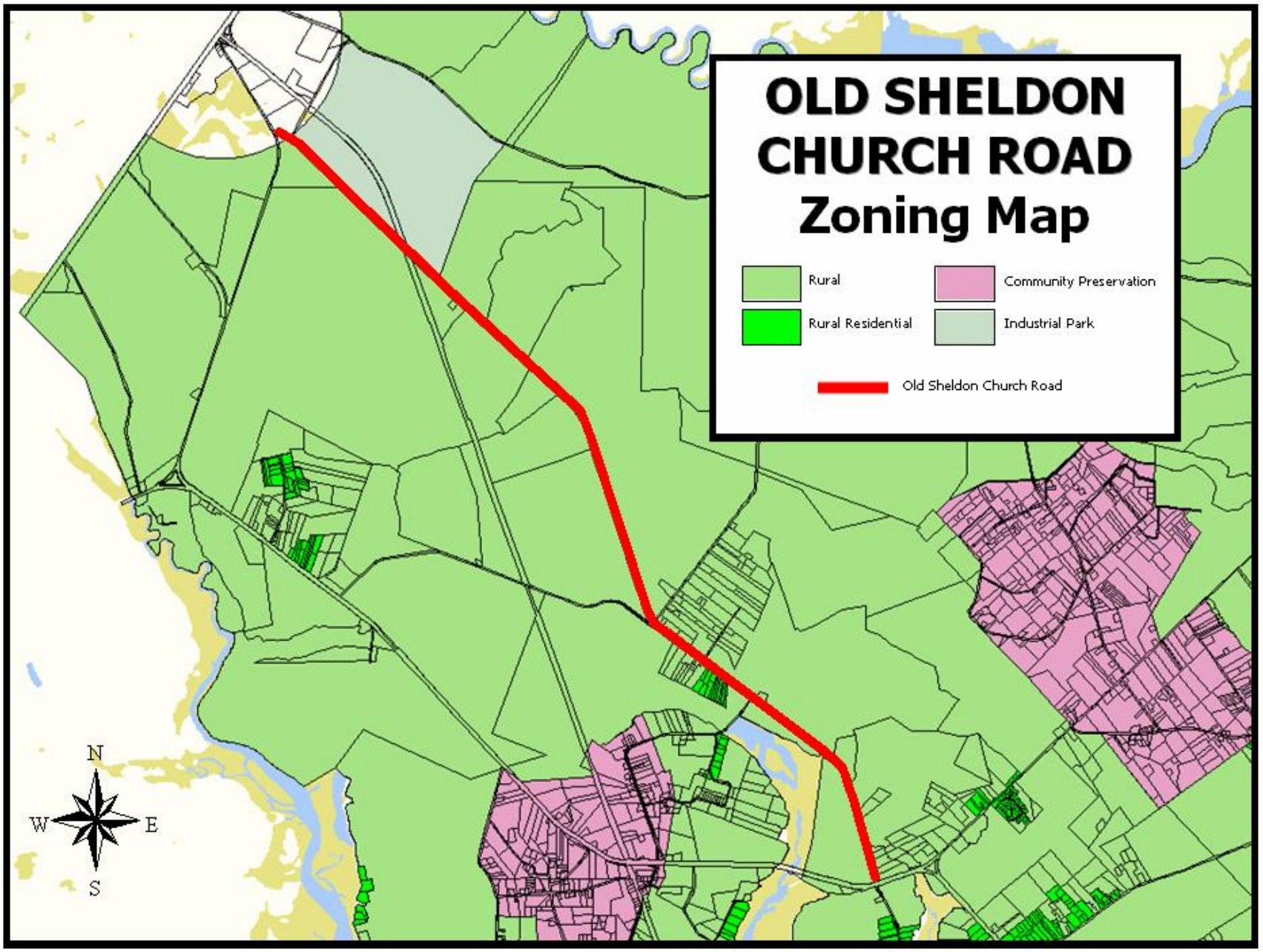
Natural Resources: In addition to its cultural resources, the Old Sheldon Church Road corridor is rich in natural and scenic resources. The land adjacent to the road is part of the ACE Basin Project, consisting of approximately 350,000 acres of diverse habitats within the Ashepoo, Combahee and South Edisto (ACE) drainage basins. The mission of the Project is to maintain the natural character of the basin by promoting wise resource management on private lands and protecting strategic tracts by conservation agencies.

The natural resources found along Old Sheldon Church Road are dominated by natural forested and manmade (impoundments) wetlands. Interspersed with these wetlands are pockets of mixed upland forests and, along the northern end, deciduous upland forest and some planted pine. One of the most significant natural features of Old Sheldon Church Road is a long canopy of trees running along the road from its intersection with U.S. 17/21 to Cotton Hall Road, a distance of approximately three miles. The canopy appears sporadically on other sections of the road as well.

The myriad of habitat types that occur along Old Sheldon Church Road contributes to the variety of wildlife that utilizes these resources to rest, nest and forage. The wetlands provide for migratory waterfowl, birds of prey, neotropical migrant and resident songbirds, as well as other terrestrial and aquatic flora and fauna. Evergreen hardwoods and shrubs, which provide the forage and habitat for wildlife, dominate these wetlands. The upland forests consist largely of hardwoods with a mixture of pine species.

Land Use and Preservation Efforts

The Old Sheldon Church Road corridor is located in an area of Beaufort County designated as Rural in the County's Comprehensive Plan (1997). The vast majority of properties along the road are also zoned either Rural or Rural Residential (see Zoning


OLD SHELDON CHURCH ROAD
Zoning Map
Rural
Community Preservation
Rural Residential
Industrial Park
Old Sheldon Church Road
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Map), which are the least intensive zoning districts in Beaufort County. One exception is a swath of land along the extreme northwestern portion of the road that is zoned Industrial Park. This area is adjacent to the Yemassee town limits.

Much of land along the road is currently undeveloped. Except for a vacant store located at the corner of Old Sheldon Church Road and Twickenham Road, a nail salon close to the intersection of Old Sheldon Church Road and US 17/21, and the Old Sheldon Church ruins, what development there is along the road is residential (both conventional and mobile homes), mostly on small lots. Land along the road within the Industrial Park area is currently undeveloped.

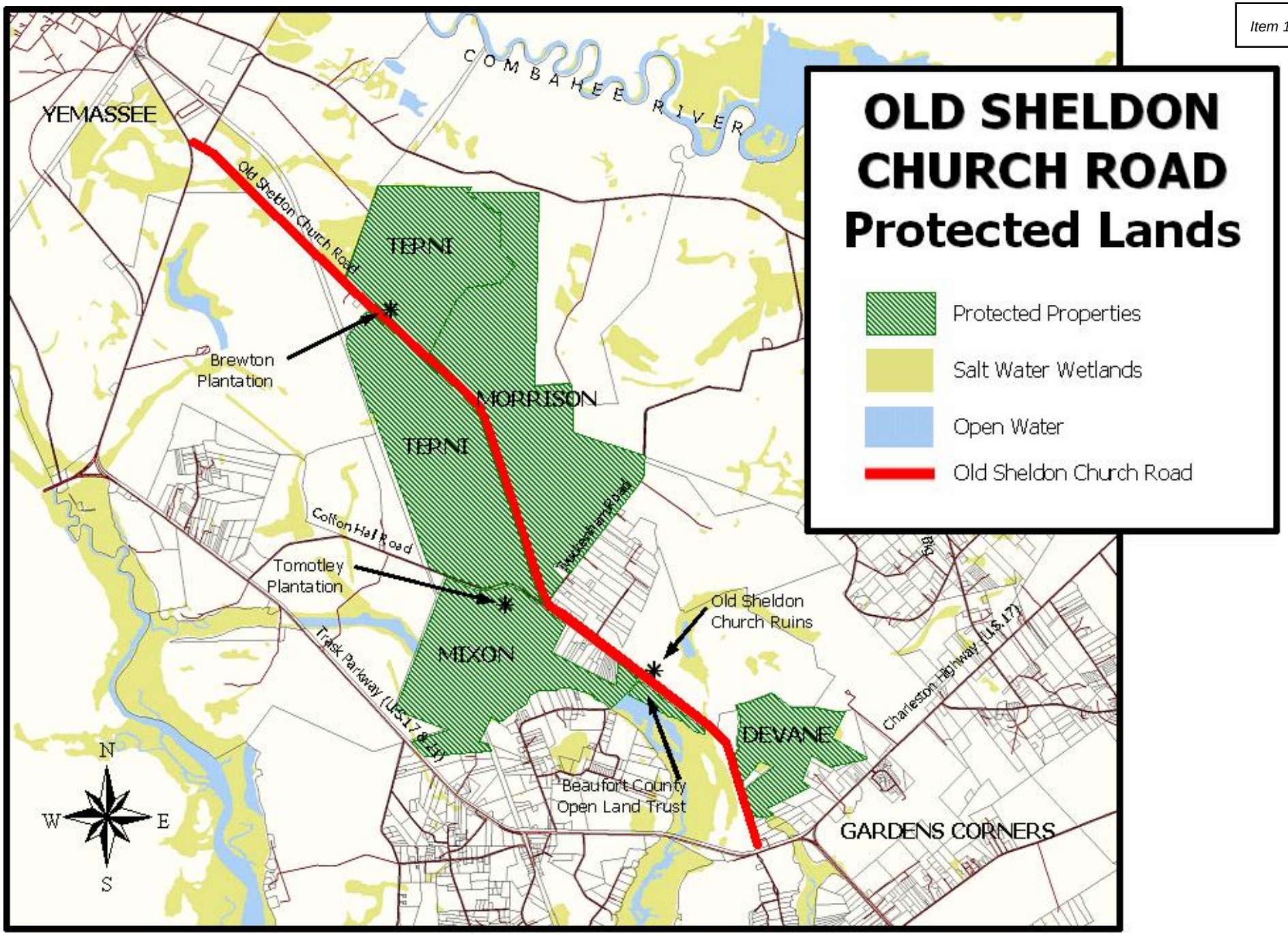
About 50 percent of the property along both sides of Old Sheldon Church Road is protected, either through conservation easements or ownership by conservation agencies (see Protected Lands Map). This amounts to 3,892 acres. As mentioned in the previous section, voluntary protection of private land helps to promote the goals of the ACE Basin Project. As a result of these protection measures, there are only a small number of sizable properties along Old Sheldon Church Road that can be developed in a way that could dramatically impact the corridor. These numbers make personal contact, discussions, and exchange of information possible, while recognizing the legacy of good stewardship among landowners.

Threats to the Corridor

During meetings of the Old Sheldon Church Road Advisory Committee, problems and concerns about the corridor were discussed. These issues are summarized in this section and can be grouped into three major topics: safety issues (including traffic volumes and speed, truck traffic and parking at the church ruins), aesthetic issues (including maintaining the tree canopy along the road, signage, and litter control), and land use issues (including the potential for incompatible development, and furthering conservation/preservation efforts). Goals and strategies developed to address these issues are detailed in Section 6.

Safety Issues: Many of the problems identified by residents and landowners are related to traffic. Use of the road as a short cut between I-95 and US Hwy. 17/21 has resulted in increasing traffic volumes, including truck traffic, on a roadway that is not capable of supporting such traffic loads. The current posted speed limit along the road is 55 mph, except for a short segment in front of the Old Sheldon Church ruins where the speed limit drops to 45 mph. Speeding is a common occurrence, and the lack of shoulders and location of large trees and drainage ditches close to the pavement present very real safety issues.

Another safety issue relates to parking at the Old Sheldon Church ruins, a major point of interest to tourists. Currently, the only available parking is a pull off on the side of the road, creating a dangerous situation for those getting in and out of vehicles as traffic goes by at a high rate of speed. On occasion, the property across from the ruins is available for parking, but this creates a situation where visitors must cross the road. In November 2000, Rep. Edie Rogers contacted John Hardee, SCDOT Commissioner for the 2nd District, regarding the concerns expressed by the Committee. As a result, speed limit reductions (to 45 mph) and new signage alerting travelers to pedestrians were implemented near the Old Sheldon Church ruins in 2001. Because these


OLD SHELDON CHURCH ROAD
Protected Lands
Protected Properties
Salt Water Wetlands
Open Water
Old Sheldon Church Road
COMBAHEE RIVER
YEMASSEE
Old Sheldon Church Road
TERNI
Brewton Plantation
MORRISON
TERNI
Cotton Hall Road
Tomotley Plantation
Trask Parkway (US17 & 21)
MIXON
Old Sheldon Church Ruins
Beaufort County Open Land Trust
DEVANE
Charleston Highway (US 17)
GARDENS CORNERS
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measures only apply to a very small section of the road, however, they are easy to ignore and very hard to enforce.

Aesthetic Issues: Deep, vegetative buffers and tree canopies along the roadway are essential to maintaining the scenic and historic appearance of Old Sheldon Church Road. The Advisory Committee identified several visual intrusions that have the effect of degrading the corridor's appearance and character. Chief among these is litter.

Roadside litter and illegal dumping blight the viewscape and endanger wildlife. Currently, trash along Old Sheldon Church Road is periodically picked up by workers employed by the Bull Point development (covering US 17/21 to Old Bailey Road) and Brewton Plantation (from Old Bailey Road to the northwestern end). The County, through its litter control program, picks up the trash once it has been bagged.

Although State law prohibits littering, there are no signs along the road that give the fines for this activity, it is not routinely enforced, and use of the road as a short cut for commuters only adds to the problem. Additional help with litter control may be extremely difficult because, again, there are no shoulders along the road and traffic goes by at excessive speeds, making volunteer efforts extremely dangerous.

Another aesthetic issue raised by residents and landowners is the manner in which the SCDOT maintains the right of way along Old Sheldon Church Road. The DOT uses equipment to periodically clear the edge of the road of debris and overhanging vegetation. Obviously, this presents a challenge to any road with a scenic tree canopy and thick natural vegetation. It is also standard for the DOT to leave piles of brush along the roadway after maintenance, which results in unsightly clutter.

Land Use Issues: The vast majority of land along Old Sheldon Church Road is currently vacant, providing opportunities for future development. The County should discourage poorly planned and designed lighting, signage and landscaping, which can degrade the appearance and character of the corridor, detracting from its scenic qualities.

About one-half of the land along the corridor is protected through conservation easements or ownership by conservation agencies. Several large parcels adjacent to the road, however, are not similarly protected, including the land surrounding the Old Sheldon Church ruins. Inappropriate development near the ruins would adversely impact the historic setting of this National Register site.

Corridor Vision

The overall vision for the Old Sheldon Church Road Scenic Highway is as follows:

Preserve the outstanding historic, natural, and scenic resources of Old Sheldon Church Road.

Goals and Strategies

GOAL: *Facilitate safe vehicular and pedestrian traffic along Old Sheldon Church Road to enhance its appeal as a Scenic Highway.*

- Work with the SCDOT and law enforcement to decrease the posted speed limit to 45 mph along the entire road and enforce it.
- Provide additional signage in appropriate places along the road to alert drivers to slow-moving agricultural equipment and deer crossings.
- Work with the SCDOT to designate US Alt. 17 as a truck route from Yemassee to US 17/21 to help divert truck traffic away from Old Sheldon Church Road.
- Coordinate with the St. Helena's Episcopal Church to acquire and develop a small parking area adjacent to the church grounds so visitors will not have to pull onto the road shoulder or cross Old SheldonChurch Road to visit the ruins.

GOAL: *Protect the Old Sheldon Church ruins as an outstanding historic resource.*

- Coordinate with the Beaufort County Sheriff's Department and the St. Helena's Episcopal Church to investigate and implement measures to decrease vandalism at the Old Sheldon Church ruins. Measures to be considered include lighting, a locking gate, higher fencing, signage, increased surveillance, etc.

GOAL: *Protect and restore the tree canopy and other natural areas along the corridor.*

- Develop written guidelines in cooperation with the SDCOT for use in maintaining the right of way (cutting, trimming, clean-up) along the corridor.
- Work with SCE&G to explore ways to mitigate the visual impact of the existing transmission lines along the roadway, including the feasibility and cost of moving the lines farther away from the right of way and planting a vegetative buffer along the road to restore the tree canopy.
- Require any new utility easements to be set back at least 50 feet from the right of way to maintain the tree canopy. Require new utility structures, such as communication towers and power-transmission lines, to be built in ways that minimize visual impacts to the highway.

GOAL: *Prevent visual intrusions that may degrade the corridor's appearance and character.*

- Amend the Zoning and Development Standards Ordinance to include Old Sheldon Church Road in the County's Highway Corridor Overlay District. Under this overlay district, the Northern Beaufort County Corridor Review Board will review architecture, landscaping, buffers, signage, and lighting for new non-residential

projects to ensure appropriateness and compatibility with the character of this corridor.

- Encourage property owners, conservation organizations and the County (through the Rural and Critical Lands Program) to purchase development rights or to secure conservation easements for critical parcels bordering the corridor.
- Maintain the rural zoning designations along the corridor.
- Encourage landowners to continue voluntary good stewardship of their land and maintain a communications network to inform and educate landowners about issues related to the corridor.
- Continue to coordinate with the County's Litter Control Program to ensure adequate volunteer help to pick up litter along the roadway. Provide signs along the road that set fines for littering and enforce them.

Implementation

Not all recommended strategies can be implemented at once. Some strategies will require a one-time effort while others will be ongoing. Still others will require much time and effort organizing and building partnerships and identifying funding sources to achieve results. Overseeing the implementation of this Plan will primarily involve the following entities:

- Citizen Steering Committee: Residents and landowners along Old Sheldon Church Road and surrounding areas are vital to ensuring that the goals and strategies outlined in this Plan are achieved. Up until now, an ad hoc advisory committee has been the driving force behind the effort to designate Old Sheldon Church Road as a Scenic Highway and develop this management plan. The work of this committee will now shift to implementation of the goals and recommendations outlined in the previous section.
- County Planning Department: The County Planning Department will continue to serve as staff to the Steering Committee and act as a liaison with other County and State agencies as necessary.
- Corridor Review Board: The Northern Beaufort County Corridor Review Board will review all proposals for non-residential development along the corridor in terms of architecture, lighting, landscaping, and general site layout.
- Historic Preservation Review Board: The Historic Preservation Review Board will review all applications for construction or demolition affecting those properties along the corridor that are on the National Register.

In addition to these specific entities, the implementation of this Plan will rely to a great extent on successful partnerships with the SCDOT, Beaufort County Council, the Sheriff's Department, SCE&G, and the St. Helena's Episcopal Church to ensure that Old Sheldon Church Road remains a Scenic Highway.

Appendix 7-A: Broad Economic Overview of Beaufort County

There is a seemingly endless supply of economic indicators available to try to gauge the performance of a national, state, or local economy. Indeed, there are so many statistics available that observers can be led stray by trying to assimilate all of the available information. Adding to the potential confusion is the fact that the 'performance' of an economy can be judged over a relatively short period of time, or over a relatively long period of time. The purpose of this section is to provide as concise of an economic overview as possible to provide context for the performance of Beaufort County's economy both currently and over the past decades. From the perspective of planning for economic growth, it is important to understand not just how a local economy is performing currently, but also what the major trends have been over a historical period that have contributed to the county's current economic situation.

The broad overview provided here will detail data that can be placed in one of two broad categories. The first includes economic data that describe the size of the Beaufort economy and how it has grown over time, including total income and total employment. However, it is also necessary to place these statistics in context by looking at data that help describe the quality of life for the local area and how it may have changed over time, including measures of per capita income, average wages, poverty rates, and unemployment rates.

Personal Income and Employment

One of the broadest measures of economic activity at the county level is personal income. Personal income data provide an estimate of income from all sources flowing annually to county residents. During 2005, total personal income in Beaufort County was $5,425,993,000.[1] Total personal income statewide stood at $120.1 billion in 2005. Beaufort's $5.4 billion in personal income ranked the county 8th statewide in terms of the level of total personal income, as shown in Figure 1.

[1] All personal income data are provided by the U.S. Bureau of Economic Analysis.

Figure 1. Total Personal Income, Top Ten S.C. Counties

2005 data, in $millions

Rank	County	Personal Income
1	Greenville	$12,930,894
2	Charleston	$11,254,449
3	Richland	$10,773,410
4	Lexington	$7,418,140
5	Spartanburg	$7,110,883
6	Horry	$6,094,976
7	York	$5,685,147
8	**Beaufort**	**$5,425,993**
9	Anderson	$4,726,306
10	Aiken	$4,264,267

Total personal income is comprised of three distinct sources of income: 1) labor earnings, 2) dividends, interest and rent, and 3) government transfer payments to individuals. During 2005, total personal income in Beaufort was made up of $3.0 billion in labor earnings, $1.7 billion in dividends, interest and rent, and $0.7 billion in transfer payments. Statewide in 2005, labor earnings accounted for 67 percent of total personal income. In Beaufort County, labor earnings accounted for just 56.1 percent of total income, placing the county 40th out of 46 counties. Meanwhile, dividends, interest and rent made up 30.6 percent of all income in Beaufort County. This was the highest percentage in the state, and more than doubled the statewide average of 14.3 percent. Meanwhile, Beaufort County ranked 46th in terms of the share of transfer payments in total income. Transfer payments accounted for 13.3 percent of all income in the county compared with a statewide average of 18.7 percent.

What do these various statistics reveal? Generally, variation across counties in the fraction of total income due to labor earnings is caused by the variation in a combination of labor force participation, unemployment, and average wages across counties. County differences in dividends, interest and rent payments are largely driven by differences in wealth, real estate values, and the size of the retiree population. Finally, differences in the relative importance of transfer payments are largely driven by differences in poverty, unemployment, wages, and the reliance on government social support programs.

A look at Beaufort's positioning in terms of the sources of total income reveals the unique nature of Beaufort's economy. The county ranks towards the bottom in terms of the share of personal income derived from labor earnings, as shown in Figure 2. Joining Beaufort in this ranking are primarily poor counties that in turn rely heavily on government transfer payments to provide income to residents, as illustrated in Figure 3 which provides the top ten counties in terms of the importance of government transfers (again, Beaufort ranks 46th out of 46 counties in this measure). Making up for these differences is the fact that Beaufort residents rely so heavily on dividend, interest and

rental payment as a source of income, the top ten counties for this measure are given in Figure 4.

Figure 2. Labor Earnings Share of Total Personal Income, Bottom Ten S.C. Counties

2005 data

Rank (of 46)	County	Labor Earnings Share
37	Barnwell	58.5%
38	Marlboro	58.3%
39	Williamsburg	57.4%
40	**Beaufort**	**56.1%**
41	Bamberg	56.1%
42	Marion	55.4%
43	Clarendon	55.4%
44	Allendale	54.8%
45	Georgetown	53.7%
46	McCormick	48.8%

Figure 3. Transfer Payments Share of Total Personal Income, Top Ten S.C. Counties

2005 data

Rank	County	Transfer Payments Share
1	Allendale	34.7%
2	Marion	34.1%
3	Williamsburg	32.8%
4	McCormick	32.7%
5	Bamberg	32.6%
6	Marlboro	32.0%
7	Dillon	31.6%
8	Lee	31.4%
9	Clarendon	31.3%
10	Barnwell	29.5%

Figure 4. Dividends, Interest and Rent Share of Total Personal Income, Top Ten S.C. Counties

2005 data

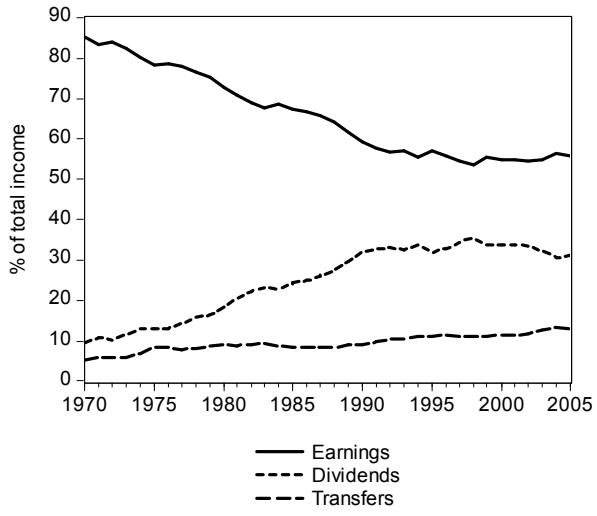
Rank	County	DI&R Share
1	**Beaufort**	**30.6%**
2	Georgetown	22.2%
3	McCormick	18.5%
4	Oconee	18.1%
5	Charleston	17.9%
6	Horry	16.5%
7	Greenville	14.9%
8	Greenwood	14.7%
9	Aiken	14.6%
10	Richland	13.9%

Taken together, these personal income statistics indicate the importance of retirees in the Beaufort County economy. The presence of a large retiree population has substantial implications for local economic development in terms of the type of industry moving into the area. This issue will be addressed in more detail subsequently.

How have these income trends developed over time? The reliance on dividend and interest types of income in Beaufort County primarily emerged between the early 1970s and the early 1990s as the relative reliance on labor earnings fell steadily. These trends between 1970 and 2005 are shown in Figure 5. Between 1970 and 1992, the share of total income derived from labor earnings fell from 85.3 percent to 56.7 percent. Between 1992 and 2005, this labor earnings share has remained roughly constant.

Figure 5. Beaufort County Personal Income Components

1970 - 2005



Meanwhile, the share of dividends, interest and rent surged from 9.5 percent in 1970 to 33.1 percent during 1992. Again, this share has remained fairly constant since 1992.

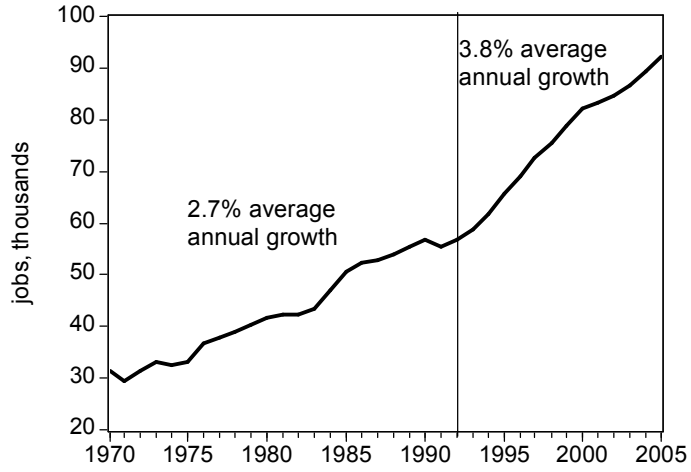
The share of government transfer payments has grown slightly over the full period, from about 5.2 percent in 1970 to 13.3 percent in 2005. These transfer payments include a wide range of government programs, including Social Security, Medicaid and Medicare benefits, as well as unemployment insurance and income maintenance benefits.

The differences in these income trends between the earlier (1970-1992) period and the more recent period (1993-2005) appear to be due to the recent economic development that has occurred in the county in response to the rising retiree population. The influx of retirees with their accumulated wealth to a relatively undeveloped Beaufort County during the 1970s and 1980s allowed for the dramatic shift in terms of major income sources. However, the ongoing growth of the retiree population has more recently triggered substantial economic development and job growth in the county. The details of this development will be addressed in the next section. However, it is apparent that growth in many service sectors, including health care, and finance, insurance and real estate, as well as construction sectors, has created more employment opportunities in the county.

This trend emerges in Figure 6 which shows total employment levels in Beaufort County between 1970 and 2005. Again, there appear to be two distinct periods of economic development in the county as illustrated by two different trends for total job growth. Between 1970 and 1992, total employment in the county grew at an average annual pace of 2.8 percent. Between 1993 and 2005, total employment grew at an average annual pace of 3.7 percent.

Figure 6. Beaufort County Total Employment

1970 - 2005



The faster pace of job growth since the early 1990s, driven largely by the service and construction sectors following in the wake of rapid population growth, have created employment and income opportunities that have worked to stabilize the share of income

derived from labor earnings seen earlier. Beaufort County is experiencing economic development that has worked to diversify the economy similar to other areas that have historically been driven by retiree and tourism activity.[2]

Having touched briefly on employment trends in the county, how does Beaufort County compare with others in terms of the size and growth of employment? There are many different estimates of employment available, including those generated by the U.S. Bureau of Labor Statistics, the U.S. Census Bureau, and the U.S. Bureau of Economic Analysis. Employment data provided by the U.S. Bureau of Economic Analysis work well for the current purposes because they provide a reasonable long history and are available consistently across every county.

According to this measure, there were a total of 92,245 jobs in Beaufort County in 2005, including both full- and part-time jobs, and including wage and salary employment, sole proprietorships and partnerships, as well as military jobs at the area's military installations (estimated to be 11,194 jobs in 2005). The corresponding figure for total employment in South Carolina in 2005 was nearly 2.4 million. Beaufort's employment total in 2005 placed in 7th out of the 46 counties, the top ten counties are given in Figure 7.

Figure 7. Total Employment, Top Ten S.C. Counties

2005 data

Rank	County	Total Employment
1	Greenville	291,275
2	Charleston	270,525
3	Richland	263,519
4	Spartanburg	145,974
5	Horry	140,764
6	Lexington	127,080
7	**Beaufort**	**92,245**
8	York	88,714
9	Anderson	82,889
10	Florence	80,696

Beaufort County's employment base has consistently been one of the fastest growing across South Carolina. Between 1970 and 2005, total employment in South Carolina nearly doubled as the number of jobs increased by 97.9 percent. Over the same period, employment in Beaufort nearly tripled as the county posted total job growth of 194.7 percent. As shown in Figure 8, Beaufort's pace of job growth from 1970 to 2005 was 5th fastest in the state.

[2] Detailed information on industry-level trends in Beaufort County will be discussed in the next section of this report.

Figure 8. Employment Growth 1970-1992, Top Ten S.C. Counties

Rank	County	Percent Growth
1	Berkeley	384.1%
2	Lexington	334.1%
3	Dorchester	320.4%
4	Horry	320.0%
5	**Beaufort**	**194.7%**
6	Georgetown	155.9%
7	Jasper	152.0%
8	Greenville	133.6%
9	York	132.6%
10	Aiken	123.2%

It was seen earlier that job growth in the county accelerated since the early 1990s. Between 1992 and 2005, total employment in Beaufort County grew by 62.4 percent. This was well ahead of the statewide average of 23.9 percent, and placed the county 3rd in the state behind just Berkeley and Calhoun Counties, as shown in Figure 9.

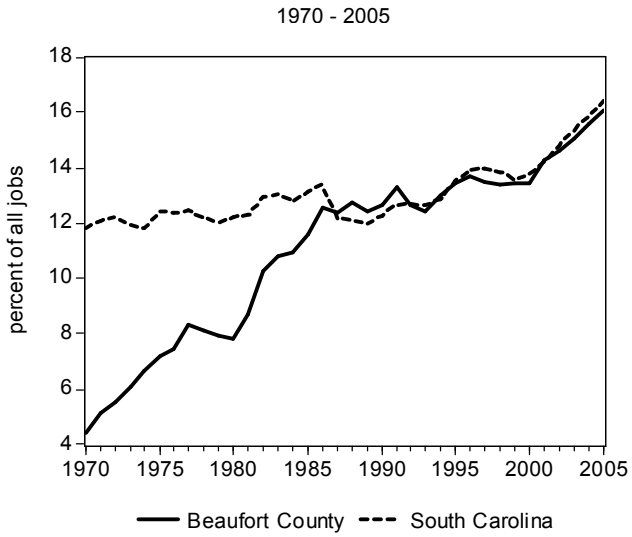
Figure 9. Employment Growth 1993-2005, Top Ten S.C. Counties

Rank	County	Percent Growth
1	Berkeley	78.7%
2	Calhoun	64.4%
3	**Beaufort**	**62.4%**
4	Lexington	59.5%
5	Jasper	58.4%
6	Horry	57.9%
7	Georgetown	54.1%
8	York	42.2%
9	Dorchester	36.1%
10	Greenville	30.2%

A noteworthy trend in total employment for Beaufort County has been the growth of sole proprietorships and partnerships. The presence of sole proprietorships and partnerships serves as a useful proxy for the degree of entrepreneurial activity within an economy. As of 2005, it is estimated that a total of 14,185 people in Beaufort County were either sole proprietors or partners in a partnership, this was 16.1 percent of all jobs. For South Carolina as a whole, 16.4 percent of all jobs were in sole proprietorships or partnerships. While Beaufort County slightly trailed the statewide average, it has seen strong growth in the presence of this type of entrepreneurial activity. As shown in Figure

10, this share in Beaufort County has risen fairly steadily since 1970 compared to the statewide average. This upward trend of entrepreneurial activity could prove to be a strength for Beaufort's economy moving forward if the county is able to capitalize on its strengths relative to nearby areas that are dealing with negative issues such as traffic congestion.

Figure 10. Entrepreneurial Jobs as Share of All Jobs



Measures of Living Standards

Economists typically turn to a few basic statistics when trying to gauge an area's relative standard of living. These measures are only able to compare areas in terms of incomes, wages, and unemployment conditions. They do not attempt to capture differences between areas in terms of such critical factors as: environmental quality, access to cultural or recreational amenities, cost of living, quality of health care, and the quantity and quality of infrastructure. Yet, statistics on per capita income, average wages, poverty rates, and unemployment do provide quantifiable benchmarks that are useful for comparing sub-state areas with each other in terms of the material well-being of county residents.

Per capita income is one of the most commonly cited measures of living standards. Per capita income is simply an area's total personal income divided by its total population. Per capita income makes no adjustment for differences in demographics, income sources, or cost of living between areas. Per capita income in Beaufort County stood at $39,308 in 2005. This was 139 percent of the South Carolina average, and was the highest in the state. Figure 11 lists both the top ten and bottom ten counties in terms of 2005 levels of per capita income. To again highlight the uniqueness of Beaufort County, it is the only county in South Carolina to post per capita income above the national average of $34,685. Per capita income in Beaufort County is roughly 15 percent

higher than the 2nd highest county (Charleston County), and is more than twice the level of Allendale County.

Figure 11. Per Capita Income, Top and Bottom Ten S.C. Counties

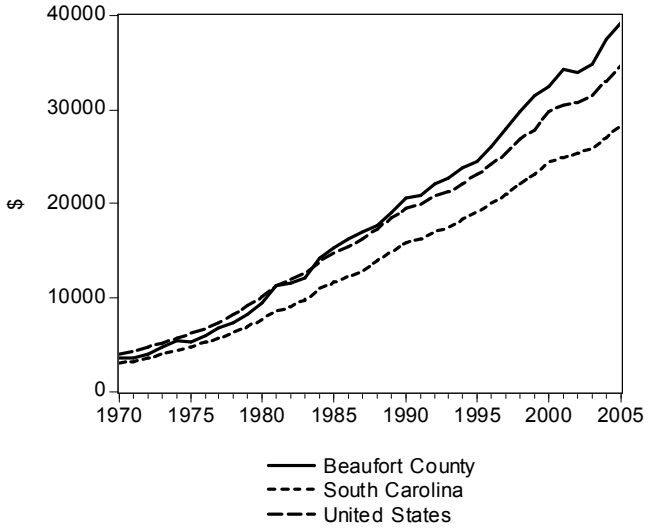
2005 Data

Rank	County	Per Capita Income	Rank	County	Per Capita Income
1	Beaufort	$39,308	37	Clarendon	$21,266
2	Charleston	$34,158	38	Bamberg	$20,989
3	Greenville	$31,759	39	Dillon	$20,850
4	Lexington	$31,575	40	Marlboro	$20,643
5	Richland	$31,518	41	Marion	$20,485
6	Georgetown	$30,399	42	Barnwell	$20,409
7	York	$29,904	43	Lee	$20,307
8	Kershaw	$28,595	44	McCormick	$20,299
9	Oconee	$28,561	45	Williamsburg	$20,005
10	Florence	$28,486	46	Allendale	$18,871

Figure 12 provides trends in per capita income for Beaufort County, South Carolina, and the United States between 1970 and 2005. Per capita income is growing over time suggesting long-term improvements in living standards.[3] Evident from this figure is the fact that Beaufort's per capita income has consistently been higher than the statewide average, and has been greater than the national average every since 1984. Also apparent is that Beaufort's per capita income has consistently been growing at a faster pace than the state or national averages.

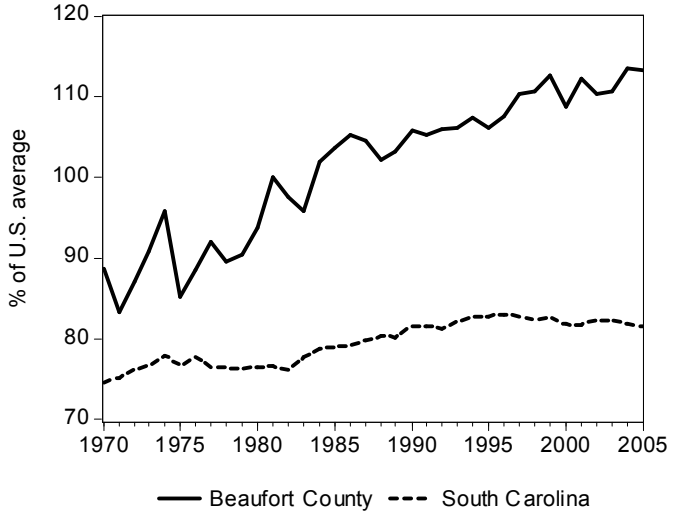
Figure 12. Per Capita Income

1970-2005



[3] An important caveat is that these data do not account for differences in the cost of living across geographic areas. Generally, per capita income has also been growing in inflation-adjusted terms.

Figure 13. Per Capita Income as a Fraction of the U.S. Average



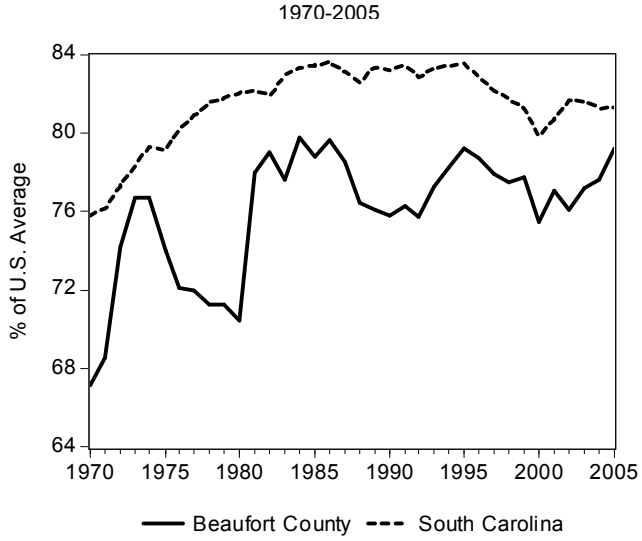
A common way to gauge gains in living standards over time is to look at an area's per capita income as a percent of the national average. Figure 13 provides a plot of per capita income in Beaufort County and for South Carolina relative to the national average. A challenge facing South Carolina's economy is readily apparent from this chart. Since the mid-1990s, South Carolina's per capita income has held roughly steady at about 81 percent of the national average. Again, this does not indicate that per capita income in South Carolina is not growing; rather, it serves to indicate that the state's per capita income growth is roughly matching the national average. However, even during this period that the state has failed to close the per capita income gap with the rest of the U.S., Beaufort County's per capita income continues to rise relative to the national average. Not only is per capita income growing in Beaufort, but it is consistently growing at a faster pace than the national average.

While Beaufort County's per capita income statistics suggest high and rapidly growing living standards on average, they do not tell the whole story. As seen earlier, Beaufort's personal income is drawn largely from dividends, interest and rent payments. Therefore, high per capita income alone does not imply high wage levels in the area. For this reason, it is also important to directly consider average wages in the county. In 2006, the average annual wage across all industries in Beaufort County stood at $33,257. This was slightly less than the statewide average of $33,958 and ranked the county 14th out of 46 counties. The average wage for the U.S. in 2006 was $41,991. Despite being well ahead of the national average in terms of per capita income, Beaufort County's average wages were just 79.2 percent of the U.S. average.

Figure 14 shows average wages as a percentage of the national average for both Beaufort County and South Carolina. This comparison is in sharp contrast to the relative per capita income comparisons made earlier. There, Beaufort's per capita income was not only above the national average, but was also consistently widening the gap above the

U.S. average. In terms of average wages, however, Beaufort County has been below both the national and statewide averages. Further, the county, like the state as a whole, has failed to close the gap with the national average since the early 1980s. That is, average wages in Beaufort are growing, but since the early 1980s they have grown at roughly the same pace as the national average, keeping average wages at roughly 76 to 78 percent of the U.S. average.

Figure 14. Average Wages as a Fraction of the U.S. Average



These wage trends highlight one of the challenges facing the Beaufort County economy. The county has benefited from the influx of retirees, many of whom bring considerable accumulated wealth to the area. This in-migration has sparked rapid economic development and job growth. However, these new jobs have not allowed the area to post relative gains in average wages. Like South Carolina in general, Beaufort County is generating new jobs. But, it remains faced with the challenge of attracting and creating higher-paying jobs.

While Beaufort's trends in terms of average wages are somewhat at odds with its per capita income growth, wage levels remain relatively high compared to many other areas in South Carolina. This has worked to keep Beaufort County's poverty rate among the lowest in the state. As of 2005, the overall poverty rate for all of South Carolina was 15.6 percent, compared with a national rate of 13.3 percent. Meanwhile, Beaufort County's poverty rate stood at 11.7 percent. As shown in Figure 15, Beaufort's poverty rate was 3rd lowest in the state ahead of just Dorchester and Oconee Counties. Meanwhile, fifteen counties in South Carolina had poverty rates of at least 20 percent during 2005.

Figure 15. Poverty Rates, Ten Lowest in S.C.

2005 Data

Rank	County	Poverty Rate
1	Dorchester	11.2%
2	Oconee	11.2%
3	**Beaufort**	**11.5%**
4	Lexington	11.7%
5	York	12.0%
6	Greenville	12.9%
7	Berkeley	13.4%
8	Kershaw	13.6%
9	Pickens	13.7%
10	Richland	14.3%

The average wage rate in Beaufort, while not experiencing growth on par with per capita income, has been sufficient to keep poverty rates relatively low. Similarly, the pace of total job growth across the county has been sufficient to keep the county's unemployment rate low. As of 2006, Beaufort County's jobless rate stood at just 5.0 percent. This was the 2nd lowest in the state, behind only Lexington County's 4.7 percent rate.

Overall, these broad economic indicators for Beaufort County serve to highlight the unique position of the county relative to the rest of the state. The county experiences unprecedented success in terms of the broadest measure of living standards, per capita income. While average wages in the area have not gained on the state or national averages, they have remained sufficiently high to keep the county's poverty rate among the lowest in South Carolina, and below the national average. Strong job growth and low unemployment further indicate the overall strength of the county's economy. Trends in terms of the relative growth of the major components of personal income suggest that economic diversification in the wake of retiree in-migration are helping to balance and stabilize the area's economy. However, the county is reaching appoint where economic development efforts should focus as much on raising the quality of new jobs as it does the quantity of new jobs. This task is much easier said than done, but additional trends highlighted through the remainder of this report may serve to suggest possible directions for these efforts.

Industry Structure of Beaufort County

An economy is made up of many different kinds of activity, and the economic structure varies greatly across local areas. Understanding the structure of the local economy is critical for understanding both the long- and short-term performance of an economy, as well as the long- and short-term challenges and opportunities facing an economy. For example, an economy that is heavily dependent on manufacturing activity is likely facing decades-long challenges in terms of job losses and plant closures. An economy heavily dependent on tourism is likely more susceptible to swings in nationwide consumer income and spending trends when compared to an area that has a large government or military presence. Industry diversification is commonly viewed as a goal of economic development. Generally, a diverse local economy is likely to be a more stable economy, one that is less susceptible to industry specific shocks that could cause volatility in more specialized economies.

The purpose of this section is to provide an overview of the industry structure of Beaufort County. First will be a look at the current makeup of the county's economy, focusing on the distribution of employment across sectors. Then, the analysis will focus on how this industry distribution has changed since 1990. The analysis presented in this section is a prelude to a more detailed economic base analysis to be offered later in this report.

The Industry Structure of Beaufort County

The current structure of the Beaufort County economy will be based on employment data provided by the U.S. Bureau of Economic Analysis. These job estimates indicate a total of 92,245 jobs in the county as of 2005. The distribution of these jobs across major sectors of the economy is given in Figure 16.[4] The largest sector in terms of employment in 2005 was Accommodation and Food Services with 11,506 workers. The Military was a close second with 11,194 jobs. Other large employment sectors in Beaufort County include Retail Trade (10,954 jobs), Construction (9,161 jobs), and Real Estate (6,834 jobs). The relatively smaller employing sectors include Utilities (173 jobs), Management (397 jobs), Information (923 jobs), Private Education Services (994 jobs), Wholesale Trade (1,004 jobs) and Manufacturing (1,192 jobs).

[4] These sectors are based on NAICS industrial codes.

Figure 17. Sectors with an Above Average Share of Total Jobs

2005 Data

Sector	Beaufort	South Carolina
Construction	9.9%	7.1%
Real estate and rental and leasing	7.4%	3.7%
Professional and technical services	5.1%	4.5%
Arts, entertainment, and recreation	3.1%	1.7%
Accommodation and food services	12.5%	8.0%
Other services	7.3%	5.8%
Federal, civilian	2.2%	1.2%
Military	12.1%	2.3%

Military	11,194
State government	1,070
Local government	6,002

These employment estimates are useful for a first glance at which sectors appear to dominate the local landscape. However, it is more useful to compare the relative size of these industries locally with their relative size at the state level. In this way, we can see how Beaufort differs from other areas in terms of the dominant types of economic activity.

Figure 17 provides the sector shares of total employment for both Beaufort County and South Carolina for those sectors that are relatively larger in Beaufort than the statewide average. Among the notable differences is the dominance of Military and Leisure and Hospitality (Arts, Entertainment and Recreation, and Accommodation and Food Services) sectors as sources of employment. Military jobs in Beaufort County account for 12.1 percent of total local employment. Statewide, Military jobs make up 2.3 percent of total employment. The Military jobs in Beaufort represent about 21 percent of the total Military presence in South Carolina.

The large presence of Leisure and Hospitality jobs indicate the reliance on tourism in Beaufort County. Taken together, jobs at local attractions, hotels and restaurants account for about 15.6 percent of total local employment compared to 9.7 percent of total employment statewide. The local Construction and Real Estate sectors also exhibit above average employment due to the area's population growth.

Overall, the statistics in Figure 17 indicate a local economy that relies heavily on the military, tourism, and housing as major sources of employment. While each of these sectors has been a valuable driver of the local economy historically, they also can present some challenges in the future. The military presence has provided a stable economic impact on the area. However, as the nature of national defense in the U.S. undergoes continuous evolution, the use of Federal Defense resources is always going to be subject

to re-evaluation. While the area avoided losing its military presence during the most recent round of Base Realignment and Closures (BRAC), there is no guarantee this will always be the case.

Tourism activity can be subject to overall economic conditions. A serious economic downturn nationally can lead to softer tourism activity and the loss of jobs and income for the industry. However, the local tourism industry is likely better insulated than others around South Carolina due to the high-end nature of the local tourism base. Also, any area that relies heavily on real estate and residential construction is susceptible to downturns in the housing market. The downturn in housing nationwide during 2007 and into 2008 has translated into job losses throughout the construction, real estate, and finance industries.

Figure 18 lists the sectors that are roughly equally represented in Beaufort County as in South Carolina. These sectors include mining, retail trade, information, and private educational services.

Figure 18. Sectors with an Average Share of Total Jobs

2005 Data

Sector	Beaufort	South Carolina
Utilities	0.2%	0.5%
Retail trade	11.9%	12.0%
Information	1.0%	1.4%
Educational services	1.1%	1.4%

Finally, those industries that are relatively underrepresented in Beaufort County are given in Figure 19. Most obvious in terms of sheer numbers is manufacturing. Just 1.3 percent of all jobs in Beaufort are in manufacturing. For South Carolina, manufacturing jobs account for 11.5 percent of total employment. The lack of a large manufacturing presence in Beaufort is beneficial in many ways. Manufacturing has suffered long-term declines in terms of employment and output. Beaufort County has not been directly subject to these structural job losses. At the same time, manufacturing jobs have been an important source of employment and income in South Carolina that have played an important role in maintaining a viable middle class.

Figure 19. Sectors with a Below Average Share of Total Jobs

2005 Data

Sector	Beaufort	South Carolina
Manufacturing	1.3%	11.5%
Wholesale trade	1.1%	3.2%
Transportation and warehousing	1.5%	2.7%
Finance and insurance	2.5%	3.8%
Administrative and waste services	5.8%	6.9%
Health care and social assistance	5.3%	7.3%
State government	1.2%	4.1%
Local government	6.5%	8.6%

The large military presence in Beaufort skews the comparisons given in Figures 17 through 19. Another way to consider the area's structural composition is to look at sector shares of total private sector employment. This ignores all government employment in the area. Figure 20 provides a list of the major sectors and the share of just private employment for each. Here, some of the patterns change slightly. For example, Beaufort's construction industry employs 12.8 percent of all private sector jobs, compared with 8.7 percent for the state as a whole. Similarly, there is now a larger difference between Beaufort and South Carolina's reliance on real estate as a source of employment.

These comparisons between Beaufort County and South Carolina in terms of economic structure are intended to provide just a first glance at the major industry differences. A more thorough look at these issues is provided via an economic base analysis in a later section of this report.

Figure 20. Sector Share of Private Employment

2005 Data

Sector	Beaufort	South Carolina
Utilities	0.2%	0.6%
Construction	12.8%	8.7%
Manufacturing	1.7%	13.9%
Wholesale trade	1.4%	3.8%
Retail trade	15.2%	14.5%
Transportation and warehousing	1.9%	3.3%
Information	1.3%	1.7%
Finance and insurance	3.2%	4.6%
Real estate and rental and leasing	9.5%	4.5%
Professional and technical services	6.6%	5.5%
Management of companies and enterprises	0.6%	0.6%
Administrative and waste services	7.5%	8.3%
Educational services	1.4%	1.6%
Health care and social assistance	6.8%	8.8%
Arts, entertainment, and recreation	4.0%	2.1%
Accommodation and food services	16.0%	9.7%
Other services, except public administration	9.4%	7.0%

The Evolution of Beaufort's Industry Structure

It is often of interest to consider not just what an area's economy looks like today, but also how it has changed over time. This helps shed light on how the economy is transforming, and how the economy may continue to evolve into the future. The U.S. Bureau of Economic Analysis data just presented to not lend themselves to a comparison over time. This is due to the reclassification of industry data from the historical Standard Industrial Classification (SIC) system to the current NAICS system. The comparable U.S. BEA data are only available for 2001 through 2005. To make a longer-term comparison, we will now utilize U.S. Bureau of Labor Statistics data on industry employment. These numbers are not comparable to the data used previously, and no reliable comparison can be made to the analysis given in the first part of this section.

Figure 21 provides a comparison of the employment shares for various sectors in Beaufort County for 1990 and 2006. Overall, the major trends apparent from this analysis are that many of the area's sectors have seen relatively small declines in their relative shares since 1990. These widespread small declines have been balanced by relatively large increases in the relative importance of a few major sectors. The construction sector's share of total employment increased from 8.3 percent in 1990 to 10.1 percent as of 2006. Health care saw its share of all jobs increase from 5.1 percent in 1990 to 8.7 percent in 2006. Other relative gains were posted in real estate, transportation and warehousing, professional, scientific and technical services, other services, and a slight increase in wholesale trade.

Figure 21. Sector Shares, 1990 and 2006

Sector	1990 Share	2006 Share
Construction	8.3%	10.1%
Manufacturing	3.1%	1.6%
Wholesale Trade	1.0%	1.1%
Retail Trade	17.1%	15.4%
Transportation and Warehousing	1.5%	2.0%
Utilities	0.5%	0.2%
Infomration	1.8%	1.2%
Finance and Insurance	3.0%	2.6%
Real Estate and Rental and Leasing	3.9%	4.4%
Professional and Technical Services	3.9%	4.2%
Adminstrative and Waste Services	6.3%	6.3%
Private Education	1.8%	1.1%
Health Care and Social Assistance	5.1%	8.7%
Arts, Entertainment and Recreation	4.1%	3.1%
Accommodation and Food Services	18.7%	17.7%
Other Services	5.4%	6.2%
Public Administration	5.6%	4.4%

Any industry claiming a higher share of total employment has seen its total job county grow at a faster pace than total county-level employment. The fastest growth between 1990 and 2006 was in health care. Health care jobs increased from 1,736 in 1990 to 5,355 in 2006. This was a 208 percent increase over a period that saw total employment in the county grow by about 82 percent.

Overall, Beaufort County has seen fairly balanced growth across sectors since 1990. This is in contrast to the overall South Carolina trends. Statewide, there have been large job losses – not just in relative terms, but also in terms of absolute numbers of jobs. No sector of the local Beaufort economy has posted large outright declines, rather, most sectors have been growing, but the health care and construction sectors in particular have posted very rapid rates of job growth since 1990.

Looking ahead, there is likely to be a slowdown in the rate of construction and real estate growth in the coming years as the local, state and national economies work to recover from the substantial housing downturn that began in late 2006. However, the rapid job growth in the local health care sector should continue unabated. If anything, health care jobs could potentially accelerate in coming years as the area continues to attract retirees and in general sees an aging population.

Beaufort County Economic Base Analysis

Economic base analysis is a fundamental technique used to help understand the key components of any local economy. Economic base techniques are based on the assumption that local economic activities can be categorized into *basic* and *non-basic* sectors. Basic activity refers to the production of goods and services that are exported outside of the local area. That is, basic production refers to output produced locally but consumed outside of the area, thus creating an inflow of dollars to the local economy.

Non-basic activity refers to goods and services produced locally for local consumption. Basic economic activities are often considered to be the engine of local economic growth. An economic base analysis can help identify those sectors locally that are export-oriented and that therefore tend to drive local economic growth. Typical examples of basic economic activities include manufacturing, natural resources, agriculture, and tourism.

Economic base analysis is important because the development and enhancement of basic activities is often seen as critical for strengthening and growing a local economy. An area's basic industries are typically considered the engines of local economic growth. Strong basic industries then lead to the further de elopement of an area's non-basic industries.

There are several analytical approaches to identifying an area's basic and non-basic sectors. One of the most common is based on the use of location quotients. In words, a location quotient is a calculated ratio between the relative size of an industry locally and the relative size of that same industry for a broader geographic unit. For example, to compare the Beaufort County economy and the national economy, a location quotient for any particular industry would be the ratio of that industry's employment share in Beaufort County to that same industry's employment share for the U.S. To use a concrete example, during 2006, the construction industry accounted for 11.83 percent of all jobs in Beaufort County. Nationwide, construction accounted for 6.74 percent of all jobs. The location quotient for Beaufort's construction industry is therefore 1.76 (1.76 = 11.83 / 6.74).

What is the interpretation of a location quotient? It is assumed that an area that sees a larger than average share of employment in a certain industry is producing more of that particular good or service than is needed to serve solely local needs. Therefore, this local industry must be in part producing to meet external demand beyond just the local economy. As such, any industry with a location quotient greater than one is producing output in part for external demand and can be considered a basic sector for the local economy.

In contrast, any industry with a location quotient less than one is assumed to be producing an insufficient amount of output to serve even the local demand, and the area is assumed to be importing this industry's output from outside the local economy. Therefore, an industry with a location quotient less than one is assumed to be a non-basic industry – one that at best is serving only local needs. Finally, an industry with a location quotient exactly equal to one is also considered to be a non-basic industry because it is producing exactly enough to meet local demand.

How can this information be used? Industries that emerge as basic industries are often viewed as the engines of local economic growth. They are industries that already have a relatively large presence and likely are responsible for a net inflow of spending into the local economy. Through further development and enhancement, these industries may continue to play an important role in local economic growth.

Meanwhile, the non-basic industries, particularly those with relatively low location quotients, indicate industries for which the local economy is importing production, resulting in an outflow of spending from the local economy. As such, by developing and enhancing these local industries, the local economy may be able to recapture some of the funds currently leaking out of the local economy via imports.

Given this background, we can turn to the economic base analysis for Beaufort County. This analysis will proceed through three levels of detail, from a broad industry definition working towards a more detailed industry level. These location quotients are based on detailed employment data provided by the U.S. Bureau of Labor Statistics, and exclude government employment. Therefore, this analysis focuses solely on private sector economic activity. Certainly, an economic base analysis that includes military employment would reveal the substantial military presence in Beaufort County. However, this military presence is largely exogenous to the area. That is, while the military is recognized as an important piece of Beaufort's economy, the growth and development of the military in the area is largely out of the hands of those in Beaufort County.

Figure 22 provides a list of location quotients at the 'supersector' level for Beaufort County. Specifically, this figure indicates each supersector's share of local employment, its corresponding share of national employment, and the calculated location quotient.

Figure 22. Supersector Location Quotients

2006 Data

Industry	Beaufort County Share	U.S. Average Share	Location Quotient
Leisure and Hospitality	24.29%	11.55%	2.10
Other Services	7.25%	3.87%	1.87
Construction	11.83%	6.74%	1.76
Unclassified	0.29%	0.22%	1.32
Financial Activities	8.06%	7.24%	1.11
Trade, Transportation, and Utilities	21.40%	23.07%	0.93
Professional and Business Services	12.92%	15.50%	0.83
Education and Health Services	9.63%	15.01%	0.64
Natural Resources and Mining	0.98%	1.58%	0.62
Information	1.45%	2.70%	0.54
Manufacturing	1.91%	12.52%	0.15

Here, five supersectors have location quotients in excess of one, suggesting that they are basic industries in Beaufort's economy. These basic industries include: leisure and hospitality, other services, construction, unclassified, and financial activities. On the surface, several of these industries should be expected to be basic for Beaufort County, specifically the importance of the local leisure and hospitality, construction, and financial sectors. Clearly 'other services' and 'unclassified' are not particularly useful industry groupings, and we will need greater industry detail to further understand the segments here that are basic sectors.

Meanwhile, six local supersectors have location quotients less than one and can therefore be considered non-basic industries. These include: trade, transportation and utilities, professional and business services, education and health services, natural resources and mining, information, and manufacturing. Again, without greater industry level detail, it is difficult to glean much from these results.

However, it is noteworthy that education and health care appear to be non-basic industries. Recall the interpretation of this finding. Local firms producing private education and health care services appear to be operating at a level below what would be expected for the local economy. This suggests that the area is currently importing these services from outside of the local economy. This is likely the case for Beaufort because of the proximity to Charleston and the relatively large health care complex located there. This suggests that the development of a larger local health care industry could benefit the Beaufort County economy is it would allow local firms to recapture some of the health care spending that is currently leaving the county.

Figure 23. Basic Industries, Sector Level

2006 Data

Industry	Beaufort County Share	U.S. Average Share	Location Quotient
NAICS 53 Real estate and rental and leasing	5.07%	1.91%	2.65
NAICS 71 Arts, entertainment, and recreation	3.64%	1.69%	2.15
NAICS 72 Accommodation and food services	20.66%	9.87%	2.09
NAICS 81 Other services, except public administration	7.25%	3.87%	1.87
NAICS 23 Construction	11.83%	6.74%	1.76
NAICS 99 Unclassified	0.29%	0.22%	1.32
NAICS 44-45 Retail trade	17.87%	13.64%	1.31

Digging deeper into this classification of basic and non-basic industries requires a greater level of industry detail. The next level of detail is available by looking at the 'sector' level. Location quotients can be calculated for a total of 18 sectors in the Beaufort economy. Of these 18 sectors, seven have been identified as basic industries. These basic industries, along with their relatively shares of employment and location quotients, are given in Figure 23. These basic industries include: real estate and rental and leasing (location quotient = 2.65), arts, entertainment and recreation (2.15),

accommodation and food services (2.09), other services (1.87), construction (1.76), unclassified (1.32) and retail trade (1.31).

Again, this list of basic industries for Beaufort County is dominated by industries associated with tourism, and real estate and construction that are largely driven by retiree and overall population growth.

Figure 24. Non-Basic Industries, Sector Level

2006 Data

Industry	Beaufort County Share	U.S. Average Share	Location Quotient
NAICS 56 Administrative and waste services	7.32%	7.36%	0.99
NAICS 54 Professional and technical services	4.82%	6.56%	0.73
NAICS 62 Health care and social assistance	8.61%	13.05%	0.66
NAICS 22 Utilities	0.29%	0.48%	0.60
NAICS 52 Finance and insurance	3.00%	5.33%	0.56
NAICS 51 Information	1.45%	2.70%	0.54
NAICS 61 Educational services	1.02%	1.96%	0.52
NAICS 48-49 Transportation and warehousing	1.91%	3.73%	0.51
NAICS 55 Management of companies and enterprises	0.78%	1.58%	0.49
NAICS 42 Wholesale trade	1.33%	5.22%	0.25
NAICS 31-33 Manufacturing	1.91%	12.52%	0.15

Figure 24 provides the list of the 11 local sectors identified as non-basic. These industries range from administrative and waste services (location quotient = 0.99) to manufacturing (location quotient = 0.15). Again we see that health care and social assistance has been identified as a non-basic industry, suggesting that health care services are being imported as local residents travel outside the county for health care. Also, we now find finance and insurance have been identified as non-basic, suggesting again that the local economy is not producing enough finance and insurance services to satisfy the local demand. Potential local finance and insurance services are being imported from outside of the county. Again, these services are likely being obtained in nearby areas including Charleston.

For the greatest level of detail, we can consider the location quotients of industries at the 'sub-sector' level in Beaufort County. The sub-sectors identified as basic industries for Beaufort County are given in Figure 25. Again, many of Beaufort's detailed basic industries are closely tied to tourism (including scenic and sightseeing transportation, accommodations, amusements, gambling and recreation, transportation, food services and drinking places) and to population growth (including real estate, personal and laundry services, clothing stores, construction and contractors, building material stores, furniture stores, motor vehicle dealers, and nursing and residential care facilities).

Figure 25. Basic Industries, Sub-Sector Level

2006 Data

Industry	Beaufort County	U.S. Average	Location Quotient
NAICS 487 Scenic and sightseeing transportation	0.11%	0.02%	5.50
NAICS 531 Real estate	4.49%	1.32%	3.40
NAICS 813 Membership associations and organizations	3.51%	1.16%	3.03
NAICS 721 Accommodation	4.47%	1.62%	2.76
NAICS 713 Amusements, gambling, and recreation	3.31%	1.23%	2.69
NAICS 812 Personal and laundry services	2.34%	1.14%	2.05
NAICS 448 Clothing and clothing accessories stores	2.62%	1.29%	2.03
NAICS 114 Fishing, hunting and trapping	0.02%	0.01%	2.00
NAICS 485 Transit and ground passenger transportation	0.69%	0.35%	1.97
NAICS 722 Food services and drinking places	16.19%	8.25%	1.96
NAICS 236 Construction of buildings	3.06%	1.59%	1.92
NAICS 238 Specialty trade contractors	7.51%	4.29%	1.75
NAICS 444 Building material and garden supply stores	2.04%	1.17%	1.74
NAICS 442 Furniture and home furnishings stores	0.78%	0.52%	1.50
NAICS 453 Miscellaneous store retailers	1.17%	0.79%	1.48
NAICS 237 Heavy and civil engineering construction	1.26%	0.86%	1.47
NAICS 451 Sporting goods, hobby, book and music stores	0.81%	0.58%	1.40
NAICS 999 Unclassified	0.29%	0.22%	1.32
NAICS 115 Agriculture and forestry support activities	0.37%	0.29%	1.28
NAICS 452 General merchandise stores	3.32%	2.62%	1.27
NAICS 445 Food and beverage stores	3.01%	2.50%	1.20
NAICS 447 Gasoline stations	0.89%	0.76%	1.17
NAICS 441 Motor vehicle and parts dealers	1.97%	1.69%	1.17
NAICS 623 Nursing and residential care facilities	2.90%	2.55%	1.14
NAICS 111 Crop production	0.49%	0.48%	1.02
NAICS 561 Administrative and support services	7.19%	7.05%	1.02

Many of these basic industries in Beaufort County are likely non-basic industries for the typical county. For example, personal and laundry services, clothing stores, and motor vehicle dealers, are often made up of local firms satisfying a largely local demand. However, local firms in these industries are meeting the demand of local residents, tourists, as well as retirees and other in-migrants to the area that may or may not be permanent residents.

Like tourism activity in general, in-migration of retirees and new residents, both permanent residents and those with second homes in Beaufort, can be thought of as an export activity. That is, new residents may have earned income and accumulated wealth outside of Beaufort County, but now choose to locate in the county and bring with them this accumulated wealth and its associated purchasing power. It is this in-migration that allows Beaufort County to see a larger presence of several basic industries that in other areas may well be non-basic industries.

Further, these basic service industries in Beaufort work to promote further population growth as the large presence of these industries makes the area attractive for additional in-migration.

The list of sub-sectors identified as non-basic is given in Figure 26. Included in this group are several sectors related to health care, financial services, professional, business and technical services, and manufacturing. Many of these sectors are those that typically can be expected to develop in an area in the wake of rapid population growth. Again, Beaufort County residents are likely turning to nearby urban centers for these services when not available locally. The relatively small presence of these types of firms, such as medical offices, insurance agents, banks, data processors, architects, engineers,

etc., suggests a potential for the county to market itself as a potential location for these firms.

Figure 26. Non-Basic Industries, Sub-Sector Level

2006 Data

Industry	Beaufort County	U.S. Average	Location Quotient
NAICS 811 Repair and maintenance	1.07%	1.10%	0.97
NAICS 492 Couriers and messengers	0.48%	0.51%	0.94
NAICS 446 Health and personal care stores	0.74%	0.86%	0.86
NAICS 711 Performing arts and spectator sports	0.30%	0.35%	0.86
NAICS 621 Ambulatory health care services	3.71%	4.69%	0.79
NAICS 517 Telecommunications	0.68%	0.86%	0.79
NAICS 522 Credit intermediation and related activities	1.99%	2.59%	0.77
NAICS 541 Professional and Technical Services	4.82%	6.56%	0.73
NAICS 443 Electronics and appliance stores	0.36%	0.49%	0.73
NAICS 512 Motion picture and sound recording industries	0.24%	0.33%	0.73
NAICS 814 Private households	0.33%	0.47%	0.70
NAICS 221 Utilities	0.29%	0.48%	0.60
NAICS 327 Nonmetallic mineral product manufacturing	0.25%	0.45%	0.56
NAICS 523 Securities, commodity contracts, investments	0.39%	0.73%	0.53
NAICS 611 Educational services	1.02%	1.96%	0.52
NAICS 518 Data processing, hosting and related services	0.17%	0.34%	0.50
NAICS 551 Management of companies and enterprises	0.78%	1.58%	0.49
NAICS 323 Printing and related support activities	0.24%	0.56%	0.43
NAICS 454 Nonstore retailers	0.16%	0.38%	0.42
NAICS 562 Waste management and remediation services	0.13%	0.31%	0.42
NAICS 488 Support activities for transportation	0.19%	0.50%	0.38
NAICS 314 Textile product mills	0.05%	0.14%	0.36
NAICS 484 Truck transportation	0.41%	1.26%	0.33
NAICS 511 Publishing industries, except Internet	0.26%	0.80%	0.33
NAICS 524 Insurance carriers and related activities	0.61%	1.91%	0.32
NAICS 423 Merchant wholesalers, durable goods	0.80%	2.72%	0.29
NAICS 315 Apparel manufacturing	0.06%	0.21%	0.29
NAICS 325 Chemical manufacturing	0.19%	0.76%	0.25
NAICS 424 Merchant wholesalers, nondurable goods	0.39%	1.80%	0.22
NAICS 332 Fabricated metal product manufacturing	0.29%	1.37%	0.21
NAICS 337 Furniture and related product manufacturing	0.10%	0.49%	0.20
NAICS 425 Electronic markets and agents and brokers	0.13%	0.70%	0.19
NAICS 712 Museums, historical sites, zoos, and parks	0.02%	0.11%	0.18
NAICS 311 Food manufacturing	0.20%	1.30%	0.15
NAICS 339 Miscellaneous manufacturing	0.08%	0.57%	0.14
NAICS 525 Funds, trusts, and other financial vehicles	0.01%	0.08%	0.13
NAICS 313 Textile mills	0.02%	0.17%	0.12
NAICS 493 Warehousing and storage	0.01%	0.56%	0.02

Overall, the results of this economic base analysis can be viewed from several angles. First, those industries that make up the economic base of the county are those that, through further support and development, may be able to continue to drive the local economy by being 'export-oriented' businesses.

However, there is also useful information available by examining the list of non-basic industries. Sectors that are currently non-basic to the local economy are those that are likely associated with an outflow of spending as local residents purchase these goods and services elsewhere. This can represent an opportunity for the county to work to develop and encourage more of these types of firms locally. By doing so, more income that is earned by local residents can stay within the Beaufort economy, helping further boost the local area.

Special Topics

The purpose of this section is to provide an overview of some specific factors affecting economic development in Beaufort County. These topics include the role of tourism in economic development, the role of the military in the local economy, and the effects of a growing retiree population.

Tourism and Economic Development

Tourism is a major industry in Beaufort County, as it is all along the South Carolina coast. It is difficult to measure the size of a local tourism industry because the 'industry' is comprised of businesses operating across a wide range of sectors. At the same time, not all activity at hotels, restaurants and shopping centers can be attributed to tourists alone. Despite the challenges, a recent report estimates that Beaufort County ranked 3rd in South Carolina in terms of total domestic travel spending during 2006.[5]

A few major indicators of travel-related activity for the top three counties in South Carolina are given in Figure 33. Total domestic travel spending in Beaufort County was $958.1 million during 2006. This represented about 10.5 percent of all travel-related spending in South Carolina. This level of tourism spending helped generate a total of $198.1 million in household income and 12.8 thousand jobs in the local economy. Further, these expenditures in the county worked to generate $53.7 million in state tax revenues and $31.1 million in local tax revenues.

Figure 33. Tourism Statistics

2006 Data

County	Direct Spending $millions	Payroll $millions	Jobs thousands	State Taxes Generated $millions	Local Taxes Generated $millions
Horry	$2,882.2	$586.7	37.9	$162.1	$118.3
Charleston	$1,456.2	$316.5	19.7	$78.6	$52.7
Beaufort	$958.1	$198.1	12.8	$53.7	$31.1
S.C. Total	$9,109.9	$1,873.3	112.0	$485.3	$306.4

[5] "The Economic Impact of Travel of South Carolina Counties 2006," prepared by the Travel Industry Association for the S.C. Department of Parks, Recreation & Tourism, August 2007.

Like many of the coastal areas in South Carolina, Beaufort County's tourism industry has an important relationship to overall economic development. That is, the local tourism industry itself is a critical source of jobs and income in the area, but it also supports broader economic growth in the region. This is because the tourism infrastructure in Beaufort, consisting of accommodations, restaurants, attractions, and public infrastructure in place to support tourism, also works to make the area more attractive to potential residents and businesses outside of the tourism industry.

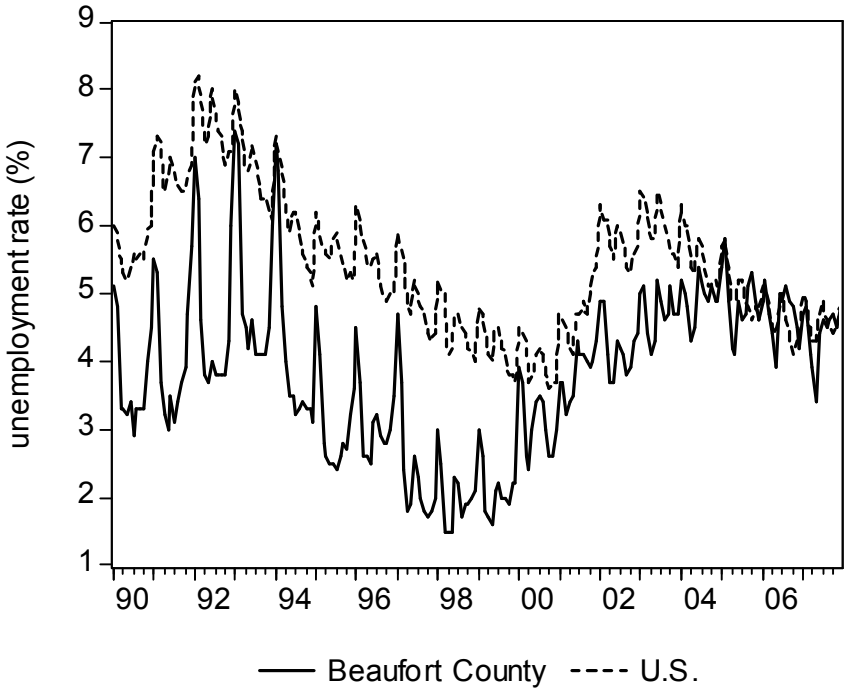
From the perspective of attracting businesses to the area, for example, among the top ranked factors for business location are cultural and natural amenities and recreation. That is, businesses consider such factors as tax burdens, availability of labor and transportation, but also important, particularly when trying to attract entrepreneurial or knowledge-based industry, is the presence of a vibrant service sector.

In this way, the impacts of Beaufort's tourism industry reach far beyond just the level of business enjoyed by hotels, restaurants and attractions. All along the South Carolina coast, the tourism industry and its service-sector offerings are helping to diversify and transform once highly seasonal economies into year-round urban centers.

One way to illustrate the trend towards a more year-round economy as Beaufort evolves and diversifies is to examine the changing seasonal variation in certain economic indicators. For example, Figure 34 provides a graph of Beaufort County's monthly unemployment rate from January 1990 to December 2007. Also shown here is the national average unemployment rate. Neither series has been adjusted for seasonality. Like the U.S. rate, Beaufort's jobless rate continues to exhibit swings throughout the course of the year as increased tourism and construction activity during the summer leads to a drop in unemployment while the off-season continues to be associated with relatively higher unemployment.

Figure 34. Seasonal Unemployment Patterns, Beaufort and U.S.

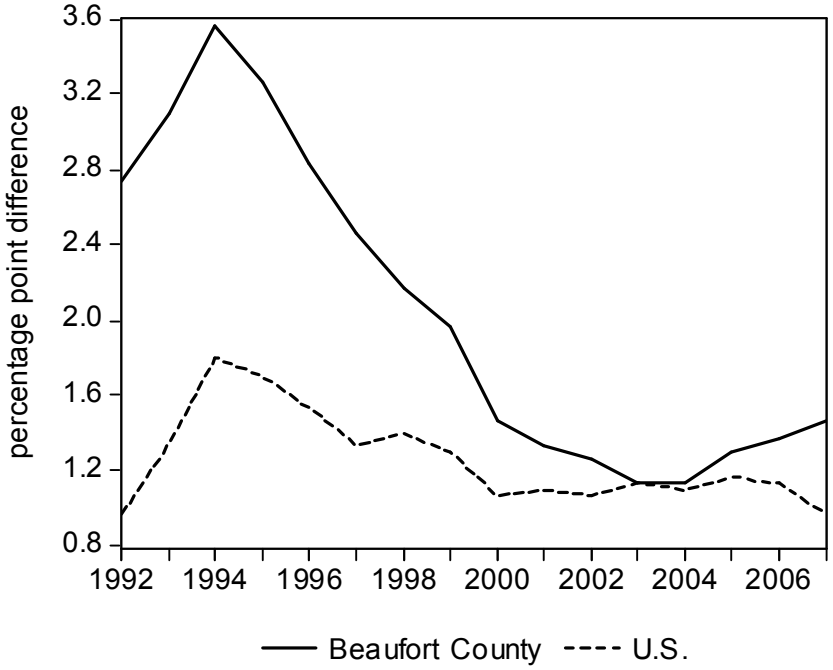
1990-2007



However, one apparent trend from this graph is the decline in the overall seasonal variation seen in the local economy since 1990. The swings in unemployment between the summer and the off-season are not nearly as pronounced as they once were. To further demonstrate this trend, Figure 35 provides a graph of the difference between the highest and lowest monthly jobless rate recorded during each year since the early 1990s.[6] This figure clearly indicates the overall decline in the degree of seasonality present in the Beaufort County economy. Meanwhile, the seasonal variation for the U.S. economy has remained generally unchanged, suggesting that this is a trend specific to the local economy.

Figure 35. Degree of Seasonal Variation in Unemployment, Beaufort and U.S.

1992-2007



This evolution towards a more year-round economy is critical in attracting permanent residents and businesses interested in enjoying the local service sector amenities throughout the year. Given the importance of tourism activity for the broader Beaufort economy, consideration of the quantity and quality of the area's tourism infrastructure needs to be included in any economic development plan for the area.

A major goal for local economic development nationwide is to seek economic diversification, a shift towards knowledge-based industry, and higher wages and incomes.

[6] Specifically, this graph provides the three-year moving average of the difference between the maximum and minimum unemployment rates for both Beaufort County and the U.S. from 1992 to 2007.

One key factor in fostering this type of environment is to continue to nurture the tourism industry because of the overlap between the services and attractions and amenities demanded by tourists and those that businesses and permanent residents seek. That is, even if a goal of economic development is to further encourage growth outside of tourism itself, the role of the local tourism industry itself cannot be overlooked.

The Economic Impact of the Military in South Carolina and Beaufort[7]

The many military installations dispersed across South Carolina are a substantial segment of the overall South Carolina economy. Bases around the state fuel economic activity by purchasing goods and services from the local community and by providing income to military and civilian personnel. In addition to these direct impacts that are due to the operations of the bases, additional benefits accrue to the state economy because of the military-related visitors and military retirees that they attract.

However, the ultimate impacts on the state and local economies do not stop with these direct expenditures associated with the military bases. Once an initial injection of funds occurs in the local economy, additional rounds of economic activity are supported by economic multiplier effects. By including these multiplier impacts, the true significance of military base operations to the state and local economies becomes clear. Further, the role of a military base in the local economy is somewhat unique in that the funding for the operations comes from the federal government. While some of this federal funding is the return of South Carolina tax dollars, much of the money used to support the military represents a true net addition to the South Carolina economy. In this way, the impacts of the military add to the economy as opposed to simply redistributing existing funds.

A 2004 analysis of the economic impacts of the military in South Carolina focused on the following segments of the state's military presence:

- The operations of Fort Jackson, Shaw Air Force Base and McEntire Air National Guard Station in the Midlands region
- The operations of the Charleston Air Force Base and Naval Weapons Station in Charleston
- The operations of the Marine Corp Air Station, Marine Corps Recruit Depot and Naval Hospital in the Beaufort area
- Military-related visitors, specifically to Fort Jackson, the Marine Corps Recruit Depot, and the Charleston area
- Military Retirees

The major results from that analysis included the following:

- A total of $7.3 billion in sales accrue annually to South Carolina businesses because of the military's overall presence in the state. Of this

[7] All figures reported in this section are taken from "The Economic Impact of the Military in South Carolina: A Focus on the Industry Distribution of Economic Activity," by Dr. Don Schunk, prepared for the South Carolina Governor's Military Base Task Force, Spring 2004.

total, $5.9 billion is due to military base operations, $1.3 billion is due to the in-state spending of military retirees, and just under $100 million is due to military-related visitors.

- Across South Carolina, a total of nearly 142,000 jobs are directly or indirectly supported by the presence of the military. This job total represents nearly 8 percent of total employment in South Carolina. Of this job total, about 54,000 are jobs directly at military bases while the remainder is spread across virtually every sector of the state's economy.
- The military's presence supports about $5.1 billion annually in personal income for South Carolinians. Again, this income flows throughout the economy, not just to those directly employed at the military installations.
- The total impact of the military on businesses in the Midlands amounts to $2.3 billion each year. This economic activity helps support 55,500 jobs and $1.9 billion in personal income in the Midlands area.
- The military's impact in the Charleston area amounts to $3.5 billion worth of sales at local businesses, a total of 64,300 jobs, and $2.2 billion in personal income.
- ***The military's presence in Beaufort supports a total of $717.5 million in sales at local businesses. This spending supports a total of 17,500 jobs and $614.6 million in personal income each year.***

These results clearly show the substantial impact of the military on South Carolina's economy. While the magnitude of these impacts is vital to understanding the importance of the military, it is also important to understand the breadth of the economic effects by estimating the industry distribution of this business activity. The following tables present the estimated impacts of the military around the Beaufort area, including a list of the 40 sectors of the local economy that are most affected by the military's presence. All of the estimated impacts presented in the following tables are based on direct data covering military base expenditures, visitor expenditures, and retiree income and expenditures. The direct spending figures come from a variety of sources, including direct correspondence with military bases, local economic development officials, and several federal government databases. These direct effects then form the basis for estimating the multiplier effects using IMPLAN, a widely used program for modeling economic impacts that relies on data specific to the state and county economies.

These results are integral for understanding the linkages between the military and the Beaufort County economy.

Figure 36. Military Impacts in Beaufort County

2003 Data

BASE OPERATIONS

Marine Corps Air Station

	Direct Impacts	Multiplier Impacts	Total Impacts
Business Sales	$172,591,529	$118,049,690	$290,641,219
Employment	5,125	3,470	8,595
Labor Income	$142,500,000	$98,915,978	$241,415,978

Marine Corps Recruit Depot

	Direct Impacts	Multiplier Impacts	Total Impacts
Business Sales	$150,117,662	$100,405,621	$250,523,283
Employment	2,705	2,992	5,697
Labor Income	$134,900,000	$84,669,348	$219,569,348

Naval Hospital

	Direct Impacts	Multiplier Impacts	Total Impacts
Business Sales	$53,992,691	$36,062,894	$90,055,585
Employment	1,120	1,025	2,145
Labor Income	$33,500,000	$30,802,580	$64,302,580

VISITORS

Marine Corps Recruit Depot

	Total Impacts
Business Sales	$10,963,274
Employment	199
Labor Income	$4,337,917

RETIREE SPENDING

	Total Impacts	Retiree Income
Business Sales	$75,335,692	
Employment	903	
Labor Income	$24,945,877	$60,000,000

OVERALL MILITARY IMPACT ON THE LOWCOUNTRY (BASE OPERATIONS AT MCAS, MCRD, MCRD VISITORS, AREA MILITARY RETIREES)

	Total Impacts
Business Sales	$717,519,053
Employment	17,539
Personal Income	$614,571,700

All dollar figures are in 2003 dollars. For base operations impacts, the direct impacts include: base expenditures in the local economy, the spending of personnel payroll in the local economy, and military and civilian employment directly at the base. MCRD visitor impacts are based on an estimate of $6.5 million in visitor spending annually. The $10.96 million impact of visitor spending includes the $6.5 million in direct spending and the multiplier effects of this direct expenditure. The retiree spending impacts are based on the local expenditures of retirees living in the 299 3-digit zip code area.

Figure 37. Annual Sales at Beaufort Businesses due to MCAS

2003 Data

	Industry	Annual Sales
1	Maintenance and Repair Other Facilities	$22,854,290
2	Other Business Services	$22,599,938
3	Real Estate	$16,559,736
4	Eating & Drinking	$11,308,756
5	Maintenance and Repair- Residential	$11,220,838
6	Doctors and Dentists	$10,596,819
7	Wholesale Trade	$8,655,669
8	State and Local Electric Utilities	$8,255,198
9	Communications- Except Radio and TV	$7,525,192
10	Banking	$7,446,452
11	Services To Buildings	$6,845,627
12	Automotive Dealers & Service Stations	$6,136,297
13	Miscellaneous Retail	$5,551,071
14	Food Stores	$4,771,349
15	Hospitals	$4,754,697
16	Insurance Carriers	$4,589,648
17	Electric Services	$4,216,401
18	Management and Consulting Services	$4,210,117
19	Engineering- Architectural Services	$4,143,626
20	Hotels and Lodging Places	$3,867,895
21	Other State and Local Govt Enterprises	$3,860,263
22	State/Local Govt NonEducation	$3,820,325
23	Cyclic Crudes- Interm. & Indus. Organic	$3,806,101
24	Motor Freight Transport and Warehousing	$3,533,490
25	General Merchandise Stores	$3,331,053
26	Legal Services	$2,887,716
27	Credit Agencies	$2,436,092
28	Automobile Repair and Services	$2,396,261
29	Amusement and Recreation Services-	$2,294,454
30	Accounting- Auditing and Bookkeeping	$2,282,224
31	Apparel & Accessory Stores	$2,123,925
32	Other Medical and Health Services	$2,094,866
33	Furniture & Home Furnishings Stores	$1,983,380
34	Transportation Equipment- N.E.C	$1,955,925
35	Apparel Made From Purchased Materials	$1,858,238
36	Building Materials & Gardening	$1,813,635
37	Security and Commodity Brokers	$1,787,570
38	Commercial Printing	$1,651,870
39	Miscellaneous Plastics Products	$1,518,635
40	Insurance Agents and Brokers	$1,471,669

The sales figures represent total sales, including the direct and multiplier-generated sales. These industries are the 40 most affected out of a total of more than 250 affected industries.

Figure 38. Annual Sales at Beaufort Businesses due to MCRD

2003 Data

	Industry	Annual Sales
1	Real Estate	$15,190,573
2	Maintenance and Repair Other Facilities	$14,901,221
3	Other Business Services	$14,756,347
4	Eating & Drinking	$10,778,502
5	Doctors and Dentists	$10,621,225
6	Maintenance and Repair- Residential	$7,944,896
7	Wholesale Trade	$7,854,052
8	Banking	$7,314,198
9	Communications- Except Radio and TV	$6,520,665
10	Automotive Dealers & Service Stations	$5,722,776
11	State and Local Electric Utilities	$5,419,029
12	Miscellaneous Retail	$5,221,782
13	Insurance Carriers	$4,821,881
14	Hospitals	$4,608,007
15	Services To Buildings	$4,514,824
16	Food Stores	$4,505,698
17	State/Local Govt NonEducation	$3,956,912
18	Electric Services	$3,929,396
19	Cyclic Crudes- Interm. & Indus. Organic	$3,701,116
20	Other State and Local Govt Enterprises	$3,563,343
21	Hotels and Lodging Places	$3,530,598
22	Management and Consulting Services	$3,180,524
23	General Merchandise Stores	$3,174,971
24	Motor Freight Transport and Warehousing	$3,102,712
25	Legal Services	$2,677,408
26	Engineering- Architectural Services	$2,674,520
27	Automobile Repair and Services	$2,226,730
28	Credit Agencies	$2,220,334
29	Amusement and Recreation Services-	$2,206,687
30	Other Medical and Health Services	$2,084,817
31	Apparel & Accessory Stores	$1,994,974
32	Transportation Equipment- N.E.C	$1,914,951
33	Furniture & Home Furnishings Stores	$1,855,882
34	Apparel Made From Purchased Materials	$1,820,632
35	Accounting- Auditing and Bookkeeping	$1,818,896
36	Building Materials & Gardening	$1,661,622
37	Security and Commodity Brokers	$1,584,289
38	Insurance Agents and Brokers	$1,546,135
39	Commercial Printing	$1,410,349
40	Miscellaneous Plastics Products	$1,402,244

The sales figures represent total sales, including the direct and multiplier-generated sales. These industries are the 40 most affected out of a total of more than 250 affected industries.

Figure 39. Annual Sales at Beaufort Businesses due to Naval Hospital

2003 Data

	Industry	Annual
1	Real Estate	$11,028,248
2	Management and Consulting Services	$6,253,460
3	Eating & Drinking	$3,823,725
4	Wholesale Trade	$3,229,790
5	Communications- Except Radio and TV	$2,958,774
6	Doctors and Dentists	$2,879,698
7	Other Business Services	$2,437,575
8	Cyclic Crudes- Interm. & Indus. Organic	$2,435,208
9	Banking	$2,339,082
10	Maintenance and Repair Other Facilities	$1,850,309
11	Legal Services	$1,701,772
12	Services To Buildings	$1,626,072
13	Hotels and Lodging Places	$1,592,501
14	Electric Services	$1,582,246
15	Automotive Dealers & Service Stations	$1,567,696
16	Miscellaneous Retail	$1,455,074
17	Motor Freight Transport and Warehousing	$1,436,239
18	Hospitals	$1,339,372
19	Maintenance and Repair- Residential	$1,319,854
20	Food Stores	$1,278,777
21	Insurance Carriers	$1,259,935
22	Other State and Local Govt Enterprises	$1,182,429
23	State/Local Govt NonEducation	$1,085,684
24	U.S. Postal Service	$1,075,126
25	Commercial Printing	$904,114
26	Accounting- Auditing and Bookkeeping	$896,912
27	General Merchandise Stores	$881,606
28	Automobile Repair and Services	$841,365
29	Credit Agencies	$839,235
30	Security and Commodity Brokers	$746,805
31	Miscellaneous Plastics Products	$670,128
32	Amusement and Recreation Services-	$629,470
33	Other Medical and Health Services	$584,813
34	Broadwoven Fabric Mills and Finishing	$571,230
35	Apparel & Accessory Stores	$565,449
36	Furniture & Home Furnishings Stores	$524,480
37	Periodicals	$516,936
38	Landscape and Horticultural Services	$503,624
39	Transportation Equipment- N.E.C	$479,341
40	Miscellaneous Publishing	$474,157

The sales figures represent total sales, including the direct and multiplier-generated sales. These industries are the 40 most affected out of a total of more than 250 affected industries.

Figure 40. Annual Sales at Beaufort Businesses due to MCRD Visitors

2003 Data

	Industry	Annual Sales
1	Miscellaneous Retail	$2,429,525
2	Hotels and Lodging Places	$2,369,552
3	Eating & Drinking	$2,235,967
4	Real Estate	$524,818
5	Communications- Except Radio and TV	$180,853
6	Wholesale Trade	$152,252
7	Other Business Services	$139,908
8	Banking	$137,623
9	Maintenance and Repair Other Facilities	$123,764
10	Electric Services	$117,803
11	Doctors and Dentists	$106,796
12	Management and Consulting Services	$105,382
13	Credit Agencies	$88,578
14	Hospitals	$82,667
15	Maintenance and Repair- Residential	$78,450
16	Automotive Dealers & Service Stations	$77,763
17	Motor Freight Transport and Warehousing	$74,108
18	Food Stores	$73,007
19	Other State and Local Govt Enterprises	$65,365
20	Legal Services	$61,053
21	Services To Buildings	$55,049
22	Accounting- Auditing and Bookkeeping	$54,072
23	Commercial Printing	$51,007
24	Automobile Repair and Services	$44,270
25	Miscellaneous Publishing	$43,105
26	General Merchandise Stores	$42,712
27	Radio and TV Broadcasting	$39,560
28	Periodicals	$39,365
29	Advertising	$36,511
30	Amusement and Recreation Services-	$35,942
31	Apparel & Accessory Stores	$32,768
32	U.S. Postal Service	$31,891
33	Motion Pictures	$31,529
34	State and Local Electric Utilities	$31,171
35	Furniture & Home Furnishings Stores	$30,414
36	Building Materials & Gardening	$29,606
37	Security and Commodity Brokers	$28,701
38	Other Medical and Health Services	$26,280
39	Laundry- Cleaning and Shoe Repair	$25,560
40	Sanitary Services and Steam Supply	$25,511

The sales figures represent total sales, including the direct and multiplier-generated sales. These industries are the 40 most affected out of a total of more than 250 affected industries.

Figure 41. Annual Sales at Beaufort Businesses due to Military Retirees

2003 Data

	Industry	Annual Sales
1	Real Estate	$5,197,039
2	Doctors and Dentists	$4,048,043
3	Eating & Drinking	$4,025,851
4	Wholesale Trade	$2,816,486
5	Banking	$2,579,290
6	Automotive Dealers & Service Stations	$2,101,054
7	Communications- Except Radio and TV	$2,022,859
8	Miscellaneous Retail	$1,947,998
9	Insurance Carriers	$1,853,890
10	Food Stores	$1,691,737
11	Hospitals	$1,680,899
12	State/Local Govt NonEducation	$1,608,558
13	Cyclic Crudes- Interm. & Indus. Organic	$1,508,058
14	Electric Services	$1,444,112
15	Other State and Local Govt Enterprises	$1,254,721
16	General Merchandise Stores	$1,214,683
17	Hotels and Lodging Places	$1,141,499
18	Maintenance and Repair- Residential	$1,097,364
19	Motor Freight Transport and Warehousing	$978,735
20	Other Business Services	$937,272
21	Maintenance and Repair Other Facilities	$930,791
22	Legal Services	$911,301
23	Amusement and Recreation Services-	$826,825
24	Transportation Equipment- N.E.C	$794,309
25	Automobile Repair and Services	$781,153
26	Other Medical and Health Services	$780,243
27	Credit Agencies	$777,482
28	Apparel Made From Purchased Materials	$770,208
29	Apparel & Accessory Stores	$741,393
30	Furniture & Home Furnishings Stores	$684,687
31	Management and Consulting Services	$615,734
32	Security and Commodity Brokers	$596,417
33	Insurance Agents and Brokers	$594,449
34	Building Materials & Gardening	$587,257
35	Miscellaneous Plastics Products	$525,807
36	Broadwoven Fabric Mills and Finishing	$473,919
37	Miscellaneous Publishing	$458,238
38	Accounting- Auditing and Bookkeeping	$431,906
39	Fluid Milk	$423,793
40	Meat Packing Plants	$421,118

The sales figures represent total sales, including the direct and multiplier-generated sales. These industries are the 40 most affected out of a total of more than 250 affected industries.

Figure 42. Annual Sales at Beaufort Businesses due to Overall Military Presence

2003 Data

	Industry	Annual Sales
1	Real Estate	$48,500,414
2	Other Business Services	$40,871,040
3	Maintenance and Repair Other Facilities	$40,660,375
4	Eating & Drinking	$32,172,801
5	Doctors and Dentists	$28,252,581
6	Wholesale Trade	$22,708,249
7	Maintenance and Repair- Residential	$21,661,402
8	Banking	$19,816,645
9	Communications- Except Radio and TV	$19,208,343
10	Miscellaneous Retail	$16,605,450
11	Automotive Dealers & Service Stations	$15,605,586
12	State and Local Electric Utilities	$14,506,476
13	Management and Consulting Services	$14,365,217
14	Services To Buildings	$13,369,724
15	Insurance Carriers	$12,543,899
16	Hotels and Lodging Places	$12,502,045
17	Hospitals	$12,465,642
18	Food Stores	$12,320,568
19	Cyclic Crudes- Interm. & Indus. Organic	$11,461,192
20	Electric Services	$11,289,958
21	State/Local Govt NonEducation	$10,471,479
22	Other State and Local Govt Enterprises	$9,926,121
23	Motor Freight Transport and Warehousing	$9,125,284
24	General Merchandise Stores	$8,645,025
25	Legal Services	$8,239,250
26	Engineering- Architectural Services	$7,255,072
27	Credit Agencies	$6,361,721
28	Automobile Repair and Services	$6,289,779
29	Amusement and Recreation Services-	$5,993,378
30	Other Medical and Health Services	$5,571,019
31	Accounting- Auditing and Bookkeeping	$5,484,010
32	Apparel & Accessory Stores	$5,458,509
33	Transportation Equipment- N.E.C	$5,147,216
34	Furniture & Home Furnishings Stores	$5,078,843
35	Apparel Made From Purchased Materials	$4,917,458
36	Security and Commodity Brokers	$4,743,782
37	Building Materials & Gardening	$4,561,756
38	Commercial Printing	$4,435,742
39	Miscellaneous Plastics Products	$4,128,940
40	Insurance Agents and Brokers	$4,022,197

The sales figures represent total sales, including the direct and multiplier-generated sales. These industries are the 40 most affected out of a total of more than 250 affected industries.

Effects of an Aging Population

South Carolina has consistently seen its population grow slightly faster than the national average in recent decades. Between 1980 and 1990, the state's population grew a total of 11.7 percent compared to 9.8 percent nationally. Between 1990 and 2000, South Carolina's population grew 15.1 percent while the nation's population grew by 13.1 percent. This trend appears to be continuing into the earliest years of the 21st century. Between the 2000 Census and 2004, South Carolina has seen population growth of 4.6 percent while the U.S. has grown by 4.3 percent.

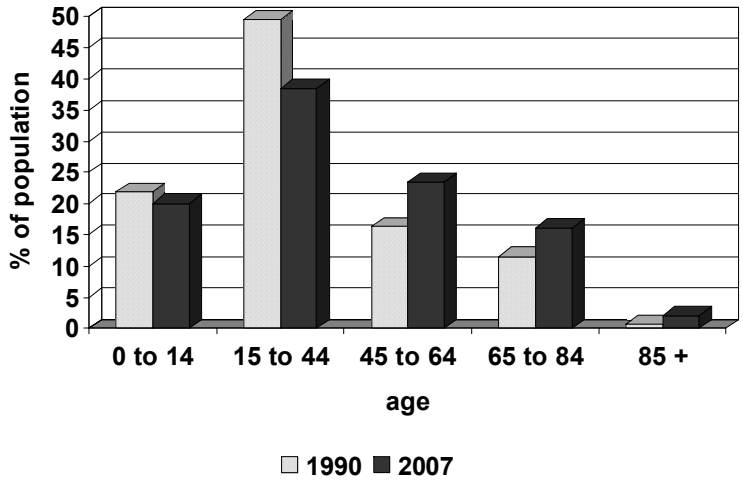
These are long-term trends that are likely to persist as the U.S. population continues to move towards the South and West from the North and East. Since 1790, the mean center of the U.S. population has moved roughly 1,000 miles to the West and South from Chestertown, Maryland in 1790 to Edgar Springs, Missouri as of 2000.[8]

South Carolina's population is not only growing relatively quickly, but it is also aging relatively quickly. In 1970, for example, 50.5 percent of the state's population was less than 25 years old. By 2000, the share of residents in this age range had fallen to 35.3 percent. Meanwhile, the share of the population aged 55 years and older has risen from 15.4 percent in 1970 to 21.4 percent in 2000. Between 1990 and 2000, the number of people aged 15 to 34 in South Carolina actually fell from about 1.15 million to less than 1.14 million.

The changing age distribution of Beaufort County's population between 1990 and 2007 is shown in Figure 43. Overall, the share of the county's population that is between the ages of 0 and 44 fell from 71 percent in 1990 to 58 percent by 2007. Meanwhile, the share of the population aged 65 and older rose from 12 percent to 18 percent over the same time period.

Figure 43. Beaufort County Population Distribution

1990 and 2007



[8] The U.S. Census Bureau issues the location of the mean center of the U.S. population after each decennial census. Between 1990 and 2000, the mean center of the population moved more than 12 miles south and more than 35 miles west.

This aging of the population will have substantial labor force and government finance impacts in the coming years and decades. For the U.S., according to the Bureau of Labor Statistics the percentage of the labor force aged 45 and older stood at 33 percent in 1998. It is estimated that by 2008, about 40 percent of the labor force will be 45 or older. Meanwhile, the percentage of the labor force between the ages of 25 and 44 is expected to fall from 51 percent in 1998 to 44 percent by 2008. Overall, the median age of the workforce should climb from 38.7 years in 1998 to 40.7 years by 2008.[9]

On a more detailed level, the wave of retiring baby boomers is expected to have the largest impacts on those industries and occupations that are generally less subject to productivity-enhancing gains in technology. For example, occupations such as education and health care tend to see lower gains in productivity. Therefore, large losses from retirement will directly impact the provision of education and health services unless new workers enter these fields. However, even in occupations that do see more productivity advances, such as manufacturing, there can be steep learning curves such that the loss of human capital and institutional knowledge will be felt.

Figure 44 provides estimates of the national retiree replacement needs for certain occupations. Here, the majority of the occupations facing the greatest replacement needs are service-related fields, many of them in education as well as health care and government.

Figure 44. Occupations with Greatest Retiree Replacement Needs, 1998-2008, U.S.

Occupation	Retiree replacement needs (thousands)
Secretaries	519
Truck drivers, heavy	425
Teachers, elementary school	418
Janitors and cleaners	408
Teachers, secondary school	378
Registered nurses	331
Bookkeepers, accounting and audit clerks	330
Teachers, college and university	195
Administrators, education and related fields	178
Farmers	175
Supervisors, construction occupations	165
Administrators and officials, public administration	143
Real estate sales occupations	144
Insurance sales occupations	135
Industrial machinery repairers	125
Maids and housekeeping cleaners	122
Private household cleaners	112
Physicians	108
Financial managers	102
Lawyers	99

source: Dohm, Arlene, "Gauging the labor force effects of retiring baby-boomers."

[9] Dohm, Arlene, "Gauging the labor force effects of retiring baby-boomers," *Monthly Labor Review*, July 2000, pp. 17- 25.

From the perspective of government revenue generation the aging of the population has three clear implications: one related to the income patterns of the population, one related to the spending patterns of the population, and one driven by the tax breaks for the elderly currently in South Carolina's tax code.

First, as the population continues to age, a growing share of the total population is leaving the peak labor earnings years. Not only does total income generally decline for the aging population, but the mix of income—in terms of labor earnings, transfers, dividends and interest—also changes, such that there can be relatively sharp drops in labor earnings for the aging population. Clearly, both the decline in total income and the shift away from labor earnings suggests downward pressure on individual income tax collections as the population ages. As the state's population continues to age, it is likely that individual income tax revenue will grow more slowly than in the past.

In addition to the income implications of an aging population, there are also shifts in expenditure patterns as people age. Nationally, 35- to 64-year-olds have the highest average level of total spending. In 1998, average household expenditures for this age group were $42,236. For those under 35 years of age, average household expenditures totaled $30,291. For those age 65 and older, average household expenditures were $24,721. Along with the decline in income comes a decline in average expenditures as individuals age. As such, with a growing share of the total population falling into the 65 years and older age group, we would expect to see downward pressure on total expenditures and, therefore, on total sales tax collections (U.S. Bureau of Labor Statistics, 2000).

However, not only will an aging population generally spend less in total, but the composition of those expenditures will also change. Compared with the younger population segments, those age 65 and older spend about the same percentage of total expenditures on food and housing. Meanwhile, they spend a relatively smaller percentage on apparel, services, transportation and entertainment. As might be expected, the older population allocates a substantially greater portion of total expenditures on health care. For example, households in the under-35-age group allocate about 3.2 percent of total spending towards health services. Households between 35 and 64 years spend about 4.7 percent on health care. For the older population, 11.9 percent of all expenditures are for health care services. In fact, not only does this oldest group allocate a greater portion of total spending towards health care, they also spend more on health care in absolute terms than younger households (U.S. Bureau of Labor Statistics, 2000).

Overall, as a greater share of the total population reaches age 65 and older, South Carolina can expect to see a growing number of individuals who not only have lower incomes and lower levels of spending, but there will also be a shift away from spending on traditionally taxable goods towards greater spending on health services—traditionally a nontaxed component of consumer expenditures. As was the case for individual income tax revenues, the aging of the population and the associated shifts in spending patterns would tend to exert downward pressure on sales tax revenues. As the population ages, it is likely that sales tax revenue growth will generally be slower than it has been in the past.

Finally, the aging population will also mean a growing number of South Carolinians will be eligible for the various types of tax breaks currently offered to seniors in the state. These tax breaks include the property tax homestead exemption, individual income tax deductions for those over 65, and the lower sales tax rate for those aged 85 and older. The fact that South Carolina can expect an increasing share of the total population to become eligible for these tax breaks again suggests that the state's revenue system will face increased pressures in the future.

The above discussion suggests that the aging population may create challenges both for the economy and for government budgets. However, these impacts can vary sharply from area to area. In Beaufort County, for example, a large number of relatively wealthy retirees moving into the area will likely have overall positive impacts on the local area. Retirees moving into the area may leave a hole in the labor force in their source region, but won't create any labor force replacement challenges locally in Beaufort.

Indeed, the opposite situation could occur if a portion of these relocating households choose to enter the local labor force. This group likely brings with them a wealth of experience that can benefit and help diversify the local economy whether they directly enter the local labor force, or if they choose to provide assistance to local groups and businesses. That is, retirees to the Beaufort area will bring with them a great deal of knowledge and experience, and to the extent they can become engaged in the local community, they can be tremendous assets for the local economy.

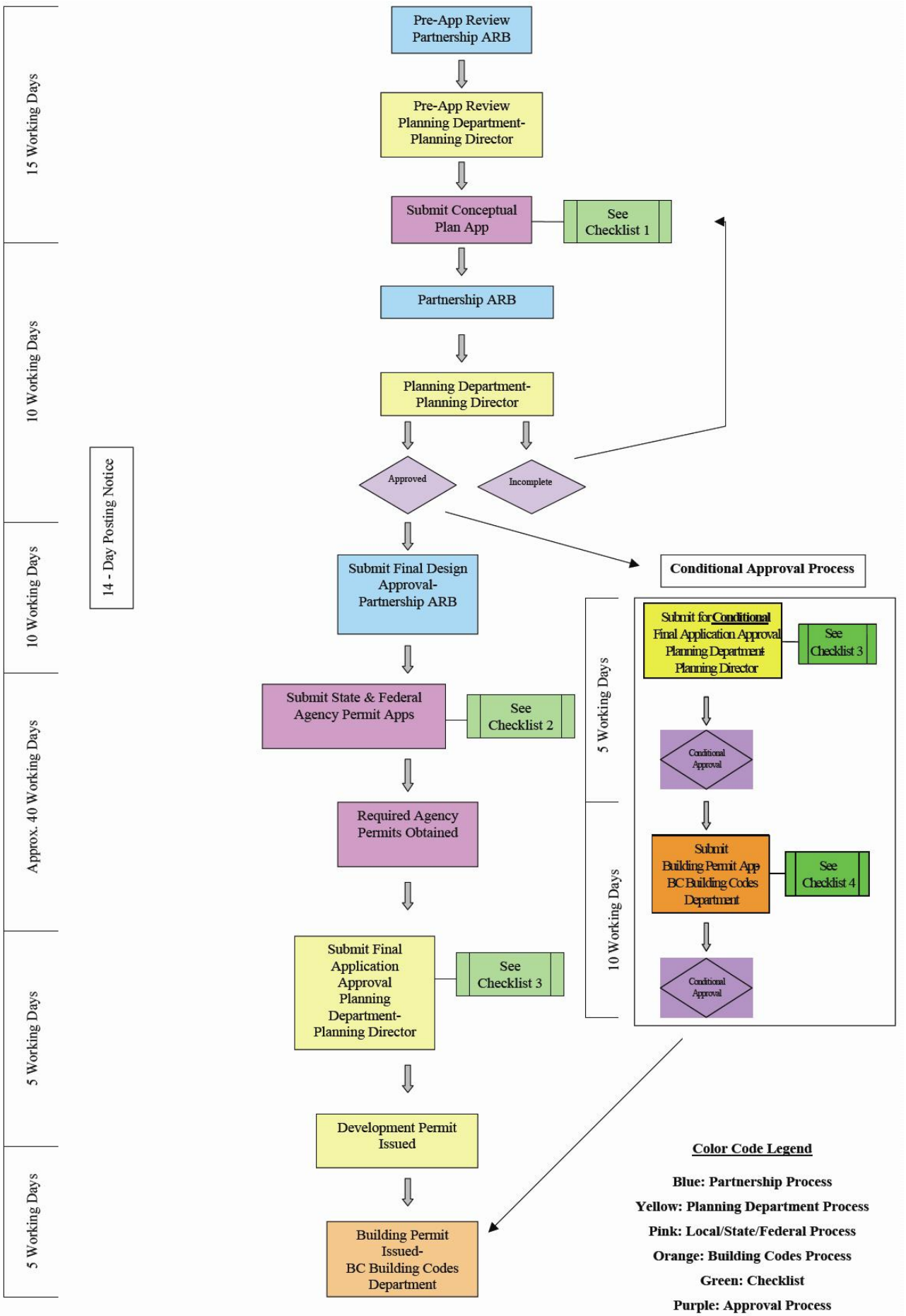
Further, the spending patterns of the retiree population outlined above help dictate the types of economic development that can occur in the wake of this population growth.

Appendix 7-B - State Economic Development Incentive Comparisons

Incentive	SC	NC	GA
Use of state funds for Site Acquisition & Development	Increased debt ceiling 5 to 5.5% to issue bonds for site acquisition & development	Can do on project-by-project basis - typically for projects with large economic impact Some counties will provide land at no cost	Has committed $20M in appropriations for site acquisition; unclear it state has also used bonds for site acquisition, but the legislature authorized $80M in 20-year bonds for the purchase of mega sites
Job Development Grant (taken against employee withholding taxes)	No statutory caps; purpose & object of grantee expenditures of grant monies is restricted	Up to 75% of withholding; annual cap of $10M; positive fiscal impact required; maximum of 15 projects per year; maximum term 10 years	New manufacturing facility: 6% of the cost of qualified investment property - $50M limit for any one project
Discretionary Grants	Economic Development Set-Aside Program receives $18M annually from state gasoline tax collections	Appropriation of $20M for the One North Carolina Fund in 2004. Additional appropriations are planned for 2005-2006. Funds can be used for most project purposes, such as equipment, building &/or utility improvements, etc.	Regional Economic Business Assistance Grant Program receives $2M - $5M annually in state appropriations. One Georgia Fund provides $10M annually for grants &/or loans to close deals (EDGE Grants) & another $10M annually for grants &/or loans to improve infrastructure, workforce or tourism in Tier 1 & 2 counties. One Georgia is funded with $62M from Georgia's tobacco settlement
Incentive	**SC**	**NC**	**GA**
Research & Development (R&D) Tax Credit	5% of total qualified research expenditures in SC Applies to all companies	5% of NC apportioned share of increase in qualified research expenditures Applies to WS Lee-eligible companies only	10% of increase in qualified research conducted in GA Applies to manufacturing, warehousing & distribution, processing, telecommunications, tourism & R&D industries
Job Creation Tax Credit	Up to $40,000 per job in most distressed' tier - $8,000 annually for 5 years	Up to $12,5000 per job in Tier 1	Up to $26,250 per job in most distressed' tier - $5,259 annually for 5 years
Machinery & Equipment (M&E) Tax Credit	Up to 5% of investment in qualified' manufacturing & productive equipment properties. A one-time economic impact zones credit - limited to $1M	Up to 7% of M&E placed in service for Tiers 1 & 2	Up to 5% of the cost of all qualified investment property purchased or acquired. An optional credit available - up to 10% - but availability depends on the aggregate costs of the investment, among other factors
Headquarters or Central Administrative Office (CAO) Tax Credits	Headquarters credit of 20% of initial capital investment. Not limited to 50% of corporate tax liability LLC credit requirement - minimum 40 HQ jobs at 2 x County per capita income level	Minimum of 40 new CAO jobs. Maximum available credit of 7% of the cost of CAO property purchased to a maximum credit of $500,000	Minimum of 100 new jobs: $2,500 to $5,000 per job annually for 5 years (amount per job depends on salary level). Credits claimed may not exceed $25M

Source: GA Department of Commerce, NC Department of Commerce, SC Department of Commerce

Appendix 7-C – Beaufort Commerce Park Development Flowchart



Appendix 8-A. Supplementary Housing Data

TABLE H-1. HOUSING SUMMARY DATA TABLE								
Statistic	Northern Beaufort County				Southern Beaufort County			County Total
	Unincorporated	Beaufort	Port Royal	Yemassee[1]	Unincorporated	Bluffton	Hilton Head	
Population, 2000	50,470	12,950	3,950	116	18,314	1,275	33,862	120,937
Housing Units, 2000	19,502	5,080	1,792	58	8,929	501	24,647	60,509
Housing Units, 1990	15,250	4,149	1,277	58	3,439	299	21,509	45,981
Change, 1990-2000	27.9%	22.4%	40.3%	0.0%	160.0%	67.6%	14.6%	31.6%
Occupied Units, 2000	16,606	4,598	1,660	51	7,744	465	14,408	45,532
Owner Occupied Units	12,139	2,692	755	2	6,184	375	11,191	33,338
Renter Occupied Units	4,467	1,906	905	49	1,560	90	3,217	12,194
Vacant Units	2,896	482	132	7	1,185	36	10,239	14,977
Vacant, part-time use[2]	1,423	66	15	6	733	10	7,360	9,613
Group Quarters *Correctional Facilities*	1	162	0	0	0	0	0	163
Group Quarters *Military*	3,788	1,631	123	0	0	0	208	5,750
Group Quarters[3] *Other Institutions*	168	241	53	0	0	0	234	696
Persons Per Hsld[t4] *Occupied Units*	3.04	2.82	2.38	2.27	2.36	2.74	2.35	2.66
Persons Per Unit *All Housing Units*	2.59	2.55	2.20	2.00	2.05	2.54	1.37	2.00
Median House Value[4]	$112,949	$106,300	$84,700	$54,800	$238,802	$129,600	$280,100	$168,100
Median Contract Rent[4]	$482	$480	$537	$230	$851	$591	$750	$591
Median Year Built[4]	1985	1968	1982	1975	1996	1984	1985	1986

Notes: 1. Yemassee figures represent the portion of the town in Beaufort County; figures derived from 2000 census block level data. 2. These are housing units held for temporary use, such as second homes; owners or occupants are counted as resident in their principal place of residence. 3. This category includes nursing homes, group homes, and similar facilities. 4. Figures for these statistics (persons per unit, house value, contract rent, and year built) were interpolated mathematically for the unincorporated areas; for Yemassee the figures are based on entire city.

Figure H-1. Housing Units by Area, 1990-2000

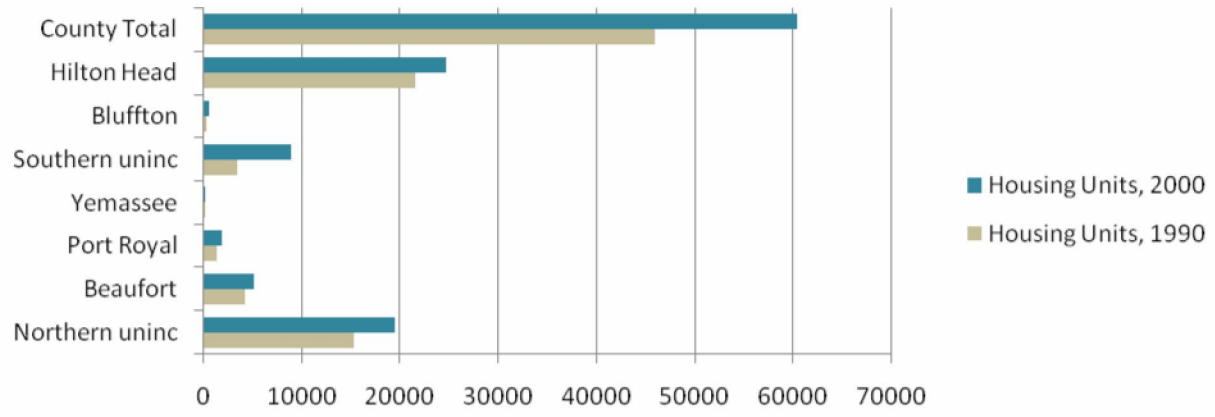


Figure H-2. Occupied Units, 1990-2000

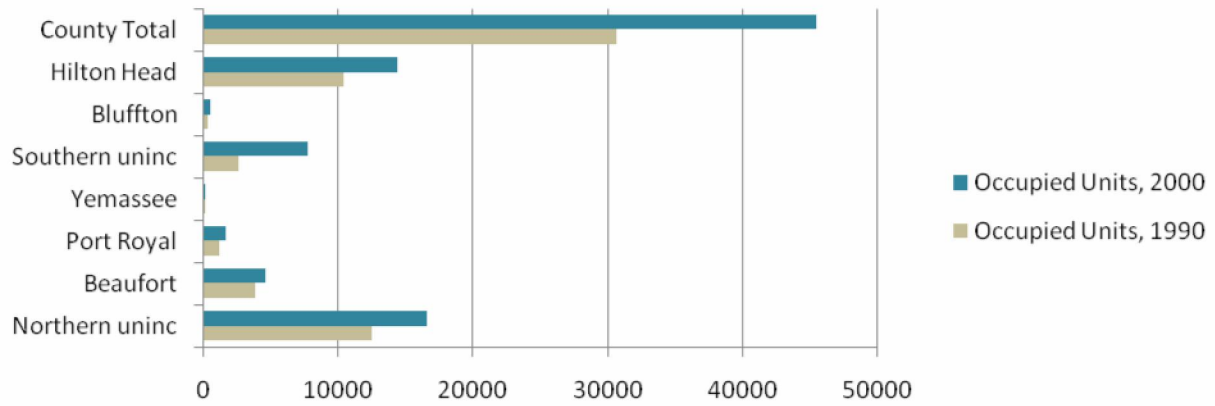


Figure H-3. Vacant and Vacant Part-Time Units, 2000

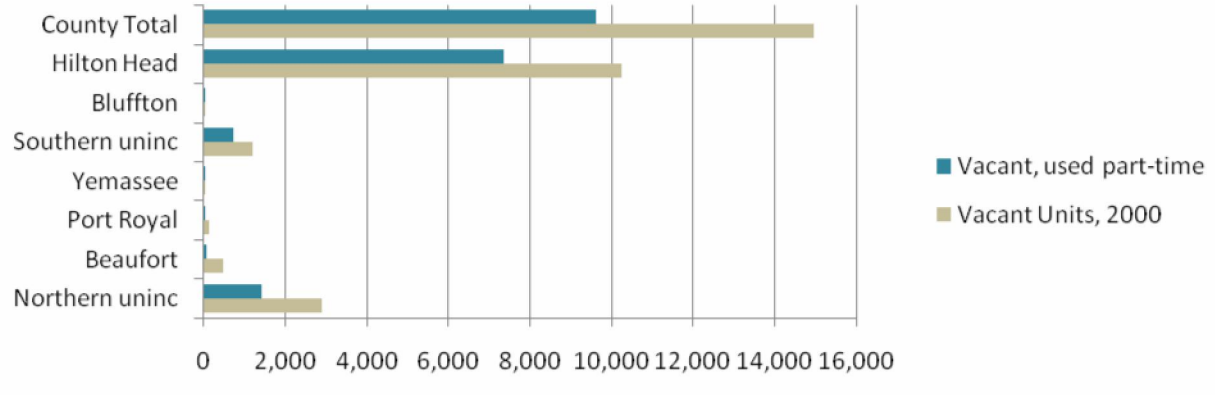


Table H-2. Population Housing Data by County Sub-Area, 2000								
Geographic Area	Population	Housing Units	Occupied housing units	Average house-hold size	1.01 or more occupants per room	House-holder moved into unit 1999 to March 2000	Housing units per sq. mile	No vehicles avail-able
Beaufort County	120,937	60,509	45,532	2.51	4.3	25.4	103.1	6.5
SUB-AREA								
Beaufort-Port Royal CCD	44,563	15,315	14,116	2.72	5.3	28.9	188.8	8
Beaufort city (part)	12,870	5,052	4,625	2.3	2.6	24.3	292.1	9.1
Burton CDP	7,180	2,690	2,462	2.85	6.3	26.6	243.8	7.2
Laurel Bay CDP	6,625	1,955	1,912	3.59	9.9	38.9	415.9	2.2
Parris Island CDP	4,841	358	318	3.21	1.9	49.4	29.4	0
Port Royal town (part)	3,950	1,792	1,631	2.36	5.5	39.9	476	9.8
Shell Point CDP	2,856	1,103	1,045	2.79	4.2	19.2	180.5	3.8
Remainder of B-PRI CCD	6,241	2,365	2,123	2.9	7.1	25.7	90.8	13.3
Bluffton CCD	19,044	9,102	7,941	2.4	2.4	30.6	50.5	4.7
Bluffton town	1,275	501	514	2.72	4.5	12.3	14.7	11.1
Hilton Head Island town (part)	0	0	0	0	n.a.	n.a.	0	n.a.
Remainder of Bluffton CCD	17,769	8,601	7,427	2.38	2.3	31.8	58.7	4.3
Hilton Head Island CCD	34,407	24,975	14,676	2.31	3.9	24.8	585.6	4.5
Hilton Head Island town (part)	33,862	24,647	14,403	2.31	4	24.7	586	4.5
Remainder of HHI CCD	545	328	273	2.32	0	32.2	558.2	3.7
St. Helena CCD	18,807	9,389	7,282	2.57	3.9	17.4	65.5	8.6
Beaufort city (part)	80	28	55	2.58	0	21.8	21.2	0
Hilton Head Island town (part)	0	0	0	0	n.a.	n.a.	n.a.	n.a.
Port Royal town (part)	0	0	0	0	n.a.	n.a.	0	n.a.
Remainder of St. Helena CCD	18,727	9,361	7,227	2.57	3.9	17.4	66	8.7
Sheldon CCD	4,116	1,728	1,517	2.74	9.6	11.3	12.4	11.1
Yemassee (part)	116	58	47	2.77	14.9	14.9	35.8	48.9
Remainder of Sheldon CCD	4,000	1,670	1,470	2.73	9.4	11.2	12.1	9.9
PLACE								
Beaufort city	12,950	5,080	4,680	2.3	2.6	24.2	272.9	9
Bluffton town	1,275	501	514	2.72	4.5	12.3	14.7	11.1
Burton CDP	7,180	2,690	2,462	2.85	6.3	26.6	243.8	7.2
Hilton Head Island town	33,862	24,647	14,403	2.31	4	24.7	586	4.5
Laurel Bay CDP	6,625	1,955	1,912	3.59	9.9	38.9	415.9	2.2
Parris Island CDP	4,841	358	318	3.21	1.9	49.4	29.4	0
Port Royal town	3,950	1,792	1,631	2.36	5.5	39.9	461.5	9.8
Shell Point CDP	2,856	1,103	1,045	2.79	4.2	19.2	180.5	3.8
Yemassee (part)	116	58	47	2.77	14.9	14.9	35.8	48.9

Sources: U.S. Census Bureau, Census 2000 Summary File 1; GCT-PH1: Population, Housing Units, Area, and Density and Census 2000 Summary File 3, Matrices H6, H18, H20, H38, H40, H42, H43, and H44.

Table H-3. Housing Data by Census Tract, 2000								
Tract	Population	Housing Units	Occupied	Vacant	Owner occupied	Renter occupied	Vacant	Avg Hsld Size
Northern Beaufort County								
1	4,116	1,728	1,522	206	1,228	294	206	2.7
2	5,164	1,895	1,707	188	1,362	345	188	3.03
3	5,633	1,591	1,553	38	443	1,110	38	3.63
4	2,123	208	175	33	24	151	33	2.81
5	12,999	5,024	4,632	392	3,110	1,522	392	2.78
6	2,449	1,180	1,075	105	614	461	105	2.27
7	6,558	2,936	2,655	281	1,653	1,002	281	2.33
8	4,796	2,123	1,996	127	924	1,072	127	2.31
9	9,321	3,736	3,521	215	2,842	679	215	2.65
10	4,841	358	318	40	127	191	40	3.31
11	8,407	4,015	3,211	804	2,775	436	804	2.59
12	1,079	1,638	550	1,088	486	64	1,088	1.96
Subtotal	67,486	26,432	22,915	3,517	15,588	7,327	3,517	2.53
Southern Beaufort County								
21	14,246	6,565	5,846	719	4,398	1,448	719	2.44
22	4,798	2,537	2,095	442	1,913	182	442	2.29
101	2,024	3,132	1,015	2,117	922	93	2,117	1.99
102	3,956	2,925	1,872	1,053	1,452	420	1,053	2.09
103	3,844	2,676	1,812	864	1,434	378	864	2.09
104	2,836	1,055	927	128	793	134	128	3.06
105	2,780	1,220	1,120	100	774	346	100	2.48
106	3,935	2,008	1,819	189	1,700	119	189	2.14
107	4,184	2,001	1,824	177	1,622	202	177	2.24
108	2,995	1,251	1,047	204	400	647	204	2.86
109	1,628	1,027	706	321	614	92	321	2.31
110	2,314	2,798	791	2,007	449	342	2,007	2.66
111	2,130	3,064	946	2,118	791	155	2,118	2.25
112	718	611	315	296	227	88	296	2.28
113	1,063	1,207	482	725	261	221	725	2.21
Subtotal	32,870	22,135	10,735	17,489	4,646	10,735	444	2.33
TOTAL	120,937	60,509	45,532	14,977	33,338	12,194	14,977	2.43
Source: Census 2000, Summary File 1								

Table H-4. Beaufort County Housing Summary Table, 2006

	Estimate	M/E		Estimate	M/E
HOUSING OCCUPANCY			**MONTHLY OWNER COSTS**		
Total housing units	78217	+/-196	Housing units with mortgage	25100	+/-1,957
Occupied housing units	55981	+/-2,065	Less than $300	0	+/-283
Vacant housing units	22236	+/-2,087	$300 to $499	198	+/-180
Homeowner vacancy rate	4.6	+/-2.0	$500 to $699	1773	+/-757
Rental vacancy rate	17.6	+/-5.2	$700 to $999	2618	+/-713
UNITS IN STRUCTURE			$1,000 to $1,499	7184	+/-1,230
1-unit, detached	47016	+/-1,985	$1,500 to $1,999	5727	+/-1,264
1-unit, attached	5084	+/-971	$2,000 or more	7600	+/-1,130
2 units	859	+/-430	Median (dollars)	1565	+/-90
3 or 4 units	2393	+/-884	Housing units no mortgage		
5 to 9 units	6085	+/-1,200	Less than $100	201	+/-184
10 to 19 units	2524	+/-775	$100 to $199	813	+/-437
20 or more units	5727	+/-999	$200 to $299	1237	+/-439
Mobile home	8529	+/-1,844	$300 to $399	3476	+/-989
Boat, RV, van, etc.	0	--	$400 or more	6869	+/-1,023
YEAR STRUCTURE BUILT			Median (dollars)	434	+/-45
Built 2005 or later	2441	+/-677	**COSTS AS % OF INCOME**		
Built 2000 to 2004	15890	+/-2,016	Housing unit with mortgage	25100	+/-1,957
Built 1990 to 1999	19375	+/-1,955	Less than 20.0 percent	6561	+/-1,031
Built 1980 to 1989	16594	+/-2,041	20.0 to 24.9 percent	3847	+/-987
Built 1970 to 1979	11879	+/-1,659	25.0 to 29.9 percent	3276	+/-872
Built 1960 to 1969	5615	+/-1,213	30.0 to 34.9 percent	2369	+/-680
Built 1950 to 1959	3962	+/-1,167	35.0 percent or more	8970	+/-1,491
Built 1940 to 1949	820	+/-480	Housing unit s no mortgage	12596	+/-1,499
Built 1939 or earlier	1641	+/-629	Less than 10.0 percent	4757	+/-891
ROOMS			10.0 to 14.9 percent	2447	+/-626
1 room	779	+/-572	15.0 to 19.9 percent	2158	+/-738
2-3 rooms	5256	+/-1,417	20.0 to 24.9 percent	1112	+/-543
4-5 rooms	31,892	+/-3,625	25.0 to 29.9 percent	484	+/-265
6-7 rooms	26,784	+/-3,448	30.0 to 34.9 percent	588	+/-433
8 rooms or more	13,506	+/-2,834	35.0 percent or more	992	+/-488
Median (rooms)	5.6	+/-0.2	Renter-occupied units	18285	+/-2,033
HOUSING TENURE			**GROSS RENT**		
Owner-occupied	37696	+/-1,949	Less than $200	217	+/-263
Renter-occupied	18285	+/-2,033	$200 to $299	0	+/-283
Avg hsld size owner-occ units	2.33	+/-0.10	$300 to $499	1164	+/-653
Avg hsld size renter-occ units	2.65	+/-0.21	$500 to $749	3891	+/-1,116
YEAR MOVED INTO UNIT			$750 to $999	4962	+/-891
Moved in 2005 or later	16177	+/-1,700	$1,000 to $1,499	4912	+/-1,302
Moved in 2000 to 2004	19309	+/-1,852	$1,500 or more	1059	+/-518
Moved in 1990 to 1999	13589	+/-1,670	No cash rent	2080	+/-952
Moved in 1980 to 1989	4011	+/-1,218	Median (dollars)	897	+/-49
Moved in 1970 to 1979	2118	+/-651	**GROSS RENT AS % OF HSLD INC**		
Moved in 1969 or earlier	777	+/-338	Less than 15.0 percent	1471	+/-734
VALUE Owner Occupied Units			15.0 to 19.9 percent	1752	+/-721
Less than $50,000	1678	+/-750	20.0 to 24.9 percent	2569	+/-959
$50,000 to $99,999	1710	+/-741	25.0 to 29.9 percent	2648	+/-1,100
$100,000 to $149,999	2705	+/-723	30.0 to 34.9 percent	1406	+/-642
$150,000 to $199,999	4793	+/-1,050	35.0 percent or more	6359	+/-1,222
$200,000 to $299,999	6817	+/-1,221	**SELECTED CHARACTERISTICS**		
$300,000 to $499,999	8679	+/-1,267	Lacking complete plumbing fac.	667	+/-501
$500,000 to $999,999	7737	+/-1,106	Lacking complete kitchen facilities	738	+/-540
$1,000,000 or more	3577	+/-706	No telephone service available	1871	+/-747
Median (dollars)	321900	+/-25,754			

Source: U.S. Census Bureau, American Household Survey, 2006

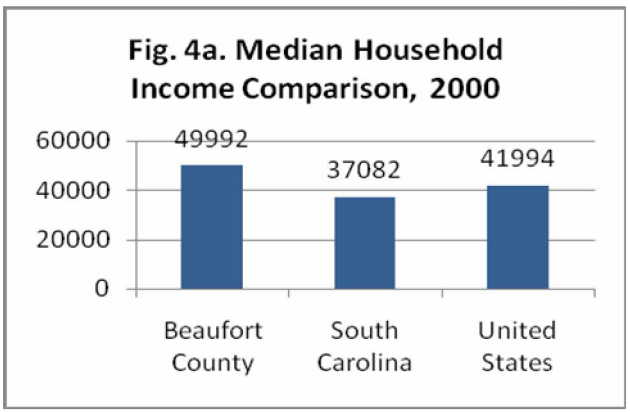


Fig. 4a. Median Household Income Comparison, 2000
60000
40000
20000
0
49992
37082
41994
Beaufort County
South Carolina
United States

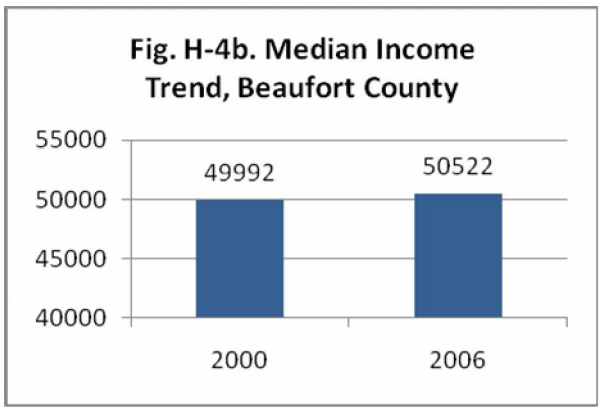


Fig. H-4b. Median Income Trend, Beaufort County
55000
50000
45000
40000
49992
50522
2000
2006

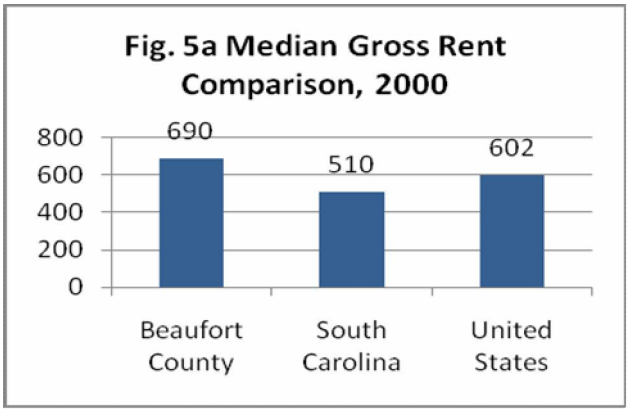


Fig. 5a Median Gross Rent Comparison, 2000
800
600
400
200
0
690
510
602
Beaufort County
South Carolina
United States

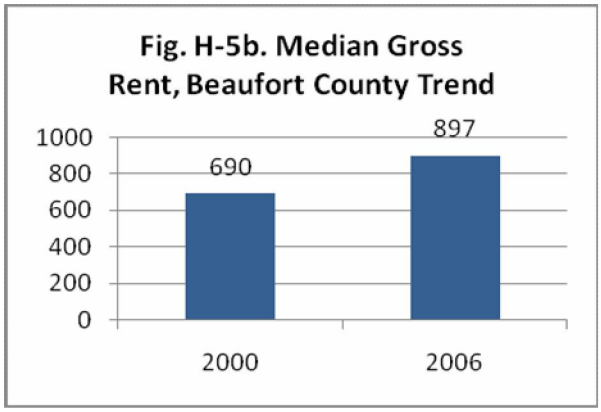


Fig. H-5b. Median Gross Rent, Beaufort County Trend
1000
800
600
400
200
0
690
897
2000
2006

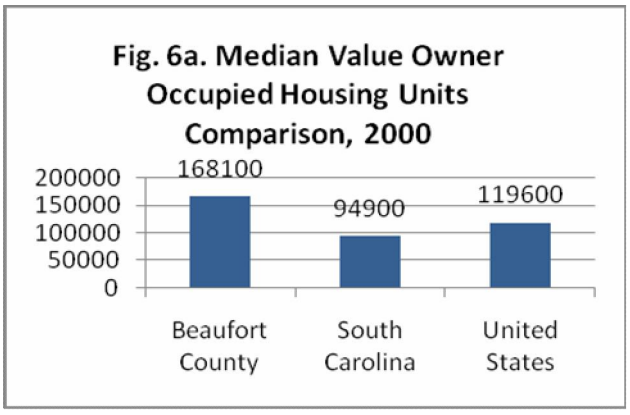


Fig. 6a. Median Value Owner Occupied Housing Units Comparison, 2000
200000
150000
100000
50000
0
168100
94900
119600
Beaufort County
South Carolina
United States

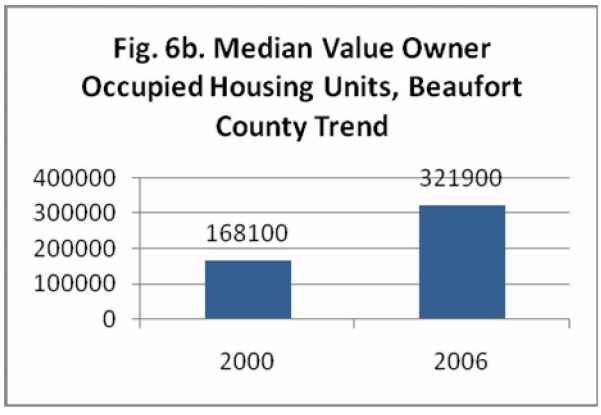


Fig. 6b. Median Value Owner Occupied Housing Units, Beaufort County Trend
400000
300000
200000
100000
0
168100
321900
2000
2006

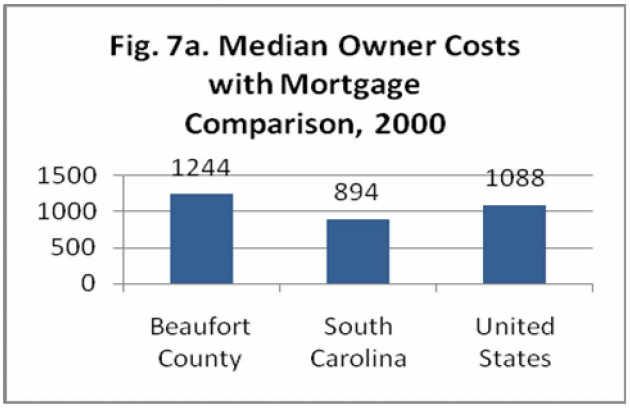


Fig. 7a. Median Owner Costs with Mortgage Comparison, 2000
1500
1000
500
0
1244
894
1088
Beaufort County
South Carolina
United States

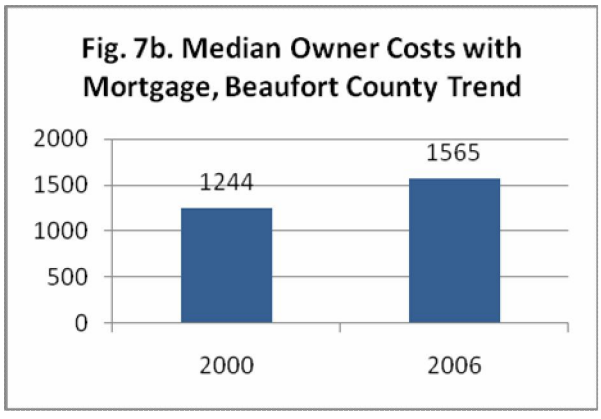
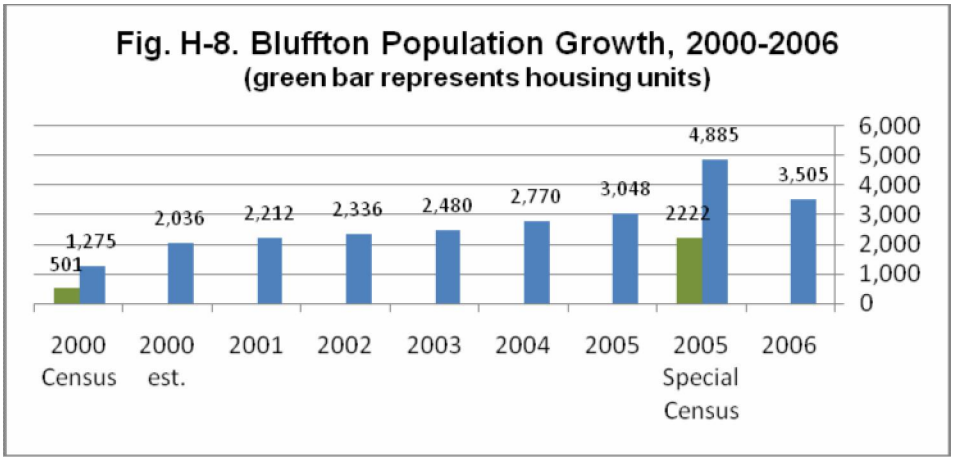


Fig. 7b. Median Owner Costs with Mortgage, Beaufort County Trend
2000
1500
1000
500
0
1244
1565
2000
2006

Table H-5. Census Population Estimates, Beaufort County and Municipalities, 2000-2006						
Date of Estimate	Beaufort County	Beaufort	Bluffton	Hilton Head	Port Royal	Yemassee
July 1, 2006	142,045	12,029	3,505	33,838	9,848	851
July 1, 2005	138,037	12,156	3,048 / 4,885*	34,536	9,618	836
July 1, 2004	133,795	12,054	2,770	34,395	9,317	831
July 1, 2003	130,279	12,136	2,480	34,447	9,356	828
July 1, 2002	128,033	12,637	2,336	34,518	9,110	819
July 1, 2001	124,503	12,027	2,212	33,991	9,089	818
July 1, 2000	122,021	12,564	2,036	33,968	9,112	812
April 1, 2000 (Estimates Base)	120,948	12,568	1,986	33,858	9,109	811
April 1, 2000 (Census 2000)	120,937	12,950	1,275	33,862	3,950	807

Source: U.S. Census 2006 Population Estimates, Table T1; Note: 2007 data not available for municipalities by the date of preparation of the Housing Element; see Table H-4 for 2007 county population estimate based on the American Community Survey; population figures vary from those provided in the 2006 American Community Survey. * A Special Census was conducted in 2005 resulting in the higher figure (see note with graph, below).



The Town of Bluffton has experienced rapid growth since the 2000 census as a result of annexation and development. A Special Census was conducted in 2005 by the Census Bureau. The results are not yet reflected in the American Community Survey annual population estimates. The **green bar** shows housing units.

Table H-6 Census Population and Housing Unit Estimates, 2000-2007				
Annual Estimate	Population	Growth Rate	Housing Units	Growth Rate
July 1, 2007	147,316	2.6%	n.a.	n.a.
July 1, 2006	143,614	3.1%	78,197	5.9%
July 1, 2005	139,333	3.3%	73,809	3.8%
July 1, 2004	134,910	3.0%	71,082	3.8%
July 1, 2003	130,993	1.9%	68,473	3.8%
July 1, 2002	128,559	3.0%	65,970	3.2%
July 1, 2001	124,799	2.2%	63,951	4.5%
July 1, 2000	122,080	--	61,192	--
April 1, 2000 (Census 2000)	120,937	--	60,509	--

Source: U.S. Census 2007 Population Estimates Table T1; 2006 Population Estimates Table T2 (Housing). Note: population figures vary from those provided in the 2006 American Community Survey.

Table H-7. Beaufort County and Census Housing Growth Trend Data, 1990-2025						
	Population			Housing		
Year	Total Beaufort County	Northern Beaufort County	Southern Beaufort County	Total Beaufort County	Northern Beaufort County	Southern Beaufort County
2025 County Projection	261,107	123,532	137,575	113,754	49,653	64,101
2005 County Estimate	154309	80650	73659	69,598	34,452	35,146
2000 Census	120,937	67,486	53,451	60,509	26,432	34,077
1990 Census	86,425	55,529	30,896	45,981	20,734	25,247
Sources: U.S. Census 1990 and 2000; 2005 estimate and 2025 projection by Beaufort County Planning Department based on the Beaufort County Transportation Model.						

Table H-8. Population Growth Trend Scenarios, 1990-2025						
	Census Trend Analysis			TAZ Trend Analysis		
Period	Beaufort County[1]	Northern Beaufort County[2]	Southern Beaufort County[3]	Beaufort County[4]	Northern Beaufort County[5]	Southern Beaufort County[6]
2020-2025	2.0	2.5	1.5	2.2	2.4	2.0
2010-2019	2.6	2.5	2.8	2.8	2.1	3.2
2007-2009	0.5	0.5	0.5	0.5	0.5	0.5
2000-2006	2.6	2.2	3.2	4.6	2.3	6.6
1990-1999	3.4	2.0	5.5	3.4	2.0	5.5
Assumptions: 1. the growth rate for the 1990s is based on 1990 and 2000 decennial census counts; the rate for the 2000-2006 period is based on the American Community Survey conducted by the Census Bureau; the period 2007-2009 reflects a flattening of growth as a result of an economic downturn; the period 2010-2019 reflects a return to the previous growth rate following the economic downturn; the period from 2020-2025 reflects a slowing of growth associated with demographic growth trends that follow an s-curve; 2. The growth rate in Northern Beaufort County reflects a slower rate of growth until 2010 when the wave of growth that began in Southern Beaufort County moves north; 3. Growth in Southern Beaufort County is based on the census until 2006 when the rate is lowered to reflect the economic downturn; after the downturn the previous rate is restored until normal slowing process (s-curve flattening) takes effect; 4. growth for Beaufort County is based on the decennial censuses until 2000, then increased to reflect findings of the Beaufort County Transportation Model (see Table H-7); for notes 5 and 6 see Table H-7 for growth trends after 2000 documented by the Beaufort County Transportation Model.						

Table H-9. Housing Growth Trend Scenarios, 1990-2025						
	Census Trend Analysis			TAZ Trend Analysis		
Period	Beaufort County[1]	Northern Beaufort County[2]	Southern Beaufort County[3]	Beaufort County[4]	Northern Beaufort County[5]	Southern Beaufort County[6]
2020-2025	2.5	3.0	2.0	2.4	1.8	3.1
2010-2019	3.5	3.0	4.0	2.4	1.8	3.1
2007-2009	0.5	0.5	0.5	2.4	1.8	3.1
2000-2006	4.5	2.4	6.0	3.3	3.4	2.8
1990-1999	2.8	2.4	3.1	2.5	3.4	1.8
Assumptions: See notes for Table H-8 for general assumptions; housing growth rates vary from population growth rates as a result of several factors including a periodic build-up and decline in inventories and housing for second home occupancy (which is counted by the census as vacant, held for occasional use).						

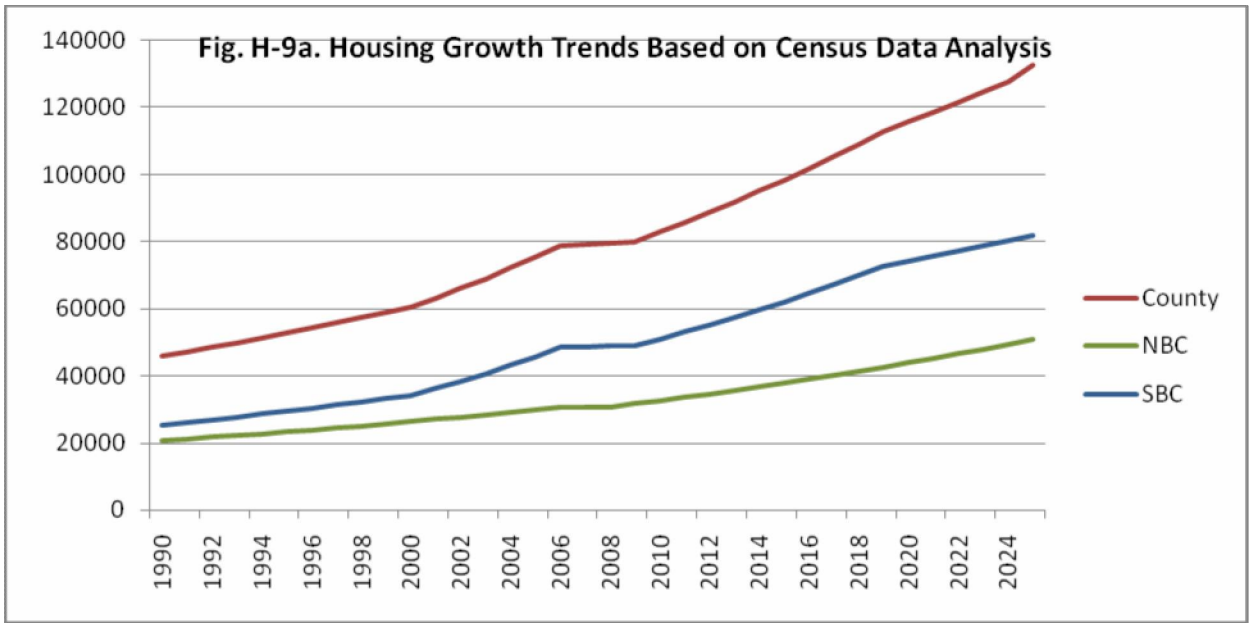


Fig. H-9a. Housing Growth Trends Based on Census Data Analysis
140000
120000
100000
80000
60000
40000
20000
0
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020
2022
2024
County
NBC
SBC

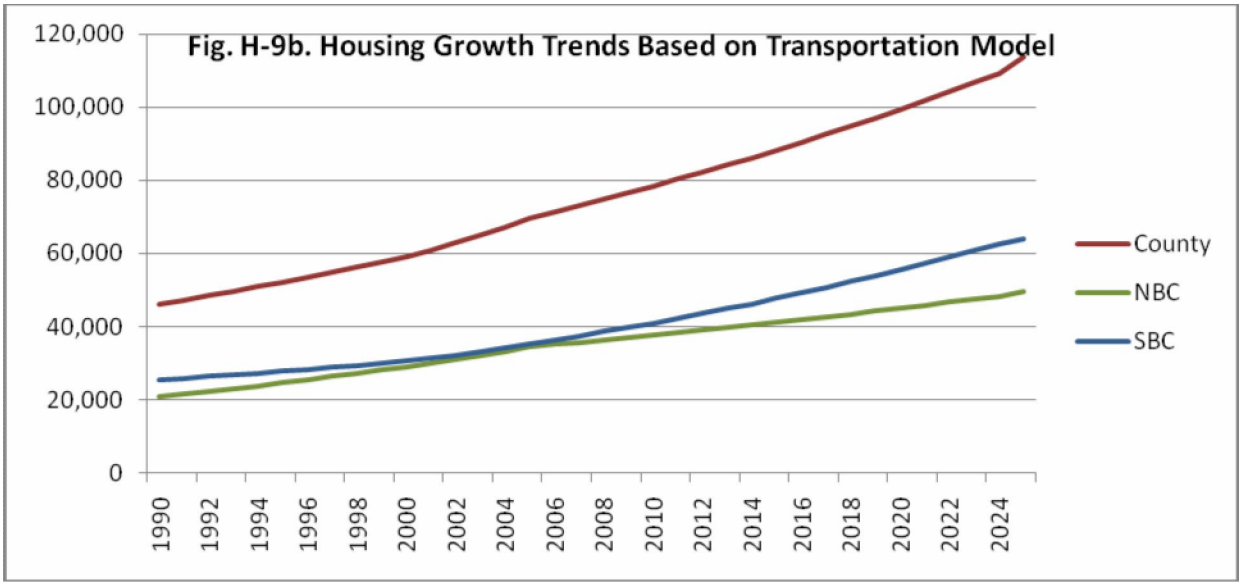


Fig. H-9b. Housing Growth Trends Based on Transportation Model
120,000
100,000
80,000
60,000
40,000
20,000
0
1990
1992
1994
1996
1998
2000
2002
2004
2006
2008
2010
2012
2014
2016
2018
2020
2022
2024
County
NBC
SBC

Table H-10. Housing Units, Persons Per Housing Unit, and Persons Per Household			
Year	Housing Units	Persons Per Housing Unit	Persons Per Household
2007	80,063	1.84	n.a.
2006	78,197	1.84	n.a.
2005	73,809	1.89	n.a.
2004	71,082	1.90	n.a.
2003	68,473	1.91	n.a.
2002	65,970	1.95	n.a.
2001	63,951	1.95	n.a.
2000	61,192	2.00	2.66
1990	45,981	1.88	2.59
Source: Census 1990 and 2000 Summary File 1; American Community Survey, 2007			

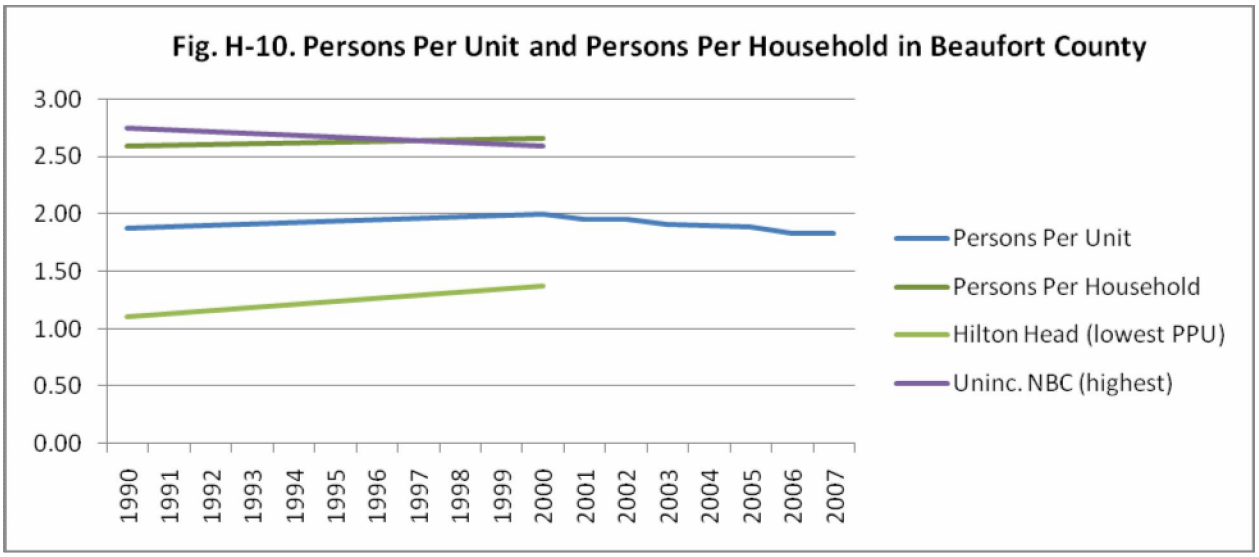


Table H-11. County, State, National Comparison, 2000			
Housing Statistic	**Beaufort County**	**South Carolina**	**United States**
Homeownership rate, 2000	73.2%	72.2%	66.2%
Housing units in multi-unit structures, percent, 2000	21.9%	15.8%	26.4%
Median value of owner-occupied housing units, 2000	$213,900	$94,900	$119,600
Households, 2000	45,532	1,533,854	105,480,101
Persons per household, 2000	2.51	2.53	2.59
Median household income, 2004	$48,577	$39,454	$44,334
Source: U.S. Census Bureau, Census 2000.			

Table H-12. Mobile Homes Geographic Comparison, 1990-2000					
	1990		2000		Percent Change 1990-2000
	#	% of All Housing Units	#	% of All Housing Units	
Beaufort County	6,655	14.5	9,001	14.9	35.3
South Carolina	235,863	16.6	355,499	20.3	50.7
United States	7,324,154	7.2	8,779,228	7.6	19.9
Source: U.S. Census Bureau, Census 2000. SF3, Table H30.					

Table H-13. Median Value of Mobile Homes, 2000	
Area Comparison	**Median Value**
Beaufort County	$48,900
South Carolina	$35,800
United States	$31,200
Source: U.S. Census Bureau, Census 2000. SF3, Table H82.	

Table H-14. Total Beaufort County Homeless Population, 2007												
Unsheltered			Emergency Shelters			Transitional Shelters			County Total			South Carolina Total
Children	Adults	Total	Children	Adults	Total	Children	Adults	Total	Children	Adults	Total	
1	25	26	1	6	7	0	0	0	2	31	33	5,594
Source: 2007 South Carolina Homeless Count, South Carolina Council on Homelessness (population count taken on January 25, 2007 using HUD definitions on homeless populations)												

Table H-15. Beaufort County Homeless Subpopulations by Causal Factor, 2007							
	Chronically Homeless	Severely Mentally Ill	Chronic Substance Abuse	Veterans	Persons With HIV/AIDS	Victims of Domestic Violence	Unac-companied Youth
Sheltered	0	0	1	0	0	1	0
Unsheltered	4	2	5	4	2	1	0
Total	4	2	6	4	2	2	0
Source: 2007 South Carolina Homeless Count, South Carolina Council on Homelessness (population count taken on January 25, 2007 using HUD definitions on homeless populations)							

Table H-16. Summary of Housing Needs and Strategies		
Demographic Segment	Priority Housing Needs	Intervention Strategies
Workforce Housing *Moderate Income Families*	Single Family Ownership; Multi-Family; Ownership; Multi-Family Rental	Zoning Overlay District; Zoning Incentives; Inclusionary Zoning; Joint Venture; Employer Assisted Housing; Tax Credits
Workforce Housing *Low Income Families*	Single Family Ownership; Multi-Family Ownership; Single Family Rental; Multi-Family Rental	Zoning Overlay District; Zoning Incentives; Inclusionary Zoning; Joint Venture; Education and Counseling; Down Payment Assistance or Second Mortgage; Non-Profit Construction; Employer Assisted Housing; Tax Credits; Preservation and Rehabilitation of Existing Housing
Workforce Housing *Single People*	Single Family Ownership; Multi-Family Ownership; Single Family Rental; Multi-Family Rental; Single Room Occupancy; Employer On-Site Housing	Zoning Overlay District; Zoning Incentives; Inclusionary Zoning Joint Venture; Education and Counseling; Non-Profit Construction; Employer Assisted Housing; Tax Credits; Preservation and Rehabilitation of Existing Housing
Workforce Housing *Short Term and Seasonal Employees*	Multi-Family Rental; Single Room Occupancy; Employer On-Site Housing	Zoning Incentives; Joint Venture; Employer Assisted Housing
Workforce Age-Transitional Housing Older Singles and Couples or Recently Retired Workers	Single Family Ownership; Multi-Family Ownership; Single Family Rental; Multi-Family Rental	Zoning Overlay District; Zoning Incentives; Inclusionary Zoning; Joint Venture; Down Payment Assistance or Second Mortgage; Tax Credits; Preservation and Rehabilitation of Existing Housing
Very Low Income Housing *Households Earning <50% of County Median Income*	Single Family Ownership; Multi-Family Ownership; Single Family Rental; Multi-Family Rental	Zoning Incentives; Education and Counseling; Down Payment Assistance or Second Mortgage; Non-Profit Construction; Employer Assisted Housing; Tax Credits; Preservation and Rehabilitation of Existing Housing
Extremely Low Income Housing *Households Earning <50% of County Median Income*	Single Family Rental; Multi-Family Rental	Education and Counseling; Down Payment Assistance or Second Mortgage; Non-Profit Construction; Preservation and Rehabilitation of Existing Housing
Rural Workforce Housing and Affordable Housing *Special Initiatives*	Single Family Ownership; Single Family Rental; Accessory Dwelling Units; Manufactured Housing (also known as Mobile Homes); Modular Housing; Traditional Cluster Housing	Zoning Incentives; Non-Profit Construction; Preservation and Rehabilitation of Existing Housing
Special Needs Housing Permanent or Long Term *Person with Disabilities, Frail Elderly, and Others*	Single Family Rental; Multi-Family Rental; Single Room Occupancy; Group Home	Inclusionary Zoning (as an optional provision); Non-Profit Construction; Preservation and Rehabilitation of Existing Housing
Special Needs Housing Transitional or Short Term *Shelters and Group Facilities*	Single Family Rental (with site supervision); Single Room Occupancy; Group Home	Joint Ventures and Non-Profit Construction

Table H-17. Priority Housing Needs Definitions	
Housing Priority	Definition
Single Family Ownership	Single family detached and attached (duplex) individually-owned houses, where each unit is on a separately platted lot.
Multi-Family Ownership	Townhouses, condominiums, and cooperatives that are individually-owned; townhouses may be on individual lots, whereas multi-family structures are on property owned by the owners' association.
Single Family Rental	Single family detached and attached (duplex) housing offered for rent by the owner; each unit may either by on a separately platted lot or on one or more unified parcels.
Multi-Family Rental	Townhouses and multi-family structures offered for rent by the owner; townhouses may be on individual lots, whereas multi-family structures are on property held by the owner.
Manufactured Housing (also known as Mobile Homes)	Housing built under HUD specifications and registered as a mobile home under state law. Parks, subdivisions, and individual placements are regulated by Beaufort County to control density and provide for public safety in flood prone areas. However, availability of manufactured housing at appropriate densities and in suitable locations is an essential part of a comprehensive workforce and affordable housing strategy.
Modular Housing	Modular housing is built in a controlled environment much like manufactured housing. However, it is typically assembled on site in the same manner as a "stick built" house, making it more permanent. Conventional housing financing is available for modular construction. Modular units can be built for removal from a site, a feature that could make them an alternative to mobile homes on heirs' property.
Traditional Cluster Housing	Clusters of houses are part of the historic rural landscape in Beaufort County. The most frequently occurring form of clustering is the "family compound," a grouping of residential structures that often includes both site-built and manufactured houses.
Single Room Occupancy	A room or small efficiency apartment rented on a weekly or monthly basis with on-site management. SROs have been successful in many communities at addressing the housing needs of low and very low income populations, and as transitional housing for homeless persons.
Group Home	This category includes a range of housing types addressing a broad variety of needs, e.g., nursing and rehab facilities, long-term care facilities, and assisted-living facilities. Various types of group homes are essential in most communities. The Bureau of the Census uses the term "group quarters" to include a broader range of group housing, such as college dormitories and military barracks.
Employer On-Site Housing	Employers often provide housing for employees, especially in remote locations and difficult housing markets. Some of the resort communities in Beaufort County have found this essential for maintaining operations, retailing essential staff, and remaining competitive. A formal program involving multiple employers and the County or municipalities does not currently exist, but may be explored (see discussion of intervention strategies).

Table H-18. Housing Intervention Strategy Definitions	
Strategy	Definition
Zoning Overlay District	A new mixed use zoning overlay district with workforce housing, as well as LEED features; could be adopted to address a wide spectrum of affordability. Transit could be planned into such development to minimize traffic impact. Employer-based rental housing could be part of such developments; employers would participate by leasing units and subleting them to employees. The location of large, planned communities is of crucial importance. They must be, a) near employment centers; b) sufficiently removed from existing, densely developed areas to have lower land values (but not in Rural districts); c) located on potential transit lines; d) contextually suitable for multi-story development at higher densities than typically found in Beaufort County. Development of mixed use affordable communities would likely require large scale *joint venturing* (see below) of public, private, and non-profit sectors.
Zoning Incentives	A *density bonus* is principal zoning incentive offered by local government to encourage the production of workforce and other forms of affordable housing. This incentive offers increased development density, typically 20% or more, in exchange for producing as much as 20% low-to –moderate income housing. Other zoning standards can be relaxed as an incentive to produce workforce or other affordable housing. Such standards include setbacks, lot coverage, floor-to-area ratios, and building height. Expedited development review may be part of an incentive package.
Zoning Requirements, e.g., *Inclusionary Zoning*	Mandatory zoning requirements may be necessary where commercial and high-end residential growth out-strips production of essential workforce housing. An *inclusionary zoning* ordinance has been recommended by the Affordable Housing Consortium. It would require developers to provide a proportion of low-moderate cost housing within their developments (typically 10-20%) or to pay an in-lieu fee to a housing trust fund. *Fair share* and *linkage* ordinances require provision of a proportion of low-moderate cost housing in an area as that area grows, commercially or residentially.
Joint Venture	Public agencies and non-profits can often productively engage with private development interests to create affordable housing. The public sector can contribute land, offer zoning incentives, and provide a structured development package with the potential to attract private development interests that would agree to a significant component of workforce or affordable housing. Non-profit agencies that specialize in affordable housing can partner with profit-making developers to provide affordable components of mixed income developments. The public sector may provide a density bonus or other incentive to encourage such partnerships.
Education and Counseling	Homebuyer education and counseling programs can be an effective part of an overall affordable housing program. Activities include financial planning, credit counseling, home purchase education, and home maintenance education. Beaufort County and several other agencies are currently providing education and counseling, and it is essential to continue and further develop the effectiveness of these programs.
Down Payment Assistance and Second Mortgages	Public and non-profit housing agencies often use down payment assistance as a means of assisting very low, low, and moderate income households become homeowners. Such assistance may take the form of grants or loans that cover part of the required down payment. A down payment assistance loan may be part of a revolving loan fund. One such revolving loan is not collected until resale, at which time a proportion of the profit is recovered. Private lenders are often more inclined to lend to lower income borrowers when a public or non-profit agency provides a second mortgage, thereby reducing their risk. Low-interest (or no interest) second mortgages in the range of 10-20% are often an essential mechanism of affordable housing agencies. Funds are recovered with each mortgage payment, thus immediately replenishing the loan fund.
Non-Profit Construction	Non-profit community development corporations and family support agencies are vital to a broad-based affordable housing program. Beaufort County's affordable housing program has matured to the point where it is working effectively with non-profits. The on-going, maturing relationship between the County and non-profits (as well as municipalities) will be essential to the future availability of affordable housing.
Employer Assisted Housing	Individual employers are currently providing housing for employees in Beaufort County. A formal program involving multiple employers and the County or municipalities has the potential to increase the availability of housing for under-served groups. An employer-assisted program might be coordinated by the County, which could target private or non-profit rental developments in areas with ready access to large employers, particularly those with young, service sector employees. Employers would contribute to the County trust fund in order to be eligible to place employees in such housing.
Tax Credits	Like mortgage insurance, tax credits are not typically offered by local governments, although property tax rebates are sometimes used to attract investment and could be used to stimulate production of affordable housing. The more typical use of tax credits by local government is in packaging affordable housing.
Preservation Of Existing Housing	Preservation of existing housing stock is an essential part of a comprehensive affordable housing program, especially in Beaufort County which has a large proportion of older housing (see Appendix). Preservation initiatives include grants and loans for stabilization, weatherization, and renovation.

Appendix 8-B. Informed Respondent Survey

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PURPOSE AND METHODOLOGY

The purpose of the informed respondent survey was to obtain essential information for the Housing Element update from experienced, local housing professionals and policy-makers. The survey was designed to assess, a) the needs of the range of populations segments in the county (affordable housing demand); and b) the strategies, policies, and programs that deliver affordable housing (affordable housing supply). The survey questionnaire was designed to provide respondents with both structured and open-ended response options (see Appendix).

Over thirty prospective respondents were identified for the survey by Planning Department and Office of Housing staff members. They included local elected officials, county and municipal senior professionals, officials of other public agencies, representatives on non-profit organizations, and representatives from the private sector. Additionally, all members of the Affordable Housing Consortium were invited to participate.

Questionnaires were initially distributed by email in June, 2008 and later distributed at a meeting of the Affordable Housing Consortium held on July 24, 2008. Telephone follow-up calls were placed to prospective respondents to boost the response rate. Some respondents expressed a preference for a telephone interview (because they preferred to discuss issues in greater depth or because they lacked time to fill out the questionnaire).

A total of 24 people responded to the survey. Four respondents returned the questionnaire and participated in a telephone interview. Four other respondents participated only in a telephone interview.

Respondent Category	**Number**
County professionals and elected officials	5
Municipal professionals and elected officials	5
Other government agency officials	2
Non-profit organization representatives	5
Private Sector representatives	7
Total	**24**

The findings from the survey will inform the Assessment section of the Housing Element and provide the basis for housing initiatives and policy recommendations proposed to the County Council for adoption as part of the Comprehensive Plan.

The Key Findings of the survey are summarized in the following section. Detailed results of the survey may be found in the subsequent sections. Potential affordable housing initiatives unfamiliar to many of the survey respondents will be taken up with County staff and the Affordable Housing Consortium during the next phase of preparation of the Housing Element.

KEY FINDINGS: HOUSING NEEDS

The following findings are based on comments received during the survey and on the structured responses. They are based on responses to Question 2 and the chart of Page 2 of the Questionnaire (see Appendix).

1. Respondents ranked Very Low Income Families with Children as the highest priority, especially those living in rural areas.
2. Very Low Income single parent households with children (a subset of #1, above) were cited in interviews as the highest priority. Low Income single parent households with children are also a high priority.
3. Respondents ranked Very Low Income Elderly as the second highest priority for affordable housing. Anecdotally, during a telephone interview, it was remarked by a non-profit representative that single early seniors (in their late 50s and 60s) are increasingly in need of affordable housing. This observation, reflecting baby-boom demographics, suggests that smaller, low maintenance units should constitute a higher proportion of affordable units.
4. Low Income Single Workers ranked as a high priority, especially in the urbanized areas. Such workers are a crucial segment of the service and retail sector labor force, suggesting the need for more rental units near employment centers.
5. Moderate Income Workers were ranked as a moderate to high priority, but ranked lower on average than Very Low Income and Low Income populations. However, a view articulated in the survey is that more local assistance is needed for Moderate Income households because federal and state programs are directed toward Very Low Income and Low Income populations.
6. Many respondents were unfamiliar with *special needs populations*, indicating that a workshop (or other educational meeting) on the housing needs of these populations should be conducted by the Affordable Housing Consortium.
7. Respondents familiar with *special needs populations* maintain that affordable housing initiatives should also target the need for community training homes, boarding houses, and other forms of non-traditional housing.
8. Respondents ranked the need for temporary housing for Victims of Abuse as a high priority, especially in rural areas.
9. Homeless populations (three categories were identified in the survey) were generally ranked by respondents as a moderate to high affordable housing priority.
10. It was noted in interviews that rural populations are often victimized by a variety of schemes related to financing mobile homes (manufactured housing). They are particularly vulnerable if they live on heirs' property and cannot obtain financing for any other type of housing.
11. Many people, especially in rural areas, are living in substandard housing. This segment of the population constitutes a sizable proportion of the spectrum of needs for affordable housing.
12. Many individuals and households in need of affordable housing have little experience with financial discipline. The high cost of commuting, increasing dependence on restaurants and fast food, fashion conscious clothing purchases, and other competing demands leave an increasingly smaller proportion of income in the budget for housing. Financial Literacy Education is now a vital part of the County's affordable housing program (see next section for more on this).

KEY FINDINGS: POLICIES, STRATEGIES, PROGRAMS

The following findings are based on comments received during the survey and on the structured responses. They are based on responses to Question 3 and the chart of Page 3 of the Questionnaire (see Appendix).

1. Respondents ranked Barriers to Affordable Housing as a high-to-critical priority," however the term clearly meant different things to different people. a) The high cost of land in Beaufort County was cited by most as the principal barrier. b) A second barrier to affordable housing noted by respondents is the cost of impact fees and other building fees, estimated at $5,000 for a single family unit. c) A third barrier to affordable housing noted by respondents is a lack of flexibility in the Zoning and Development Standards Ordinance. Respondents would like to see greater flexibility to encourage creativity of design, and they would also like to see more opportunities to achieve densities necessary for affordable housing. d) Many respondents cited the low densities in County and municipal zoning ordinances as a barrier, and they requested a review of the ordinances to find ways of increasing density for affordable housing. Respondents were concerned with densities in both rural and urbanized areas.
2. Non-Profits were ranked closely behind Barriers as the second highest priority. Interviews and written comments suggest that Non-Profit capacity-building is essential. Increased funding for current services, such as Housing Counseling, is also critical.
3. Stabilization/Rehabilitation of Existing Housing ranked as the third highest priority. Several respondents said there is a need to increase the level of effort in this area, especially for low income and fixed income families, for frail non-working elderly, and for others who are disabled or sick. They stressed the importance of keeping people in their homes by making them safe and secure.
4. Housing Counseling and Financial Literacy Education ranked as the fourth highest priority. Homebuyer counseling is an essential part of the County's overall affordable housing strategy, however it is not adequately funded. Financial literacy education, which is more specifically targeted to personal money management than homebuyer counseling, is essential for most low-moderate income first-time homebuyers.
5. Inclusionary Zoning was ranked by respondents as a high-to-critical need. Several respondents also mentioned its potential in interviews and written comments. However, it is clear that the precise formulation of an inclusionary housing ordinance remains to be worked out. Issues include a) whether it will be mandatory or voluntary; b) development size thresholds that trigger the requirement; c) the proportion of affordable units in the development; d) the income level of affordable units; and, e) opt-out options such as "in lieu" payments to a Housing Trust Fund and/or off-site construction.
6. Down Payment Assistance to homebuyers has been a mainstay of the County's affordable housing initiatives, and it was ranked highly by respondents. Some respondents pointed to the need for a dedicated source of funding.
7. Establishment of a Housing Trust Fund ranked as a high priority. It could become an essential mechanism for long term funding of affordable housing by funneling both dedicated funding sources and one-time grants into a single resource pool (recognizing that some funds would have to be reserved for specific purposes).
8. Many respondents also endorsed the concept of a Housing Land Trust, which would be established for the purpose of acquiring and allocating land for affordable housing. Such a program would be similar to the Beaufort County Rural and Critical Lands Program or the

Beaufort Open Land Trust, which acquire lands for environmental purposes. An option mentioned by several respondents is to join the Low County Land Trust based in Charleston.

9. According to some respondents, the Seabrook Community Preservation Plan is a good model of what could be done to achieve affordable housing within a mixed use context. Mixed use development offers excellent potential to build affordable housing if a diverse range of units can be included in the product, such as apartments above commercial uses.
10. According to one respondent, the County Comprehensive Plan should define a "development model" for residential/mixed use and identify locations where such a model could be built. Developers should be offered a fast track incentive to build with 10-15% workforce or affordable housing.
11. A respondent observed that developer incentives/density bonuses are worthless unless they are monitored and non-compliance is sanctioned.
12. Respondents point out that rental housing is an essential form of affordable housing, and it must be a major part of the County's overall affordable housing strategy.
13. Respondents agreed that manufactured housing (mobile homes) should be phased out, but it should be recognized that mobile homes are currently the only form of affordable housing available to many people.
14. Respondents were concerned that there should be an alternative to mobile homes on heirs' property.
15. Many respondents expressed their belief that a regional approach to planning and funding affordable housing was desirable and much needed.
16. A respondent observed that the County should be proactive in purchasing foreclosed homes for "scattered" affordable housing.
17. According to a respondent who is an architect, the exterior of affordable units can be attractive without running up costs. Savings come from relatively simple interiors, thoughtful design, and less square footage.
18. In the words of one respondent, "The high cost of housing is a result of several factors: greed, development fees, land costs, low density."

RECOMMENDATIONS

The following recommendations are based on discussions with staff and respondents during the course of the survey.

1. **Reduce Barriers to Affordable Housing**
    a. Establish a Beaufort-Jasper Housing Land Trust or join the Lowcountry Housing Trust (based in Charleston) for the purpose of acquiring land for affordable housing. Ensure that the Trust works in concert with Northern and Southern Beaufort County planning framework and a regional framework agreed upon with Jasper County.
    b. Establish a Housing Trust Fund to pool financial resources for affordable housing. The Trust Fund would become an essential mechanism to address the spectrum of housing needs in Beaufort County or a wider region.
    c. Review the density bonus provision in the Zoning and Development Standards Ordinance in order to identify amendments to increase its attractiveness to developers.
    d. Review standards of the Rural Residential zoning district in order to selectively increase density for affordable housing. Consider strict criteria to limit density increases to small subdivisions with covenants to restrict resale to pre-determined affordable prices.
    e. Review standards for Community Preservation areas in order to selectively increase density for affordable housing. Focus on CP districts such as Seabrook that are near urbanized areas or on major arterials with ready access to employment centers.
2. **Enhance Non-Profit Activity**
    a. Establish a new non-profit *community development corporation*, or expand an existing non-profit, for the purpose of constructing modular affordable housing. The venture would also have the mission of training workers in construction and the building trades.
    b. Enhance the activities of other non-profits through the establishment of a Housing Land Trust and a Housing Trust Fund (see #1 above).
    c. Link Inclusionary Zoning to non-profits by providing an "in lieu" option for market rate developers to partner with non-profits to meet their inclusionary requirement.
    d. Explore non-profit capacity-building for development of limited equity cooperatives and mutual housing associations (see definitions at the end of the survey questionnaire in the Appendix). While these two types of affordable housing were not ranked as high priorities in the survey, that result may simply reflect a lack of familiarity with this type of initiative.
3. **Adopt a New Mixed Use District with Affordable Housing and LEED components**
    a. Formulate an overlay or floating mixed use zoning district with affordable housing and energy and environmental design components that would attract interest from private sector investors.
    b. Link housing affordability with broader spectrum affordability, i.e., shorter commutes to work, walkable or short-commute distances to goods and services, and lower electric bills.
    c. Link the new district to TIF districts.
    d. Identify specific sites or general areas in or near urbanized areas for town center development with affordable housing components. Pre-approve the mix of uses, density and intensity of uses, and other critical standards.
    e. Consider issuing an RFP for pre-packaged projects to attract appropriate investors and developers.

RESPONDENT COMMENTS	
NAME	COMMENTS
Morris Campbell Deputy Administrator, Community Services, Beaufort County	1. Beaufort County is involved with a number of initiatives to help meet the housing needs of its citizens. They included a down payment assistance, housing rehabilitation, partnerships with developers and non-profits for development of homes in various locations in the county. 2. There should be a differential established for permanent residency versus temporary/rental for individuals. 3. I hope we can become creative enough to offer some kind of an option that would help to allow heirs property owners an opportunity to develop their estate with housing other than mobile homes. I know this may be beyond out purview; however, if we could offer an alternative, it may be amenable to some families.
Arthur Cummings Director, Building Codes, Beaufort County Telephone interview 7/14	Manufactured housing (mobile homes) has several disadvantages such as depreciating value. Modular construction may be a viable alternative without some of the disadvantages. A non-profit community development corporation might be able to produce modular units (like Katrina houses) at an affordable cost while also training people in construction and the building trades. Start-up funding could be a good investment by the County. Housing costs are high in Beaufort County for several reasons. Fees are costly, averaging around $5,000 per unit (e.g., $2500 impact fees; $2,000 well or hook-up fee). The cost of property is exceptionally high. Construction costs are also high, although they are coming down as a result of the decline in the housing market.
Susan Milne Homeless Coordinator, Beaufort County Alliance for Human Services	1. County should be proactive in purchasing foreclosed, etc. homes for “scattered” affordable housing. Seems “affordable” housing has morphed into “workforce” housing and many believe a house costing $140,000 is affordable – we need housing – scattered throughout the county for $90,000-110,000 and a way to assure investors don’t purchase – county or non-profit refer for purchase – not on “open” market. 2. We have a critical need – affordable housing – but not much political will or vision as to how to make it happen – maybe some brainstorming with a range of people & backgrounds. 3. Put an actual range to “affordable.”
Mitzi Wagner Director, Beaufort County Disabilities and Special Needs	1. Two areas which we are looking for housing are in the area of Community Training Homes which house 4 individuals with Development Disabilities who are able to reside in a home with constant staff supervision. Another is a Supported Living Program where individuals with development disabilities rent an apartment or condo and DSN also has a unit with full time staffing on the site for support. 2. More boarding home situations are needed for people with development disabilities as well as opportunities for home ownership without down payments. If they receive SSI they cannot accumulate monies for down payments.
Gerald Dawson Vice Chair, AH Subcommittee, County Council, Beaufort Co.	1. Council appropriates limited funds for affordable housing on an annual basis. The Governing Council has suggested several steps to assist in creating affordable housing. Implement those recommendations (inclusionary zoning, density bonuses, waiver of impact fees, etc.).
Gene Rugala Affordable Housing Council	1. Working with the Beaufort County Housing Coordinator we are involved in all aspects of housing in Beaufort County – home repair, down payment assistance, community education, and of course approving development of affordable or workforce housing. We are looking to craft an ordinance for a dedicated funding stream and development of a housing trust working regionally with other counties. 2. Home repair for elderly and also low income families in county and municipalities.

Rugala, continued	3. Inclusionary zoning important concept and issue to be dealt with. Reduction of barriers to affordable housing. Dedicated funding stream, i.e., permitting, dedicating a mil to affordable housing. Home repairs in cities and county, housing assistance to workers – police, fire, teachers – in form of housing downpayment assistance. Non-profit involvement in home construction. Identify builders and developers who are interested in building affordable housing. Incentives to builders to provide affordable housing. This is a county-city-regional issue and it will take a collaborative effort to remedy this issue.
Brenda Dooley Habitat for Humanity – North Telephone interview 7/14	Production has been at 2 houses per year. Now striving to produce 3 per year. Nearly 200 people are awaiting homes. Most are single mothers with 3-5 children. Service area is north of the Broad River. Affordable land is the greatest barrier to producing housing. Land sought where ever it is affordable. Insurance cost on Lady's Island and St. Helena are high, so those areas may be out. City of Beaufort review makes building there difficult.
Pat Wirth Habitat for Humanity – South Telephone interview 7/14	1. See attachment. 2. Many Beaufort County families are living in the most deplorable of conditions: without heat, hot water, proper ventilation, little or no plumbing, faulty electrical systems, structurally deficient or unsafe housing. Many live in overcrowded conditions, sore far exceeding building and fire capacity codes. Those in public housing contend with increasing incidents of crime, drug sales, and violence. It behooves all Beaufort County to join Hilton Head Regional Habitat for Humanity as it offers a hand up, not a hand out, to those low-incme residents and help break the cycle of poverty substandard housing fosters. 3. It is important to note that Hilton Head Regional Habitat for Humanity is the only organization providing full ownership opportunities to those residents earning 20% - 60% of the Area Median Income (AMI). We build at no profit and then hold the mortgage at zero percent interest. Production of 80 houses to date, 76 in Beaufort County. Now 11 on drawing board, only 1 in Beaufort County. Most are single mothers with 2-4 children. Middle-aged and elderly single people are also applying in increasing numbers. Income criterion is 60% of AMI, which is $37,800. Affordable land is the greatest barrier to producing housing. Land sought where ever it is affordable, which leaves out HHI. Discussions with HHI and Bluffton on forming a Community Land Trust are in early stages. Board member comment at Governing Council meeting 7/24/08: We're now building in Jasper County, but give us land and we'll build again in Beaufort County.
Ed Boyd Beaufort County Housing Authority	1. The Beaufort Housing Authority (BHA) administers federal Programs that target the low and very low income families / individuals. This segment of out population normally cannot become homeowners until they improve their income situation. We assist 904 families in the rental market. These families must pay 30% of this income for rent and utilities. 2. There will always be a population that will be renters and a comprehensive strategy must include this group (elderly, disabled, and workforce). A permanent funding source is needed to help with matching funds for State and Federal grants. 3. The Beaufort County Affordable Housing Consortium is working on a Workforce Housing Plan and this document included strategies that should be included in the Comp Plan. These items are addressed in the check list.
Joan Mustard Low County Community Development Corp.	1. Governing Council, BC Affordable Housing Consortium. LCDC runs homebuyer education/financial literacy, down payment assistance, and housing repair programs (also foreclosure clinics). Need more dollars – fasters – with fewer hoops to jump through – and administrative fees to cover the cost of providing services. 2. We have clients in Seabrook (2 right now) who have no indoor plumbing. We had to close out housing repair waiting list in 10/07. 22 on waiting list at present.

Mustard, continued	3. Developer incentives/density bonuses are worthless unless they are monitored and non-compliance is sanctioned. DPA "gap funding" such as Beaufort County offers is the most practical device to encourage homeownership.
Leroy Gilliard BJEOC Telephone interview 7/14	1. Affordable housing is becoming more and more difficult to obtain in Beaufort County and in particular the Hilton Head Island areas. We have been and are presently involved in improving the quality of life, the local economy and increase jobs. Together, the County and BJEOC are dedicated to the creation of affordable housing through policy, planning, initiatives, and partnerships with private and public organizations. 3. Create a housing incentive plan – under affordable housing that would include expediting permits for affordable housing project and expedited to a greater degree than other projects. Establish and review policies and procedures on housing cost to ensure all prospective affordable housing projects are reviewed and verify their level of benefit and period of affordability. Ensure affordability periods (lengths) are maintained through restrictions or other covenants. Land costs are prohibitive for affordable housing. Zoning needs to be re-examined to allow subdivision to smaller lots in the rural areas. You can't have affordable housing where three acre lots are required. The greatest need now is for young people in the 30-40 age range who lack the resources to purchase their own home. Mobile homes need to be addressed. They meet a need, but trailers are falling apart, people are paying through the nose, but it's all they can afford. There are all sorts of schemes to sell them to people, but they can lead to problems. Some require land to be part of the security, which results in some people losing title to their land. The land is taken from the people if the trailer note is not paid. Schemes abound.
Clarece Walker President and Chief Executive Officer United Way of the Lowcountry	3. I believe that we need more funds for Stabilization/Rehabilitation of existing housing especially for low income and fixed income, and frail non-working elderly and others who are disabled or sick rather than new homes or units. We need to keep people in the homes they have and be sure that their homes are safe and secure. I also believe that we need more low interest mortgages that low-income can afford to purchase a home as well as Homebuyer Counseling and Financial Literacy Education to teach people how to be effective home buyers and keep their home in good repair as their major asset. List of programs supported by United Way attached to questionnaire.
Mike Sutton City Council, City of Beaufort / NW Quadrant redev	1. Habitat/Block-by-Block 3. Continue working with legal assistance programs that help landowners to clear titles and clear probate issues (this would allow many land owners to utilize grant programs to repair existing homes). Extensive comments attached.
Libby Anderson City Planner, City of Beaufort	1. The City applied for grants to help with our housing repair programs. The City has considered an "inclusionary housing ordinance." The City has reviewed its land holdings to see if it owns any land that can be used for affordable housing. The City is working with the Housing Authority to relocate, replace, or improve the units now located at Marsh Point.
Linda Bridges Planning Administrator, Town of Port Royal	1. We are not currently involved in any such initiatives.
Marcy Benson, Senior Grants Administrator, Town of Hilton Head	1. The Town of Hilton Head repealed the Moderate Income Housing Program in December 2007. There is no replacement at this time; however, during the Town's Comprehensive Plan update of 2009 workforce/affordable housing will be discussed in conjunction with the housing element. As a suggestion affordable housing, employment centers and transportation needs could be approached on a regional basis.

Laura Morgan Planning Director, Town of Bluffton, Planning & Growth Management Department	1. The Town of Bluffton is in the process of establishing a Neighborhood Services Program in an effort to empower neighbors, provide financial assistance and to keep the Town of Bluffton clean, green and safe. This program recognizes and fosters groups formed in pursuit of neighborhood interests. A few of the housing initiatives in the program include home inspection assistance, trash removal assistance, demolition assistance, free paint and septic maintenance assistance. Beaufort County can support such program initiatives by initiating a Regional Trust, such as the Lowcountry Housing Trust in Charleston, SC. In establishing a Regional Trust, municipalities with the County can participate through an intergovernmental agreement to pool resources to achieve workforce and affordable housing goals.
Michelle Knight HOME coordinator, LCOG	1. LCOG is responsible for the administration/management of the Lowcountry Regional HOME Consortium as well as a number of Community Development Block Grant (CDBG) Projects related to providing affordable housing to income qualifying individuals.
Wendy Zara AG Edwards/Wachovia Securities	1. As Chair of the Chamber of Commerce Growth and Infrastructure Committee, I am aware of the lack of availability of workforce housing countywide (housing for 70-100% of median income especially). It is imperative to work co-operatively with the towns and city 9ex HH) to enact an inclusionary zoning ordinance (including fee-in-lieu or land donation options). The County also should join the Lowcountry Housing Trust (easier than establishing its own). In order to prevent zoning shopping, efforts need to be at least countywide or in partnership with jasper. 2. The biggest problem is substandard housing, especially in unincorporated areas. In the rural areas many families own their land but live in substandard housing. I think it is easier to address the very low and low income shortage that the moderate because developers can build tax-credit housing for these populations. We need to add housing for the 50-100% of median population and REPAIR programs for the substandard housing. 3. New affordable housing should be built/rehabbed in the incorporated areas or on the edge of urban areas to be near public services and employers. There is no need to add densities in the rural areas where employment and services are unavailable. However there is a critical need for repair in the rural areas. Unless builders/developers are required to include workforce housing in their projects (or donate land or a fee in lieu) workforce housing will not be built. Infill development needs to be incentivized in the urban areas. Comments on Population page: The need for workforce housing overall is critical. It is easier to find money for subsidized housing than to resolve the need for families or individuals who earn 70-100% of median income. We need public/private partnerships to address those needs, plus we need to address the subsidized housing issues and how to get rid of trailers. Comments on Policy, Strategy, or Program page: Many low income people have credit problems that disqualify them for loans.
Tina Hill Shell Point Apartments	1. We are Low Income Housing Tax Credit authorized under SC Housing Finance & Development Authority, regulated by Section 42 of the Internal Revenue Code. 72 units total: 22 two bedroom @ 50% median income 22 three bedroom @ 50% median income 14 two bedroom @ 60% median income 14 three bedroom @ 60% median income
Billy Keyserling Realtor and Developer Telephone interview 7/15	Populations affected are really all Beaufort County residents, who have been out-priced by the influx of affluent retirees and others. Those will serious income limitations are especially affected. The average price of a house now is about $300,000. The builders are now almost totally dependent on importing homebuyers as locals are priced out of the market. The high cost of housing is a result of several factors: greed, development fees, land costs, low density. At $5,000, fees are 5% of a $100,000 house, and that's too high. Density limitations are a serious impediment. Creative developments can achieve both affordable housing and environmental goals. The current development regulation model is entirely punitive. Incentives should be introduced into it.

Keyserling, continued	Modular housing has potential, but certain site built housing can achieve the same efficiencies. Haven Homes in Ridgeland is one of the best modular builders in the country. Panelized construction may also be an option. There needs to be more creativity and more will to meet the challenge of affordable housing. Creativity is stifled under current conditions.
Cooter Ramsey Allison Ramsey Architects Telephone interview 7/15	Affordable housing can and should be distributed throughout the county and not concentrated in specific locations. The exterior of affordable units can be attractive without running up costs. Savings come from relatively simple interiors, thoughtful design, and less square footage. Modular housing tends to be as expensive as stick built. However, if it could be set up specifically for affordable housing production, certain economies could be achieved. The concept of a non-profit producing an affordable Katrina-type modular house might work here. The Seabrook Community Preservation Plan is a good model of what could be done to achieve affordable housing within a mixed use context. Mixed use development offers excellent potential to build affordable housing if a diverse range of units can be included in the product, such as apartments above commercial uses.
Richard Seymour Vice Chair Affordable Housing Consortium Governing Council	1. Collaboration with Lowcountry Housing Consortium, Charleston. The County Comprehensive Plan should define a “development model” for residential/mixed use and identify locations where such a model could be built. Offer developers a fast track incentive to build with 10-15% workforce or affordable housing.
Dean Morrissey Millennium Real Estate Group Member, Affordable Housing Consortium	I feel there is a huge need for more rental property. We tent to always refer to home ownership, where 35% of the overall population in the US rents their domicile. Every opportunity to provide quality affordable housing, especially rental property, offers a greater choice for livable and habitable homes.

RANKED SURVEY RESPONSES --POPULATIONS IN NEED			
POPULATION - URBAN	URBAN MEAN	POPULATION - RURAL	RURAL MEAN
Very Low Income Elderly	3.06	Very Low Income Families with Children	3.33
Low Income Working Families With Children	2.95	Very Low Income Elderly	3.15
Very Low Income Families with Children	2.94	Victims of Abuse	3.08
Low Income Single Workers	2.94	Low Income Working Families With Children	3.07
Developmentally Disabled, Families Non-Working	2.81	Very Low Income Individuals and Couples	2.92
Developmentally Disabled, Single Non-Working	2.80	Low Income Working Couples, No Children	2.77
Victims of Abuse	2.76	Low Income Single Workers	2.71
Temporarily Homeless Families	2.75	Developmentally Disabled, Families Non-Working	2.71
Frail Non-Working Elderly	2.73	Low Income Seniors, Single Or Married	2.71
Low Income Working Couples, No Children	2.69	Developmentally Disabled, Single Non-Working	2.69
Special Needs Homeless	2.65	Frail Non-Working Elderly	2.62
Very Low Income Individuals and Couples	2.59	Temporarily Homeless Families	2.57
Moderate Income Working Couples, No Children	2.58	Moderate Income Working Couples, No Children	2.46
Low Income Seniors, Single Or Married	2.57	Moderate Income Working Families w/ Children	2.46
Developmentally Disabled Single Assisted Workers	2.56	Special Needs Homeless	2.43
Individuals in Recovery	2.44	Moderate Income Single Workers	2.43
Homeless Transitional Workers	2.42	Developmentally Disabled Single Assisted Workers	2.42
Moderate Income Working Families w/ Children	2.41	Individuals in Recovery	2.38
Moderate Income Single Workers	2.26	Moderate Income Seniors, Single or Married	2.23
Moderate Income Seniors, Single or Married	2.07	Homeless Transitional Workers	2.00

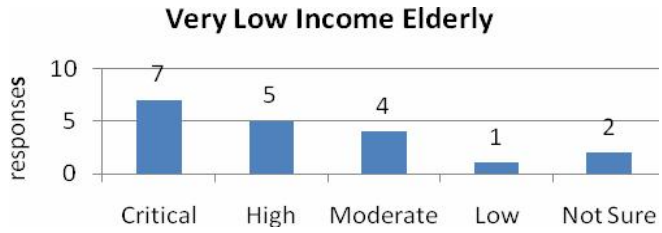
Priority Scale: Critical = 4, High = 3, Moderate = 2, Low = 1

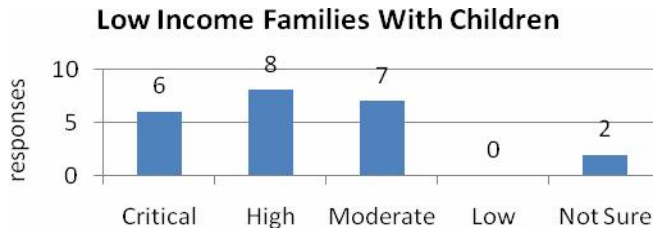
RANKED SURVEY RESPONSES -- HOUSING STRATEGIES			
POLICY, STRATEGY, OR PROGRAM	URBAN MEAN	POLICY, STRATEGY, OR PROGRAM	RURAL MEAN
Non-Profit Housing Services/Construction	3.47	Reduction of Barriers to Affordable Housing	3.54
Reduction of Barriers to Affordable Housing	3.41	Stabilization/Rehab of Existing Housing	3.45
Stabilization/Rehab of Existing Housing	3.28	Non-Profit Housing Services/Construction	3.43
Financial Literacy Education	3.27	Financial Literacy Education	3.38
Homebuyer Counseling	3.24	Homebuyer Counseling	3.15
Trust Fund	3.13	State and Federal Initiatives	3.15
Down Payment and Closing Assistance	3.12	Inclusionary Zoning	3.08
Inclusionary Zoning	3.12	Down Payment and Closing Assistance	3.00
Public/Private Ventures	3.07	Trust Fund	3.00
Revolving Loan	3.00	Tax Increment Financing (TIF districts)	3.00
State and Federal Initiatives	2.88	Developer Incentives (other)	2.92
Employer-Based Programs	2.80	Revolving Loan	2.89
Tax Credits (State or Federal programs)	2.79	Tax Credits (State or Federal programs)	2.82
Tax Increment Financing (TIF districts)	2.77	Mortgage Insurance (local program)	2.78
Developer Incentives (other)	2.65	Public/Private Ventures	2.73
Land Trust	2.65	Fair Share Housing	2.70
Mortgage Insurance (local program)	2.64	Modular Housing	2.62
Density Bonus	2.63	Employer-Based Programs	2.56
Gentrification Prevention	2.53	Gentrification Prevention	2.46
Modular Housing	2.40	Land Trust	2.38
Fair Share Housing	2.25	Density Bonus	2.36
Non-Traditional Housing (e.g., SRO)	2.25	Mutual Housing Association (Co-Housing)	2.00
Mutual Housing Association (Co-Housing)	2.14	Non-Traditional Housing (e.g., SRO)	2.00
Limited Equity Co-ops	2.07	Limited Equity Co-ops	1.91
Manufactured Housing	1.38	Manufactured Housing	1.77

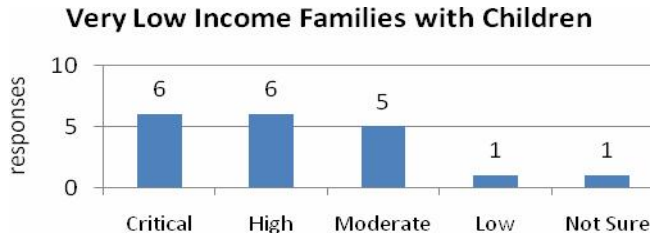
Priority Scale: Critical = 4, High = 3, Moderate = 2, Low = 1

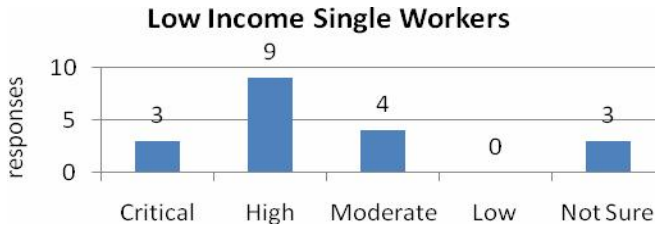
Population Response Distribution (Highest Ranking by Mean)

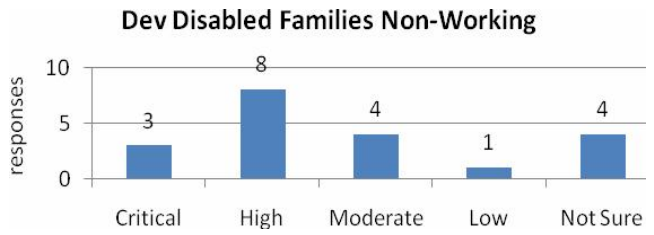
Urban

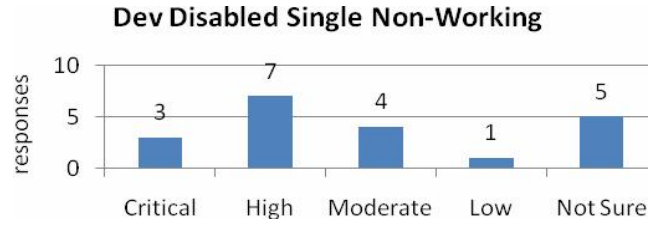




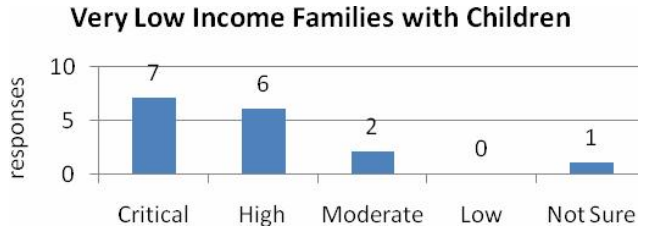


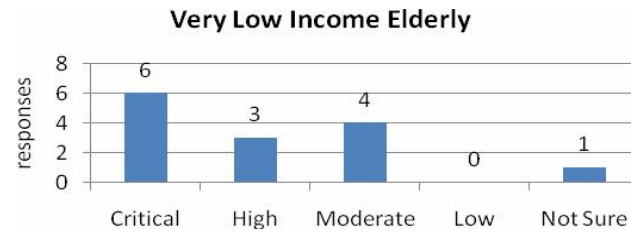


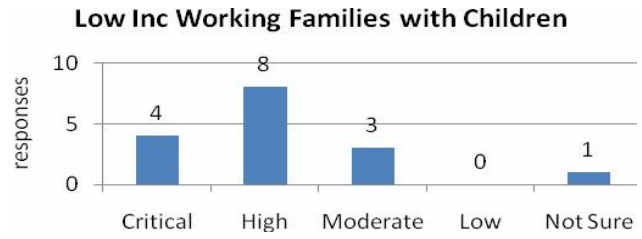


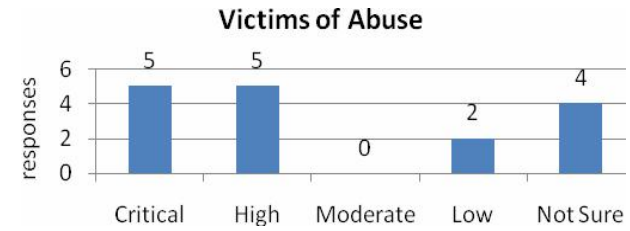


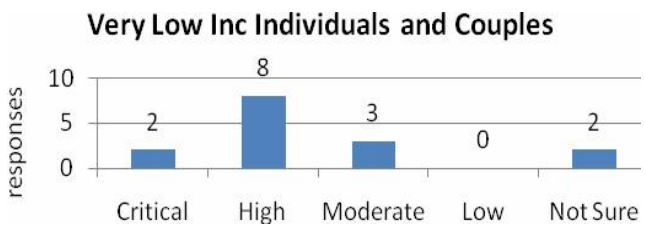
Rural

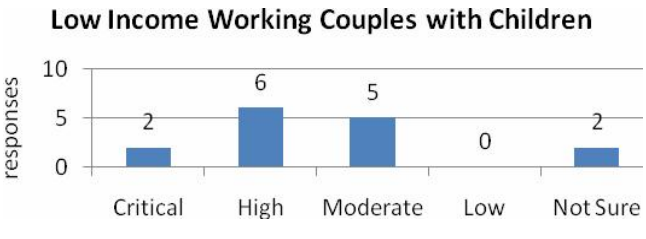






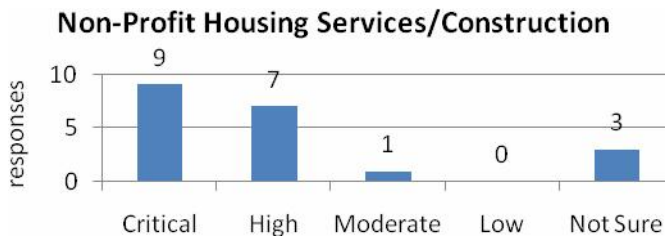


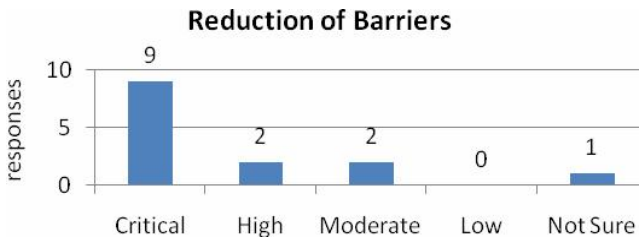


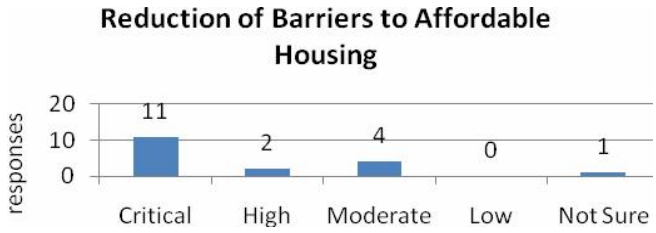


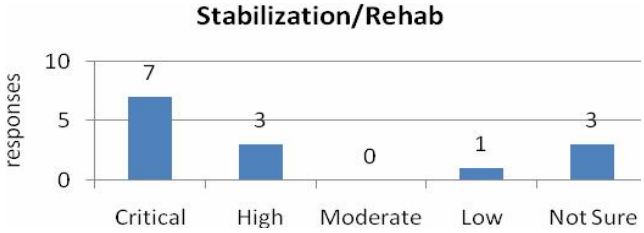
Policy, Strategy, Program Response Distribution (Highest Ranking by Mean)

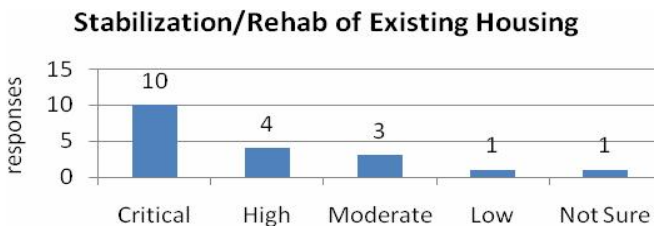
Urban	Rural

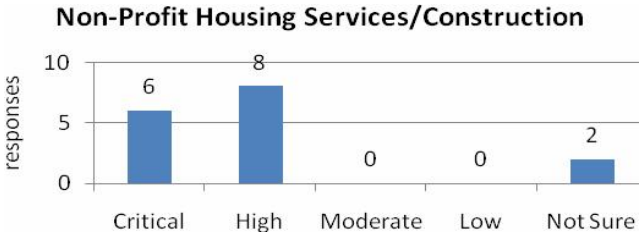


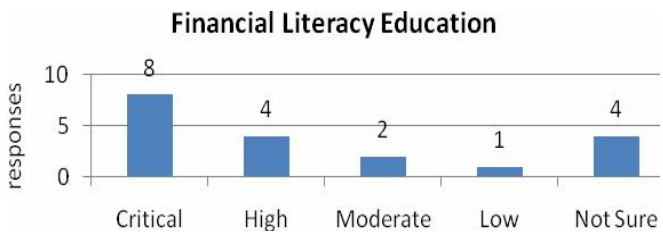


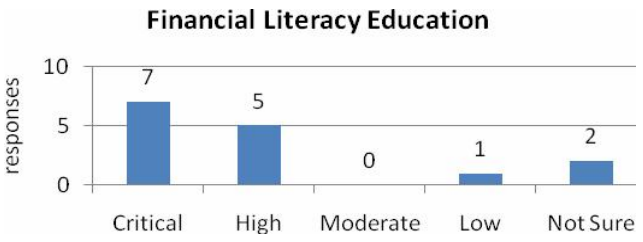


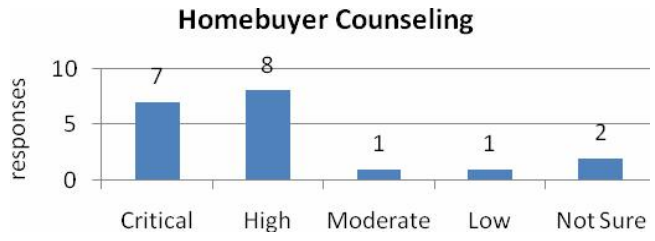


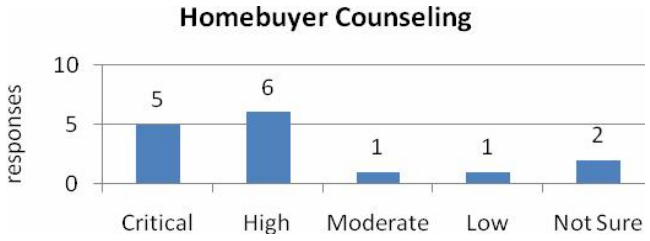


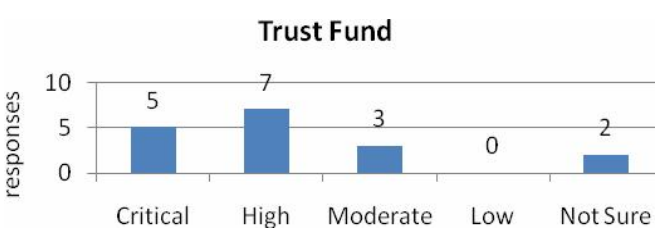


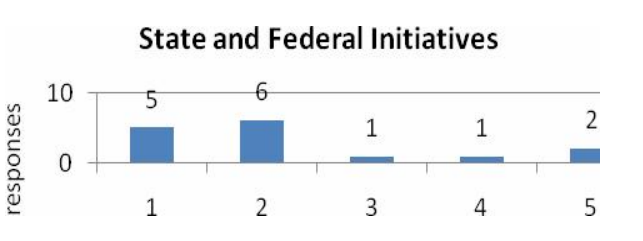












Addendum: Housing Opportunities Survey

HOUSING OPPORTUNITIES SURVEY

Beaufort County is currently updating its Comprehensive Plan. The Comprehensive Plan will contain policies and strategies in its Housing Element for strengthening the delivery of workforce and affordable housing. This survey is designed to obtain comments and recommendations for the Housing Element update from officials in local government, non-profit agencies, and professional organizations that work in the housing arena.

Respondent Name: _____ Date: _____

Organization and Title: _____

Instructions: The first question on this page provides you with an opportunity to describe the housing programs and initiatives that you are acquainted with and how policies and strategies in the Comprehensive Plan can help improve the delivery of housing opportunities. The second and third questions relate to the charts on pages two and three. The second page of the questionnaire is a "needs assessment" chart that asks you rate the housing needs of various populations. The third page of the questionnaire relates to housing supply and asks you to rate various housing-related policies and programs.

1. Please briefly describe any workforce or affordable housing initiatives with which you are involved, and offer any suggestions as to how the Beaufort County Comprehensive Plan can be supportive.

_____

_____

_____

_____

_____

_____

_____

_____

2. Please fill out page two. If you have any additional comments related to housing needs of specific populations, you may provide them here.

_____

_____

_____

_____

_____

_____

3. Please fill out page three. If you have any additional comments related to housing programs, policies, or strategies, you may provide them here.

_____

_____

_____

_____

_____

_____

Thank you for your assistance. If you have additional comments, please use the back of this sheet. If you have any questions about the Housing Element update, please contact either Thomas Wilson at 522-1167 or Robert Merchant at 470-2722. PLEASE FAX THE COMPLETED QUESTIONNAIRE TO 470-2731, ATTENTION T. WILSON.

Page 2 instructions: For each population listed below, check the column that represents your assessment of the need for supportive interventions (such as those listed on Page 3). A ranking of "critical" or "high" suggests that the needs of that population should be given careful attention in the planning process. If you would like to recommend specific initiatives for a population, you may add a note to that effect on this page or in the space provided on Page 1 for Question #2.

POPULATION **(See Definitions on pages 4 and 5)**	Need in Towns and Urbanized Areas					Need in Rural Unincorporated Areas				
	Critical	**High**	**Moderate**	**Low**	**Not Sure**	**Critical**	**High**	**Moderate**	**Low**	**Not Sure**
Very Low Income Families with Children										
Very Low Income Individuals and Couples										
Very Low Income Elderly										
Low Income Working Families With Children										
Low Income Working Couples, No Children										
Low Income Single Workers										
Low Income Seniors, Single Or Married										
Moderate Income Single Workers										
Moderate Income Seniors, Single Or Married										
Moderate Income Working Families With Children										
Moderate Income Working Couples, No Children										
Developmentally Disabled, Families Non-Working										
Developmentally Disabled, Single Non-Working										
Developmentally Disabled Single Assisted Workers										
Temporarily Homeless Families										
Special Needs Homeless										
Homeless Transitional Workers										
Frail Non-Working Elderly										
Victims of abuse										
Individuals in Recovery										
Other:										
Other:										
Other:										

Page 3 instructions: For each policy, strategy, or program listed below, check the column that represents your assessment of the need for that initiative. To the extent that it applies to a specific population, make a note either on this page or on Page 1, in space provided for Question #3. Each item in the list below has many variants; please use the "Other" line to describe a specific form of a program that you believe is vital to workforce and affordable housing in Beaufort County.

POLICY, STRATEGY, OR PROGRAM (See Definitions on pages 4 and 5)	Importance in Towns and Urbanized Areas					Importance in Rural Unincorporated Areas				
	Critical	High	Moderate	Low	Not Sure	Critical	High	Moderate	Low	Not Sure
Density Bonus										
Developer Incentives (other than Density Bonus)										
Down Payment and Closing Cost Assistance										
Employer-Based Programs										
Fair Share Housing										
Financial Literacy Education										
Gentrification Prevention										
Homebuyer Counseling										
Inclusionary Zoning										
Land Trust										
Limited Equity Co-ops										
Manufactured Housing										
Modular Housing										
Mortgage Insurance (local program like FHA, VA)										
Mutual Housing Association (Co-Housing)										
Non-Profit housing services/construction (e.g., Habitat)										
Non-Traditional Housing (e.g., Single Room Occupancy)										
Public/Private Ventures										
Reduction of Barriers to Affordable Housing										
Revolving Loan										
Stabilization/Rehabilitation of Existing Housing										
State and Federal Initiatives (how can local officials improve delivery of State and Federal assistance?)										
Trust Fund										
Tax Credits (specify State or Federal programs)										
Tax Increment Financing (TIF districts)										
Other:										

DEFINITIONS

Affordable Housing. Affordable housing is frequently defined in terms established by state and federal government for program administration purposes. For such purposes it is assumed that housing is affordable when rents or mortgage payments do not exceed 30 percent of a household's income. For local government needs assessment and planning purposes, the 30 percent standard is most effectively applied at the census tract or block group level where it can be associated with neighborhood level geography. See Household Income.

Barriers to Affordable Housing. This is a term that often applies to structural impediments in local zoning and land development codes and development review procedures that hinder the development of workforce and affordable housing.

Density Bonus. An incentive for affordable housing in the zoning ordinance to encourage the development of affordable housing by permitting increased density and effectively reducing land cost per unit.

Down Payment Assistance. A grant or loan to a homebuyer to supplement the amount of down payment they can afford. This form of assistance enables with adequate cash flow and sound credit to purchase a home with a smaller level of savings.

Employer-Based Programs. Programs that provide workforce housing partially or entirely through organized involvement of employers. Such programs may be in conjunction with private sector, non-profit, or local government initiatives. In Beaufort County, this has been discussed in the form of **"home-to-work"** programs.

Fair Share Housing. A planning initiative that requires a specified amount of workforce housing to be constructed by geographic area. Development of market rate housing or commercial development may be subject to wait-listing until an adequate amount of workforce housing is produced.

Financial Literacy Education. Classes targeted for homebuyers with poor credit histories to fundamentally improve their current financial standing and future financial management.

Gentrification. The process whereby relatively affluent homebuyers, renters, and investors move into a neighborhood thus increasing property values, rents, or taxes resulting in an involuntary displacement of long-term residents and business owners, the loss of neighborhood diversity, or a change in the overall character of that neighborhood.

Homebuyer Counseling. Programs that offer expert advice to inexperienced homebuyers on basic financial planning, home-buying procedures, home maintenance, and other areas that enhance a prospective buyer's ability to purchase and sustain homeownership.

Household Income. The total income of all persons living together in a housing unit. The following categories of household income are often used in structuring affordable and workforce housing programs, and follow definitions established by the U.S. Dept. of Housing and Urban Development:

- **Moderate Income** means a household earning a gross income of no greater than 120% of the county median income, as determined by the U.S. Department of Housing and Urban Development, adjusted for household size.
- **Low Income** means a household earning a gross income of no greater than 80% of the county median income, as determined by the U.S. Department of Housing and Urban Development, adjusted for household size.
- **Very low income** means a household earning a gross income of no greater than 50% of the county median income, as determined by the U.S. Department of Housing and Urban Development, adjusted for household size.
- **Extremely Low Income** means a household earning a gross income of no greater than 30% of the county median income, as determined by the U.S. Department of Housing and Urban Development, adjusted for household size.

Housing Trust Fund. A special fund for financing production of affordable housing with one or more dedicated sources of revenue. A housing trust fund may be used in conjunction with inclusionary zoning to provide developers with an alternative to constructing workforce or affordable housing.

Inclusionary Zoning. A requirement in the zoning ordinance for developers in designated areas to produce a specified percentage of affordable housing as part of a market rate residential development project. The developer may alternatively pay an "in lieu" fee.

Land Trust. A non-profit agency that obtains land for the purpose of making it available for workforce or affordable housing. The land trust retains ownership of the land after it is developed, which enables it to restrict resale of housing to affordable levels.

Limited Equity Housing Cooperative. A housing cooperative organized to limit accumulation of equity as a means of retaining affordability. A limited equity housing cooperative is owned by a nonprofit corporation or nonprofit housing sponsor. Resident-owners own the cooperative as an undivided whole, rather than individual units, but each has the exclusive right to occupy a specific unit within the cooperative.

Manufactured Housing. Housing built under HUD specifications and registered as a mobile home under state law.

Modular Housing. Housing that is constructed off-site in a factory setting, transported to the building site in components or modules, and assembled on-site.

Mortgage Insurance. A program that provides lenders with local insurance against loss from foreclosure; similar to FHA and VA programs.

Non-Traditional Housing. Forms of alternative housing such as single room occupancy rentals. Such housing often provides small rental units on a weekly basis with small deposits.

Mutual Housing Association (Co-Housing). A **c**ommunity-based, nonprofit tax exempt corporation that may develop, own or manage housing units. Association membership includes nonresident and community members. Resident members constitute a majority of the shareholders of the corporation. Each member has one shareholder vote. The corporation is governed by an elected volunteer Board of Directors representative of the association membership. Members have no equity interest in the project. Residents pay a one-time membership fee to be used to defray the cost of constructing the housing units. This fee is refundable with nominal interest when residents leave the association. Residents must be members of the association, pay the membership fee and meet resident selection criteria established by the association.

Permanently Affordable. A**f**fordable in perpetuity and subject to an agreement between the developer and the city to maintain affordability. Such agreement shall be recorded to the property.

Public/Private Ventures. Joint ventures involving government or non-profits, on the one hand, and private investors or developers on the other hand. In exchange for a package of incentives, private interests agree to provide a workforce housing component in the development.

Resident Controlled Non-Profit Housing Corporation. A housing corporation established to manage for-sale or rental housing projects designated for very low, low or moderate income households in which the majority of households have formed a nonprofit housing corporation. Residents need not have equity interest in such projects.

Revolving Loan. A public sector lending program that provides a second mortgage held until re-sale of the property, at which time the loan fund recoups a proportionate share of appreciation. Useful in rapidly appreciating markets, the program was pioneered in San Francisco for moderate income workforce housing.

Self-Help Housing. Housing constructed for very low, low, and moderate income families in which a group of prospective homebuyers provides labor to assist in the construction of their units. The intent of this program is to transform the hours of labor into “sweat equity” to reduce the purchase price of the unit.

Sustained Affordability. The affordable housing obligation being produced to meet the requirements of this ordinance is done so in a manner that maintains the affordability provided into the unforeseeable future, with minimal loss in affordability.

Tax Credits. State and Federal tax credits for affordable housing.

Tax Increment Financing. Financing of affordable housing and other designated redevelopment objectives through higher taxes (increments from a base year) generated as a result of revitalization in a specified redevelopment district.

Workforce Housing. Residential units for individuals and households with sufficient earnings from employment to rent or purchase adequate housing in a stable and balanced market. Because workforce housing is essential to the basic functions of a community, market interventions may sometimes be required to ensure its production and availability.

Appendix 10A: Beaufort County Trails and Blueways Master Plan

PROJECT GOALS

Beaufort County recognizes the need to protect historic resources, provide public recreational facilities and parkland, provide alternative transportation, and preserve open space in its Comprehensive Plan. The proposed Beaufort County Trails and Blueways System will help Beaufort County in its quest to achieve some of these goals.

The Comprehensive Plan defines greenways as natural areas that often follow linear landscape features such as rivers, streams, highlands, and even abandoned railroads. Greenways can be publicly or privately owned, and may be open or closed to public use. Greenways are usually linear strips running through urban, suburban, and rural areas that protect water quality, floodplains, wetlands, wildlife habitat, scenic vistas, historic and cultural resources, and recreational uses. Greenways can link communities, parks, and other large natural areas. Some greenways have trails that are protected pathways for recreation and transportation. Trails and greenways may enable people to walk to pleasant natural areas; to walk, bicycle, or ride a horse away from noisy, dangerous roads; and to travel without cars to schools, community centers, shopping centers, stores and parks.

Beaufort County has begun taking steps towards establishing a trail and greenway network through the preservation of natural and historically important areas. Thousands of acres of sensitive land have been protected through the Rural and Critical Lands Preservation Ordinance, the river buffer standards, conservation easements on private lands, and the Beaufort County Open Land Trust.

Bluffton, in southern Beaufort County, has begun working with the South Carolina Department of Natural Resources to develop wildlife corridors and open space greenways. Bluffton has also developed an area plan to determine how and where greenways and trails can best serve the Southern Beaufort community. The Town of Hilton Head Island has developed and put in place an extensive trail system adjacent to SC Highway 278. Greenway and trail projects have unique purposes for each community in which they are developed. The Southern Beaufort County concept is intended to connect the community with safe routes for people to access the community's resources via walking, cycling, or non-motorized modes. It is also the purpose of the Southern Beaufort County Greenway Project to provide the community with access to watercourses and other natural resources.

This trail masterplan or vision for Beaufort County is based on the documents produced by the Northern Trails and Blueways project and the Southern Beaufort Greenways Project, which are incorporated herein by reference.

The Beaufort County Trails and Blueways Master Plan focuses on the recreation and alternative transportation components of a trail system. The goals of the plan are to:

- Provide a safe alternative to traveling with motor vehicles, thus reducing traffic congestion on roadways and reducing air pollution.
- Provide connections to cultural and natural resources for residents, tourists and visitors.
- Link communities with commercial areas and community resources, such as schools and shopping centers.
- Provide access to open space and recreational opportunities.
- Provide links and connections within, and to, the various communities in Beaufort County.

Additionally, numerous historically relevant sites in Beaufort County have been identified. The trail system helps to preserve and protect these historic resources by:

- Identifying these resources as sites that should be prioritized for protection because of their historic significance.
- Raising the community's awareness of the significance of these resources by linking them to the trail system.

Beaufort County is a region endowed with cultural richness and natural beauty. The Beaufort County Trails and Blueways Master Plan is an important step towards protecting these assets, and minimizing the impacts of increased development and tourism, while providing safe routes for alternative transportation and recreation.

PROCESS AND APPROACH

The Beaufort County Trails and Blueways Master Plan depicts routes for the development of the trail and blueway network. To achieve the goals listed in the introduction required, and will continue to require, extensive public input, data collection, site visits and examination of existing master plans in the various communities. The following is a summary of the Beaufort County Trails and Blueways Master Plan processes for the northern and southern sections of the County and is based upon the products from the Northern Beaufort County Trails and Blueways project and the Southern Beaufort Greenway Project. Various types of trails are shown on the maps and are listed on each legend. Below is a brief definition for each:

- **Existing South Carolina Department of Natural Resources (SCDNR) Port Royal Sound Paddle Trails** are water trails for paddle craft that have been designated and mapped by SCDNR.
- **Proposed Blueways** are water trails for paddle craft that are being proposed based upon input gathered during the public information meetings and agency interviews. They include water trails that link into the existing greenway system at water access points and links that provide access to the adjacent ACE Basin in Colleton County.
- **Existing Trails** include designated trails that have been constructed.
- **Proposed Trails** are trails that are being proposed based upon input received during the public information meetings and agency interview process completed during this study, as well as trails which have been preliminarily routed or planned by Community Preservation Areas, municipalities, the Lowcountry Council of Governments (LCOG) or other governmental entities. They include trails being proposed in the short and long term.

- **Proposed Rails to Trails** include trails and greenways that are along existing and/or abandoned rail lines.
- **Proposed Trail in Water Line Easement** is a trail that follows an existing water line easement.

As the trail/blueway system is described in the following pages, the routes and trails are referred to as one of three categories:

- **Spine Trails** are the major corridors that tie Beaufort County together. It is envisioned that both residents and tourists will use these facilities.
- **Spur Trails** connect Spine Trails to neighborhoods, parks, community facilities, shopping districts, vistas, historic and natural features and boat landings. It is envisioned that residents will predominantly use these trails.
- **Blueway Trails** are waterways for use by canoes, kayaks and other paddle craft. It is envisioned that both residents and tourists will use these trails.

PRIORITIES

Southern Beaufort County: The Southern Beaufort Greenway (SBG) Plan delineates a number of projects and phases with trails throughout the Bluffton area and connecting to unincorporated portions of the County. The SBG plan includes improving the walk-ability of the downtown historic portion of Bluffton and connecting it with the newly annexed areas of Palmetto Bluff, Buckwalter and Shultz tracts. The vision of the plan also seeks to connect existing and proposed parks, schools, ball fields and other amenities with the residential sections of Bluffton. The SBG plan strives to improve water access for citizens with a proposed blueway as well. The SBG plan also addresses the connection of the Bluffton area with the Town of Hilton Head Island and its trail system.

Northern Beaufort County: Northern Beaufort County includes the portion of Beaufort County north of the Broad and Pocotaligo Rivers. The maps show the entire network throughout Northern Beaufort County. Priorities must be established to develop the plan in a logical and effective manner.

A high priority in the northern part of the County should be the establishment of the Port Royal Rail Trail and Water Line Easement spine trails and greenways. In order to secure conservation easements with public access and implement these facilities, discussions between Beaufort County and CSX and Port Royal rail lines should begin immediately. Beaufort County should also begin similar discussions with the United States Navy and Beaufort Jasper Water & Sewer Authority in reference to the area located within the waterline easement. Although these target areas currently contain active rail and water service lines, properly designed trails could be established within the existing rights of way that would not affect the operations of the existing services. In the future, if these services were relocated and/or discontinued, additional trails and greenway features could be incorporated.

The implementation of the Route 21, Route 170 and Route 280/802/Brickyard Point spine trails should be another high priority in northern Beaufort County. The establishment of these trails will complete the regional routes to which the spur trail network will connect. Roadway improvements are currently under construction for both Route 170 and Route 280. Due to the nature and timeline associated with the completion of these projects, it is imperative that representatives from Beaufort County begin discussions with the South Carolina Department of Transportation (SCDOT) in order to facilitate the inclusion of bike lanes. Route 170 is an important connection to Southern Beaufort County and the trail system outlined in the

Bluffton/Hilton Head area links existing and future trails and pathways within Beaufort County and eventually Jasper County. At the time of these discussions, the County should present the concept of developing bike lanes along Routes 21, 17 and 280/802 to the SCDOT in order to insure the future programming and funding of these routes.

The final stages of implementation should focus on the development of the various spur trails, which have been identified in the major study areas. Special attention should be placed upon the implementation of the spur routes that connect directly to the spine trails. The creation of these routes will provide a vital link from the spine trails to the adjacent residential neighborhoods and community centers. Establishing these initial connections into the core of each community will provide the populace with regional alternative transportation and recreational opportunities. This approach will also allow each community to experience and examine the various types of trails that have been implemented. This opportunity will allow the community to further refine the trail locations and types that have been proposed for their neighborhoods.

SUMMARY

Municipalities within the County have successfully undertaken the process for planning and implementing trail/blueway networks outlined in this section. In order for the County to achieve the implementation of its trail/blueway networks, it is critical that all parties that have a stake in the development and use of these facilities be involved through each stage of the planning, construction and management processes. This way the links to the municipalities, the unincorporated parts of the County and its resources can be established as the funding and opportunities arise. The proposed trail and blueway routes that are shown on these maps were developed based upon input received from Beaufort County citizens during a series of meetings. Because the goals and characteristics of each area within Beaufort County are unique, the users and uses of the trails/blueways system will vary. The goals, characteristics and users will determine how each area's trail/blueway network is designed and planned.

Northern Beaufort County Trails and Blueway Master Plan

Spine Trails are the major corridors that tie Beaufort County together.

Spur Trails connect Spine Trails to neighborhoods, parks, community facilities, shopping districts, vistas, historic and natural features and boat landings.

Blueway Trails are waterways for use by canoes, kayaks and other paddle craft.

HAMPTON COUNTY

TO SAVANNAH

TO CHARLESTON

COLLETON COUNTY

JASPER COUNTY

N

W E

S

COOSAW RIVER

BEAUFORT

BROAD RIVER

PORT ROYAL

ST. HELENA SOUND

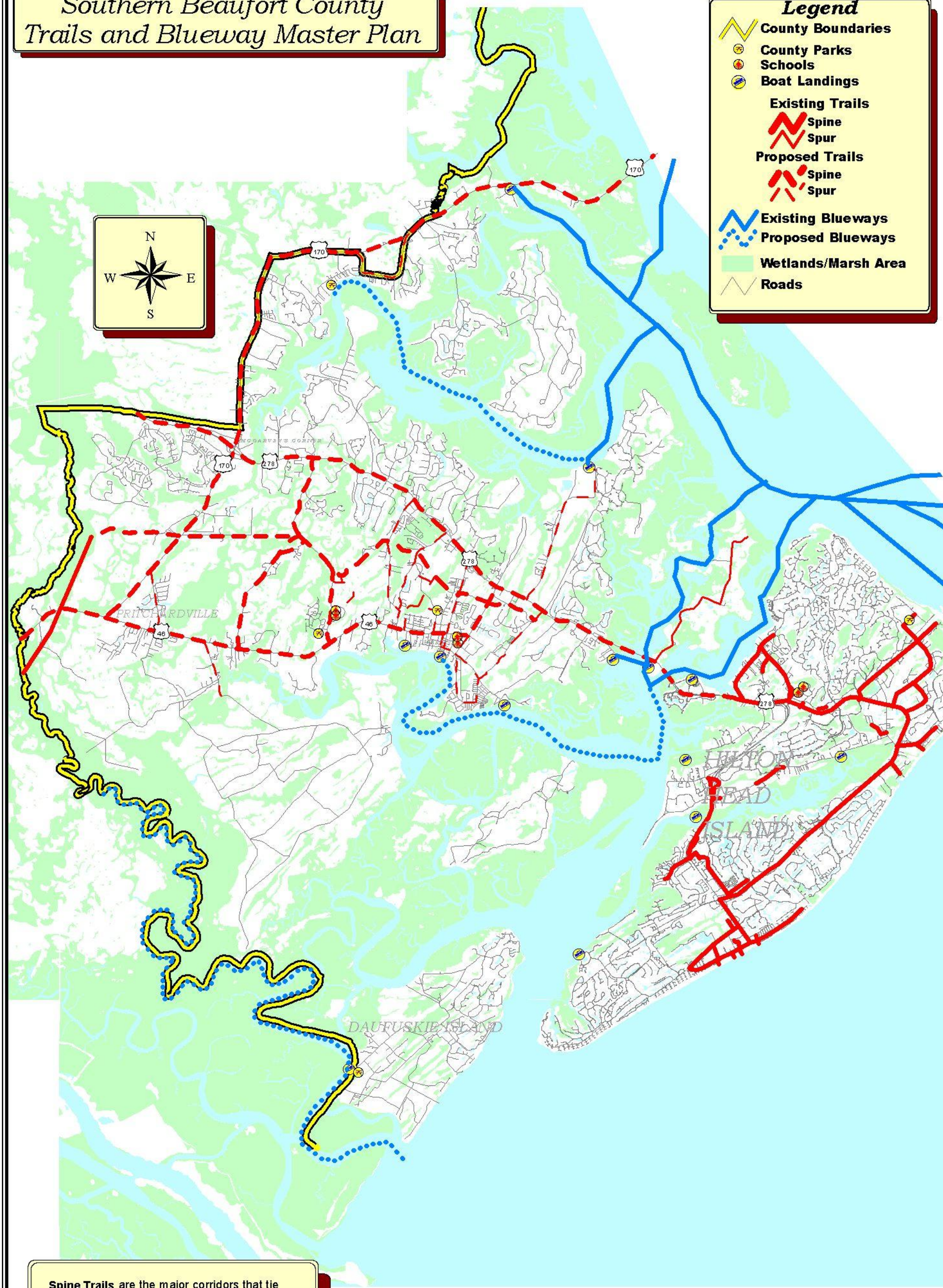
PORT ROYAL SOUND

Legend

- County Boundaries
- County Parks
- Schools
- Boat Landings
- Existing Trails
  - Spine
  - Spur
- Proposed Trails
  - Spine
  - Spur
- Existing Blueways
- Proposed Blueways
- Wetlands/Marsh Area
- Roads
- Active Rail Lines

Prepared by Beaufort County GIS Department

Southern Beaufort County Trails and Blueway Master Plan



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Printed September 23, 2003

BEAUFORT COUNTY SOUTH CAROLINA 1769

Prepared by Beaufort County GIS Department

Appendix 10-A

Northern Beaufort County

Greenway and Blueway Master Plan

October 2002



JORDAN JONES & GOULDING

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Introduction

PROJECT GOALS

In its Comprehensive Plan, Beaufort County recognizes the need to protect historic resources, provide public recreational facilities and parkland, provide alternative transportation, and preserve open space. The proposed Northern Beaufort County Greenway and Blueway System will help Beaufort County in its quest to achieve all of these goals.

The Comprehensive Plan defines greenways as natural areas that often follow linear landscape features such as rivers, streams, highlands, and even abandoned railroads. Greenways can be publicly or privately owned, and may be open or closed to public use ... Greenways are usually linear strips running through urban, suburban, and rural areas that protect water quality, floodplains, wetlands, wildlife habitat, scenic vistas, historic and cultural resources, and recreational uses ... Greenways can link communities, parks, and other large natural areas. Some greenways have trails which are protected pathways for recreation and transportation. Trails within greenways may enable people to be within walking distance of pleasant natural areas; to walk, bicycle, or ride a horse away from noisy, dangerous roads; and to travel without cars to schools, community centers, shopping centers, stores and parks."

Beaufort County has begun taking steps towards establishing a greenway network through preservation of historical and natural areas. Hundreds of acres of sensitive land have been protected through the Rural and Critical Land Preservation Ordinance, the Wetland Buffer standards, conservation easements on private lands, and through the Beaufort County Open Land Trust. Bluffton, in southern Beaufort County, has begun working with the South Carolina Department of Natural Resources to develop wildlife corridors and open space greenways. There is a proposal to add River Protection Overlay Districts to the Zoning and Development Standards Ordinance, which would place an additional level of protection on these sensitive lands.

The Northern Beaufort Greenway and Blueway Master Plan focuses on the recreation and alternative transportation components of a greenway system. The goals of the plan are to:

- Provide a safe alternative to traveling with motor vehicles, thus reducing traffic congestion on roadways and reducing air pollution
- Provide connections to cultural and natural resources for residents, tourists and visitors
- Link communities with commercial areas and community resources, such as schools and shopping centers.
- Provide access to open space and recreational opportunities.

Additionally, through the Comprehensive Plan and public workshops numerous historically relevant sites in Northern Beaufort County have been identified. The greenway and blueway system helps to preserve and protect these historic resources by:

- Identifying these resources as sites that should be prioritized for protection because of their historical significance.
- Raising the community's awareness of the significance of these resources by linking them to the Greenway and Blueway system.

Northern Beaufort County is a region endowed with cultural richness and natural beauty. The Northern Beaufort Greenway and Blueway Master Plan is an important step towards protecting these assets, and minimizing the impacts of increased development and tourism, while providing safe routes for alternative transportation and recreation.

PROCESS AND APPROACH

To achieve the goals listed above required extensive public input, data collection, site visits and examination of existing master plans in the various communities. Following is a summary of the Northern Beaufort County Greenway Master Plan process.

Phase I: Pre-Planning

- Task 1 - Kick Off Meeting — December 6, 2001
  A meeting was held with the Beaufort County Planning Department to establish the goals and objectives for the project.

- Task 2 - Data Collection — Throughout Master Plan Process
  Various sources of information were compiled to use in the planning of the Northern Beaufort County Greenway and Blueway Master Plan. These sources include: GIS information consisting of county boundaries, city boundaries, roadways, zoning areas, parcel information, wetland and waterways, aerial photography. Existing greenway and bike plans for the Lowcountry region, City of Beaufort, Town of Port Royal, Lady's Island, and St. Helena Island have also been collected. Other sources include the County, Comprehensive Plan, the County Manual for Stormwater Best Management Practices, and information about historic locations and other points of interest. Information regarding boat landings, fishing piers and bridges, canoe and kayak throw-ins were supplied by the Coastal Expeditions Map. Supplemental information on blueway routes were gathered through the owners of The Kayak Farm. Appendix A contains the complete list of data collected.

- Task 3 - Site Survey — December 2001-March 2002
  A site survey was completed which included site visits and an inventory and analysis of physical and environmental features, recreational amenities, historical and archeological resources, transportation access, existing bikeways and trails, wildlife habitat, aesthetics/viewsheds, adjacent land use and neighborhood character. The site inventory included the following locations: City of Beaufort, Town of Port Royal, Town of Yemassee, St. Helena Island, Hunting Island, Fripp Island, Lady's Island, Harbor Island, the Shell Point neighborhood, the Habersham development and surrounding area, Burton Wells Park, and the upper Ace Basin. Information concerning roadways, existing bike routes, boat launches, points of interest, and existing viewsheds were documented on existing GIS base maps and overlays.

- Task 4 - Base Map — Throughout Master Plan Process

  Information from the site visits, public meetings, stakeholder inter-views and Beaufort County's most recent GIS data were used to create base maps for each of four areas in Northern Beaufort County:
  - North of Whale Branch
  - Port Royal Island
  - St. Helena Island
  - Ladys Island, the City of Beaufort, and the Town of Port Royal.

  The base maps include streets, waterways, wetlands, county and city boundaries, resource conservation areas, parks, open space and preserved lands, and existing trails.

- Task 5: Planning Commission Meeting — February 5, 2002

  A meeting with the Beaufort County Planning Commission was held to gather input from the Planning Commission on the proposed Northern Beaufort County Greenway and Blueway Master Plan. Refer to Appendix A for a summary of the meeting.

- Task 6: Public Workshop #1 — February 6, 2002

  An all-day public Workshop was held in the City of Beaufort at the main branch of the Beaufort County Library to receive input from the public and various government agency representatives regarding their desires, concerns, and visions for the project. A summary of the comments received and a list of attendees can be found in Appendix A.

- Task 7: Meetings with Community Groups, Agencies and Individuals — March 4-7,2002

  The Beaufort County Planning Department identified the need for additional community meetings. A series of meetings was held with the following Community Preservation areas:
  - North of the Whale Branch & Seabrook
  - Shell Point
  - St. Helena
  - Burton

  The minutes from these meetings were then distributed to the County. Several meetings were held with the following agencies and individuals on St. Helena Island:
  - York Glover, County Extension Agent, Clemson University Extension Program.
  - Sandra Jones, Director of Land Use Programs, Penn Center.
  - Liz Santigati, S.C. Community Development Center.
  - Marqueta Goodwine
  - Jessie Gant, Owner, Ultimate Eating Restaurant.
  - Kitty Green, Gullah & Geechie Mahn Tours, Gullah Island Welcome Center.

  Following each community meeting, further Site Inventory of each Community Preservation zone was conducted to document the information gathered during the community meetings. The Site Inventory included mapping, field notes, and photo documentation.

Phase II: Planning Response

- Task 8: Planning Response — April-July 2002

  Using all of the gathered data, a draft plan identifying potential greenway routes that meet the goals of the project was developed for review by the Beaufort County Planning Department. The mapped routes were accompanied by a written description

explaining the intent of the route. The draft plan was circulated amongst the Advisory Group and Beaufort County staff for comments.

- Task 9: Final Master Plan Fall 2002
  The Final Master Plan was completed, incorporating the comments from the draft mapped routes and text.

- Task 10: Presentation to the Beaufort County Planning Commission and Beaufort County Council (To be arranged and conducted by Beaufort County Planning Department) Fall 2002
- Task 11: Public Presentation (To be arranged and conducted by Beaufort County Planning Department) Fall 2002

HISTORY AND DEMOGRAPHICS

People have inhabited the islands of Northern Beaufort County for at least 3800 years. The peoples that lived on these islands came from many places for many reasons. The stories of their arrival and the stories they created once settled form one of the more interesting and varied histories of any region in the Southeast.

Remains of a hunting and gathering civilization have been found dating to 1800 B.C. These people lived in impermanent huts, eating hickory nuts, fish, shellfish and game. Numerous sites remain in Northern Beaufort County. Examples include Indian Hill on St. Helena Island, thought to be a regional ceremonial center and was inhabited from 900 to 1400 AD. A smaller religious temple from the same period, known as The Little Barnwell Site, is located on Whale Branch. US Route 21 is thought to follow an ancient traveling route that may have been used by these people. From 1680 to 1715, a tribe known as the Yemassee migrated to the region from Florida and Central Georgia. Pocosabo Town was one of their settlements, found near present- day Sheldon.

Beginning in the 1500's, Europeans periodically attempted to explore and settle the Northern Beaufort region. In 1526, the Spanish Captain Pedro Quexos gave St. Helena its name, "Santa Elena Island" during an exploration of the coast. In 1562, the French Huguenot Captain Jean Ribaut named Porte Royall. The Charles Forte, established by the Huguenots on Parris Island, was the first Protestant settlement in North America. The Forte only existed for a few months. From 1577 to 1588, the Spanish returned and built a settlement named San Marcos (also known as Santa Elena) on Parris Island. At its height, it boasted 60 houses with men, women and children residents.

For almost 100 years after the dissolution of San Marcos, Northern Beaufort County had no permanent European settlements, although the Port Royal Sound provided refuge for pirates and warships. Finally in 1710, Beaufort Town was established by the Lord Proprietors of Carolina. Soon after, a brutal massacre emptied the town and surrounding plantations during the Yemassee War. The conflict lasted from 1715-17, and resulted in the Yemassee being driven from the region. Beaufort made a slow recovery, with indigo and shipbuilding being the primary livelihoods.

- The legacy of the 1700's is found throughout Northern Beaufort County. Today's routes 21, 278 and 170 are all built upon the routes of colonial era roads. In 1734, Fort Frederick, was constructed of tabby on the Beaufort River. Other historic structures from this era include:

- St. Helena's Episcopal Church (1724)
- Hepworth-Pringle House (1720), the oldest house in Beaufort
- Ruins of Prince William's Parish Church (1745-55), the first attempt in America to imitate a Greek temple
- St. Helena Parish Chapel of Ease (I 740), which served planters on St. Helena

From the 1800's to the Civil War, Northern Beaufort County enjoyed its wealthiest era. Large plantations harvested Sea Island cotton, considered the finest in the world, which was shipped from Port Royal to English mills overseas. Acres of land were cleared and drained for production. The African slave population grew tremendously to provide the labor, soon representing over 80% of the population in Beaufort District. The Gullah, descendants of this original slave population, have managed to preserve much of their roots and traditions to this day.

The majority of structures in the City of Beaufort National Historic District were built during in the early to mid- 1800's including:

- Beaufort College Building (1852)
- First Baptist Church (1844)
- Tabernacle Baptist Church (1840)
- Beaufort Arsenal (1852)
- Retreat Plantation (Jean de la Gaye House) on Battery Creek near Beaufort (1740), the oldest existing plantation in the county
- Brick Baptist Church (1855) on St. Helena
- Praise Houses, Gullah houses of worship that first appeared in 1840. Only four 20th century praise houses remain on St. Helena

On November 7, 1861, the Union defeated the Confederacy at Hilton Head, one of the earliest Union victories in the Civil War. By December, Union forces had forced the evacuation of the entire Beaufort area. Confederates managed to hold the railroad. Confederate earthworks can still be seen at Stoney Creek Battery near Sheldon on Route 17.

On January 1, 1863, the slaves were freed by the Union. The Emancipation Proclamation was read on The Green on St. Helena Island. By 1870, many islands were owned by the society of free black farmers. During Reconstruction, the Penn School was established by the Port Royal Relief Committee of Philadelphia to educate the former slaves. In the 1960's, it became the Penn Community Center. During the Civil Rights Movement, Martin Luther King Jr. used the center as retreat and for planning. The Penn Center is recognized as a National Historic Landmark District.

Reconstruction was mainly an era of poverty for both blacks and whites, and they were forced to focus on self-sufficiency. It was during this time that the Hunting Island Lighthouse & Keeper's Dwelling (1875) was constructed. Reconstruction was also the beginning of a 50-year period during which wealthy Northerners purchased large estates for hunting retreats and winter vacation homes.

Phosphate mining was attempted during the late 19th century, resulting in the Port Royal railroad line and the Town of Port Royal. About this time, Pam's Island (1883) was established as a Navy coaling station. The dry dock on the island is a National Register Historic District. Ft.

Fremont, a 3-gun concrete fortification to protect the Navy Yard at Parris Island, was built in Lands End, St. Helena in the 1890's. In 1915, the Marine Corps established Parris Island as a training depot. The Marine Corps Air Station (MCAS) and the military housing complex at Laurel Bay were constructed in the 1950's.

Transportation was a major factor in the pace of development in Northern Beaufort County throughout its history. Before bridges connected the islands, ferries ran between mainland, Port Royal Island, the City of Beaufort, Lady's Island, Hilton Head and Daufuskie Island. In the 1920's, a bridge was constructed to connect Port Royal Island and the mainland. In the 1930's, a bridge was completed from Port Royal to Lady's Island. These bridges allowed for greater access within and to the County.

The connection to the mainland began the decline in the Gullah culture. Although still threatened by development pressures, there is presently a revival in Gullah culture. African-Americans make up a growing segment of the Beaufort County tourism industry. They come to Northern Beaufort County to visit the Penn Center and experience the Gullah Culture.

Silviculture began to take over agriculture in the 1950's, and these lands are now being developed at a rapid pace. A few large agribusiness firms are still established on St. Helena, producing mainly tomatoes. Currently, Mexicans and Central Americans provide the main work force on these farms.

Tourism, the military bases, and the retirement community industry are the predominant segments of the economy in Northern Beaufort County today. It is the combination of beaches, a mild climate, and the rich history of the region that creates such a desirable place to visit and retire.

Demographics of Beaufort County and Northern Beaufort County

As the 21st century begins, Northern Beaufort County finds itself growing and changing at a tremendous pace. The number of tourists to the County has doubled in a decade, and its population has increased by more than 20%. The tables below illustrate this growth. The development of a greenway/blueway system is critical as infrastructure is upgraded to accommodate growth and while the land is still available and affordable. Significant lands must be protected and public recreation areas established before the land is developed. An increase in residents and tourists also means an increase in vehicular traffic, if other alternatives of transportation are not provided.

Table 1: Population Change in Beaufort County*

Year	Population
1930	21,815
1940	22,037
1950	26,993
1960	44,187
1970	51,136
1980	63,364
1990	86,425
2000	120,937
2010 (projection)	155,447

*1994 SC Statistical Abstract and 1997 Beaufort County Comprehensive Plan

Table 2: Population Change in Northern Beaufort County*

Year	Population
1990	55,529
2000	67,486

*1994 SC Statistical Abstract and 1997 Beaufort County Comprehensive Plan

Table 3: Percentage of Population By Age in 2000*

Age	Beaufort County	Northern Beaufort County
<18 years	23.3%	27.2%
18-24 years	12.0%	16.4%
25-44 years	27.2%	28.7%
45-64 years	22.1%	17.9%
>64 years	15.5%	9.9%

*US Census Bureau

Table 4: Percentage of Rural vs. Urban Residents in Northern Beaufort County in 2002*

Year	Population
Rural Population	30%
Urban Population	70%

*Beaufort County Planning Department

Table 5: Employment in Beaufort County*

Year	Population
1990	55,529
2000	67,486

*SC Employment Commission

Table 6: Number of Registered Tourists* in Beaufort County**

Year	Population
1990	52,354
2000	123,670

*"Registered Tourists" are those tourists which registered with the Chamber of Commerce Visitors' Center
**Greater Beaufort Area Chamber of Commerce

Northern Beaufort County Greenway and Blueway Master Plan

OVERVIEW

Northern Beaufort County includes the portion of Beaufort County north of the Broad and Pocotaligo Rivers. The Overall Map in Section 3 shows the entire network throughout Northern Beaufort County. Various types of trails are shown on the plans, as listed on each legend. Below is a brief definition for each:

- Existing SCDNR Port Royal Sound Paddle Trails - are water trails for paddle craft that have been designated and mapped by the South Carolina Department of Natural Resources.
- Proposed Blueways - are water trails for paddle craft that are being proposed based upon input gathered during the public information meetings and agency interviews. They include water trails that link into the existing greenway system at water access points and links that provide access to the adjacent ACE Basin in Colleton County.
- Existing Greenways - include designated trails and greenway trails that have been constructed.
- Greenways Currently Planned - include trails and greenway trails which have been preliminarily routed by Community Preservation Areas, municipalities, the Lowcountry Council of Governments or other governmental entities. They include trails being proposed in both the short and long-term.
- Proposed Greenways - are trails that are being proposed based upon input received during the public information meetings and agency interview process completed during the study.
- Proposed Ferry Connections - are proposed ferry services routes that will accommodate trail users.
- Proposed Rails to Trails - include trails and greenway trails that are along existing and/or abandoned rail lines.
- Proposed Trail in Water Line Easement - is a greenway trail that follows an existing water line easement.

As the greenway/blueway system is described in the following pages, the routes and trails are referred to as one of three categories of trails:

- Greenway Spine Trails - are the major trail and greenway trail corridors that tie Northern Beaufort County together. It is envisioned that both residents and tourists will use these facilities.
- Greenway Spur Trails - are trails that connect Spine Trails to neighborhoods, parks, community facilities, shopping districts, vistas, historic and natural features, and boat landings. It is envisioned that these that these trails will be predominantly used by residents.
- Blueway Trails - are trails for use by canoes, kayaks and other paddle craft. It is envisioned that both residences and tourists will use these trails.

Greenway Spine Trails: There are four trails in the Northern Beaufort County greenway and blueway system defined as "Greenway Spine Trails":

- The Route 21 Spine Trail: Runs east-west from the Town of Yemassee to the entrance to Fripp Island. In most areas, the trail will be configured as 4'-O" to 5'-0" wide bike lanes along both sides of the road. The actual width of the bike lane will be determined based upon the existing roadway conditions and prevailing AASHTO standards. A segment of the Route 21 Spine Trail has been completed on Lady's Island.
- The Route 280/802/Brickyard Point Trail: Forms a partial loop through Lady's Island and Port Royal Island, beginning at Brickyard Point and crossing the Route 21 Trail and commercial district on Lady's Island. The trail crosses the Beaufort River into the Town of Port Royal, connecting to their existing trail system. It then crosses Battery Creek into Shell Point, following Route 280 up to Burton and the commercial district surrounding the intersection of 280 and Route 21.
- The Port Royal Rail Trail: Will share the existing right-of-way with the CSX railroad. The ultimate goal for this area is the conversion of the rail line to a greenway park system. This proposed off-road greenway is envisioned as a linear park that would provide a major recreational thoroughfare for residents and tourists from the Town of Port Royal to the Town of Yemassee.
- The Route 17 Spine Trail: Will provide a connection between the communities of Garden Corners, Sheldon, and Pocotalgio through the use of bike lanes. The Route 17 Spine Trail joins up with the Route 21 Spine Trail as it passes through Sheldon. This trail would also connect users to Charleston, SC and Savannah, GA and serve as a segment of the East Coast Greenway.
- The Route 170 Spine Trail: Will provide a critical connection from Southern Beaufort County into Northern Beaufort County. A series of alternate greenway solutions have been developed to accommodate the crossing of the Route 170 Spine trail over the Broad River. These options include providing bike lanes along the new Route 170 bridge, a ferry crossing, and/or a linear greenway corridor park located on the existing Route 170 bridge. The Route 170 Spine trail will ultimately tie into spur trails serving the communities of Burton and Shell Point, and will eventually provide a vital segment along the East Coast Greenway.
- The Water Line Park: Is a potential major greenway linear park route that has been identified along an existing water line easement. The easement is currently owned by the U.S. Navy and maintained by the Beaufort Jasper Water and Sewer Authority. This linear park would provide opportunities for both recreational and alternative transportation users. Additionally, the greenway corridor would increase and enhance the preservation of greenspace within Northern Beaufort County. The greenway spine trail would allow access for users from the Marine Corps Air Station through Burton Wells Park to the Shell Point Community.

Spur Trails: To define the spur trails and explore the network in more detail, the Greenway and Blueway Master Plan divides Northern Beaufort County into four sections:

1) St. Helena and surrounding islands
2) Ladys Island, the City of Beaufort, and the Town of Port Royal
3) Port Royal Island (excluding the City of Beaufort and the Town of Port Royal)
4) North of the Whale Branch

The greenway/blueway system is shown at an enlarged scale in each of the four study areas to effectively address the specific needs of each area as defined during the public meetings and interview process. The proposed greenway and blueway routings, which are shown on these maps, were developed based upon actual input received from Northern Beaufort County citizens and business people during a series of meetings.

In each of the following four sections, a short description of the region is given, along with the specific goals defined during the community participation process. Because the goals and characteristics of each area within Northern Beaufort County are unique, the users and uses of the greenway/blueway system will vary. The goals, characteristics and users will determine how each area's greenway/blueway network is designed and planned.

PRIORITIES

The Northern Beaufort County Greenway and Blueway Master Plan depicts routes for the Development of the greenway and blueway trails network. Priorities must be established to develop the plan in a logical and effective manner.

The first priority should be the establishment of the Port Royal Rail Trail and Water Line Easement spine trails and greenways. In order to secure conservation easements with public access and implement these facilities, discussions between Northern Beaufort County and CSX and Port Royal rail lines should begin immediately. Northern Beaufort County should also begin similar discussions with the United States Navy and Beaufort Jasper Water & Sewer Authority in reference to the area located within the water line easement. Although these target areas currently contain active rail and water service lines, properly designed trails could be established within the existing right-of-ways that would not effect the operations of the existing services. In the future, if these services were relocated and/or discontinued, additional trails and greenway features could be incorporated.

The implementation of the Route 21, Route 17, Route 170 and Route 280/802/Brickyard Point spine trails should be the next highest priority. The establishment of these trails will complete the regional routes to which the spur trail network will connect. Roadway improvements are currently under construction for both Route 170 and Route 280. Due to the nature and timeline associated with the completion of these projects, it is imperative that representatives from Northern Beaufort County begin discussions with the South Carolina Department of Transportation in order to facilitate the inclusion of bike lanes. At the time of these discussions, the County should present the concept of developing bike lanes along Route 21, Route 17 and Route 280/802 to the SCDOT in order to insure the future programming and funding of these routes.

The implementation of the proposed ferry crossing on the Broad River at the Route 170 Bridge is a logical next step after the spine trails throughout the county have been established. The

LISTING OF CONSERVATION EASEMENTS & PRESERVED LANDS

1. Joiner Bank Heritage Preserve
2. Bullpoint LP Conservation Easement
3. D. Duvane Conservation Easement
4. Rose Hill Plantation
5. National Wildlife Refuge
6. R. Taylor Conservation Easement
7. Auld Brass Conservation Easement
8. Oak Grove/ W. C. Campbell Conservation Easement
9. Tomotely Plantation Conservation Easement
10. Charlotte Island (Beaufort County)
11. Coosaw LP Conservation Easement
12. Pratt Family Conservation Easement
13. Murdaugh, Lgare & Palms Islands (Beaufort County Rural & Critical Lands Program)
14. Daws Island Heritage Preserve
15. Lemon Island (Beaufort County)
16. Pickney Island National Wildlife Refuge
17. Bay Point Shoals Heritage Preserve
18. Huspah/ H.C. Jones Conservation Easement
19. Nemours Plantation Wildlife Foundation
20. Old Island Heritage Preserve
21. Victoria Bluff (SCDNR)
22. Chapman Family/ Oak Forest Island
23. J.W. Johnson Trust
24. SCDNR Conservation Easement
25. Williman Islands (SCDNR)
26. Pritchards Island (University of South Carolina)
27. St. Philips Island Conservation Easement

LEGEND :

- COUNTY BOUNDARIES
- WATERWAYS
- WETLANDS/ MARSHES
- MAJOR ROADS
- ROADS
- RAILROAD
- MILITARY BASES
- CONSERVATION EASEMENTS & PRESERVED LANDS
- COUNTY & STATE PARKS
- AIRPORTS
- WESTERN BORDER OF THE ACE BASIN PROJECT

HAMPTON COUNTY
TOWN OF YEMASSEE
COLLETON COUNTY
JASPER COUNTY
TO CHARLESTON, SC
POCOTALIGO
TO SAVANNAH, GA
TOMOTLEY
PRIESTER
SHELDON
YEMASSEE-PORT ROYAL RAIL LINE
GARDEN CORNERS
COMBAHEE RIVER
POCOTALIGO RIVER
BRAY'S ISLAND
HALL ISLAND
LOBECO
DALE
WILLIMAN ISLANDS
BUZZARD ISLAND
ACE BASIN
SEABROOK
WHALE BRANCH
CHISOLM ISLAND
LADYS ISLAND
COOSAW RIVER
PORT ROYAL ISLAND
CHISOLM ISLAND (USMC AIR STATION)
WILKINS
COOSA ISLAND
MORGAN ISLAND
ST. HELENA SOUND
LAUREL BAY (USMC)
CITY OF BEAUFORT
LADYS ISLAND
DATAW ISLAND
ST. HELENA ISLAND
BURTON
BATTERY CREEK
POLAWANA ISLAND
EGG BANK
HARBOR ISLAND
SHELL POINT
CORNERS COMMUNITY
DISTANT ISLAND
TO BLUFFTON AND HILTON HEAD
TOWN OF PORT ROYAL
CAT ISLAND
HARBOR RIVER
OKATIE
LEMON ISLAND
CANE ISLAND
HUNTING ISLAND STATE PARK
BROAD RIVER
PARRIS ISLAND (USMC)
BEAUFORT RIVER
FRIPP ISLAND
LANDS END
TRENCHARD'S INLET
PORT ROYAL SOUND
BAY POINT ISLAND
ATLANTIC OCEAN
HILTON HEAD ISLAND

N W E S

SCALE: NTS

OCTOBER 2002

BASE MAP

NORTHERN BEAUFORT COUNTY GREENWAY AND BLUEWAY MASTER PLAN

PREPARED FOR: BEAUFORT COUNTY PLANNING DEPARTMENT

PREPARED BY: JORDAN, JONES & GOULDING

Northern Beaufort County Trails and Blueway Master Plan

Spine Trails are the major corridors that tie Beaufort County together.

Spur Trails connect Spine Trails to neighborhoods, parks, community facilities, shopping districts, vistas, historic and natural features and boat landings.

Blueway Trails are waterways for use by canoes, kayaks and other paddle craft.

HAMPTON COUNTY

TO SAVANNAH

TO CHARLESTON

COLLETON COUNTY

JASPER COUNTY

N

W E

S

COOSAW RIVER

ST. HELENA SOUND

BEAUFORT

BROAD RIVER

PORT ROYAL

PORT ROYAL SOUND

Legend

- County Boundaries
- County Parks
- Schools
- Boat Landings
- Existing Trails
  - Spine
  - Spur
- Proposed Trails
  - Spine
  - Spur
- Existing Blueways
- Proposed Blueways
- Wetlands/Marsh Area
- Roads
- Active Rail Lines

Prepared by Beaufort County GIS Department

creation of the ferry line service will provide a vital link to the Southern Beaufort County Greenway System. The linking of the County's Northern and Southern greenway networks will provide both residents and tourists with a series of unique opportunities to enjoy the environs of the County through alternative transportation and recreation activities.

The final stages of implementation should focus on the development of the various spur trails, which have been identified in the four major study areas. Special attention should be placed upon the implementation of the spur routes that connect directly to the spine trails. The creation of these routes will provide a vital link from the spine trails to the adjacent residential neighborhoods and community centers. Establishing these initial connections into the core of each community will provide each community with regional alternative transportation and recreational opportunities. This approach will also allow each community to experience and examine the various types of trails that have been implemented. This opportunity will allow the community to further refine the trail locations and types that have been proposed for their neighborhoods.

PROPOSED NORTH OF THE WHALE BRANCH GREENWAY/BLUEWAY NETWORK

The area designated as north of the Whale Branch includes the communities of Dale, Garden Corners, Sheldon, and a portion of Yemassee. In this part of the County, significant land use protection measures have been established to preserve both the visual character and natural resources found throughout the area. Conservation easements, which have been placed on existing plantations and the preservation of the ACE Basin, are working examples of how progressive land use measures can insure proper long-term management of the region's natural resources. Although these measures are in place, potential development currently threatens the surrounding lands. There is much concern that the cultural landscape unique to this area will be lost through the conversion of farmlands to residential communities and supporting infrastructure. As a result, the communities that comprise the area designated as north of the Whale Branch have taken a proactive stance in order to establish proper long-term management of their community's resources.

Goals: The following goals for the programming of the proposed North of the Whale Branch greenway and blueway network were identified from information gathered during a series of community workshops and interviews:

- Provide alternative transportation connections from residential areas to community service areas to help mitigate traffic congestion and negative environmental impacts.
- Provide access to protected historic and natural resources found within the ACE Basin.
- Utilize existing rail line corridors for future greenway routing opportunities.
- Develop a regional greenway network that includes connections to Savannah, Georgia and Charleston, South Carolina.
- Provide a greenway connection to the Amtrak Station located in Yemassee.
- Identify historic and natural lands for future protection.
- Limit the areas for greenway/blueway development to main traffic routes and existing public facilities.

Users/Uses: Both residents and tourists will take advantage of the greenway and blueway network north of the Whale Branch. Greenway tourists can embark from the Amtrak Station on a tour of the natural and cultural landscape in this area, cycle to Savannah or Charleston on the future East Coast Greenway, or explore the islands and communities south of the Whale

Branch. Residents will be the main beneficiaries of the network, using it not only for recreation, but also for commuting to community resources.

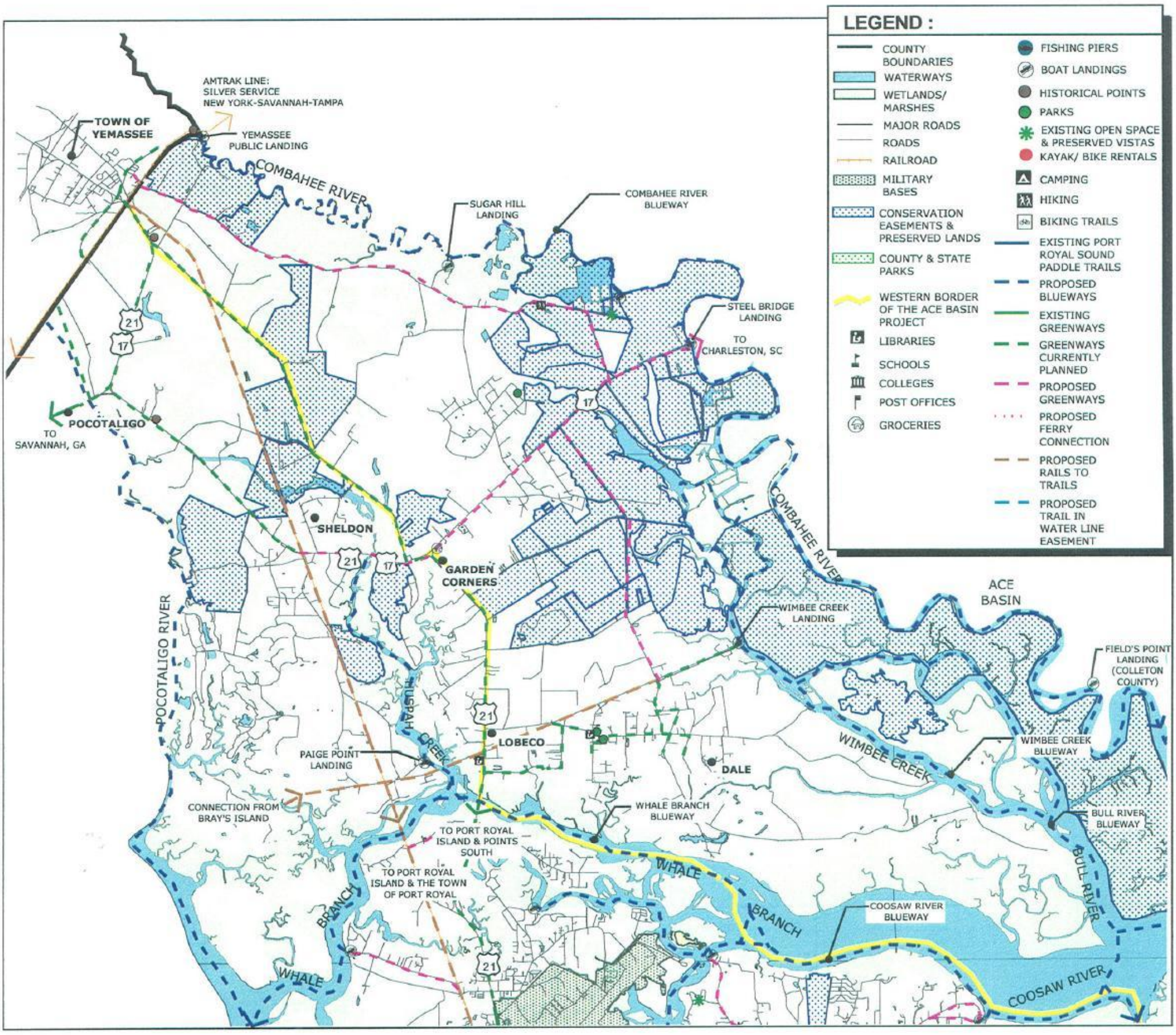
Greenway/Blueway Network: The Town of Yemassee is a primary gateway to the proposed Northern Beaufort County greenway and blueway network. Existing resources in this town, such as the Amtrak Rail Line, would provide greenway users from other regions access to various tours of Northern Beaufort County. Two main spine trails originate at this point, an off-road rail trail and an on-road bike lane. A third spine trail north of the Whale Branch runs east and west, bisecting these two trails. Spur trails connect the communities to the spine trails and provide scenic routes throughout the area north of the Whale Branch. The network will connect into the Low Country Trails Network proposed by the Low Country Council of Governments and the proposed Revolutionary Trails Network. It may also include an on-road segment designated by the East Coast Greenway.

Greenway Spine Trails: Three major spine trails are planned or proposed north of the Whale Branch:

- Port Royal Rail Trail: This greenway involves the sharing of the right-of-way with the railroad, or preferably, the conversion of the Port Royal rail line to a linear greenway park system. This proposed off-road greenway is envisioned as a linear park that would connect residents along its path from the Town of Yemassee to the Town of Port Royal. The width of the existing rail corridor would also accommodate the addition of passive park facilities. The segment of the trail in this area will provide access the historic Old Sheldon Church Ruins.
- Route 21 Spine Trail: Bike lanes planned along Route 21 would provide commuters with alternative modes of transportation to the southern island communities of the City of Beaufort, Port Royal, Lady's, St. Helena, Hunting and Fripp Islands. The Route 21 route near Pocotaligo will be part of the proposed Revolutionary Trails Network, accessing an historically significant Revolutionary War site and cemetery. The Route 21 Spine Trail also accesses the Garden Corners shopping center and the Lobeco library.
- Route 17 Spine Trail: Bike lanes along Route 17 would provide a vital connection between the Gardens Corner, Sheldon and Pocotaligo communities. The Route 17 Spine Trail joins the Route 21 Spine Trail as it passes through Sheldon. This, trail would also connect users to Charleston, SC and Savannah, GA and serve as a segment of the proposed East Coast Greenway.

Greenway Spur Trails: The North of the Whale Branch Greenway/Blueway system includes a series of proposed spur trails, predominantly bike lane routes identified along existing road rights-of-way. The bike lane routes would serve two main purposes. First it will connect residents with the spine trails for the purpose of commuting and second it will provide access to the cultural and natural resources located throughout the area.

- Brays Island/Wimbee Creek Rail Trail Spur: The rail line corridor, which runs from Brays Island to Wimbee Creek Landing, has an existing right-of-way which is wide enough to accommodate an off-road greenway spur trail. (The County will first need to research which, if any, parts of this easement have reverted back into private ownership.) This spur trail would connect to the Port Royal Rail Trail just west of Paige Point Landing, providing links to existing publicly held lands such as fishing piers and boat launch facilities. The creation of this spur trail would facilitate the conversion of the existing fishing piers and boat launches into destination spots serving as public parks. A multi-use trail and a soft-surface equestrian trail within the rail right-of-way would accommodate walkers, joggers, cyclists and equestrians along the greenway. Several smaller spur trails will link residential



SCALE: NTS

OCTOBER 2002

NORTH OF THE WHALE BRANCH
NORTHERN BEAUFORT COUNTY
GREENWAY AND BLUEWAY MASTER PLAN

PREPARED FOR: BEAUFORT COUNTY PLANNING DEPARTMENT

PREPARED BY: BY JORDAN, JONES & GOULDING

neighborhoods to the Brays Island/Wimbee Creek Rail Trail Spur. These spur trails will also connect residents to community services such as libraries and neighborhood parks.

- The River Road Spur Trail: Will provide users with an opportunity to explore the area's natural resources. Bike lanes along this road will allow users to visit portions of the ACE Basin and enjoy the protected vistas of the various plantations found along this route.
- The Kinloch Spur Trail: Will link the Route 17 Spur Trail with the Brays Island/Wimbee Creek Rail Trail. It could provide access to the Nemours Plantation, a protected area that periodically provides environmental education and outreach seminars. Bike lanes and off road trails would serve this route.

Blueway Trails: The proposed blueway network will connect the existing boat launch facilities found along Whale Branch, the Coosaw River, the Combahee River, Bull River and Wimbee Creek. It will also provide users with connections to the Colleton County side of the ACE Basin. The proposed blueway will offer users an opportunity to explore the biodiversity found throughout the islands and marshes in the ACE Basin, including the publicly owned Williman Island. The existing boat launch facilities could eventually be transformed into trailheads and community based parks.

PROPOSED PORT ROYAL ISLAND GREENWAY/BLUEWAY NETWORK

The area of Port Royal Island located east of the City of Beaufort and the Town of Port Royal, is comprised of many established and developing residential communities. Unlike the other areas found within Northern Beaufort County, the development, of this residential community resulted from the need to provide housing opportunities for military personnel assigned to the three major installations located on the island. Originally planned as a bedroom community to serve the needs of military families, the residential composition of this rapidly growing area is changing. Recently, Port Royal Island has become a mixture of non-military first-time homeowners in combination with retirees and military families. This changing demographic requires that community services that address the needs of this dynamic and diverse community be provided.

Goals: The following goals for the programming of the proposed Port Royal Island greenway and blueway network were identified from information gathered during a series of community information meetings and interviews:

- Provide alternative transportation connections from residential areas to community service areas to help mitigate traffic congestion and negative environmental impacts.
- Provide access to protected historic and natural resources.
- Create passive parks for recreational enjoyment.
- Utilize existing rail line corridors for future greenway routing opportunities.
- Identify historic and natural lands for future protection.
- Create greenway connections to Parris Island Marine Corps Recruit Depot, Laurel Bay military housing and the Marine Corps Air Station.
- Provide greenway access to Burton Wells Park.
- Provide greenway connections from existing PUD's to existing community facilities.

Users/Uses: Residents will be the main beneficiaries of the Port Royal Island greenway and blueway network. The network will provide links between the residential neighborhoods and vital connections to community services, including shopping districts, schools and parks. Additionally, these links will provide residents with alternative transportation connections to

their work places found throughout the island, including Parris Island and the Marine Corps Air Station. Potential trail routes have also been proposed to provide residents with walking and riding opportunities within their own neighborhoods.

The spine trails running through Port Royal will be used by resident cyclists to access other communities and resources within Northern Beaufort County. The spine trails will also be used by surrounding communities to access Port Royal.

Greenway/Blueway Network: The Port Royal Island greenway and blueway network consists of spine trails linking the communities and military facilities within the network to adjacent island communities. Spur trails provide connections to interior neighborhoods within the network. The blueway trail encircles Port Royal Island, with access at existing boat launches that tie directly into the greenway network.

Greenway Spine Trails: Three major spine trails are planned or proposed for Port Royal. Route 21 Spine Trail: Bike lanes and sidewalks planned to run along Route 2 1, where feasible, would allow commuters alternative transportation to the adjacent communities to the northern and southern island communities of the City of Beaufort, and Ladys, St. Helena, Hunting and Fripp Islands, and the area designated as North of the Whale Branch. Beyond the Marine Corps Air Station, bike lanes could be constructed. The construction of sidewalks adjacent to the Corps Base would connect residents into the trail network. In order to provide the required space necessary for the construction of bike lanes, two center traffic lanes could be converted into a single center turning lane.

- Route 170 Spine Trail: Route 170 and the Broad River Bridge, which serve as the primary connection to Bluffton and Hilton Head Island, are currently undergoing construction improvements. The master plan study identified this area as a primary gateway to the Northern Beaufort County greenway and blueway network. With the widening of Route 170, the master plan identified an opportunity to place 10' wide multi-use trailways along each side of the roadway. This system should include a safety buffer zone to separated the roadway from the multi-use trailway. This safety buffer zone was identified as an opportunity to provide a landscape enhancement area, which could include the addition of native grasses and tree cover. The construction of the new Broad River Bridge includes a proposal to convert of the existing bridge structure to a fishing pier on the Northern Beaufort County side of the river. Access to the pier would be provided at the Broad River Landing boat launch.

  The County and SCDOT should also consider leaving the existing bridge structure standing and modifying it into a pedestrian/bicycle crossing. The central section of the existing bridge could be removed and replaced with a drawbridge structure to allow passage of tall watercrafts. The bridge could be used as fishing pier, scenic area and linear park space. Leaving this existing bridge in place would not only create a safe crossing for greenway users, but would provide the addition of a unique park facility for the County.

  It is envisioned that the Broad River Landing boat launch adjacent to the existing bridge would serve as a trailhead and community park. The renovation of this facility should include the installation of traditional park services including restrooms, concessions and parking. Additional site amenities including landscaping, educational signage and seating areas should also be installed. The Route 170 Spine Trail may share the 170 Bridge and Park with the East Coast Greenway.

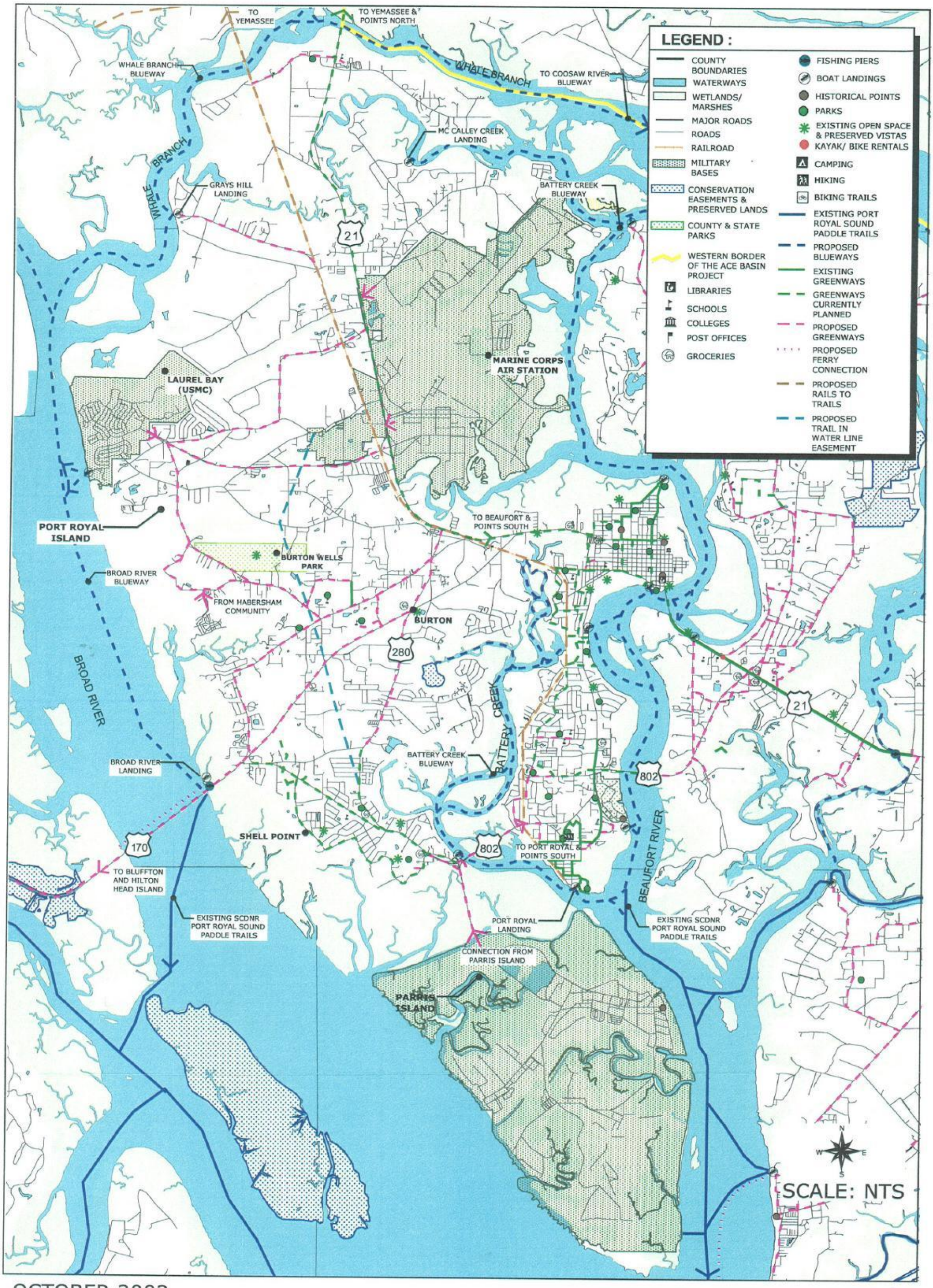
- Port Royal Rail Trail: This greenway will share the existing right-of-way with the CSX railroad, with the ultimate goal of converting the rail line to a greenway linear park system. This proposed off-road greenway is envisioned as a linear park that would provide a major recreational and environmental preservation zone thoroughfare for residents and tourists from the Town of Port Royal to the Town of Yemassee.
- Route 280/802 Spine Trail: This route, consisting of bike lanes and sidewalks in designated areas, will connect the proposed Port Royal Rail Trail/Route 21 Spine Trail, Shell Point Community, Burton, Port Royal, and Ladys Islands. Within Shell Point, this route connects a number of community shopping areas and neighborhood parks including Jericho Park.
- Water Line Park: A waterline easement, "Water Line Park", owned by the Navy has been identified as a potential greenway/linear park system between Marine Corps Air Station and Parris Island, running through Burton Wells Park. This greenway/linear park system would offer recreational opportunities to adjacent residents as well as providing military personnel with alternative transportation to and from the two military installations.

Greenway Spur Trails: Within the island, a series of spur trails, (primarily bike lanes and sidewalks along existing road right-of-ways), have been identified to provide linkages between the residential neighborhoods. Multi-use trails should be placed where the road right-of-way is of sufficient width. These routes would also provide vital connections to community services, including shopping districts, schools and parks. The routing of the bike lanes includes the following:

- Two spur trails will connect the Marine Corps Air Station, Laurel Bay and the residential neighborhoods in between. One route is proposed along Laurel Bay Road, and the other will follow Parker Drive to Mroz Lane.
- A spur trail is proposed to connect Parris Island to the Route 280/802 Spur Trail. This route will provide access to shopping within the Shell Point Community.
- Spur trails connecting to the Route 170 and Route 280/802 spine trails will provide access for residents to shopping areas in Burton and Shell Point, neighborhood schools, and parks, including Burton Wells Park.
- Shell Point's planned trail system will connect to the "Water Line Park" spine trail and the Route 280/802 Spine Trail. These routes will provide vital links to existing parks, schools, shopping areas, and vistas.
- A spur trail in Seabrook will connect the Route 21 Spine Trail to the Port Royal Rail Trail via a neighborhood park.

A number of potential trail routes are also proposed to provide residents with walking and cycling opportunities within their own neighborhoods. These trails are routed as loops, connecting into the overall Port Royal Island greenway network.

Blueway Trails: The blueway trail component of the Port Royal Island master plan links existing public and residential boat launch facilities. It would provide users with an opportunity to experience the diverse environs and historic resources found along Battery Creek, the Broad River and Beaufort River. The Broad River Blueway continues north from the Broad River Landing Fishing Pier to Gray's Hill Landing on the Whale Branch. The master plan study also identified the opportunity to renovate the existing boat launch facilities into community parks. During the public information meetings the community identified the need for increased public park lands and the desire to renovate the public boat launch areas into facilities that included restrooms and picnic and seating areas. Finally, in order to facilitate safe passage between the



OCTOBER 2002

PORT ROYAL ISLAND
NORTHERN BEAUFORT COUNTY
GREENWAY AND BLUEWAY MASTER PLAN

PREPARED FOR: BEAUFORT COUNTY
PLANNING DEPARTMENT

PREPARED BY: JORDAN, JONES & GOULDING

Northern Beaufort County greenway and blueway network and the existing greenway systems located on Bluffton and Hilton Head Island, the master plan study recommends a scheduled ferry system be instituted to shuttle greenway/blueway users across the Broad River. The ferry could also serve travelers on the East Coast Greenway. If successful, the ferry system could eventually link to other destination spots throughout the county.

PROPOSED LADY'S ISLAND, CITY OF BEAUFORT & TOWN OF PORT ROYAL GREENWAY/BLUEWAY NETWORK

The communities of Lady's Island, the City of Beaufort and the Town of Port Royal recognize the value of establishing a greenway/blueway network and have begun planning and implementing these systems. Although each area is unique in character, they are all bound together by increased growth and urbanization. Recognizing the need to offer residents and visitors access to alternative transportation and passive recreational facilities, each community has taken an aggressive approach to identify and incorporate quality of life measures and insure proper growth patterns. By working together, community leaders have not only identified greenway corridors within their own communities, but have also established plans to connect to surrounding communities. The integration of these existing Plans will provide community members and visitors with safe and enjoyable transit and recreational opportunities throughout these areas.

Goals: The following goals for the programming of the proposed Lady's Island, City of Beaufort and Town of Port Royal greenway and blueway network were identified from information gathered during a series of community workshops and interviews:

- Provide alternative transportation connections from residential areas to community service areas to help mitigate traffic congestion and negative environmental impacts.
- Provide access to protected historic and natural resources.
- Create passive parks for recreational enjoyment.
- Utilize existing rail line corridors for future greenway routing opportunities.
- Identify historic and natural lands for future protection.
- Limit the areas for greenway/blueway development to main traffic routes and existing public facilities.

Users/Uses: The greenway system in this area of Beaufort County will be used by both residents and tourists. The system will allow residents of the City of Beaufort and the Town of Port Royal to walk or cycle to work, shopping areas, schools, civic buildings and parks. The greenway system will also provide access for the residents living in communities on Lady's Island. Residents and tourists will use the greenway system for walking and cycling tours within historic City of Beaufort and Town of Port Royal. Additionally, the network will provide users with the opportunity to experience Lady's Island's natural beauty and outlying communities.

Greenway/Blueway Network: The Lady's Island, City of Beaufort and Town of Port Royal greenway and blueway network consists of spine trails linking communities within the network to adjacent island communities. Spur trails provide further connections to interior communities within the network. The blueway system has been routed along the intercoastal rivers which surround the islands. This blueway route will be accessed via existing boat launches and will connect into the greenway network in designated locations.

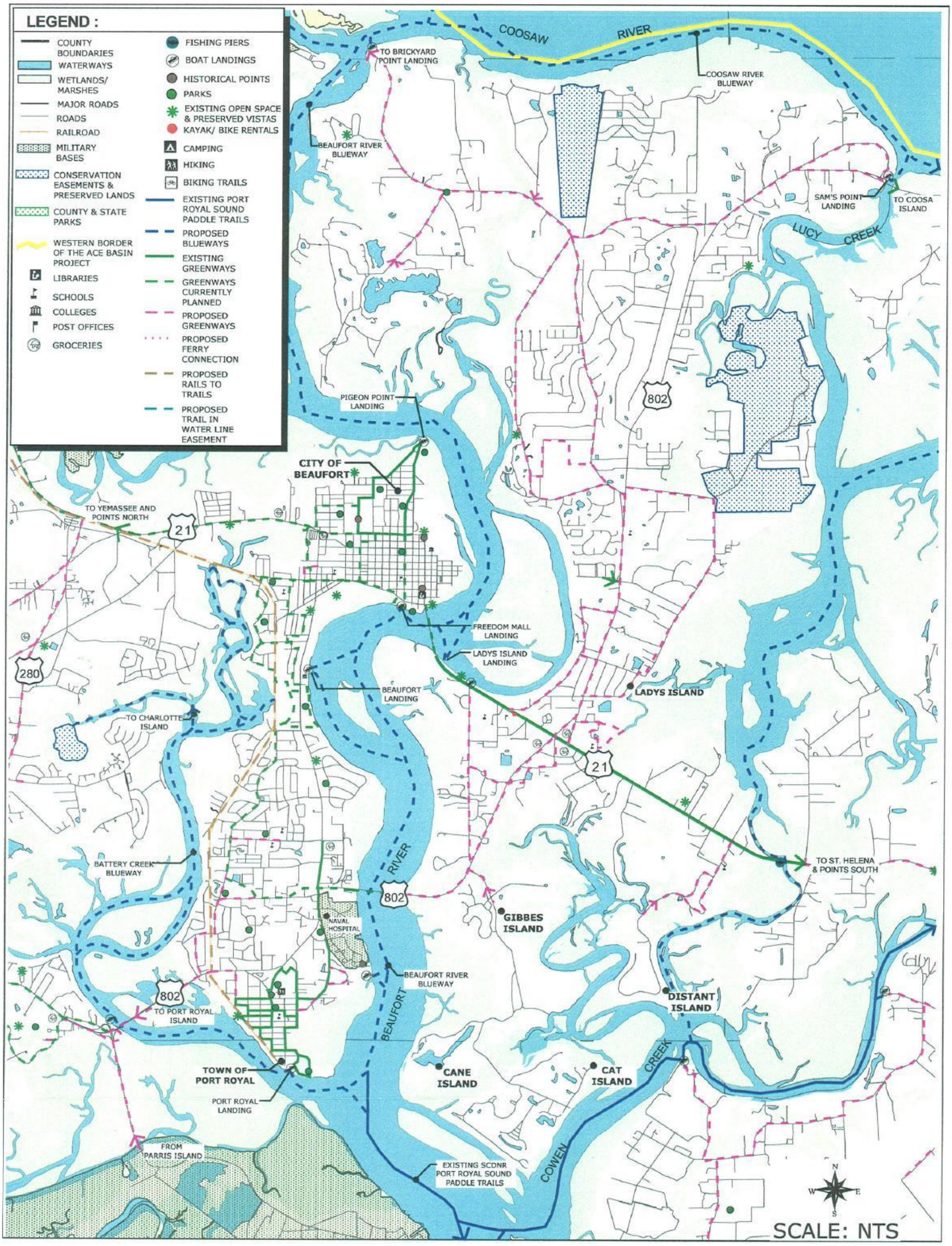
Greenway Spine Trails: Three main spine trails will link Lady's Island, the City of Beaufort and the Town of Port Royal to each other and surrounding communities.

- The Route 21 Spine Trail: A segment of which is completed as it runs through Lady's Island, will be configured as bike lanes along both sides of the road. The Route 21 spine trail will provide an alternative transportation system for commuters between these communities and allow safe passage to existing commercial and cultural areas found along Route 21, such as the City of Beaufort Historic District. Eventually, it is envisioned that this trail would extend north to the Town of Yemassee and south towards Fripp Island. The Route 21 spine trail will be the main alternative transportation link between the communities of Northern Beaufort County and will provide access to many of the regions' cultural and natural resources in the region.
- The Route 802/Brickyard Point Spine Trail: Begins at Brickyard Point, crosses Route 21, runs through the Town of Port Royal and Shell Point community, and connects back to Route 21 on Port Royal Island. This trail links the northern and southern communities of Lady's Island to businesses located along Route 21. It directly to Shell Point and Lady's Island.
- The Route 802/Brickyard Point Spine Trail: Links Brickyard Point Landing and Broomfield Park to the Route 21 Spine Trial. Route 802 connects into the Town of Port Royal's existing trail and park system and provides access to the Naval Hospital, the YMCA nature trail and rookery, Port Royal Landing and the Sands' boardwalk and overlook facility.
- The Port Royal Rail Trail: Will share the existing right-of-way with the CSX railroad, with the ultimate goal of converting the rail line to a greenway linear park system. This proposed off-road greenway is envisioned as a linear park that would connect residents along its path from the Town of Port Royal to the Town of Yemassee. It will be an important off-road link between the City of Beaufort and the Town of Port Royal and will provide the addition of needed park land.

Greenway Spur Trails: On Lady's Island, a series of spur trails are proposed that will link residential communities throughout the island to the Route 21 and Route 802/Brickyard Point spine trails. These spur trails will be located within the existing road right-of-ways, and will consist of bike lanes and walking trails. These trails will connect residential neighborhoods with schools, parks, protected open spaces and boat launch facilities. The southern-most proposed spur trail connecting to Route 802 will link to the communities on Gibbs, Cane and Cat Island into the greenway and blueway system.

The City of Beaufort has an existing and planned walking trail network that effectively connects neighborhoods to community resources. The City's trail network will connect to both the Route 21 Spine Trail and the Port Royal Rail Trail. The conversion of the Port Royal rail line to a greenway system would not only provide a regional trail and park network, but also link to numerous residential communities located adjacent to the corridor. The proposed Southside Park facility, between Beaufort and Port Royal, will also provide much needed passive recreational opportunities for residents. A number of schools located in the surrounding community will be linked to the Port Royal Rail Trail and Southside Park with walking trails.

The revitalization of the Town of Port Royal has led to the programming and establishment of a series of parks and protected green spaces that are interconnected by walking and biking trails. Additionally, the town has established trail connections from residential areas to community facilities. The conversion of the Yemassee - Port Royal rail line to a greenway would provide the community with an off-road alternative connection to existing park and community facilities



OCTOBER 2002

LADYS ISLAND, CITY OF BEAUFORT, & THE TOWN OF PORT ROYAL

NORTHERN BEAUFORT COUNTY GREENWAY AND BLUEWAY MASTER PLAN

PREPARED FOR: BEAUFORT COUNTY PLANNING DEPARTMENT

PREPARED BY: JORDAN, JONES & GOULDING

located within the town. The creation of this greenway would also provide the addition of a passive park to this community.

In addition to the Port Royal Rail Trail, several spur trails run between the City of Beaufort and the Town of Port Royal. These trails link neighborhoods to Bob Jones Park, several schools, and the Technical College of the Low Country.

Blueway Trails: The proposed blueway system extends the existing Port Royal Sound Paddle Trails north along the Beaufort River. This route will connect the existing boat launch facilities identified as Beaufort, Freedom Mall, Lady's Island, Pigeon Point, and Brickyard Point. A spur water trail, the "Battery Creek Blueway," travels up Battery Creek, with proposed connections to the Port Royal Rail Trail. The Beaufort River Blueway connects to the Coosaw River Blueway and Sam's Point Landing, where ACE Basin Tours are based. Each of the above landings is directly connected into the greenway system. Additionally the master plan identified the need to convert the existing boat launch facilities into community parks. The renovation of these existing boat launches into parks that provide passive park opportunities, such as picnicking areas will increase visitorship and provide the community with needed park lands.

PROPOSED ST. HELENA GREENWAY/BLUEWAY NETWORK

The historical, cultural and natural resources found throughout St. Helena Island offer a unique opportunity in which a greenway/blueway network can serve as a catalyst for protection and education, while serving the needs of recreation, tourism and alternative transportation. Currently, there is concern that constant development pressure will lead to the loss of the traditional ways of the St. Helena community. There is also concern that a greenway system could accelerate development patterns. The best way to control undesirable changes on the island is to proactively plan for the protection of these treasured resources. The objective of the greenway/blueway routing plan is to promote amongst residents and visitors an understanding and respect for the true history and current need to protect the environs of St. Helena.

Goals: The following goals for the programming of the St. Helena greenway and blueway network were identified from information gathered during a series of community information meetings and interviews:

- Connect historic resources through a greenway system for the purpose of education and preservation.
- Design elements of the greenway network to address the rural character of the Corners Community.
- Identify historic and natural lands for future protection.
- Limit the areas for greenway/blueway development to main traffic routes and existing public facilities so as not to negatively affect the daily lives of island residents.
- Provide alternative transportation opportunities to the communities found on the surrounding islands to help mitigate traffic congestion and negative environmental impacts.

Users/Uses: Both residents and tourists will use the greenway/blueway network on St. Helena. Tourists and Beaufort County residents can bike along loop routes that connect historic and natural resources or cycle through St. Helena to Hunting Island. Residents of Fripp Island and Harbor Island, a private beach community on the north end of Hunting Island will be able to safely cycle to Hunting Island and St. Helena. All residents will be provided with safer routes to cycle and walk to community facilities and schools. Residents and visitors may also use the

network to travel to areas to the north of St. Helena, including Lady's Island, the City of Beaufort and the Town of Port Royal. A ferry is also proposed to connect St. Helena to Hilton Head at Lands End. The ferry would provide a scenic and functional passage for tourists, and for residents working in Hilton Head.

Greenway/Blueway Network: Given the sensitive nature of the environs found throughout St. Helena, it was determined that the greenway/blueway network should provide access to historic and natural resources, without infringing on the rights of residents. The result is a greenway network that is routed within the existing roadway right-of-ways and ties together points of interest that are currently held as public lands. Additionally, the blueway network has been identified to allow access to the surrounding island waterways. This network will allow users to experience and gain an appreciation for the sensitive environs which comprise the islands' shoreline. It will also facilitate alternative transportation through the implementation of a ferry line, which will provide service connections to the surrounding islands.

Greenway Spine Trail: One major spine trail is proposed for St. Helena.

- The Route 21 Spine Trail: Is the main trail in the St. Helena greenway route, beginning at the Lady's Island Bridge and terminating at the entrance to Fripp Island. It allows the only public access to the Barrier Islands in Northern Beaufort County. This greenway trail will be configured as 4'0" to 5'-0" bike lanes running east and west along the existing roadway. The greenway will connect existing community facilities, historical and cultural sites, preserved open space areas, businesses and residential communities found along Route 21.

  The greenway along Route 21 will also provide a vital link to Hunting Island State Park. This Park is one of the few publicly held lands that allow Northern Beaufort County visitors and residents access to the natural resources found in this region. Hunting Island State Park has been programmed to include educational and recreational features that focus on allowing users to enjoy the barrier islands while developing to an understanding of how fragile and critical these environmental resources are to our way of life. Hunting Island has public beach access, camping, mountain bike trails, and an historic lighthouse and museum. The Route 21 Spine Trail also accesses a small public beach on the private gated community of Harbor Island.

  During the community input process, it was determined that the point at which the Route 21 Spine trail passes through the historic Comers Community required special attention in order to address the needs and wishes of the community. This area is comprised of a number of cultural and historic resources that the community would like to have connected through a soft surface walking trail network. It is the community's belief that a soft surface walking trail network is historically in keeping with the traditions of the Corners Community. The result of this input lead to the proposed soft surface walking trail loop system which will connect the historic commercial area to the Penn Center and the ruins of the Chapel of Ease. This soft surface walking trail should include interpretive signage and other installations to promote an understanding of how the historic and cultural landscape represents the Gullah way of life.

Greenway Spur Trails: Several greenway spur trails are proposed throughout St. Helena that will link to the Route 21 Spine Trial.

- These spur trails will provide access from established residential communities found throughout St. Helena, including Lands End, Eddings Point, Dataw and Polawana Islands, to the Route 21 Spine Trail.
- The Lands End/Seaside Spur Trail: Links historic sites such as the Penn Center, the Chapel of Ease, Fort Fremont (currently private), and the Coffin Point Praise House, Station Creek Landing, and several neighborhood parks.

The St. Helena greenway network allows users to access pre-established public boat launches from which they can enjoy the vistas and various habitats that are found along the inner waterways separating each island. The master plan study also identified these areas as potential community parks and trailhead facilities. The renovation of these areas should include the programming of traditional park amenities such as restrooms, picnic shelters and seating areas. The conversion of the public boat launch facilities into community parks will provide the St. Helena Community with additional park lands that were requested during the community information meetings.

In the future, designated boat launches determined through community input will serve as stops along a ferry route. It is envisioned that a ferry system will eventually tie to a bus shuttle service, providing tourists and residents with an alternative transportation option to the islands located along the Port Royal Sound.

Blueway Trails: A blueway network for paddle craft also connects these existing boat launches via the waterways, exposing recreational users to the diverse coastline and habitats that are found within each interior coastal waterway. The proposed blueway network will expand upon the existing South Carolina Department of Natural Resources (SCDNR) Port Royal Sound Paddle Trails on the northeast side of the island. The proposed blueway trails will connect to the Coosaw River, Bull River in the ACE Basin, and eventually to the City of Beaufort and the Town of Port Royal. Via the blueway network, paddle craft users will be able to access the SCDNR Old Island Heritage Preserve trail system and the Bay Point Shoals Heritage Preserve.



OCTOBER 2002

ST. HELENA & SURROUNDING ISLANDS NORTHERN BEAUFORT COUNTY GREENWAY AND BLUEWAY MASTER PLAN

PREPARED FOR: BEAUFORT COUNTY PLANNING DEPARTMENT

PREPARED BY: JORDAN, JONES & GOULDING

DESIGN GUIDELINES

This section gives an overview of the various considerations necessary when designing and constructing trails within the greenway. Refer to the AASHTO 1999 Guide for the Development of Bicycle Facilities for more detailed information on trail design and signage usage.

TRAIL USERS

The first step in designing and constructing a trail is to identify the types of uses that the trail will need to accommodate. Various types of trail users include: bicyclists, walkers, runners, scooters (non-motorized), in-line skaters and equestrians. It is important to note that some jurisdictions and certain types of funding may require that trails are designed to meet the American Disabilities Act (ADA) guidelines for accessibility. Motorized vehicles, with the exceptions of those vehicles for emergency and maintenance purposes, are typically prohibited from using trails.

TRAIL TYPES

The uses anticipated and the site conditions will determine the appropriate type of trail. In some areas, a combination of trail types may be appropriate, such as sidewalks in addition to bike lanes along an existing road. This allows for separation of uses. Here are examples of the various types of trails and their users:

- Multi-Use Trails: Bicyclists, walkers, runners, scooters (non-motorized), in-line skaters.
- Boardwalks: Walkers, and where permitted, bicyclists.
- Walking Trails/Sidewalks: Walkers, runners, hikers, and where permitted, scooters and in-line skaters.
- Bicycle Lanes: Bicyclists.
- Equestrian Trails: Equestrians.

TRAIL DESIGN

It is recommended that the County and municipalities set a range of standard slopes and widths for each trail type to create consistency throughout the Greenway network. Multi-use trails and shared use trails should be designed to keep grades to a minimum. Where feasible, grades should not exceed 5 percent. Shared use paths with soft surfaces may require grades less than 3 percent to minimize erosion and ensure user safety. In all cases, cross-slope grades should not exceed 2 percent. The selection of each trail's width depends upon several factors:

- Environmental site conditions
- Available right of way and/or easement width

- Types of trail users

- Multi-Use Trails: A 10-foot width is recommended for multi-use trails in suburban and rural areas, narrowing to an 8-foot width if the trail is on steeper slopes, in sensitive areas, or if other conditions such as available right of way, make construction difficult. The width of the trail may increase to 12 feet in urban areas where trail use is expected to be high and the greenway can handle the impact. In all cases, a 2-foot soft shoulder should be included on either side for user safety, and to preserve the integrity of the pavement edge. The shoulder can be mulched, planted with native grasses, or in high-use conditions, covered with a layer of gravel. Refer to the AASHTO guidelines for further information.
- Walking trails: Hard surface walking paths should be a minimum of 4 feet wide and should be handicap accessible (see ADA standards). Soft surface walking trails, for use of walking or hiking only, should be a minimum of 20 inches for single file use, or as wide as 4 feet, which allows for two people walking side by side.
- Equestrian Trails: Equestrian trails should be designed to be 4 feet wide for single file riding and 8 feet wide for riding two side by side.
- Bike Lanes: Bike lanes aid in separating vehicular traffic flow from bicycle traffic, increasing the level of safety for both types of users. Lanes should allow bike traffic to flow in the same direction as the vehicular traffic. Two-way bicycle lanes adjacent to one side of the roadway are greatly discouraged for reasons of safety. Bike lanes should be a minimum of:
    - 4 feet wide.
    - 5 feet wide where adjacent to curb and gutter.
    - 5 feet wide where adjacent to parking stalls.

  Drainage structures and other roadway structures within the bike lanes should be minimized. Bike lane width may be increased in areas where such structures may interfere with bicycle traffic.

TRAIL SURFACES

There are several types of surfaces that can be used for trails. Selection of a surface for a particular trail depends upon the type of use and the conditions specific to the site. When choosing a trail surface consider the following:

- Site environmental conditions
- Types of trail users
- Site character

Once these factors are taken into consideration, it will become more clear which trail surface is appropriate for a site. Here is a listing and description of various types of trail surfaces:

- Asphalt: Many multi-use trail users, such as bicyclists and in-line skaters prefer asphalt because it is softer and does not contain the "bumps" created by concrete construction joints (Peterson, 1998). Asphalt is appropriate in dry, upland areas outside the 100-year floodplain. Cold-pressed recycled asphalt is suitable for pedestrian and handicap accessible uses, but the rough surface is not appropriate for bicyclists or in-line skaters.

Estimated Costs for Asphalt Trails*

Type	Cost
Trail with no drainage	$2.00 per square foot
8' wide trail with drainage	$18.50 per linear foot
10' wide trail with drainage	$23.00 per linear foot

Estimated Costs for Recycled Asphalt Trails*

Type	Cost
Trail with metal edging	$2.00 per square foot

- Concrete: Concrete paving is used within the 100-year floodplain, because it is less likely to be damaged by flood events. The concrete should contain a fiber mesh material, which makes the paving more resistant to heaving and cracking.

Estimated Costs for Concrete Trails*

Type	Cost
Trail with no drainage	$3.50 per square foot
5' wide trail with drainage	$21.00 per linear foot
8' wide trail with drainage	$33.60 per linear foot
10' wide trail with drainage	$42.00 per linear foot

- Permeable Concrete: Both concrete and asphalt are impermeable surfaces, which means that water cannot infiltrate through them into the ground. Permeable concrete paving allows a certain amount of infiltration. Over time, however, the pores in the paving can become clogged with sediment. The material should be located in areas where a minimal amount of water drains onto the pavement. Permeable concrete is most effective on well-drained soils outside of the 100-year floodplain or tidal zone. It can be used for multi-use trails, sidewalks and walking trails.

Estimated Costs for Permeable (Porous) Concrete Trails*

Type	Cost
Without Drainage	$2.00 - $6.50 per square foot

- Soil Cement: Soil cement, another paving material, is created on site by mixing the native soil with concrete. Although soil cement is a hard impermeable surface, it has the look of a natural footpath. It is best suited for walking trails. Soil cement is most successful on well-drained soils.

Estimated Costs for Soil Cement (Soil Stabilizers) Trails*

Type	Cost
6' wide	$18.00 per linear foot
8' wide	$24.00 per linear foot
10' wide	$30.00 per linear foot

- Boardwalks: Boardwalks are used in areas with saturated soils, wetland areas, and other sensitive areas where it is undesirable or prohibited to install a trail on the ground surface. Boardwalks may be used when it is necessary to cross non-tidal wetlands, where the trail has an educational purpose, for beach dune crossings, or for access to the water across river buffers (Refer to Beaufort County Zoning & Development Standards Ordinance, Sec.106-1911). The boardwalks in these areas should be designed to have a minimal impact on the vegetation below and surrounding them.

Estimated Cost for Boardwalk with Railing*

Type	Cost
6' wide	$220.00 per linear foot
8' wide	$260.00 per linear foot
10' wide	$300.00 per linear foot

- Gravel or Sand Surface with Geoweb Substructure: Geoweb material used with 57 stone and an M10 or sand surface may be used as a soft surface trail. It provides a stable trail surface that blends in with the surrounding environment.

Estimated Cost for Gravel or Sand Surface with Geoweb Substructure*

Type	Cost
Trail with drainage	$3.50 per square foot

- Equestrian Trails: Surfaces for equestrian trails should be soft, but firm, with native soil being the best surface.

Equestrian and Other Soft Surface (Native Soil) Trails*

Type	Cost
Trail	$2.50 per square foot

* These estimates are for information purposes only. Actual prices are subject to vary. Prices do not include land acquisition costs, staking, grading, erosion control, landscaping or final clean up.

SIGNAGE

Signage is not only a necessary safety component of an effective trail or greenway system, but can also be used to enhance the user's experience. A signage package is recommended to establish standards for the various types of signage within the greenway. A graphic designer can create such a package. To establish the trail logo and raise awareness of the trail system, a county-wide contest could be held to create a logo for the signage. The Northern Beaufort County Greenway & Blueway system should also incorporate any future East Coast Greenway, Revolutionary Trails Network, or Palmetto Greenway Initiative signage that is developed along shared routes.

In either case, both the American Association of State Highway and Transportation Officials (AASHTO) and the Manual on Uniform Traffic Control Devices (MUTCD) guidelines must be followed for the directional and safety signage. A signage package should consist of the following elements:

Greenway Signage:

- Logo: Creates a sense of place and provides consistency of the signage along the Northern Beaufort Greenway and Blueway network. The logo should be incorporated into all the signage in the same location. It can be imprinted on the sign frame or post, or included on the sign itself.
- Map: Provides site specific and overall location information to greenway users. Map signage should be placed at trailheads, parks and any other site where locational information is appropriate.
- Directional Signage: Alerts greenway users to anticipate changes in the course of the greenway. Refer Signage to Figure 1 for examples of directional signage.
- Safety Signage: Alerts greenway users of potential hazards and site conditions they will encounter.
- Traffic Control Devices: May be necessary in addition to safety signage where greenway routes intersect roadways or railroad crossings. Additional pavement markings and traffic calming measures can greatly increase trail safety in these areas. Refer to Figure 2 for examples of safety signage.
- Educational Signage: Provides additional interpretive information about a site's environmental, cultural, or historical features. Refer to Figure 3 for examples of educational signage.
- Mileage Markers: These markers are appropriate for extended-range greenways. They provide users with information about their location along a route.

Blueway Signage:

- Logo: Creates a sense of place and provide consistency to the signage along the Northern Beaufort Greenway & Blueway network.
- Map: Provides site specific and overall location information to blueway users. Map signage should be placed at all water access points.
- Information: A small kiosk where information on safety, as well as blueway map brochures
- Station will provide useful information to users.

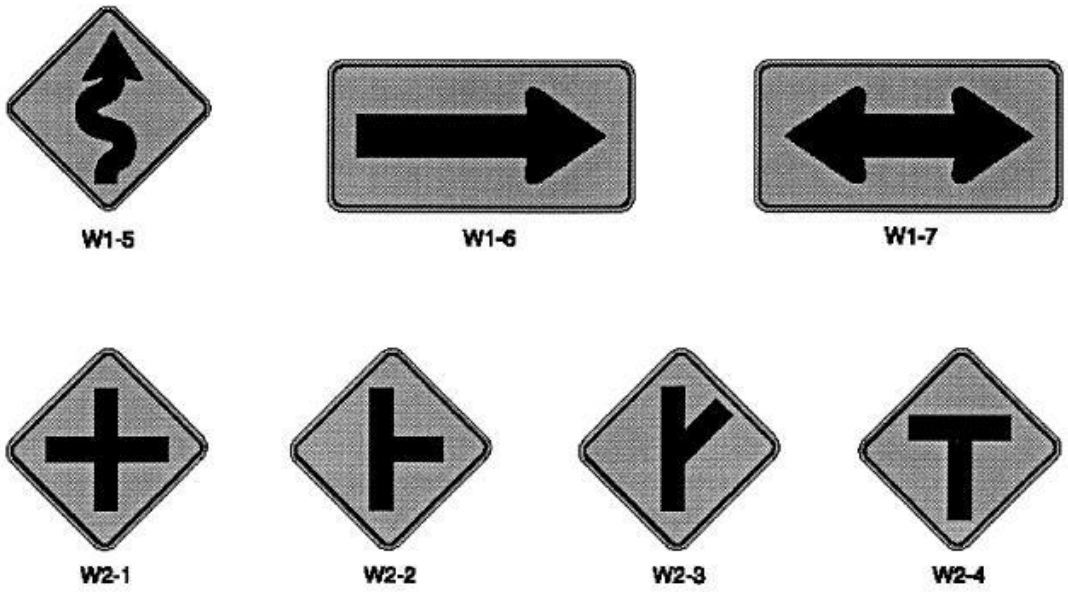


Figure I: Examples of Directional Signage

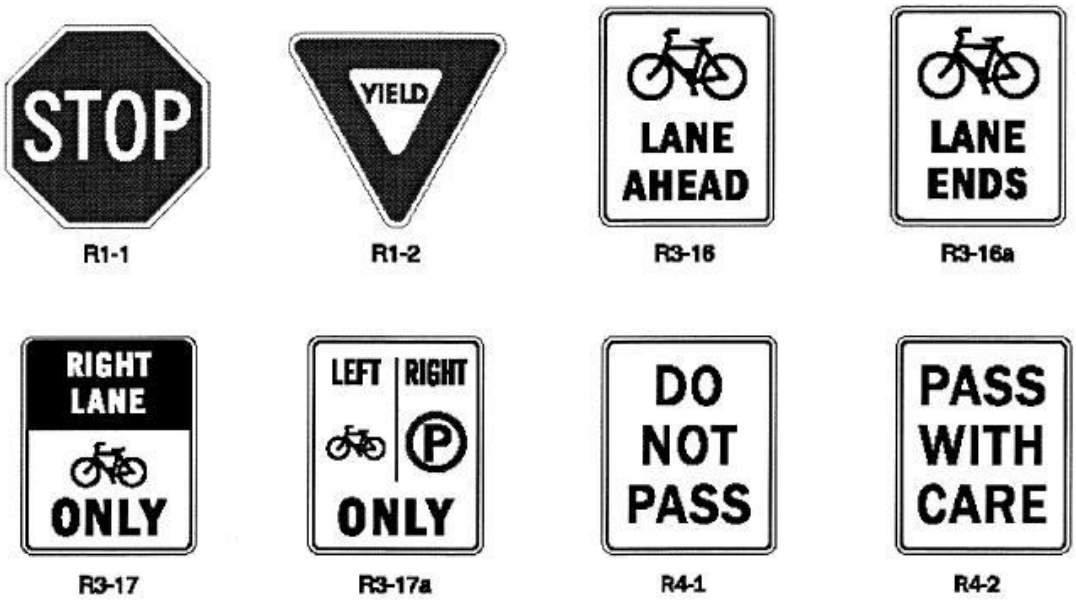


Figure 2: Examples of Safety Signage

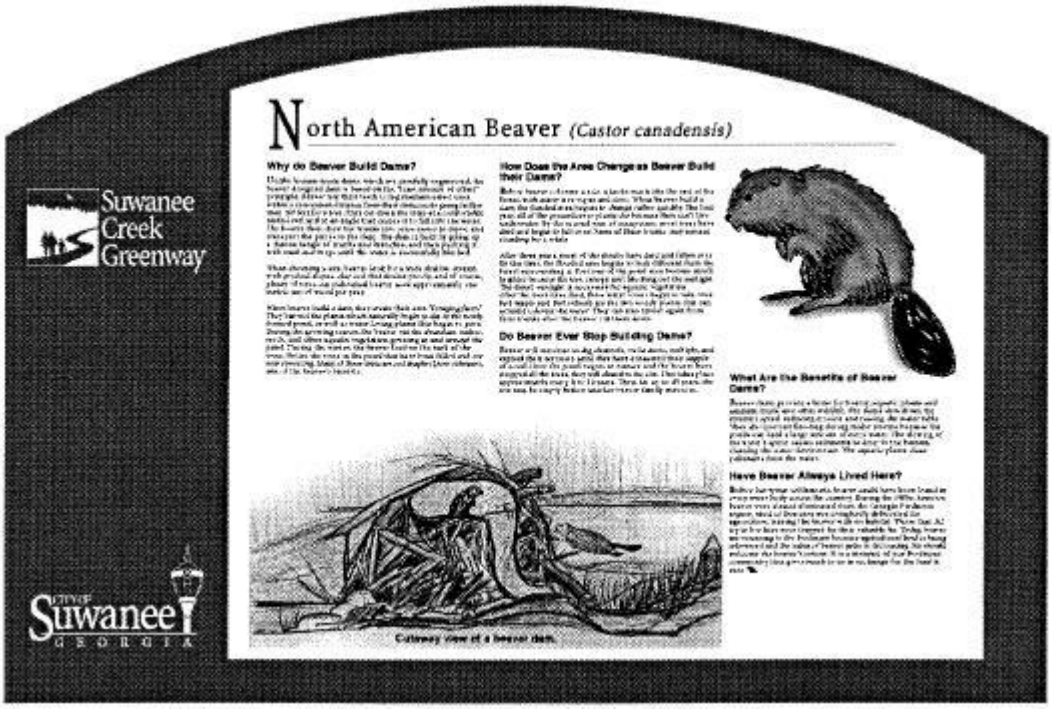


Figure 3: Example of Educational Signage

DESIGNING TRAILS ALONG RAILROAD CORRIDORS

Railroad corridors provide exciting opportunities for siting long distance greenway trails. In order to use existing or abandoned railroad corridors as greenway routes, the County will need to investigate the status of land within the corridor. This will require coordination with the rail line company as well as property owners. The rail line corridor will need to be mapped by a surveyor to determine updated ownership information and the exact location of property lines. If the land is still owned by the rail company, the County will need to negotiate permanent ownership of the corridor or an easement with permanent public access. In the case that the land has reverted back to the adjacent property owners, the County will need to negotiate public access on a permanent easement from the individual property owners.

DESIGNING TRAILS ALONG UTILITY CORRIDORS

Utility corridors can also offer great opportunities for locating greenways trails. In order to successfully site a greenway along a utility corridor, the agency which manages the greenway will need to work closely with the utility company to establish and balance the needs of the utility with those of the greenway. The following items will need to be addressed when planning to develop a greenway along a utility corridor:

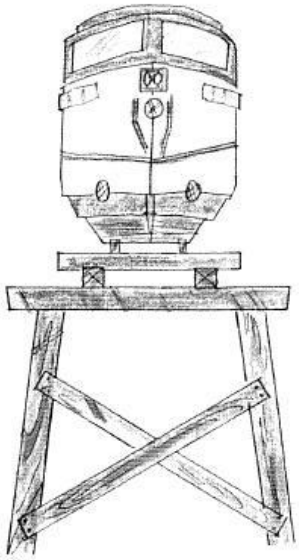
- What are the anticipated uses of the greenway?
- How will the greenway be maintained?
- What are the responsibilities associated with planning and managing the greenway?
- How will those responsibilities be delegated?

In general, the alignment of a trail facility should provide access to the active utility and minimize any impacts. Maintenance of the utility needs to be coordinated with the Owner for reasons of

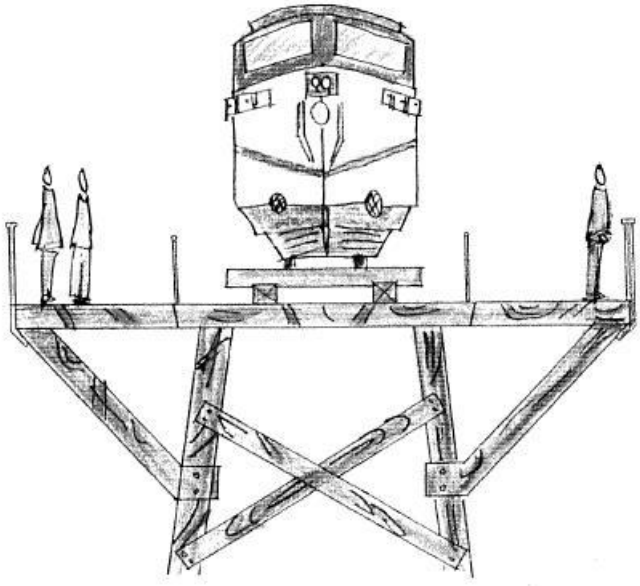
public safety. Any impact to the utility due to the trail placement becomes the responsibility of the Owner. Use of utility corridors for greenways may create new opportunities for funding sources to the Greenway system. In the past, utility companies have offered their support and funding to greenway projects. Additionally, some underground utilities may possess casements for maintenance, but not for public access. In these cases the County will need to change the easement type to include permanent public access.

TYPICAL SECTIONS

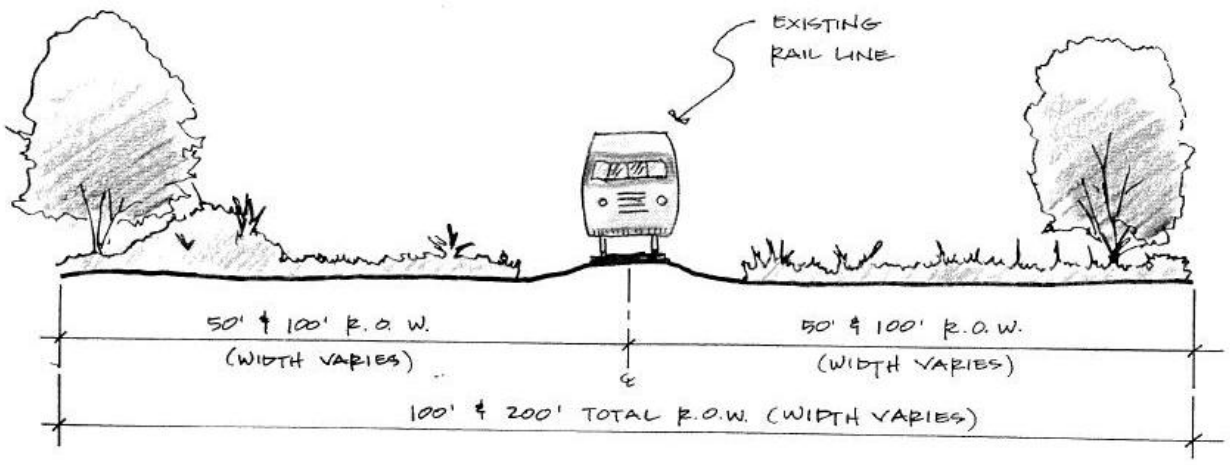
Sections 1 through 12 show typical sections of existing conditions and examples of proposed conditions of greenways and trails in Northern Beaufort County. Actual conditions will vary for each specific trail. The following are descriptions of the sections which have been provided.



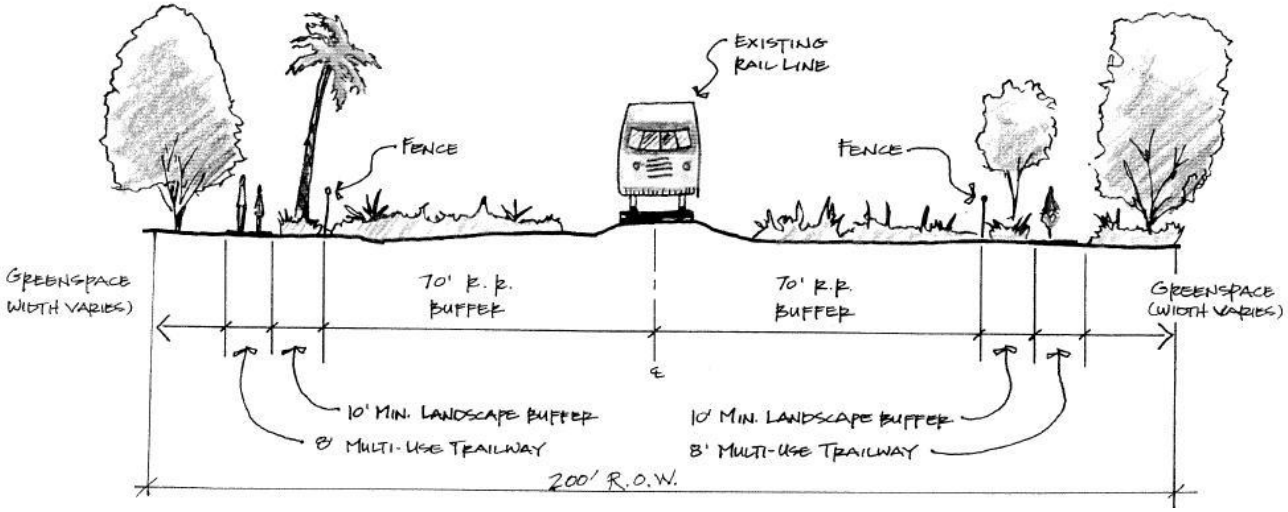
Section 1: A section through the existing Yemassee-Port Royal Rail Line Train Trestle



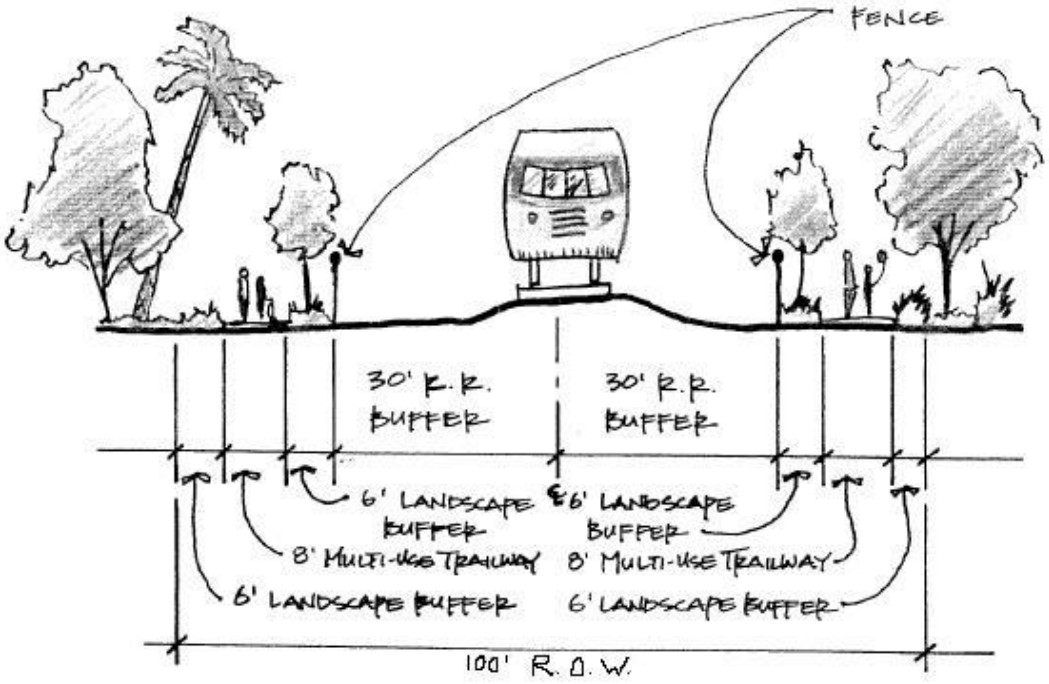
Section 2: This section shows how the trestle could be adapted for pedestrian use along the Port Royal Rail Trail, while the train line is still active.



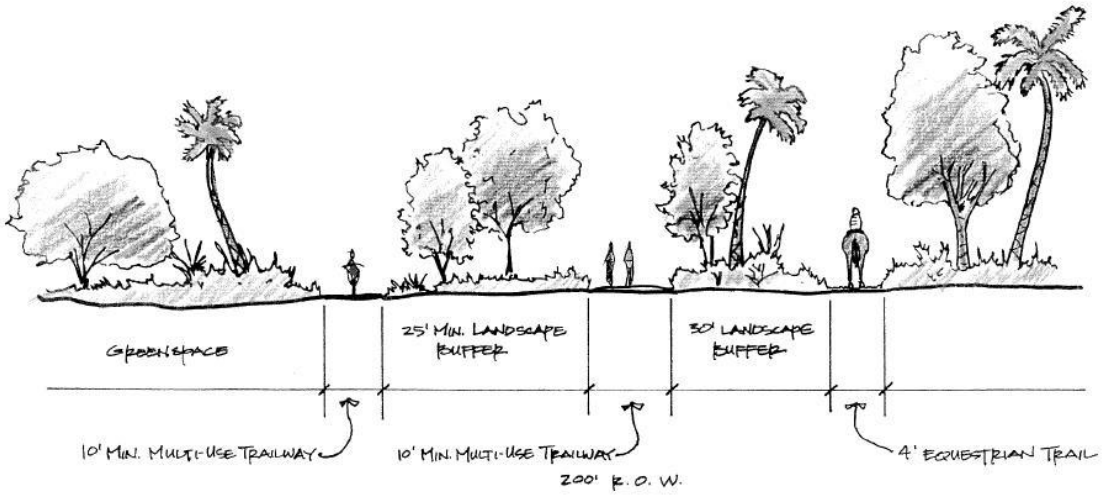
Section 3: A section through the existing 100' or 200' right of way along the Yemassee-Port Royal Rail Line.



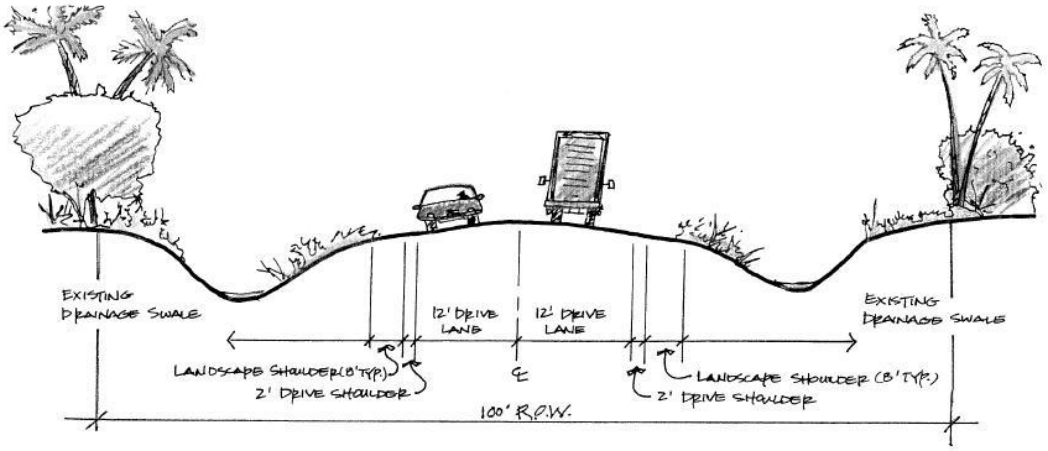
Section 4: This section shows how the proposed Port Royal Rail Trail and greenspace could be incorporated alongside the active rail line within the 200' right of way.



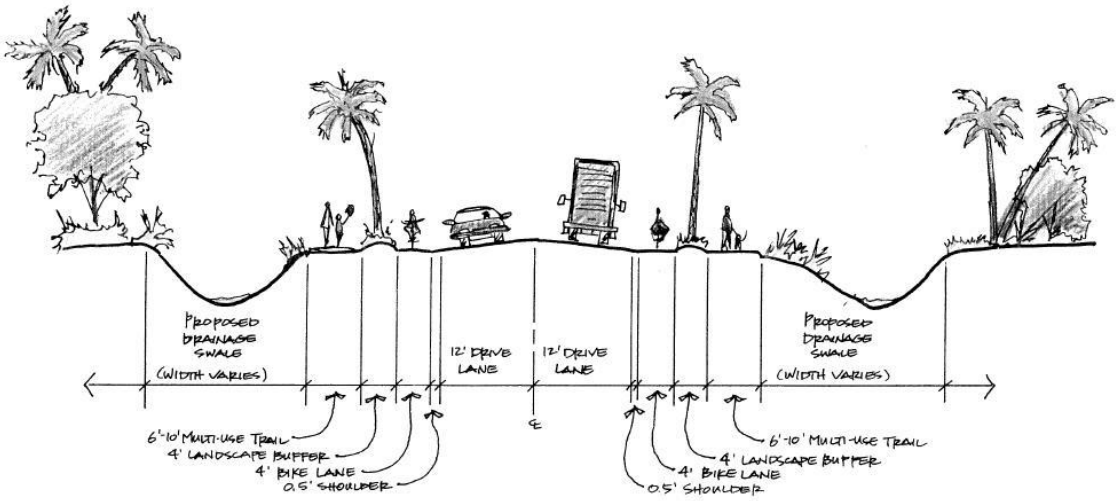
Section 5: This section shows how the proposed Port Royal Rail Trail and greenspace could be incorporated along the active rail line within the 100' right of way.



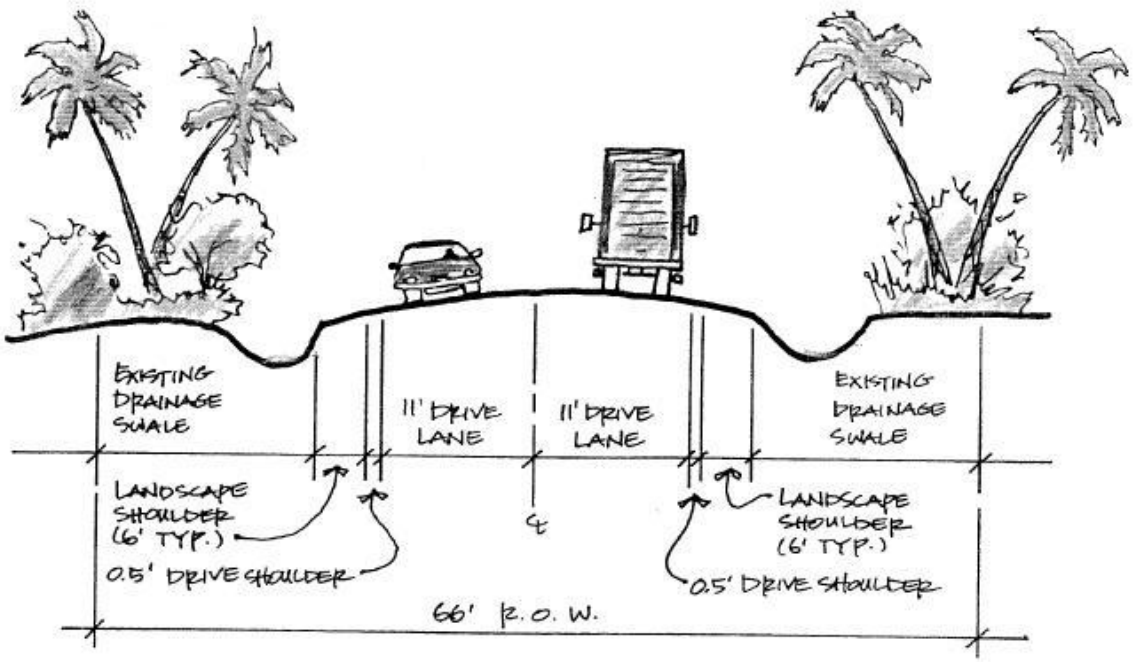
Section 6: This section shows the proposed Port Royal Rail Trail and greenspace in the case that the Yemassee-Port Royal Rail Line is abandoned. The greenspace would form a linear park extending through the County.



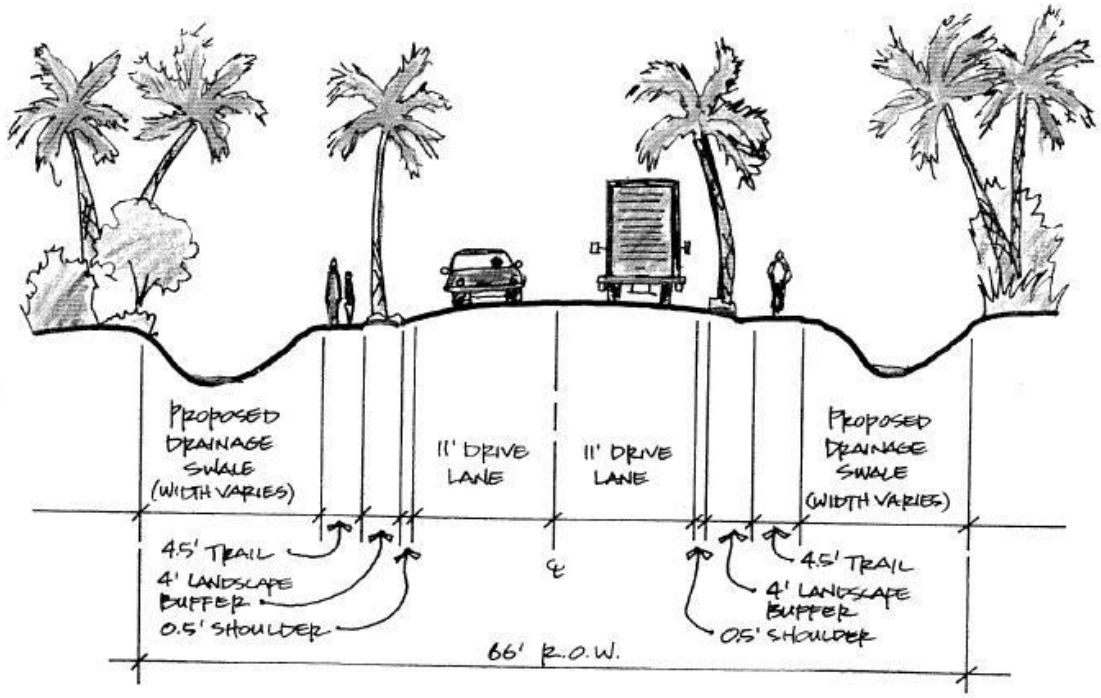
Section 7: A section through a typical existing 100' right of way along a roadway.



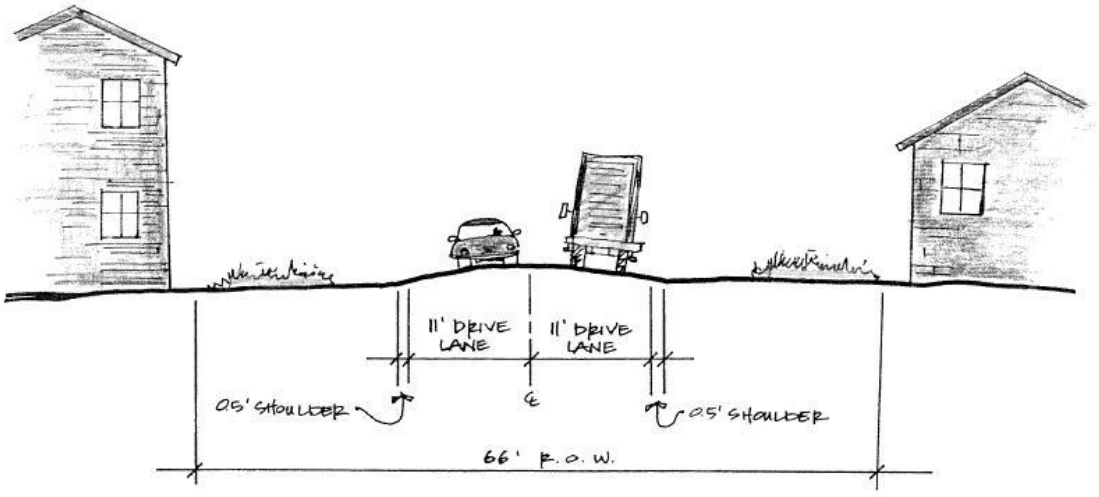
Section 8: This section shows multi-use trails or sidewalks and bike lanes along the existing roadway within an existing 100' right of way.



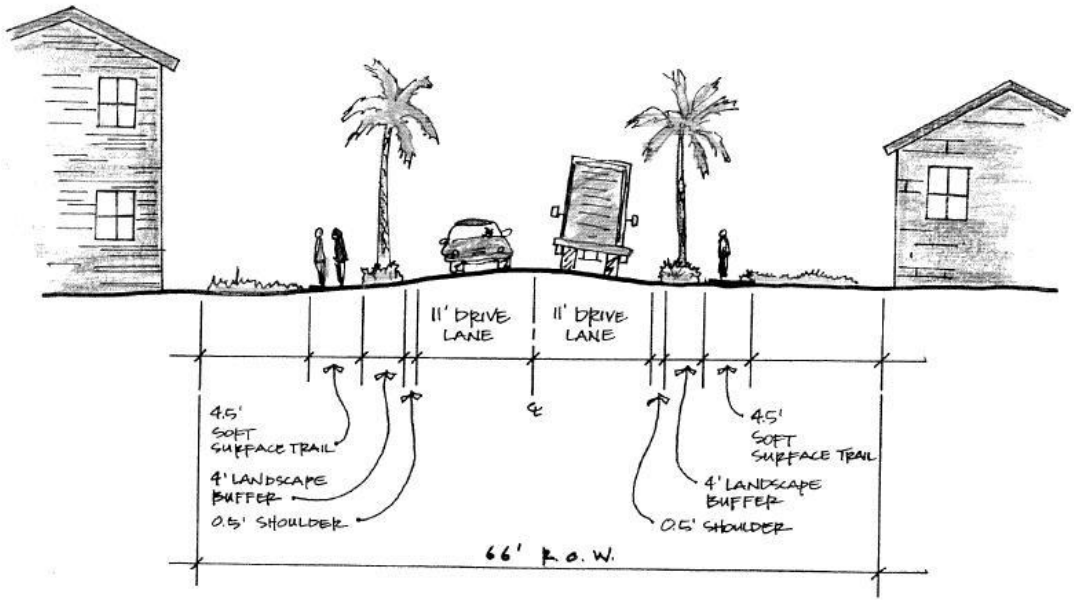
Section 9: A section through a typical existing 66' right of way along a roadway.



Section 10: This section shows trails or sidewalks placed along the existing roadway within the existing 66' right of way.



Section 11: A section through a typical existing 66' right of way along a roadway in the Corners Community.



Section 12: This section shows soft surface trails through the existing 66' right of way along a roadway through the Corners Community.

MAINTENANCE MANAGEMENT GUIDELINES

This section provides an overview of the issues involved in maintaining a greenway/blueway system.

MAINTENANCE MANAGEMENT SYSTEM

An appropriate maintenance system is critical for the success and longevity of a greenway/ blueway system. A maintenance management system will assist the entity responsible for managing the greenway/blueway with a clear work plan from which to operate. The entity managing the greenway/blueway system will need to:

- Determine the maintenance goals and levels of service.
- Generate maintenance programs which afford those levels of service.
- Provide an efficient execution of the maintenance programs.
- Monitor and assess each maintenance program to determine if the programs are meeting the service needs.
- Accurately budget the maintenance programs[1].

When a maintenance system is being developed, each greenway/blueway will need to be specifically examined in order to accurately address its maintenance needs. The type of trail surface, types of users, quantity of users and location of the trail will have a direct effect on determining the type and frequency of maintenance required. The section on maintenance from the Denver Bicycle Master Plan provides a general checklist for maintenance of trails. In this section, author Jed Wagner of the Denver Parks and Recreation department presents a checklist as follows:

Maintenance to be Performed on a Continuous, Scheduled Basis

✔	**Trail user safety:** Safety is central to all maintenance operations, and is the single most important trail maintenance concern. Items for consideration include scheduling and documentation of inspections, the condition of railings, bridges, and trail surfaces, proper and adequate signage, removal of debris, and coordination with other agencies associated with trail maintenance.
✔	**Trails inspection:** Trails inspections are integral to all trail maintenance operations. Inspections will occur on a regularly scheduled basis, the frequency of which will

[1] Bachensky, L.. Maintenance Management Systems for Trails. Article from American Trails Organization website, www.americantrails.org, website accessed October 1, 2003.

depend on the amount of trail use, location, age, and the type of construction.

- ✔ **Trail sweeping:** Trail sweeping is one of the most important aspects of trail maintenance, helping ensure trail user safety. The type of sweeping to be performed depends on trail design and location. Trails that require sweeping of the whole system will be swept by machine. Trails that require only spot sweeping of bad areas will be swept by hand or with blowers.
- ✔ **Trash Removal:** Trash removal from trail corridors is important from both a safety and aesthetic viewpoint and includes removing ground debris and emptying trash containers. Trash removal will take place on a regularly scheduled basis, the frequency of which will be fairly low.
- ✔ **Tree and shrub pruning:** Tree and shrub pruning will be performed for the safety of trail users. Pruning will be performed to established specifications on a scheduled and as needed basis, the frequency of which will be fairly low.
- ✔ **Moving of vegetation:** Trails maintenance personnel will mow vegetation along trail corridors on a scheduled basis only where moving is not performed by other agencies or park districts.
- ✔ **Scheduled maintenance tasks:** Inspections, maintenance and repair of trail-related concerns will be scheduled. Inspection and repair priorities should be dictated by trail use, location, and design. Scheduled maintenance tasks is a key item towards the goal of consistently clean and safe trails.

Maintenance to be Performed on an Irregular or As-needed Basis

- ✔ **Trail Repair:** Repair of asphalt or concrete trails will be closely tied to the inspection schedule. Prioritization of repairs is part of the process. The time between observation and repair of a trail will depend on whether the needed repair is deemed a hazard, to what degree the needed repair will affect the safety of the trail user, and whether the needed repair can be performed by the trails maintenance crew or if it is so extensive that it needs to be repaired by outside entities.
- ✔ **Trail Replacement:** The decision to replace a trail and the type of replacement depends on many factors. These factors include the age of the trail, and the money available for the replacement. Replacement involves either completely overlaying an asphalt trail with a new asphalt surface, or replacement of an asphalt trail with a concrete trail. In general, replacing asphalt trails with concrete is desirable.
- ✔ **Weed control:** Weed control along trails will be limited to areas in which certain weeds create a hazard to users (such as “goathead” thorns along trail edges). Environmentally safe weed removal methods should be used, especially along waterways.
- ✔ **Trail edging:** Trail edging maintains trail width and improves drainage. Problem areas include trail edges where berms tend to build up, and where uphill slopes erode onto the trails.

  Removal of this material will allow proper draining of the trail surface, allow the flowing action of the water to clean the trail, and limit standing water on trail surfaces. Proper drainage of trail surfaces will also limit ice build-up during winter months.
- ✔ **Trail drainage control:** In places where low spots on the trail catch water, trail surfaces should be raised or drains built to carry away water. Some trail drainage control can be achieved through the proper edging of trails. If trail drainage is corrected near steep slopes, and the possibility of erosion must be considered.

- ✔ **Trail Signage:** Trail signs fall into two categories, trail safety and information. Trail users should be informed where they are, where they are going, and how to use trails safely. Signs related to safety area most important and should be considered first. Information signage can enhance the trail users' experience. A citywide system of trail information signage should be a goal.
- ✔ **Revegetation:** Areas adjacent to trails that have been disturbed for any reason should be revegetated to minimize erosion.
- ✔ **Habitat enhancement and control:** Habitat enhancement is achieved by planting vegetation along trails, mainly trees and shrubs. This can improve the aesthetics of the trail, help prevent erosion, and provide for wildlife habitat. Habitat control involves mitigation of damage caused by wildlife. An example is the protection of trees along waterways from damage caused by beavers.
- ✔ **Public awareness:** Creating an understanding among trail users of the purpose of trails and their proper use is a goal of public awareness. Basic concepts of trail use include resolution of user conflicts, and speed limitations. The representatives should be easily accessible to field questions and concerns.
- ✔ **Trail program budget development:** A detailed budget should be created for the trails program, and revised on an annual basis.
- ✔ **Volunteer coordination:** The use of volunteers can help increase public awareness of trails, and provide a good source of labor for the program. Sources of volunteers include Boy Scouts, school groups, church groups, trail users, or court workers. Understanding volunteers' concerns is important, as are possible incentives or recognition of work performed. Implementation of an ''Adopt-a-Trail'' program should be considered.
- ✔ **Records:** Good record-keeping techniques are essential to an organized program. Accurate logs should be kept on items such as daily activities, hazards found and action taken, maintenance needed and performed, etc. Records can also include surveys of the types and frequency of use of certain trail sections. This information can be used to prioritize trail management needs.
- ✔ **Graffiti control:** The key to graffiti control is prompt observation and removal. During scheduled trail inspections any graffiti should be noted and the graffiti removal crew promptly notified.
- ✔ **Mapping:** Several maps are privately marketed and available for trail users. From a maintenance standpoint, an accurate detailed map of the trail system is important for internal park use.
- ✔ **Coordination with other agencies:** Maintenance of trails located within more than one jurisdiction, like the Platte River Trail and the High Line Canal Trail, is provided by other agencies, in addition to Denver Parks Department. A clear understanding of maintenance responsibilities needs to be established to avoid duplicating efforts or missing maintenance on sections of the trails.
- ✔ **Education and Interpretation:** Many segments of the trail system contain a wealth of opportunities for education and interpretation. A successful example is Denver Public Schools' Greenway Experience, operated for many years. Trails along waterways provide good opportunities to teach and study concepts about urban wildlife and ecology. Educational opportunities range from interpretive signage to educational tours.
- ✔ **Law enforcement:** A greater law-enforcement effort might be made toward the goal of safer trail system. Law enforcement agencies should be aware about the location of trails, and the types and levels of use they receive. Sections of trail corridors being used by transients is an ongoing problem that is not easily solved. Increased law

enforcement will be addressed on an as needed basis.

✔ **Proper training of employees:** Proper training maintenance employees is essential to the efficient operation of the trails maintenance program. All employees should be thoroughly trained to understand and be aware of all of the above mentioned aspects of a good training program. Employees must also be aware of the need for positive public contact. Proper positive attitude towards public questions and concerns is important, as is the conveyance of this information to trail supervisors.

MAINTENANCE RESPONSIBILITIES

The Northem Beaufort County Greenway/Blueway Master Plan encompasses cross-jurisdictional boundaries that must be considered when defining levels of maintenance responsibilities. As each segment of the greenway/blueway network. is implemented as outlined in the Implementation Strategies section of this document, it is imperative that a comprehensive management plan be established prior to the completion of the design process. The management plan should address issues concerning funding, scheduling and responsibility for providing greenway/blueway maintenance. Depending upon land ownership and jurisdictional boundary delineation, a memorandum of understanding between all parties involved may be needed in order to insure that proper management of the greenway/blueway system is addressed.

ADDITIONAL RESOURCES

More specific technical information on trail maintenance be found in the following resources:

- American Trails Organization Website: www.americantrails.org
- Parker, T. S. 1994. Trail Design &Management Handbook, Revision 1. 1. Open Space and Trails Program, Pitkin County Colorado. Available from the Pitkin County Open Space and Trails Program, 530 E. Main Street, Aspen, CO 8161 1, phone 970-920-5232, fax 970-920-5198.
- USDA Forest Service, 1996. Trail Construction and Maintenance Notebook Revised February 1999. USDA Forest Service-Technology & Development Program.

IMPLEMENTATION STRATEGIES

STAGES OF THE PROCESS

The implementation of the Northern Beaufort County greenway/blueway system involves four stages of development: the regional plan, the greenway/blueway segment master plan, the design and construction phase, and the management plan. The following is a brief description of each of the four stages:

- Regional Plan: The Northern Beaufort County Greenway and Blueway Master Plan is a regional plan created to ensure that an individual community's master plans work with and compliment the master plans of adjacent communities. These master plans can include transportation, greenspace, land use, or watershed plans. Depending on the goals of each regional plan, the region may be defined by a watershed, a political boundary, or a geographic or ecological region. The Northern Beaufort County Greenway and Blueway Master Plan has been divided into four geographical areas separated by water. The Ladys Island, City of Beaufort and Town of Port Royal area has been defined by geography and political boundaries.

  The critical step in implementing the greenway/blueway network is for Beaufort County, the three military facilities, and each community preservation district to officially adopt the Northern Beaufort County Greenway and Blueway Master Plan. From there, the individual greenway/blueway segments should be master planned and implemented by the County, with input and assistance from the community preservation districts through which the trails are located. Segments within other municipalities, in gated communities or on military bases will be implemented by those entities, coordinating with the County to ensure that their systems tie into the overall network. The proposed ferry system should be developed and managed through a public/ private partnership. Road paving and drainage projects, undertaken by the South Carolina Department of Transportation, could supplement the greenway/blueway system by thoughtful planning to include multi-use trails, bike lanes and sidewalks, and access to boat launch facilities within the scope of their projects. South Carolina D.O.T. and the East Coast Greenway Alliance have already begun preparation of a trail plan which would link South Carolina in with the East Coast Greenway.

- Greenway/Blueway Segment Master Plan: The greenway/blueway segment master plan focuses on a particular greenway/blueway section and its relationship to the surrounding region. The master plan identifies areas for preservation, restoration, water quality improvements, education, alternative transportation and recreation. Although it describes elements and facilities to be included within the greenway, the master plan is conceptual and does not show specific locations for any element. Instead, it examines relationships between

the elements. The greenway/ blueway master plan defines the project's goals and issues. It also addresses implementation costs and funding sources, and proposes a timeline for completion of the greenway/blueway segment. The greenway/blueway segment master plan is developed with input from the surrounding community, and the process usually takes from six to twelve months to complete.

- Design and Construction Phase: The design and construction phase involves the detailed design of site elements, development of construction documents, and construction of elements within the greenway/blueway segment based on the greenway/blueway Segment Master Plan. Construction documents consist of technical drawings and specifications produced based on the master plan, applicable regulations, funding source requirements, design of site elements, and in-depth examination of the site conditions. They include the specific location and design of all the greenway/blueway elements.

  Construction documents are used to guide the construction process. Successful construction within the greenway/blueway segment is achieved through the use of these documents and the cooperative effort of the project partners, design team, and contractor during construction. Refer to Section 4, Design Guidelines and Typical Sections for further information.

- Management Plan: This step is often overlooked in the greenway/blueway development process. The management plan for a greenway/bluway segment should be developed concurrently with the master planning and construction documents. A decision about the greenway/blueway management approach may affect design decisions. Management plans identify who will manage the greenway/blueway, where the funding will come from, and what expertise, equipment, and supplies are needed. For these reasons, management plans are beneficial in making more accurate long-term cost predictions for the greenway/blueway segment. Well-written management plans are crucial to the success of the greenway/blueway system. Refer to Section 5, Maintenance Management Guidelines for further information.

THE CAST

Greenway/blueway implementation involves various groups including the project partners, planning team, design team, stakeholders, and agencies. Following are some general definitions for these groups based on their roles in the project:

- Project Partners: The project partners include the project owner(s) or someone appointed by the owner(s), such as a project manager or a committee. Other partners may include nonprofits or governmental agencies that provide funding or other project assistance. In Northern Beaufort County, examples of project partners include County officials and departmental staff, Pathways Connect, Open Land Trust, and representatives from each municipality, community, and military base involved in a particular greenway/blueway segment.

- Planning Team and Design Team: The planning team and design team are the groups of professionals hired to complete the greenway/blueway project. The planning team is formed to create the greenway/blueway master plan. The design team is assembled to complete the design and construction phase of the project.

Hiring professionals for assistance is important because of the sensitive nature of greenway/blueway design. It is critical to accurately identify sensitive natural and cultural areas within the greenway/blueway segment. It is also essential to design and construct the elements of the greenway/blueway system in an environmentally sensitive manner. Professionals with experience in greenway/blueway projects or environmentally sensitive design should be selected for the project.

The teams may include the following professionals:

Profession	Expertise
Landscape Architect	Project coordination and greenway/blueway master planning, design and construction oversight.
Civil Engineer	Topographic and hydrological issues.
Biological/Ecologist	Identification of wetlands and significant natural areas.
Urban Planner	Regional planning and economic studies.
Environmental Planner	Watershed, preservation, and restoration planning.
Architect	Design of site structures (e.g. pavilion, restroom facilities).
Surveyor	Locate and record existing site conditions. Record plat for right-of-way, easements, and land acquisition.
Archaeologist	Identification of cultural resources.
Environmental Engineer	Water resources management.
Recreational Planner	Programming and master planning of recreational amenities and recreational needs assessment.
Structural Engineer	Design of bridge abutments and assessment of site structures (e.g. observation tower, boardwalk).
Geotechnical Engineer	Soil testing and subsequent design recommendations based on test results.
Real Estate Attorney/ Land Trust	Land, easement, and right-of-way acquisition.

- Stakeholders: Stakeholders are people who are in some way affected by activity in the greenway/ blueway corridor. Stakeholders should be identified and consulted during the regional planning and greenway/blueway segment master planning stages. The stakeholders will vary depending on the location and goals of the project.

- Agencies: Agencies are the federal, state, county, or local governmental bodies involved in the greenway/blueway project, such as the Office of Ocean and Coastal Resource Management (OCRM). They may be involved in funding and therefore have certain project requirements that must be met. They may also participate in a regulatory capacity and require permits based on federal, state, or local law.

COUNTY COORDINATION

The relationship of the different entities for the execution of the Northern Beaufort County Greenway and Blueway Master Plan are defined in Chart I: "Flow of Coordination for County Greenway/Blueway Implementation." Their roles are described below:

- Beaufort County Council: Will be responsible for approving the Northern Beaufort County Greenway and Blueway Master Plan, greenway/blueway segment master plans, and potential greenway/blueway projects within the County. They will receive input on these greenway/blueway projects from the Planning Commission as well as from City, County and Community Representatives.
- The Beaufort County Planning Commission: Will be responsible for the review and recommendation to the County Council of the greenway/blueway segment master plans and construction projects that are in support of the goals of the Comprehensive Plan and the Northern Beaufort County Greenways and Blueways Master Plan. They will instruct the Beaufort County Planning Department when to proceed with implementation, and receive input from the Planning Department about possible greenway/blueway projects.
- The Beaufort County Planning Department: Will supervise the master planning and implementation of greenway/blueway segment master plans. They will coordinate with Parks and Recreation and the Transportation Department to develop management plans for the greenway/blueway system. They will coordinate implementation of the Northern Beaufort County Greenway and Blueway Master Plan with municipalities and the military bases in the area, as well as with organizations planning larger networks such as the East Coast Greenway and the Revolutionary Trails Network. The Planning Department will also coordinate funding of the projects with Pathways Connect and the County Grants Writer. As the greenway segment master plans are developed, the County Planning Department will receive input from the individual community planning representatives concerning each community's needs and desires. The Planning Department will coordinate their planning efforts with the Advisory Committee. Finally, the Planning Department will issue the request for proposals for the design and construction of projects within the County.
- The County Grants Writer: Will be utilized to help obtain funds for the greenway/blueway networks. They will coordinate with Beaufort County Planning Department and Pathways Connect when applying for funding.
- The Municipalities within Beaufort County: Will be responsible for the planning and development of local greenway and blueway systems within their domain. They will collaborate with the Beaufort County Planning Department to incorporate their systems into the larger network of greenways and blueways within Northern Beaufort County.
- The Local Military Bases: Will be responsible for the development of the local greenway and blueway system within their domain. While their interior systems may be limited to military personnel, they will need to coordinate with the Beaufort County Planning Department to incorporate their systems into the larger network of greenways and blueways with Northern Beaufort County.
- Pathways Connect: Will be responsible for assisting with grant writing, and securing and endowing funding for the construction and maintenance of greenway/blueway projects. They will also inform the Beaufort County Planning Department on the funding status of project and assist with the planning process. Pathways Connect will also help to raise public awareness about greenways and blueways within the County.
- The Advisory Committee: Will provide input and feedback concerning the greenway/blueway segment master plans. They will share their information with Pathways Connect and the Community Planning Representatives. The following is a suggested list of

representatives from agencies and organizations that should be included in the advisory committee*:

S.C. Department Of Transportation
S.C. Department of Natural Resources
Beaufort County Parks & Recreation
Low Country Council of Governments
Neighborhood Associations
Open Land Trust
Area Business Associations
Rural & Critical Lands Board
Local School Representatives
Office of Ocean & Coastal Resources Management
Pathways Connect

*This is only a suggested list. Other agencies, organizations and stakeholders specific to each greenway and trail project should be included in the process.

- Citizen Representative: A citizen representative from each individual Community Preservation Committee is responsible for coordinating projects with the local communities and advising the Planning Department, Advisory Committee and Pathways Connect about the community's concerns and needs.
- The Community Preservation Areas: Advise their Community Preservation Planner about the community's concerns and needs regarding potential and existing greenway/blueway projects. They will also inform the County Council of the community's needs.

SUMMARY

The process for planning and implementing greenway/blueway networks outlined in this section has been successfully undertaken by numerous municipalities. In order to achieve the implementation of the greenway/blueway network, it is critical that all parties which have a stake in the development and use of these facilities be involved through each stage of planning, construction and management process.

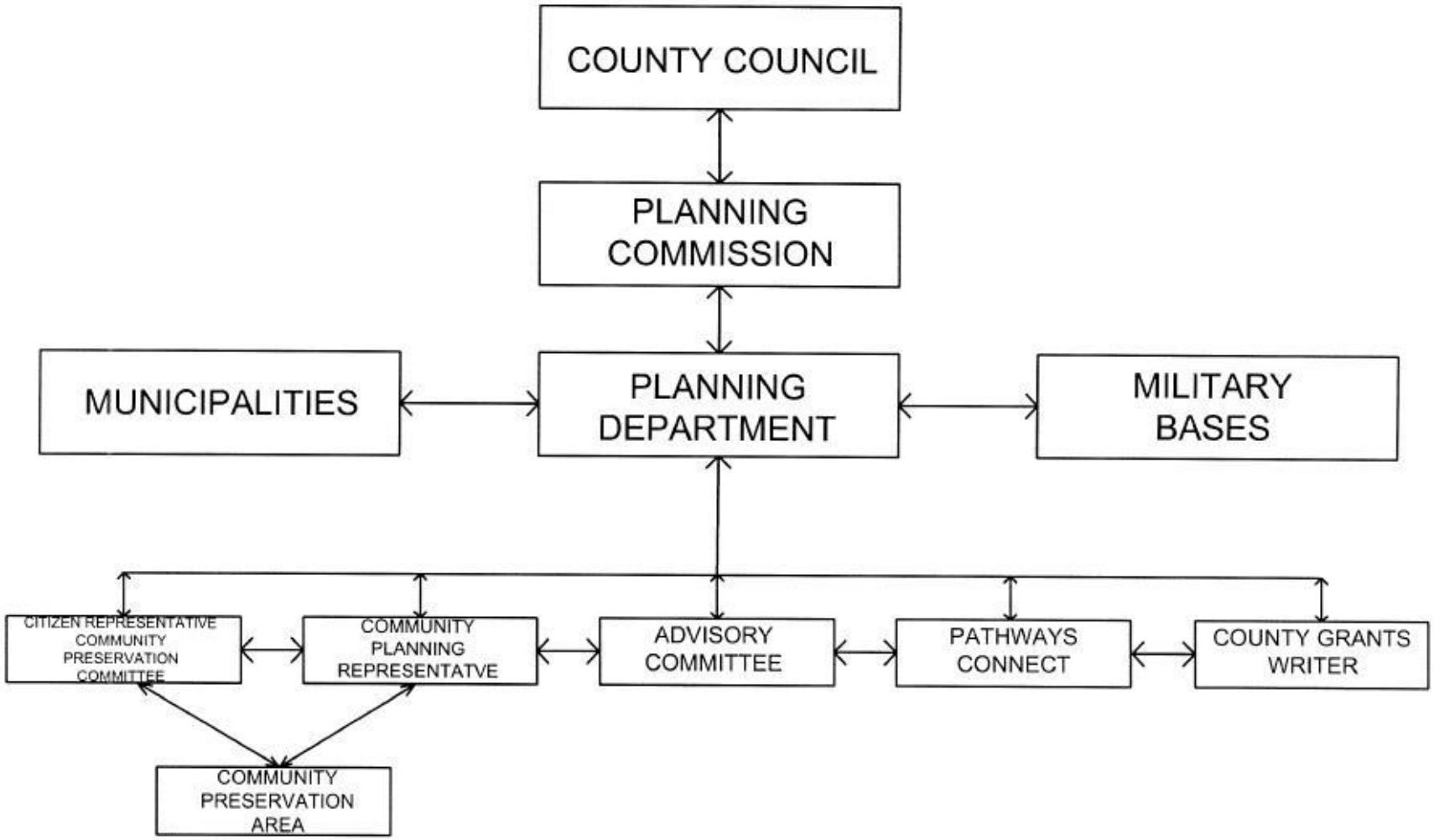


Chart 1: Flow of Coordination for County Greenway/Blueway Implementation

Grant Funding Sources
Northern Beaufort County Greenway and Blueway Master Plan

Grant Type	Grant Program	Grant Source
Planning Technical Assistance Implementation	**Grants, Public Workshops, Technical Assistance** Promotes the Coastal Zone Management Act (CZMA), which encourages sustainable development by balancing ecological, cultural, historic, and aesthetic values with economic development, restoring deteriorating waterfronts and ports, enhancing public access to the coast, mitigating the effects of natural hazards, giving priority to water dependent uses, including ports and shipping, marinas and commercial and recreational fishing, funding Special Area Management Plans (SAMPS) that protect significant natural resources and allow reasonable economic growth.	The Office of Ocean and Coastal Resource Management (OCRM)
Planning Design	**Rivers, Trails, and Conservation Assistance** Aids in helping state, local and citizen groups undertake conservation projects such as protecting rivers, developing trails, and providing outdoor recreational opportunities. National Park Service helps provide tools to local governments to complete projects independently.	Department of the Interior, National Park Service
Acquisition Planning Design Implementation	**Land & Water Conservation Fund** 50% matching grants for acquisition of real property and development of facilities for general-purpose outdoor recreation.	SC Dept. of Parks, Recreation, and Tourism (PRT)
Acquisition Design Implementation	**Recreational Trails Program** Acquisition and/or development grant (80% federal/20% local) for recreational trails including new trail construction.	SC Dept. of Parks, Recreation, and Tourism (PRT)
Acquisition Design Implementation	**National Trails Endowment** Grants for grassroots efforts to secure trail lands, and build and maintain footpaths.	American Hiking Association
Acquisition Land Preservation Implementation Maintenance	**Local Sales Tax Intiatives** Use a Special Option Sales Tax to fund to the acquisition of land for greenways and open space, construction, improvements,and/ or maintenance of trail facilities.	Beaufort County & Municipalities within Beaufort County
Acquisition Land Preservation Implementation Maintenance	**Local Bond Referendums** Designate funds to the acquisition of land for greenways and open space, construction, improvements, and or maintenance of trail facilities.	Beaufort County
Acquisition	**Recreation Land Trust Fund (RELT)** State grants to be used for the acquisition of land for the purpose of public recreation. This is a 50-50 match program.	SC Dept. of Parks, Recreation, and Tourism (PRT)
Implementation Maintenance	**Local Capitol Improvements Program (C.I.P)** Designate funds from the County Capitol Improvements Program towards construction and improvements to greenways.	Beaufort County

Grant Type	Grant Program	Grant Source
Implementation	**Transportation Funding Assistance** Use transportation funding sources towards greenways as methods of alternative transportation.	Beaufort County Transportation Advisory Groups, Beaufort County Transportation Committee
Planning	**Financing Assistance** Provides assistance to communities with planning for financing parks, greenway and open space projects, as well as right-of-way and easement acquisitions.	Trust for Public Land
Planning	**Innovative Community Partnership Grant:** To catalyze community based redevelopment and revitalization, encourage integrated community planning and build partnerships that increase a community's capacity to restore and protect community watersheds and airsheds.	EPA Regional Office
Planning Design Implementation	**Parks and Recreation Development Fund (PARD)** Grants for the development of new public recreation facilities or enhancement/renovations to existing facilities. Projects need endorsement of majority weighted vote factor of County Legislative Delegation Members. This is an 80-20 match program.	SC Dept. of Parks, Recreation, and Tourism (PRT)
Planning Design Implementation	**American Greenways Kodak Awards Program** Grants of $500-2500 to local greenway projects. Grants can be used for almost any activity that serves as a catalyst for local greenway planning, design or development.	The Conservation Fund
Design Implementation	**Cottonwood Foundation Grants** Grants for projects that protect the environment, promote cultural diversity, empower people to meet their basic needs, and rely on volunteer efforts.	Cottonwood Foundation
Design Implementation	**D.I.R.T.** Grants from $2,000-5,000 in support of efforts to protect, preserve, and restore recreational lands and waterways	Powerfood, Inc.
Planning	**Watershed Assistance Grants** Grants up to $30,000 to local watershed partnerships to support their organizational development and long-term effectiveness to conserve and restore watersheds.	River Network
Implementation	**Global Relief Heritage Forest Program** Funding for planting tree seedlings on public lands. Emphasis is placed on diversifying species, regenerating the optimal ecosystem for the site and implementing the best forest management practices.	American Forestry Association
Implementation	**Traffic Impact Fees (TIFS)** Traffic Impact Fees can be used to fund alternative forms of transportation such as greenways. This funding originates from a fee developers pay the County to mitigate the impacts of growth and development on the roadway systems.	Beaufort County
Implementation	**Accomodations Tax** County funds generated from by motel and hotel revenues can be directed towards development of greenway trails.	Beaufort County
Planning Operations	**Rivers and Trails Conservation Assistance** Long term assistance with conservation projects.	National Park Service
Stewardship	**Fish America Foundation** Provides funding for projects that enhance or conserve water and fisheries resources, including community efforts, up to $10,000.	Fish America Foundation
Stewardship	**R.E.I. Seed Grant Program** Seed grants of $200 to $2,000 for projects that enhance river protection.	National Rivers Coalition American Rivers, Inc.

Grant Type	Grant Program	Grant Source
Recreation	**Transportation Enhancement Program** Federal grant (80% w/20% match) with $1 million cap per project. Funding shall be approved for preliminary engineering, utility relocation, or property acquisition only when the applicant can demonstrate that the Transportation Enhancement funds, combined with other existing resources, will result in a completed and fully funded project. Funding can be provided, however, for feasibility studies.	SC Department of Transportation (SCDOT)
Stewardship	**Wetland Development Grants** Grants to assist state, tribal, and local agencies in their wetland protection, management and restoration efforts.	United States Department of Environmental Protection (USEPA)
Stewardship	**National Natural Landmarks Program** To identify and recognize nationally significant natural areas throughout the USA and to encourage their continued preservation	Natural Landmarks Program, National Parks Service
Preservation	**Federal Survey & Planning Grants** Federal Survey and Planning Grants can be used for a variety of historic preservation projects under the following categories: Identifying, Recording, and Recognizing Historic Properties, surveys to record historic properties with historical or architectural importance in a town or county, Studies that identify potential locations of archaeological sites, Archaeological surveys of multiple sites, National Register nominations for historic districts or multiple properties	South Carolina Department of Archives and History (SCDAH)
Acquisition Stewardship	**North American Wetlands Conservation Fund** Provides grant funds for wetlands conservation projects in the U.S.	U.S. Fish and wildlife service, Department of the Interior
Planning Stewardship	**Sustainable Development Grant** Grants for projects that help communities ensure long term environmental protection through the application of sustainable development strategies.	EPA Regional Office
Stewardship	**Wetlands Protection: Development Grants:** Assist states and local governments in developing new and enhancing existing wetlands protection and restoration programs.	EPA Regional Office
Stewardship	**Soil and Water Conservation** Plan and carry out a national natural resource conservation program and to provide leadership in conservation, development, and productive use of the nation's soil, water, and related natural resources	Natural Resource Conservation Service
Water Quality Management	**Nonpoint Source Implementation Grants** Assist states, local governments and nonprofit organizations in implementing EPA approved section 319 nonpoint source management programs.	EPA Regional Office
Education	**Riversmart** Offers "Grassroots toolkits" to organizations to assist in their quest to educate the public about the health of rivers watersheds and communities.	River Network

SOUTHERN BEAUFORT GREENWAY

Funding Provided by the Hilton Head Island Foundation

the PALMETTO CONSERVATION FOUNDATION

Palmetto Trail

May 1999
Palmetto Trail
Palmetto Conservation Foundation

I. PROCESS AND APPROACH

A. PURPOSE

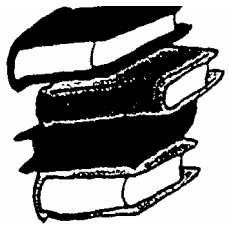
The goals of the Palmetto Conservation Foundation and the Palmetto Greenways Initiative are to stimulate public and private interest in preserving and creating greenways in South Carolina.

Greenways are corridors of protected open space for conservation and recreation purposes. They protect natural and historical resources and preserve scenic landscapes. Greenways offer a route for people to move from place to place. All greenways are unique in their community and serve a variety of purposes.

The purpose of the Southern Beaufort County Greenway Project is to determine how and where greenways can best serve the Southern Beaufort community. Greenway projects have unique purposes for each community they are developed in. The Southern Beaufort County Greenway concept is intended to connect the community with safe routes for people to access the community's resources via walking, cycling, or non-motorized modes. It is also the purpose of the Southern Beaufort County Greenway Project to provide the community with access to water courses and other natural resources.

B. PROCESS

The following is a summary of the six stages of the study process. This information will provide the framework for the planning process and aid in the final decision making.



Stage One - ESTABLISHING AN ADVISORY COMMITTEE

It is important that a citizen's advisory committee be established to provide local support and assistance with the greenway planning process. The input of local individuals is also invaluable. The committee group will assist with the inventory, analysis, design, and the implementation stages of the project. An advisory committee should consist of an inclusive group of individuals from the community.

Stage Two - INVENTORY & ANALYSIS

Southern Beaufort County has a wealth of natural, cultural, and recreational resources. It is important for people in the community to have easy and adequate access to these resources. To that end, these resources must be inventoried to determine the desired destinations of the community.

This stage is divided into several categories of items to inventory. Each resource is then described and analyzed. The analysis should identify the factors contributing to the desirability of incorporating the identified resource into the greenway plan. This information will provide the intellectual foundation for the next stage - developing the conceptual greenway route.

Stage Three - DEVELOPMENT OF CONCEPTUAL ROUTE

Once the resources have been inventoried and analyzed, it is necessary to link the individual sites together. It is useful to identify several conceptual routes. This will enable the committee to evaluate the alternatives and discuss the opportunities and constraints that each present. When developing the route, the committee should look at feasibility of route including economics in construction, land procurement, neighborhood support, existing amenities, and safety. Most likely, the final plan will be a combination of all the concepts.

In routing the greenway, it is important to look at right-of-ways and ownership of potential greenway

properties. Also, it is necessary to identify potential supporters of the effort, problems such as road and water crossings and existing safe crossings.

Stage Four - DRAFT THE FINAL PLAN

A final greenway route is determined from analyzing the alternatives. The routing should address all concerns that have been identified in the previous stages. Once the committee has identified the selected route, the greenway must be documented. It is also necessary to tour the route to identify the true onsite issues. The final greenway plan shall be presented in document form with specific greenway maps.

Stage Five - CREATION OF STANDARDS FOR THE GREENWAY

Actual design details and guidelines for development will be established to guide construction of surfaces, signage, lighting, and landscaping within the greenway corridor. Overall standards will be developed for the Southern Beaufort Greenway, however, each area may have unique issues that need to be addressed.

Stage Six - PROMOTION & IMPLEMENTATION

The commitment of an ongoing Southern Beaufort County Greenway support group is important to ensure that the overall greenway is developed to its fullest potential. This group should produce a marketing strategy that will identify methods to promote the Greenway Project.

The marketing strategy should also identify local support groups and volunteers that can help build and fund the greenway project. In concert with the marketing strategy, a strategy for guiding and monitoring the actual construction of the greenway must be identified. The implementation phase should identify manageable sections of the greenway for construction. A cost estimate will prove to be useful in prioritizing the phasing of the actual construction.

II. HISTORY AND DEMOGRAPHICS

A. History of Southern Beaufort County

Bluffton, South Carolina, is situated on the "High Bluff" overlooking the May River between Savannah, Georgia, on the south and Beaufort and Charleston, South Carolina, on the north.

Evidence suggests that from 8000 B.C. onward, Southern Beaufort County-was inhabited by Paleo-Indians. Coastal shell rings, ceramic and lithic artifacts, ceremonial artifacts, human burials, and village sites document the arrival of agriculture, pottery-making, religion, and political institutions in Southern Beaufort County.[1]

The Yemassee were the last Native Americans to move into Southern Beaufort in the mid-1600s. By 1715, there were ten Yemassee towns established in the Port Royal, St. Helena, and Hilton Head region. During their time inhabiting Southern Beaufort County, the Yemassee bore the brunt of English expansionism, border warfare, and demographic decline. In April of 1715, the Yemassee retaliated. For two years the Yemassee, along with other Muskhogean-speaking tribes, raged war with the English.[2] After the Yemassee War, which lasted from 1715 to 1717, the Yemassee continued border raids until 1928. Soon after they were stricken from the land and forced to the south where the surviving Yemassees were absorbed by the Seminole Tribe in what is now Georgia and Florida.

Once the Yemassee were removed, the Lord Proprietors of England granted themselves additional baronies of 13,000 acres under a charter from King Charles II from the "Indian Lands." Afterwards the lands were open for settlement by white colonists. Sir John Colleton was deeded the "Devil's Elbow Barony," the property surrounded by Colleton and Okatie Rivers, the May River, Mackey's Creek, and Linden Plantation. In 1776, the barony was divided into six tracts and sold. A tract of 680 acres, which included the present town of Bluffton, went to Benjamin Walls[3].

After the Revolutionary War, cotton and rice brought great prosperity to the sea island's and mainland plantations. During the heat-stricken summers these plantations hoarded malaria and yellow fever-carrying mosquitoes. Bluffton's huge spreading live oak trees, as well as its access to the plantations by way of water-travel made this area a prime location for escape and vacation. The first summer homes were built in the early 1800's. Unfortunately, Beaufort County Court House records were destroyed by General William Tecumseh Sherman's cavalry in 1865 while on route to Columbia for safekeeping. Therefore no records from the Revolutionary War to 1860 are available. Information on the antebellum period are derived from letters, church records, wills, and some newspaper articles.

Before being named Bluffton, the area was called both "May River" and "Kirk's Bluff." In the early 1840s, a meeting was held under the leadership of R. Barnwell Rhett to have the village change its name to Bluffton for the high banks on which it stands. The first reference about Bluffton was in a Savannah paper in 1843. Bluffton was then incorporated in 1852.

Bluffton remained peaceful for a number of years until 1844. The planters near and around Bluffton were angered by Federal tariffs making the goods they imported from abroad excessively expensive. Out of this discontent grew the "Bluffton Movement." Incensed planters gathered beneath what became known as the "Secession Oak" and the secessionist movement was born. Sixteen years later, South Carolina became the first state to secede from the Union[4].

Bluffton's prosperity came to a drastic halt with the outbreak of the War Between the States and the

[1] Lawrence S. Rowland, Alexander Moore, & George C. Rogers, Jr., The History of Beaufort County, South Carolina 1514-1861, University of South Carolina Press, Columbia, South Carolina, 1996. Page 8.

[2] ibid page 12-13.

[3] Ibid page 7.

[4] A Short History of the Early Days of Bluffton South Carolina. Published by the Bluffton Historical Preservation Society, Inc. in 1983.

capture of Hilton Head Island by Federal forces in November of 1861. Fear of raids forced most all citizens out of Bluffton and it soon became an abandoned town. Around 1862 Bluffton was overtaken by Confederate Forces and used as a lookout for changes in Federal movements. In 1863 Bluffton's resilience was tested when General David Hunter ordered that the town be destroyed by fire. Only two churches and approximately fifteen homes in the center of the town remained. Today the two churches and eight of the fifteen homes still stand.

After the war, a few original settlers, along with other families, returned to Bluffton to rebuild its beautiful and peaceful community. In time Bluffton would become the commercial center for Southern Beaufort County. Virtually everything going out or coming into Bluffton did so by way of river boats. Numerous general stores were built to help Bluffton's self-sufficiency. Bluffton once again became a prosperous, peaceful, and healthy place to reside and vacation.

Bluffton's prosperity took another knock around 1926 when the Coastal Highway, US 17, was built to bridge Savannah River at Port Wentworth. People were given access to Savannah via roads and began driving to do their shopping. Thus the river boat was being replaced as well. Bluffton's reputation of being a trading center began to decline and continued declining until the 1950's. The bridging of the Mackey and Skull Creeks in the 1950's, the building of the Tallmadge Bridge, as well as the short route to Savannah were all responsible for Bluffton's present reflourishment.

Today Bluffton with its "historic past, its beautiful bluff and river estuary, its healthy climate, and its quiet peaceful atmosphere, continues to charm everyone who will take the opportunity to visit it."

B. Demographics*

1. Population: Beaufort County

Beaufort County population increase by year:

- From 1930 to 1940, added 222 people.
- From 1940 to 1950, added 4956 people.
- From 1950 to 1960, added 14,059 people.
- From 1960 to 1970, added 10,084 people.
- From 1970 to 1980, added 14,228 people.
- From 1980 to 1990, added 21,289 people.
- From 1990 to 2000, projected to add 38,575 people.
- From 2000 to 2010, projected to add 49,000 people.

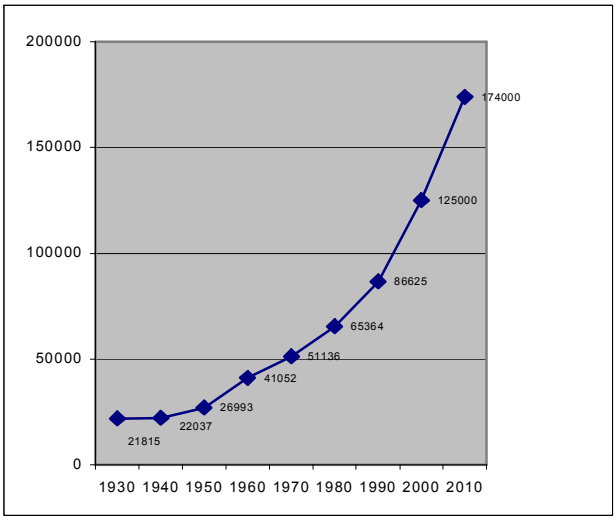
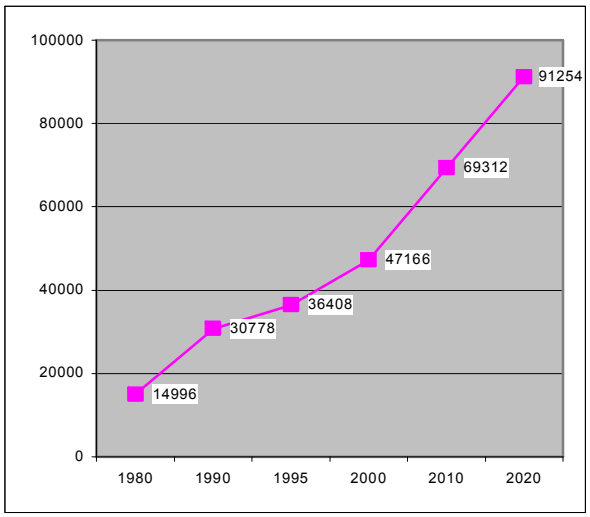


Figure 1: Population Change, Beaufort County

2. Population: Southern Beaufort County Area

	1980	1990	1995	2000	2005	2010
Bluffton Township	3,652	7,084	9,708	13,252	28,929	47,288
Hilton Head Island	11,344	23,694	26,700	33,914	40,383	43,966
Total	14,996	30,778	36,408	47,166	69,312	91,254



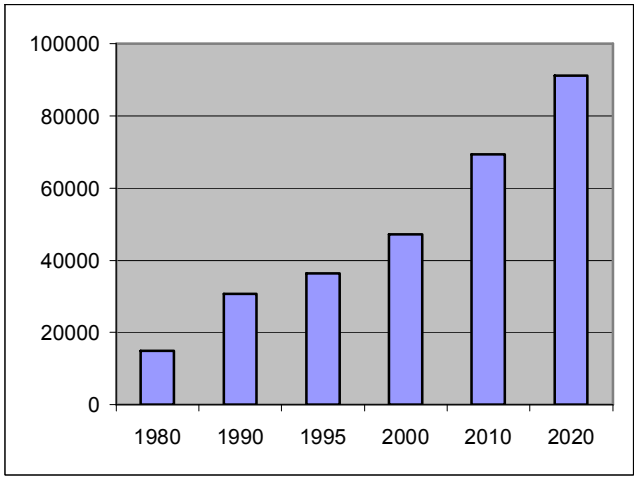


Figure 2 and 3: Population Increase in Southern Beaufort County

3. Age Profiles in Beaufort County

The 1990 age profile:

Under 5 years	8.6%
Age 5-17	16.7%
Age 18-39	40.0%
Age 40-64	22.4%
Age 65 and over	12.3%

5. Employment

Employment	1990	1996
# people employed	33,743	41,602

4.5% unemployed

The largest employers in Beaufort County are in:
Public sector:

Board of Education	1,883
Marine Corps	836
Beaufort County	760
Naval Hospital	900
Marine Corps (civilian)	645

6. Tourism

Tourism is a major component of Beaufort's economy. Its beaches and historic sites are primary draws to the coastal economy. Beaufort County currently ranks third in South Carolina in accommodation tax collections, a common statistic for gauging the tourism industry.

Accommodations Tax Collections in Beaufort

1991-92	$2,330,195
1992-93	$2,434,042
Percent Change	4.5%

Net Revenues from Accommodations Tax to Beaufort County

1991-92	$1,990,351
1992-93	$2,090,968
Percent Change	5.1%

4. Issued Building Permits in Bluffton Township, 1990-1995

Year	1990	1991	1992
# of Permits	143	120	142

Year	1993	1994	1995
# of Permits	157	318	394

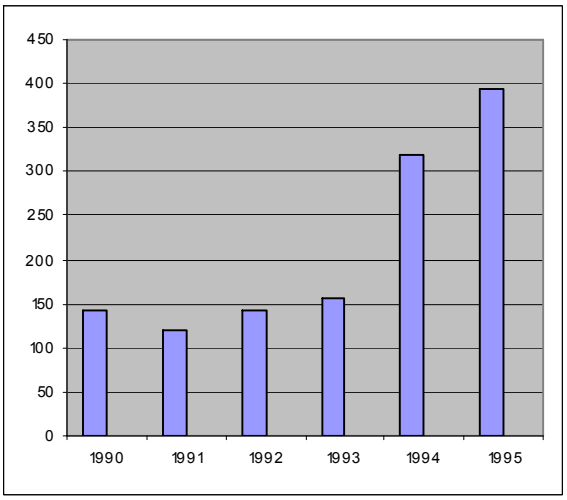


Figure 4: Building Permits Issued in Bluffton Township

7. Population of Urban/Rural Residents in Beaufort County

Year	Total	Rural	Urban
1970	51,136	25,479	25,657
1980	65,365	25,800	39,564
1990	86,425	28,224	58,201

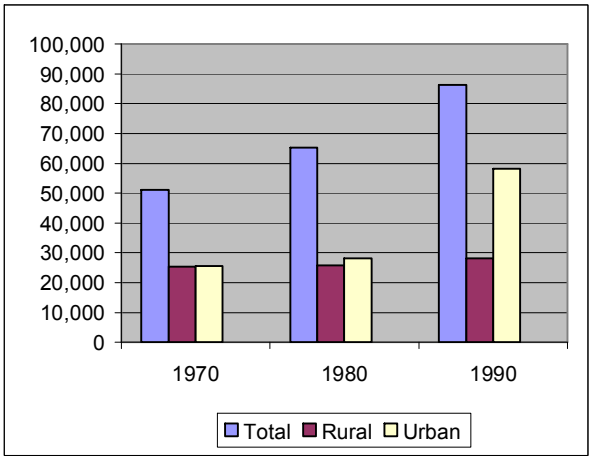


Figure 5: Population of Urban and Rural Residents in Beaufort County

IV. ADVISORY COMMITTEE

The Beaufort County Council and the Town of Bluffton along with interested organizations and citizens, helped determine which local organizations should be included in the process. Each organization was requested to send a representative to the initial meeting. The following is a list of the citizens that were involved in the study process.

Palmetto Conservation Foundation
Ken Driggers & Rebecca D. Ramos

Town of Bluffton
H. Emmett McCracken, Jr., Mayor

Beaufort County Council
Barry Connor

Beaufort County PALS
David Johnson

Beaufort County Planning Department
Maurice Ungaro, Principal Planner

SCDOT
Mr. Robert McFee & Robert Clark

Beaufort County Development Division
Ms. Rosetta Radtke

DHEC Physical Activity Coordinator
Phyllis Atkins

Bluffton Town Council
Cece Caldwell

Bluffton Historical Preservation Society
Mary Scardici

Clean Water Taskforce
Bill Marscher

Town of Hilton Head Island
Mr. Steve Riley, Town Manager

Union Camp/Branigar Corporation
Chuck Mitchell

Beaufort Jasper Water Sewer Authority
Dean Moss & Mike Bell

Colleton River Plantation
Bob Stahl

Sun City Community
Vic Bubas

Palmetto Electric Cooperative
Tom Upshaw

Beaufort County PALS
H.C. Boehm, Jr.

SCANA
Brad Samuel

Bluffton Telephone Company
Tom Wing, General Manager

Colleton River Plantation
William Langley, General Manager

SC Department of Natural Resources
Stuart Greeter

Beaufort County School District
Herman Gaither

US Department of Agriculture
Alan Ulmer

Citizens At Large
Annelore Harrell
Jacob Martin
Jack Maloney
Sue Olsen
Laura McIntosh
Arthur Hancock
Boowie Hancock

V. INVENTORY AND ANALYSIS

The Inventory and Analysis phase was broken into four categories for concentrated efforts of review:

A. Destinations
Greenways should connect a community by linking individual desired destinations.

Task: Identify places of interest, desired destinations, and other nodes for the Greenway System. These are places like neighborhoods, parks, cemeteries, schools, colleges, employment centers, shopping areas, and recreational resources.

B. Linkages
All destinations should be connected with a safe and easy travel route.

Task: Develop patterns of connections and identify access points and service nodes to provide parking and other facilities.

Task: Identify existing corridors or connectors for Southern Beaufort County currently being used for alternative modes of transportation and recreation activities.

Task: Identify new routes to be developed to link the known destinations.

Task: Identify different user groups and activities (i.e. cyclists, mopeds, roller blades, walkers, joggers.) on various sections of the greenway.

C. Issues
Suspicion from landowners generally exists when public access through private land is recommended. Identify issues that citizens may be concerned with. It is important to identify as many issues that may arise before the fact so we will be prepared to address all concerns.

Task: Identify the concerns of landowners in the proposed greenway corridor. These may include vandalism, tax incentives, and landowner liability.

D. Development Activity
New developments can easily be incorporated in a greenway plan.

Task: Identify proposed development activities that may impact the design of the Greenway. Coordinate with the town and county permitting departments, as well as the county comprehensive plan, the adjoining town of Hilton Head Island, and any proposed road improvement projects

V. DESTINATIONS

Each community has unique places of interest and community service districts. Each of these destinations should be interconnected by a safe alternative route. Originally the committee as a group identified the following places as possible destinations for the Greenway:

- Pinckney Wildlife Refuge
- Bluffton Historic District
- Bluffton Town Dock
- Bluffton Sand Bar
- Churches and cemeteries
- Ball Fields and stadiums
- Parks and nature trails
- Boat landings
- School campus
- Drainage plans/canals
- Power lines parallel to 278
- Water and sewer lines
- New subdivisions
- Wetlands
- Historic resources
- Other environmentally significant lands
- Farms and farmland
- Buck Island Road
- Victoria Bluff
- Water Access Points
- Two River Corridor
- Heritage Trust property
- New School property

The Greenway Advisory Committee met to discuss further the relative importance of incorporating the original list of destinations into the Greenway Plan. The destinations are natural, cultural, historic, recreational, and service resources of the community. Each place was analyzed based on value and importance to the community, as well as numbers of anticipated users and regularity of use. Location and ease of access or remoteness or destinations were also factors that were discussed.

Bluffton Historic District - the district itself is a primary site, although the greenways plan may wish to identify specific corridors. Among the individual destinations within the historic district are:

- The People's Store
- Dr. Jakey's Office Site
- The Fripp House
- The Fripp-Lowden House
- Carson House
- Patz Brothers Residence
- The Card House
- The John A. Seabrook House
- The Heyward House
- The Squire Pope House
- The Huger-Gordon House
- The Lockwood House
- Seven Oaks House

Churches - Included in the Bluffton Historic District are at least three churches that should be included in the greenway system.

- The Church of the Cross

- The Campbell Chapel
- Bull Hill Methodist Church (St. Luke's)

Parks and Cemeteries - All parks and cemeteries are potential destinations. The following specific parks and cemeteries should have high priority for inclusion as destinations.

- Bluffton Recreational Center
- Michael C. Riley Park
- Proposed park and nature area on Shults Tract
- Proposed park and nature area on Palmetto Bluff
- Bluffton Cemetery
- School Stadium

Bluffton Sand Bar – The Bluffton Sand Bar is characterized as one of the main facilities to access the rivers in Bluffton.

Pinckney Island National Wildlife Refuge - This wildlife refuge was established in 1975 and is made up of five small islands surrounded by several thousand acres of marsh. It historically was the Sea Island Plantation of Charles Cotesworth Pinckney. This destination is situated along US. Highway 278 between Hilton Head Island and Bluffton.

Waterfront Vistas - There are several of these in the Bluffton area. The Town Dock is a good example.

Bluffton Town Hall - An important town center. Located on the corner of All Joy Road and Pritchard Street, Bluffton Town Hall is used for community meetings and gatherings.

Victoria Bluff Heritage Preserve - A 100-acre heritage preserve located on the Colleton River. It is the home of both pine/saw palmetto plant communities and an inland maritime forest. The property is open for hiking and nature walks.

Water Access Points - the following water access points are located in Southern Beaufort County:

- All Joy Public Boat Landing, Bluffton, May River
- May River Public Boat Docking Facility, Bluffton, May River
- C.C. Haigh, Jr. Public Boat Landing, Beaufort County, Highway 242, Mackay River
- Buckingham Public Boat Landing, Pinckney Island Wildlife Refuge, Mackay River
- Potential boat landings on Palmetto Bluff and Shults Tract

Open and Proposed School Campuses - The following schools that were picked as possible destinations:

- Michael C. Riley Elementary School
- New school complex on Buckwalter Tract
- University of South Carolina, Beaufort County Campus

Hilton Head Is1and Greenway System – Southern Beaufort County should be able to connect with the biking and walking system already established on Hilton Head Island communities.

Plantation Developments - The Bluffton community has expanded to include plantation developments. The Advisory Committee recommends extending the Greenway Plan to connect these developments through sidewalks or by other means.

New Annexation Properties

- Palmetto Bluff
- Shults Tract

VII. LINKAGES

Linkages should provide safe access into the original Town of Bluffton to the newly incorporated area of Bluffton, along Highway 278, and then into Hilton Head Island. Listed below are the areas the Advisory Committee identified as possible linkages for the greenway.

Linkages

- Colleton and May River Corridors
- U.S. 278 between Bluffton and Hilton Head
- Island
- Sewer line corridors
- Power line corridors
- Highway 46 between Palmetto Bluff Road and Highway 278

Greenway Safety

Safety is of utmost importance in the Greenway. These general recommendations were discussed to improve safety in the greenway corridor.

- Traffic signals should be sensitive and have the ability to be triggered by bicyclists;
- Traffic signal push button actuated devices should be installed for pedestrians;
- All RR crossings should be safe: and
- Vertical separators should be installed between bike lanes and motor vehicle lanes where space is limited and/or speed limit is higher.

Things to Consider About Linkages during the Planning Process:

- Develop linkages between existing greenways in Hilton Head Island and the City of Beaufort.
- Think Big Picture: consider trails to Savannah and Charleston-link to the Heritage Corridor. Greenways are an economic development tool.
- Use greenways to strengthen the link between land and water. Many residents of the county do not have access to one of the County's most important asset - the water. Greenways should provide maximum views to the water and marsh.
- Boat ramps and access to the water should serve as nodes on the greenway. Boat ramp facilities should be modified to be more friendly to the non-boating public or develop additional water access sites specifically for the non-boating public.
- Make the greenway appeal to a wide constituency of residents. Public input in the planning and implementation process is very important.
- Consider developing "Blueways" trails for canoes and kayaks that would interface with the greenway trails at certain nodes.
- Consider developing different kinds of greenways. In urban areas, trails could generally be paved to facilitate the widest variety of user groups. Horseback riding would be prohibited in these areas. In the more rural areas, trails could be unpaved and horseback riding may be allowed. Some greenways would be exclusively wildlife corridors where human access is not allowed. Other greenways may be along creeks and waterways and provide needed buffering for water filtration for ensuring water quality.

VIII: ISSUES

It is important to identify issues that neighborhoods and landowners may be concerned with. These issues were discussed both with the Advisory Committee and at the Public Meeting in the attempt to resolve any particular issues before they are raised. Each community has unique concerns, however, most all deal with maintenance and crime.

- **Maintenance**
  Who will maintain the greenway?
  How will maintenance be performed?

- **Management**
  Who will manage the greenway?
  How will it be managed?

- **Security**
  How will safety of greenway users be ensured?
  Will the greenway be patrolled regularly by public safety officials? Who and how? What will be the hours of operation of the greenway?
  Will lights be a part of the greenway?

- **Vandalism**
  Can the greenway be built to curb vandalism and crime?

- **Liability**
  If a property owner gives an easement for the greenway, what is the property owner's liability?
  If the property is acquired by the city what type of additional liability is the city taking?

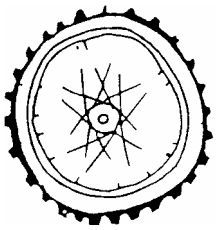
- **Cost**
  Who will pay for the development for the greenway?
  Who will pay for operation and maintenance costs of the greenway?
  How much will it cost?
  With all other pressing needs in the community is it reasonable to use public funds for the greenway?

- **Environmental Issues**
  Will the greenway traverse fragile natural areas?
  How will significant trees and wildlife habitats be protected?
  Will a paved greenway increase storm water runoff to sensitive waters?

- **Property Rights**
  How will greenway acquisition occur?
  Will developers be required to donate greenway easements?
  Or will incentives be used for owners to donate land or easements for greenways?
  Or sell at low prices?
  If developers are required to dedicate land for greenways, will they receive tax incentives?

- **Multiple Users**
  Will the greenway be open to all users including skateboards and rollerbladers?
  What about horses?

- **Problem Sites**
  Some nodes and linkages on potential greenway corridors may have problems associated with them due to ownership or neighborhood concerns.



IX: THE PLAN

The conceptual plan was developed by incorporating the Advisory Committee's recommendations and public comments. The plan evolved into two phases. The first phase is a set of passages through both old and new Bluffton connecting the identified destinations. The second phase will connect Bluffton with the Island of Hilton Head.

Phase One

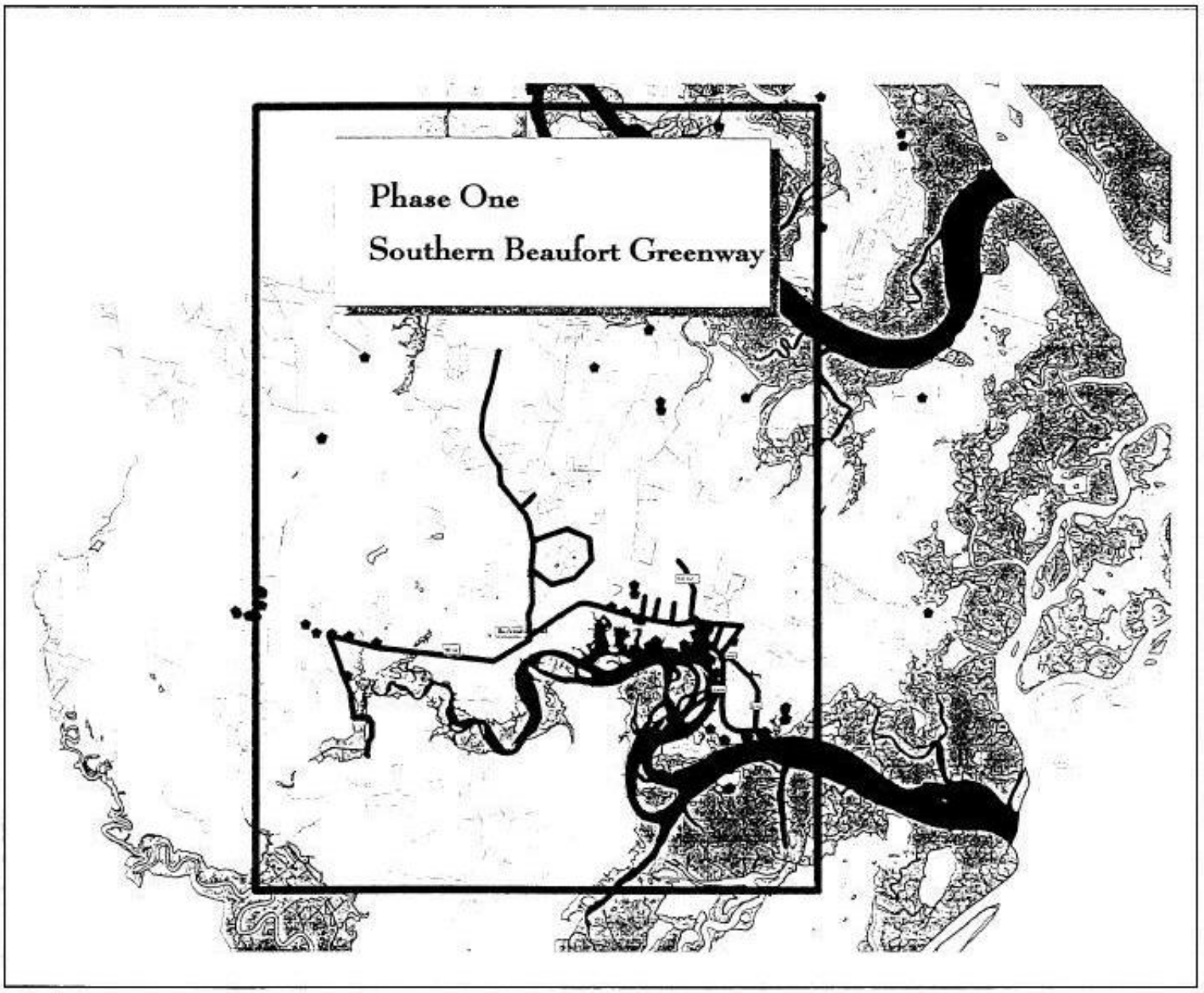
Phase One of the Southern Beaufort Greenway is the development of a Greenway Plan that connects the Town of Bluffton with all of its parts. Specifically, the Advisory Committee hopes to accomplish the following:

- Improve the walkability of downtown Historic Bluffton;
- Connect the newly incorporated area of Bluffton with the original Town of Bluffton;
- Unite parks, schools, and ball fields with major residential areas in the Town of Bluffton. This also includes connecting the sites of proposed schools with current amenities;
- Improve water access for citizens in the Town of Bluffton.

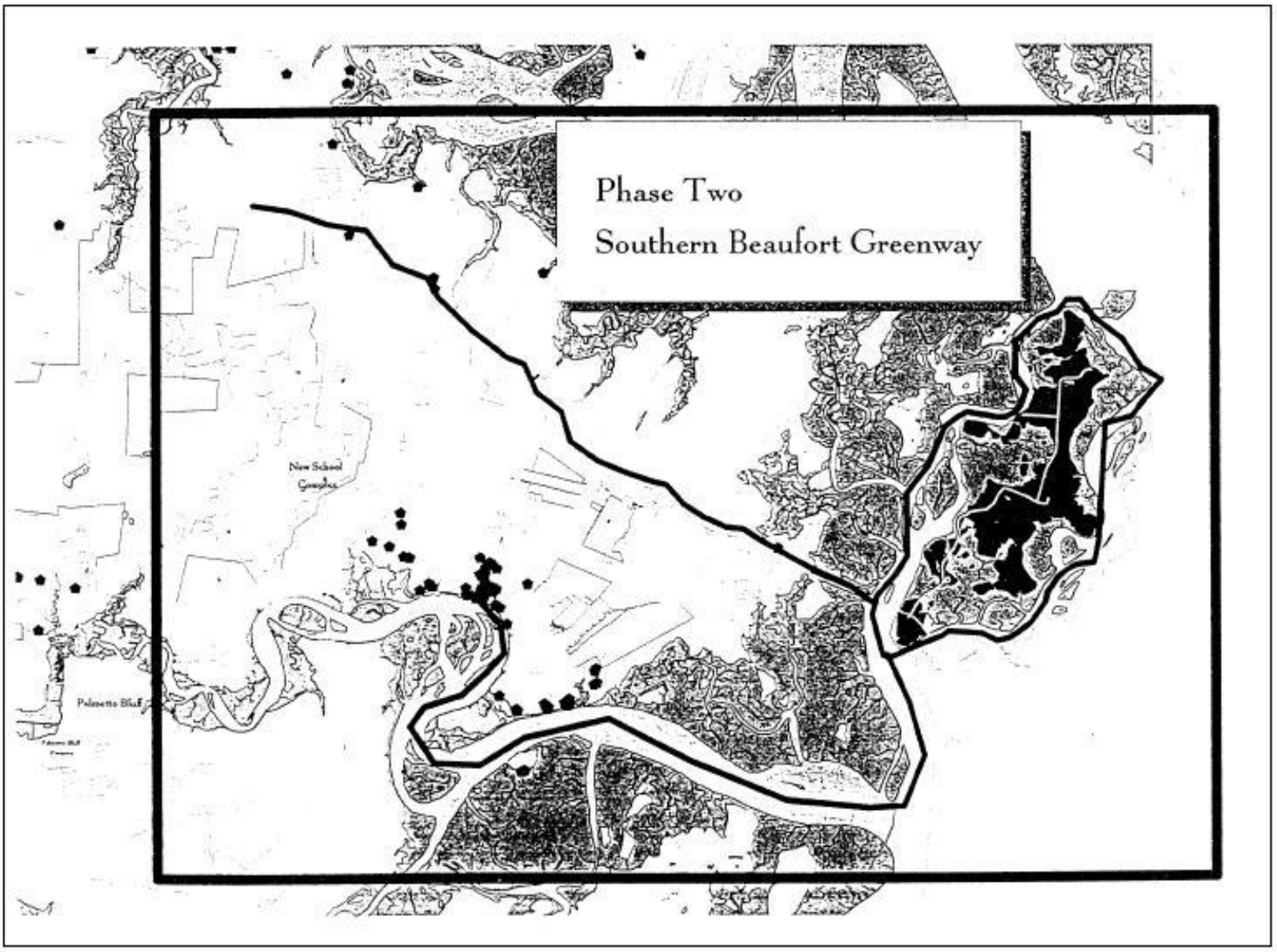
Phase Two

Phase Two of the Southern Beaufort Greenway is the greenway system that will connect Phase One, the Bluffton Greenway System, with Hilton Head Island. The Advisory Committee felt that after the Bluffton Greenway Plan was completed, the next step would be to bridge Bluffton with the Town of Hilton Head Island. Presently, Hilton Head Island has a diverse system of bike and walking trails on its Island. Both communities see the advantage of having an alternative means of transportation to on or off of the Island of Hilton Head.

Phase One Map
Southern Beaufort Greenway



Phase Two Map
Southern Beaufort Greenway



A. Overview of Phase One – Connecting Bluffton

The Town of Bluffton's land area has increased dramatically in the past year due to the annexation of two large tracts of land into the Town of Bluffton. The first area, Palmetto Bluff, is located south of Bluffton on the other side of the May River. The second area, the Shults Tract, is northwest of Bluffton and south of Highway 278. One of the central purposes of Phase One of the Southern Beaufort Greenway Advisory Committee is to connect both physically and mentally new Bluffton with old Bluffton.

This is quite possible since most neighborhoods and communities in new Bluffton have yet to be built. To insure the mental connection, a physical connection is necessary. The Southern Beaufort Greenway can provide this physical connection. With the construction of bike paths and sidewalks, new and old residents alike will be able to participate in the best of Bluffton.

To understand the Southern Beaufort Greenway conceptually, the greenway system has been divided into eight project areas that serve as greenway connectors. These connectors will join new and old Bluffton, new and existing neighborhoods, and particular destinations and attractions. Each route links major portions of the identified destinations and some can be implemented and utilized with relatively minor efforts. These connector routes expose Southern Beaufort Greenway for future greenway development.

The eight project areas are:

- **Project Area One – Palmetto Bluff**
- **Project Area Two – Buckwalter Tract**
- **Project Area Three – Buckwalter Road to Original Bluffton**
- **Project Area Four – Shults Tract Connector**
- **Project Area Five – Historic Bluffton Walking Tour**
- **Project Area Six – Connecting Original Bluffton**
- **Project Area Seven – Connector to All Joy Boat Landing**
- **Project Area Eight – Ulmer Road Connector**

B. Phase One Project Areas

1. Project Area One - Palmetto Bluff

During this past year, the Town of Bluffton annexed two large pieces of land from Union Camp. This first piece, called Palmetto Bluff, consists of approximately 20,660 acres and is located across the May River from the existing corporate limits of Bluffton. Union Camp, the owner of the land, has proposed creating a Planned Unit Development (PUD) on Palmetto Bluff. This PUD will have residential communities, golf courses, commercial and business parks, and 5,000 acres of managed forests to be used for recreation, natural trails, and educational experiences. Also, Union Camp has agreed to create a Palmetto Bluff Park from 10 upland acres, and will donate $150,000 for design and construction.

The goal of Project Area One is to connect, through sidewalks and bike trails, Palmetto Bluff to the original Town of Bluffton. Presently, there is only one primary site access for Palmetto Bluff, and it is approximately six miles from original Bluffton along South Carolina Highway 46. From the current plans, there will be no other access points into Palmetto Bluff that are any closer to Bluffton. Therefore, Project Area One includes the construction of sidewalks and bike trails along Highway 46 to the newly constructed Buckwalter Road. Besides the benefits to the Palmetto Bluff communities, these sidewalks and bike trails will also be used by the current residents along Highway 46 --- communities like the Maye River Plantation, the Grandee Oake Subdivision, and other mobile home parks and campgrounds.

2. Project Area Two - Buckwalter Tract

Here the greenway picks up at Buckwalter Road. This road is currently under construction and runs through the Buckwalter Tract. When finished, it will connect Highway 46 to the new school complex and then unto Highway 278. The new school complex is scheduled-for opening this next school year. Now is the time to implement the construction of sidewalks and bike paths along this road and the road surrounding the school to allow for alternative forms of transportation for students and residents.

In the near future, those undeveloped areas around the new school complex will soon be built into new subdivisions and communities. If Beaufort County and Bluffton insist on the construction of sidewalks and bike paths along all new roads at this time, this will encourage residents to walk and bike, instead of driving. It also would be beneficial if the County and Town would require all new subdivisions being built in the Buckwalter tract to provide sidewalks and bike paths.

Due to the construction of the Villages at Buckwalter Subdivision and the opening of the new school this fall, the advisory committee has designated this area between the subdivision and the school along Buckwalter road as a priority for sidewalk and bike path construction.

3. Project Area Three - Buckwalter Road to Original Bluffton

Project Area Three runs along Highway 46 from Buckwalter Road to connect with the Shults Tract, then into Original Bluffton. Continuing on Highway 46 at Buckwalter Road, the greenway path will traverse along Highway 46 pass Buck Island Road, Red Cedar Road, Oak Street, and Shults Road, to the corner of Maye River Road and Bluffton Road.

During this stretch, the greenway passes various historic sites, including Succession Oak and the Bluffton Cemetery. Sidewalks and bike paths would need to be constructed along Highway 46 to the corner of Dubois Lane where there is already an existing sidewalk.

4. Project Area Four - Shults Tract Connector

The Shults Tract is approximately 620 acres, of which over 120 acres are freshwater wetlands. Unlike Palmetto Bluff, a portion of the Shults Tract falls within the current municipal limit of Old Bluffton. When development of Shults is complete, there will be over 1600 residential units, 30 acres in general commercial and a 200 acre business park. As part of the agreement with Bluffton, Union Camp is donating 25 acres and $300,000 for the design and construction of a community park and playground for Bluffton residents on the Shults Tract. Union Camp will

also be donating 120 acres for a nature preserve which may be used for recreational parks, nature trails, and educational stations.

With the development of the Shults tract, the incoming residents, the commercial outlets and recreational opportunities, it is important that there is a direct route for bikers and walkers into and out of the Shults Tract. Current plans have designated two entrances off of Shults Road into the Shults Tract. (Shults Road is off of Highway 46, near the 4-way intersection in Bluffton.) One leads directly into the nature preserve and community park, while the other leads into residential communities. To allow for this easy access, sidewalks and bike paths need to be built along Shults Road, and the Town of Bluffton should request that all routes into and roads built in the Shults Tract provide for alternative forms of transportation.

5. Project Area Five - Historic Bluffton Walking Tour

Unlike many communities, Bluffton is the home of many historic homes and churches. Fortunately, the Bluffton-Okatie Business Council and the Bluffton Historical Society have already established a walking tour through this historic district. The goal of Project Area Four is to accommodate the Bluffton Walking Tour - A Walk Through Time, and address any areas along the walking route that may still need work.

Most of the sidewalks have been built along the main streets of the walking tour. These include sidewalks along Calhoun Street, Boundary Street, and Bridge Street. However, there are still some side streets that need sidewalk development. These streets are Walter Street, Allen Street, Green Street, and Lawrence Street. With the construction of sidewalks along these streets, the part of the walking tour which encompasses pre-Civil War Buildings would be connected by sidewalks.

6. Project Area Six - Connecting the Rest of Original Bluffton

Besides the historic homes in downtown Bluffton, there are many other significant sites in this area that are important to Bluffton residents. Project Area Five is an attempt to connect those areas in original Bluffton, and therefore may partially overlap with the area discussed in Project Area Four.

Beginning at the corner of May River Road and Boundary Street, the greenway continues on sidewalks along Bruin Road to the Bluffton Post Office on the corner of Bruin Road and Pritchard Street. Follow Pritchard Street along existing sidewalks, it passed the back of the Michael C. Riley School to Bluffton Town Hall on the corner of Bridge Street/All Joy Road. Here the greenway can go either east or west.

Turning west, along Bridge Street, the greenway connects to those small shops on Calhoun and Bridge Street, or south to the Bluffton public boat dock. This will also allow opportunities for students to walk to the Bluffton Library which is two blocks north of Bridge Street on Boundary Street.

Going east from the Town Hall, the greenway proceeds along All Joy Road to Burnt Church Road. The path will follow Burnt Church Road all the way back to Bruin Road. The significant areas along Burnt Church Road include Michael C. Riley School, the school stadium, and the growing communities along this route. Sidewalks and bike paths are badly needed along Burnt Church Road.

The Advisory Committee has identified construction of sidewalks and bike paths along Burnt Church Road from Lake Linden and Fern Lakes subdivision pass the school to the corner of All Joy Road as a priority project.

7. Project Area Seven - Connector to All Joy Boat Landing

The All Joy boat Landing is one of the most visibly used public access facilities to the May River. With more people and the dwindling number of river access sites in public hands, sites like these which provide necessary access to Bluffton's natural resources are quite important. To increase the accessibility to these areas, bike paths and sidewalks need to be built along All Joy Road from the Bluffton Town Hall to the boat landing. The Advisory Committee also sees the construction of these sidewalks and bike paths as a priority project.

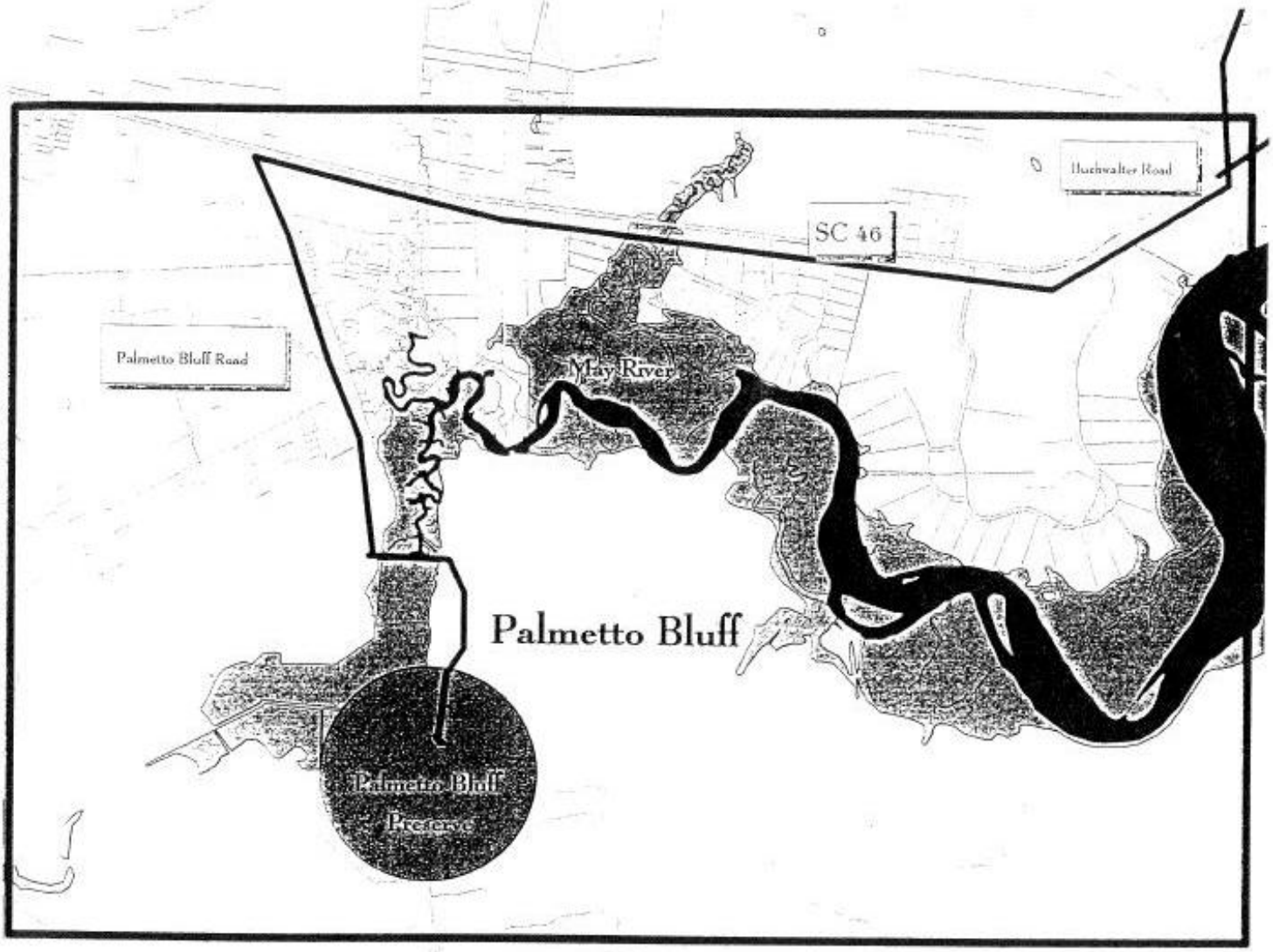
8. Project Area Eight - Ulmer Road Connector

The Seventh Project Area will connect Burnt Church Road with the facilities along Ulmer Road. These facilities include the Beaufort County Gymnasium and the Bluffton Center. Sidewalks and bike paths should be built along the entire length of Ulmer Road to its intersection with Shad Road and then to All Joy Road.

The Advisory Committee sees the construction of Project Area Six, Seven, and Eight as a priority loop to connect schools, recreation areas, and water access points in Old Bluffton.

Palmetto Bluff

Phase One, Project One



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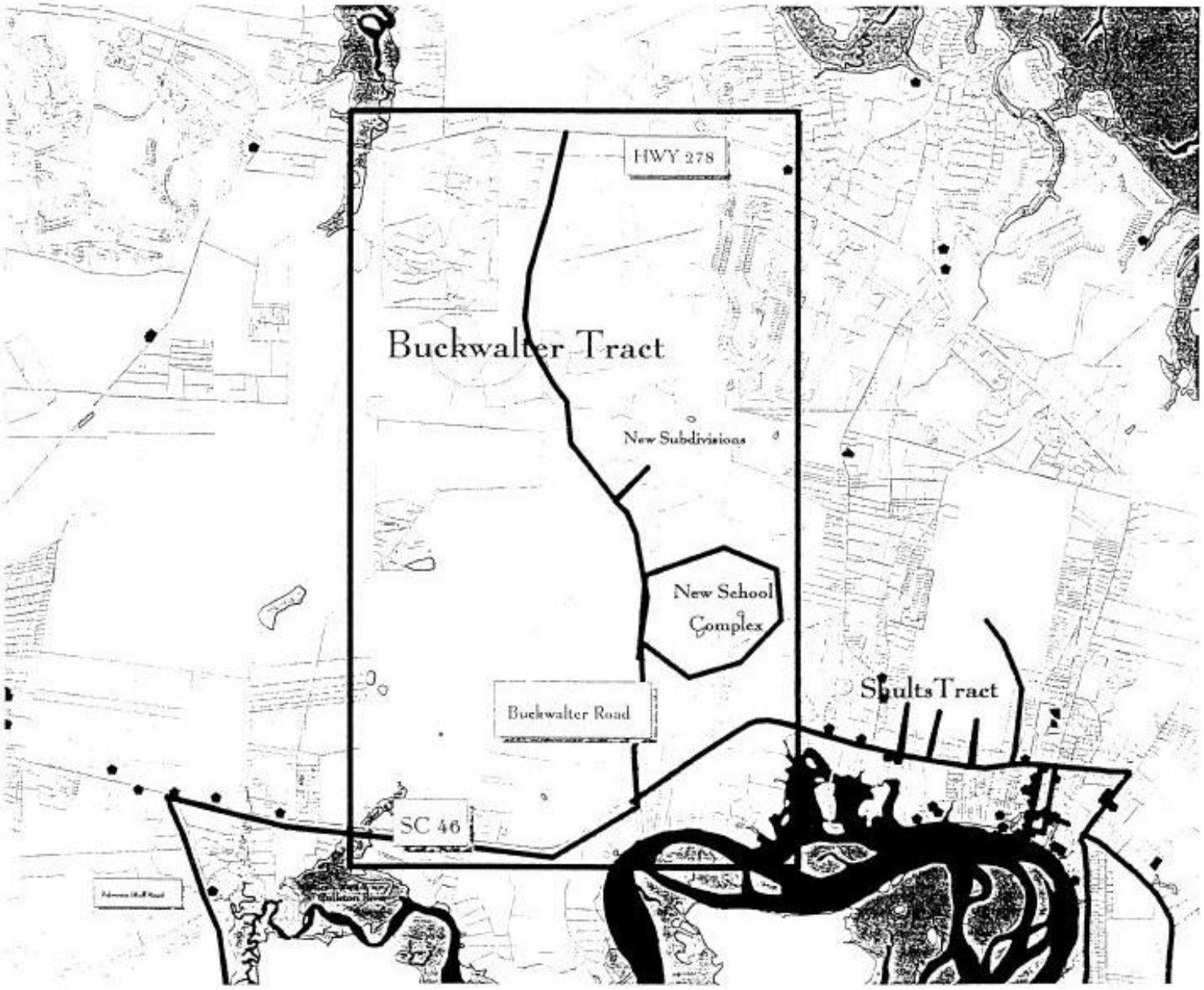
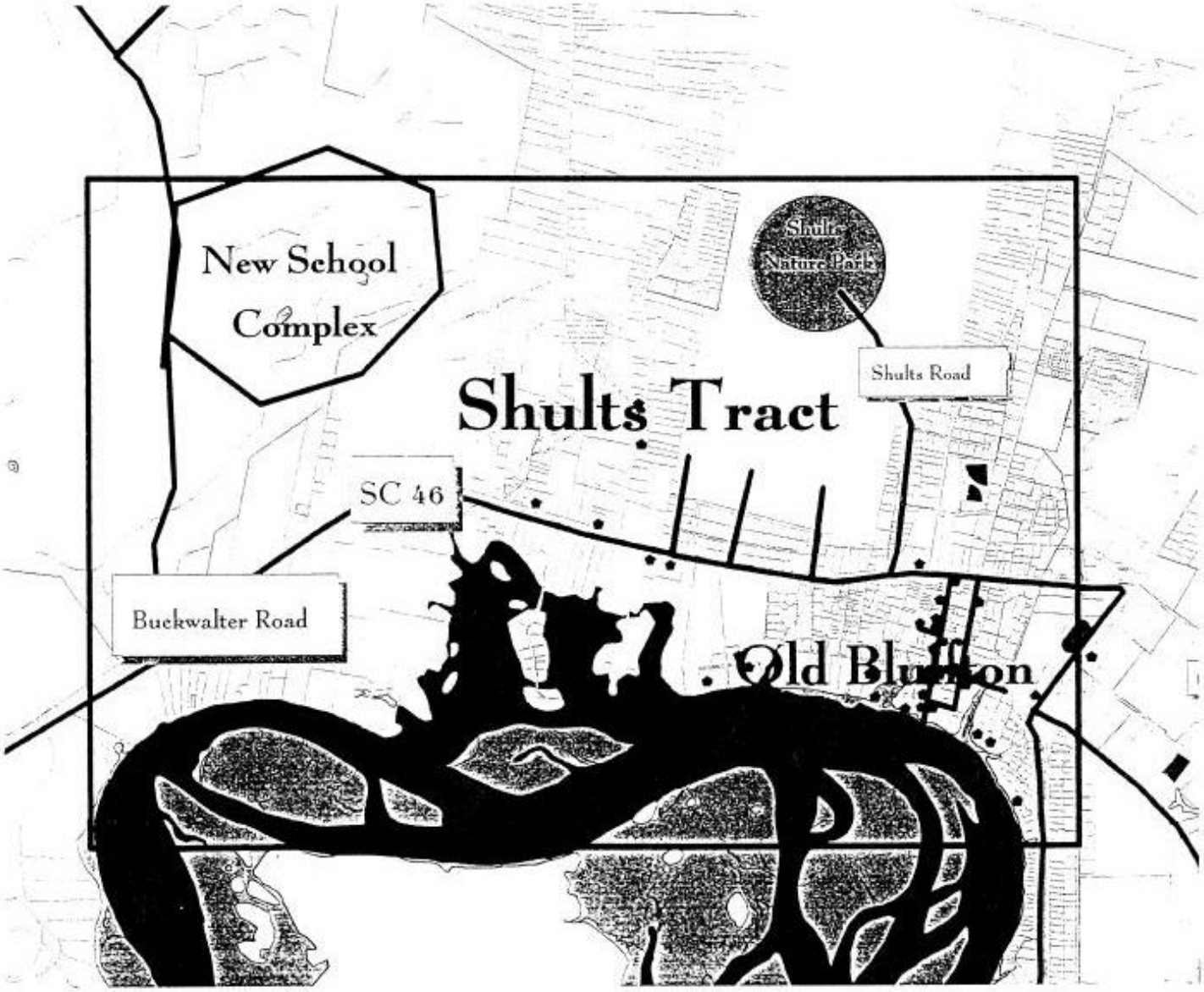
Buckwalter Tract
Phase One, Project Two



Buckwalter Road to Old Bluffton

Phase One, Project Three



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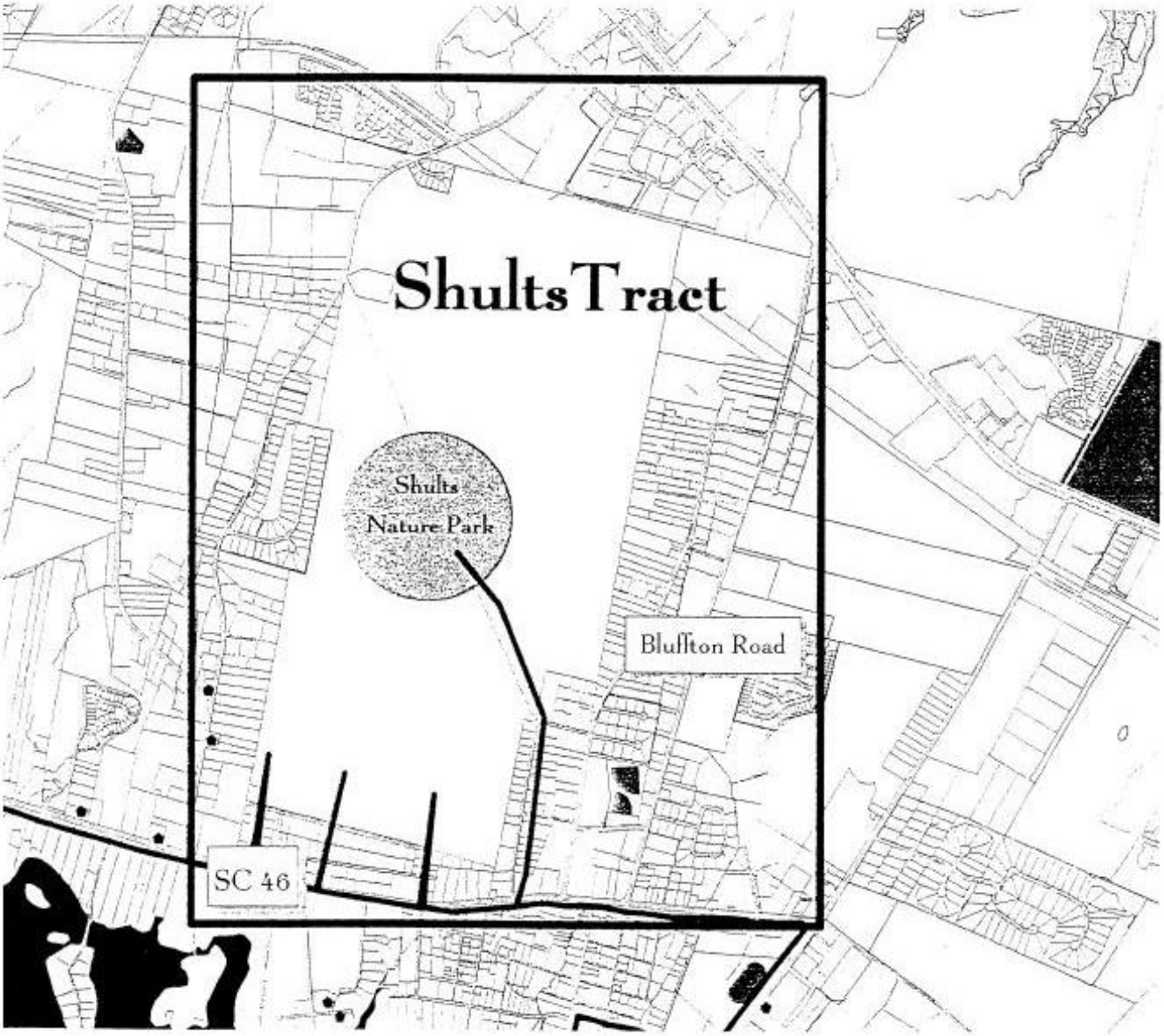
Shults Tract Connector
Phase One, Project Four



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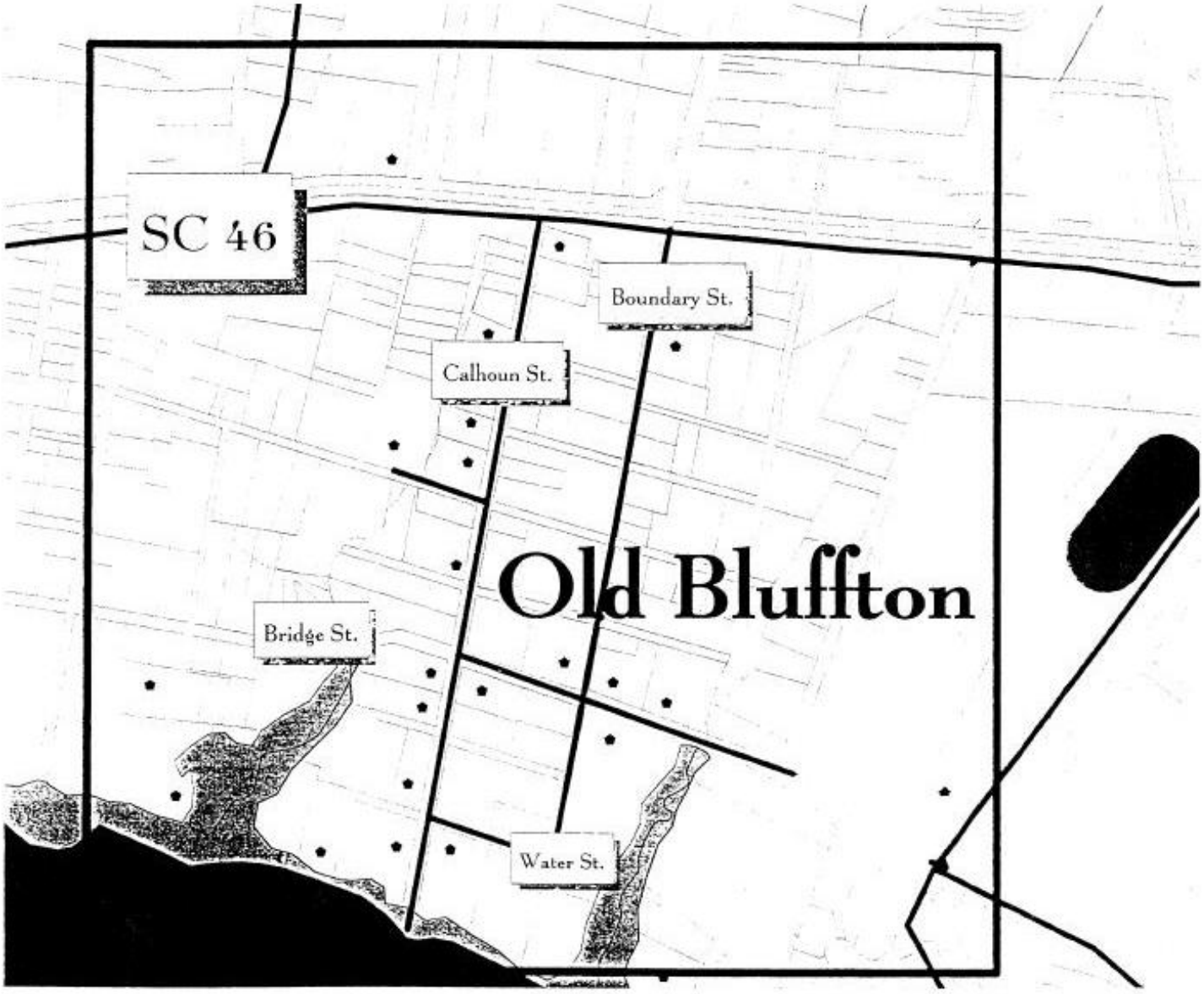
Historic Bluffton Walking Tour

Phase One, Project Five



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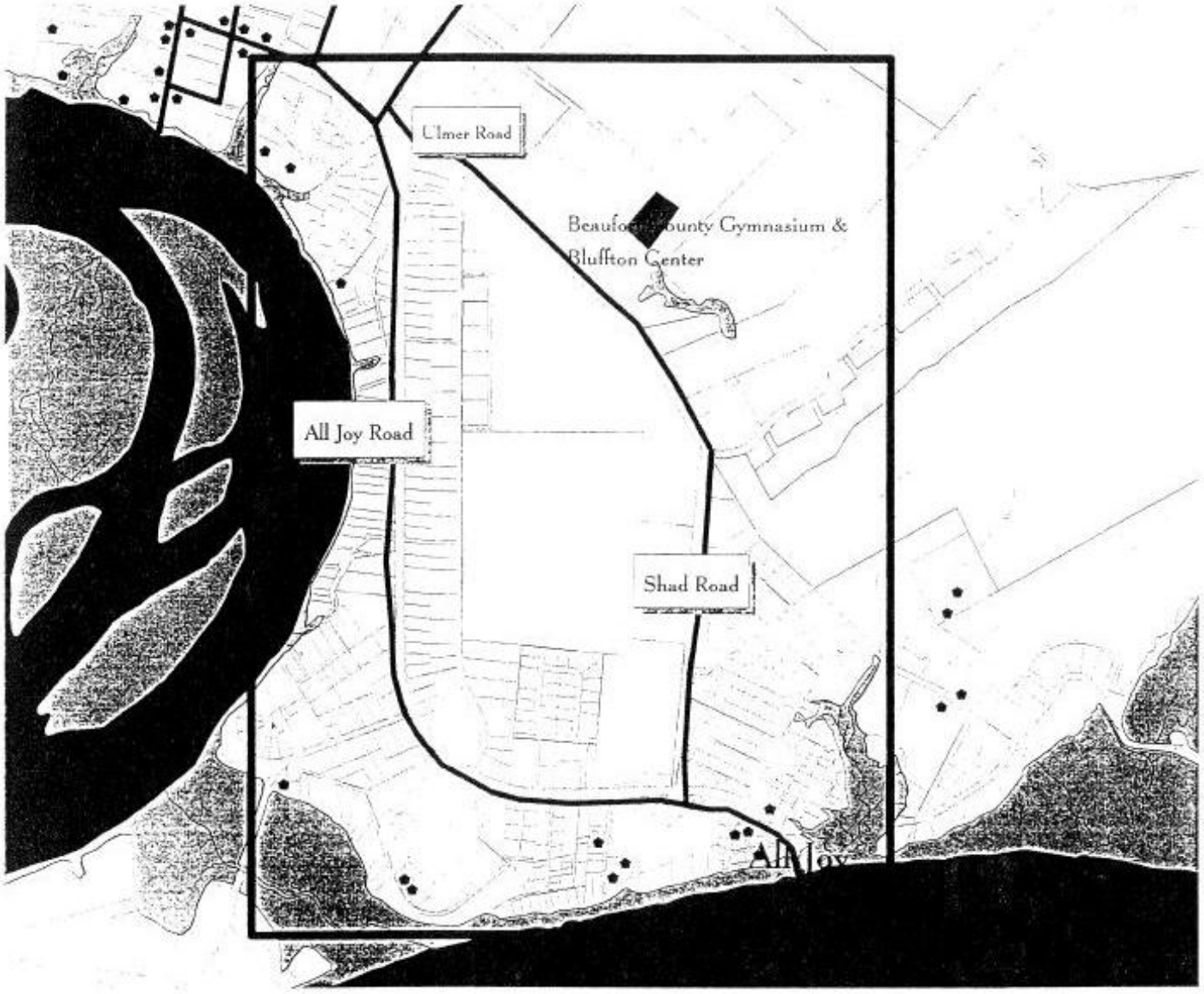
Connecting Original Bluffton

Phase One, Project Six



Connector to All Joy Boat Landing & Ulmer Road Connector

Phase One, Project Seven & Eight



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A. Overview of Phase Two – Connecting Bluffton with Hilton Head

Phase Two of the Southern Beaufort Greenway is more complicated and less manageable than Phase One. In the advisory committee's discussions involving the needs of connecting Bluffton with Hilton Head, many concerns were raised. Of the utmost concern was the use of Highway 278 for bicycle and pedestrians. Besides being the major traffic route into and out of Hilton Head Island, over the past ten years the area along Highway 278 has built up quickly with residential subdivisions, commercial outlets and retail businesses. These restaurants, grocery stores, outlet malls, and fast food chains provide the residents of Southern Beaufort County with their everyday needs, while making Highway 278 a traffic nightmare.

Unfortunately, there are few routes left into Hilton Head from Bluffton. There are some utility right-of-ways that could have possible use, but the advisory committee has been concerned with the rights of adjacent property owners and landowner liability concerns.

B. Phase Two Project Areas

1. Project Area One – Highway 278 Connector

Project Area One of Phase II begins at the intersection of Buckwalter Road and Highway 278 just north of Bluffton and will continue down Highway 278 to Hilton Head Island. Presently, the Town of Hilton Head Island has plans to build a bike path and sidewalks up to the first bridge into Hilton Head Island. This part of the greenway would be able to connect to Hilton Head's current plans.

The greenway will pass by many of the plantations and golf courses along Highway 278, including Rose Hill, Belfair, Crescent and Colleton River. It will connect to Victoria Bluff Heritage Preserve and Pinckney Island National Wildlife Refuge.

There are many issues that have not been settled around this path. For instance, there has been discussion of the construction of paths to cross over or under Highway 278. Today, it is not recommended that pedestrians try to cross Highway 278 due to inaccessibility and speed of traffic. Crossings would go a long way to improve the usefulness of the greenway.

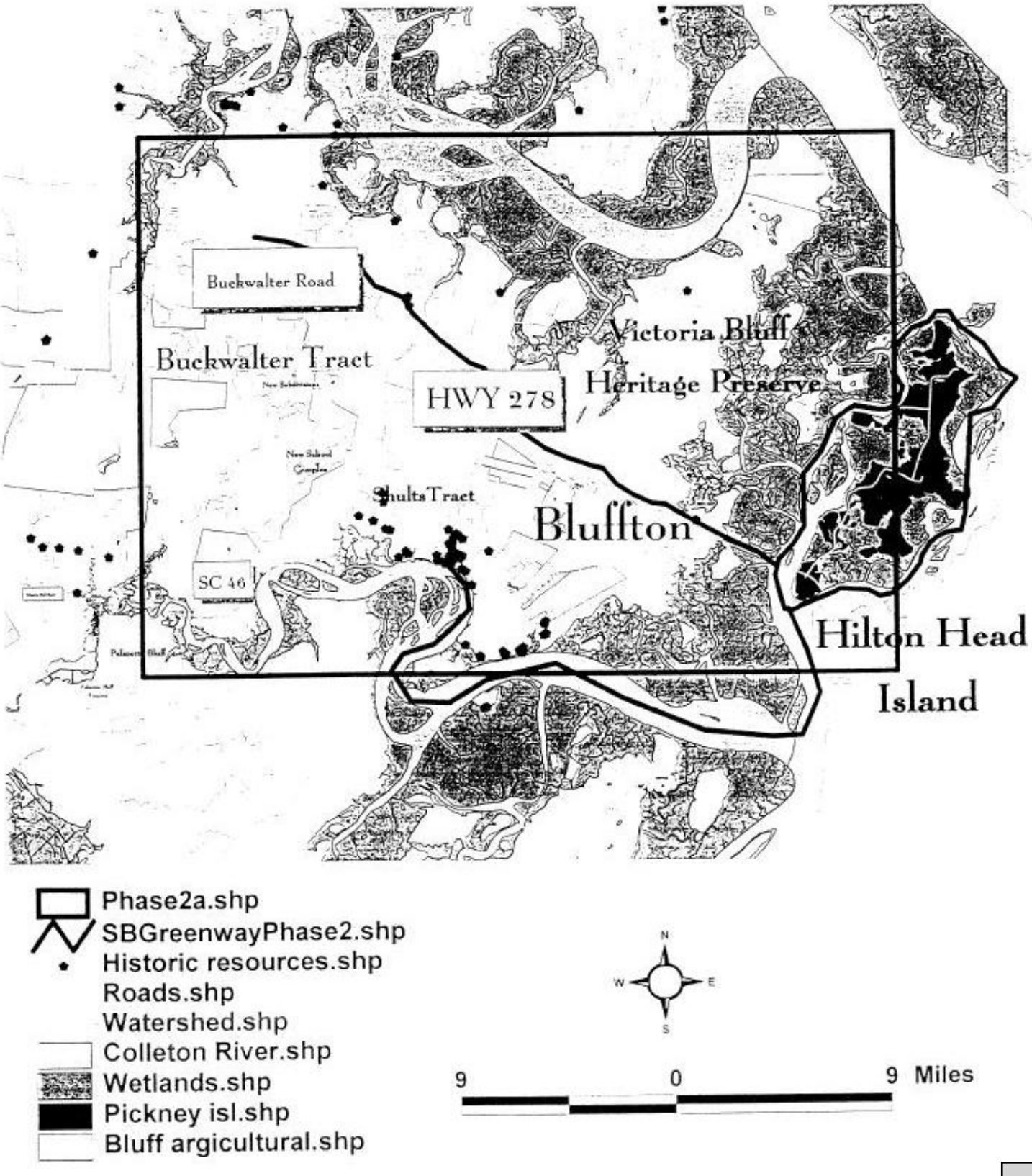
It also has been suggested that more stop lights will be built along 278 to slow down traffic and help with congestion. If this happens, pedestrian cross walks should be accommodated.

It has come to the attention of the Advisory Committee that Beaufort County Council has planned to hire a traffic engineer who will be addressing specifically the pedestrian issues raised by the committee concerning Highway 278. The Advisory Committee has therefore decided not to attempt to design a greenway along Highway 278, but wait for the recommendations of the consultant.

2. Project Area Two – Bluffton Blueway

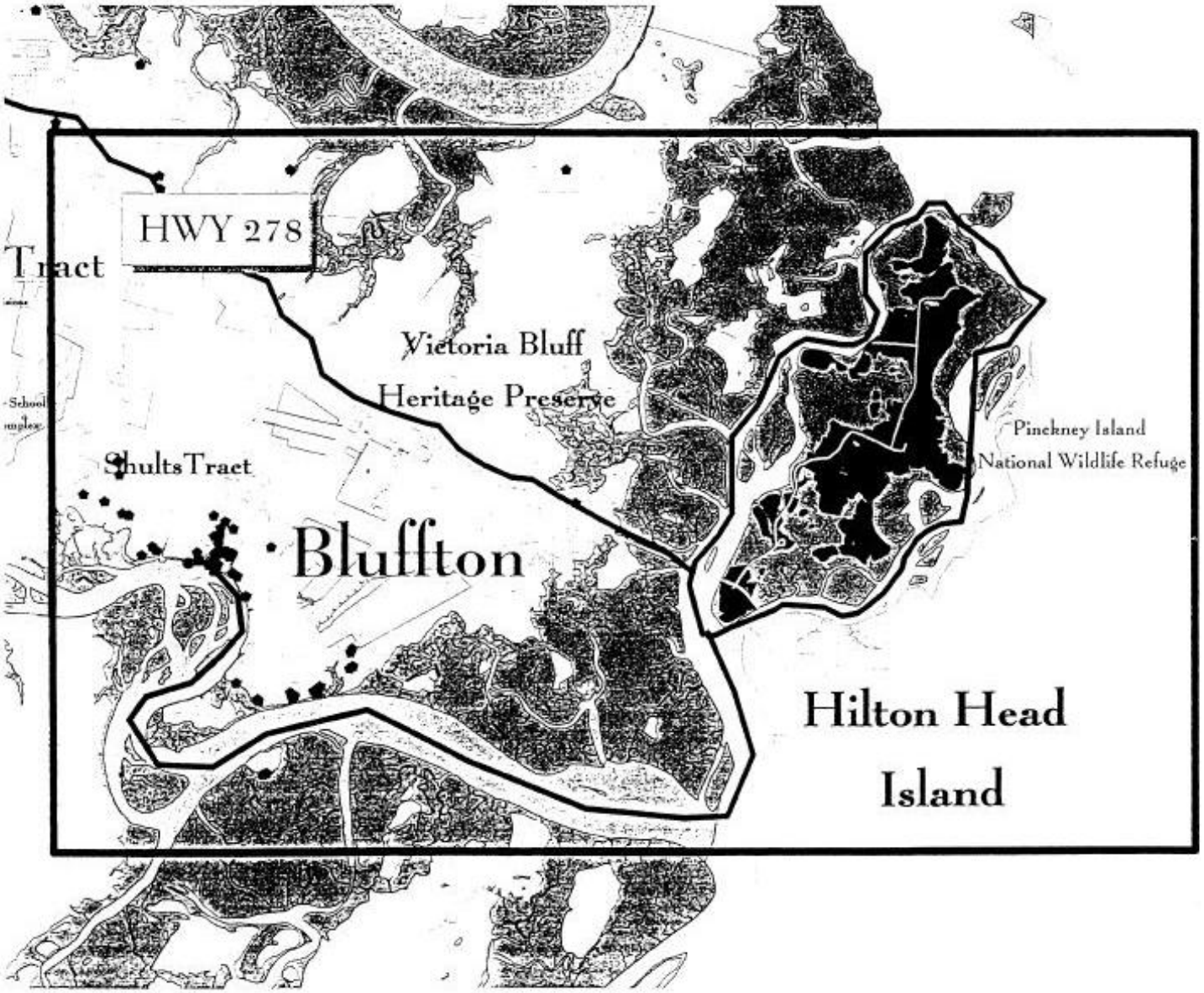
Another way to connect Hilton Head Island to the Town of Bluffton is through water courses. Using existing and planned water access points, Project Area Two of Phase II will be called the Bluffton Blueway. The Blueway will run from Bluffton and the All Joy Boat Landing on the May River through the intercoastal waterway and around Pinckney Island National Wildlife Refuge and along Hilton Head Island.

Highway 278 Connector
Phase Two, Project One



Bluffton Blueway

Phase Two , Project Two



VIII: BUDGET

The Southern Beaufort Greenways Plan can be clearly divided into eight project areas. The following briefly describes each area and their projects, including budget estimates and priority level.

A. Phase One

1. Project Area One - Palmetto Bluff

Construction of sidewalks and bike trails along South Carolina Highway 46 to Buckwalter Road, approximately five miles.

Budget Estimate: $200,000
Priority Level: 2

2. Project Area Two - Buckwalter Tract

Construction of sidewalks and bike trails along Buckwalter Road, approximately five miles.

Budget Estimate: $200,000
Priority Level: 1B

3. Project Area Three - Buckwalter Road to Original Bluffton

Construction of sidewalks and bike trails along South Carolina Highway 46 to the corner of Dubois Lane, one and one-half miles.

Budget Estimate: $75,000
Priority Level: 2

4. Project Area Four - Shults Tract Connector

Budget Estimate: $ unknown
Priority Level: 1A

5. Project Area Five - Historic Bluffton Walking Tour

Construction of sidewalks along Walter Street, Allen Street, Green Street, and Lawrence Street.

Budget Estimate: $30,000
Priority Level: 2

6. Project Area Six - Connecting Original Bluffton

Construction of sidewalks and bike paths along Burnt Church Road.

Budget Estimate: $65,000
Priority Level: 1A

7. Project Area Seven - Connector to All Joy Boat Landing

Construction of bike paths and sidewalks along All Joy Road from the Bluffton Town Hall to the All Joy boat landing.

Budget Estimate: $95,000
Priority: 1A

8. Project Area Eight - Ulmer Road Connector

Construction of sidewalks and bike paths along the entire length of Ulmer Road to its intersection with All Joy Road.

Budget Estimate: $95,000
Priority Level: 1A

B. Phase Two

1. Project Area One - Highway 278 Connector
Construction of sidewalks and bike trails along South Carolina Highway 278 from Buckwalter Road to Hilton Head Island.

Budget Estimate: $ unknown
Priority Level: 2

2. Project Area Two – Palmetto Blueway
Insure water access points are accessible for non-motorized boats, publicize Blueway, and post Blueway signs.

Budget Estimate: $2,000
Priority Level: 2

PRIORITY LEVELS
1A High Priority, will serve maximum number of users, expenditures are middle to low range
1B High Priority, will serve maximum number of users, expenditures are in the high range
1C High Priority, will serve limited number of users however a key greenway link, expenditures are low range
2 Medium Priority, will make the area useable for a broad range and volume of users, med-low expenditures
3A Low Priority, expenditures may be high, users numbers may be low
3B Low Priority, Project heavily relies on the cooperation of elements and organizations outside the committee
4 Long-Range-Future Project

XI. INTRODUCTION TO DESIGN GUIDELINES

Signage
Signage provides greenway users with information they need to use the greenway system. The Southern Beaufort Greenway Advisory Committee must begin discussions on design specifications, construction materials, and development strategies for the greenway system.

Bicycle
Adequate pavement surface, bicycle safe grates, safe railroad crossings, and bicycle responsive traffic signals should always be provided on roads where bicycle lanes are designated. Use of raised pavement markings and raised barriers is discouraged in that they cause steering difficulties for cyclists.

Traffic Control Devices
Special consideration to greenway users should be given at all traffic signal crossings. Traffic signal timing should consider pedestrians and cyclists. Detectors for traffic actuated signals should be sensitive to bicycles and should be located in the expected path of the cyclists, including left turn lanes. In some areas pedestrian actuated buttons may be necessary and preferable. It may also be necessary in heavily used areas to incorporate an "all-red" clearance interval for pedestrians.

Shoulders
Smooth paved shoulders intended for bicyclists should be a minimum of 4' in width. If motor vehicle speed exceeds 35 mph or if heavy use by trucks, RV, and buses then additional width should be provided.

Bicycle Lines
4 feet minimum or
5 feet minimum if adjacent to curb-

Bicycle lanes are delineated along roadways to designate travel lanes for cyclists separated from motorists. Bike lanes should always be one-way facilities and carry traffic in the same direction as adjacent motor vehicle traffic. Two way bicycle lanes on one side of the road promote riding, against the flow of motor vehicle traffic and are unacceptable. Wrong way riding is a major cause of bicycle accidents. Two-way bicycle lanes are acceptable only if they axe separated from the motor vehicle road with a landscape strip. Intersections should accommodate safe bicycle traffic flow. If right turn lanes are provided for motorists a safe bicycle lane shall be provided fro through bike traffic flow.

Trail Stripping and Markings
The Manual on Uniform Traffic Control Devices describes marking patterns and colors for trails primarily for bicycle use. Markings should be reflective and slip resistant.

- Broken yellow line separates two direction travel (Use a 1-3 segment ratio - 3' segment with 9' gap).
- A solid white line separates different uses such as pedestrians and cyclist.

Appendix 10-B: Robert Smalls Parkway Joint Corridor Plan

The Planning Departments of the City of Beaufort, Town of Port Royal and Beaufort County have prepared a joint plan for the Highway 170 Corridor between the Broad River Bridge and the intersection of Highway 170 and Highway 280 (please refer to the enclosed map). The purpose of this plan is to recognize Robert Smalls Parkway as the Gateway to Northern Beaufort County. The SC 170 corridor is a key arterial in Beaufort County, linking the Town of Port Royal, City of Beaufort, and areas to the north to Bluffton, Hilton Head Island, and Savannah. Recent roadway widening has increased the capacity along SC 170; however, strong projected growth along the corridor is expected to result in demands that fully utilize this additional capacity.

PLAN GOALS

1. **Recognize Highway 170 as the only travel link between Northern and Southern Beaufort County by providing for the efficient and safe flow of traffic along Robert Smalls Parkway:** Highway 170 is the lifeline for residents of Northern Beaufort County that work in Hilton Head, Bluffton, and Savannah. This fact needs to be recognized by minimizing delays and traffic hazards while providing a safe thoroughfare for local access as well.

2. **Establish a cohesive and well-linked community for existing and future neighborhoods along Robert Smalls Parkway:** As the Robert Smalls Corridor develops, it will be used more and more as a means of local access for residents of existing and future subdivisions in the area. Therefore this plan will address such issue as requiring more direct linkages between residential areas and linking residents to commercial areas.

3. **Preserve and enhance the aesthetic qualities of the Corridor:** Highway 170 has a fairly consistent wall of trees along both sides of the corridor. These visual elements need to be enhanced by encouraging sensitive site planning, promoting quality architecture, and minimizing visual clutter.

To further these goals, this Plan proposes the following:

1. **Provide for consistent access management standards for new development.** Adopting these standards would ensure the following:

    - That through traffic can flow in an efficient and safe manner;
    - That the visual quality of the landscaped highway buffer is not compromised by too many interruptions in the vegetation; and

- That the number of driveway and access road crossings of pedestrians and bicyclists traveling along the proposed multi-use trail is minimized.

2. **Provide for a uniform set of development standards that would allow for a consistent visual quality along the corridor.** The development standards that have been identified include establishing a uniform landscaped highway buffer, in addition to signage, architectural, landscaping and lighting standards for properties adjoining Robert Smalls Parkway.

3. **Establish a non-motorized trail along both sides of the Corridor.** This trail is proposed to occur outside of the existing SC Department of Transportation right-of-way. This plan proposes locating this trail on an easement established within the 50-foot wide highway buffer.

ACCESS MANAGEMENT STANDARDS AND PLANNING

The County's Comprehensive Plan has recognized the importance of mobility for the SC 170 corridor. Because of Beaufort County's natural constraints and the prohibitive cost of constructing a parallel route, the operational strategy for the SC 170 corridor focuses on the following:

- Maximizing the throughput capacity.
- Using existing parallel roadways to satisfy shorter trips, and installing additional parallel roadway connections.
- Using backside connections and interparcel access to minimize the need for travel along SC 170 to access development generated trips from within the local area.

In addition to the operational benefits of less frequent interruptions to mainline traffic flow, the spacing of access points facilitates use of minor arterials and collectors to provide connections to final trip origins/destinations.

Alternative routes, backside access, and interparcel access can reduce the need for local trips to travel along Robert Smalls Parkway. Providing alternative access in conjunction with limiting the number of Robert Smalls Parkway access points can result in alternative routes than are more time effective than the primary arterial for local travel. With alternative travel for local trips, the Robert Smalls Parkway corridor will service a higher proportion of longer trips, which have no other alternative for north/south travel. Limiting access points to Robert Smalls Parkway will result in less friction from signals and turning vehicles and, therefore, a smoother traffic flow with improved travel time reliability.

Recommended Access Management Standards

The application of access management standards can improve the efficiency of a transportation network. Access management is a tool that can help prevent traffic congestion by limiting and controlling vehicles entering, exiting, and turning along a corridor. Minimizing the potential disruptions to the vehicles in the roadway facilitates traffic movement. Effective access standards

benefit a community by reducing accidents, increasing roadway capacity, providing better access to businesses, and improving mobility.

The recommended access management standards for Robert Smalls Parkway include the following elements:

- Signal Spacing
- Signal Operations to Maximize Throughput
- Future Medians
- Number of Driveways
- Driveway Spacing and Corner Clearance
- Driveway Design
- Driveway Linkages
- Backside Access
- Deceleration Lanes
- Driveway Retrofit Techniques

The following sections explain the various access management techniques and establish standards for each technique for application along the Robert Smalls Parkway corridor. Unless specifically stated otherwise, *SCDOT Roadside Management Standards* should be followed. The recommended guidelines in this document should be utilized in addition to the SCDOT strategies. When they are in conflict, the stricter requirement shall govern.

1. **Signal Spacing and Future Signal Locations:** The placement of traffic signals significantly impacts the ability to move traffic along a roadway. Signals placed too close together can impede the flow of traffic on the roadway. Traffic signals should only be erected if they are warranted for a particular location and, if warranted, should follow specific placement guidelines. The following signal spacing is recommended for Robert Smalls Parkway:

   - Full signalized access – 3200' spacing
   - Directional signalized access – 1,900' spacing

   A full signalized access location provides signalized access to both sides of the arterial. A directional signalized access provides signalized access to one side of the arterial. By providing access to only one side of highway, signal operations are simplified allowing more time to through movements.

   The signalized access spacing requirements indicated above were used as a starting point and modified to indicate likely signalized access needs as reflected by local development patterns and existing roadway network along Robert Smalls Parkway. The resulting signalized access locations are shown in Figure 1 and are listed below:

   - Location 1 – SC 280 (full signal access)
   - Location 2 – W. K. Alston Road (full signal access)
   - Location 3 – Goethe Hill Road – southwest intersection (full signal access)

- Location 4 – Castle Rock Road (full signal access)
- Location 5 – Approximately 3200' southwest of Castle Rock Road (full signal access)
- Location 6 – Broad River Road at location realigned to the north (directional signal access –northwest side)
- Location 7 – SC 802 (full signalized access)

These signalized access locations result in a minimum spacing between full-signalized intersections of 2,350' with an average spacing of 3,350'. The specific access locations, indicated above and shown in Figure 1, are defined as part of the corridor access plan. If a modification to the defined locations is desired to meet the needs of a planned development, the following conditions shall be satisfied:

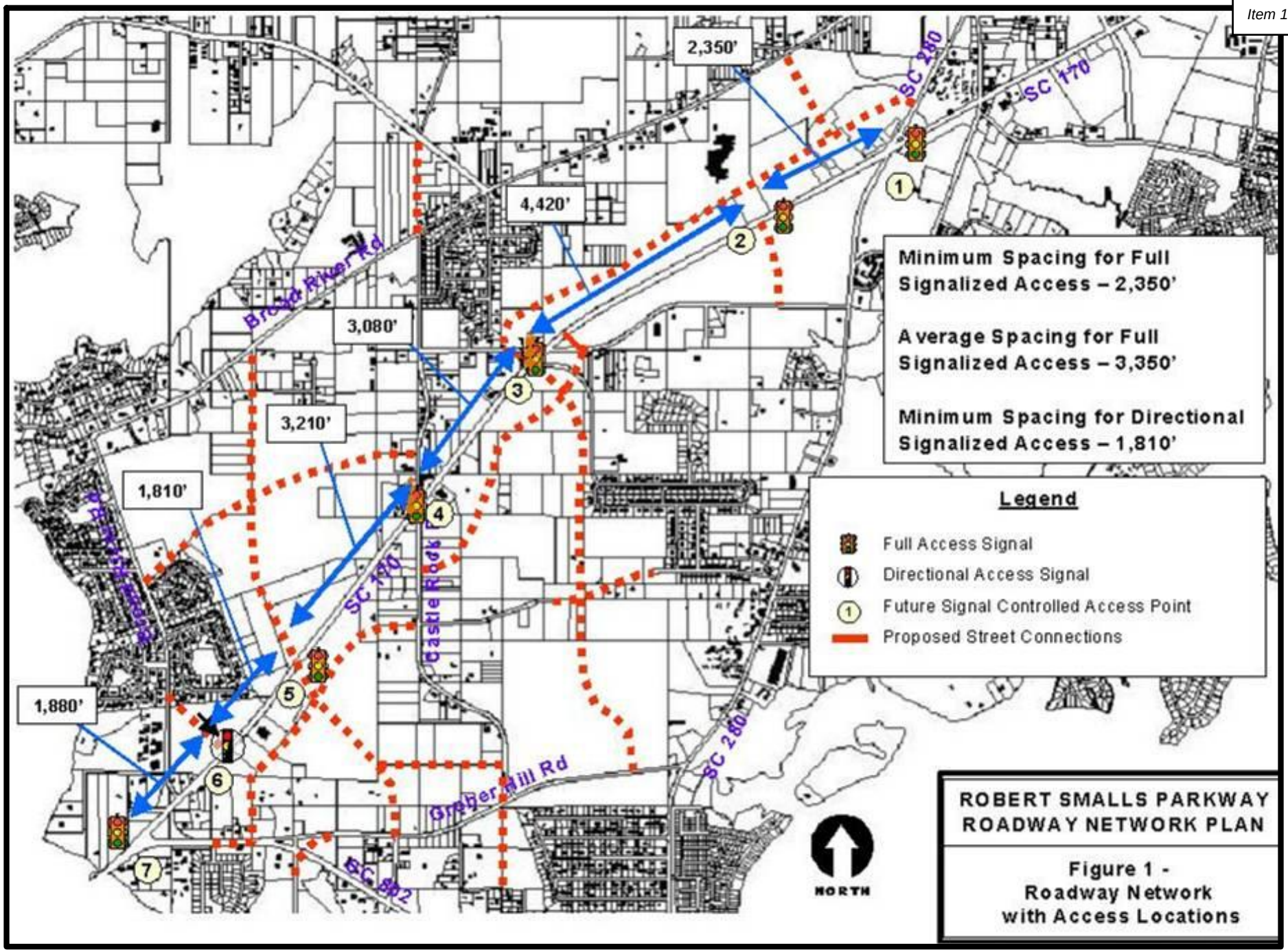
- The modified location must meet the warrants for signalization with the proposed development as defined in the Manual on Uniform Traffic Control Devices (MUTCD) by the Federal Highway Administration (FHWA) with the analysis and specific application of traffic signal warrants to be approved by the Beaufort County Traffic Engineer.

- The modified location must provide adequate spacing (as defined in the spacing standards indicated above) from existing traffic signals, programmed traffic signals, and future signalization of primary roadway intersections, including:

  - SC 170 at SC 280
  - SC 170 at W.K. Alston
  - SC 170 at Castle Rock Road
  - SC 170 at Broad River Road
  - SC 170 at SC 802

- The modified location shall not have an adverse impact on existing or future LOS based on comparative analysis of conditions with the recommended signal locations indicated above. The developer shall be required to conduct LOS and signal system progression analysis to demonstrate compatibility of the proposed signal location with operation of the remainder of the signal system.

2. Coordinating Signal Operations to Maximize Throughput: Maintaining throughput capacity along the Robert Smalls Parkway corridor requires maximizing the available green time along the corridor. Therefore, all signalized intersections shall provide a minimum of 55% of the signal cycle length for through movement green time for Robert Smalls Parkway. Along the corridor as a whole, an average of 65% of the signal cycle shall be allocated for through movement green time for Robert Smalls Parkway.


2,350'
4,420'
3,080'
3,210'
1,810'
1,880'
SC 280
SC 170
Broad River Rd
Castle Rock Rd
Gregg Mill Rd
SC 802
1
2
3
4
5
6
7
Minimum Spacing for Full Signalized Access – 2,350'
Average Spacing for Full Signalized Access – 3,350'
Minimum Spacing for Directional Signalized Access – 1,810'
Legend
Full Access Signal
Directional Access Signal
Future Signal Controlled Access Point
Proposed Street Connections
NORTH
ROBERT SMALLS PARKWAY
ROADWAY NETWORK PLAN
Figure 1 -
Roadway Network
with Access Locations

3. **Future Installation of Medians:** The cross-section of Robert Smalls Parkway currently consists of four travel lanes and a center turning lane. In the event that medians are installed, median breaks will correspond to the signal locations called forth in this study. As development proposals are reviewed along the corridor, applicants are encouraged to consider alternative means of parcel access to connect to proposed signalized intersections.

4. **Driveway Spacing:** A minimum of one point of access to a property will be allowed. Additional access points above the one permitted may be granted provided the continuous roadway frontage of the property exceeds 500 feet. Single parcel access is strongly discouraged. Joint access driveways are encouraged for small parcels to adhere to the 500-foot spacing. Driveways should be limited to the number needed to provide adequate access to a property. Factors such as alignment with opposing driveways and minimum spacing requirements will have a bearing on the location and number of driveways approved. Refer to Table 1.

Table 1: Maximum Number of Driveways per Frontage

Length of Frontage	Maximum Number of Driveways
500 feet or less	1
500+ to 1,000 feet	2
1,000+ to 1,500 feet	3
1,500+ to 2,000 feet	4
More than 2,000 feet	4 plus 1 per each additional 500 feet of frontage

A minimum spacing of 500' shall be maintained along Robert Smalls Parkway between a driveway and a signalized intersection. Within 500 feet of signalized intersections, access shall be off the secondary road. Driveway spacing shall be measured from the closest edge of pavement to the next closest edge of pavement.

5. **Driveway Design:** Traffic entering and exiting developments creates potential conflict with vehicles traveling on the roadway. Appropriate driveway design can improve safety and reduce congestion. Driveways should be designed to allow vehicles to enter and exit the roadway quickly and safely with minimum impact to the traffic on the roadway. Driveways should have appropriate turn radii and driveway width. The throat of a driveway must be adequate in depth in order to allow a vehicle to queue as it enters or exits the highway. An access point must also be designed to accommodate appropriate vehicle types. Driveway width and turning radii shall conform to SCDOT's Access and Roadside Management Standards.

6. **Driveway Linkages:** There are several techniques for linking driveways to improve access from the roadway and between parcels. Shared driveways serve two or more adjacent properties that may or may not be comprised of land from each property. Shared

driveways allow for larger driveway spacing and improved management of traffic entering and exiting a development.

Cross access driveways interconnect the parking facilities of two or more abutting properties. They are always comprised of land from both properties. Cross access driveways provide an opportunity for vehicles to move between developments without using the roadway. Cross access driveways reduce traffic on the roadway and reduce the potential for conflict between entering, exiting, and through traffic.

The land comprising the shared or cross access driveways should be recorded as an easement and serve as a covenant attached to the property. Joint maintenance agreements should also be incorporated into the property deed. Linkages requiring mutually executed easements should be required between adjoining properties to provide movement without requiring a return to the public roadway.

A circulation road may be used as the linkage when a uniform setback line is established on a number of properties so that drives at the front of the building can be interconnected. A common road should be provided if possible to avoid the stripping of lots.

A system of joint-use driveways and cross access easements should be established wherever feasible. Vehicle and pedestrian links to adjacent properties with provisions for stubbed out connections should be required when adjacent land is not developed.

7. **Backside Access:** The development of backside access roads provides an opportunity to remove turning traffic from the roadway and serve businesses with alternate access. Backside access to businesses provides exposure to a greater number of businesses, thus increasing commercial value, and improving intersection spacing on cross roads. Traffic that would otherwise enter and exit from the main roadway has access to a large number of businesses from a safer, less conflicting location.

   Where feasible, a backside access road should be provided. Developments should be designed to connect to existing backside access, where provided. Where feasible, a continuous backside access road shall be provided either immediately behind the buffer yard or, if outlots are provided, along the rear property line of the outlots.

   Where backside access does not exist, developments should be designed to allow for future backside access through construction of circulation roads to the rear and parking on the side and in the rear of properties. Figure 1 provides recommended locations for backside access and alternative roadway connections.

8. **Deceleration Lanes:** Deceleration lanes on corridors providing access into developments that produce a substantial number of trips can reduce the slowing and stopping of traffic caused by turning vehicles. The purpose of a deceleration lane is to enhance motorist safety and the through movement of vehicles on the corridor. These lanes are desirable features on any road, but offer the most benefit on principal arterials such as Robert Smalls

Parkway. These lanes are needed when the volume of traffic turning at a site is high enough in relation to the through traffic to constitute the potential for disruption.

9. **Retrofitting Existing Driveways:** Opportunities to bring existing driveways to the current standards appear when a business changes ownership or when any improvements to the existing driveways or parking lots occur. As changes are made to previously developed property or to the roadway, driveways will be evaluated for the need to be relocated, consolidated, or eliminated if they do not meet the access management standards.

10. **Traffic Impact Analysis:** A traffic impact analysis study should be provided for proposed developments along the Robert Smalls Parkway corridor anticipated to generate at least 50 peak-hour trips. The study should measure development against the traffic service level goals in order to correctly ascertain needed roadway facilities stimulated by new development. A traffic impact study will also enable review and evaluation of the anticipated traffic impact of proposed development along with recommended roadway mitigation measures as appropriate.

    A detailed traffic impact study should evaluate the need for deceleration lanes, turn lanes and access control. Where signalized access is recommended at locations other than those indicated in the plan, an arterial analysis should be provided to ensure arterial capacity and traffic progression bandwidth along Robert Smalls Parkway are not adversely affected.

UNIFORM SET OF DEVELOPMENT STANDARDS

The purpose of this section is to identify the most important development standards to produce a consistent visual quality along the Robert Smalls Parkway Corridor regardless of political jurisdiction. These standards build on the best features of the existing Corridor Overlay District standards currently established in Beaufort County and the City of Beaufort.

1. **Highway Corridor Buffer Standards:**

    - Buffer Width: A 50-foot wide highway Corridor Buffer will be required for all development along the Robert Smalls Parkway Corridor. For lots of record with depths less than 500 feet, the width of the Highway Buffer shall be the larger of 10% of the lot depth or 25 feet wide.
    - Buffer Vegetation: For every 100 feet of highway frontage, three overstory trees, nine understory trees and 20 shrubs shall be required. The use of existing plant material is strongly encouraged and will be counted toward the landscaping requirement. No tree six inches in diameter at four feet diameter breast height (dbh) or larger shall be removed from any highway buffer, exclusive of access drive location, required sight triangle, and diseased trees.
    - Uses Permitted in the Buffer: Vehicular access drives perpendicular to highway right-of-way, foot and pedestrian paths, walls and fences (max. 6 feet high), landscaping sculpture, lighting fixtures, trellises, bus shelters, signage, and utility lines placed perpendicular to right-of-way.

- Bicycle/Pedestrian Trail Easement: A 15-foot wide easement will be sought for the future development of a bicycle/pedestrian trail along the highway. This easement will be located within the highway buffer.

2. Architectural Standards: In order to provide a sense of place and character, promote the region's architectural heritage, to stabilize and strengthen property values, and to provide for an attractive climate for quality investment, this plan calls for uniform architectural and landscaping standards to be applied along the Robert Smalls Parkway Corridor. These standards would apply to development within 500 feet of the highway right-of-way line on both sides of the highway. Exceptions can be made to these standards when the developer has demonstrated outstanding design.

- Roofs: Roof overhangs and pitched roofs shall be incorporated into all building designs unless deemed impractical. Buildings having large footprints, where applying a pitched roof would be impractical, may have a flat roof only if a parapet is used. Pitched roofs shall have a minimum pitch of 4:12. Long unarticulated roofs are not permitted. Roof materials shall consist of wood shingles, slate shingles, multi-layered asphalt shingles, metal (raised seam, galvanized metal, corrugated metal, metal tile, etc.) or tiles.
- Exterior Materials and Form: Wood clapboard, wood board and batten, wood shingle siding, brick, stucco, tabby, natural stone, faced concrete block and artificial siding material which resembles painted wood clapboard are permitted. Highly reflective glass or materials shall not be permitted as the predominant material. Long unarticulated building facades are not permitted. Internally illuminated and/or neon lighted exterior architectural or structural elements that are visible from the Highway are not permitted. Plywood, cinder block, unfinished poured concrete, unfaced concrete block, and plastic or vinyl, not closely resembling painted wood clapboard are not acceptable siding materials.
- Color: Bright primary colors, clashing combinations of colors are not permitted.
- Accessory Uses: The design of accessory buildings and structures shall reflect and coordinate with the general style of architecture inherent with the primary structure. Unscreened chain-link fences and woven metal fences are not permitted where they will be visible from the Highway. Exterior storage shall be screened from view from the Highway. Exterior displays shall consist of merchandise that cannot be practically displayed indoors. These include automobiles, plant materials, landscape structures, agricultural products, and boats.

3. Landscaping and Site Design Standards: These standards apply to development occurring within 500 feet of the highway right-of-way line on both sides of SC 170.

- Location of Parking: Parking is encouraged to locate at the sides and rear of the principle structure.
- Landscaped Median: A five-foot wide landscaped median shall be installed alongside (perpendicular to) parking spaces on the interior portion of a parking lot with more than one parking bay.

- Landscaped Peninsula: A landscaped peninsula parallel to the parking spaces shall be required for every eight parking spaces. The peninsula shall, at a minimum, be as large as a parking space. Each peninsula shall have planted an overstory tree that is at least 3 ½" caliper and 12 feet high at time of planting.
- Foundation Buffer: A five-foot wide landscaped foundation buffer will be required between any structure and parking or driving area.

4. Signage Standards:

- Freestanding signs: All new freestanding signs shall be monument signs. Only one freestanding sign shall be allowed per lot if the lot has less than 1,000 feet of frontage and more than one approved driveway. For lots with more than 1,000 feet of frontage and more than one approved driveway, an additional freestanding sign may be permitted. The maximum size of freestanding signs shall be 80 square feet (per side). The maximum height of freestanding signs shall be 10'. For lots with frontage on two (2) arterial streets one freestanding sign shall be permitted per street frontage if these signs can be located at least two hundred (200) feet apart as measured to the leading edge of the sign. For lots with frontage on two (2) streets but where both streets are not arterial streets, a primary entrance and a secondary entrance should be established. At the secondary entrance, a freestanding sign up to 40 square feet in size (per side) may be permitted provided that the two (2) signs are at least seventy-five (75) feet apart. The street address number of the property shall be displayed on the sign or on the support structure in letters at least three (3) inches high.
- Sign Lighting: No internally illuminated signs shall be permitted. However, halo-lit or reverse back-lit channel letters are permitted. Neon signs are prohibited except for window signs; the total square footage of all neon windows signs shall not exceed 16 square feet per tenant space.
- Master signage plan: A master signage plan is required for all new multi-tenant development.
- Colors: Signage color and materials shall be compatible with the overall design of the main building. The dominant sign color must adhere to the architectural color standards. Accent colors and corporate logos shall be reviewed on a case-by-case basis.
- Prohibited Sign Types: The following sign types are prohibited:
  1. Portable signs (except sandwich boards signs).
  2. Changeable copy signs with the following exceptions – churches, schools, theaters, and gasoline price signs
  3. Internally illuminated signs.
- Temporary signs: Real estate "For Sale" signs shall be limited to one sign per street frontage for lots less than 5 acres, the maximum size of the sign shall be 6 square feet per side and the maximum height shall be 3.5'. For lots 5 acres or larger, one sign per 1,000' of street frontage is permitted. Maximum size of these signs shall be 24 square feet and the maximum height shall be 10'. Real estate "For Rent" or "For Lease" signs shall only be displayed as window signs. Project signs that include project information, lease information, individual contractors, sub-contractors, and financers shall be limited to one sign per development with a maximum size of 40 square feet. Project signs may

not be erected prior to commencement of construction and must be removed at project completion or twelve months after erection, whichever occurs first.

5. **Lighting Standards:** In order to reduce glare to motorists, inhibit the spillage of light into adjoining properties and to preserve and protect the nighttime environment, the following standards are proposed:

- Fixture (luminaire): Unless otherwise explicitly approved by the appropriate design review board, the light source shall be a full cut-off fixture, completely concealed within an opaque housing and shall not be visible from any street. Where the design for an area may suggest the use of lighting fixtures of a particular "period" or architectural style, fixtures other than full cut-off fixtures may be used if the lumens generated by each fixture do not exceed 5,500 and if the mounting heights of such fixtures are less than or equal to 15'. In all cases, fixtures used under gasoline canopies and other structural canopies shall be flat lens, recessed lens, or drop lens with glare shields. Use of drop lens without glare shields is prohibited.
- Light source (lamp): Only incandescent, fluorescent, metal halide, or color corrected high-pressure sodium may be used. The same type light source must be used for the same or similar types of lighting on any one site or commercial subdivision. No colors other than white or off-white (light yellow tones) may be used for any light source for the lighting of signs, structures, or the overall site unless the appropriate design review board deems such lighting to be appropriate to the design theme of the proposed development. Total lighting levels cannot exceed 50,000 lumens per acre.
- Mounting: Fixtures must be mounted in such a manner that its cone of light does not cross any property line of the site. Wood fixtures shall be naturally stained or painted with earth tones. If metal poles are used, they shall be black, dark gray, dark brown, or earth tone. Any fixtures located within any required buffer should not exceed twelve (12) feet above grade. The height of all other fixtures shall not exceed twenty-five (25) feet above grade; however, in parking areas greater than one acre in size, lights located more than one hundred (100) feet from any property line may be up to thirty (30) feet above grade.
- Light trespass. In addition to the these general provisions, offstreet lighting shall be shielded and/or directed in such a manner that it illuminates only the user's premises and does not spill over into neighboring residential areas so as to interfere with the peaceful enjoyment of residential or public properties.

DEVELOPMENT OF A PEDESTRIAN/BICYCLE TRAIL

This plan proposes the development of a 10 foot wide pedestrian and bicycle trail to be located on both sides of the Robert Smalls Parkway Corridor extending from the intersection of SC 170 and SC 280 to the Broad River Bridge. The location of this trail is proposed to be within a 15-foot wide easement that is in turn located within the required 50-foot highway buffer. This arrangement benefits the property owners along the corridor by making use of an area of their property that cannot be used for development. Locating this trail in an easement rather than acquiring additional right-of-way does not cause development to be pushed further away from the

highway. It is proposed that the entire trail be developed at one time rather than piece-meal fashion when development occurs. Funding sources may include TEA-21 Enhancement Funds.

In addition to the aforementioned guidelines, it is recommended that multimodal access be considered, planned and incorporated. Signalized intersections should have marked crosswalks and appropriate crosswalk signalization. The Beaufort County Trails and Blueway Master Plan should be incorporated.

Appendix 10-C: Okatie Highway (SC 170) and West Fording Island Road (US 278) Joint Corridor Access Management Plan

The purpose of this plan is to preserve the throughput capacity of West Fording Island Road (US 278) and Okatie Highway (SC 170) by planning for properly spaced and timed signals, employing access management standards and encouraging linkages (for both motorized and non-motorized transportation) to reduce local traffic from these principal arterials. The area covered by this plan is comprised of Okatie Highway (SC 170) from Old Baileys Road (S-18) to McGarvey's Corner (US 278); and West Fording Island Road (US 278) from the Jasper County line to McGarvey's Corner (SC 170). Given the existing and future deficiencies of Southern Beaufort County's road network, it is important to employ planning tools and policies that help reduce vehicle miles traveled, and maximize the existing capacity of principal arterials such as US 278 and SC 170. Planning tools, such as access management standards, will not increase capacity, but can be used to maximize the existing capacity of the road network, and insure that the system is being used as efficiently as possible.

PLAN GOALS

1. **Provide for the efficient and safe flow of traffic along West Fording Island Road (US 278) and Okatie Highway (SC 170):** Highway 170 is the lifeline for residents of Northern Beaufort County that work in Hilton Head, Bluffton, and Savannah; and US 278 is the only principal east/west arterial that links Interstate 95 with Bluffton and Hilton Head Island. Therefore, delays and traffic hazards must be minimized for through traffic and a safe thoroughfare must be maintained for local access as well.

2. **Establish a cohesive and well-linked community for existing and future neighborhoods along West Fording Island Road (US 278) and Okatie Highway (SC 170):** As these corridors continue to develop, they will be used more and more as a means of local access for residents of existing and future subdivisions in the area. Therefore, this plan will address such issues as requiring more direct linkages (both motorized and non-motorized) between residential areas and linking residents to commercial areas.

To further these goals, this Plan proposes the following:

1. Provide for consistent access management standards for new development. Adopting these standards would ensure the following:

    - That through traffic can flow in an efficient and safe manner;
    - That the number of driveway and access road crossings of pedestrians and bicyclists traveling along the proposed multi-use trail is minimized.

2. Work with Jasper County to establish consistent access management standards and parallel roadways within its jurisdiction for West Fording Island Road (US 278) and Okatie Highway (SC 170).

3. Establish a 10-foot wide pedestrian and bicycle trail on the east side of Okatie Highway (SC 170) and on both sides of the West Fording Island Road (US 278) corridor. These trails are proposed to occur outside of the existing SC Department of Transportation right-of-way. This plan proposes locating this trail on an easement established within the 50-foot wide highway buffer.

ACCESS MANAGEMENT STANDARDS

The County's Comprehensive Plan has recognized the importance of mobility for principal arterials such as US 278 and SC 170. Therefore, the operational strategy for these corridors focuses on the following:

- Maximizing the throughput capacity.
- Using existing parallel roadways to satisfy shorter trips, and installing additional parallel roadway connections.
- Using backside connections and interparcel access to minimize the need for travel along principal arterials to access development generated trips from within the local area.

In addition to the operational benefits of less frequent interruptions to mainline traffic flow, the spacing of access points facilitates use of minor arterials and collectors to provide connections to final trip origins/destinations.

Alternative routes, backside access, and interparcel access can reduce the need for local trips to travel along West Fording Island Road (US 278) and Okatie Highway (SC 170). Providing alternative access in conjunction with limiting the number of access points can result in alternative routes than are more time effective than the primary arterial for local travel. With alternative travel for local trips, the corridors will service a higher proportion of longer trips. Limiting access points to West Fording Island Road (US 278) and Okatie Highway (SC 170) will result in less friction from signals and turning vehicles and, therefore, a smoother traffic flow with improved travel time reliability.

Recommended Access Management Standards

The application of access management standards can improve the efficiency of a transportation network. Access management is a tool that can help prevent traffic congestion by limiting and controlling vehicles entering, exiting, and turning along a corridor. Minimizing the potential disruptions to the vehicles in the roadway facilitates traffic movement. Effective access standards benefit a community by reducing accidents, increasing roadway capacity, providing better access to businesses, and improving mobility.

The recommended access management standards for West Fording Island Road (US 278) and Okatie Highway (SC 170) include the following elements:

- Signal Spacing
- Signal Operations to Maximize Throughput
- Median Openings
- Number of Driveways
- Driveway Spacing and Corner Clearance
- Driveway Design
- Driveway Linkages
- Backside Access
- Deceleration Lanes
- Driveway Retrofit Techniques

The following sections explain the various access management techniques and establish standards for each technique for application along the West Fording Island Road (US 278) and Okatie Highway (SC 170) corridors. Unless specifically stated otherwise, *SCDOT Roadside Management Standards* should be followed. The recommended guidelines in this document should be utilized in addition to the SCDOT strategies. When they are in conflict, the stricter requirement shall govern.

1. Signal Spacing and Future Signal Locations: The placement of traffic signals significantly impacts the ability to move traffic along a roadway. Signals placed too close together can impede the flow of traffic on the roadway. Traffic signals should only be erected if they are warranted for a particular location and, if warranted, should follow specific placement guidelines. The following signal spacing is recommended for West Fording Island Road (US 278) and Okatie Highway (SC 170):

- Full signalized access – 3,600 feet spacing
- Directional signalized access – 2,000 feet spacing

A full signalized access location provides signalized access to both sides of the arterial. A directional signalized access provides signalized access to one side of the arterial. By providing access to only one side of highway, signal operations are simplified, allowing more time to through movements.

The signalized access spacing requirements indicated above were used as a starting point and modified to indicate likely signalized access needs as reflected by local development patterns and existing roadway network along West Fording Island Road (US 278) and Okatie Highway (SC 170). The resulting signalized access locations are shown in Figure 1 and are listed below:

US 278 (West Fording Island Road)

- Location 1 – West Campus Drive (full signal access)
- Location 2 – Abandoned Railroad ROW approx. 1,400 feet east of West Campus Drive (full signal access)
- Location 3 – Sun City Boulevard (full signal access)

- Location 4 – Okatie Center Boulevard N. and S. (full signal access)

SC 170 (Okatie Highway)

- Location 1 – West Fording Island Road (eastbound 278 off ramp) (directional signal access – west side)
- Location 2 – West Fording Island Road (westbound 278 off ramp) (directional signal access)
- Location 3 – Sanders Property 1,190 feet north of Commerce Place E. and W. (full signal access)
- Location 4 – Tide Watch Drive (existing full signal access)
- Location 5 – Cherry Point Road (full signal access)
- Location 6 – S 162 - Pritcher Point Road (full signal access)
- Location 7 – SC 141 - John Smith Road (full signal access)
- Location 8 – SC 462 (directional signal access northwest side)
- Location 9 – Oldfield Commercial approx. 4,000 feet east of SC 462 (full signal access)

The specific access locations, indicated above and shown in Figure 1, are defined as part of the corridor access plan. If a modification to the defined locations is desired to meet the needs of a planned development, the following conditions shall be satisfied:

- The modified location must meet the warrants for signalization with the proposed development as defined in the Manual on Uniform Traffic Control Devices (MUTCD) by the Federal Highway Administration (FHWA) with the analysis and specific application of traffic signal warrants to be approved by the Beaufort County Traffic Engineer.

- The modified location shall provide connectivity to adjacent properties to give the properties access to the signalized intersection.

- The modified location shall not have an adverse impact on existing or future LOS based on comparative analysis of conditions with the recommended signal locations indicated above. The developer shall be required to conduct LOS and signal system progression analysis to demonstrate compatibility of the proposed signal location with operation of the remainder of the signal system.

2. **Coordinating Signal Operations to Maximize Throughput:** Maintaining throughput capacity along the West Fording Island Road (US 278) and Okatie Highway (SC 170) corridors requires maximizing the available green time along the corridors. Therefore, all signalized intersections shall provide a minimum of 55% of the signal cycle length for through movement green time for West Fording Island Road (US 278) and Okatie Highway (SC 170). Along the corridor as a whole, an average of 65% of the signal cycle shall be allocated for through movement green time for West Fording Island Road (US 278) and Okatie Highway (SC 170). Traffic signals shall be timed and coordinated so that they provide motorists with green lights as they progress down the corridors.

3. **Median Openings:** The cross-sections of West Fording Island Road (US 278) and Okatie Highway (SC 170) currently consist of four travel lanes and a combination of landscaped or grassy medians and center turning lanes. As these corridors develop, full access will be limited to signalized intersections. Therefore, median openings and center turning lanes that are not located at signalized intersections will be removed and replaced with medians. As development proposals are reviewed along the corridor, applicants are encouraged to provide alternative means of parcel access to connect to proposed signalized intersections.

4. **Driveway Spacing:** A minimum of one point of access to a property will be allowed. Additional access points above the one permitted may be granted provided the continuous roadway frontage of the property exceeds 1,000 feet. Single parcel access is strongly discouraged. Joint access driveways are encouraged for small parcels to adhere to the 1,000-foot spacing. Driveways should be limited to the number needed to provide adequate access to a property. Factors such as alignment with opposing driveways and minimum spacing requirements will have a bearing on the location and number of driveways approved. Refer to Table 1.

Table 1: Maximum Number of Driveways per Frontage

Length of Frontage	Maximum Number of Driveways
1,000 feet or less	1
1,000 to 2,000 feet	2
More than 2,000 feet	2 plus 1 per each additional 1,000 feet of frontage

A minimum spacing of 1,000' shall be maintained between a driveway and a signalized intersection. Within 1,000 feet of signalized intersections, access shall be off the secondary road. Driveway spacing shall be measured from the closest edge of pavement to the next closest edge of pavement.

5. **Driveway Design:** Traffic entering and exiting developments creates potential conflict with vehicles traveling on the roadway. Appropriate driveway design can improve safety and reduce congestion. Driveways should be designed to allow vehicles to enter and exit the roadway quickly and safely with minimum impact to the traffic on the roadway. Driveways should have appropriate turn radii and driveway width. The throat of a driveway must be adequate in depth in order to allow a vehicle to queue as it enters or exits the highway. An access point must also be designed to accommodate appropriate vehicle types. Driveway width and turning radii shall conform to SCDOT's Access and Roadside Management Standards.

6. **Driveway Linkages:** There are several techniques for linking driveways to improve access from the roadway and between parcels. Shared driveways serve two or more adjacent properties that may or may not be comprised of land from each property. Shared

driveways allow for larger driveway spacing and improved management of traffic entering and exiting a development.

Cross access driveways interconnect the parking facilities of two or more abutting properties. They are always comprised of land from both properties. Cross access driveways provide an opportunity for vehicles to move between developments without using the roadway. Cross access driveways reduce traffic on the roadway and reduce the potential for conflict between entering, exiting, and through traffic.

The land comprising the shared or cross access driveways should be recorded as an easement and serve as a covenant attached to the property. Joint maintenance agreements should also be incorporated into the property deed. Linkages requiring mutually executed easements should be required between adjoining properties to provide movement without requiring a return to the public roadway.

A circulation road may be used as the linkage when a uniform setback line is established on a number of properties so that drives at the front of the building can be interconnected. A common road should be provided if possible to avoid the stripping of lots.

A system of joint-use driveways and cross access easements should be established wherever feasible. Vehicle and pedestrian links to adjacent properties with provisions for stubbed out connections should be required when adjacent land is not developed.

7. **Backside Access:** The development of backside access roads provides an opportunity to remove turning traffic from the roadway and serve businesses with alternate access. Backside access to businesses provides exposure to a greater number of businesses, thus increasing commercial value, and improving intersection spacing on cross roads. Traffic that would otherwise enter and exit from the main roadway has access to a large number of businesses from a safer, less conflicting location.

   Where feasible, a backside access road should be provided. Developments should be designed to connect to existing backside access, where provided. Where feasible, a continuous backside access road shall be provided either immediately behind the buffer yard or, if outlots are provided, along the rear property line of the outlots.

   Where backside access does not exist, developments should be designed to allow for future backside access through construction of circulation roads to the rear and parking on the side and in the rear of properties. Figure 1 provides recommended locations for backside access and alternative roadway connections.

8. **Deceleration Lanes:** Deceleration lanes on corridors providing access into developments that produce a substantial number of trips can reduce the slowing and stopping of traffic caused by turning vehicles. The purpose of a deceleration lane is to enhance motorist safety and the through movement of vehicles on the corridor. These lanes are desirable features on any road, but offer the most benefit on principal arterials such as West Fording Island Road (US 278) and Okatie Highway (SC 170). These lanes are needed when the

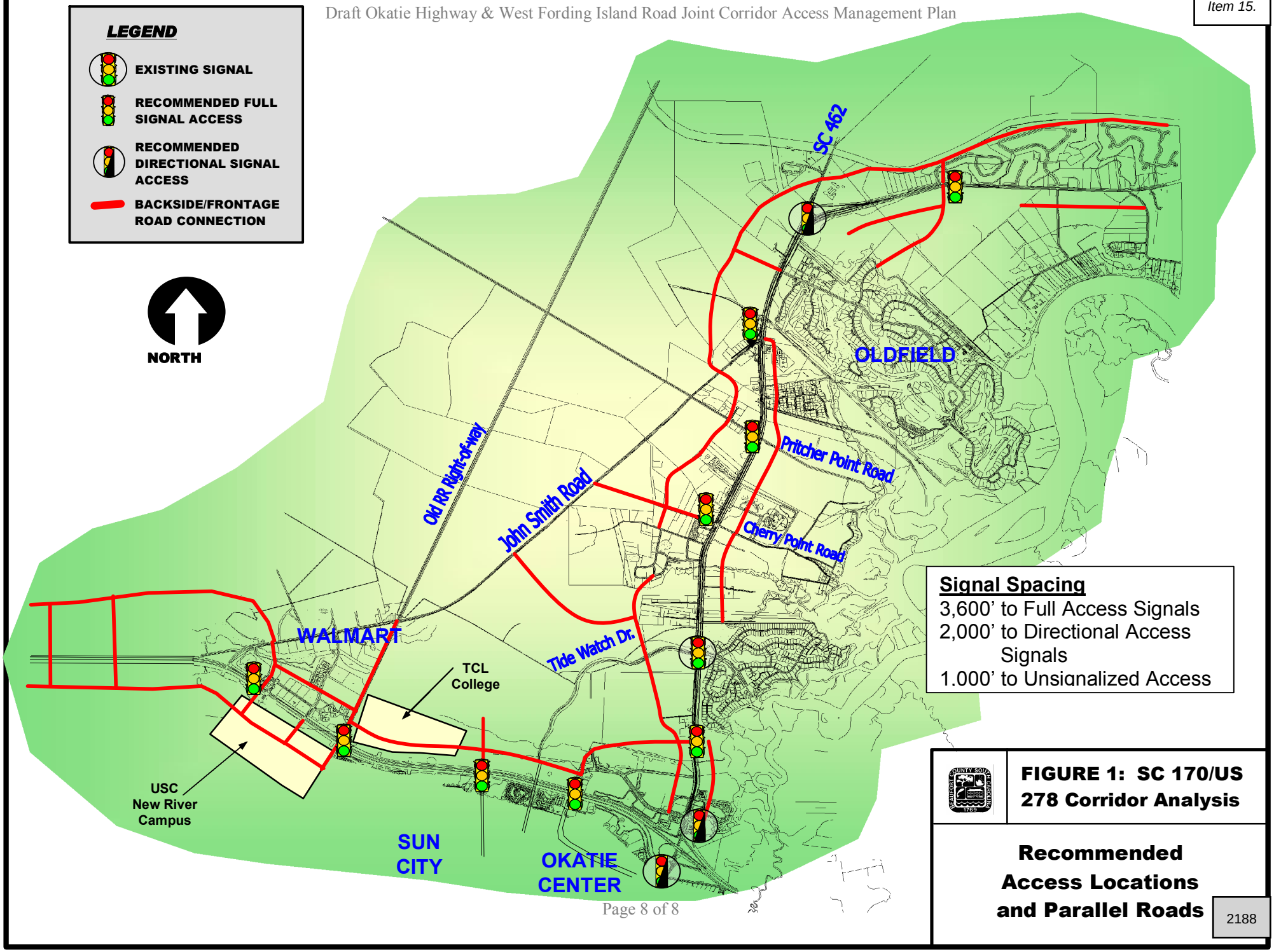
volume of traffic turning at a site is high enough in relation to the through traffic to constitute the potential for disruption.

9. **Retrofitting Existing Driveways:** Opportunities to bring existing driveways to the current standards appear when a business changes ownership or when any improvements to the existing driveways or parking lots occur. As changes are made to previously developed property or to the roadway, driveways will be evaluated for the need to be relocated, consolidated, or eliminated if they do not meet the access management standards.

DEVELOPMENT OF A PEDESTRIAN/BICYCLE TRAIL

This plan proposes the development of a 10-foot wide pedestrian and bicycle trail to be located on the east side of Okatie Highway (SC 170) and on both sides of the West Fording Island Road (US 278) corridor. Where feasible, the location of this trail is proposed to be within a 15-foot wide easement that is in turn located within the required 50-foot highway buffer. This arrangement benefits the property owners along the corridor by making use of an area of their property that cannot be used for development. Locating this trail in an easement rather than acquiring additional right-of-way does not cause development to be pushed further away from the highway. It is proposed that the entire trail be developed at one time rather than piece-meal fashion when development occurs. Funding sources may include future federal transportation enhancement funds and state gas tax funds (County C funds).

In addition to the aforementioned guidelines, it is recommended that multimodal access be considered, planned and incorporated. Signalized intersections should have marked crosswalks and appropriate crosswalk signalization.


LEGEND
EXISTING SIGNAL
RECOMMENDED FULL SIGNAL ACCESS
RECOMMENDED DIRECTIONAL SIGNAL ACCESS
BACKSIDE/FRONTAGE ROAD CONNECTION
NORTH
SC 462
OLDFIELD
Old RR Right-of-way
John Smith Road
Pritcher Point Road
Cherry Point Road
Tide Watch Dr.
WALMART
TCL College
USC New River Campus
SUN CITY
OKATIE CENTER
Signal Spacing
3,600' to Full Access Signals
2,000' to Directional Access Signals
1,000' to Unsignalized Access
FIGURE 1: SC 170/US 278 Corridor Analysis
Recommended Access Locations and Parallel Roads
2188

Appendix 10-D

ACCESS MANAGEMENT PLAN: BUCKWALTER PARKWAY

US 278 TO BLUFFTON PARKWAY PHASE 4
BEAUFORT COUNTY, SOUTH CAROLINA

Prepared for:

Beaufort County &
Town of Bluffton

Prepared by:



SRS ENGINEERING, LLC
801 Mohawk Drive
West Columbia, South Carolina 29169

SUBMITTED
MAY 2007

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INTRODUCTION & PROJECT OVERVIEW

INTRODUCTION

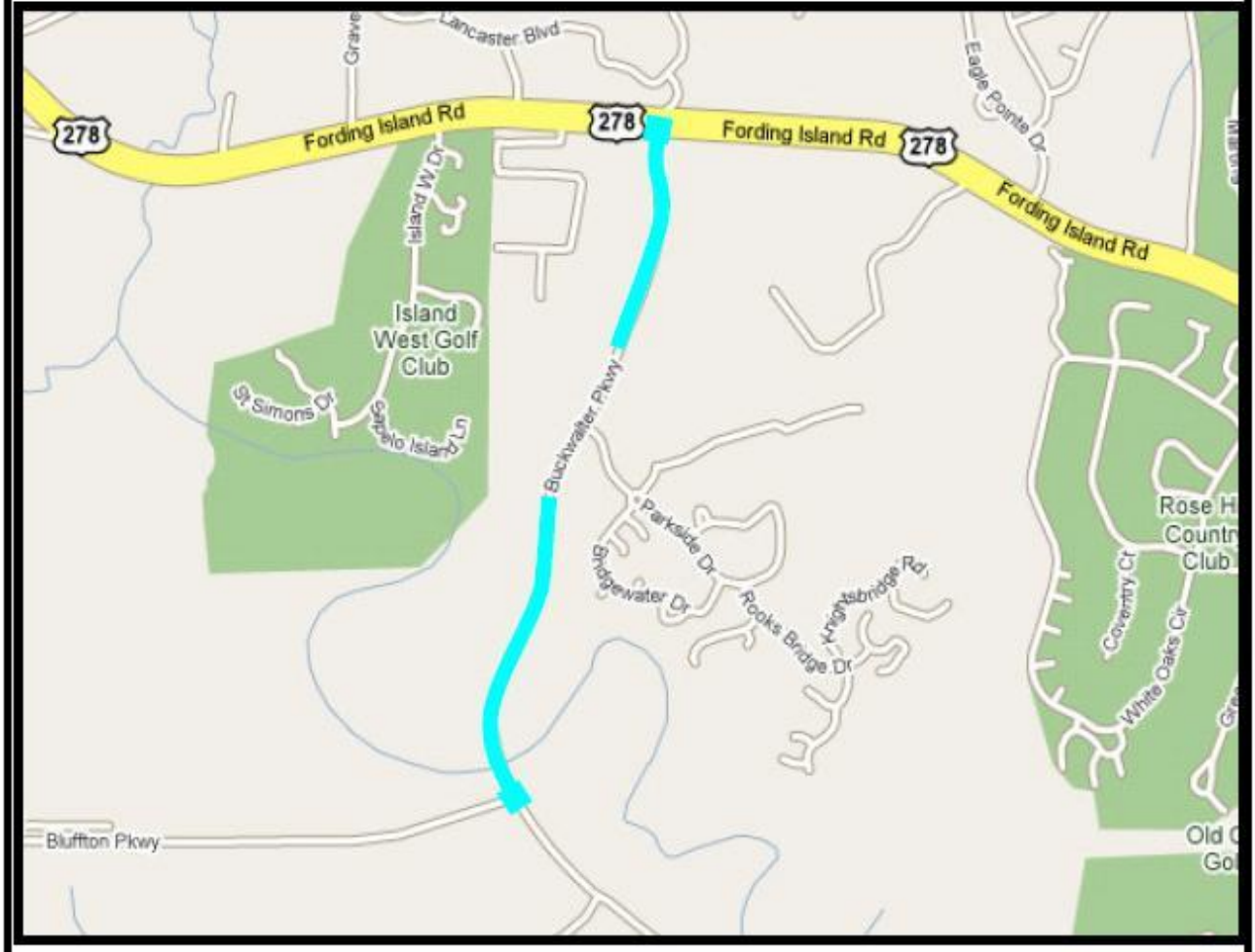
SRS Engineering, LLC (SRS) has been retained by a combination of the Beaufort County Engineering and the Town of Bluffton Planning Departments to complete an analysis of the northerly segment of the Buckwalter Parkway which is both an existing and planned future north/south orientated arterial located in Southern Beaufort County.

As planned by the County's Comprehensive Plan, in it's entirely, the Buckwalter Parkway will provide a multi-lane divided facility between US 278 and SC 46. This facility is anticipated to serve not only north/south orientated traffic, but also east/west orientated traffic along the middle/shared section of the Parkway which is currently designated as a combined route with the future Bluffton Parkway.

PROJECT OVERVIEW

The segment of the Buckwalter Parkway to be studied is the northerly portion of the Parkway. In total, this segment is approximately 1.6-miles in length beginning at the signalized intersection with US 278 and ending at the future signalized intersection of the northerly leg of the Bluffton Parkway (Phase 4) which is currently under construction.

The purpose of this study is to review the planned/future development that will access this section of the Buckwalter Parkway and define appropriate locations for development access; specifically signalized intersections. By properly planning these access points and strategically locating future signals along this corridor, the greatest roadway capacity will be achieved while providing good access to development. **Figure 1** illustrates the general section of the Buckwalter Parkway being studied.



= Study Area Corridor

N

NOT TO SCALE

Figure 1

STUDY AREA LIMITS

Buckwalter Parkway Access Management: Bluffton, SC

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FUTURE CONDITIONS

To estimate the traffic flow conditions under Future conditions, the County's newly updated transportation model has been utilized which reflects the anticipated traffic loading for the Year 2025. Traffic volumes on the roadway network at this time will include all existing traffic, traffic due to normal growth and traffic due to anticipated development in the area as well as all planned roadway improvements anticipated to be completed as stated in the County's transportation model.

TRAFFIC VOLUME PROJECTIONS

The daily traffic volume projections were obtained from the County's Transportation model for the year 2025. These future traffic volumes were obtained for the two intersections which define the limits of this study, US 278 to the north and the Bluffton Parkway (northern leg/Phase 4 intersection) to the south. In addition, daily two-way traffic volumes were also obtained for the segment of the Buckwalter Parkway being studied.

According to the County's Transportation model, the northern segment of the Buckwalter Parkway is anticipated to carry between 15,700 vehicles per day (vpd) to 18,100 vpd. **Table 1** depicts the daily volumes for the Buckwalter Parkway. For comparative purposes; the adjoining roadways/segments of US 278 to the east and west of the Buckwalter Parkway, the Bluffton Parkway (Phase 4) west of the Buckwalter Parkway and the shared route segment of the Buckwalter/Bluffton Parkway are also presented.

Table 1
2025 DAILY TRAFFIC VOLUMES
Buckwalter Parkway Access Management

Arterial Roadways	Segments	Daily Two-Way Traffic Volume (vpd)
Buckwalter Parkway	South of US 278	15,692
	North of Bluffton Parkway	18,116
	Shared Route with Bluffton Parkway	38,607
US 278	West of Buckwalter Parkway	85,188
	East of Buckwalter Parkway	80,634
Bluffton Parkway	West of Buckwalter Parkway	26,630

1. Source: WSA Transportation Model completed for Beaufort County.
vpd=Vehicles-per-day.

As shown by the table, the Buckwalter Parkway is anticipated to serve a high of 18,166 vpd in within the defined study area. However; just to the south of the study area, the daily volume is expected to increase to 38,607 vpd. This significant increase is due to the fact that at this point, the Buckwalter Parkway is a

combination route with the Bluffton Parkway. Other volumes in the area indicate that US 278 is expected to serve over 80,000 vpd in the vicinity of the intersection with the Buckwalter Parkway and the Bluffton Parkway just west of the Buckwalter Parkway is expected to serve approximately 26,600 vpd.

In addition to the daily traffic volumes, design peak-hour volumes have also been developed for the study area intersections along the Buckwalter Parkway using multiple sources including the County's Transportation model and individual Traffic Impact Studies conducted for developments along the corridor. Developments for which traffic studies were provided are as follows:

1. Sea Turtle Cinema (SRS Engineering):
2. Sea Turtle Phase II: Commercial Shopping Center (SRS Engineering);
3. Willow Run PUD (Kimley Horn Associates); and
4. Bluffton Town Center (Thomas & Hutton).

It should be noted that the Bluffton Town Center report does not reflect the development proposal as is currently being planned. According to the property owner, a more dense development is proposed. Based on this, adjustments have been made to the traffic volumes associated with the access drives to/from Buckwalter Parkway.

In addition to this project specific information, assumptions regarding development on some of the smaller tracts adjacent to the Buckwalter Parkway have been made. These assumptions are outlined below:

1. C1 Tract: Located on the east side of the Buckwalter Parkway just south of US 278 opposite the Cinema's north access. Assumed to be developed as a 200-Room Hotel and 50,000 sf of office space based on information provided by current owner;
2. C2 Tract: Located to the south of C1. Assumed to be a 5,000 sf drive-up bank. Southerly access assumed to ultimately provide a connection into the Willow Run PUD; and
3. C6 Tract: Located opposite the Buckwalter Town Center proposed development, the southern access currently serves the Lutheran Church; development on the northern section is currently unknown.

Figure 2 illustrates the study area corridor and summarizes the land development proposals along the Buckwalter Parkway by indicating points of access, depicting site development plans where applicable in addition to indicting the future Bluffton Parkway intersection.

Using this information, trip generation estimates have been completed in order to estimate traffic loadings at each intersection along the Parkway. The results of compiling this data are design peak-hour traffic volumes for the future 2025 condition which are illustrated in **Figure 3**. These volumes are the basis on which to conduct the alternatives analyses for the corridor in order to best determine appropriate locations for traffic signals and access drives to serve the expected development.

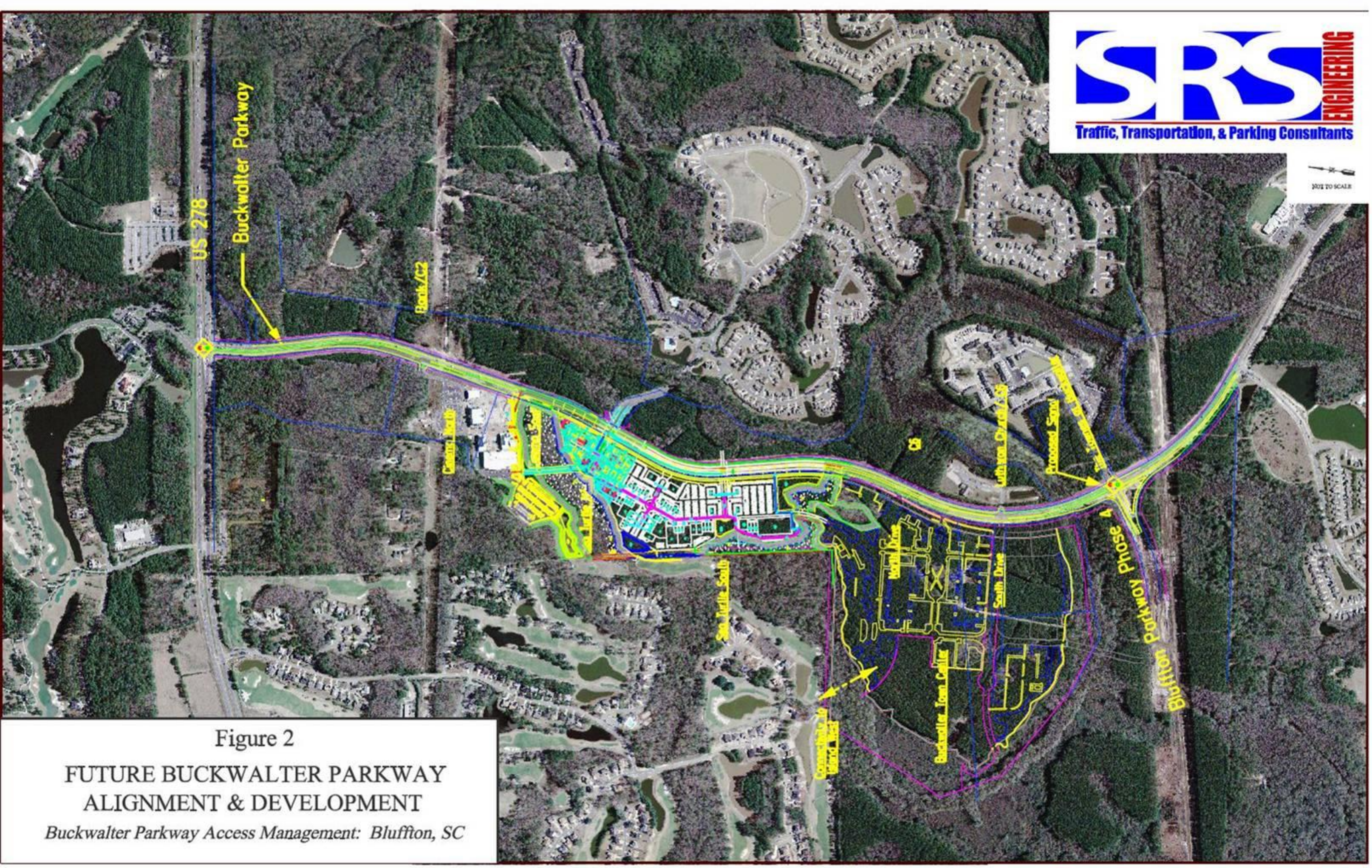

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Figure 2

FUTURE BUCKWALTER PARKWAY
ALIGNMENT & DEVELOPMENT

Buckwalter Parkway Access Management: Bluffton, SC

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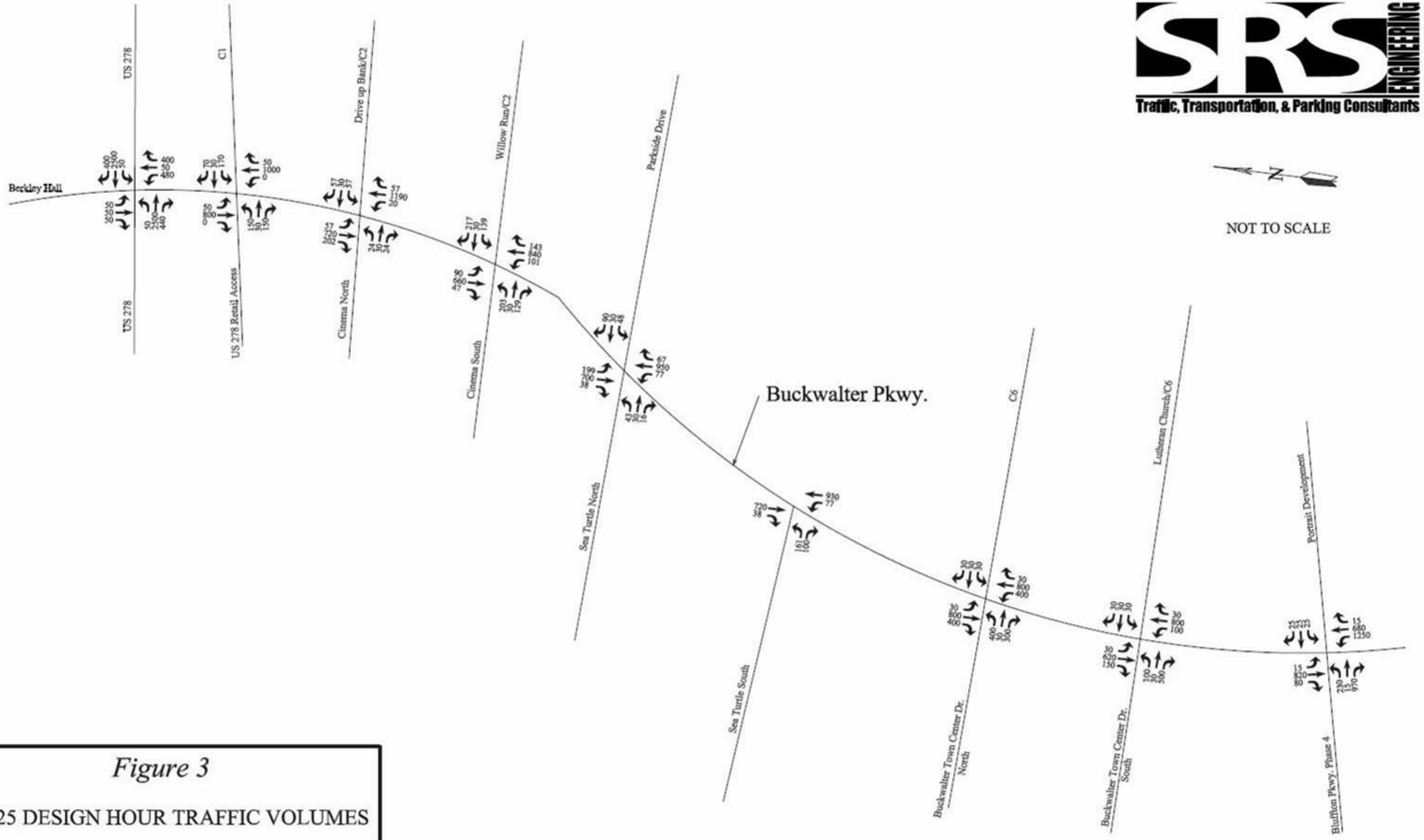


Figure 3

2025 DESIGN HOUR TRAFFIC VOLUMES

Buckwalter Parkway Access Management

TRAFFIC OPERATIONS

To assess quality of flow, capacity analyses were conducted to provide an indication of how well the study area intersections and roadway segments are anticipated to serve future traffic demands. The following provides a description of the methodology utilized to complete these analyses.

METHODOLOGY

Level-of-Service

A primary result of capacity analyses is the assignment of level-of-service (LOS) to traffic facilities under various traffic flow conditions[1]. The concept of level-of-service is defined as a qualitative measure describing operational conditions within a traffic stream and their perception by motorists and/or passengers. A level-of-service definition provides an index to quality of traffic flow in terms of such factors as speed, travel time, freedom to maneuver, traffic interruptions, comfort, convenience, and safety.

Six levels-of-service are defined for each type of facility. They are given letter designations from A to F, with LOS A representing the best operating conditions and LOS F the worst.

Since the level-of-service of a traffic facility is a function of the traffic flows placed upon it, such a facility may operate at a wide range of levels-of-service, depending on the time of day, day of week, or period of a year.

Signalized Intersections

The six levels-of-service for signalized intersections may be described as follows:

- LOS A describes operations with very low delay; most vehicles do not stop at all.
- LOS B describes operations with relatively low delay. However, more vehicles stop than LOS A.
- LOS C describes operations with higher delays. Individual cycle failures may begin to appear. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
- LOS D describes operations with delay in the range where the influence of congestion becomes more noticeable. Many vehicles stop and individual cycle failures are noticeable.
- LOS E describes operations with high delay values. Individual cycle failures are frequent occurrences.

[1] The capacity analysis methodology is based on the concepts and procedures in the *Highway Capacity Manual*; Transportation Research Board; Washington, DC; 2000.

- LOS F describes operations with high delay values that often occur with over-saturation. Poor progression and long cycle lengths may also be major contributing causes to such delay levels.

Levels-of-service for signalized intersections are calculated using the operational analysis methodology of the 2000 *Highway Capacity Manual*. This method assesses the effects of signal type, timing, phasing, and progression; vehicle mix; and geometrics on delay. Level-of-service designations are based solely on the criterion of calculated control delay per vehicle, since delay is a measure of driver discomfort, frustration, fuel consumption, and increased travel time.

Roadway Segment Analyses

The determination of how a roadway segment serves traffic is an investigation of multiple factors including roadway geometry, number of operating lanes, provision of auxiliary lanes (left-turn & right-turn), traffic volumes and directional splits of traffic, access drives per mile, and the separation of signalized intersections. These factors result in an assignment of arterial speed and level of service which is used to assess the roadway operations.

Signalized Intersection Spacing

The proper spacing of traffic signals along the Buckwalter Parkway will be critical so that the corridor can provide the greatest/most efficient capacity that it is capable of providing. Without proper spacing, vehicle queues may be created which back into/through adjacent intersections resulting in a "gridlock" pattern which causes a significant degradation in roadway capacity and traffic flow. According to access management guidelines, the ideal spacing of signalized intersections along a major arterial such as the Buckwalter Parkway is ideally 2,640-feet or a 1/2-mile (ref. *Access Management Manual*, TRB). This separation provides a progression speed ranging between 30 and 40 miles per hour (mph).

However, this spacing may not be achievable in all circumstances due to constraints such as topography, environmental issues/wetlands, etc. While the most advantageous separation is 1/2-mile and should be provided if feasible, shorter separation distances of 1,500-1,700-feet will allow progressions speeds along the Buckwalter Parkway that are in the 30 mph range.

In planning signal locations, one must also account for the classification of roadways that intersect the corridor. For instance, when interesting a major roadway/arterial which presumably serves a large volume of traffic, separation to the next adjacent intersection(s) is extremely important so that vehicle speeds and resulting queues/stacking do not interfere with the operations of adjacent traffic signal.

ANALYSIS SCENERIOS

Review of the Buckwalter Parkway corridor and the submitted/approved traffic studies begins to identify logical intersections for installation of traffic signal control which meet signal warrants. Two intersections are obviously going to either maintain traffic signal control (US 278 at Buckwalter Parkway) or to be placed under traffic signal control (future intersection of Bluffton Parkway Phase 4 at Buckwalter Parkway).

There are multiple intersections located along the Buckwalter Parkway that are built and/or planned as part of development proposals. **Table 2** depicts the approximate spacing of intersections along the Parkway using US 278 as the starting point.

Table 2
INTERSECTION SPACING
Buckwalter Parkway Access Management

Corridor	Major Intersecting Cross Streets	Separation (Feet)	Cumulative Distance to US 278 (Feet)
Buckwalter Parkway	US 278 to C1 Access (est.)	950	950
	C1 Access (est.) to Cinema North/C2	950	1,900
	Cinema North/C2 to Cinema South/C2	900	2,800
	Cinema South/C2 to Sea Turtle North/Parkside Dr	1,000	3,800
	Sea Turtle North/Parkside Dr to Sea Turtle South	1,050	4,850
	Sea Turtle South to Buckwalter Town Center Rt/Rt Access	1,100	5,950
	Buckwalter Town Center Rt/Rt Access to Buckwalter Town Center North	500	6,450
	Buckwalter Town Center North to Buckwalter Town Center Promenade	450	6,900
	Buckwalter Town Center Promenade to Buckwalter Town Center South/C6	500	7,400
	Buckwalter Town Center South/C6 to Bluffton Parkway Phase 4/Portrait	1,075	8,475

As shown, the entire corridor being studied is approximately 8,475-feet (1.6-miles) and typical separation of access points is typically 900 to 1,000-feet with the exception of the distance between Sea Turtle and the northerly Buckwalter Town Center access (approx. 1,900-feet) and the separations between the Buckwalter Town Center access drives (approx. 500-feet).

Applying the "ideal" separation of signalized intersections to the corridor length of 8,475-feet results in the possibility of signalizing three (3) intersections between US 278 and the Bluffton Parkway (8,475/2,640=3.2) in order to meet ideal spacing.

Review of the future 2025 traffic volumes from the prior completed traffic studies for the Cinema and Sea Turtle development indicate that traffic signals are planned at the southerly Cinema access opposite parcel C2 and at the southern Sea Turtle access. Based on Table 2, the location of the first traffic signal; at the southern Cinema access; results in a separation of approximately 2,800-feet (US 278 to Cinema south). This separation is recommended due to the fact that US 278 is a Principal Arterial and maintaining the ideal separation of ½-mile between signals will provide good operations for these intersections.

Separation between the southerly Cinema access and Sea Turtle south is approximately 2,050-feet which is less than the ideal ½-mile spacing however, due to the fact that the intersecting roadways with the Buckwalter Parkway are not major collectors (Cinema access and Sea Turtle access) the separation can be slightly less (note that the separation is greater than 1/3-mile).

The remaining section of the Buckwalter Parkway between Sea Turtle South and the Bluffton Parkway intersection is approximately 3,625-feet. Separation between the southern Sea Turtle access and the northern Buckwalter Town Center access is approximately 1,600-feet. The key separation in this remaining segment would be the separation from the Bluffton Parkway intersection (major cross street intersection) to the next signalized intersection to the north along the Buckwalter Parkway. While ½-mile would be preferred, this separation would be unreasonable due to the fact that this would leave approximately 900-feet separation between the traffic signal at the southern Sea Turtle access. Based on the current development plans, the most appropriate location for this signal would be the future planned northern Buckwalter Town Center access which would provide a separation of approximately 2,000-feet to the Bluffton Parkway and approximately 1,600-feet to the traffic signal at the southern Sea Turtle access.

Assuming the location of signals as referenced above, both intersection and arterial analyses have been completed which are summarized in **Table 3**.

Table 3
ANALYSES RESULTS
Buckwalter Parkway Access Management

	Intersection Analyses Results			Northbound Buckwalter Arterial Analyses Results		Southbound Buckwalter Arterial Analyses Results	
Signalized Intersections	**Delay[2]**	**V/C[3]**	**LOS[4]**	**Speed[5]**	**LOS**	**Speed**	**LOS**
Buckwalter Parkway @							
US 278	53.0	1.30	D	17.1	D	Starting Point	
Cinema South	28.1	0.57	C	23.3	C	26.6	C
Sea Turtle South	8.3	0.41	A	30.2	B	36.0	A
Buckwalter Town Center North	26.4	0.61	C	27.9	C	17.2	D
Bluffton Parkway Phase 4	40.5	0.98	D	Starting Point		**13.0**	**E**

1. Calculations completed using the 2000 HCM methodology.
2. Delay in seconds-per-vehicle.
3. V/C=Volume to capacity ratio.
4. Level-of-Service.
5. Speed in mph.

GENERAL NOTES:

1. For signalized intersections, delay is representative of the overall intersection operations.
2. For arterial, LOS is a function of speed on corridor segment.

As shown, each of the signalized study area intersections are expected to operate at a LOS D or better based on future design hour volumes. As was expected, due to the high volumes of traffic, the intersections of US 278 at Buckwalter Parkway and Bluffton Parkway Phase 4 at Buckwalter Parkway are the intersections that are anticipated to operate at a LOS D. These service levels are due to the high volumes of traffic on both the major intersecting arterials (US 278 and Bluffton Parkway) and on the Buckwalter Parkway.

The arterial analyses indicate that the northbound direction of Buckwalter Parkway will operate at good service levels with a LOS D only in the segment approaching US 278 operating at a LOS D (approx. 17 mph). The southbound flow operates at good service levels until your reach the section approaching the Bluffton Parkway Phase 4 intersection when the arterial degrades to a LOS E at the Bluffton Parkway (13 mph). The reasoning for this degradation in service levels at the Bluffton Parkway intersection is due to the long southbound delays and vehicular queues that are expected.

A second scenario was reviewed regarding the location of the southerly traffic signal at the Buckwalter Town Center development. Rather than signalize the northern access of the Buckwalter Town Center, signalize the southern access of the Buckwalter Town Center which is located approximately 1,075-feet north of the Bluffton Parkway intersection.

In reviewing this scenario, the southern access provides slightly less 1,100-feet of separation between it and the major intersection of the Bluffton Parkway Phase 4. This 1,100-feet is less than desirable based on the suggested spacing of signalized intersection along the corridor. **Table 4** depicts the results of the intersection and arterial analyses assuming this location.

Table 4
ALTERNATIVE ANALYSES
SIGNAL AT SOUTH BUCKWALTER TOWN CENTER ACCESS
Buckwalter Parkway Access Management

	Intersection Analyses Results			Northbound Buckwalter Arterial Analyses Results		Southbound Buckwalter Arterial Analyses Results	
Signalized Intersections	**Delay[2]**	**V/C[3]**	**LOS[4]**	**Speed[5]**	**LOS**	**Speed**	**LOS**
Buckwalter Parkway @							
US 278	53.9	1.30	D	17.1	D	Starting Point	
Cinema South	20.9	0.59	C	28.1	B	33.0	B
Sea Turtle South	9.4	0.41	A	33.5	B	33.6	B
Buckwalter Town Center South	26.4	0.54	C	24.9	C	22.2	C
Bluffton Parkway Phase 4	40.0	0.98	D	Starting Point		**10.1**	**F**

1. Calculations completed using the 2000 HCM methodology.
2. Delay in seconds-per-vehicle.
3. V/C=Volume to capacity ratio.
4. Level-of-Service.
5. Speed in mph.

GENERAL NOTES:

1. For signalized intersections, delay is representative of the overall intersection operations.
2. For arterial, LOS is a function of speed on cooridor segment.

As shown, each of the signalized study are intersections are expected to operate at a LOS D or better. Just as under the prior scenario, LOS D's are expected at the intersections of US 278 at Buckwalter Parkway and Bluffton Parkway Phase 4 at Buckwalter Parkway.

The arterial analyses indicate that the northbound direction of Buckwalter Parkway will also continue to operate as under the prior scenario, good service levels with only a LOS D in the segment approaching US 278 operating at a LOS D (approx. 17 mph). The southbound flow operates at good service levels until your reach the section approaching the Bluffton Parkway Phase 4 intersection when the arterial degrades to a LOS F (10 mph) at the Bluffton Parkway.

As indicated, operations on the Buckwalter Parkway are impacted due to the close proximity of the signal at the southern access. In addition, vehicle queues were also reviewed for the critical movements of the southbound through at the Bluffton Parkway intersection. This southbound queue could extend to/through the southerly Buckwalter Town Center access resulting in poor operations/"grid-lock".

Queue calculations indicate that the northbound left-turn into the southern Buckwalter Town Center access can be accommodated assuming that dual left-turn lanes are provided. However, operations at Buckwalter Parkway at Bluffton Parkway intersection indicate that the southbound through volume will result in significant vehicular queues which could stack back into the southern Buckwalter Town Center intersection. The reasoning for this large queue is due to the large volume of northbound left-turn traffic anticipated at the Buckwalter Parkway at Bluffton Parkway intersection (estimated at 1,250 vehicles) which represents drivers continuing to travel on the Bluffton Parkway in a westerly direction. Because of this large volume, timing of the traffic signal at this intersection must favor the northbound movement which detracts from the southbound through movement, resulting in the long vehicle queues.

DEVELOPMENT ACCESS/CONNECTIVITY

In order to maintain traffic flow on the northern section of the Buckwalter Parkway, the location of signalized intersections must be properly planned and maintained. As such, not all access points will be allowed signalization at "front door" locations along the frontage of the site.

With this, the planning of good connectivity between developments is critical so that drivers can travel from one facility to another without having to get on the Buckwalter Parkway and to allow access for traffic to one of the planned signalized intersections.

Connectivity is especially important for many of the parcels along the Buckwalter Parkway due to development parcel size, environmental constraints/wetlands and proximity to major arterials such US 278 and the Bluffton Parkway. For parcels which front US 278, connectivity to the Buckwalter Parkway is critical as the approved access plan for US 278 limits full-access movement drives and signalized intersections.

In particular, three developments have plans to access the Buckwalter Parkway identified via their approved traffic studies and in some instances, their respective development agreements. The Willow Run PUD, Island West and the proposed Buckwalter Commons retail site located along US 278 (opposite the Berkeley Hall maintenance access) are each planned to have access to/from the Buckwalter Parkway.

Suggestions to provide for and/or enhance connectivity and allow access to/from developments are depicted by **Figure 4** for the Buckwalter Parkway northern corridor and are briefly described below:

- **Buckwalter Commons/C1 Tract-** A new intersection to be planned as part of the on going development in the area. This access is suggested to be located approximately 950-feet south of US 278 and will be an unsignalized intersection to due its proximity to the signalized intersection of US 278. Based on the location of this access and the anticipated inability to provide connectivity to other development sites to the south (Cinema and C2), this access is anticipated to be a full-movement access and should provide separate left and right-turn lanes on both the Buckwalter Parkway and the site access approaches. Vehicles exiting the respective sites should be placed under STOP sign control.

- **Cinema North Access/C2 Tract-** Is currently a three-legged intersection which currently serves as a secondary access for the cinema. This access is approximately 1,900-feet south of US 278 (950-feet south of the proposed Buckwalter Commons/C1 Tract access). Opposite the cinema development is the C2 tract which is currently anticipated to be developed as a drive-up bank. This access was planned as a full-movement access due to the evening activity of the theatre and should remain as an unsignalized access when the Buckwalter Parkway is fully constructed. As such, separate turning lanes (left and right) are suggested on both the Buckwalter Parkway and access approaches, with the acess drives being placed under STOP sign control.

- **Cinema South Access/C2 Tract-** Currently an unsignalized intersection three-legged intersection which is planned to be placed under traffic signal control after the Buckwalter

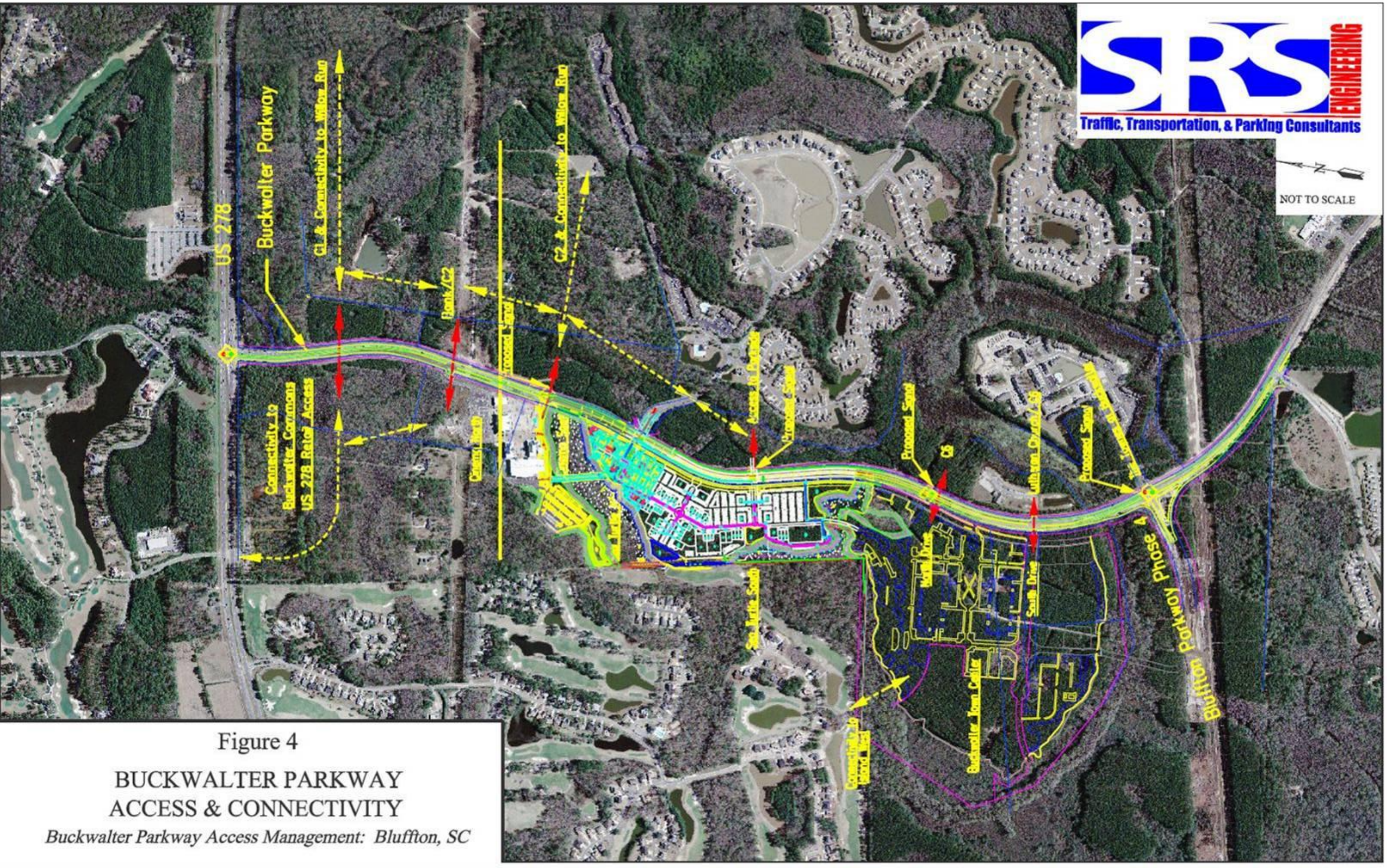


Figure 4

BUCKWALTER PARKWAY
ACCESS & CONNECTIVITY

Buckwalter Parkway Access Management: Bluffton, SC

Parkway is fully constructed. Alignment of the future C2 tract access once planned will result in a four-legged signalized intersection. Buckwalter Parkway approaches to this intersection should provide separate left and right-turn lanes on all applicable approaches. Approaches for the Cinema and C2 tracts should provide a separate left-turn lane, a through lane and a separate right-turn lane. Access to/from the Willow Run PUD is suggested at this intersection by providing connectivity through adjacent property owners to the Willow Run project.

- **Sea Turtle North Access/Parkside Drive-** Currently an unsignalized full-movement access located approximately 1,000-feet south of the proposed signalized intersection at the Cinema south access. Access to remain as a full-movement unsignalized intersection access with completion of the Buckwalter Parkway and the Sea Turtle development. On the west side of the Buckwalter Parkway, connectivity between the Sea Turtle development and the cinema development is suggested in order to provide accessibility to the proposed signal at the southerly cinema access.

  It should be noted that this intersection was investigated in order to determine if signalization is currently warranted at the existing access currently serving Wood Bridge sub-division. Based on counts conducted in March 2007 and historical counts conducted in November 2005, the site access will not meet signalization requirements based on either the 4 or 8 hour warrant analyses. It should also be noted that while the peak-hour signal warrant is marginally met, installation of a signal based solely on this warrant and not substantiated by either of the greater warrants is not typical.

- **Sea Turtle South Access/C5 & C6 Tracts-** A planned future four-legged intersection which is suggested to be placed under traffic signal control. Access to be located approximately 1,050-feet south of the Sea Turtle north access. If possible, extend the westerly leg of the intersection to the Woodbridge neighborhood in order to provide access for the neighborhood to a signalized intersection. Buckwalter Parkway approaches to this intersection should provide separate left and right-turn lanes on all applicable approaches. Approaches from the Sea Turtle and C5 & 6 tracts should provide a separate left-turn lane, a through lane and a separate right-turn lane. If connectivity to the Woodbridge neighborhood is not provided, the need for the separate eastbound and westbound through lanes on the minor street approaches will no longer be needed/required.

- **Buckwalter Town Center-** In total, five access drives have been proposed for this site one of which is planned to be placed under traffic signal control. The suggested location of this signalized location is discussed later in this report. Connectivity of this development to planned development to the west, the Sea Turtle development to the north and connectivity to the Island West development should be planned/provided.

  Access to/from this development should be planned by providing two full-movement access drives (one of which will be signalized) and spacing of the limited movement (right-in/right-out) access drives at a minimum of 500-600 feet from a full-movement access. Full-movement access drives should provide separate turning lanes on all approaches (Buckwalter Parkway and access drives) and align opposite access drives serving the C6 tract located on the west side of the Buckwalter Parkway.

  Depending on the final development proposal, which should include the entire Town Center project, the proposed access drives and separation should be refined which will likely reduce the number of access drives to the Buckwalter Parkway. It should be noted that the northbound left-turn movement entering the Buckwalter Town Center at the signalized access will likely require

dual left-turn lanes entering the development due to the projected left-turn volumes. Limited movement access drives should provide separate right-turn deceleration lanes on the Buckwalter Parkway.

As discussed later in this report, the separation of access drives to this tract and the future intersection of the Buckwalter and Bluffton Parkways will be important. Depending on which alignment of the Bluffton Parkway is selected will depend on the future access to/from this site and the suggested location of the anticipated signalized access.

BLUFFTON PARKWAY PHASE 5B DESIGN IMPACTS

A study is currently underway which illustrates a relocation of the Bluffton Parkway resulting in a 4-legged intersection in contrast to the current "S" curve alignment. This alternative would result in a true east/west corridor of the Bluffton Parkway with a single point of intersection with the Buckwalter Parkway rather than the two intersections with a combination route of the Buckwalter/Bluffton Parkway between the two intersections.

As was indicated earlier in this report, a capacity issue that was created by the current "S" curve design resulted in operational issues not only at the intersection of the Buckwalter Parkway at Bluffton Parkway Phase 4, but also at the adjacent intersection of the Buckwalter Parkway at the southern Buckwalter Town Center access. If the alternative of straightening out the Bluffton Parkway is approved, a new 4-legged intersection will result. According to current concept planning, this new intersection would be located approximately 1,100-feet south of the current intersection of the Buckwalter Parkway at Bluffton Parkway Phase 4. This new location of the Bluffton Parkway would then be approximately 2,100-feet from the proposed southern Buckwalter Town Center access. It should be noted that the re-location of the Bluffton Parkway to this location would also result in the re-location of the traffic signal at the current location (Bluffton Parkway Phase 4/Townes access at Buckwalter Parkway) to this new intersection.

Given this scenario, traffic volumes at the Buckwalter Parkway at Bluffton Parkway would change significantly such that the heavy northbound left-turn movement would now become significantly lower while the eastbound through movement would increase. This would result in a significant improvement in intersection operations and improves traffic flow not only along the Bluffton Parkway, but also the Buckwalter Parkway. This change in directional traffic flow, as well as the revised separation of approximately 2,100-feet to the southern Buckwalter Town Center access, would feasibly allow the installation of traffic signal control at this intersection. The main reasoning for allowing this signal under this scenario is the increased separation and the anticipation that vehicle queues will no longer impact the intersection operations. **Table 5** depicts the resultant service levels (intersection and arterial) for this scenario. **Figure 5** illustrates this access alternative as the Preferred Solution which depicts the preferred location of traffic signals, intersection separation and connectivity along the Buckwalter Parkway corridor.

The installation of a temporary signal is permitted at Parker Drive which may be removed upon completion of Phase 5B of the Bluffton Parkway, and the median opening at Parker Drive may be closed upon completion of Phase 5B. Phase 5B alignment may remain as is, and as part of Phase 5B construction, two additional residential access points may be simultaneously built to provide three residential access points for adjacent residents.

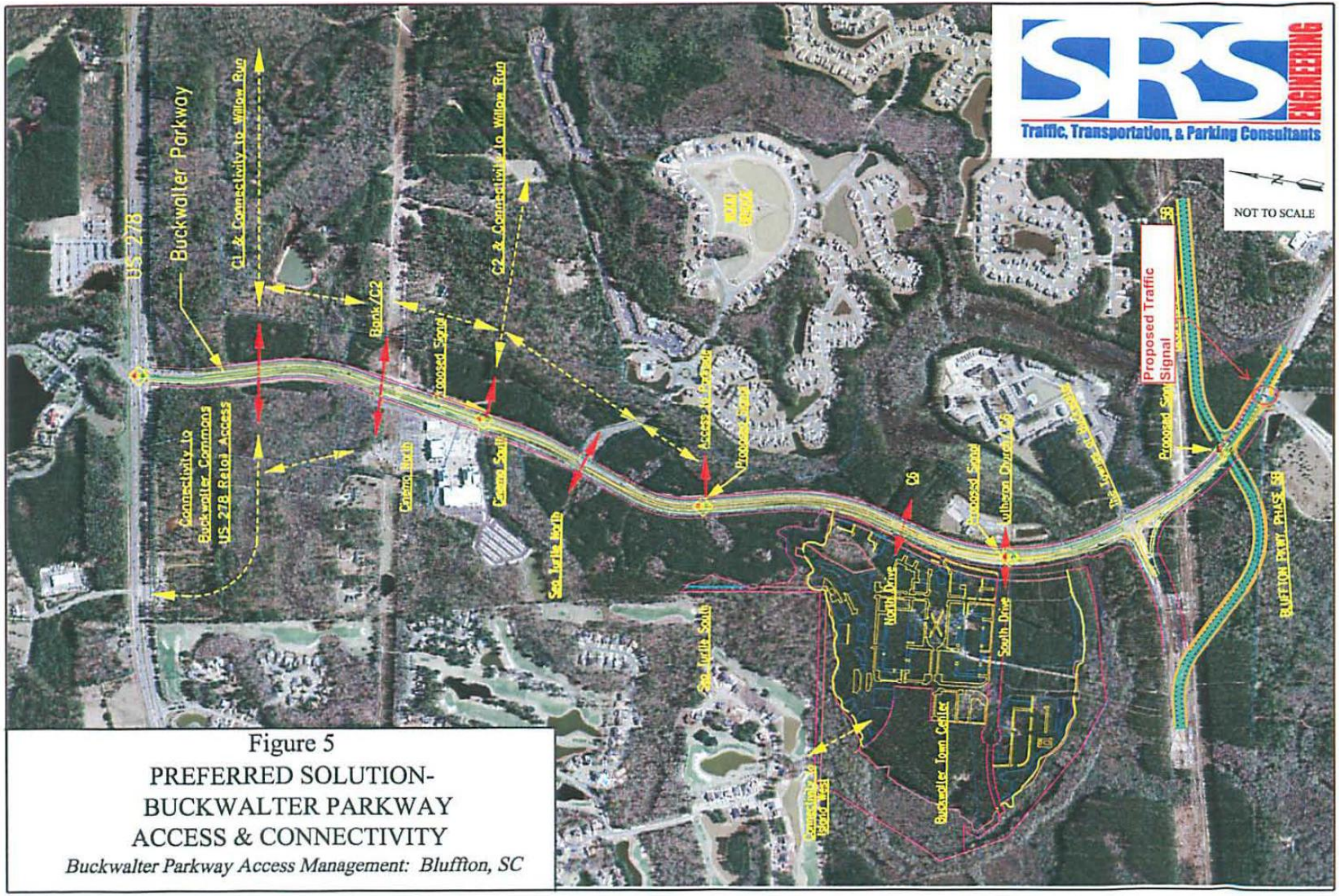


Figure 5
PREFERRED SOLUTION-
BUCKWALTER PARKWAY
ACCESS & CONNECTIVITY
Buckwalter Parkway Access Management: Bluffton, SC

Table 5
ALTERNATIVE ANALYSES
BLUFFTON PARKWAY RE-ALIGNMENT
Buckwalter Parkway Access Management

	Intersection Analyses Results			Northbound Buckwalter Arterial Analyses Results		Southbound Buckwalter Arterial Analyses Results	
Signalized Intersections	**Delay[2]**	**V/C[3]**	**LOS[4]**	**Speed[5]**	**LOS**	**Speed**	**LOS**
Buckwalter Parkway @							
US 278	53.9	1.30	D	17.1	D	Starting Point	
Cinema South	20.9	0.59	C	28.1	B	33.0	B
Sea Turtle South	9.6	0.41	A	33.1	B	33.6	B
Buckwalter Town Center South	27.1	0.54	C	31.9	B	22.5	C
Bluffton Parkway Phase 4	52.8	1.29	D	Starting Point		19.5	D

1. Calculations completed using the 2000 HCM methodology.
2. Delay in seconds-per-vehicle.
3. V/C=Volume to capacity ratio.
4. Level-of-Service.
5. Speed in mph.

GENERAL NOTES:

1. For signalized intersections, delay is representative of the overall intersection operations.
2. For arterial, LOS is a function of speed on corridor segment.

As shown, if the Bluffton Parkway alignment becomes a 4-legged intersection rather than the "S" curve alignment, the intersection will now be located approximately 1,100-feet father to the south of the current Bluffton Phase 4 alignment. This additional separation and re-assignment of traffic will allow better operations at the new Buckwalter Parkway at Bluffton Parkway intersection as well as improving on the flow of through traffic on the arterial as shown by the southbound serve levels which indicate LOS D or better as compared to the LOS E or LOS F as indicated by the prior scenarios.

A second alternative assuming the scenario of the Bluffton Parkway was analyzed assuming that the first signal to the north of the now relocated Bluffton Parkway intersection would be 2,600-feet to the north placing the signal in the vicinity of the Buckwalter Town Center project at the proposed "promenade" access. Based on these analyses, if the signal were located at this point (Buckwalter Town Center south access not signalized) the arterial analyses for the southbound direction of the Buckwalter Parkway indicate a slight improvement in the arterial analyses of approximately 2 mph (21.7 mph) which continues to operate at a LOS D.

CONCLUSIONS

This report has been prepared in an effort to plan major access points/signalized intersections along the section of the Buckwalter Parkway between US 278 and the intersection of the future Phase 4 leg of the Bluffton Parkway which has been referred to as the northern segment of the Buckwalter Parkway.

Two intersections are either already signalized (US 278) or are defined/planned for traffic signal control (Bluffton Parkway Phase 4). The subject of this report is to investigate the location of additional future traffic signals and access drives between these two major intersections.

Based on the projected traffic volumes and planned access drives, two intersections are recommended for installation of traffic signal control once warrants are met. These two intersections are the southern Cinema access which aligns opposite the C2 Tract and the southern Sea Turtle retail access which aligns opposite the C5 Tract. Separation of these proposed signalized locations to each other and to/from the signal at US 278 provide adequate spacing as well as provide for good operations.

The placement of the third/last traffic signal is not as clear due to current unknowns regarding the future alignment of the Bluffton Parkway Phase 4 intersection. If the current "S" alignment of the Bluffton Parkway continues as is currently being designed, the next traffic signal to the north of the Bluffton Parkway intersection should be located a minimum of approximately 2,000-feet to the north placing it in the vicinity of the northerly access to/from the Buckwalter Town Center development. However, if the alignment of the Bluffton Parkway is modified resulting in a new four-legged signalized intersection approximately 1,100-feet south of the current alignment, signalization of the southerly Buckwalter Town Center development could occur which would now be located approximately 2,100-feet to the north of this new 4-legged Bluffton Parkway intersection.

Operations at the signalized intersections are anticipated to be LOS D or better under either scenario of the alignment of the Bluffton Parkway however; arterial analyses are improved if the intersection of Buckwalter Parkway and the Bluffton Parkway becomes a single 4-legged intersection.

Based on these analyses, the solution that provides the best operations while also making provisions for access to/from development along the northern segment of the Buckwalter Parkway is the alternative of aligning the Bluffton Parkway to the south and signalizing the following intersections as indicated in **Table 6**:

Table 6
PREFERRED ALTERNATIVE BLUFFTON PARKWAY RE-ALIGNMENT
SIGNALIZED INTERSECTION SPACING
Buckwalter Parkway Access Management

Corridor	Signalized Cross Streets	Separation (Feet)
Buckwalter Parkway	US 278	
		2,800
	Cinema South	
		2,050
	Sea Turtle South	
		2,550
	Buckwalter Town Center South	
		2,100
	Bluffton Parkway Aligned	

If alignment of the Bluffton Parkway is **not** shifted to the south and maintains its current proposal of the "S" alignment/shared route, then the following intersections should be signalized as indicated in **Table 7**:

Table 7
BLUFFTON PARKWAY CURRENT LOCATION
SIGNALIZED INTERSECTION SPACING
Buckwalter Parkway Access Management

Corridor	Signalized Cross Streets	Separation (Feet)
Buckwalter Parkway	US 278	
		2,800
	Cinema South	
		2,050
	Sea Turtle South	
		1,600
	Buckwalter Town Center North	
		2,025
	Bluffton Parkway Phase 4/Portrait	

APPENDIX

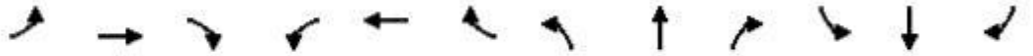
- **Capacity & Arterial Analyses**

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.98	1.00
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	3433	1863	1583		1817	1583
Flt Permitted	0.03	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.81	1.00
Satd. Flow (perm)	64	5085	1583	3433	5085	1583	3433	1863	1583		1516	1583
Volume (vph)	50	2500	440	400	2500	50	480	50	400	50	50	50
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	2717	478	435	2717	54	522	54	435	54	54	54
RTOR Reduction (vph)	0	0	72	0	0	11	0	0	0	0	0	5
Lane Group Flow (vph)	54	2717	406	435	2717	43	522	54	435	0	108	49
Turn Type	Perm		pm+ov	Prot		Perm	Prot		Free	Perm		Perm
Protected Phases		4	5	3	8		5	2			6	
Permitted Phases	4		4			8			Free	6		6
Actuated Green, G (s)	116.0	116.0	136.0	18.1	139.1	139.1	20.0	40.9	190.0		15.9	15.9
Effective Green, g (s)	117.0	117.0	138.0	19.1	140.1	140.1	21.0	41.9	190.0		16.9	16.9
Actuated g/C Ratio	0.62	0.62	0.73	0.10	0.74	0.74	0.11	0.22	1.00		0.09	0.09
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	39	3131	1183	345	3750	1167	379	411	1583		135	141
v/s Ratio Prot		0.53	0.04	c0.13	0.53		c0.15	0.03				
v/s Ratio Perm	c0.85		0.22			0.03			0.27		c0.07	0.03
v/c Ratio	1.38	0.87	0.34	1.26	0.72	0.04	1.38	0.13	0.27		0.80	0.34
Uniform Delay, d1	36.5	30.1	9.5	85.5	14.1	6.7	84.5	59.4	0.0		84.9	81.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	276.9	2.8	0.2	138.7	0.7	0.0	185.6	0.7	0.4		37.6	6.6
Delay (s)	313.4	32.9	9.7	224.2	14.8	6.7	270.1	60.1	0.4		122.5	87.9
Level of Service	F	C	A	F	B	A	F	E	A		F	F
Approach Delay (s)		34.2			43.1			142.9			111.0	
Approach LOS		C			D			F			F	

Intersection Summary			
HCM Average Control Delay	53.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

BUCKWALTER PWKY NORTH SEGMENT
4: Cinema South & Buckwalter Pkwy

Bluffton Pkwy 4-leg
9/29/2006



Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.88		1.00	0.87		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1637		1770	1618		1770	3539	1583	1770	3539	1583
Flt Permitted	0.41	1.00		0.56	1.00		0.35	1.00	1.00	0.27	1.00	1.00
Satd. Flow (perm)	764	1637		1047	1618		644	3539	1583	498	3539	1583
Volume (vph)	203	30	129	139	30	217	101	840	143	90	660	47
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	221	33	140	151	33	236	110	913	155	98	717	51
RTOR Reduction (vph)	0	100	0	0	71	0	0	0	56	0	0	18
Lane Group Flow (vph)	221	73	0	151	198	0	110	913	99	98	717	33
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.1	28.1		28.1	28.1		64.9	64.9	64.9	64.9	64.9	64.9
Effective Green, g (s)	29.1	29.1		29.1	29.1		65.9	65.9	65.9	65.9	65.9	65.9
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.64	0.64	0.64	0.64	0.64	0.64
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	216	462		296	457		412	2264	1013	319	2264	1013
v/s Ratio Prot		0.04			0.12			c0.26			0.20	
v/s Ratio Perm	c0.29			0.14			0.17		0.06	0.20		0.02
v/c Ratio	1.02	0.16		0.51	0.43		0.27	0.40	0.10	0.31	0.32	0.03
Uniform Delay, d1	36.9	27.7		31.0	30.2		8.1	9.0	7.1	8.3	8.4	6.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	67.4	0.2		1.5	0.7		1.6	0.5	0.2	2.5	0.4	0.1
Delay (s)	104.3	27.9		32.5	30.9		9.6	9.5	7.3	10.8	8.7	6.9
Level of Service	F	C		C	C		A	A	A	B	A	A
Approach Delay (s)		70.8			31.4			9.3			8.9	
Approach LOS		E			C			A			A	

Intersection Summary			
HCM Average Control Delay	20.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	103.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.34	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	638	3539	3539	1583
Volume (vph)	161	100	77	930	720	38
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	175	109	84	1011	783	41
RTOR Reduction (vph)	0	94	0	0	0	8
Lane Group Flow (vph)	175	15	84	1011	783	33
Turn Type		Perm	Perm			Perm
Protected Phases	4			2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	15.8	15.8	94.2	94.2	94.2	94.2
Effective Green, g (s)	16.8	16.8	95.2	95.2	95.2	95.2
Actuated g/C Ratio	0.14	0.14	0.79	0.79	0.79	0.79
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	248	222	506	2808	2808	1256
v/s Ratio Prot	c0.10			c0.29	0.22	
v/s Ratio Perm		0.01	0.13			0.02
v/c Ratio	0.71	0.07	0.17	0.36	0.28	0.03
Uniform Delay, d1	49.2	44.8	3.0	3.6	3.3	2.6
Progression Factor	1.00	1.00	0.72	0.71	1.00	1.00
Incremental Delay, d2	8.8	0.1	0.7	0.3	0.2	0.0
Delay (s)	58.1	44.9	2.8	2.9	3.5	2.7
Level of Service	E	D	A	A	A	A
Approach Delay (s)	53.0			2.9	3.5	
Approach LOS	D			A	A	

Intersection Summary			
HCM Average Control Delay	9.6	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00		1.00	1.00		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.86		1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1599		1770	1723		3433	3539	1583	1770	3539	1583
Flt Permitted	0.71	1.00		0.15	1.00		0.95	1.00	1.00	0.33	1.00	1.00
Satd. Flow (perm)	2580	1599		276	1723		3433	3539	1583	607	3539	1583
Volume (vph)	400	30	500	30	30	30	400	800	30	30	620	400
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	435	33	543	33	33	33	435	870	33	33	674	435
RTOR Reduction (vph)	0	381	0	0	26	0	0	0	10	0	0	218
Lane Group Flow (vph)	435	195	0	33	40	0	435	870	23	33	674	218
Turn Type	Perm			Perm			Prot		Perm	Perm		Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8					2	6		6
Actuated Green, G (s)	26.0	26.0		26.0	26.0		20.0	84.0	84.0	59.0	59.0	59.0
Effective Green, g (s)	27.0	27.0		27.0	27.0		21.0	85.0	85.0	60.0	60.0	60.0
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.18	0.71	0.71	0.50	0.50	0.50
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	581	360		62	388		601	2507	1121	304	1770	792
v/s Ratio Prot		0.12			0.02		c0.13	0.25			c0.19	
v/s Ratio Perm	c0.17			0.12					0.01	0.05		0.14
v/c Ratio	0.75	0.54		0.53	0.10		0.72	0.35	0.02	0.11	0.38	0.27
Uniform Delay, d1	43.3	41.1		40.9	36.9		46.8	6.8	5.2	15.9	18.5	17.4
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	0.91	0.92	0.82
Incremental Delay, d2	5.3	1.7		8.5	0.1		4.3	0.4	0.0	0.7	0.6	0.9
Delay (s)	48.6	42.7		49.5	37.0		51.1	7.1	5.2	15.1	17.6	15.1
Level of Service	D	D		D	D		D	A	A	B	B	B
Approach Delay (s)		45.3			41.2			21.4			16.6	
Approach LOS		D			D			C			B	

Intersection Summary			
HCM Average Control Delay	27.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	0.95	1.00	1.00	0.95	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	3539	1583	1770	3539	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.13	1.00	1.00	0.16	1.00	1.00	0.95	1.00	1.00	0.37	1.00	1.00
Satd. Flow (perm)	246	3539	1583	301	3539	1583	3433	3539	1583	680	3539	1583
Volume (vph)	190	1010	160	190	1100	60	360	450	100	160	600	140
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	207	1098	174	207	1196	65	391	489	109	174	652	152
RTOR Reduction (vph)	0	0	15	0	0	32	0	0	70	0	0	30
Lane Group Flow (vph)	207	1098	159	207	1196	33	391	489	39	174	652	122
Turn Type	Perm		pm+ov	Perm		Perm	Prot		Perm	pm+pt		Perm
Protected Phases		4	5		8		5	2		1	6	
Permitted Phases	4		4	8		8			2	6		6
Actuated Green, G (s)	51.0	51.0	61.0	51.0	51.0	51.0	10.0	28.0	28.0	34.0	26.0	26.0
Effective Green, g (s)	52.0	52.0	63.0	52.0	52.0	52.0	11.0	29.0	29.0	36.0	27.0	27.0
Actuated g/C Ratio	0.51	0.51	0.62	0.51	0.51	0.51	0.11	0.28	0.28	0.35	0.26	0.26
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	125	1804	1040	153	1804	807	370	1006	450	336	937	419
v/s Ratio Prot		0.31	0.02		0.34		c0.11	0.14		0.05	c0.18	
v/s Ratio Perm	c0.84		0.08	0.69		0.02			0.02	0.14		0.08
v/c Ratio	1.66	0.61	0.15	1.35	0.66	0.04	1.06	0.49	0.09	0.52	0.70	0.29
Uniform Delay, d1	25.0	17.8	8.2	25.0	18.5	12.5	45.5	30.3	26.8	23.9	33.8	29.9
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	327.9	0.6	0.1	195.5	0.9	0.0	62.5	1.7	0.4	1.3	4.3	1.8
Delay (s)	352.9	18.4	8.3	220.5	19.4	12.5	108.0	32.0	27.2	25.3	38.1	31.6
Level of Service	F	B	A	F	B	B	F	C	C	C	D	C
Approach Delay (s)		64.0			47.5			61.5			34.8	
Approach LOS		E			D			E			C	

Intersection Summary			
HCM Average Control Delay	52.8	HCM Level of Service	D
HCM Volume to Capacity ratio	1.29		
Actuated Cycle Length (s)	102.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	81.1%	ICU Level of Service	D
Analysis Period (min)	15		
c Critical Lane Group			

Arterial Level of Service: NB Buckwalter Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Bluffton Pkwy Phase	II	45	20.9	32.3	53.2	0.19	12.9	F
Lutheran Church/C6	II	45	39.8	7.9	47.7	0.42	31.9	B
Sea Turtle South	II	45	31.4	3.1	34.5	0.32	33.1	B
Willow Run/C2	II	45	33.7	11.2	44.9	0.35	28.1	B
US 278	II	45	43.2	59.9	103.1	0.49	17.1	D
Total	II		169.0	114.4	283.4	1.77	22.5	C

Arterial Level of Service: SB Buckwalter Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
US 278	II	45	7.9	121.0	128.9	0.07	2.0	F
Cinema South	II	45	43.2	10.3	53.5	0.49	33.0	B
Sea Turtle South	II	45	33.7	3.9	37.6	0.35	33.6	B
Buckwalter Town Cntr	II	45	31.4	19.4	50.8	0.32	22.5	C
Bluffton Pkwy Phase	II	45	39.8	38.4	78.2	0.42	19.5	D
Total	II		156.0	193.0	349.0	1.65	17.1	D

Item 15.

Arterial Level of Service: NB Buckwalter Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Bluffton Pkwy Phase	II	45	20.9	32.3	53.2	0.19	12.9	F
Lutheran Church/C6	II	45	43.3	7.9	51.2	0.49	34.6	B
Sea Turtle South	II	45	25.1	3.3	28.4	0.24	30.6	B
Willow Run/C2	II	45	33.7	11.2	44.9	0.35	28.1	B
US 278	II	45	43.2	59.9	103.1	0.49	17.1	D
Total	II		166.2	114.6	280.8	1.77	22.7	C

Arterial Level of Service: SB Buckwalter Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
US 278	II	45	7.9	121.0	128.9	0.07	2.0	F
Cinema South	II	45	43.2	10.3	53.5	0.49	33.0	B
Sea Turtle South	II	45	33.7	3.9	37.6	0.35	33.6	B
Buckwalter Town Cntr	II	45	25.1	18.9	44.0	0.24	19.8	D
Bluffton Pkwy Phase	II	45	43.3	38.4	81.7	0.49	21.7	D
Total	II		153.2	192.5	345.7	1.65	17.2	D

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.98	1.00
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	3433	1863	1583		1817	1583
Flt Permitted	0.03	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.81	1.00
Satd. Flow (perm)	64	5085	1583	3433	5085	1583	3433	1863	1583		1516	1583
Volume (vph)	50	2500	440	400	2500	50	480	50	400	50	50	50
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	2717	478	435	2717	54	522	54	435	54	54	54
RTOR Reduction (vph)	0	0	72	0	0	11	0	0	0	0	0	5
Lane Group Flow (vph)	54	2717	406	435	2717	43	522	54	435	0	108	49
Turn Type	Perm		pm+ov	Prot		Perm	Prot		Free	Perm		Perm
Protected Phases		4	5	3	8		5	2			6	
Permitted Phases	4		4			8			Free	6		6
Actuated Green, G (s)	116.0	116.0	136.0	18.1	139.1	139.1	20.0	40.9	190.0		15.9	15.9
Effective Green, g (s)	117.0	117.0	138.0	19.1	140.1	140.1	21.0	41.9	190.0		16.9	16.9
Actuated g/C Ratio	0.62	0.62	0.73	0.10	0.74	0.74	0.11	0.22	1.00		0.09	0.09
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	39	3131	1183	345	3750	1167	379	411	1583		135	141
v/s Ratio Prot		0.53	0.04	c0.13	0.53		c0.15	0.03				
v/s Ratio Perm	c0.85		0.22			0.03			0.27		c0.07	0.03
v/c Ratio	1.38	0.87	0.34	1.26	0.72	0.04	1.38	0.13	0.27		0.80	0.34
Uniform Delay, d1	36.5	30.1	9.5	85.5	14.1	6.7	84.5	59.4	0.0		84.9	81.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	276.9	2.8	0.2	138.7	0.7	0.0	185.6	0.7	0.4		37.6	6.6
Delay (s)	313.4	32.9	9.7	224.2	14.8	6.7	270.1	60.1	0.4		122.5	87.9
Level of Service	F	C	A	F	B	A	F	E	A		F	F
Approach Delay (s)		34.2			43.1			142.9			111.0	
Approach LOS		C			D			F			F	

Intersection Summary			
HCM Average Control Delay	53.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.88		1.00	0.87		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1637		1770	1618		1770	3539	1583	1770	3539	1583
Flt Permitted	0.41	1.00		0.56	1.00		0.35	1.00	1.00	0.27	1.00	1.00
Satd. Flow (perm)	764	1637		1047	1618		644	3539	1583	498	3539	1583
Volume (vph)	203	30	129	139	30	217	101	840	143	90	660	47
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	221	33	140	151	33	236	110	913	155	98	717	51
RTOR Reduction (vph)	0	100	0	0	71	0	0	0	56	0	0	18
Lane Group Flow (vph)	221	73	0	151	198	0	110	913	99	98	717	33
Turn Type	Perm			Perm			Perm		Perm	Perm		Perm
Protected Phases		4			8			2			6	
Permitted Phases	4			8			2		2	6		6
Actuated Green, G (s)	28.1	28.1		28.1	28.1		64.9	64.9	64.9	64.9	64.9	64.9
Effective Green, g (s)	29.1	29.1		29.1	29.1		65.9	65.9	65.9	65.9	65.9	65.9
Actuated g/C Ratio	0.28	0.28		0.28	0.28		0.64	0.64	0.64	0.64	0.64	0.64
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	216	462		296	457		412	2264	1013	319	2264	1013
v/s Ratio Prot		0.04			0.12			c0.26			0.20	
v/s Ratio Perm	c0.29			0.14			0.17		0.06	0.20		0.02
v/c Ratio	1.02	0.16		0.51	0.43		0.27	0.40	0.10	0.31	0.32	0.03
Uniform Delay, d1	36.9	27.7		31.0	30.2		8.1	9.0	7.1	8.3	8.4	6.8
Progression Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Incremental Delay, d2	67.4	0.2		1.5	0.7		1.6	0.5	0.2	2.5	0.4	0.1
Delay (s)	104.3	27.9		32.5	30.9		9.6	9.5	7.3	10.8	8.7	6.9
Level of Service	F	C		C	C		A	A	A	B	A	A
Approach Delay (s)		70.8			31.4			9.3			8.9	
Approach LOS		E			C			A			A	

Intersection Summary			
HCM Average Control Delay	20.9	HCM Level of Service	C
HCM Volume to Capacity ratio	0.59		
Actuated Cycle Length (s)	103.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			



Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.34	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	638	3539	3539	1583
Volume (vph)	161	100	77	930	720	38
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	175	109	84	1011	783	41
RTOR Reduction (vph)	0	94	0	0	0	8
Lane Group Flow (vph)	175	15	84	1011	783	33
Turn Type		Perm	Perm			Perm
Protected Phases	4			2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	15.8	15.8	94.2	94.2	94.2	94.2
Effective Green, g (s)	16.8	16.8	95.2	95.2	95.2	95.2
Actuated g/C Ratio	0.14	0.14	0.79	0.79	0.79	0.79
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	248	222	506	2808	2808	1256
v/s Ratio Prot	c0.10			c0.29	0.22	
v/s Ratio Perm		0.01	0.13			0.02
v/c Ratio	0.71	0.07	0.17	0.36	0.28	0.03
Uniform Delay, d1	49.2	44.8	3.0	3.6	3.3	2.6
Progression Factor	1.00	1.00	0.62	0.60	1.00	1.00
Incremental Delay, d2	8.8	0.1	0.7	0.3	0.2	0.0
Delay (s)	58.1	44.9	2.5	2.5	3.5	2.7
Level of Service	E	D	A	A	A	A
Approach Delay (s)	53.0			2.5	3.5	
Approach LOS	D			A	A	

Intersection Summary			
HCM Average Control Delay	9.4	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00		1.00	1.00		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.86		1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1599		1770	1723		3433	3539	1583	1770	3539	1583
Flt Permitted	0.71	1.00		0.15	1.00		0.95	1.00	1.00	0.33	1.00	1.00
Satd. Flow (perm)	2580	1599		276	1723		3433	3539	1583	607	3539	1583
Volume (vph)	400	30	500	30	30	30	400	800	30	30	620	400
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	435	33	543	33	33	33	435	870	33	33	674	435
RTOR Reduction (vph)	0	381	0	0	26	0	0	0	10	0	0	220
Lane Group Flow (vph)	435	195	0	33	40	0	435	870	23	33	674	215
Turn Type	Perm			Perm			Prot		Perm	Perm		Perm
Protected Phases		4			8		5	2			6	
Permitted Phases	4			8					2	6		6
Actuated Green, G (s)	26.0	26.0		26.0	26.0		20.6	84.0	84.0	58.4	58.4	58.4
Effective Green, g (s)	27.0	27.0		27.0	27.0		21.6	85.0	85.0	59.4	59.4	59.4
Actuated g/C Ratio	0.22	0.22		0.22	0.22		0.18	0.71	0.71	0.50	0.50	0.50
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	581	360		62	388		618	2507	1121	300	1752	784
v/s Ratio Prot		0.12			0.02		c0.13	0.25			c0.19	
v/s Ratio Perm	c0.17			0.12					0.01	0.05		0.14
v/c Ratio	0.75	0.54		0.53	0.10		0.70	0.35	0.02	0.11	0.38	0.27
Uniform Delay, d1	43.3	41.1		40.9	36.9		46.2	6.8	5.2	16.2	18.9	17.7
Progression Factor	1.00	1.00		1.00	1.00		0.89	0.95	0.83	0.91	0.92	0.82
Incremental Delay, d2	5.3	1.7		8.5	0.1		3.5	0.4	0.0	0.7	0.6	0.9
Delay (s)	48.6	42.7		49.5	37.0		44.8	6.8	4.3	15.4	18.0	15.4
Level of Service	D	D		D	D		D	A	A	B	B	B
Approach Delay (s)		45.3			41.2			19.1			17.0	
Approach LOS		D			D			B			B	

Intersection Summary			
HCM Average Control Delay	26.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.54		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	12.0
Intersection Capacity Utilization	71.0%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Item 15.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.74	1.00	1.00	0.75	1.00	1.00	0.95	1.00	1.00	0.37	1.00	1.00
Satd. Flow (perm)	1378	1863	1583	1392	1863	1583	3433	3539	1583	691	3539	1583
Volume (vph)	230	15	970	25	25	25	1250	680	15	15	820	80
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	16	1054	27	27	27	1359	739	16	16	891	87
RTOR Reduction (vph)	0	0	4	0	0	22	0	0	4	0	0	50
Lane Group Flow (vph)	250	16	1050	27	27	5	1359	739	12	16	891	37
Turn Type	Perm		pm+ov	Perm		Perm	Prot		Perm	Perm		Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8		8			2	6		6
Actuated Green, G (s)	21.0	21.0	74.0	21.0	21.0	21.0	53.0	89.0	89.0	31.0	31.0	31.0
Effective Green, g (s)	22.0	22.0	76.0	22.0	22.0	22.0	54.0	90.0	90.0	32.0	32.0	32.0
Actuated g/C Ratio	0.18	0.18	0.63	0.18	0.18	0.18	0.45	0.75	0.75	0.27	0.27	0.27
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	253	342	1055	255	342	290	1545	2654	1187	184	944	422
v/s Ratio Prot		0.01	c0.45		0.01		0.40	0.21			c0.25	
v/s Ratio Perm	0.18		0.22	0.02		0.00			0.01	0.02		0.02
v/c Ratio	0.99	0.05	1.00	0.11	0.08	0.02	0.88	0.28	0.01	0.09	0.94	0.09
Uniform Delay, d1	48.9	40.4	21.8	40.8	40.6	40.1	30.0	4.7	3.8	33.0	43.1	33.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.75	0.80	0.53
Incremental Delay, d2	52.7	0.1	26.4	0.2	0.1	0.0	6.1	0.3	0.0	0.8	16.3	0.3
Delay (s)	101.6	40.4	48.2	41.0	40.7	40.2	36.1	5.0	3.8	25.7	50.9	17.8
Level of Service	F	D	D	D	D	D	D	A	A	C	D	B
Approach Delay (s)		58.2			40.6			25.0			47.6	
Approach LOS		E			D			C			D	

Intersection Summary			
HCM Average Control Delay	40.0	HCM Level of Service	D
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

BUCKWALTER PWKY NORTH SEGMENT 2025 Design Vols, 9/29/2006

South Access Alternative

Arterial Level of Service: NB Buckwalter Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Towne Portrait	II	45	20.9	5.0	25.9	0.19	26.6	C
Lutheran Church/C6	II	45	22.9	7.5	30.4	0.21	24.9	C
Sea Turtle South	II	45	31.4	2.7	34.1	0.32	33.5	B
Willow Run/C2	II	45	33.7	11.2	44.9	0.35	28.1	B
US 278	II	45	43.2	59.9	103.1	0.49	17.1	D
Total	II		152.1	86.3	238.4	1.56	23.6	C

Arterial Level of Service: SB Buckwalter Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Cinema South	II	45	43.2	10.3	53.5	0.49	33.0	B
Sea Turtle South	II	45	33.7	3.9	37.6	0.35	33.6	B
Buckwalter Town Cntr	II	45	31.4	19.9	51.3	0.32	22.2	C
Bluffton Pkwy Phase	II	45	22.9	51.7	74.6	0.21	10.1	F
Total	II		131.2	85.8	217.0	1.37	22.7	C

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0		4.0	4.0
Lane Util. Factor	1.00	0.91	1.00	0.97	0.91	1.00	0.97	1.00	1.00		1.00	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85		1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.98	1.00
Satd. Flow (prot)	1770	5085	1583	3433	5085	1583	3433	1863	1583		1817	1583
Flt Permitted	0.03	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00		0.81	1.00
Satd. Flow (perm)	64	5085	1583	3433	5085	1583	3433	1863	1583		1516	1583
Volume (vph)	50	2500	440	400	2500	50	480	50	400	50	50	50
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	54	2717	478	435	2717	54	522	54	435	54	54	54
RTOR Reduction (vph)	0	0	72	0	0	11	0	0	0	0	0	5
Lane Group Flow (vph)	54	2717	406	435	2717	43	522	54	435	0	108	49
Turn Type	Perm		pm+ov	Prot		Perm	Prot		Free	Perm		Perm
Protected Phases		4	5	3	8		5	2			6	
Permitted Phases	4		4			8			Free	6		6
Actuated Green, G (s)	116.0	116.0	136.0	18.1	139.1	139.1	20.0	40.9	190.0		15.9	15.9
Effective Green, g (s)	117.0	117.0	138.0	19.1	140.1	140.1	21.0	41.9	190.0		16.9	16.9
Actuated g/C Ratio	0.62	0.62	0.73	0.10	0.74	0.74	0.11	0.22	1.00		0.09	0.09
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0			5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0			3.0	3.0
Lane Grp Cap (vph)	39	3131	1183	345	3750	1167	379	411	1583		135	141
v/s Ratio Prot		0.53	0.04	c0.13	0.53		c0.15	0.03				
v/s Ratio Perm	c0.85		0.22			0.03			0.27		c0.07	0.03
v/c Ratio	1.38	0.87	0.34	1.26	0.72	0.04	1.38	0.13	0.27		0.80	0.34
Uniform Delay, d1	36.5	30.1	9.5	85.5	14.1	6.7	84.5	59.4	0.0		84.9	81.3
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00		1.00	1.00
Incremental Delay, d2	276.9	2.8	0.2	138.7	0.7	0.0	185.6	0.7	0.4		37.6	6.6
Delay (s)	313.4	32.9	9.7	224.2	14.8	6.7	270.1	60.1	0.4		122.5	87.9
Level of Service	F	C	A	F	B	A	F	E	A		F	F
Approach Delay (s)		34.2			43.1			142.9			111.0	
Approach LOS		C			D			F			F	

Intersection Summary			
HCM Average Control Delay	53.9	HCM Level of Service	D
HCM Volume to Capacity ratio	1.30		
Actuated Cycle Length (s)	190.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	90.1%	ICU Level of Service	E
Analysis Period (min)	15		
c Critical Lane Group			

Bluffton Parkway Corridor Study 2025 Design Vols, NORTH ACCESS TOWN CENTE
4: Cinema South & Buckwalter Pkwy 9/29/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00		1.00	1.00		1.00	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.88		1.00	0.87		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1637		1770	1618		1770	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.95	1.00		0.30	1.00	1.00	0.21	1.00	1.00
Satd. Flow (perm)	1770	1637		1770	1618		553	3539	1583	394	3539	1583
Volume (vph)	203	30	129	139	30	217	101	840	143	90	660	47
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	221	33	140	151	33	236	110	913	155	98	717	51
RTOR Reduction (vph)	0	116	0	0	204	0	0	0	80	0	0	26
Lane Group Flow (vph)	221	57	0	151	65	0	110	913	75	98	717	25
Turn Type	Split			Split			pm+pt		Perm	pm+pt		Perm
Protected Phases	4	4		8	8		5	2		1	6	
Permitted Phases							2		2	6		6
Actuated Green, G (s)	19.4	19.4		15.3	15.3		65.3	56.7	56.7	65.3	56.7	56.7
Effective Green, g (s)	20.4	20.4		16.3	16.3		67.3	57.7	57.7	67.3	57.7	57.7
Actuated g/C Ratio	0.17	0.17		0.14	0.14		0.56	0.48	0.48	0.56	0.48	0.48
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	301	278		240	220		408	1702	761	331	1702	761
v/s Ratio Prot	c0.12	0.03		c0.09	0.04		0.02	c0.26		c0.02	0.20	
v/s Ratio Perm							0.13		0.05	0.14		0.02
v/c Ratio	0.73	0.20		0.63	0.30		0.27	0.54	0.10	0.30	0.42	0.03
Uniform Delay, d1	47.2	42.8		49.0	46.7		13.1	21.8	17.0	14.0	20.3	16.4
Progression Factor	1.00	1.00		1.00	1.00		0.81	0.80	1.42	1.00	1.00	1.00
Incremental Delay, d2	8.9	0.4		5.1	0.8		0.3	1.2	0.2	0.5	0.8	0.1
Delay (s)	56.2	43.2		54.1	47.4		11.0	18.7	24.3	14.5	21.0	16.5
Level of Service	E	D		D	D		B	B	C	B	C	B
Approach Delay (s)		50.5			49.8			18.7			20.0	
Approach LOS		D			D			B			C	

Intersection Summary			
HCM Average Control Delay	28.1	HCM Level of Service	C
HCM Volume to Capacity ratio	0.57		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	67.8%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	0.95	0.95	1.00
Frt	1.00	0.85	1.00	1.00	1.00	0.85
Flt Protected	0.95	1.00	0.95	1.00	1.00	1.00
Satd. Flow (prot)	1770	1583	1770	3539	3539	1583
Flt Permitted	0.95	1.00	0.34	1.00	1.00	1.00
Satd. Flow (perm)	1770	1583	638	3539	3539	1583
Volume (vph)	161	100	77	930	720	38
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	175	109	84	1011	783	41
RTOR Reduction (vph)	0	94	0	0	0	8
Lane Group Flow (vph)	175	15	84	1011	783	33
Turn Type		Perm	Perm			Perm
Protected Phases	4			2	6	
Permitted Phases		4	2			6
Actuated Green, G (s)	15.8	15.8	94.2	94.2	94.2	94.2
Effective Green, g (s)	16.8	16.8	95.2	95.2	95.2	95.2
Actuated g/C Ratio	0.14	0.14	0.79	0.79	0.79	0.79
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	248	222	506	2808	2808	1256
v/s Ratio Prot	c0.10			c0.29	0.22	
v/s Ratio Perm		0.01	0.13			0.02
v/c Ratio	0.71	0.07	0.17	0.36	0.28	0.03
Uniform Delay, d1	49.2	44.8	3.0	3.6	3.3	2.6
Progression Factor	1.00	1.00	0.51	0.50	0.33	0.07
Incremental Delay, d2	8.8	0.1	0.6	0.3	0.2	0.0
Delay (s)	58.1	44.9	2.1	2.1	1.3	0.2
Level of Service	E	D	A	A	A	A
Approach Delay (s)	53.0			2.1	1.2	
Approach LOS	D			A	A	

Intersection Summary			
HCM Average Control Delay	8.3	HCM Level of Service	A
HCM Volume to Capacity ratio	0.41		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	43.1%	ICU Level of Service	A
Analysis Period (min)	15		
c Critical Lane Group			

Bluffton Parkway Corridor Study 2025 Design Vols, NORTH ACCESS TOWN CENTE
23: Buckwalter Tn Cntr Dr North & Buckwalter Pkwy 9/29/2006

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0		4.0	4.0		4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	0.97	1.00		1.00	1.00		0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	0.86		1.00	0.92		1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00		0.95	1.00		0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	3433	1609		1770	1723		3433	3539	1583	1770	3539	1583
Flt Permitted	0.95	1.00		0.55	1.00		0.95	1.00	1.00	0.33	1.00	1.00
Satd. Flow (perm)	3433	1609		1018	1723		3433	3539	1583	607	3539	1583
Volume (vph)	400	30	300	30	30	30	400	800	30	30	800	400
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	435	33	326	33	33	33	435	870	33	33	870	435
RTOR Reduction (vph)	0	234	0	0	30	0	0	0	12	0	0	150
Lane Group Flow (vph)	435	125	0	33	36	0	435	870	21	33	870	285
Turn Type	Prot			Perm			Prot		Perm	Perm		pm+ov
Protected Phases	7	4			8		5	2			6	7
Permitted Phases				8					2	6		6
Actuated Green, G (s)	19.8	33.0		8.2	8.2		20.0	77.0	77.0	52.0	52.0	71.8
Effective Green, g (s)	20.8	34.0		9.2	9.2		21.0	78.0	78.0	53.0	53.0	73.8
Actuated g/C Ratio	0.17	0.28		0.08	0.08		0.18	0.65	0.65	0.44	0.44	0.62
Clearance Time (s)	5.0	5.0		5.0	5.0		5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0		3.0	3.0		3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	595	456		78	132		601	2300	1029	268	1563	1026
v/s Ratio Prot	c0.13	0.08			0.02		c0.13	0.25			c0.25	0.05
v/s Ratio Perm				c0.03					0.01	0.05		0.13
v/c Ratio	0.73	0.27		0.42	0.27		0.72	0.38	0.02	0.12	0.56	0.28
Uniform Delay, d1	47.0	33.4		52.9	52.2		46.8	9.7	7.5	19.8	24.8	10.7
Progression Factor	1.00	1.00		1.00	1.00		0.99	0.82	0.66	0.72	0.77	1.36
Incremental Delay, d2	4.6	0.3		3.7	1.1		4.2	0.5	0.0	0.9	1.4	0.1
Delay (s)	51.6	33.7		56.5	53.3		50.6	8.5	5.0	15.1	20.6	14.7
Level of Service	D	C		E	D		D	A	A	B	C	B
Approach Delay (s)		43.5			54.4			22.1			18.5	
Approach LOS		D			D			C			B	

Intersection Summary			
HCM Average Control Delay	26.4	HCM Level of Service	C
HCM Volume to Capacity ratio	0.61		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	16.0
Intersection Capacity Utilization	68.5%	ICU Level of Service	C
Analysis Period (min)	15		
c Critical Lane Group			

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Ideal Flow (vphpl)	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Total Lost time (s)	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0	4.0
Lane Util. Factor	1.00	1.00	1.00	1.00	1.00	1.00	0.97	0.95	1.00	1.00	0.95	1.00
Frt	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85	1.00	1.00	0.85
Flt Protected	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00	0.95	1.00	1.00
Satd. Flow (prot)	1770	1863	1583	1770	1863	1583	3433	3539	1583	1770	3539	1583
Flt Permitted	0.74	1.00	1.00	0.75	1.00	1.00	0.95	1.00	1.00	0.37	1.00	1.00
Satd. Flow (perm)	1378	1863	1583	1392	1863	1583	3433	3539	1583	691	3539	1583
Volume (vph)	230	15	970	25	25	25	1250	680	15	15	820	80
Peak-hour factor, PHF	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Adj. Flow (vph)	250	16	1054	27	27	27	1359	739	16	16	891	87
RTOR Reduction (vph)	0	0	4	0	0	22	0	0	4	0	0	50
Lane Group Flow (vph)	250	16	1050	27	27	5	1359	739	12	16	891	37
Turn Type	Perm		pm+ov	Perm		Perm	Prot		Perm	Perm		Perm
Protected Phases		4	5		8		5	2			6	
Permitted Phases	4		4	8		8			2	6		6
Actuated Green, G (s)	21.0	21.0	74.0	21.0	21.0	21.0	53.0	89.0	89.0	31.0	31.0	31.0
Effective Green, g (s)	22.0	22.0	76.0	22.0	22.0	22.0	54.0	90.0	90.0	32.0	32.0	32.0
Actuated g/C Ratio	0.18	0.18	0.63	0.18	0.18	0.18	0.45	0.75	0.75	0.27	0.27	0.27
Clearance Time (s)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Vehicle Extension (s)	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0	3.0
Lane Grp Cap (vph)	253	342	1055	255	342	290	1545	2654	1187	184	944	422
v/s Ratio Prot		0.01	c0.45		0.01		0.40	0.21			c0.25	
v/s Ratio Perm	0.18		0.22	0.02		0.00			0.01	0.02		0.02
v/c Ratio	0.99	0.05	1.00	0.11	0.08	0.02	0.88	0.28	0.01	0.09	0.94	0.09
Uniform Delay, d1	48.9	40.4	21.8	40.8	40.6	40.1	30.0	4.7	3.8	33.0	43.1	33.0
Progression Factor	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	0.80	0.82	0.60
Incremental Delay, d2	52.7	0.1	26.4	0.2	0.1	0.0	6.1	0.3	0.0	0.9	18.1	0.4
Delay (s)	101.6	40.4	48.2	41.0	40.7	40.2	36.1	5.0	3.8	27.2	53.4	20.2
Level of Service	F	D	D	D	D	D	D	A	A	C	D	C
Approach Delay (s)		58.2			40.6			25.0			50.1	
Approach LOS		E			D			C			D	

Intersection Summary			
HCM Average Control Delay	40.5	HCM Level of Service	D
HCM Volume to Capacity ratio	0.98		
Actuated Cycle Length (s)	120.0	Sum of lost time (s)	8.0
Intersection Capacity Utilization	96.1%	ICU Level of Service	F
Analysis Period (min)	15		
c Critical Lane Group			

Bluffton Parkway Corridor Study 2025 Design Vols, 9/29/2006
North Access Alternative

Arterial Level of Service: NB Buckwalter Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Towne Portrait	II	45	20.9	5.0	25.9	0.19	26.6	C
C6	II	45	30.1	9.2	39.3	0.30	27.9	C
Sea Turtle South	II	45	24.3	2.3	26.6	0.22	30.2	B
Willow Run/C2	II	45	33.7	20.6	54.3	0.35	23.3	C
US 278	II	45	43.2	59.9	103.1	0.49	17.1	D
Total	II		152.2	97.0	249.2	1.56	22.5	C

Arterial Level of Service: SB Buckwalter Pkwy

Cross Street	Arterial Class	Flow Speed	Running Time	Signal Delay	Travel Time (s)	Dist (mi)	Arterial Speed	Arterial LOS
Cinema South	II	45	43.2	23.3	66.5	0.49	26.6	C
Sea Turtle South	II	45	33.7	1.4	35.1	0.35	36.0	A
Buckwalter Tn Cntr D	II	45	24.3	22.3	46.6	0.22	17.2	D
Bluffton Pkwy Phase	II	45	30.1	54.1	84.2	0.30	13.0	E
Total	II		131.3	101.1	232.4	1.37	21.2	D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Appendix 10-E

ACCESS MANAGEMENT PLAN: BLUFFTON PARKWAY

BLUFFTON PARKWAY: PHASE FOUR
TOWN OF BLUFFTON & BEAUFORT COUNTY, SC

Prepared for:

Beaufort County &
Town of Bluffton

Prepared by:

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FINAL SUBMITTAL
OCTOBER 2007

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INTRODUCTION & PROJECT OVERVIEW

INTRODUCTION

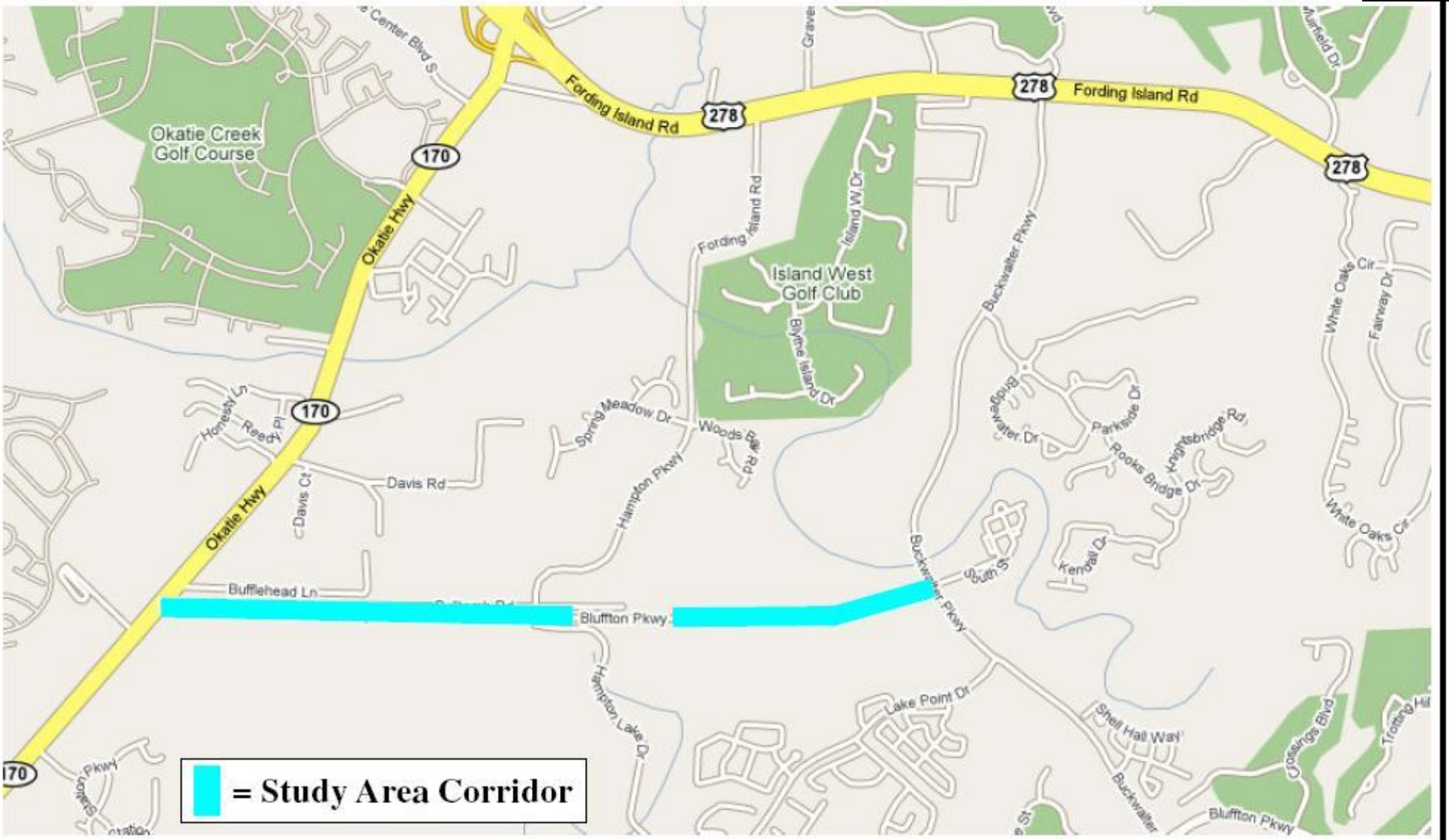
SRS Engineering, LLC (SRS) has been retained by a combination of the Beaufort County Engineering and the Town of Bluffton Planning Departments to complete an analysis of the westerly segment (Phase 4) of the Bluffton Parkway which is an existing/under construction east/west orientated major arterial located in Southern Beaufort County.

As planned by the County's Comprehensive Plan, the Bluffton Parkway will provide a multi-lane divided facility between SC 170 and US 278. This facility is anticipated to serve as an alternative route for both US 278 and SC 46 which are currently the only east/west orientated major roadways in southern Beaufort County. Eventually, it is thought that the Bluffton Parkway will extend west of SC 170 in Beaufort County into Jasper County and eventually access I 95 either directly via a new interchange or indirectly via an existing interchange. This planning is underway as a joint effort between Beaufort and Jasper County's. With or without this extension toward I 95, the importance of the Bluffton Parkway as an east/west corridor is imperative in order to provide for the ability of existing and future traffic flow through southern Beaufort County.

PROJECT OVERVIEW

The segment of the Bluffton Parkway to be studied in this report is the westerly portion of the Parkway referred to as Phase 4. In total, this segment is approximately 2.6-miles in length beginning at the intersection with SC 170 and ending at the intersection with the Buckwalter Parkway. The easterly termini for this report has been assumed to be the recently planned realignment of the Bluffton Parkway where the Phase 4 segment will intersect the Buckwalter Parkway in the form of a 4-legged signalized intersection, opposite the Phase 5B segment resulting in the Bluffton Parkway as a continuous east/west orientated roadway.

The purpose of this study is to review this segment of the Bluffton Parkway (Phase 4) and define appropriate locations for development access which will be concentrated at signalized intersections. By properly planning these access points and strategically locating future signals along this corridor, the greatest roadway capacity will be achieved while providing good access to development which will be forth coming in the near future. **Figure 1** illustrates the general section of the Bluffton Parkway studied within this report.



NOT TO SCALE

Figure 1

STUDY AREA LIMITS

Bluffton Parkway Access Management: Bluffton, SC

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FUTURE CONDITIONS

To estimate the traffic flow conditions under Future conditions, the County's newly updated transportation model has been utilized which reflects the anticipated traffic loadings for the Year 2025. Traffic volumes on the roadway network at this time will include all existing traffic, traffic due to normal growth and traffic due to anticipated development in the area as well as all planned roadway improvements anticipated to be completed as stated in the County's transportation plan/model.

TRAFFIC VOLUME PROJECTIONS

The daily traffic volume projections were obtained from the County's Transportation model for the year 2025 for the segment of the Bluffton Parkway being studied.

According to the County's Transportation model, the Phase 4 segment of the Bluffton Parkway is anticipated to serve between 22,000-26,000 vehicles per day (vpd). **Table 1** depicts the daily volumes for the Bluffton Parkway as are contained in the County's E+C (existing plus committed) model assignment. For comparative purposes; the adjacent roadways/segments of US 278 to the north and SC 46 to the south (parallel to the Bluffton Parkway Phase 4) have also been presented.

Table 1
2025 DAILY TRAFFIC VOLUMES
Buckwalter Parkway Access Management

Arterial Roadways	Segments	Daily Two-Way Traffic Volume (vpd)[1]
Bluffton Parkway	Between SC 170 and Hampton Parkway	22,865
	Between Hampton Parkway and Buckwalter Parkway	26,630
US 278	Between SC 170 and Hampton Parkway	87,001
	Between Hampton Parkway and Buckwalter Parkway	85,127
SC 46	West of Old Miller Road	20,449
	East of Old Miller Road	20,630

1. Source: WSA Transportation Model completed for Beaufort County.
vpd=Vehicles-per-day.

As shown by the table, the fourth phase of the Bluffton Parkway is anticipated to serve a high of 26,630 vpd within the defined study area. However, it should be noted that just to the east of the study area, the daily volume is expected to increase to 32,200 vpd (east of the Buckwalter Parkway). Other volumes in the area indicate that US 278 is expected to serve over 87,000 vpd in the vicinity of McGarvey's Corner and SC 46 is anticipated to be greater than 20,000 vpd west of the Buckwalter Parkway intersection.

TRAFFIC OPERATIONS

To assess quality of flow, capacity analyses were conducted to provide an indication of how well the study area intersections and roadway segments are anticipated to serve future traffic demands. The following provides a description of the methodology utilized to complete these analyses.

Roadway Segments

The determination of how a roadway segment serves traffic is an investigation of multiple factors including roadway geometry, number of operating lanes, provision of auxiliary lanes (left-turn & right-turn), traffic volumes and directional splits of traffic, access drives per mile, and the separation of signalized intersections. These factors result in an assignment of arterial speed and level of service which is used to assess the roadway operations.

In reviewing the existing and future roadway system within southern Beaufort County, three important east/west corridors are prevalent; US 278 and SC 46 as existing facilities and the Bluffton Parkway as a proposed facility. These three roadways, according to the County's transportation model will serve a total of over 134,000 vpd in the western region of southern Beaufort County. Given the importance of serving traffic flow via the east/west orientated corridors, it can be determined that all three of the corridors are extremely important to the flow of traffic through the area where the Bluffton Parkway is the second most used facility (based on the estimates) which will require proper planning and intersection spacing in order to serve the estimated flows.

Signalized Intersection Spacing

The proper spacing of traffic signals along the Bluffton Parkway will be critical so that the corridor can provide the greatest/most efficient capacity possible. Without proper spacing, vehicle queues may be created which back into/through adjacent intersections resulting in a "gridlock" pattern which causes a significant degradation in roadway capacity and traffic flow. According to access management guidelines, the ideal spacing of signalized intersections along a major arterial such as the Bluffton Parkway is ideally 2,640-feet or a 1/2-mile (ref. *Access Management Manual*, TRB). This separation provides a progression speed ranging between 30 and 40 miles-per-hour (mph).

However, this spacing may not be achievable in all circumstances due to constraints such as topography, environmental issues/wetlands, etc. While the most advantageous separation is 1/2-mile and should be provided if feasible, shorter separation distances of 1,500-1,700-feet will allow progressions speeds along the Bluffton Parkway that are in the 30 mph range.

In planning signal locations, one must also account for the classification of roadways that intersect the corridor. For instance, when interesting a major roadway/arterial which presumably serves a large volume of traffic, separation to the next adjacent intersection(s) is extremely important so that vehicle speeds and resulting queues/stacking do not interfere with the operations of adjacent traffic signal.

Review of the Bluffton Parkway corridor and the limited number of submitted traffic studies begins to identify some logical intersections for installation of traffic signal control when/if the intersection meets the criteria for traffic signal control (warrants). Three intersections are obviously going to be placed under traffic signal control; the intersection of Bluffton Parkway at SC 170, Bluffton Parkway at Hampton Hall and Bluffton Parkway at Buckwalter Parkway. Between these three obvious intersections, additional points of access will be required which will be both signalized and unsignalized intersections. Signalized intersections should provide separation distances as suggested in prior sections of this report. In planning the location of major intersections along the Bluffton Parkway, requested/conceptual drive locations as well as major wetland locations were reviewed/accounted for. **Table 2** depicts the approximate spacing of anticipated major intersections along the Bluffton Parkway using SC 170 as the starting point.

Table 2
MAJOR (SIGNALIZED) INTERSECTION SPACING
Bluffton Parkway Access Management

Corridor	Major Intersecting Cross Streets (Signal Locals)	Separation (Feet)	Cumulative Distance to SC 170 (Feet)
Bluffton Parkway	SC 170	0	0
	Lawton Station Access (Relocated East)	1,750	1,750
	Sandhill Tract	2,100	3,850
	Hampton Parkway	2,450	6,300
	Parcel 10B	2,550	8,850
	Parcel 12A & 12 B	2,600	11,450
	Buckwalter Parkway	2,200	13,650

As shown, seven major intersections are planned/suggested along this section (Phase 4) of the Bluffton Parkway. Given that the entire corridor being studied is approximately 13,650-feet (2.6-miles), the suggested separation of the major intersections is typically between 2,000-feet to 2,600-feet with the exception of the distance between SC 170 and the Lawton Station access (1,750-feet). It should be noted that it is suggested that the Lawton Station access be located as far to the east in order to obtain a maximum separation from SC 170 as is possible.

While the separation between the Lawton Station access and SC 170 is approximately 1,800-feet, which is less than the ideal ½-mile spacing, the location of this potential signalized intersection will provide access to multiple parcels/developments on both the north and south side of the Bluffton Parkway. If located further to the east, the ideal separation distances to the intersection with Hampton Parkway would be impacted.

As these intersections are planned, it is imperative that the approaches to the Bluffton Parkway provide sufficient width and geometry to accommodate future traffic loadings. Implementation of traffic signal control should only be considered after a detail study has been completed which identifies that a traffic signal is warranted. Under no circumstances should a future intersection, which will be signalized, permit/allow split phasing for the minor street approaches. This can be avoided by providing sufficient driveway widths, storage length and throat lengths. Approaches should account for the fact that each signalized intersection will be a four-legged intersection and that through movements should be made from a separate lane. Under all circumstances, left-turn and right-turn deceleration lanes should be provided along/within the Bluffton Parkway at each signalized intersection. If needed/warranted, dual left-turn lanes may be needed depending on the development specifics of a particular site.

DEVELOPMENT ACCESS/CONNECTIVITY

In order to maintain traffic flow on the Bluffton Parkway, the location of signalized intersections must be properly planned and maintained. As such, not all access points will be allowed signalization at "front door" locations along the frontage of the site.

With this, the planning of limited access/unsignalized access points and good connectivity between developments is critical so that drivers can travel from one facility to another without having to get on the Bluffton Parkway and to allow access for traffic to one of the planned signalized intersections.

Connectivity is especially important for many of the parcels along the Bluffton Parkway due to development parcel size and environmental constraints. For parcels which front US 278, connectivity to the Bluffton Parkway is critical as the approved access plan for US 278 limits full-access movement drives and signalized intersections.

Unsignalized Access Points

In addition to the planning of signalized intersections, locations for unsignalized intersections have also been identified along the length of the corridor. In general, these suggested locations are located between the suggested locations of the traffic signals and will presumably prohibit left-turns from the minor street approaches at a minimum. **Table 3** illustrates the location of each access along the Phase 4 segment of the Bluffton Parkway.

Table 3
INTERSECTION SPACING
Bluffton Parkway Access Management

Corridor	Intersecting Cross Streets	Separation (Feet)	Cumulative Distance to SC 170 (Feet)
Bluffton Parkway	SC 170	0	0
	Parcels 8B-1& 8C (Right-In/Right-Out North Side, Right-In/Right-Out/Left-In South Side)	750	750
	Lawton Station Access	1,000	1,750
	Right-In/Right-Out/Left-In	1,000	2,750
	Sandhill Tract	1,100	3,850
	Right-In/Right-Out	1,200	5,050
	Hampton Parkway	1,250	6,300
	Parcel 10C (Right-In/Right-Out)	1,450	7,750
	Parcel 10B	1,100	8,850
	Parcel 10B (Right-In/Right-Out/Left-In)	1,350	10,200
	Parcel 12A & 12B	1,250	11,450
	Sandy Pointe Connection (Right-In/Right-Out)	1,500	12,950
	Buckwalter Parkway	700	13,650

Suggestions to provide for and/or enhance connectivity and allow access to/from developments are depicted by **Figure 2-A** and **B** for the Bluffton Parkway Phase 4 segment and briefly described below:

N

NOT TO SCALE

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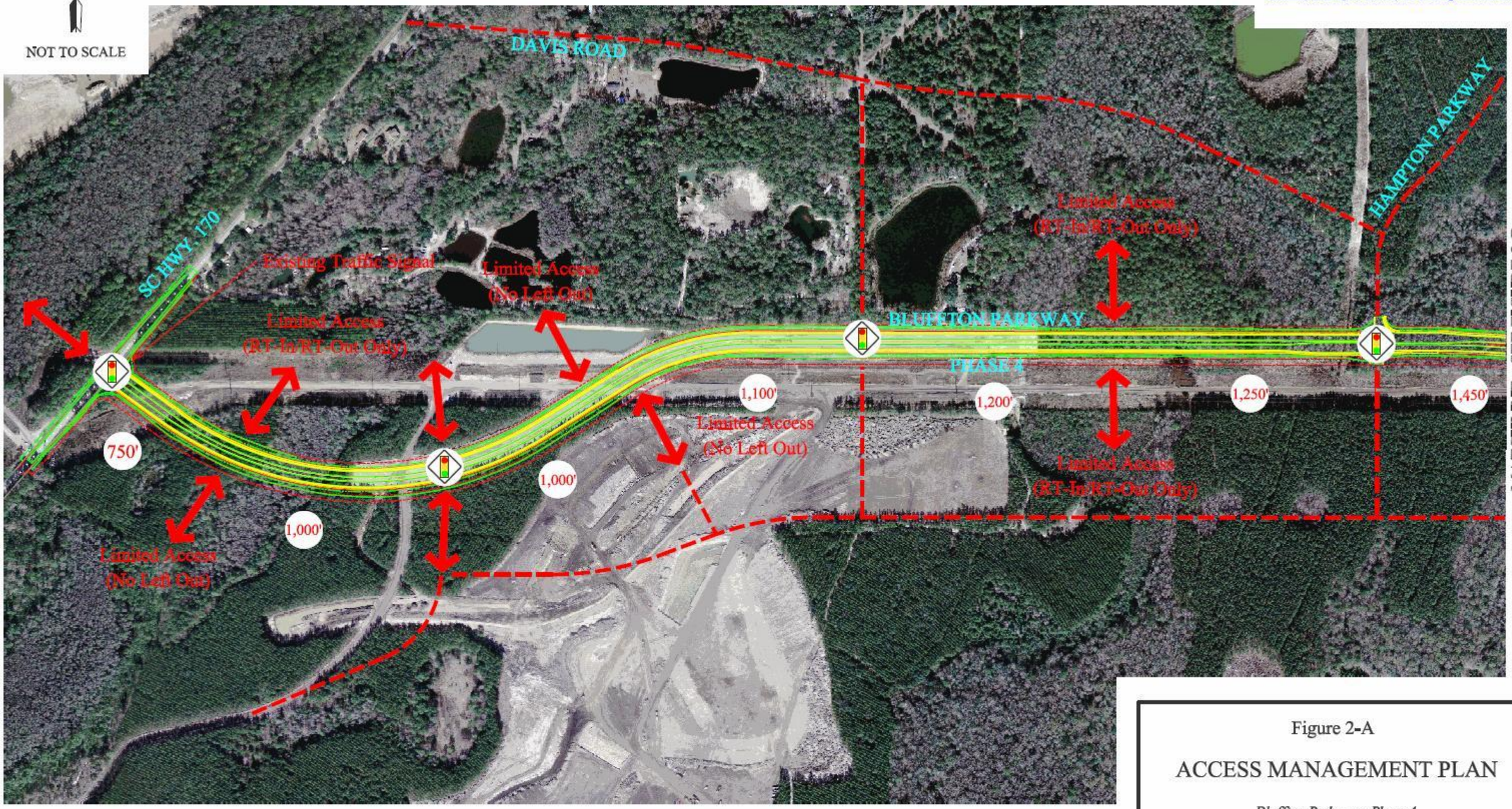

Figure 2-A

ACCESS MANAGEMENT PLAN

Bluffton Parkway: Phase 4
Bluffton, SC

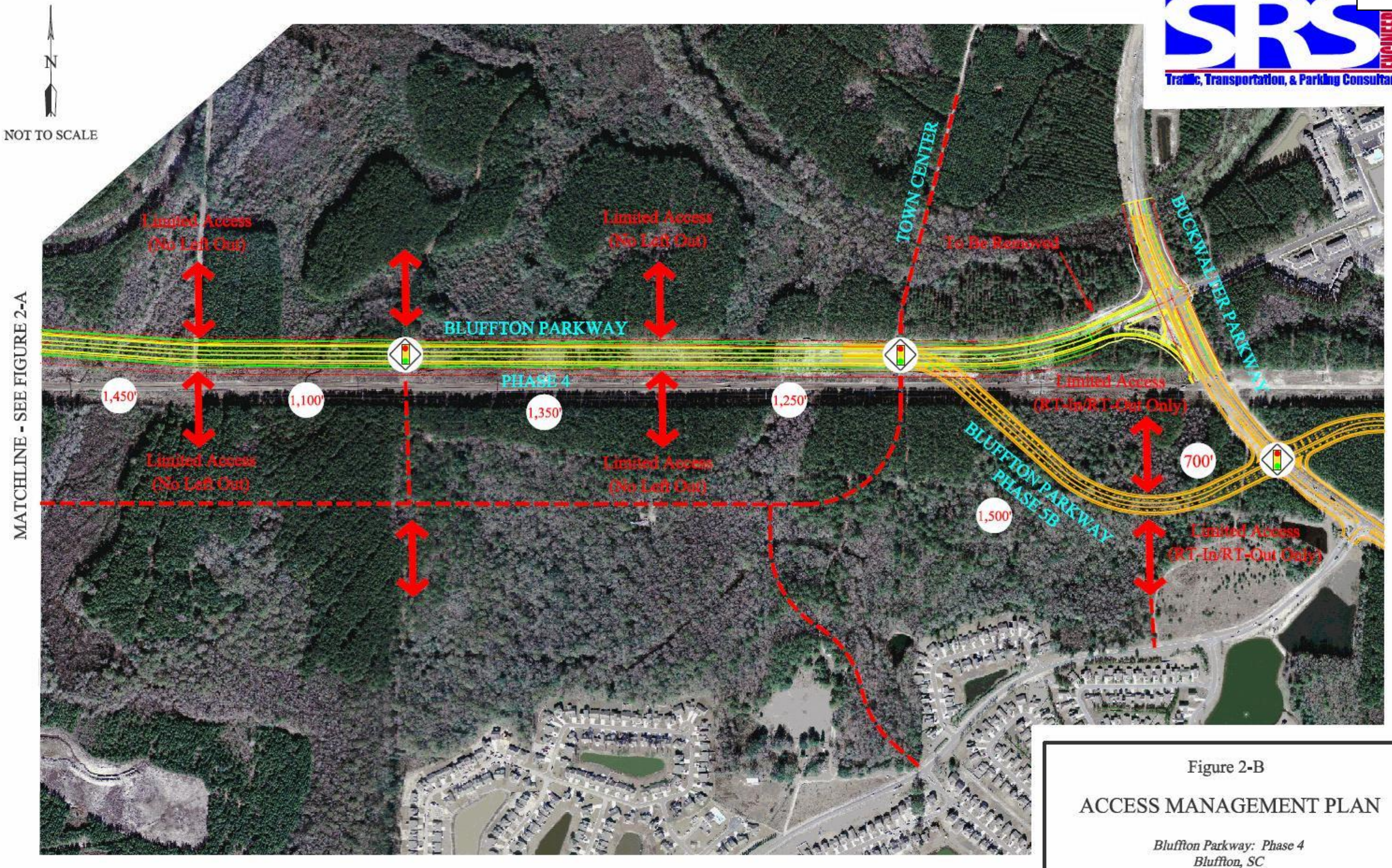

Figure 2-B

ACCESS MANAGEMENT PLAN

Bluffton Parkway: Phase 4
Bluffton, SC

- **Parcels 8B-1 & 8C-** A new intersection to be planned as part of the development along the eastern side of SC 170. This access is planned to be located approximately 750-feet east of SC 170 and will be an unsignalized intersection to due its proximity to the planned signalization of the SC 170 intersection. Based on the location of this access, the access drives that this development proposes to SC 170 and the connectivity suggested to the Lawton Station access, this access should be restricted to right-in/right-out movements only on the north side of the Bluffton Parkway and right-in/right-out/left-in (westbound left-turn only). Full access or signalization of this intersection would result in safety and capacity constraints at this intersection and the adjacent signalized intersection of SC 170. This will be especially evident if/when the Bluffton Parkway is extended towards the west. Vehicles exiting the respective sites on the north and south side of the Bluffton Parkway should be placed under STOP sign control. It should be noted that the westbound left-turn in movement is being allowed while the eastbound left-in is not. The main reasoning for prohibiting the eastbound left-turn is due to the proximity to the SC 170 intersection which is anticipated to provide dual left-turns in the westbound direction which may result in over-lapping left-turns if left-turns are provided in the eastbound direction entering this access.

- **Unsignalized Access (Undefined)-** A new intersection planned between the two signalized intersections of Lawton Station and Hampton Lake. This access is planned to be located approximately 1,000-feet east of the Lawton Station access and will be an unsignalized intersection. This access should be restricted to right-in/right-out and left-turn in movements only (prohibit left-turns out from the minor approaches). Vehicles exiting the respective sites on the north and south side of the Bluffton Parkway should be placed under STOP sign control.

- **Unsignalized Access (Undefined)-** A new intersection planned between the two signalized intersections of Hampton Lake and Hampton Parkway. This access is planned to be located approximately 1,200-feet east of the Hampton Lake access and will be an unsignalized intersection. This access should be restricted to right-in/right-out movements only (prohibit left-turns out from the minor approaches). Vehicles exiting the respective sites on the north and south side of the Bluffton Parkway should be placed under STOP sign control.

- **Parcel 10C-** A new intersection planned between the two signalized intersections of the Hampton Parkway and Parcel 10B. This access is planned to be located approximately 1,450-feet east of the Hampton Parkway and will be an unsignalized intersection. This access should be restricted to right-in/right-out and left-turn in movements only (prohibit left-turns from the minor approaches). Vehicles exiting the respective sites on the north and south side of the Bluffton Parkway should be placed under STOP sign control.

- **Parcel 10B-** A new intersection planned between the two signalized intersections of the Parcel 10B and the proposed Bluffton Technical Center. This access is planned to be located approximately 1,350-feet east of the parcel 10-B signalized intersection and will be an unsignalized intersection. This access should be restricted to right-in/right-out and left-turn in movements only (prohibit left-turns from the minor approaches). Vehicles exiting the respective sites on the north and south side of the Bluffton Parkway should be placed under STOP sign control.

- **Sandy Pointe-** A new intersection planned 700-feet to the west of the Buckwalter Parkway. This access should be restricted to right-in/right-out movements. Left-turns into the parcel should not be allowed from the Bluffton Parkway due to the proximity of the signalized intersection with Buckwalter Parkway to the east of this access. Vehicles exiting the site on the south side of the Bluffton Parkway should be placed under STOP sign control.

Each of these intersections should be planned/constructed with adequate deceleration lanes along/within the Bluffton Parkway. The restriction of left-turn movements exiting the access drives should be accomplished by three methods; the raised median within the Bluffton Parkway, the construction of a raised delta median within each of the access drives and appropriate signage and stripping.

Connectivity off of the Bluffton Parkway will provide for the ability to move from parcel to parcel and to access traffic signals along the corridor. Examples of a connector roadway are shown along the southerly side of the Bluffton Parkway which will basically extend from Lawton Station to the Sandy Pointe connector at the planned signalized intersection with the Bluffton Technical Center. Other connectivity proposals including the extension of Davis Road to the Hampton Parkway and the connectivity of the Bluffton Technical Center to the Hampton Parkway are indicted by Figure 2.

CONCLUSIONS

This report has been prepared in an effort to plan major access points/signalized intersections along the section of the Bluffton Parkway between SC 170 and the Buckwalter Parkway.

Based on the current configuration, two intersections are recommended for installation of traffic signal control which are the limits of the Phase 4 section of the Bluffton Parkway; SC 170 and Buckwalter Parkway. The planning of access drives between these two signalized has been based on access management practices outlined in the *Access Management Manual*, TRB, 2003 and potential development activity along the Parkway.

A total of seven potential traffic signals have been suggested along this section of the Bluffton Parkway which include the two ends being SC 170 and the Buckwalter Parkway. Given the length of this section of the parkway, the average spacing for each signalized intersection is 2,275-feet or approximately four-tenths of a mile. Between each signalized intersection, potential limited access drives have been suggested which are either limited to right-turn in/right-turn out movements only or in some instances allow left-turns from the major roadway, but prohibiting left-turns from the minor approaches.

Connectivity suggestions have been provided along both the north and south sides of the Bluffton Parkway. Along the south, connectivity is suggested between Lawton Station and the Sandy Pointe sub-division. This connector roadway would be constructed on new location and would be completed as development comes on line. On the north side of the Bluffton Parkway, connectivity is suggested by the extension of Davis Drive to the Hampton Parkway and then by providing a connection from the Technical Center to Davis Drive.

While projections of individual operations at intersections are not possible at this time, it is anticipated that as long as the intersections are planned with appropriate geometrics and cross-sections, operations along this section of the parkway should be good given the daily traffic volumes as projected by the County's transportation model.


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APPENDIX 11-A: INVENTORY OF PARK AND RECREATION FACILITIES
Northern Beaufort County

Park	Jurisdiction	Acreage	Baseball/Softball Field	Soccer Fields	Football Fields	Outdoor Basketball Court	Tennis Court	Picnic Area	Community Center Building	Gymnasium	Swimming Pool	Playground	Restroom Facility	Notes – Other Facilities
Port Royal Island														
Pocket Parks														
Anchor park	Town of Port Royal	0.3												
Battery Saxton	City of Beaufort	1.3												Undeveloped
Buoy Park	Town of Port Royal	0.2												
Calhoun Thomas Park	City of Beaufort	0.5												
Cannon Park	City of Beaufort	0.3												
Charles Knott Park	City of Beaufort	0.9												
Cypress Point/Cypress Park	Town of Port Royal	2.7												Boardwalks
Dowling Park Pond	City of Beaufort	1.2												
Horse Hole Park	City of Beaufort	0.7												
Horse Trough Park	City of Beaufort	0.1												
Kate Gleason Park	Beaufort Memorial Hospital	3.0												
Lenora Drive Park	Town of Port Royal	0.8										1		
Little Park	City of Beaufort	0.1												
Logan Park	City of Beaufort	0.2												
Lovejoy Park	City of Beaufort	0.9												
Master Barnwell Bluff/Bellamy Curve	City of Beaufort	2.4												
Morrall Park	City of Beaufort	0.4												
Mossy Oaks Playground	City of Beaufort	0.4										1		
Secession Park	City of Beaufort	0.1												
Tic Toc Playground	City of Beaufort	0.4										1		
Wilson Park	City of Beaufort	0.7												
YMCA Marsh (Cypress Wetlands)	YMCA	8.5												Boardwalk
Washington Street Playground	City of Beaufort/Non-profit	1.2										1		
Neighborhood Parks														
Arthur Horne Nature Park	Beaufort County	17												
Bob Jones Park	Beaufort County	5	3	1		1						1	1	
John Parker Park (Casablanca)	Town of Port Royal	3.2				1		1				1		
Grays Hill Community Center	Beaufort County	1				1						1		
Live Oak park	Town of Port Royal	2.3				1	1	1				1		
National Street Field/Annette Bryant	Beaufort County/City of Beaufort	4	1	1								1		
Naval Heritage Park	Town of Port Royal	5.5												Skate Park, Walking Trails
Pigeon Point Boat Landing/Pinckney Pk.	City of Beaufort	2.5						1						Dock, Boardwalk
Pigeon Point Park	City of Beaufort	7.8						1				1	1	
Port Royal Community Arts Center	Beaufort County	7	1		1				1			1		
Shell Point Park	Beaufort County	14.8		2			2					1		Walking Trail
Southside Tennis Courts		4					2							
Community Parks														
Basil Green Park	Beaufort County	8	3	2									1	
Green Street Neighborhood Activity Center/Bladen St. Tennis Courts	Beaufort County	7				1	7		1	1	1	1		
Mink Point Recreation Center	Beaufort County	10	1	1					1	1				
Sands Beach	Town of Port Royal/Beaufort County	3.5												Boardwalk/Boat Ramp/Beach
Regional Parks														
Burton Wells County Park	Beaufort County	312	5	3	2	1		1	1	1		2	2	2 Raquetball Courts, Fitness Center
Waterfront Park (includes Freedom Park)	City of Beaufort	8						1				1	1	
Lady's Island														
Neighborhood Parks														
Broomfield Center	Beaufort County	2	1			1			1			1		
Coosaw Center	Beaufort County	2							1			1		
St. Helena Island														
Neighborhood Parks														
Scott Community Center	Beaufort County	11	1	1		1	1		1			1		
Gloria Potts Park (Seaside Center)	Beaufort County	10				1			1			1		
Community Parks														
St. Helena Park	Beaufort County	35	2		1	1	1					2		
Special Use Parks														
Hunting Island State Park	State of South Carolina	5000						2					3	Campground, cabins, boardwalk, fishing pier, nature center. trails
Sheldon														
Neighborhood Parks														
Agnes Major Center	Beaufort County	4.6	1			1			1			1		
Booker T. Washington Center	Beaufort County	3				1			1			1		
Dale Center	Beaufort County	10	1			1			1			1		

Southern Beaufort County

Park	Jurisdiction	Acreage	Baseball/Softball Field	Soccer Fields	Football Fields	Outdoor Basketball Court	Tennis Court	Picnic Area	Community Center Building	Gymnasium	Swimming Pool	Playground	Restroom Facility	Notes – Other Facilities
Greater Bluffton														
Neighborhood Parks														
Old M.C. Riley Baseball Complex	Beaufort County	4	1	2		1		1					1	Concession bldg.
McCracken Stadium	Leased from School District/ Operated and Maintained by Beaufort County	6		1							1		1	Concession bldg., grandstands, indoor pool
Oyster Factory	Jointly owned by Town of Bluffton and Beaufort County/Operated and Maintained by Beaufort County	5						1					1	Kayak Landing
Community Parks														
Oscar Frazier Park	Owned by the Town of Bluffton/ Operated and Maintained by Beaufort County	32	3	1				1	1				1	Concession bldg.
Bluffton Center	Beaufort County	20		1		1	2		1	1			1	
Pinckney Colony Reserve	Beaufort County	38						1						
Regional Parks														
Buckwalter Park	Owned by the Town of Bluffton/Operated and Maintained by Beaufort County	142		3				1				1	1	Concession bldg. (only phase I is complete
Special Use Parks														
Victoria Bluff	SCDNR	1255												
Pinckney Island Wildlife Refuge	Boat Landing Beaufort County/US Fish and Wildlife	970												
Shults Nature Preserve		100												
Hilton Head Island														
Neighborhood Parks														
Old Schoolhouse	Beaufort County	3												
Green Shell Park	Owned by Town of Hilton Head Island/Operated and Maintained by Beaufort County	3				2								
Community Parks														
Barker Field	Owned by Town of Hilton Head Island/Operated and Maintained by Beaufort County	20	4	2	2							1	1	
Island Recreation Center	Operated by a non-profit association/Subsidized by Beaufort County and the Town of Hilton Head	6			1	4		1	1	1	1	1		2 volleyball courts
Jarvis Creek Park	Owned by the Town of Hilton Head/Administered by Island Rec Center/Maintained by Town of Hilton Head Island and Beaufort County	56						1	1			1	1	
Crossings Park	Owned by the Town of Hilton Head Island/Operated and Maintained by Beaufort County	74	4	1	1			1				1	1	Skate park, outdoor hockey
Chaplin Community Park	Owned by the Town of Hilton Head Island/Operated and Maintained by Beaufort County	67			3	2	6	1				1	1	
Regional Park														
Beaufort County School Complex	School District	12		6	4	5	10	1		4		3		Running track, volleyball court
Special Use Parks														
Shelter Cove Park	Town of Hilton Head Island	8						1						
Fish Haul Park	Town of Hilton Head Island	31										1	1	
Folly Field Beach Park	Town of Hilton Head Island	1											1	Boardwalk
Islander's Beach Park	Town of Hilton Head Island	13										1	1	
Alder Lane Beach Park	Town of Hilton Head Island	1											1	
Malphrus Beach Park	Town of Hilton Head Island	7												
Coligny Beach Park	Town of Hilton Head Island	8											1	Office and boardwalk
Cordillo Courts	Owned by Town of Hilton Head/Operated and Maintained by Island Rec Center	2												
Driessen Beach Park	Town of Hilton Head Island	15										1	1	Office and boardwalk
Xeriscape Interpretive Garden	Town of Hilton Head Island	3												
Honey Horn	Town of Hilton Head Island	69							1					
Northridge	Town of Hilton Head Island	70												

Appendix 12-A: 10-Year Capital Improvements Plan

Item #	Title of Project	Item Cost	Project Rollup Cost	Priority	CIP Expenditures 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Funding Sources	Annual Operating Expenses: Salaries and Benefits	Facility O&M Cost	Total	Effective Date
	Public Safety																		
1	**Public Safety Misc. Improvements**		$1,383,866		**$1,383,866**														
	Detention Center - Create additional housing Capacity	$150,000		1												$0	$0	$0	
	Animal Control Improvements (Small Building)	$753,866		3												$0	$0	$0	
	Administration Building - Security improvements	$270,000		1												$0	$0	$0	
	Myrtle Park Bluffton Office - Security Improvements	$85,000		1												$0	$0	$0	
	Rear Chemical Storage Building (Up-Fits)	$25,000		2												$0	$0	$0	
	New Helicopter Hangar (Up-Fits)	$100,000		3												$0	$0	$0	
2	**Courthouse - Security system replacement, exterior improvements**	$1,100,000	$1,100,000	1	**$1,100,000**											$0	$0	$0	
3	**Animal Shelter - Southern Beaufort County**		$4,600,000			**$4,600,000**													
	Construction of a 24,000 sf Facility	$3,600,000		2												$558,000	$400,000	$958,000	2011
	Land (10 acres)	$1,000,000		2												$0	$0	$0	
4	**Detention Center Expansion - Property**		$3,000,000			**$3,000,000**													
	Purchase alternate housing site	$350,000		1												$0	$0	$0	
	Design of duplex apartment	$110,000		1												$0	$0	$0	
	Construction of duplex apartment	$1,716,000		1												$0	$0	$0	
	Buy Smith property	$300,000		1												$0	$0	$0	
	Relocate residents	$24,000		1												$0	$0	$0	
	Realign Marsh Drive	$250,000		1												$0	$0	$0	
	A&E Fees	$250,000		1												$0	$0	$0	
5	**Detention Center Expansion - Construction**		$10,000,000	1												$1,500,000	$500,000	$2,000,000	2014
	A&E Fees	$1,000,000				**$1,000,000**													
	Construction	$9,000,000					**$9,000,000**												
6	**LEC, EM, EMS and MIS Complex @ $43,863,234**																		
	24 Acres for LEC, EM, EMS and MIS Complex	$15,600,000	$15,600,000	1	**$15,600,000**														
	Demo & Site Work for LEC, EM, EMS and MIS Complex	$1,982,304	$1,982,304	1		**$1,982,304**													
	Construction 70,000 sf for LEC & EM Facility	$17,500,000	$17,500,000	1		**$17,500,000**										$60,000	$90,000	$150,000	2012
	Sheriff's Office (50,000 sf)																		
	Emergency Management Center (20,000 sf)																		
	Construction 35,000 sf for EMS & MIS Facility	$8,356,000	$8,356,000	1			**$8,356,000**												
	EMS (17,500 sf) - Relocation of Existing Facility															$0	$0	$0	2012
	MIS (17,500 sf) - Relocation of Existing Facility															$0	$50,000	$50,000	2012
	A&E Fees		$1,500,000	1															
	LEC	$1,000,000			**$1,000,000**														
	EMS	$500,000				**$500,000**													
	Sale of Depot Road Facility	($500,000)	($500,000)	1			**($500,000)**									$0	($50,000)	($50,000)	2012
	Arthur Horne Building		$2,450,000	1		**$2,450,000**													
	Building Improvements for Magistrates	$2,450,000														$0	$15,000	$15,000	2011
7	**EMS Facilities within Fire Stations**																		
	2010		$791,000			**$791,000**													
	EMS Station Palmetto Bluff - New Fire Station	$416,000		2												$346,856	$10,568	$357,424	2011
	EMS Station Lady's Island - LISH FD HQ Renovations	$375,000		2												$346,856	$10,188	$357,044	2011
	2014		$440,000							**$440,000**									
	EMS Station Burton Area - New Fire Station	$440,000		2												$348,581	$15,548	$364,129	2015
	Subtotal	**$68,203,170**																	
	DSN																		
8	**DSN - Build 2 New CTH Homes North of the Broad River**		$820,928		**$820,928**														
	Replacement of Ivy Lane CTH Home	$410,464		1												$0	$0	$0	2010
	Replacement of Broad River CTH Home	$410,464		1												$0	$0	$0	2010
9	**DSN - Purchase 5 Apartments/Townhouses for Supported Living**	$725,000	$725,000	2	**$725,000**										$1M from SCDDSN	$135,047	$30,293	$165,340	2011
															Remainder from				
10	**DSN - Build 2 New CTH Homes in Bluffton**		$842,928												Fed & State				
	Bluffton 1	$421,500		1		**421,500**									Grants & G.O.	$155,931	$79,607	$235,538	2011
	Bluffton 2	$421,428		2			**421,428**								Bonds	$155,931	$79,607	$235,538	2012

Appendix 12-A: 10-Year Capital Improvements Plan

Item #	Title of Project	Item Cost	Project Rollup Cost	Priority	CIP Expenditures 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Funding Sources	Annual Operating Expenses: Salaries and Benefits	Facility O&M Cost	Total	Effective Date
11	**Administration Building / Program Building - Funded in 2008 CIP**	$0	$0												2008 CIP	$140,000	$50,000	$190,000	2009
	Subtotal	**$2,388,856**																	
	Emergency Management																		
12	**Misc. Improvements**		$1,835,000			**$1,835,000**													
	TMC Cameras	$400,000		3												$0	$10,000	$10,000	2011
	Mobile Data Computer Replacements	$500,000		3												$0	$0	$0	2011
	ITS Camera Installation (Hurricance Evacuations)	$500,000		3												$0	$10,000	$10,000	2011
	Automatic Vehicle Locator	$435,000		3												$0	$49,500	$49,500	2011
13	**Radio Central Control System Replacement, Phase I & II**		$9,000,000																
	Phase I	$5,300,000		1		**5,300,000**										$0	$451,000	$451,000	2011
	Phase II	$3,700,000		1			**$3,700,000**									$0	$167,000	$167,000	2011
14	**Computer Aided Dispatch (CAD) Replacement**	$5,000,000	$5,000,000	1				**$5,000,000**											
15	**Outdoor Warning System - Funded in 2008 CIP**	$0	$0	1											2008 CIP	$0	$22,240	$22,240	2009
	Subtotal	**$15,835,000**																	
	Boat Landings																		
16	**Boat Landings - 2009**		$1,650,000		**$1,650,000**														
	White Hall Boat Landing - Parking Improvements	$750,000		2												$0	$1,000	$1,000	2010
	Port Royal Boat Landing - Parking Improvements	$750,000		2											DNR Funds /	$0	$1,000	$1,000	2010
	Alljoy Boat Landing - Float/dock system improvements	$150,000		2											G.O. Bonds	$0	$1,000	$1,000	2010
17	**Boat Landings - 2010**		$650,000			**$650,000**													
	White Hall Boat Landing - Ramp/Float/Dock Improvements	$325,000		2											DNR Funds /	$0	$1,000	$1,000	2011
	Wallace Creek Boat Landing - Ramp/Float/Dock	$325,000		2											G.O. Bonds	$0	$1,000	$1,000	2011
18	**Boat Landings - 2011**		$1,975,000				**$1,975,000**												
	Station Creek Boat Landing - Ramp/Float/Dock	$150,000		2												$0	$1,000	$1,000	2012
	Hilton Head Island - New Facility	$1,500,000		3											DNR Funds /	$0	$1,000	$1,000	2012
	C.C. Haigh Jr. Boat Landing - Ramp/Float/Dock	$325,000		2											G.O. Bonds	$0	$1,000	$1,000	2012
19	**Boat Landings - 2012**		$3,250,000					**$3,250,000**											
	Alljoy Boat Landing - Parking Improvements	$1,000,000		2												$0	$1,000	$1,000	2013
	Lady's Island (Whitehall) Boat Landing - Parking Improvements	$750,000		2												$0	$1,000	$1,000	2013
	Fort Frederick Access Road Improvements	$750,000		2											DNR Funds /	$0	$1,000	$1,000	2013
	Sands Boat Landing - Parking Improvements	$750,000		2											G.O. Bonds	$0	$1,000	$1,000	2013
20	**Boat Landings - 2013**		$3,000,000						**$3,000,000**										
	May River Boat Landing - New Facility	$1,800,000		3											DNR Funds /	$0	$1,000	$1,000	2014
	Station Creek Boat Landing - Parking Improvements	$1,200,000		2											G.O. Bonds	$0	$1,000	$1,000	2014
21	**Boat Landings - 2014**		$2,600,000							**$2,600,000**									
	Broad River Boat Landing - New Facility	$2,000,000		3											DNR Funds /	$0	$1,000	$1,000	2015
	Sams Point Boat Landing - Parking Improvements	$600,000		2											G.O. Bonds	$0	$1,000	$1,000	2015
22	**Boat Landings - 2015**		$2,850,000								**$2,850,000**								
	New River Boat Landing - New Facility	$1,500,000		3												$0	$1,000	$1,000	2016
	Brickyard Point Boat Landing - Parking Improvements	$600,000		2											DNR Funds /	$0	$1,000	$1,000	2016
	Russ Point Boat Landing - Parking Improvements	$750,000		2											G.O. Bonds	$0	$1,000	$1,000	2016
23	**Boat Landings - 2016**		$3,050,000									**$3,050,000**							
	Okatie River - New Facility (Access from SC 170)	$750,000		3												$0	$1,000	$1,000	2017
	Grays Hill Boat Landing - Parking Improvements	$800,000		2											DNR Funds /	$0	$1,000	$1,000	2017
	Combahee Boat Landing - New Facility	$1,500,000		3											CIP G.O. Bonds	$0	$1,000	$1,000	2017
24	**Boat Landings - 2017**		$2,500,000										**$2,500,000**						
	Warsaw Island Boat Landing - New Facility	$1,000,000		3											DNR Funds /	$0	$1,000	$1,000	2018
	Village or Coffin Creek - New Facility	$1,500,000		3											G.O. Bonds	$0	$1,000	$1,000	2018
	Subtotal	**$21,525,000**																	
	Public Works																		
25	**PW - CIP**		$2,442,000																
	Storm Water Utility - New Addition	$227,000		2	**$227,000**										Stormwater Utility	$0	$0	$0	2010
	Grounds Maintenance - New Office Building	$340,000		2	**$340,000**										G.O. Bonds	$0	$0	$0	2010
	Public Works Office - Expansion / Improvements	$825,000		2		**$825,000**									G.O. Bonds	$0	$4,500	$4,500	2011

Appendix 12-A: 10-Year Capital Improvements Plan

Item #	Title of Project	Item Cost	Project Rollup Cost	Priority	CIP Expenditures 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Funding Sources	Annual Operating Expenses: Salaries and Benefits	Facility O&M Cost	Total	Effective Date
	Grounds Maintenance - New Storage / Equipment Shed	$125,000		2		**$125,000**									G.O. Bonds	$0	$1,000	$1,000	2011
	General Support / Roads & Drainage North - New Office	$340,000		3				**$340,000**							G.O. Bonds	$0	$3,000	$3,000	2013
	Facility Maintenance - New Workshop / Warehouse	$230,000		2				**$230,000**							G.O. Bonds	$0	$0	$0	2013
	Grounds Maintenance - Burton Wells Maintenance Shed	$145,000		3						**$145,000**					G.O. Bonds	$0	$500	$500	2015
	Public Works South Office - Addition / Improvements	$210,000		2						**$210,000**					G.O. Bonds	$0	$0	$0	2015
26	**Regional Solid Waste Transfer Facility**																		
	Land		$1,525,000			**$1,525,000**													
	Property Acquisition (20 Acres @ 50,000 / Acre)	$1,000,000		2											G.O. Bonds	$0	$0	$0	2011
	Pre-Development Costs	$525,000		2											G.O. Bonds	$0	$0	$0	2011
	Construction & Equipment		$4,726,375				**$4,726,375**												
	Constructing Transfer Station	$2,200,000		3											G.O. Bonds	$120,000	$0	$120,000	2012
	(Reduced Disposal Fees will Offset O&M)																		
	Constructing MRF	$1,100,000		2											G.O. Bonds	$120,000	$0	$120,000	2012
	(Revenue Generated will Offset O&M)																		
	Equipping Transfer Station	$1,026,375		3											G.O. Bonds	$0	$0	$0	2012
	Equipping MRF	$400,000		2											G.O. Bonds	$0	$0	$0	2012
27	**Modernization of 3 Convenience Centers**		$1,000,000																
	St. Helena Facility	$333,333		2						**$333,333**					G.O. Bonds	$0	$0	$0	2015
	Hilton Head Facility	$333,333		2							**$333,333**				G.O. Bonds	$0	$0	$0	2016
	Simmonsville Facility	$333,334		2								**$333,334**			G.O. Bonds	$0	$0	$0	2017
	Subtotal	**$9,693,375**																	
	Libraries																		
28	**Beaufort Library**		$2,379,760		**$2,379,760**														
	Renovation - Beaufort Br. Phase II	1,189,880		1											G.O. Bonds	$0	$0	$0	2010
	Renovation - Beaufort Br. Phase I	1,189,880		1											G.O. Bonds	$0	$0	$0	2010
29	**New Regional Library - N. Beaufort Co. (St. Helena)**	$7,170,000	$7,170,000	1	**$7,170,000**										See Note below title	$396,000	$355,000	$751,000	2010
	Note: Funding Sources: Impact Fees Grants G.O. Bonds & Donations																		
30	**Lobeco - New Branch**		$2,309,140										**$2,309,140**		25% Impact Fees 75% G.O. Bonds	$102,615	$112,385	$215,000	2018
	Renovation and Add-on	$2,009,140		2															
	Land Purchase	$300,000		2															
31	**Pritchardville - New Branch**		$10,520,000						**$10,520,000**							$496,000	$355,000	$851,000	2014
	Land Purchase	$2,000,000		1															
	Development & Construction Cost	$8,520,000		1															
32	**Okatie - New Branch**		$10,520,000							**$10,520,000**						$496,000	$355,000	$851,000	2015
	Land Purchase	$2,000,000		2															
	Development & Construction Cost	$8,520,000		2															
33	**Lady's Island - New Branch**		$8,400,000									**$8,400,000**			25% Impact Fees 75% G.O. Bonds	$496,000	$355,000	$851,000	2017
	Land Purchase	$2,000,000		2															
	Development & Construction Cost	$6,400,000		2															
34	**Hilton Head Island - New Branch (Renovation and Add-on)**	$10,700,000	$10,700,000	2				**$10,700,000**								$0	$331,875	$331,875	2013
35	**Burton Wells**		$16,950,000	1		**$16,950,000**													
	New Branch	$14,500,000														$567,740	$654,535	$1,222,275	2011
	Move Tech Office, Admin & IT	$2,450,000														$0	$77,725	$77,725	2011
36	**Renovation at Beaufort Library Phase III**		$5,200,000				**$5,200,000**								G.O. Bonds	$0	$0	$0	2012
	Renovation and Add-on	$4,000,000		1															
	Parking																		
	Land Cost	$200,000		1															
	Facility (50 spaces)	$1,000,000		1															
	Subtotal	**$74,148,900**																	
	Administrative Office Space																		
37	**South County General Administration Building**																		
	Land (5 acres)	$1,000,000	$1,000,000	1	**$1,000,000**										G.O. Bonds/ Lease Revenue				
	Construction of 31,798 sf Facility	$7,154,550	$7,154,550	1		**$7,154,550**										$0	($38,000)	($38,000)	2011
	Current Lease: $338,000 - New Operating Cost: $300,000																		
	Net Operational Difference: (38,000)																		
	Construction of 97,908 sf Addition or Facility	$22,029,300	$22,029,300	3							**$22,029,300**				G.O. Bonds	$7,300,000	$1,900,000	$9,200,000	2016

Appendix 12-A: 10-Year Capital Improvements Plan

Item #	Title of Project	Item Cost	Project Rollup Cost	Priority	CIP Expenditures 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Funding Sources	Annual Operating Expenses: Salaries and Benefits	Facility O&M Cost	Total	Effective Date
38	**South County Human Services Building**														G.O. Bonds/ Lease Revenue				
	Land (5 acres)	$1,000,000	$1,000,000	3									$1,000,000						
39	**Construction of 60,000 sf Facility**	$13,500,000	$13,500,000	3										$13,500,000	G.O. Bonds	$0	$0	$0	2019
40	**Voter Registration / Warehouse BIV #6**		$1,750,000			$1,750,000									G.O. Bonds	$0	($30,000)	($30,000)	2011
	Construction of 10,000 sf Facility	$1,750,000		2															
	Current O&M: $50,000 - Projected O&M: $20,000																		
	Net Operational Difference: (30,000)																		
	Subtotal	**$46,433,850**																	
	Planning																		
41	**Fishing Village - Option Selection and Cost Development TBD**	$4,200,000	$4,200,000	3					$4,200,000						G.O. Bonds	Offset by Revenues		Creates Revenue	2014
	Subtotal	**$4,200,000**																	
	PALS - South																		
42	**Buckwalter Park - One Year Soccer Field and Light 3**	$1,500,000	$1,500,000	1	$1,500,000										G.O. / Imp. fees	$0	$35,000	$35,000	2010
43	**Buckwalter Park - Complete Rec Center**	$2,300,000	$2,300,000	1	$2,300,000										G.O. / Imp. fees	$70,000	$50,000	$120,000	2010
44	**Buckwalter Park - Aquatics Center**	$5,000,000	$5,000,000	1		$5,000,000									G.O. / Imp. fees	$350,000	$110,000	$460,000	2011
45	**Buckwalter Park - Baseball Complex**	$5,800,000	$5,800,000	1			$5,800,000								G.O. / Imp. fees	$70,000	$45,000	$115,000	2012
46	**Develop Camp St. Marys**	$4,500,000	$4,500,000	2				$4,500,000							G.O. / Imp. fees	$70,000	$60,000	$130,000	2013
47	**Purchase 25 Acres in Okatie**	$1,900,000	$1,900,000	2					$1,900,000						G.O. / Imp. fees	$35,000	$35,000	$70,000	2014
48	**Develop Daufuskie Park**	$1,400,000	$1,400,000	2															
49	**Okatie Park Development**	$5,000,000	$5,000,000	2						$5,000,000					G.O. / Imp. fees	$70,000	$25,000	$95,000	2015
50	**Develop Jones Tract Park**	$5,000,000	$5,000,000	2							$5,000,000				G.O. / Imp. fees	$70,000	$25,000	$95,000	2016
51	**Develop Okatie Preserve**	$4,000,000	$4,000,000	2								$4,000,000			G.O. / Imp. fees	$105,000	$15,000	$120,000	2017
52	**Buckwalter Tennis Center**	$2,500,000	$2,500,000	3									$2,500,000		G.O. Bonds	Leased Facility / No Cost			2018
53	**Complete Buckwalter Passive Areas**	$2,000,000	$2,000,000	3										$2,000,000	G.O. / Imp. fees	$35,000	$10,000	$45,000	2019
54	**Develop Altamaha**		$450,000											$450,000		$35,000	$10,000	$45,000	2019
	Phase I	$450,000		3											State Funds Donor Funds G.O. Bonds				
	Phase II	**TBD**		3															
	Subtotal	**$41,350,000**																	
	PALS - North																		
55	**Lady's Island Park Development (Crystal Lake - land)**	$1,500,000	$1,500,000	1	$1,500,000										G.O. / Imp. fees	$150,000	$75,000	$225,000	2010
56	**Improvements to Existing Facilities**		$1,000,000		$1,000,000														
	Bladen Street Tennis Courts - Lights	$150,000		2											G.O. Bonds	$0	$0	$0	2010
	Bladen Street Tennis Courts - Resurfacing	$500,000		2											G.O. Bonds	$0	$0	$0	2010
	Indoor Pools Resurfacing	$200,000		2											G.O. Bonds	$0	$0	$0	2010
	Mink Point Center Improvements	$150,000		2											G.O. Bonds	$0	$0	$0	2010
57	**Lady's Island Community Park Phase I**	$1,000,000	$1,000,000	1	$1,000,000										G.O. Bonds	$100,000	$125,000	$225,000	2010
58	**Improvements to Existing Facilities**		$1,000,000			$1,000,000									G.O. Bonds	$0	$0	$0	2011
	Agnes Major Center Expansion	$500,000		2															
	Scott Center Restroom / Picnic Shelter	$200,000		2															
	Greene Street Center Parking Lot Resurfacing	$100,000		2															
	Gloria Potts' Center Restroom & Picnic Shelter	$200,000		2															
59	**Fort Fremont Park Phase II Ranger Station / RR**	$1,100,000	$1,100,000	3		$1,100,000									G.O. Bonds	$150,000	$75,000	$225,000	2011
60	**Lady's Island Community Park Phase II**	$1,000,000	$1,000,000	1		$1,000,000									G.O. / Impact 30%	$0	$0	$0	2011

Appendix 12-A: 10-Year Capital Improvements Plan

Item #	Title of Project	Item Cost	Project Rollup Cost	Priority	CIP Expenditures 2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Funding Sources	Annual Operating Expenses: Salaries and Benefits	Facility O&M Cost	Total	Effective Date
61	**Burton Wells Phase III (Adult Complex)**	$2,200,000	$2,200,000	2			**$2,200,000**								G.O. Bonds	$0	$25,000	$25,000	2012
62	**St. Helena Park Expansion**	$1,600,000	$1,600,000	2				**$1,600,000**							G.O. / Impact 25%	$85,000	$50,000	$135,000	2013
63	**Lady's Island Community Park Phase III**	$1,800,000	$1,800,000	1					**$1,800,000**						CIP / Impact 25%	$0	$25,000	$25,000	2014
64	**Burton Wells Tennis Complex**	$1,500,000	$1,500,000	3						**$1,500,000**					G.O. Bonds	$75,000	$50,000	$125,000	2015
65	**Grays Hill Neighborhood Park**	$1,700,000	$1,700,000	3							**$1,700,000**				G.O. / Impact 25%	$85,000	$50,000	$135,000	2016
66	**Lands End Neighborhood Park**	$1,700,000	$1,700,000	3							**$1,700,000**				G.O. / Impact	$85,000	$50,000	$135,000	2016
67	**Lobeco Community Park**	$1,200,000	$1,200,000	2								**$1,200,000**			G.O. / Impact	$85,000	$50,000	$135,000	2017
68	**Castle Rock / Jericho Park**	$2,400,000	$2,400,000	3									**$2,400,000**		G.O. / Impact 25%	$85,000	$50,000	$135,000	2018
69	**Gloria Potts' Park Expansion**	$1,100,000	$1,100,000	2										**$1,100,000**	G.O. Bonds	$0	$25,000	$25,000	2019
70	**Burton Wells Park Phase IV (Road)**	$1,500,000	$1,500,000	1		**$1,500,000**									G.O. Bonds	$0	$5,000	$5,000	2011
	Necessary to Accommodate New Library																		
	Subtotal	**$23,300,000**																	
	Hilton Head Island Airport																		
71	**Tree Obstruction Removal / Mitigation (South)**	$1,000,000	$1,000,000	1	**$1,000,000**										95% FAA Grants 2.5% State Grants 2.5% Airport Enterprise Fund	$0	$5,000	$5,000	2010
72	**New Aircraft Rescue & Fire Fighting Station**	$1,300,000	$1,300,000	1	**$1,300,000**											$0	$10,000	$10,000	2010
73	**Tree Obstruction Removal / Mitigation (North)**	$4,000,000	$4,000,000	1		**$4,000,000**										$0	$15,000	$15,000	2011
74	**Air Carrier Terminal Expansion / Renovations**	$1,500,000	$1,500,000	2		**$1,500,000**										$0	$10,000	$10,000	2011
75	**Tree Obstruction Removal / Mitigation (Sides)**	$2,000,000	$2,000,000	1			**$2,000,000**									$0	$7,500	$7,500	2012
76	**Commercial Terminal Automobile Parking Expansion**	$1,400,000	$1,400,000	2			**$1,400,000**									$0	$3,000	$3,000	2012
77	**New Taxiways / Apron Expansion / Heliport**	$2,800,000	$2,800,000	2				**$2,800,000**								$0	$5,000	$5,000	2013
78	**Land Acquisition (Dillon Road)**	$1,700,000	$1,700,000	3					**$1,700,000**							$0	$0	$0	2014
79	**Precision Approach (ILS) Equipment Installation**	$3,000,000	$3,000,000	2						**$3,000,000**						$0	$15,000	$15,000	2015
80	**Runway / Taxiway Rehabilitation**	$5,000,000	$5,000,000	2							**$5,000,000**					$0	$0	$0	2016
81	**Aircraft Hangars**	$2,500,000	$2,500,000	2								**$2,500,000**				$0	$15,000	$15,000	2017
82	**Land Acquisition (Summit Drive)**	$9,000,000	$9,000,000	3									**$9,000,000**			$0	$0	$0	2018
	Subtotal	**$35,200,000**																	
	Beaufort County Airport (at Lady's Island)																		
83	**Tree Obstruction Removal / Mitigation**	$1,000,000	$1,000,000	1	**$1,000,000**										95% FAA Grants 2.5% State Grants 2.5% Airport Enterprise Fund	$0	$1,000	$1,000	2010
84	**Runway Overlay / Widening / Grooving**	$1,900,000	$1,900,000	1		**$1,900,000**										$0	$0	$0	2011
85	**Parking Lot Relocation / Sanitary Sewer**	$1,000,000	$1,000,000	1			**$1,000,000**									$0	$3,600	$3,600	2012
86	**Parallel Taxiway / Apron Expansion / Heliport**	$1,800,000	$1,800,000	2				**$1,800,000**								$0	$5,000	$5,000	2013
87	**Runway Extension**	$15,000,000	$15,000,000	2					**$15,000,000**							$0	$5,000	$5,000	2014
88	**Terminal Expansion**	$1,400,000	$1,400,000	2						**$1,400,000**						$0	$8,000	$8,000	2015
89	**Apron Expansion / Fuel Farm Upgrade**	$1,300,000	$1,300,000	2							**$1,300,000**					$0	$3,000	$3,000	2016
90	**Aircraft Hangars**	$1,500,000	$1,500,000	2								**$1,500,000**				$0	$10,000	$10,000	2017
	Subtotal	**$24,900,000**																	
	NON-ROAD TOTALS	$367,178,151	$367,178,151		$43,998,563	$85,361,364	$45,280,814	$30,222,012	$38,122,013	$25,150,347	$39,914,648	$20,985,350	$19,711,157	$17,052,018		$15,651,557	$7,648,171	$23,299,728	

Appendix 12-B: 10-Year CIP Projected Revenues

Projected County Capital Project Revenues	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
Existing Debt Capacity	$39,003,390										**$39,003,390**
New Debt Capacity resulting from annual debt payments	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	**$50,000,000**
New Debt Capacity resulting from increases in assessed value	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	$5,000,000	**$50,000,000**
Federal and State Grants for Airport Capital Facilities	$3,300,000	$7,400,000	$4,400,000	$4,600,000	$16,700,000	$4,400,000	$6,300,000	$4,000,000	$9,000,000	$0	**$60,100,000**
Library Impact Fees	$0	$4,237,500	$0	$2,675,000	$2,630,000	$2,630,000	$0	$2,100,000	$577,285	$0	**$14,849,785**
Park Impact Fees (Northern Beaufort County)	$1,140,000	$1,500,000	$174,000	$1,350,000	$570,000	$1,500,000	$1,500,000	$1,200,000	$750,000	$735,000	**$10,419,000**
Park Impact Fees (Southern Beaufort County)	$0	$600,000	$660,000	$480,000	$540,000	$450,000	$1,020,000	$360,000	$720,000	$220,000	**$5,050,000**
TOTAL COUNTY CAPITAL PROJECT REVENUES	**$53,443,390**	**$23,737,500**	**$15,234,000**	**$19,105,000**	**$30,440,000**	**$18,980,000**	**$18,820,000**	**$17,660,000**	**$21,047,285**	**$10,955,000**	**$229,422,175**
TOTAL COUNTY CAPITAL PROJECT EXPENSES	**$43,998,563**	**$85,361,364**	**$45,280,814**	**$30,222,012**	**$38,122,013**	**$25,150,347**	**$39,914,648**	**$20,985,350**	**$19,711,157**	**$17,052,018**	**$365,798,286**
COUNTY CAPITAL PROJECT SURPLUS/(DEFICIT)	**$9,444,827**	**($61,623,864)**	**($30,046,814)**	**($11,117,012)**	**($7,682,013)**	**($6,170,347)**	**($21,094,648)**	**($3,325,350)**	**$1,336,128**	**($6,097,018)**	**($136,376,111)**

Projected Transportation Project Revenues	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	TOTAL
Sales Tax	$150,000	$7,100,000	$14,325,000	$26,050,000	$43,960,000	$40,450,000	$20,040,000	$0	$0	$0	**$152,075,000**
South County Road Impact Fees	$800,000	$1,300,000	$5,700,000	$12,200,000	$9,990,000	$15,100,000	$9,835,000	$8,325,000	$6,000,000	$0	**$69,250,000**
North County Road Impact Fees	$1,342,750	$2,387,750	$2,780,000	$3,210,000	$4,000,000	$2,700,000	$2,400,000	$1,500,000	$1,000,000	$0	**$21,320,500**
Congressional Earmark	$394,000	$14,896,000	$4,090,000	$2,810,000	$8,510,000	$0	$0	$0	$0	$0	**$30,700,000**
Guideshare/SCDOT	$500,000	$13,225,000	$23,325,000	$39,700,000	$700,000	$700,000	$700,000	$0	$0	$0	**$78,850,000**
Tag-CTC Funds	$40,000	$0	$0	$210,000	$0	$0	$0	$0	$0	$0	**$250,000**
Enhancement Grants	$0	$0	$200,000	$0	$0	$0	$0	$0	$0	$0	**$200,000**
Town of Hilton Head Island	$0	$0	$500,000	$300,000	$300,000	$0	$0	$0	$0	$0	**$1,100,000**
Traffic Mitigation	$93,000	$0	$0	$550,000	$140,000	$300,000	$350,000	$300,000	$0	$0	**$1,733,000**
Admissions Fees	$0	$0	$985,000	$1,700,000	$300,000	$300,000	$0	$0	$0	$0	**$3,285,000**
Additional Revenues	$0	$0	$0	$0	$0	$0	$760,000	$700,000	$0	$0	**$1,460,000**
TOTAL ROAD PROJECT REVENUES	**$3,319,750**	**$38,908,750**	**$51,905,000**	**$86,730,000**	**$67,900,000**	**$59,550,000**	**$34,085,000**	**$10,825,000**	**$7,000,000**	**$0**	**$360,223,500**
TOTAL ROAD PROJECT EXPENSES	**$52,010,000**	**$86,730,000**	**$67,900,000**	**$61,250,000**	**$46,535,000**	**$56,775,000**	**$76,500,000**	**$74,000,000**	**$56,000,000**	**$47,000,000**	**$624,700,000**
ROAD PROJECT SURPLUS/(DEFICIT)	**($48,690,250)**	**($47,821,250)**	**($15,995,000)**	**$25,480,000**	**$21,365,000**	**$2,775,000**	**($42,415,000)**	**($63,175,000)**	**($49,000,000)**	**($47,000,000)**	**($264,476,500)**

Source:Beaufort County Controller; Beaufort County Engineering Department

Appendix 12-C: 2007 Road CIP Schedule

Project Number	Project Name	FY 08/09				FY 09/10				FY 10/11				FY11/12				FY 12/13			
		PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals
1	US 17 Widening	$300,000	$0	$23,550,000	$23,850,000	$0	$0	$40,000,000	$40,000,000	$0	$0	$1,000,000	$1,000,000	$0	$0	$1,000,000	$1,000,000	$0	$0	$0	$0
2	US 278 Signal System & ITS Architecture Plan & Street Lighting	$200,000	$0	$220,000	$420,000	$0	$0	$120,000	$120,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
3	Burnt Church Road Phase 1 Widening	$0	$0	$1,470,000	$1,470,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
4	SC 46 Widening[10]	$0	$0	$3,300,000	$3,300,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
5	US 21/SC 802 Connector	$0	$750,000	$750,000	$1,500,000	$0	$0	$3,460,000	$3,460,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
6	Bluffton Parkway Phase 5A and 5B	$400,000	$4,000,000	$0	$4,400,000	$400,000	$5,000,000	$7,600,000	$13,000,000	$0	$0	$20,000,000	$20,000,000	$0	$0	$20,000,000	$20,000,000	$0	$0	$0	$0
7	Squire Pope Rd/US 278	$0	$0	$680,000	$680,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
8	US 21 (Boundary Street) Improvements & Parallel Road	$750,000	$1,000,000	$0	$1,750,000	$550,000	$4,000,000	$500,000	$5,050,000	$250,000	$3,000,000	$3,500,000	$6,750,000	$100,000	$0	$3,650,000	$3,750,000	$100,000	$0	$4,000,000	$4,100,000
9	SC 802 (Ribaut Road) Improvements	$0	$0	$1,640,000	$1,640,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
10	US 278 (W.H. Pkwy) Resurfacing	$0	$0	$1,600,000	$1,600,000	$0	$0	$1,500,000	$1,500,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
11	US 278 Frontage Roads	$300,000	$1,000,000	$250,000	$1,550,000	$150,000	$1,500,000	$1,050,000	$2,700,000	$100,000	$1,500,000	$1,900,000	$3,500,000	$50,000	$500,000	$1,850,000	$2,400,000	$0	$0	$2,250,000	$2,250,000
12	Simmonsville Road Widening	$0	$1,500,000	$2,000,000	$3,500,000	$0	$0	$3,300,000	$3,300,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
13	US 21/SC 802 Widening & Savannah Hwy Widening	$750,000	$500,000	$0	$1,250,000	$750,000	$2,000,000	$3,000,000	$5,750,000	$0	$3,500,000	$10,000,000	$13,500,000	$0	$0	$13,000,000	$13,000,000	$0	$0	$8,450,000	$8,450,000
14	US 278 Widening, Phase2&3	$800,000	$500,000	$0	$1,300,000	$800,000	$2,500,000	$0	$3,300,000	$450,000	$3,000,000	$8,000,000	$11,450,000	$0	$0	$10,000,000	$10,000,000	$0	$0	$13,350,000	$13,350,000
15	SC 170 Widening	$0	$2,700,000	$0	$2,700,000	$700,000	$2,000,000	$3,900,000	$6,600,000	$0	$1,000,000	$8,000,000	$9,000,000	$0	$0	$7,200,000	$7,200,000	$0	$0	$0	$0
16	US 21 Business Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$500,000	$0	$0	$500,000	$0	$1,000,000	$0	$1,000,000
17	Malphrus Road/US 278 & Foreman Hill Road Connection	$0	$0	$0	$0	$50,000	$250,000	$0	$300,000	$0	$0	$1,200,000	$1,200,000	$0	$0	$0	$0	$0	$0	$2,260,000	$2,260,000
18	Northern Beaufort ByPass	$500,000	$0	$0	$500,000	$1,000,000	$0	$0	$1,000,000	$1,000,000	$0	$0	$1,000,000	$0	$1,500,000	$0	$1,500,000	$0	$2,000,000	$0	$2,000,000
19	SC 170 Robert Smalls Parkway	$50,000	$100,000	$150,000	$300,000	$50,000	$100,000	$500,000	$650,000	$0	$0	$500,000	$500,000	$0	$0	$400,000	$400,000	$250,000	$0	$0	$250,000
20	Old Miller Road Extension	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$100,000	$0	$0	$100,000	$25,000	$150,000	$500,000	$675,000
21	Transit Service (LRTA)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
22	Joe Frazier Road Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$200,000	$0	$0	$200,000	$50,000	$250,000	$0	$300,000
23	Sam's Point Rd/Brickyard/Holly Hall Intersection	$0	$50,000	$250,000	$300,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
24	US 278 Widening, Phase 4	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
25	Bluffton Parkway, Phase 6	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,000,000	$0	$0	$2,000,000
26	Buck Island Road Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$500,000	$0	$0	$500,000
27	Bruin Road Extension	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$200,000	$0	$0	$200,000	$200,000	$500,000	$0	$700,000
28	Burnt Church Road Widening Phase 2	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
29	Western Beaufort ByPass	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
30	US 21 Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
31	Midtown Drive & Broad River Drive Connection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
32	US 278 Bridge Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
33	SC46/SC170 Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
34	Robert Smalls to Ribaut Rd Connector	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
35	Commerce Park Roadway Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$250,000	$250,000	$0	$500,000	$0	$0	$1,000,000	$1,000,000
36	Beaufort-Yemassee Rail-Trail	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$500,000	$0	$0	$500,000	$200,000	$1,000,000	$6,500,000	$7,700,000
	TOTALS	$4,050,000	$12,100,000	$35,860,000	$52,010,000	$4,450,000	$17,350,000	$64,930,000	$86,730,000	$1,800,000	$12,000,000	$54,100,000	$67,900,000	$1,900,000	$2,250,000	$57,100,000	$61,250,000	$3,325,000	$4,900,000	$38,310,000	$46,535,000

Appendix 12-C: 2007 Road CIP Schedule

Project Number	Project Name	FY 13/14				FY 14/15				FY 15/16				FY 16/17				FY 17/18				TOTALS
		PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals	PE	R/W	Construction	FY Totals	
1	US 17 Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$92,000,000
2	US 278 Signal System & ITS Architecture Plan & Street Lighting	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,100,000
3	Burnt Church Road Phase 1 Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,200,000
4	SC 46 Widening [10]	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,000,000
5	US 21/SC 802 Connector	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,515,500
6	Bluffton Parkway Phase 5A and 5B	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$60,000,000
7	Squire Pope Rd/US 278	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,000,000
8	US 21 (Boundary Street) Improvements & Parallel Road	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$22,000,000
9	SC 802 (Ribaut Road) Improvements	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$2,265,000
10	US 278 (W.H. Pkwy) Resurfacing	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$4,700,000
11	US 278 Frontage Roads	$0	$0	$1,000,000	$1,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$13,600,000
12	Simmonsville Road Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$8,000,000
13	US 21/SC 802 Widening & Savannah Hwy Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$42,700,000
14	US 278 Widening, Phase2&3	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$40,000,000
15	SC 170 Widening	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$26,200,000
16	US 21 Business Improvements	$0	$0	$5,000,000	$5,000,000	$0	$0	$5,000,000	$5,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$11,593,000
17	Malphrus Road/US 278 & Foreman Hill Road Connection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$3,800,000
18	Northern Beaufort ByPass	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$6,000,000
19	SC 170 Robert Smalls Parkway	$150,000	$1,000,000	$0	$1,150,000	$0	$1,000,000	$2,000,000	$3,000,000	$0	$0	$2,000,000	$2,000,000	$0	$0	$2,000,000	$2,000,000	$0	$0	$2,000,000	$2,000,000	$12,400,000
20	Old Miller Road Extension	$0	$0	$225,000	$225,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$1,000,000
21	Transit Service (LRTA)	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
22	Joe Frazier Road Improvements	$0	$0	$1,500,000	$1,500,000	$0	$0	$2,000,000	$2,000,000	$0	$0	$1,000,000	$1,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$5,000,000
23	Sam's Point Rd/Brickyard/Holly Hall Intersection	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$360,000
24	US 278 Widening, Phase 4	$1,000,000	$1,000,000	$0	$2,000,000	$0	$1,000,000	$3,000,000	$4,000,000	$0	$0	$5,000,000	$5,000,000	$0	$0	$5,000,000	$5,000,000	$0	$0	$0	$0	$16,000,000
25	Bluffton Parkway, Phase 6	$0	$3,000,000	$5,000,000	$8,000,000	$0	$0	$15,000,000	$15,000,000	$0	$0	$15,000,000	$15,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$40,000,000
26	Buck Island Road Widening	$0	$2,000,000	$0	$2,000,000	$0	$0	$3,000,000	$3,000,000	$0	$0	$2,500,000	$2,500,000	$0	$0	$0	$0	$0	$0	$0	$0	$8,000,000
27	Bruin Road Extension	$100,000	$0	$8,000,000	$8,100,000	$0	$0	$6,000,000	$6,000,000	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$15,000,000
28	Burnt Church Road Widening Phase 2	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
29	Western Beaufort ByPass	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0	$0
30	US 21 Widening				$0	$1,500,000	$3,500,000	$5,000,000	$10,000,000			$10,000,000	$10,000,000			$10,000,000	$10,000,000			$10,000,000	$10,000,000	$40,000,000
31	Midtown Drive & Broad River Drive Connection				$0	$100,000	$300,000	$100,000	$500,000			$500,000	$500,000				$0				$0	$1,000,000
32	US 278 Bridge Widening	$5,000,000	$5,000,000	$15,000,000	$25,000,000			$25,000,000	$25,000,000			$35,000,000	$35,000,000			$35,000,000	$35,000,000			$35,000,000	$35,000,000	$155,000,000
33	SC46/SC170 Widening				$0				$0	$0	$0	$0	$0			$0	$0			$0	$0	$0
34	Robert Smalls to Ribaut Rd Connector				$0	$1,000,000	$2,000,000		$3,000,000			$3,000,000	$3,000,000			$4,000,000	$4,000,000				$0	$10,000,000
35	Commerce Park Roadway Improvements			$1,000,000	$1,000,000				$0				$0				$0				$0	$2,500,000
36	Beaufort-Yemassee Rail-Trail			$1,800,000	$1,800,000				$0				$0				$0				$0	$10,000,000
	TOTALS	$6,250,000	$12,000,000	$38,525,000	$56,775,000	$2,600,000	$7,800,000	$66,100,000	$76,500,000	$0	$0	$74,000,000	$74,000,000	$0	$0	$56,000,000	$56,000,000	$0	$0	$47,000,000	$47,000,000	$666,933,500



2040 COMPREHENSIVE PLAN



November 2021

ACKNOWLEDGMENTS

County Council

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Paul Sommerville, Vice-Chairman
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York Glover, Sr.
Alice Howard
Stu Rodman
Larry McElynn
Brian Flewelling
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Support from:

Beaufort County, the Rural and Critical Lands Program, and the people of Beaufort County



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INTRODUCTION

BEAUFORT COUNTY'S OPPORTUNITY: RESILIENCE, EQUITY, & PLACE

Beaufort County has the key ingredients that provide for a high quality of life. The unique character of the Lowcountry--the distinctive blend of the natural and built environment--set it apart from other places. The area's character, community, environment, sense of place, and history are cherished by its citizens and should be preserved and protected. At the same time, there is a need to promote economic opportunity and equitable access to jobs, housing, and services for all its residents to enjoy.

This Comprehensive Plan is being created in a time of change that is challenging the status quo. Growth continues to provide opportunities as well as challenges. The COVID-19 pandemic has altered how we live, shop, gather, and conduct business. Storm events are getting stronger and more frequent, which is causing more people and expensive infrastructure to be impacted by higher levels of flooding. Development is pushing into our natural environment, and we are losing our tree canopy. Habitats and the quality of our waterways are being threatened. More and more, our underserved populations are not able to equitably share in the region's opportunities and economy. Fortunately, the citizens and leadership of Beaufort County are determined to address these issues and create the tools needed to overcome current challenges.

Beaufort County has created a vision and the regulatory tools it needs to balance economic development, resource protection, and growth in a form that creates quality places. With the Comprehensive Plan, Greenprint Plan, transect-based zoning, cultural overlays, and various small area and corridor plans, it has a healthy toolbox from which to guide the growth of its built environment.

There remains however, an opportunity to more completely organize the toolbox to help achieve the County's vision for the future. With this Comprehensive Plan, a more direct link is created between planning for prosperity, environmental and economic resilience, equitable community services and infrastructure, and preservation of the unique place that is the Lowcountry.

Balance can be achieved by including goals, strategies, and specific actions that will enable all citizens increased access and choices related to health, safety, quality of life, education, recreation, and jobs. Growth can occur together with resource protection and resilience planning. It does not need to be an either-or decision.

By considering these two concepts in unison, and creating clarity about how to accomplish both, Beaufort County can move forward confident that it is protecting the health, safety, and welfare of its citizens; the assets that support its economy; and the opportunity for a better life for its citizens.

This Comprehensive Plan looks out 20 years and recognizes the impact that growth has on the convenience, sense of place, and character of the region. It describes specific principles, strategies, and actions that enable Beaufort County to act on

With this Comprehensive Plan, a more direct link is created between planning for environmental and economic resilience, the equitable sharing in community services, infrastructure, prosperity and quality of life, and the preservation and promotion of the unique place that is the Lowcountry.

its established principles and values as described in the many visionary plans that it has created.

The Comprehensive Plan acknowledges that growth is desired and inevitable, but must be accomplished in ways that support traditional town planning, environmental protection, and access and equity for its citizens. Balance can be accomplished by guiding development to land that is most suitable based on economic, cultural, social, and environmental principles.

The Plan acknowledges that the County is inextricably linked to its municipalities and adjacent counties, sharing roads, waterways, habitats, and open spaces which do not follow jurisdictional boundaries. This requires that high levels of cooperation and collaboration be maintained within the region so that local identities can be expressed within a framework of shared goals regarding infrastructure, environmental protection, growth, economic development, and affordable housing.

With focus and effort, as well as regional collaboration, Beaufort County can move forward with a clear vision and action plan that honors its principles and values. By investing in new public infrastructure, creating incentives for affordable housing, focusing development on land of the highest suitability, and making hard choices about how to protect the very environmental systems that can help mitigate harm, future generations will be able to enjoy the quality of life and economic prosperity offered by Beaufort County's unique landscape and culture.

THE 2040 COMPREHENSIVE PLAN

The 2040 Comprehensive Plan is a county-wide planning document that outlines goals, policies, and implementation strategies developed with a thorough public engagement process. The purpose of the 2040 Comprehensive Plan is to enable government officials and citizens to anticipate and constructively respond to growth and change; to encourage the development of a vibrant built environment and a healthy natural environment; and to provide equitable opportunities for all citizens to enjoy a high quality of life.

Critical Goals of the Plan

- Integrate existing plans and initiatives into a community-wide vision for the future.
- Create a resource to inform policy decisions.
- Set priorities and responsibilities to be used by Staff and Leadership to initiate tasks and make decisions.
- Outline specific goals and strategies to achieve the vision.
- Align Strategic Plans, Capital Improvement Plans, Budgets, and Department Action Plans.

Why Is It Needed?

A comprehensive plan is required by state law in all jurisdictions that have zoning. The comprehensive plan sets out a vision for the future, establishes goals, and recommends actions to achieve those goals. It links long range vision with local programs and policies.

The comprehensive plan informs County government activities to ensure Beaufort County maintains its high quality of life, unique landscape, access to nature, Lowcountry aesthetic, and expands economic opportunities. When implemented, the comprehensive plan will enable the County to reap the rewards of its ongoing success and to build a community that attracts people to live, work, and play. This plan looks out into the future 10 years. After five years, the plan should be reviewed and revised after 10 years.

What Does It Include?

The Beaufort County Comprehensive Plan 2040 conveys a vision, goals, strategies, and actions derived through a collaborative "community-based" planning process.

It includes Implementation and Action Planning, which provides an opportunity for County staff, leadership, private sector interests, and citizens to hold each other accountable to act on it.

The Comprehensive Plan focuses the capital investment, human capacity, and the shared commitment that is needed for the County to realize its vision and manage its growth toward an even more viable and sustainable future. Consistent with state statute, the Comprehensive Plan consists of elements which analyze growth and guide future development and projects.*

Because of the unique approach undertaken by the County in the adoption of this Comprehensive Plan, the standard elements are woven into integrative Themes that better articulate Beaufort County's priorities for achieving economic, social, and environmental sustainability.

Required Elements For South Carolina Comprehensive Plans*



POPULATION
Consider historic trends, projections, household numbers and sizes, educational levels, and income.



ECONOMIC DEVELOPMENT
Consider labor force characteristics, employment and residence, and analysis of the economic base.



NATURAL RESOURCES
Consider coastal resources, slope, agricultural and forest land, plant and animal habitats, parks and recreation areas, scenic views, wetlands and soils.



CULTURAL RESOURCES
Consider historic buildings, structures, districts, natural/ scenic sites and archaeological resources.



COMMUNITY FACILITIES
Consider water/ sewage system and wastewater treatment; solid waste collection and disposal, fire protection, emergency medical services, government facilities; education and cultural facilities.



HOUSING
Consider location, types, age, condition of housing, owner and renter occupancy, and affordability.



LAND USE
Consider existing and future categories, including residential, commercial, industrial, agricultural, forestry, mining, public and quasi-public, recreation, parks, open space, and vacant or undeveloped.



TRANSPORTATION
Consider facilities including major road improvements, new roads, transit projects, pedestrian and bicycle projects, and other elements of a network in coordination with land use.



PRIORITY INVESTMENT
Analyze the likely federal, state, and local funds available for public infrastructure and facilities during the next ten years, and recommend projects for needed public infrastructure and facilities such as water, sewer, roads, and schools.



RESILIENCE
Consider strategies for the long term viability, maintaining quality of life and health, safety and welfare for future generations.

Look for these icons throughout the document
to keep track of how each element is addressed

HOW TO USE THIS DOCUMENT

Each of the core values, strategies, and actions included in this document are important in order for the County to achieve its vision. In that sense, this Comprehensive Plan is a living document that needs to be used and updated regularly. To be effective, the Plan needs to influence the actions of County departments and encourage collaboration and cooperation between them. The Plan is a starting point, where vision is articulated, themes are established, strategies are identified, and action items are defined.

A Tool for Decision Making: First and foremost, the Comprehensive Plan should serve as a reference tool that is referred to regularly, and should be the foundation for the County's internal actions and interactions with its neighboring municipalities and counties. The Core Values and Strategies in each element serve as these tools for decision making.

A Plan for Action: The plan also outlines specific action items in each element and a Capital Improvements Plan that achieve the core values and strategies. These action items are intended to be implemented within a ten year time. While this plan provides specific steps for future action, it purposefully does not resolve all of its core principles, and strategies with specific actions.

The Comprehensive Plan describes actions in terms of immediate activities that begin with adoption of the plan, typically completed within the first year; short-term activities that start within one to three years of the plan's adoption; mid-term activities that begin three to ten years after the plan's adoption; and long-term activities that extend beyond ten years and may overlap into the next Comprehensive Plan Update.

Three **concepts** are woven throughout **Thematic Chapters** that address Beaufort County's greatest opportunities within the 2040 Comprehensive Plan, which are: **Resilient, Equitable, and Unique to Place:**

Resilient — Able to adapt and thrive in a dynamic coastal environment and changing economy.

Equitable — Ensuring all neighbors have fair and equal access to safety, quality of life, health,amenity and opportunity.

Unique to Place — Preserving and promoting a built and natural environment that is of the Lowcountry way of life.

Within the Thematic Chapters, each recommended strategy is highlighted with a capital letter R (Resilient), E (Equitable), or P (Place) to represent each of these concepts.

BEAUFORT COUNTY ATLAS

A living document in a simple template that can be updated over time. The starting reference point for current and future Beaufort County planning projects.



PEOPLE OF BEAUFORT COUNTY

County Comprehensive Plan references County

BEAUFORT COUNTY COMPREHENSIVE PLAN

A simple and visual comprehensive plan update with succinct analysis and concrete recommendations organized by theme.

County Comprehensive Plan and Green Print Plan reference each other.

GREENPRINT PLAN

A simple and visual Green Print Plan update with succinct analysis and concrete recommendations organized by theme.

MUNICIPAL COMP PLANS

PARKS AND RECREATION PLANS

SOUTHERN LOWCOUNTY ORDINANCE AND DESIGN MANUAL

TRANSPORTATION PLANS

PROCESS: CAPTURING COMMUNITY VISIONS & GOALS

The planning process was conducted during the time of social distancing associated with the COVID-19 pandemic, which shaped the way community engagement was conducted with most of the interaction being virtual and web-based.

The process was organized in stages. The initial phase analyzed Beaufort County's existing environment, its role within the region, social and economic conditions, and projected growth.

Initial efforts also included evaluating the action items of existing plans and policies to determine what has been done, what was not relevant anymore, and what still needed to be done to avoid duplication of efforts.

Later stages shaped the strategy and vision for the Plan around a process of extensive community outreach and engagement that had to respond to the realities of being conducted during a pandemic.

Public surveys, in-person and virtual community workshops, focus groups, and planning exercises helped establish goals, strategies, metrics, and implementation steps. In-person workshops occurred around the County and tried to reach as many citizens as possible through outreach and promotion.

The Plan was drafted, expanded, and ultimately finalized through an iterative process of continuous feedback between the consultant team, community, and County staff. Public comments were integrated in response to additional public workshops that asked the public to evaluate and prioritize the Plan's key strategies.

The Comprehensive Plan process was led by the County's Planning Department, with support from all the County's departments. Several stakeholder groups helped shape the plan's focus.



COMMUNITY VOICES OF INPUT

1.4K

STORYMAP & CONTENT VIEWS

2.5K

STAKEHOLDER TOUCHPOINTS

47+

METHODS OF ENGAGEMENT

12

WITH COMMUNITY EMPHASIS ON

- PRESERVING ENVIRONMENT & RURAL CHARACTER
- RESILIENT CULTURE & ECONOMY
- GROWTH MANAGEMENT & COLLABORATION





Beaufort County Comprehensive Plan Public Workshops, 2020

THEMES

Three **concepts** are woven throughout **Thematic Chapters** that address Beaufort County's greatest opportunities within the 2030 Comprehensive Plan, which are: **Resilient, Equitable, and Unique to Place:**

Resilient — Able to adapt and thrive in a dynamic coastal environment and changing economy.

Equitable — Ensuring all neighbors have fair and equal access to safety, quality of life, health,amenity and opportunity.

Unique to Place — Preserving and promoting a built and natural environment that is of the Lowcountry way of life.

Within the Thematic Chapters, each recommended strategy is highlighted with a capital letter R (Resilient), E (Equitable), or P (Place) to represent each of these concepts.

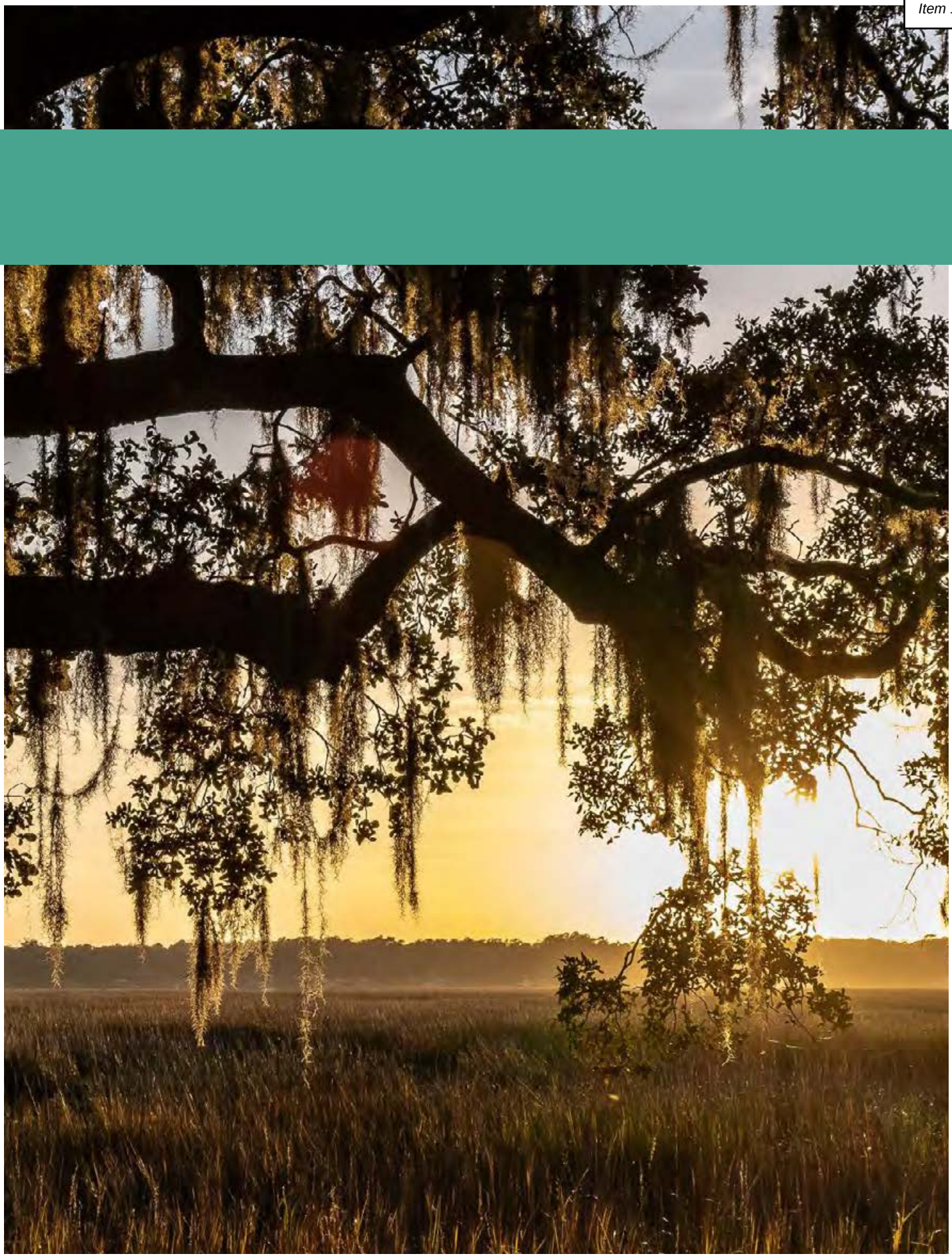


Photo source: Port Roy

NATURAL ENVIRONMENT

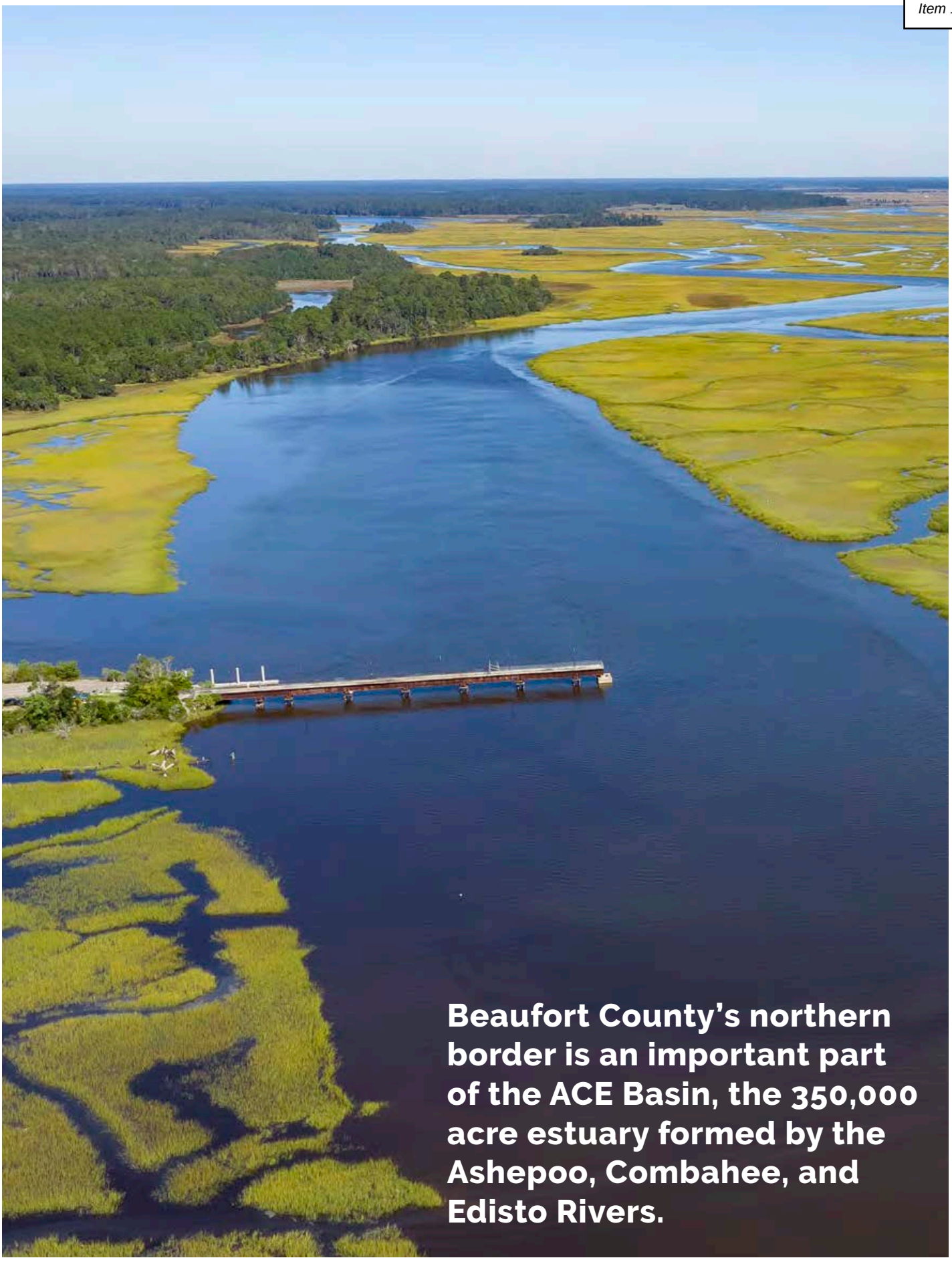
Natural resources protected for recreation, rejuvenation, hazard mitigation, and environmental health.



CORE VALUES

1. We value our unique and complex natural environment as a source of life, recreation, economy, culture and sense of place.
2. We make efforts to preserve our critical natural environments to preserve the quality of life for future generations.
3. We balance development with the preservation of our natural systems.
4. We depend on clean water to support our economy and lifestyle.
5. We prepare for environmental changes and meet those challenges head on.
6. We are leaders in the region and pursue environmentally responsible development.

Refer to the County Atlas, Greenprint, Action Playbook, and other supporting documents with more information.



Beaufort County's northern border is an important part of the ACE Basin, the 350,000 acre estuary formed by the Ashepoo, Combahee, and Edisto Rivers.

Photo source: Design Workshop

CONTEXT

Beaufort County has a treasured natural environment, primarily made up of the Port Royal Sound, and including expansive saltmarshes and tidal waters, sub-tropical maritime forests of live oaks and palmettos, towering pines, forested wetlands of cypress and tupelo, and over 30 miles of beaches.

Beaufort County residents and visitors have a great attachment to the local environment and have fought hard to preserve and protect it. The County has developed advanced stormwater standards to prevent flooding and protect water quality. They have developed requirements to protect specimen trees, habitats, beaches and dunes, and endangered species. They have also been very aggressive in securing and preserving open space.

However, there are still many challenges ahead. Development has not slowed and the County will continually need to reevaluate and update its policies and regulations to make sure that its water quality and resource protection goals are met. As growth continues, land becomes more scarce and challenging to develop, reinforcing the importance of prioritizing future acquisitions of open space and the preservation of greenways and wildlife corridors to connect natural areas.

Additionally, the County needs to continue to cooperate with its neighbors on natural resource planning, achieving baseline environmental standards, and retrofitting stormwater management systems in older developments.

Adding to the challenge, Beaufort County is experiencing the effects of stronger storm events and rising sea levels. Impacts include higher levels of flooding, property damage, loss of business and infrastructure, displacement, and significant drain on local and federal budgets.

Sea level rise also affects environmental systems, including erosion of protective beach landforms, marsh migration, loss of wildlife habitat, potential for prolonged flooding, and the salinization of freshwater wetlands and aquifers, which alters their ecological balance and function.

These impacts can be reduced by planning in harmony with the natural environments that are "designed" to accommodate them. Resiliency planning will prevent costly recovery expenditures and lessen fears of devastation or economic ruin from coastal or storm flooding. Locating homes and businesses outside the path of destructive flooding will lead to a safer, economically, and socially sustainable future

Several coastal community comprehensive plans and resiliency plans were studied to determine current best practices, including:

Norfolk, Virginia, Virginia Beach, New Orleans, Broward County Florida, Charleston, South Carolina,Boston, Washington DC,and Miami, Florida.

Given the strides the County has taken to preserve and protect its natural resources, the following strategies are needed to face future challenges:

» Continue to reevaluate and update water quality and natural resource protection standards.

» Work cooperatively with neighboring jurisdictions to protect valuable resources.

» Implement tools to aid the conservation of sensitive environments and landscapes.

» Study and minimize the probable impacts of sea level rise on public assets, infrastructure, operations, and the environment.

» Continue to aggressively conserve and begin to restore critical habitats and their ecosystem services.



Photo source: Design Workshop

STRATEGIES & ACTIONS

RNE 1. STUDY, MONITOR, ADDRESS, AND PROTECT VITAL NATURAL RESOURCES, AND PRIORITIZE CONSERVATION EFFORTS.

- Monitor and study the impacts of rising sea level on salt marshes.
- Identify opportunities to facilitate marsh migration and target vulnerable areas for conservation.
- Establish project standards and regulations for permitting living shorelines as an alternative to bulkheads and revetments as erosion control techniques through collaboration with DHEC/OCRM.
- Collect and compile baseline data on water quality standards on the sub-watershed level, including the Port Royal Sound. Continue to support short- and long-term monitoring of the Sound to identify any changes. Work towards centralizing and standardizing the collection and analysis of water quality to be easily accessible.
- Continue to implement the Stormwater Utility with priority placed on encouraging property owners in older moderate- and high-density developments that predate the adoption of stormwater standards in Beaufort County to retrofit facilities to meet current standards.

- Provide a mechanism to allow high-density developments to reduce the impact of nitrogen pollution by encouraging property owners to retrofit stormwater management devices in older non-conforming developments within the same sub-watershed.
- Continually reevaluate and update the Stormwater BMP manual to increase the use of Low Impact Development (LID) and incentivize preservation of trees and preservation and restoration of natural spaces that serve these functions naturally and at no cost.
- Continually evaluate how stormwater standards can be modified to help reduce FEMA flood insurance rates through the Community Rating System (CRS).
- Continue to fund the Rural and Critical Lands Preservation Program (RCLPP) and use the Greenprint map to assist in prioritizing land purchases and conservation easements.
- Work toward a network of open spaces coordinating RCLPP lands with other preserved lands and open space set asides.
- Protect mature and specimen trees and plant new trees when property is developed or redeveloped.
- Build on the current partnership with Clemson Extension to promote the value of tree protection and proper tree care and promote other Extension public education programs such as Master Naturalist and Master Gardner to help residents restore and protect the area's natural resources.
- Preserve groundwater quality by reducing and eliminating heavy usage of groundwater resources in the County.

NE1. ACTIONS

NE 1.1. Monitor effectiveness of existing ordinances and programs and update as necessary to protect water quality and natural resources.

NE 1.2. Seek referendums on additional funding for the Rural and Critical Lands Preservation Program every four years.

NE 1.3. Require new developments and encourage existing developments to adopt a tree management plan.

NE 1.4. Support Port Royal Sound Foundation's application to the EPA's National Estuary Program to recognize the local and national importance of the Port Royal Sound, drawing support and funding for conservation and research on our vital coastal resources. Seek partnership with Port Royal Sound Foundation to monitor water quality and provide educational opportunities for the community about the importance of keeping our waterways healthy.

NE 1.5 Evaluate the time period that a property owner must wait after clear cutting property before applying for a development permit.

R NE 2. USE THE GREENPRINT PLAN AND GREENPRINT PRIORITY MAPPING TO ENSURE THAT NEW DEVELOPMENT SUPPORTS RESOURCE CONSERVATION.

- Create awareness of potential impacts of development.
- Identify areas critical for flood control and natural resource protection, as well as higher ground that may be more suitable for development.
- Use the Greenprint Overlay in review of proposed development and land use plans, infrastructure plans, parks and recreation plans, and transportation plans.

STRATEGIES & ACTIONS

NE2. ACTIONS

NE 2.1. Provide critical environmental systems maps on the County website.

NE 2.2. Update environmental systems mapping (five-year cycle) to reflect ongoing research and actual conditions of flooding and sea level rise.

R NE3. MONITOR AND STUDY ENVIRONMENTAL HAZARDS TO BEST UNDERSTAND POTENTIAL IMPACTS AND PLAN APPROPRIATELY.

NE3. ACTIONS

NE 3.1. Install and monitor tidal gauges at several locations in Beaufort County, including the Port Royal Sound Foundation's Maritime Center, to provide a thorough representation of tidal activity across the county. Seek partners to assist in funding and managing tidal gauges, including ACE Basin NERR, Palmetto Bluff Conservancy, Lowcountry Institute, S.C.

NE 3.2. Install groundwater monitoring wells at various locations including agricultural areas and low-lying communities that rely on septic systems.

NE 3.3. Adopt comprehensive water plans for vulnerable areas of the County by studying and analyzing how stormwater, sea level rise, and storm surge interact in an area determined by geographic and geological conditions. Understand and quantify to what degree salt marshes reduce local flooding and storm surge impacts, implement planning to incorporate these natural buffers as hazard reduction tool.

NE 3.4. Engage residents in the Community Collaborative Rain, Hail, and Snow Network (CoCoRaHS) program through collaboration with the Office of the State Climatologist and the National Weather Service

R NE 4. BUILD AT HIGHER ELEVATIONS TO AVOID IMPACT OF INCREASED FLOODING.

- Enact ordinances and policies that direct new development to a height or location resilient to coastal flooding caused by increasingly intense storm events, king tides, and rising sea levels.
- Consider increasing low-impact development (LID) standards, increasing buffers, limiting septic systems, and reducing density for low-lying areas and areas identified on the Greenprint Priority Mapping.
- Periodically evaluate freeboard requirements and/or Base Flood Elevations (BFE) to ensure that new structures are built to address existing flood risks and projected future risks due to sea level rise.
- Incentivize land purchases in flood-prone areas for open space preservation.
- Apply for grant funding—DOT, EPA, CDBG, FEMA, etc.—to develop a sustainable, resilient solution to address current and future flooding of the Warsaw Island Causeway.

NE4. ACTIONS

NE 4.1. Adopt a coastal resilience overlay district to require notification prior to real estate closings of the vulnerability of property to coastal flooding in low lying areas.

NE 4.2. Adopt additional feet of freeboard above BFE as well as uniform policies for adjacent properties outside the flood area.

NE 4.3. Review the County's Community Rating Service (CRS) program and makes changes to regulations and programs as appropriate with the goal of improving the County's CRS rating. Every improvement in the CRS rating saves flood policy holders 5% in premiums.

R NE 5. ASSIST VULNERABLE COMMUNITIES AND CONDUCT HAZARD MITIGATION PLANNING.

- Identify local communities that are at the highest risk to the impacts of coastal flooding and sea level rise. Develop criteria for identifying when the County intervenes, either through policy and/or funding regarding flooding and sea level rise impacts to public, quasi-public, and private infrastructure and individual properties to ensure equitable and proportional responses.
- Fully incorporate and integrate future sea level rise and climate change impacts into emergency management and hazard mitigation plans.

NE5. ACTIONS

NE 5.1. Develop a flood, sea level rise, and climate change roadshow program to connect with community groups, homeowners' associations, professional organizations not already served by existing programs, and other similar organizations for community outreach and education. Partner with public agencies such as Sea Grant and nonprofit groups such as the Port Royal Sound Foundation and the Gullah/Geechee Sustainability Think Tank in development of the program.

NE 5.2. Maintain an ongoing collaborative working group, similar to the Sea Level Rise Task Force, for discussions and feedback involving recommendations and other proactive activities related to sea level rise and resilience.

NE 5.3. Hire a Resilience Officer to oversee hazard mitigation planning in the county, including, but not limited to, assisting vulnerable communities, applying for grants, creating outreach education programs, and continually assessing hazard risks and creating policies to mitigate them.

R NE 6. EXPAND COMMUNITY-LEVEL CLIMATE CHANGE SCIENCE OUTREACH AND EDUCATION.

- Improve communication and outreach to the public about the science and projected impacts of flooding, sea level rise, and climate change.

NE6. ACTIONS

NE 6.1. Develop a county- level website that houses Beaufort County specific flooding and sea level rise information, including housing reports, outreach materials, the GIS portal that has sea level rise mapping, and other data sources. This website can potentially count as Community Rating System outreach credit if National Flood Insurance Program information is included.



Photo source: Design Workshop

CULTURE

Historic, cultural, and scenic resources protected for future generations.



CORE VALUES

1. We know that cultural diversity is what makes us a strong and healthy community. We believe in protecting culturally significant communities and resources through sensitive place-based planning and community engagement.

2. We understand that the assorted geographies of the County have varied demographic make-ups, needs, and lifestyle preferences.

3. We preserve and promote our cultural, ethnic, and socioeconomic diversity within our approach to planning the built environment.

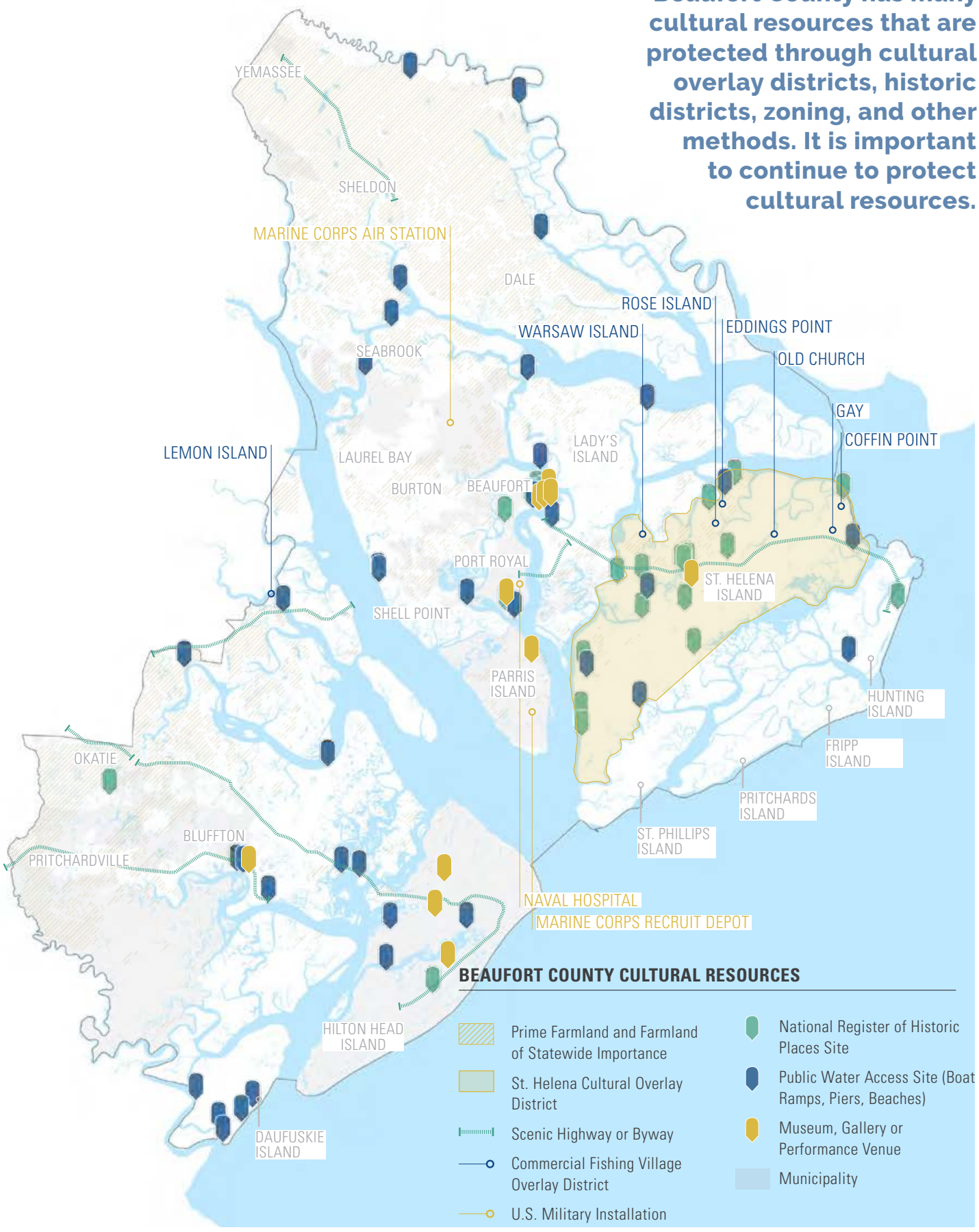
4. We know that the County's attractiveness as a destination to live, work, and vacation, and its consequent economic well-being, are directly related to its historic character and unique quality of life.

5. We want local communities to have a strong voice in their future planning.

6. We believe that our major cultural resource is our people.

Refer to the County Atlas, Greenprint, Action Playbook, and other supporting documents with more information.

Beaufort County has many cultural resources that are protected through cultural overlay districts, historic districts, zoning, and other methods. It is important to continue to protect cultural resources.



CONTEXT

Beaufort County is one of America's historic and cultural treasures. The County is home to the second oldest city in South Carolina and boasts two of four National Historic Landmark Districts in the state. Beaufort County is the birthplace of the Reconstruction Era.

The County is home to several significant Gullah/Geechee communities. Farming, fishing, and forestry have been an important part of life in the County for generations. The County's abundant resources—land and water—have provided jobs, sustenance, and places to recreate and reflect.

Many residents of Beaufort County, especially the Gullah/Geechee community, have traditionally relied on local waters as a food source. Some residents have used water resources as a source for small-scale commercial fishing enterprises.

We know that the County's attractiveness as a destination to live, work, and vacation, and its consequent economic well-being, are directly related to its historic character and unique quality of life.

These resources include the County's rich agricultural heritage, the people's relationship to the water, the area's scenic roadways, and the County's unique Gullah/Geechee history. Each of these components is vital to the region's identity. They add to the quality of life for residents; drive the local tourism economy; and make the County an attractive place to live or invest.

Beaufort County has grown rapidly over the past 20 years. Growth has brought economic development, educational opportunities, and improvements in public facilities and services. This growth has spread along shorelines and across farmland and forest.

As waterfront property has developed, access to the water for commercial, recreational, and subsistence purposes has diminished. Forested land has been consumed by new subdivisions. Vernacular architecture is being lost to production housing. New residents, bringing suburban lifestyles, have supplanted residents practicing a rural way of life. More people mean more cars. Traffic congestion has become a major public concern. As a result, roads have been widened to four, even six lanes to ease traffic flow. Many two-lane, tree-shaded "canopy" roads, have been replaced by suburban arterials.

Beaufort County bears a great responsibility to be good stewards of its cultural and historic resources. Therefore, this chapter offers the following strategies to protect the County's unique historic, cultural, and scenic resources:

- Enhance access to the water for all users.
- Preserve historic, cultural, and archaeological resources.
- Promote the preservation of agriculture and forestry.
- Protect the County's rural landscape and way of life.



Photo source: Design Workshop

STRATEGIES & ACTIONS

RC 1. PROTECT AND ENHANCE THE TRADITIONAL LOCAL SEAFOOD INDUSTRY BY PROACTIVELY WORKING TO PRESERVE EXISTING WORKING WATERFRONTS AND ALLOWING FOR THE EXPANSION OF COMMERCIAL FISHING OPERATIONS WHERE APPROPRIATE.

- Enhance boat landings and other County-owned waterfront properties to serve the diverse needs of subsistence, commercial, and recreational boaters and fishermen. Such enhancements include providing fishing piers, crabbing docks, and improved boat landing facilities.
- Consider the use of the Rural and Critical Land Preservation Program to protect working waterfronts by purchasing development rights; or, where deemed appropriate, consider the acquisition of working waterfronts with a long-term lease arrangement to continue active private operation of the waterfront.
- Explore the feasibility of using some County waterfront properties to support the traditional seafood industry by allowing

the location of private seafood processing facilities and other supporting services. This should only be considered where sufficient land is available and where such activities would not interfere with public access to the water, or endanger other seafood harvesting.

- Pursue funding sources such as OCRM Coastal Access and BIG Grants, the DNR Water Recreational Resource Fund, and consider local revenue-generating sources such as boat landing user fees at certain landings to fund improvements to water access facilities.
- Work with OCRM and DHEC to form a Commercial Seafood Advisory Committee made up of representatives of the local seafood industry, dock owners, seafood distributors, along with representatives of local governments, the Gullah/Geechee Fishing Association, and SC Sea Grant to continually monitor the status of Beaufort County's local seafood industry.
- Prioritize conservation of the Port Royal Sound to ensure health and sustainability of commercial seafood species (shrimp, shellfish, crab, offshore finfish) that rely on its live oyster reefs and tidal mud flats. Seek partnership with Port Royal Sound Foundation to provide educational opportunities for the community about the importance of our local seafood industry.

C1. ACTIONS

C 1.1. Improve access to the water at Fort Frederick, Jenkins Creek Boat Landing, and Station Creek Boat Landing.

C 1.2. Develop a comprehensive study of Beaufort County's boating needs. Develop a list of improvements necessary to accommodate existing and future requirements and identify partnerships with muncipalities to improve access to the water near jurisdictional boundaries.

C 1.3. Build a kayak launch at Fort Frederick and develop a blueway trail on the Beaufort River and associated creeks

R C 2. PRESERVE AND PROTECT THE COUNTY'S HISTORIC AND CULTURAL LANDSCAPES AND WATERWAYS.

- Develop a heritage tourism plan, in partnership with the Gullah/Geechee Cultural Heritage Corridor and the local Gullah/Geechee community that balances public access with private traditions, and economic development with the protection of cultural landscapes and lifeways. Explore land conservation strategies, development ordinances, and grant programs that can support plan implementation.
- Explore regional and national partnerships to take advantage of National Park Service and other initiatives to protect cultural landscapes against the impacts of climate change. This cultural inventory and vulnerability assessment should be aligned with a St. Helena Island comprehensive water study and plan, and should inform Rural and Critical Land priority purchases.
- Prioritize land conservation strategies and development ordinances that protect the quality of water bodies that are critical to Beaufort County cultural lifeways – including working waterfronts and public and traditional water access points. Protect and identify opportunities to improve water access for subsistence fishing and other traditional uses. Prioritize land conservation strategies and development ordinances that protect shorelines and critical habitat.
- Develop public education programs and curricula to share information about impacts of sea level rise and promote strategies that protect at-risk ecosystems, communities and cultural landscapes. Partner with public agencies such as Sea Grant, and nonprofit groups such as the Port Royal Sound Foundation and the Gullah/Geechee Sustainability Think Tank in development of programs.

STRATEGIES & ACTIONS

- Recognize scenic highways and byways as important cultural resources and develop appropriate protection measures. Consider nominating Old Sheldon Church Road, and US 21 from Chowan Creek to Folly Road on St. Helena Island, both currently State Scenic Byways, as National Scenic Byways.
- Work with other public agencies and nonprofit agencies to preserve and restore the buildings at Penn Center.
- Educate the public about the Port Royal Sound's integral role in establishing and sustaining the rich history of our county- attracting early explorers, facilitating the start of Reconstruction, supporting thriving industries and more- as well as its continued intricate relationship with our Lowcountry lifestyle today.
- Explore regional partnerships with jurisdictions sharing waterways to promote holistic protections and policies.
- Encourage the efforts of private nonprofit groups such as the Beaufort County Historical Society, and public agencies such as the Reconstruction Area National Historical Park and USCB to preserve and educate the public on the County's unique history. Partner with the municipalities on efforts to preserve and promote local historic resources.

C2. ACTIONS

C 2.1. Partner with the Town of Hilton Head Island to plan and implement the Historic Mitchelville Freedom Park.

C 2.2. In partnership with community members, including the Gullah/Geechee Sea Island Coalition and the St. Helena Island Cultural Protection Overlay District Committee, conduct a baseline cultural resource inventory and vulnerability assessment of buildings, archaeological sites, traditionally used roads, waterways, water access points, fishing areas, burial sites, and sacred grounds to inform protection and stewardship practices for Gullah/ Geechee communities.

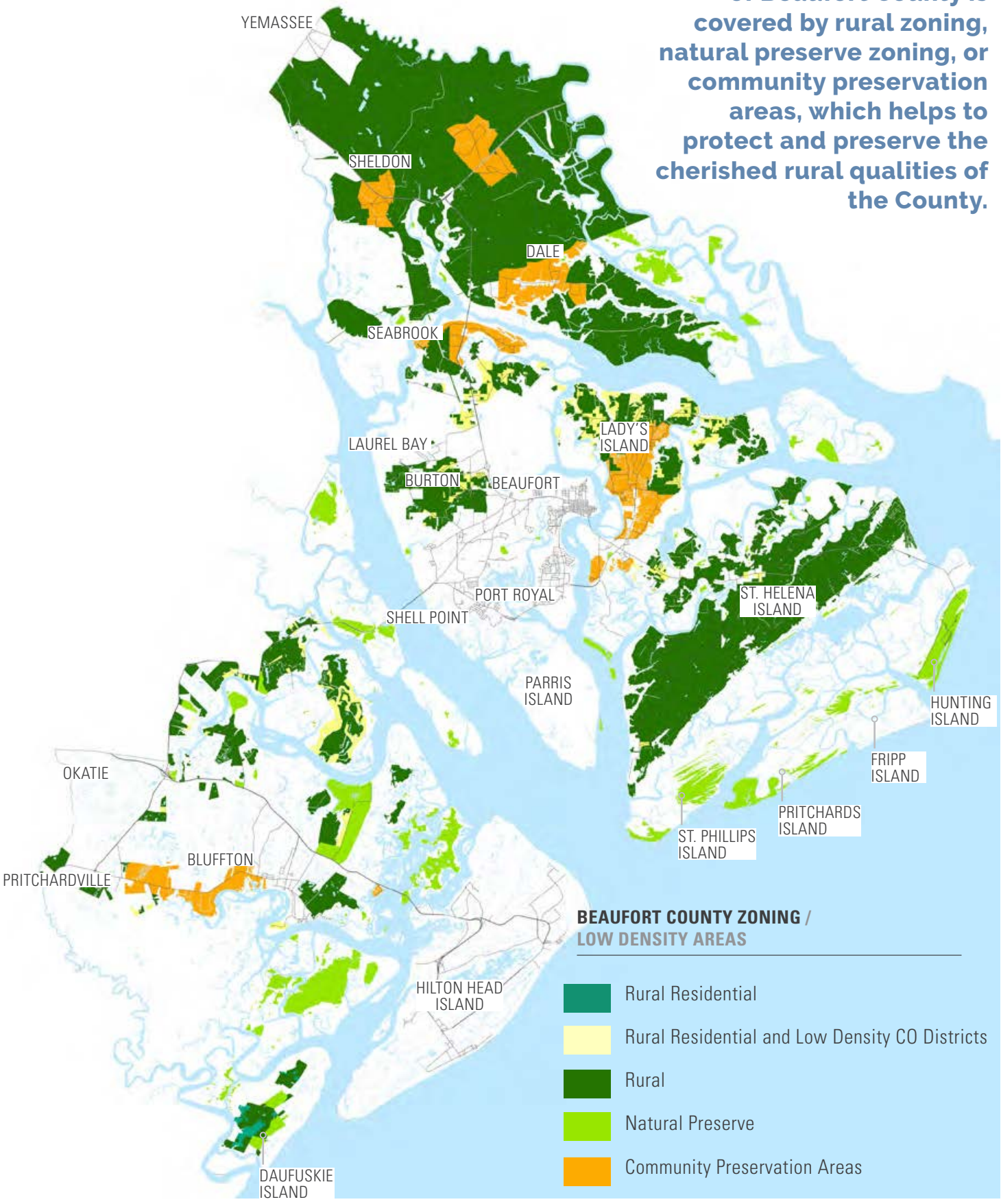
P C 3. CONTINUE TO EMPHASIZE THE PROTECTION OF HISTORIC AND ARCHAEOLOGICAL RESOURCES THROUGH A COMBINATION OF PLANNING, DATA GATHERING, LAND USE REGULATIONS, AND LAND ACQUISITION.

- Coordinate with the SC Department of Archives and History on projects that trigger state and federal permits.
- Review development plans to determine the location of archaeological and historic resources and the potential impact of development.
- Identify ways to protect older vernacular structures, many of which are located in rural areas, to preserve an important component of the historic built environment and as a source of affordable housing.
- Pursue the acquisition of significant archaeological and historic sites via the Rural and Critical Land Preservation Program.
- Consider additional protections for historic cemeteries including acquisition by public or nonprofit entities, easements, and buffer requirements.

C3. ACTIONS

C 3.1. Update the Beaufort County Above Ground Historic Resources Survey.

A significant portion of Beaufort County is covered by rural zoning, natural preserve zoning, or community preservation areas, which helps to protect and preserve the cherished rural qualities of the County.



STRATEGIES & ACTIONS

E C 4. PROMOTE THE PRESERVATION AND VIABILITY OF AGRICULTURE AND FORESTRY.

Where suitable, consider the lease of County-owned properties to family farms or small growers who are interested in actively farming the land. Promote sustainable agricultural practices (crop diversity, low use of pesticides, protection of soil quality, cover crops, etc.). Make active agriculture a condition of the lease.

- Continue to partner with the USDA and other agencies and organizations to match local funds for the preservation of farmland.

C4. ACTIONS

C 4.1. Use the Rural and Critical Land Preservation Program to promote active agriculture and the preservation of agricultural lands, and continue to target the purchase of development rights on active agricultural lands.

E C 5. SUPPORT LOCAL MARKETING INITIATIVES DESIGNED TO INCREASE THE PROFITABILITY OF SMALL-SCALE FARMING BY CONNECTING LOCAL GROWERS WITH CONSUMERS.

- Encourage the use of locally grown produce by adopting a local food purchasing program. This includes area grocery stores, local restaurants, institutions such as schools, and local food banks.
- Create a coalition consisting of Beaufort County, the Rural and Critical Land Preservation Program, Penn Center, the Coastal Conservation League, and local growers, to advocate for local agriculture, and identify policies, programs, and actions to further local agriculture.
- Encourage community gardens and farms in urban and suburban areas by removing regulatory barriers.
- Urge HOAs to accept native plantings in lieu of lawns. This would not only support the pollinator population we depend on for farming, but benefit stormwater and biodiversity while saving property owners' money.

C5. ACTIONS

C 5.1. In conjunction with Clemson Extension, create a website with information on locally grown produce, and retail and restaurants using locally sourced food. The web site should promote organizations that advocate local foods such as Lowcountry Local First and Fresh on the Menu.

E C 6. SUPPORT THE PRESERVATION OF THE COUNTY'S RURAL LANDSCAPE AND WAY OF LIFE.

Support existing organizations that promote cultural resource protection, such as the South Carolina Coastal Community Development Corporation, the Gullah/Geechee Sea Island Coalition, the Cultural Protection Overlay District Committee, the Corners Community Preservation District Committee, the Lowcountry Alliance, and Penn Center.

- Encourage collaboration between the various public and private non-profit groups working to preserve the County's rural landscapes and way of life.
- Continue to recognize the importance of policies such as low-density rural zoning and family compounds in preserving and

enhancing the traditional land use patterns associated with rural Beaufort County and the Gullah/Geechee community.

- Develop a suite of policy, land conservation, land stewardship, and incentive programs that offer greater protection to Heirs' properties in partnership with the Center for Heirs' Property Preservation and the Pan-African Family Empowerment & and Land Preservation Network.
- Explore local and regional partnerships to support local farmers and create demonstration models for sustainable, culturally significant, and environmentally resilient farming practices.
- Consider the designation or creation of a County liaison position to assist rural property owners.

C6. ACTIONS

C 6.1. Periodically evaluate Beaufort County's rural land use policies, including family compound uses, to determine that they are accomplishing the policy goals of preserving the rural landscape and way of life, and that they are fair and equitable to local residents and property owners.

C 6.2. Develop a brochure designed to help small rural landowners understand how to subdivide and transfer land. The brochure should explain family compounds, policies for small rural landowners, home occupation and home business provisions, cottage industry provisions, resources for heirs' property, etc.



Photo source: Design Workshop

SPOTLIGHT: ST. HELENA

St. Helena Island is home to Beaufort County's largest Gullah/Geechee community. Gullah/Geechee communities are comprised of descendants of enslaved people brought from West Africa. The historic isolation of the County's barrier islands was crucial to the survival of this culture. As in other parts of the Southeast, Gullah/Geechee culture is under extreme stress from rapid coastal development, population growth, lack of recognition, and financial hardship. Growth has the potential to substantially alter the traditional social and cultural character of Beaufort County's Gullah/Geechee community, as new residents bring different values and customs.

The existing Cultural Protection Overlay (CPO) District protects St. Helena Island from gentrification that would result in a greater demand for services and higher property values, making it more difficult and costly to maintain the traditional rural lifestyle on the Island.

Beaufort County's Gullah/Geechee communities face other unique challenges brought on by increased development pressure. When the County was primarily rural, large tracts of agricultural and forested land, regardless of ownership, provided the Gullah/Geechee community with access to waterways, oyster beds, hunting grounds, and other elements of the natural environment that were lifelines for the community. New development, especially along high-value waterfront property, has limited entry to these traditional hunting and fishing

grounds. In addition, many of the older cemeteries, which play an important role for the Gullah/Geechee community, are located within the original plantations, on private property, making them difficult to access.

Beaufort County's Gullah/Geechee community makes evident that the region's cultural resources are not just the historic sites, waterways, sacred grounds, farmlands, open spaces, hunting grounds, and the land on which traditional events have occurred. The most important cultural resource is the people themselves.

The primary threat to the long-term viability of Beaufort County's Gullah/Geechee communities is land development. Implementing land use policies that concentrate growth in urban areas and protect rural land from suburban development, are the most important actions the County can take to protect its unique Gullah/Geechee heritage.

ST. HELENA STRATEGIES

- Reevaluate the CPO District by assessing whether additional land use restrictions are necessary to meet the intent of the district. Consider the addition of specific design standards that reinforce historic Gullah/Geechee development patterns and character. Include diverse representation on the steering committee that may be formed to guide the process. Ensure public input from all segments of the community.
- Explore the possibility of a Gullah/Geechee Heritage Enterprise Zone to allow cottage industries, and offer heritage tax credits for culturally significant businesses/industries.
- Explore tax credits and grants to help property owners in the CPO District fund housing restoration and adaptive reuse of commercial buildings.
- Explore the potential to base property tax assessment on the land's current use rather than its market value within the CPO District.
- Ensure open access to waterways for traditional Gullah/Geechee fishing families. Work in collaboration with the Open Land Trust and the Rural and Critical Land Program to place easements on these locations in perpetuity to enhance the cultural landscape, working waterfronts, and continuation of Gullah/Geechee traditions.
- Ensure that the Gullah/Geechee burial areas that were mapped in 1999, and any identified subsequently, are platted and protected from development. Consider exempting these properties from stormwater fee assessment and taxation where possible.
- Define the Corners Community as a hub of commerce and culture, and implement design guidelines and land conservation strategies to protect its character and create scenic buffers. Promote a safe pedestrian environment in the Corners Community and other gathering places on St. Helena Island that serve the Gullah/Geechee community.
- Encourage residents challenged by high utility bills to seek assistance through energy assistance programs administered by Beaufort-Jasper EOC.

ST. HELENA ACTIONS

- Reevaluate the CPO District by assessing whether additional land use restrictions are necessary to meet the intent of the district. Consider the addition of specific design standards that reinforce historic Gullah/Geechee development patterns and character. Include diverse representation on the steering committee that may be formed to guide the process. Ensure public input from all segments of the community.
- In partnership with the Sea Level Rise Task Force, commission a comprehensive water study and plan for St. Helena Island that considers stormwater, sea level rise, and

storm surge to better define the risks posed by climate change and new development and recommend strategies to protect against these threats. Engage the Gullah/Geechee community, Penn Center, local churches, area businesses, and local non-profits such as the Friends of Fort Fremont, in preparation of the plan. This study should be aligned with County-wide Gullah/Geechee cultural inventory and vulnerability assessments.

- Consider prohibiting Mining/Resource Extraction within the Cultural Protection Overlay zone and revising conditions for Mining in the CDC to require that the presence of Prime Farmland as defined by the USDA be considered in the decision to approve a permit for mining. Consider a spacing requirement for mines.
- Support nonprofit organizations, such as the Center for Heirs' Property Preservation and PAFEN, with expertise in resolving heirs' property issues. Encourage establishment of local offices in Northern Beaufort County and expansion of their programs throughout the County. Consider partnering with the municipalities to provide support for these groups by applying for grant funds, Accommodations Tax and Hospitality Tax Revenues (if appropriate), and local funds to expand efforts in the area.
- Work with DOT to address road and drainage conditions on state-owned roads on St. Helena Island.
- Ask residents to develop a specific list of areas (addresses) where drainage is an issue. Have these areas assessed by the Stormwater Utility Board and projects developed as appropriate to address concerns. Consider grant funding, including CDBG and EPA, for projects.
- Develop a strategy to permanently address maintenance and safety improvements to "legacy roads" and private roads serving low-and moderate-income property owners. Consider grant programs and public service projects to address immediate maintenance needs
- Ensure that St. Helena residents are included in the planning process for the Parks and Recreation Master Plan. Consider equity issues in development of that plan.
- Assess the condition of existing recreation facilities on St. Helena Island. Develop plans for improvements and add funding costs to CIP. Apply for grant funding for improvements as appropriate.
- Review recreation programs on St. Helena Island. Ensure that programs are addressing community needs and that programs are expanded beyond pre-pandemic levels.
- Work with Penn Center to develop an MOU and lease agreement in order for the County to take a more active role in maintaining MLK Park on St. Helena Island and including applying for grants for park improvements.



Community Meeting on St. Helena

Photo source: Design Workshop

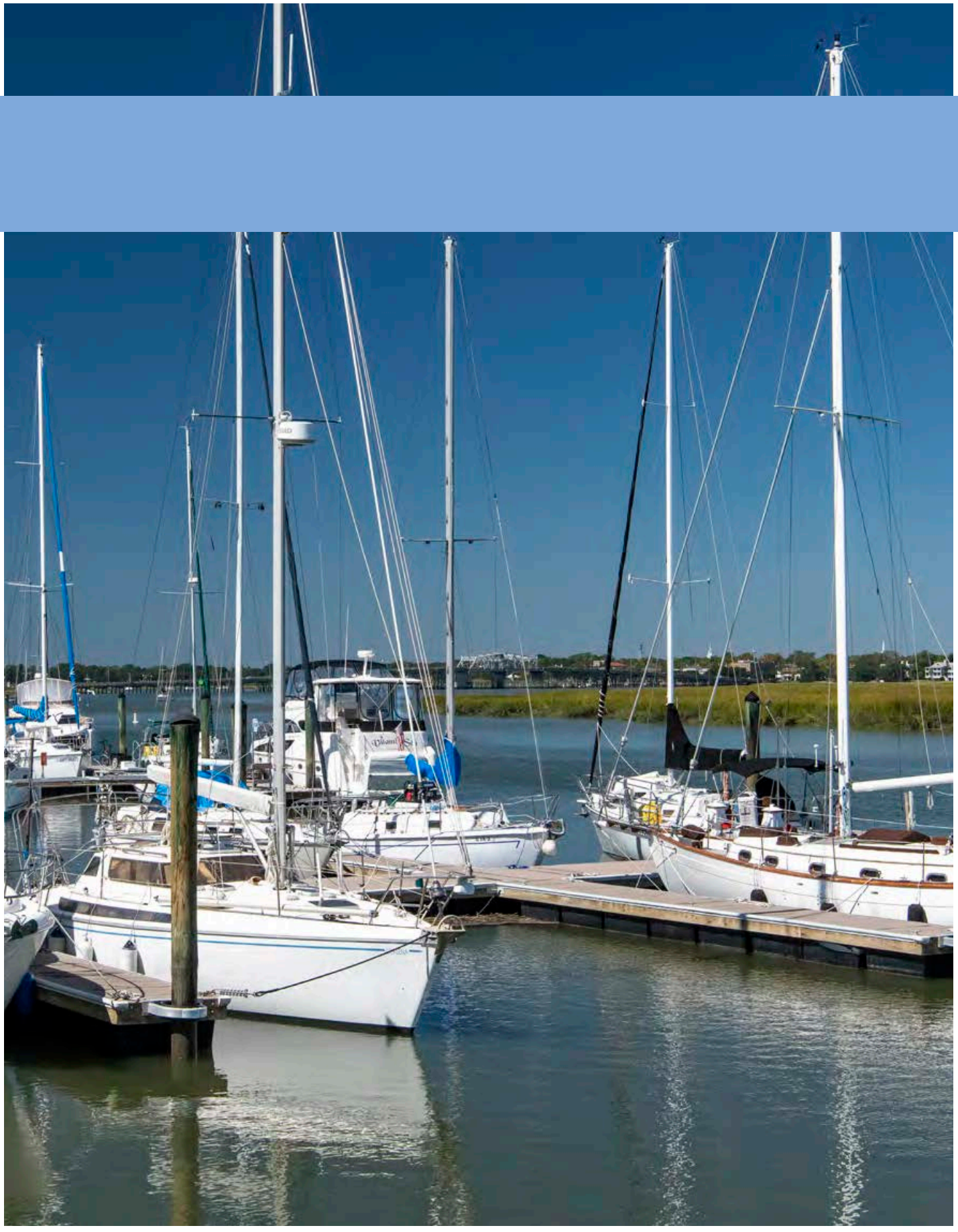


Photo source: Design Workshop

ECONOMY

A resilient economy poised for a sustainable future.



CORE VALUES

1. We value our unique and complex natural environment as a source of life, recreation, economy, culture, and sense of place.
2. We support industries that are clean and environmentally friendly. We are forward-looking and will take advantage of evolving innovative economic opportunities.
3. We prepare our workforce with the skills needed to meet the needs of emerging opportunities.
4. We value our military relationships and recognize their importance to our culture and economy.
5. We recognize that the County is made up of unique natural and cultural environments and we position economic development opportunities that fit those locations.
6. We are business friendly and create the incentives needed to attract new businesses that support our principles.
7. We recognize the need to locate jobs nearer to where people live, to reduce time spent commuting.
8. We recognize that regional cooperation and coordination will expand opportunities for us all.
9. We support the growth and success of our municipalities and collaborate on growth management and land use issues.

Refer to the County Atlas, Greenprint, Action Playbook, and other supporting documents with more information.

CONTEXT

Beaufort County's economy has traditionally been based, directly or indirectly, on its natural and cultural resources. Agriculture, forestry, tourism, resort development, even the presence of the military, is the result of the County's unique blend of geography, nature, and culture.

This is still generally true today, with the existing economic drivers being tourism, the military, the retirement industry, residential development, education, and healthcare. All these industries continue to be vital to the economic sustainability of the community.

The County's mild climate, vast and varied water resources, like those of the Port Royal Sound, its ties to the military, and its attractive built environment, have drawn a large influx of new residents, keeping Beaufort County one of the fastest growing counties in South Carolina. Access to safe and healthy waterways on the Port Royal Sound is instrumental in building a link between the County's natural resources and economic development by connecting people and businesses to water-based recreation and industry. Resort, residential, and commercial development has greatly expanded the service-related workforce. Ongoing growth has created the need for infrastructure improvements and additional County services, which require more revenue.

The long-term success and viability of Beaufort County depends upon the creation of a larger, more diversified tax base and creating quality jobs for County residents. Beaufort County has the highest per capita income in the state; however, the County lags behind the state and the nation in average annual wages.

The County is fortunate to have a solid foundation in the military. This positions the area well to attract new business from the aeronautics and other supporting industries. In addition, the County's three military installations create a pool of exiting and retiring service members who bring considerable talent and skills to the local workforce, skills that are especially attractive to the technology and aerospace industries.

At the same time, these individuals often need assistance in transitioning into the civilian workforce. To date, Beaufort County has weathered the periodic threat of base closures; however, a new peril in the form of climate change and rising sea levels is emerging.

Bringing new types of businesses to the area to diversify the economy is critical. New industries should be targeted to build on the region's strengths, including knowledge-based, green industries, and the visual and performing arts.

Comprehensive education and workforce training is needed to better prepare County residents for these and other emerging job opportunities. The future depends on quality job creation that allows citizens to remain or settle in Beaufort County with employment that requires knowledge, talent, and training, and compensates with higher-paying jobs.

Regional cooperation will be necessary to maintain a strong economic outlook moving forward. Most of the growth in the region has been centered in Beaufort County, primarily in the Hilton Head and Bluffton area. As the southern portion of the County has started to build-out, growth has been pushing into Jasper County. The proposed Port of Jasper and associated development will stimulate further growth in Jasper County and the 278 Corridor.



Spanish Moss Trail is a County-wide recreation asset

Photo source: Design Workshop |

Growth, and expansion through annexation, in both Jasper and Hampton Counties, have a direct impact on the natural environment, roads, and character and quality of life in Beaufort County. Continuing to coordinate land use and development, natural resource and open space planning, transportation, and emergency services is key to ensuring a healthy economic future.

It is important for Beaufort County to develop a sustainable economic base, offering opportunities to all its residents. Therefore, this chapter offers the following strategies to develop a resilient economy moving forward:

- Support existing industries and develop new employment sectors.
- Educate the workforce.
- Grow jobs close to where people live.
- Foster collaboration among governments and between agencies.

STRATEGIES AND ACTIONS

R E 1. SUPPORT AND ENHANCE EXISTING ECONOMIC DRIVERS.

- Protect the natural environment, manage growth, and support infrastructure improvements to preserve the region's attractiveness.
- Support the growth of the tourism and hospitality industries by protecting and preserving the qualities that make Beaufort County an attractive place to visit.
- Grow the supply chain for the tourism and hospitality industry so that goods and services can be provided locally rather than by outside businesses. This would provide local jobs and improve the efficiency of and reduce costs to the region's hotels and resorts.
- Promote the Port Royal Sound and its position as the driving force behind environmental tourism, real estate development, and invaluable ecological services. Take steps to ensure that the protection of the Sound is thoughtfully integrated into these endeavors to ensure long-term cohesion and sustainability of industries and our waterways.

E1. ACTIONS

E 1.1. Seek partnership with Port Royal Sound Foundation to educate the community about the Port Royal Sound as a critical economic driver for the community and the importance of keeping it healthy.

R E 2. RECOGNIZE THAT THE MILITARY IS A VITAL COMPONENT OF THE COUNTY'S HISTORY, CULTURE, AND ECONOMY.

- Support the Greater Beaufort Chamber of Commerce's Military Affairs Committee's efforts to promote and lobby for the retention and expansion of the military installations in Beaufort County.
- Work cooperatively with the City of Beaufort and the Town of Port Royal to implement the recommendations of the 2015 Lowcountry Joint Land Use Study (JLUS), and continue to enforce standards within the AICUZ contours that discourage development that would adversely affect the mission of the Marine Corps Air Station Beaufort (MCAS).
- Support Beaufort County's three military bases by providing affordable off- base housing for active- duty military personnel and their families and providing educational opportunities and other amenities to support military families.

E2. ACTIONS

E 2.1. Continue to partner with the Marine Corps to preserve open space around MCAS to protect the facility from undesirable encroachment. This partnership expands the County's efforts to preserve rural and critical land while ensuring the ability of MCAS to remain militarily viable and vital to the national defense. Continue to partner with the Marine Corps to ensure the other strategies and actions within this plan are compatible with the mission of MCAS Beaufort.

E 2.2. Implement transfer of development rights program to compensate affected property owners within the MCAS Airport Overlay District.

E.2.3. Support implementation of the recommendations of the Military Installation Resilience Review being conducted for the County's military facilities.

R E 3. TARGET AND RECRUIT NEW INDUSTRIES.

- Target industries that build on the region's strengths and diversify the local tax base. These industries include aerospace and defense; tourism and hospitality supply chain; health and bio-related fields; knowledge-based industries; and green industries. Develop flexibility with the business license fee program for target industries.
- Support the Beaufort County Economic Development Corporation's efforts to purchase properties and to develop spec buildings by assisting in identifying candidate properties; providing financial support; assisting in off-site transportation improvements; and overcoming regulatory barriers to sites that meet other locational criteria.
- Ensure that there is a sufficient quantity of appropriately located, zoned and environmentally suitable land for non-retail commercial uses such as business parks, research and development centers, product assembly, distribution centers, cottage industries, and light to moderate industrial uses.

E3. ACTIONS

E 3.1. Provide the Beaufort County Economic Development Corporation with a list of properties meeting locational requirements for office and light industrial uses on a regular basis.

E 3.2. Purchase approximately 30 acres in 3 or 6 acre tranches in each local jurisdiction within Beaufort County through the Beaufort County Economic Development Corporation, to provide ample space for companies wishing to expand or move to Beaufort County.

R E 4. DEVELOP INCENTIVES FOR BUSINESSES TO EXPAND OR LOCATE IN THE COUNTY.

- Create incentives-tied to the County's target industries and designed to stimulate private investment in the development of appropriate sites near Beaufort County's two airports.
- Reduce the County's personal property tax rates for registered, County-based aircraft.
- Consider the standardization of competitive business license fee rates and classifications across Beaufort County and each of its municipalities.

E4. ACTIONS

E 4.1. Provide more flexibility in commercial zoning districts to permit smaller non-retail commercial uses such as small assembly facilities and light industrial operations, or contractor's offices that do not adversely impact surrounding retail uses.

E 4.2. Create incentives, such as an accelerated building permit process, height and density bonuses and fee reductions and waivers, for commercial and industrial projects that intend to meet either LEED or Energy Star standards.

R E 5. ESTABLISH LOCATIONAL CRITERIA FOR NEW BUSINESSES.

- Locate jobs close to municipalities, outside of environmentally sensitive land and land prone to flooding, and close to the highest concentrations of households to reduce impacts on traffic and commute times.
- Encourage the planning, development, and permitting of mixed-use developments that will attract young professionals.

STRATEGIES AND ACTIONS

E5. ACTIONS

E 5.1. Target land purchases to incentivize the location of new employers in walkable mixed-use communities such as Buckwalter Place.

E E 6. DEVELOP A HIGHLY SKILLED AND WELL-TRAINED WORKFORCE.

- Work with educational partners, both within and outside of Beaufort County, including universities, colleges, and trade schools, to tailor their educational programs to the County's unique economic opportunities that support the knowledge-based economy and green industry technologies.
- Support and enhance programs such as TWEAC, TCL's Transitioning Military Training Program, and instituations such as USCB and the miliary bases, that assist individuals leaving the military in enhancing the skills needed for employment in the public and private sectors.
- Involve youth in implementation of the plan and actively recruit the input of students in future planning efforts. Serve as guest speakers in classrooms. Invite students to observe Planning Commission and County Council meetings. Partner with teachers to invite presentation of planning-related student projects at Planning Commission meetings.

R E 7. CREATE A BUSINESS-FRIENDLY ENVIRONMENT.

- Identify properties that are currently under municipal or County control that can be offered to relocating businesses.
- Review and update state and local incentives on a regular basis to attract the right industries for the region as well as keep pace with the changing face of business and industry.
- Support green and sustainable development projects that meet economic development requirements, by streamlining the review processes, as well as creating fee reductions and waivers, and building height or density bonuses.
- Add a specified definition for Knowledge-intensive businesses to the list of businesses qualified for the state Jobs Tax Credit.
- Promote state and federal brownfield clean-up programs including the state Brownfields/Voluntary Cleanup Program (VCP) that allows a non-responsible party to acquire a contaminated property with state Superfund liability protection for existing contamination by agreeing to perform an environmental assessment and/or remediation. Financial incentives including tax credits are available to property owners who enter into the VCP. Encourage property owners to apply for funding through the Brownfields Cleanup Revolving Loan Fund.
- Clarify the home business and home occupation standards in the CDC and update the Cultural Protection Overlay to broaden the cottage industries standards.

R E 8. FORGE REGIONAL AND STATE PARTNERSHIPS AND COLLABORATION.

- Support legislation that would amend the current South Carolina economic development qualifying criteria from a Per Capita Income base to an Average Regional Wage base, which would more accurately

reflect the income levels of the region's working population.

- Coordinate incentives between counties and municipalities in the region to create a level playing field.
- Maintain and grow partnerships and shared priorities with Jasper and Hampton Counties to include economic development, land use, transportation, and signage.
- Provide an additional tax credit in Multi-County Park agreements for companies whose new construction meets LEED and Energy Star standards. The tax credit should be based on the level of green building certification.

PE 9. RECOGNIZE THE IMPORTANCE OF THE VISUAL AND PERFORMING ARTS COMMUNITY AS A KEY COMPONENT OF QUALITY OF LIFE AND SOURCE OF ECONOMIC DEVELOPMENT.

- Support the planning, development, and permitting of a visual and cultural arts community, which is essential to attracting and retaining young professionals and enhancing quality of life.
- Provide local matching funds to the Community Arts Grant Fund to support individual artists, art education programs, and local arts organizations.
- Continue to support the creation of venues, classrooms, and galleries to showcase new and emerging local artists.
- Continue to provide space in libraries and other County buildings to display the work of local artists.



Photo source: Design Workshop

MOBILITY

Innovative, multimodal, and cost effective infrastructure that sustains a high quality of life..



CORE VALUES

1. We understand our roads support our community character and sense of place.
2. We believe that context-sensitive "Complete Streets" should define the design of all of our roads.
3. We believe that a healthy, multimodal approach to transportation provides choices to residents and visitors, especially the most vulnerable.
4. We want innovative transportation management solutions to be integrated into transportation planning.
5. We work collaboratively with our neighboring jurisdictions to create common approaches to mobility and connectivity.
6. We believe our roads express our landscape and should be harmonious with our environment.

Refer to the County Atlas, Greenprint, Action Playbook, and other supporting documents with more information.

CONTEXT

Traffic congestion on Beaufort County's roads is one of the most noticeable indicators of the adverse impacts of new growth. As a result, Beaufort County has invested heavily in improving its transportation network over the last 15 years.

Examples of large-scale, highly-visible improvements include the Bluffton Parkway; the widening of US 278 from SC 170 to the bridge to Hilton Head Island; the widening of the McTeer Bridge and Lady's Island Drive; and the widening of US 17 from Gardens Corner to the county line.

These projects were made possible through a resolute effort to raise local funds through impact fees and the capital project sales tax and leverage state and federal transportation funds.

While the county and the region will continually need to improve its road network to keep up with new growth, several factors challenge the sustainability of the current levels of commitment to fund and implement large-scale transportation improvements:

- Fiscal Constraints: The limited availability of tax dollars to fund large-scale transportation improvements and competition with other public needs, such as schools, parks, and public safety facilities.
- Environmental and Geographical Constraints: Beaufort County's unique physical environment limits the construction of new roads.
- Quality of Life Constraints: Even if the County had unlimited resources to address traffic congestion issues, many citizens would object to continual road widening or grade separated intersections as eroding the character and aesthetics of the Lowcountry.

Therefore, as Beaufort County continues to grow, its approach to addressing transportation infrastructure will need to shift its focus away from large scale transportation and toward smaller scale network improvements that preserve and increase the efficiency of the road network. Such projects include intersection improvements, turning lanes, parallel roads, and intelligent transportation systems (ITS).

In addition to small scale network improvements, it is important to promote other modes of transportation such as transit, water-based transportation, walking, and cycling in order to reduce automobile dependency.

Over time, improving other modes of transportation will not only reduce vehicle miles travelled (VMTs), but increase the quality of life by creating transportation choices.

Therefore, this chapter offers the following strategies to maximize the efficiency of the county's road network while promoting policies and alternative transportation choices to reduce our dependence on automobile transportation.

- Work cooperatively and regionally to implement needed road improvements.
- Maximize the efficiency of the existing road network.
- Adopt a Complete Streets Policy.
- Promote a diversity of transportation mode choices including water taxis/ ferries.
- Encourage walkable and transit-ready development.
- Develop transportation improvements that enhance the County's sense of place.

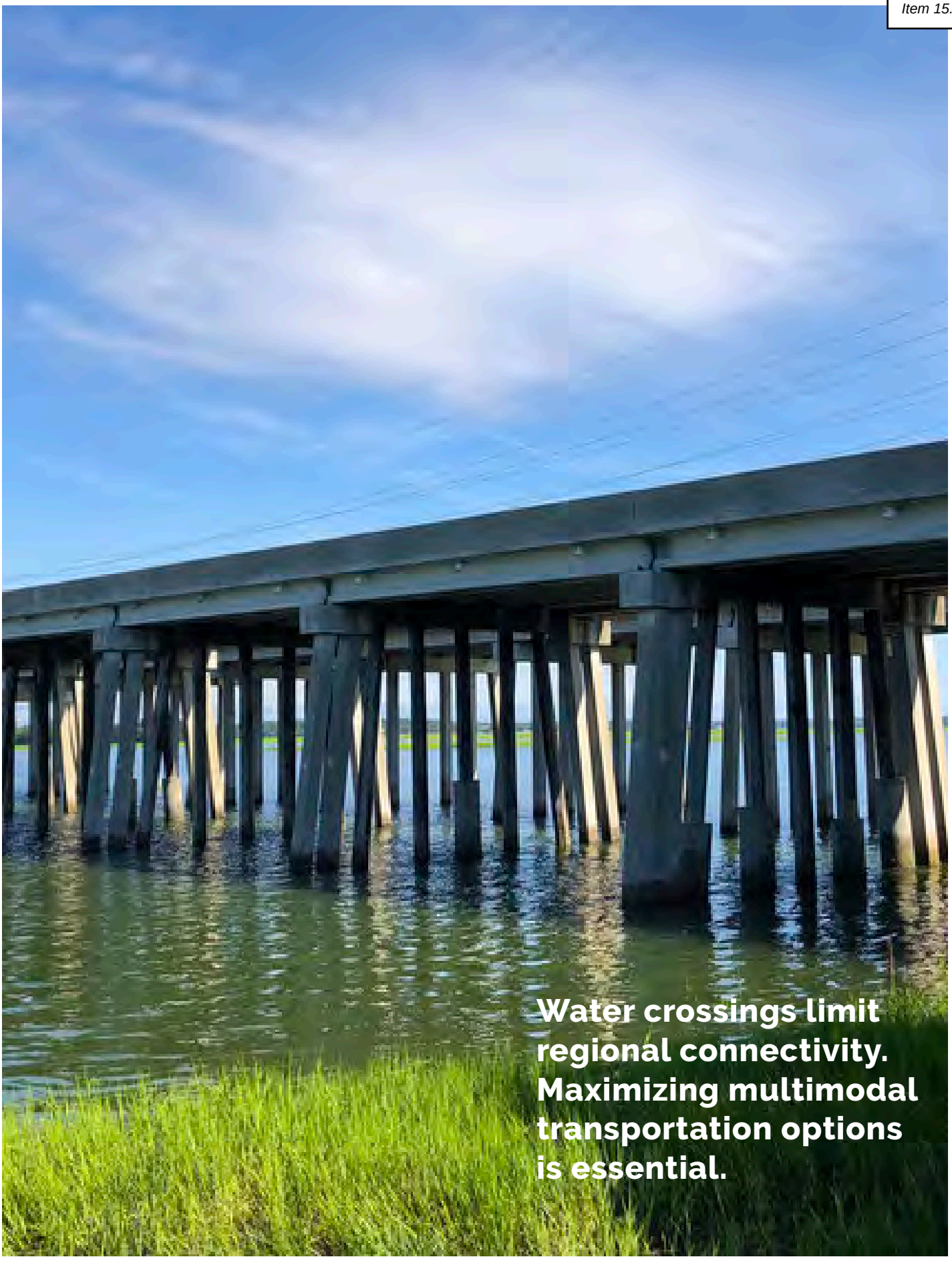


Photo source: Beaufort County

STRATEGIES AND ACTIONS

P M 1. ADOPT A COMPLETE STREETS POLICY.

- All streets shall be planned, designed, operated, and maintained to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities.
- All future transportation projects should adhere to a Complete Streets Policy in an appropriate urban, suburban, or rural context.
- Support and fund projects and programs that promote a diversity of transportation choices such as transit, cycling, and walking.
- Through LATS Metropolitan Planning Organization, develop a shared regional commitment to develop complete streets, and to work with SCDOT to convert state highway corridors into multimodal corridors.

M1. ACTIONS

M 1.1. Formally adopt a Complete Streets policy that requires all streets to be planned, designed, operated, and maintained to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. All future transportation projects should adhere to the Complete Streets policy in an appropriate urban, suburban, or rural context.

M 1.2 Prepare corridor master plans so that major arterial and state highways can evolve into complete streets.

R M 2. MAINTAIN AND ENHANCE A SAFE, EFFICIENT, REGIONAL ROAD NETWORK.

- In order to maintain an acceptable quality of life in the region, conditions on the regional road network outside of urbanized areas should not fall below LOS "D". Within urban areas, consider using a different metric to evaluate mobility such as multi-modal LOS or accessibility.
- Continue to work cooperatively with the municipalities, neighboring counties, LATS, and DOT to identify, fund, and implement needed road improvements. The funding strategy should use revenue from Guideshare funds, impact fees, capital projects sales tax, and grant opportunities.
- Develop a network of secondary streets to improve levels of service at failing intersections.
- Approach each road widening as a last resort to be considered after alternative strategies have been deemed inadequate to address transportation needs.

M2. ACTIONS

M 2.1. Develop a funding strategy and implement the transportation projects in the 10-year Capital Improvements Program.

M 2.2. Update impact fees every five years to insure that future development is paying for its impact on the transportation network.

M 2.3. Place an initiative on the 2022 ballot to reimpose a 1% capital project sales tax to fund transportation improvements that includes roads and multi-use pathways. Establish a regular schedule for future referendums.

M 2.4 Include needed transportation improvements in the LATS Long Range

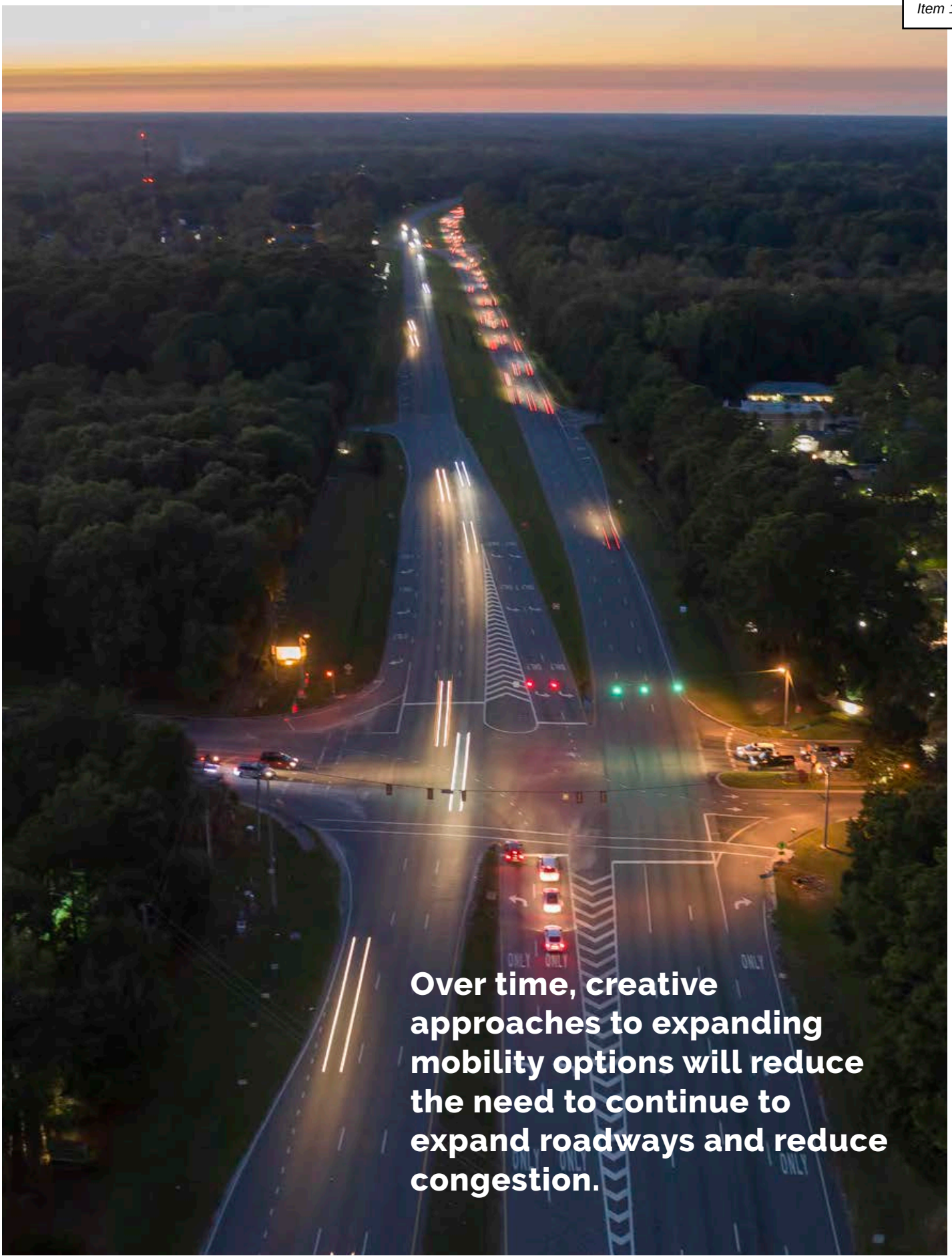


Roadway designs can provide environmental curtains that preserve habitat connectivity *Photo source: Design Workshop*

Transportation Plan to insure maximum utilization of Guideshare funding for county transportation projects.

R M 3. PRESERVE AND ENHANCE NETWORK EFFICIENCY BY ADOPTING, APPLYING AND ENFORCING POLICIES TO MANAGE ACCESS AND REDUCE VEHICLE MILES TRAVELED (VMTS)

- Adopt land use policies that encourage internal trip capture and promote development whose location and density are suitable to support public transit and other alternative modes of transportation.
- Consider to use and improve on the following VMT reduction strategies – access management, improving secondary road network, promoting alternative transportation modes, and Intelligent Transportation Systems (ITS – as an alternative to road widening. Approach road widening as a last resort to be considered after alternative strategies have been deemed inadequate to address transportation needs.
- Support improvements to existing rail infrastructure and expansion of passenger service serving the County.
- Identify opportunities and incentives for improving/expanding marine access and transport services, e.g., ferry services, water taxis, public dockage services, and kayak launches.



Over time, creative approaches to expanding mobility options will reduce the need to continue to expand roadways and reduce congestion.

Photo source: Design Workshop

STRATEGIES AND ACTIONS

P M 4. PROMOTE CONTEXT SENSITIVE TRANSPORTATION IMPROVEMENTS THAT ENHANCE THE LOCAL ENVIRONMENT.

- Use context-sensitive design principles in the development and redesign of all streets and roads.
- Coordinate billboards, signage, landscape, streetscape standards for roads that cross jurisdictional boundaries, such as along the SC 170 corridor and the SC 462 corridor.
- Explore design standards and innovative road construction techniques to protect tree canopies and vegetated buffers, link wildlife habitat, and preserve wetlands.

E M 5. PRIORITIZE BICYCLING AND WALKING TO CONNECT RESIDENTS WITH JOBS, SCHOOLS AND OTHER DESTINATIONS; PROVIDE SAFE FACILITIES THAT BENEFIT PERSONS OF ALL ECONOMIC STATUSES, AGES, AND ABILITIES.

- Develop a funding strategy and anticipated annual revenue for trail projects that includes Accommodations Tax, Guideshare funds, Capital Project Sales Tax, dedicated local funding, and state and federal grants.
- Develop a non-profit to advocate pathway projects in Beaufort County and raise private donations.
- Work with Friends of the Spanish Moss Trail to expand its role to advocate and raise private donations for pathway projects that connect to the Trail.
- Work with DOT to identify projects in the preliminary engineering state to incorporate bike / pedestrian improvements.
- Advocate for state funding for Safe Routes to School beginning with state delegation.
- Work with SCDOT to widen shoulders and provide adequate width to the right of rumble strips.
- Work with LATS during the update of the Long Range Transportation Plan to incorporate bicycle and pedestrian projects in the plan and advocate for a target percentage of funding to be devoted to bicycle and pedestrian facilities.

M5. ACTIONS

M 5.1. Complete the Spanish Moss Trail and make continuous progress on other greenway, trail, sidewalk, and bicycle lane projects.

M 5.2. Dedicate a staff position to plan and implement bicycle and pedestrian facilities.

M 5.3 Develop a funding strategy and implement the bicycle and pedestrian projects in the 10-year Capital Improvements Program.

M 5.4 Adopt "Beaufort County Connects 2021", the Bicycle/Pedestrian Plan for the County.

E M6. SUPPORT THE DEVELOPMENT OF BUS RAPID TRANSIT FEATURES IN HIGH-DEMAND CORRIDORS, SUCH AS OFF-BOARD FARE COLLECTION, PLATFORM LEVEL BOARDING, AND DEDICATED LANES AND STOPS SHELTERED FROM AUTOMOBILE TRAFFIC.

M6. ACTIONS

M6.1. Increase the numbers of park and ride locations along major transportation routes that connect employees with their jobs.

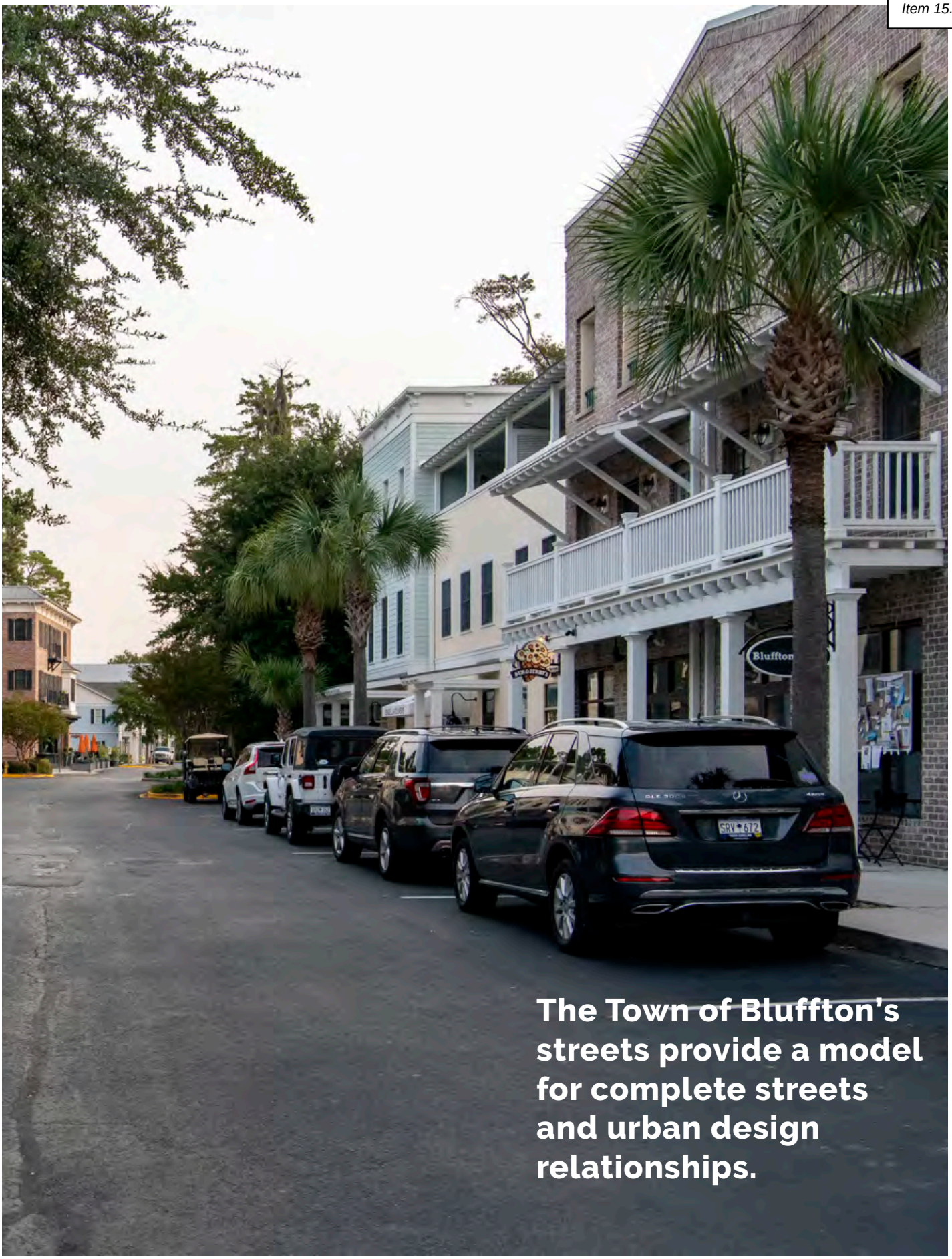
M6.2. Promote the use of transit to reduce seasonal and local traffic and provide opportunities for employees to access job opportunities.

M6.3. Support Palmetto Breeze's efforts to establish a fixed-route bus service between Hilton Head Island and Bluffton and in the Beaufort/Port Royal area. Consider adding stops in the Sheldon/Seabrook areas.

M6.4. Incentive "transit- ready" development projects that cluster moderate to high density residential development, retail, services and employment centers within walking distance of transit stops.

R M 7. UPGRADE AIRPORTS.

- Support the enhancement of the Hilton Head Island Airport and the Beaufort Executive Airport to support economic development and tourism in the region.
- Consider the impacts of airport improvements on the environment, MCAS Beaufort, and the surrounding community.



The Town of Bluffton's streets provide a model for complete streets and urban design relationships.

Photo source: Design Worksh



Photo source: Design Workshop

HOUSING

Promote quality, affordable housing available and accessible to all residents.



CORE VALUES

1. We provide the support needed for our citizens to access a happy and successful life.
2. We want our citizens to have equitable access to high quality services, amenities, education and infrastructure.
3. We desire safe, stable neighborhoods.
4. We know our population is aging and also becoming more diverse.
5. We believe a community should offer a mix of housing types available to residents of varying incomes, ages, and abilities.
6. We understand the need to ensure housing that is affordable to our workforce.
7. We believe that diversity in housing, in neighborhoods, and in people, adds to resiliency.

Refer to the County Atlas, Greenprint, Action Playbook, and other supporting documents with more information.

CONTEXT

Beaufort County is the most affluent county in South Carolina in terms of median household income. This wealth is not spread evenly, however, but varies greatly across the county's diverse population and geography. The median income for African-American and Hispanic households is significantly lower than for the County as a whole. According to the Centers for Disease Control (CDC) Social Vulnerability Index (SVI), Beaufort County has areas of high vulnerability related to housing and transportation, especially in its more rural areas. Median income on St. Helena Island in 2019 was only two-thirds that of the County as a whole ($44,190 in Census Tract 11.02 verses $68,377 for the County). The Sheldon and Seabrook areas (Census Tracts 1 and 2) had the lowest median income in the County in 2019, at $38,395 and $42,466 respectively.

Attaining affordable housing is a problem for both renters and homebuyers. According to the Beaufort County, South Carolina Housing Needs Assessment by Bowen National Research, in 2017, 47.4% of Beaufort County renters are "cost- burdened," or paying more than 30% of their income toward housing. Northern unincorporated Beaufort County had the highest number of cost- burdened renters at 55.9%. Over 33% of Beaufort County homeowners are paying more than 30% of their income toward housing, which is significantly higher than the statewide average of 23%. Slightly over 70% of the available housing inventory for sale is priced above $300,000, while only 10% of the inventory is available for less than $200,000.

The situation is even more difficult for very low-income residents. While about 18% of Beaufort County residents can afford a $500 per month rent, only 6.3% of the rental housing market is listed at or below that price.

Government subsidized housing currently has 280 families on the waiting list. The one-bedroom wait list is the longest and the wait time is almost three years. The wait list for Housing Choice Vouchers (formerly Section 8) has over 1,000 families on it and is not expected to open for additional applications until 2023 or later.

The greatest projected growth by household age group is expected to occur among seniors, which creates the need for senior-based housing, health care and programs, assisted living facilities and continuing care facilities. Many housing developments within the County do not provide parks, open spaces, and amenities, which requires people to travel to enjoy public recreational opportunities. Many residents have to drive--often long distances--to get to their workplace, which congests roadways, utilizes land for parking, and lengthens the workday.

Beaufort County will need to have an active role in affordable housing in order to build a sustainable future for tourism and other major industries, protect its military bases, and continue to be a desirable place to live for people of all income levels. A comprehensive affordable housing approach will:

- Foster the creation of affordable housing near jobs, services and public transit.
- Reduce regulatory barriers to the creation of affordable housing.
- Establish an ongoing funding source to address housing needs.
- Partner with non-profit agencies and the private sector.
- Work regionally to address affordable housing needs.



Photo source: Design Works

STRATEGIES AND ACTIONS

E H 1. DEVELOP POLICIES FOR THE APPROPRIATE LOCATION AND QUALITY OF AFFORDABLE HOUSING.

- Locate affordable housing in infill sites that are accessible to employment, services, schools, parks, and public transportation.
- Encourage affordable housing to be located in mixed-income, mixed-use, walkable communities.
- In rural areas, affordable housing strategies should be focused on the rehabilitation of existing dwellings for low-/moderate-income homeowners, eliminating barriers to expanding existing family compounds, and assisting families in clearing titles to heirs' property.
- Support efforts to enable older adults and seniors to transition into housing to meet their specific needs. Ensure that senior housing is located in walkable communities or near transit so that seniors can access shopping and services without the necessity of a car.

H1. ACTIONS

H 1.1. Create affordable housing location criteria and weighting to refine affordable housing location mapping included in the Comprehensive Plan. Update every five years.

R H 2. REDUCE REGULATORY BARRIERS TO THE DEVELOPMENT OF AFFORDABLE HOUSING.

- Expand on existing affordable housing density bonuses. Explore other regulatory incentives including the fast tracking of permits, etc.
- Continue to support a waiver or reduction of impact fees for eligible affordable housing projects. Continue to explore other programs that reduce development costs for affordable housing without compromising quality.

H2. ACTIONS

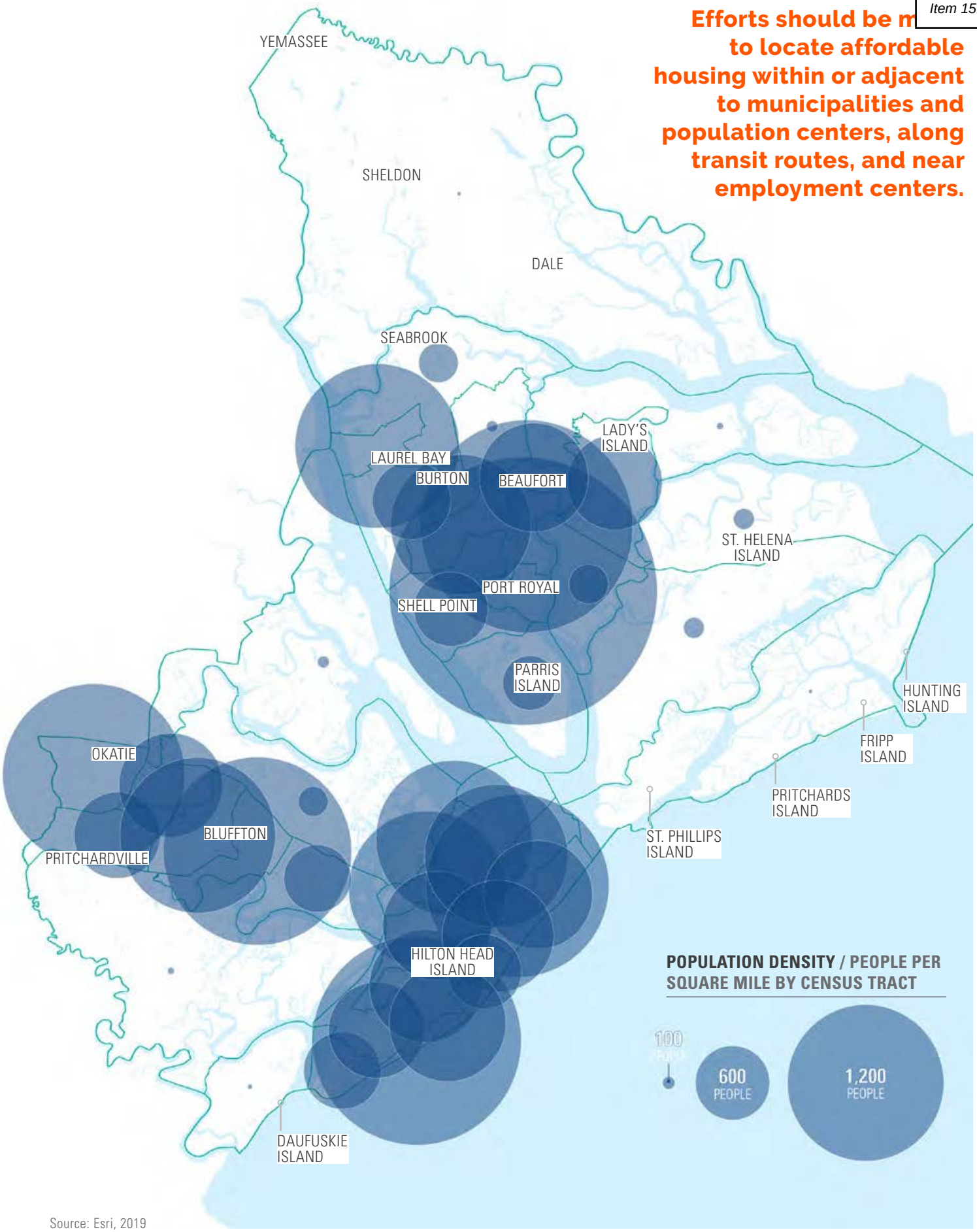
H 2.1. Work to eliminate barriers to developing affordable and workforce housing by periodically evaluating and updating the Community Development Code.

H 2.2. Expand on the existing density bonuses in the Community Development Code to incentivize the creation of affordable housing by the private sector. Consider expanding the required affordability period beyond 25 years.

R H 3. AGGRESSIVELY PURSUE THE DEVELOPMENT OF AFFORDABLE HOUSING.

- Use the recommendations from the 2018 Housing Needs Assessment to inform which affordable housing projects to support or pursue.
- Develop and maintain partnerships with non-profit organizations to expedite the construction of new affordable housing and provide programs that address needs such as down payment assistance. Such partnerships include purchasing of land, innovative financing, providing local matches to grant applications, and providing technical assistance.
- Support state efforts to enact legislation enabling local jurisdictions to adopt inclusionary zoning regulations that link

Efforts should be m to locate affordable housing within or adjacent to municipalities and population centers, along transit routes, and near employment centers.



Source: Esri, 2019

STRATEGIES AND ACTIONS

the production of affordable housing to development of market rate housing.

- Establish an ongoing dedicated funding source to assist in local affordable housing initiatives. The County should consider establishing a housing trust fund in order to pool limited resources, manage dedicated funding, and to prioritize and manage affordable housing initiatives. Consider securing state legislation in order to adopt a real estate transfer fee to fund housing initiatives.
- Consider re-establishing the Affordable Housing Task Force or a similar group to serve as a public advisory committee to the housing coordinator to help bring diverse perspectives to the table and avoid duplication of programs and services.

H3. ACTIONS

H 3.1. In cooperation with local municipalities and Jasper County, create a Regional Affordable Housing Trust Fund and provide annual funding to support affordable housing needs in the Lowcountry.

H 3.2. Consider establishing an Affordable Housing Land Trust to acquire and hold land. The land is leased to others to build affordable units, with the land remaining in ownership of the trust. Since land is taken out of the market, the impact of land appreciation is removed, therefore enabling long-term affordable housing.

H 3.3. Hire a housing coordinator for Beaufort County to implement the policies of this plan.

H 3.4. Seek funding through the Home Investment Partnership Program (HOME) and the Community Development Block Grant (CDBG) Program to rehabilitate substandard housing and create new affordable housing.

H 3.5. Consider prohibiting short term rentals as the primary use of the property in certain residential zones; i.e., only permit short term rentals in conjunction with 4% properties.

H 3.6. Review zoning districts to determine if appropriate opportunities exist to incorporate more "missing middle housing."



Photo source: Design Worksh

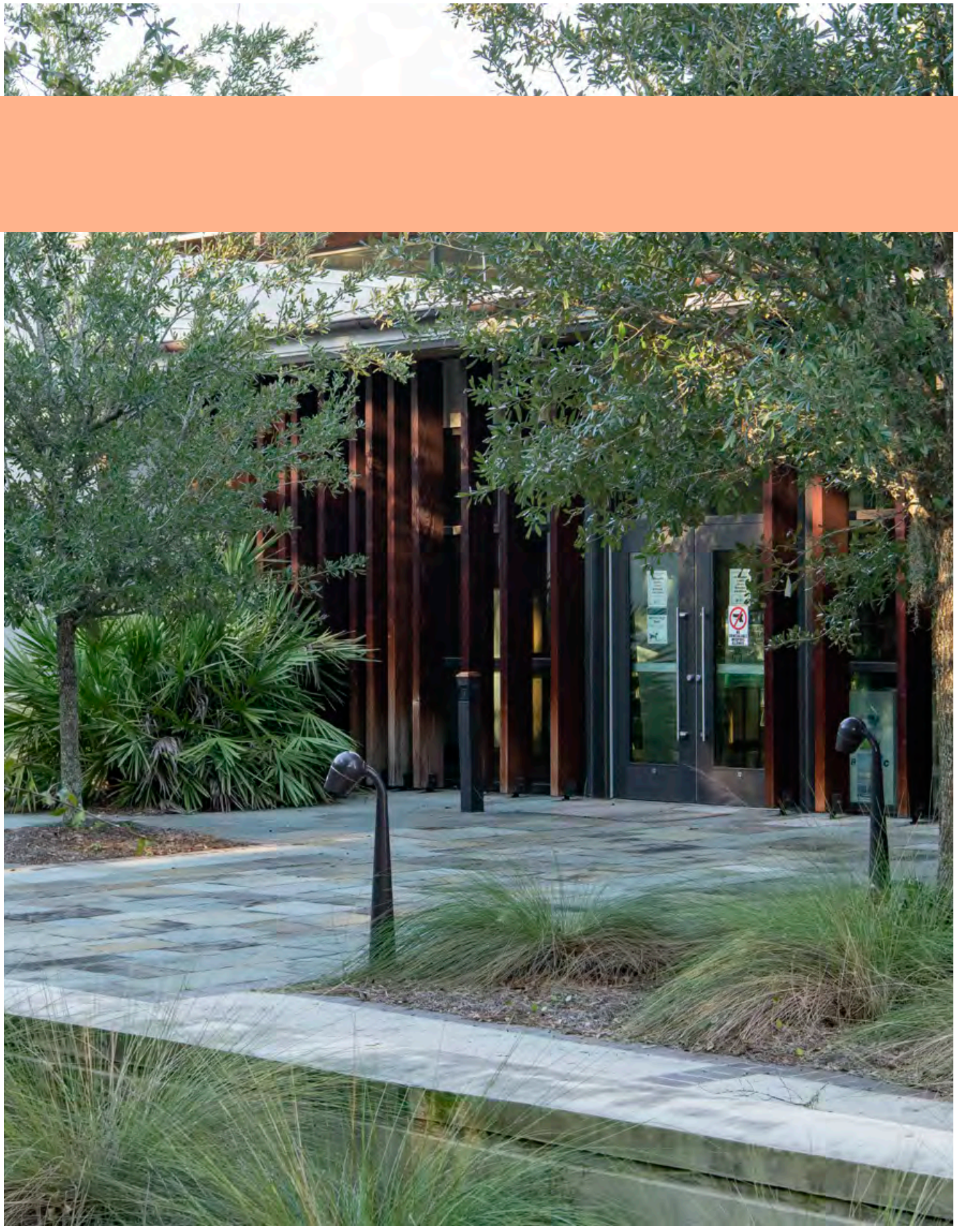


Photo source: Design Works

COMMUNITY FACILITIES

High quality, resilient community facilities and services for all residents.



CORE VALUES

1. We desire equitable access to quality facilities and services for all residents.
2. We believe critical facilities should be located outside of vulnerable, flood-prone areas.
3. We develop new community facilities in concert with Place Type Overlay future land use designations.
4. We believe in promoting green building practices and reducing the environmental impact of County facilities.

Refer to the County Atlas, Greenprint, Action Playbook, and other supporting documents with more information.

CONTEXT

As growth continues at a rapid rate, Beaufort County faces a significant challenge to meet the need for equitable distribution of services and community facilities to all of its citizens. Access to recreation, schools, water and sewer utilities, and public health and safety services should be expanded as the County works to accommodate its population growth, especially in Southern Beaufort County. Examples of recent successes include the development of nine existing and planned Passive Parks; 10 constructed miles of the Spanish Moss Trail in Northern Beaufort County; enhancements to boat public boat ramps and fishing piers; a successful bond referendum to renovate school facilities and add classroom space; and additional EMS facilities, vehicles, and staff.

The County will need to address several factors as it continues the expansion of community facilities to meet the demands of new growth:

- Accessibility: Ensure the population is served fairly and has equitable access to schools, parks, and public health and safety facilities. Consider what levels of service are appropriate relative to the density of identified areas.
- Environment: Locate future community facilities away from areas that are prone to flooding, and retrofit existing facilities to maximize their resilience to sea level rise and increased flooding.
- Place Type Areas: Balance the development of future community facilities with the varying densities and characters of local communities, and the natural environment.

Beaufort County has a responsibility to provide quality facilities and services to all of its citizens while continuing to expand its environmental stewardship efforts. Therefore, this chapter sets forth the following strategies to guide the development and enhancement of future and existing community facilities and ensure that the County:

- Provides quality facilities and services throughout the County.
- Develops resilient public infrastructure.
- Promotes energy efficiency in County operations.
- Expands the public health and safety service network.



Interpretive parks in Port Royal

Photo source: Port Royal



Interpretive parks in Port Royal

Photo source: Port Royal

STRATEGIES AND ACTIONS

R CF 1. DEVELOP RESILIENT AND EQUITABLE PUBLIC FACILITIES, INFRASTRUCTURE, AND PROGRAMS.

- Develop policies to locate public infrastructure in areas resilient to coastal flooding. This includes developing a strategy to inventory and retrofit vulnerable existing critical infrastructure..
- Ensure that the design of new public facilities enhances the communty's sense of place.
- Evaluate availability and quality of public facilities and programs.

CF1. ACTIONS

CF 1.1. Map and analyze locations of existing vulnerable critical infrastructure using projected future conditions. This includes developing an inventory of low-lying public facilities and critical infrastructure, including roads, sewer, water, public buildings, and stormwater infrastructure.

CF 1.2. Develop policies that require the design and location of future capital improvements and critical infrastructure to account for projected sea level rise and lifespan of structure.

R CF 2. EXPAND THE USE OF GREEN BUILDING DEVELOPMENT AND OPERATIONS PRACTICES TO REDUCE CONSUMPTION OF NATURAL RESOURCES, PROMOTE ENERGY EFFICIENCY, AND REDUCE POLLUTION.

- Evaluate all County operations and policies to promote energy efficiency and to reduce energy consumption, including where future facilities are located.
- Continue to expand the provision of online services, where practical, to reduce or eliminate the need for the public to travel to County facilities.
- Develop commuting policies and incentives for County employees such as telecommuting, carpooling, and alternative commuting modes such as walking, cycling, and transit.
- Support Green Building by requiring future County buildings and additions to be LEED certified; encourage other local governments and agencies to adopt similar policies; and provide tax or other incentives to the private sector for LEED buildings.
- Evaluate existing and future land use regulations, design standards, and building codes to ensure that they do not place unreasonable barriers to providing site and building features designed to merit LEED credits (e.g., rain barrels, cisterns, and green roofs).
- Provide support to local agencies that administer low-income weatherization programs such as the Weatherization Assistance Program offered through the US Department of Energy.
- Continually reevaluate development regulations to remove any unnecessary regulatory barriers that deter local renewable energy generation.
- Assist private communities in overcoming barriers placed by restrictive covenants.

CF2. ACTIONS

CF 2.1. Conduct an energy audit for all County facilities (existing, undergoing renovation, and under design). The County should consider entering into an energy performance contract with an Energy Service Company to perform the audit and implement the improvements.



Palmetto Breeze provides an option for commuters

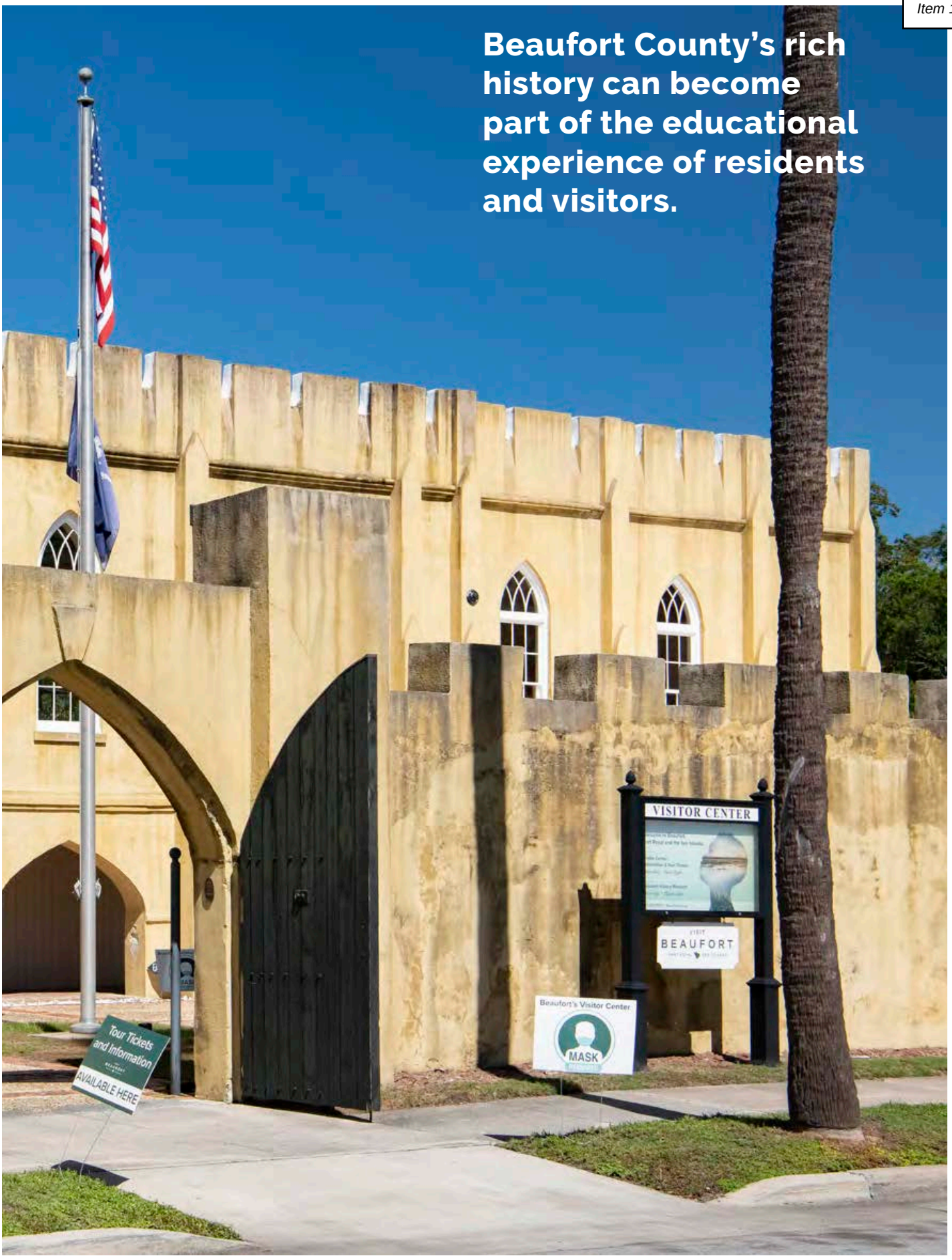
Photo source: Beaufort County

The Audit should include an evaluation of the feasibility of using renewable energy, such as wind and solar, to reduce energy costs in County facilities

CF 2.2. Install electric vehicle charging stations at every Council facility that houses a sizeable workforce or has high public visitation.

E CF 3. EXPAND WATER AND SEWER SERVICES TO AREAS OF NEED WITHIN URBANIZED OR URBANIZING AREAS.

- Support the extension of public water in the Seabrook/Stuart Point CP, Dale CP, the Pritchardville CP, and other rural communities that are currently served by private wells by working with both BJWSA and, in the northern most part of the county, Lowcountry Regional Water System (LRWS). Prioritize communities within designated urban growth boundaries. Promote Clemson Extension's "Be Septic Safe Program" to owners of septic tanks to prevent groundwater contamination and extend the life of septic tanks.
- Work with the Lowcountry Council of Governments, Deep Well Project, and other agencies to pursue grants to assist low- and moderate-income residents with laterals and tap fees.
- Restrict the expansion and location of new regional sewage collection and transmission facilities in rural areas except where a documented public health or environmental safety issue has been identified.



Beaufort County's rich history can become part of the educational experience of residents and visitors.

Photo source: Design Workshop

CF3. ACTIONS

CF 3.1. Adopt county-wide policies that limit residential density for developments that are not served by public sewer.

CF 3.2. Work with BJWSA to identify and prioritize areas with the highest concentration of on-lot septic systems for connection to sewer if these neighborhoods are within urbanized areas or within designated growth boundaries.

R CF 4. CREATE A COMPREHENSIVE PLAN FOR SUSTAINABLE WASTE REMOVAL AND DISPOSAL.

- Design and implement a plan for provision of multiple disposal alternatives, including composting, for the County.
- Continue efforts to form alliances with neighboring counties to develop alternative methods for waste disposal and recycling.
- Initiate the placement of a transfer station and a Material Recovery Facility (MRF) in Beaufort County to provide an alternative to disposal and recycling at the Hickory Hill Landfill and MRF. Ensure appropriate siting to avoid impacting communities and sensitive habitats.
- Explore means of initiating mandated curbside pick- up for solid waste and recycling in Districts 6, 7, and 9, and encourage the Town of Hilton Head to provide or require curbside pick-up.
- Explore an exclusive franchise system, allowing haulers to bid on servicing an entire Solid Waste District or a designated area within the Solid Waste District if not feasible for one hauler to service the entire district. This will help to reduce costs for citizens and decrease truck traffic in residential neighborhoods.
- Pursue recycling options for yard waste as an alternative to placement in a construction and demolition landfill or incineration.
- Expand options to help the public dis toxic items such as household hazardous waste that degrade water quality.

CF4. ACTIONS

CF 4.1. Install trash compacting equipment to increase the efficiency and capacity of County high usage convenience centers.

CF 4.2. Design and implement a plan for sustainable waste removal and disposal for the County, including multiple disposal alternatives, like various recycilng streams and composting.

E CF 5. DEVELOP LIBRARIES THAT FIT WITH CURRENT TRENDS IN PROGRAMMING AND ARE DESIGNED TO SERVE THE VARYING NEEDS OF THE CITIZENS OF THE COUNTY.

- Establish a Level of Service of 1.0 square foot per capita building space and two collection items per capita.
- Expand the bookmobile program to meet the needs of residents who are unable to physically travel to a branch location.
- Expand on-line services for e-books, audio books, music streaming, and other services.

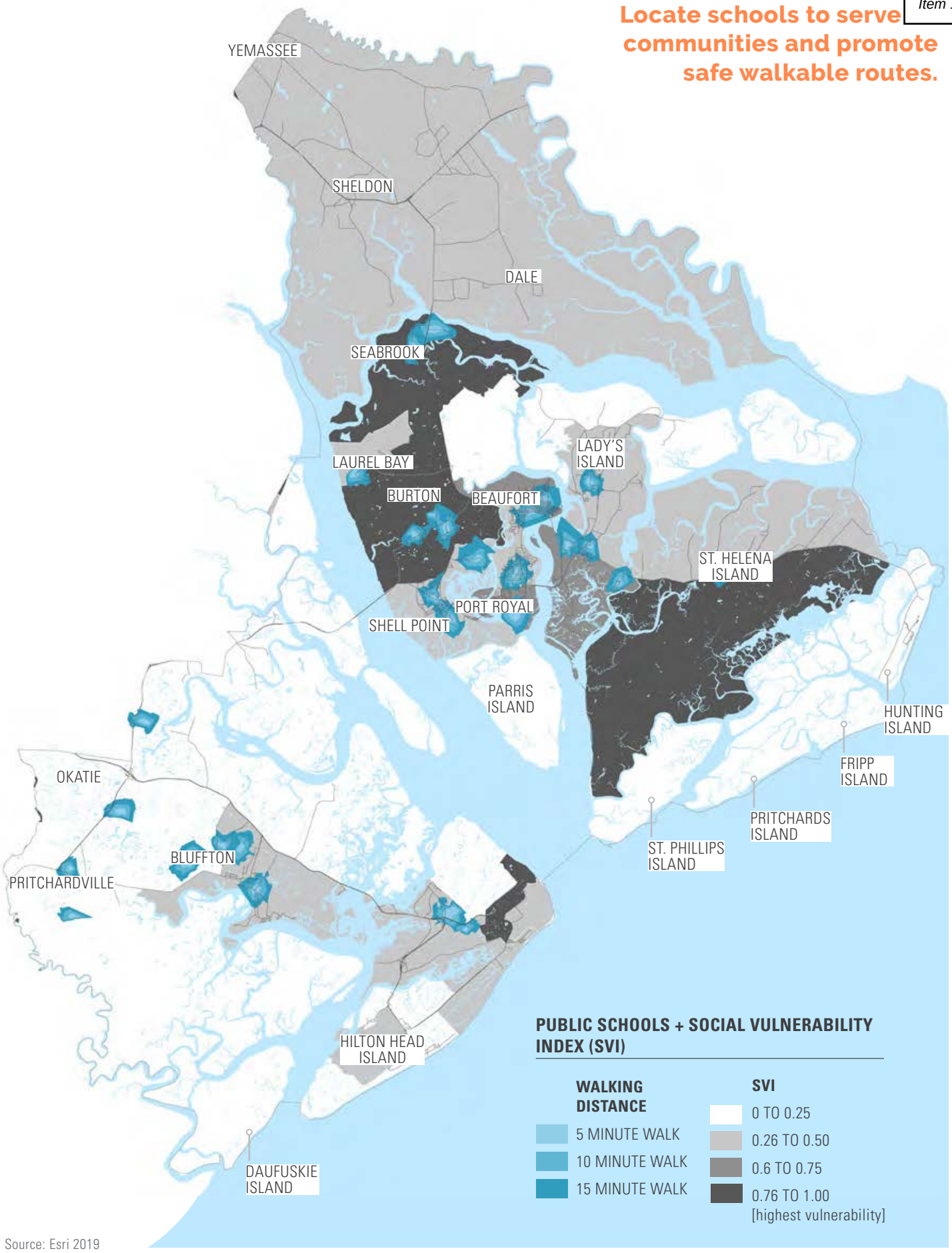
CF5. ACTIONS

CF 5.1. Review and update Impact Fees every five years.

CF 5.2. Renovate and repair the Beaufort, Hilton Head Island, Lobeco, and Bluffton facilities to meet current operational needs.

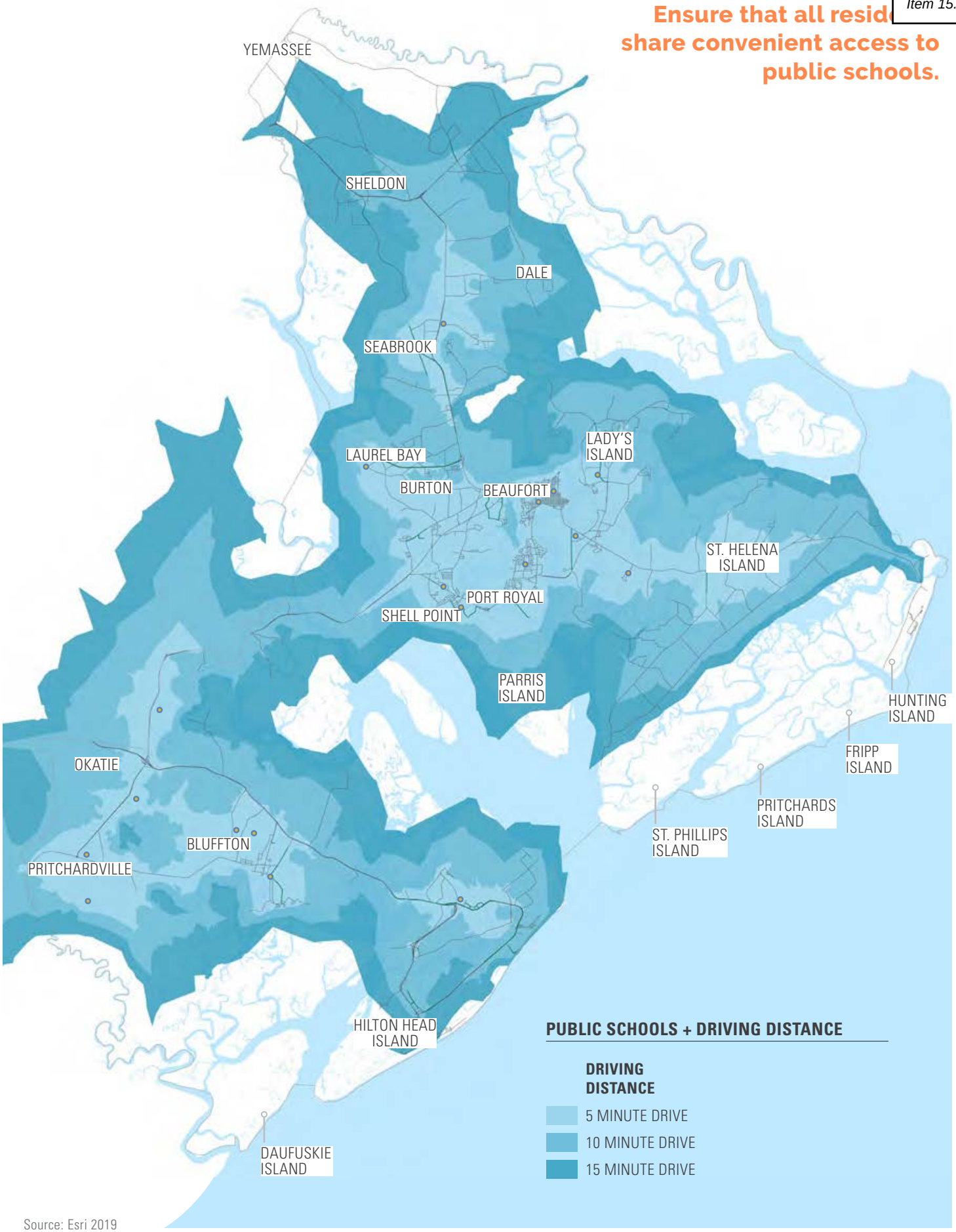
CF 5.3. Develop two additional library facilities: one 12,000 - 15,000 square foot facility in the Okatie area, and one 3,000 - 5,000 square foot facility at Burton Wells Park.

Locate schools to serve communities and promote safe walkable routes.



Source: Esri 2019

**Ensure that all resid
share convenient access to
public schools.**



Source: Esri 2019

E CF 6. ENSURE THAT SCHOOLS ARE PLANNED FOR AND LOCATED TO SERVE THE COUNTY'S DIVERSE POPULATION FAIRLY AND TO THE SAME HIGH LEVEL OF QUALITY.

- Conduct an analysis to ensure that school quality and access is balanced equitably across the County so that every student has access to educational opportunity.
- Coordinate the timing and siting of future school facilities through Intergovernmental Agreement, coordinated funding, coordinated growth projections, and coordinated land use planning to project future facility needs.
- Encourage cooperation between the School District and other community facility providers (parks, libraries, fire protection) to coordinate future land purchases to serve mutual needs.
- Maintain and expand coordination with the school district to ensure that major development proposals do not have an adverse impact on current school capacity.
- Seek future school sites that are in close proximity or within residential areas so that more children can walk to school.

CF6. ACTIONS

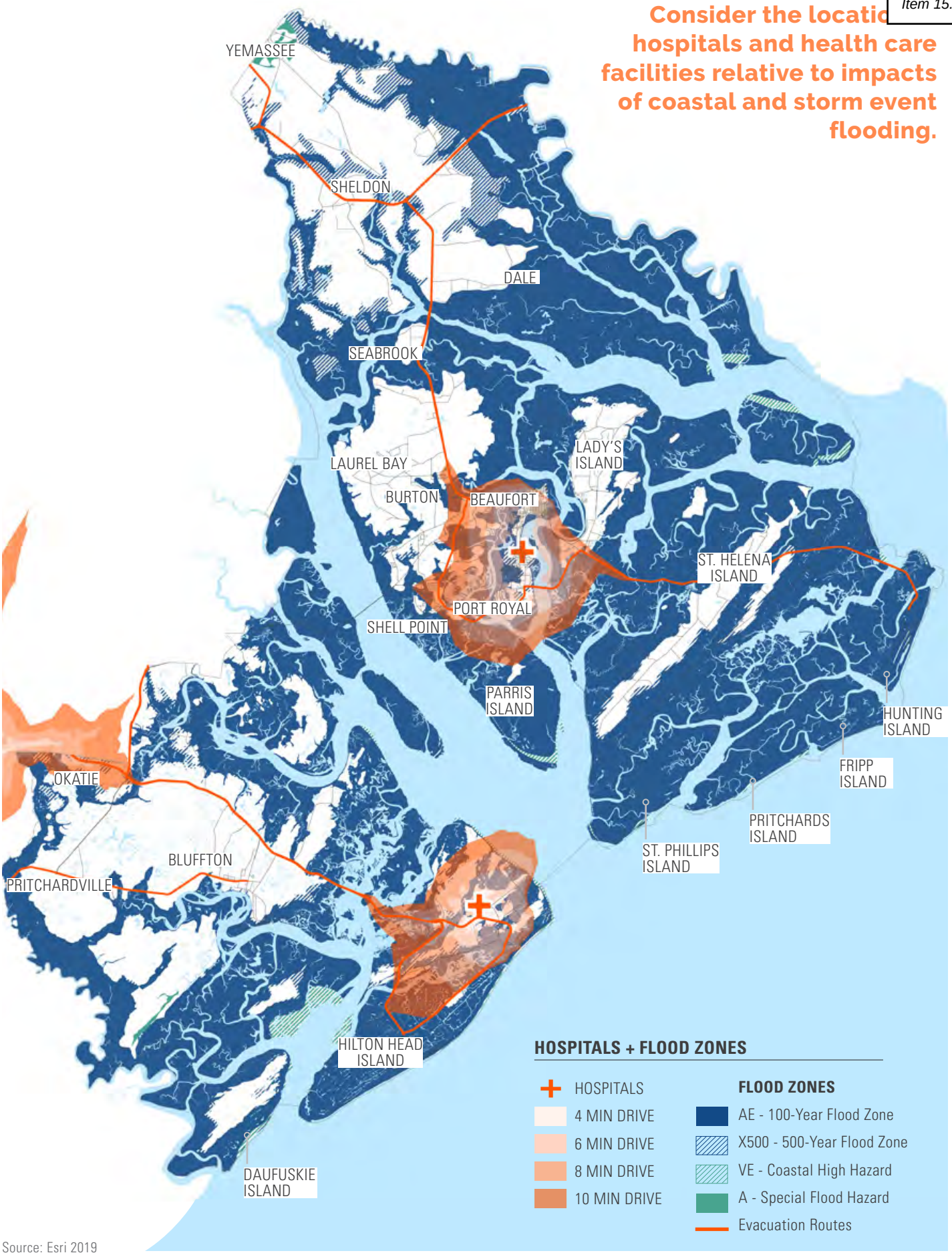
CF 6.1. Establish "Safe Routes to Schools"' ' standards and routing plans, consistent with recommendations of Bike and Pedestrian Task Force, that require a strong pedestrian orientation in residential areas so that pedestrian ways are available for children to safely walk to school.

CF 6.2. Adopt school impact fees for Southern Beaufort County.

E CF 7. ESTABLISH A PUBLIC HEALTH AND SAFETY NETWORK THAT CREATES ACCESSIBILITY ACROSS THE COUNTY.

- Provide updated land use and population projections to be used by the fire districts to project future capital needs.
- Support the fire districts' efforts to improve ISO ratings by providing excellent dispatching services, improving and enforcing building codes, and supporting public water improvements in areas with lack of fire hydrants and/or inadequate water pressure.
- Continue the cooperative relationship between the Burton Fire District and the City of Beaufort and the Town of Port Royal, and the Lady's Island/St. Helena Fire District and the City of Beaufort, in providing high quality, cost effective fire services.
- Use the South Carolina Hurricane Plan to provide a framework of local actions necessary for emergency operations to respond to hurricanes and tropical weather events threatening the County. Work cooperatively with municipalities, inland counties, and the State to ensure that emergency evacuation times are minimized.
- Consider the geographic reach of law enforcement so that there is equitable coverage county-wide.
- Include the EMS administrative offices, training center and storage space needs in the planned Law Enforcement Center (LEC) complex.
- In addition to EMS, other related departments including the Dispatch System, Emergency Services, and Traffic Management should be housed in the new LEC to allow for efficient communication regarding shared requirements.

Consider the locatio hospitals and health care facilities relative to impacts of coastal and storm event flooding.



Source: Esri 2019

CF7. ACTIONS

CF 7.1. Renovate the existing Emergency Medical Services (EMS) headquarters on Depot Road to meet the needs of the administration for parking, training and storage. The facility's design, circulation, and security measures need to be context sensitive to the adjacent Spanish Moss Trail.

CF 7.2. Expand or replace the EMS station located at the shared Bluffton Fire District Station on William Pope Drive near Sun City to adequately accommodate EMS's personnel and operational space needs.

CF 7.3. Construct either an extension to the existing Detention Center facility or a new facility to accommodate anticipated operational demand. The facility needs to house specific special populations such as inmates with addiction or mental health issues. The operational costs of an additional facility should be studied to determine if a true benefit would be derived from adding to the existing facility or constructing a new one.

CF 7.4. Construct a new Law Enforcement Center to ensure that there is adequate space to house existing and future law enforcement personnel.

CF 7.5. Build an appropriate facility to house the Emergency Management Department within or attached to the proposed Law Enforcement Center.

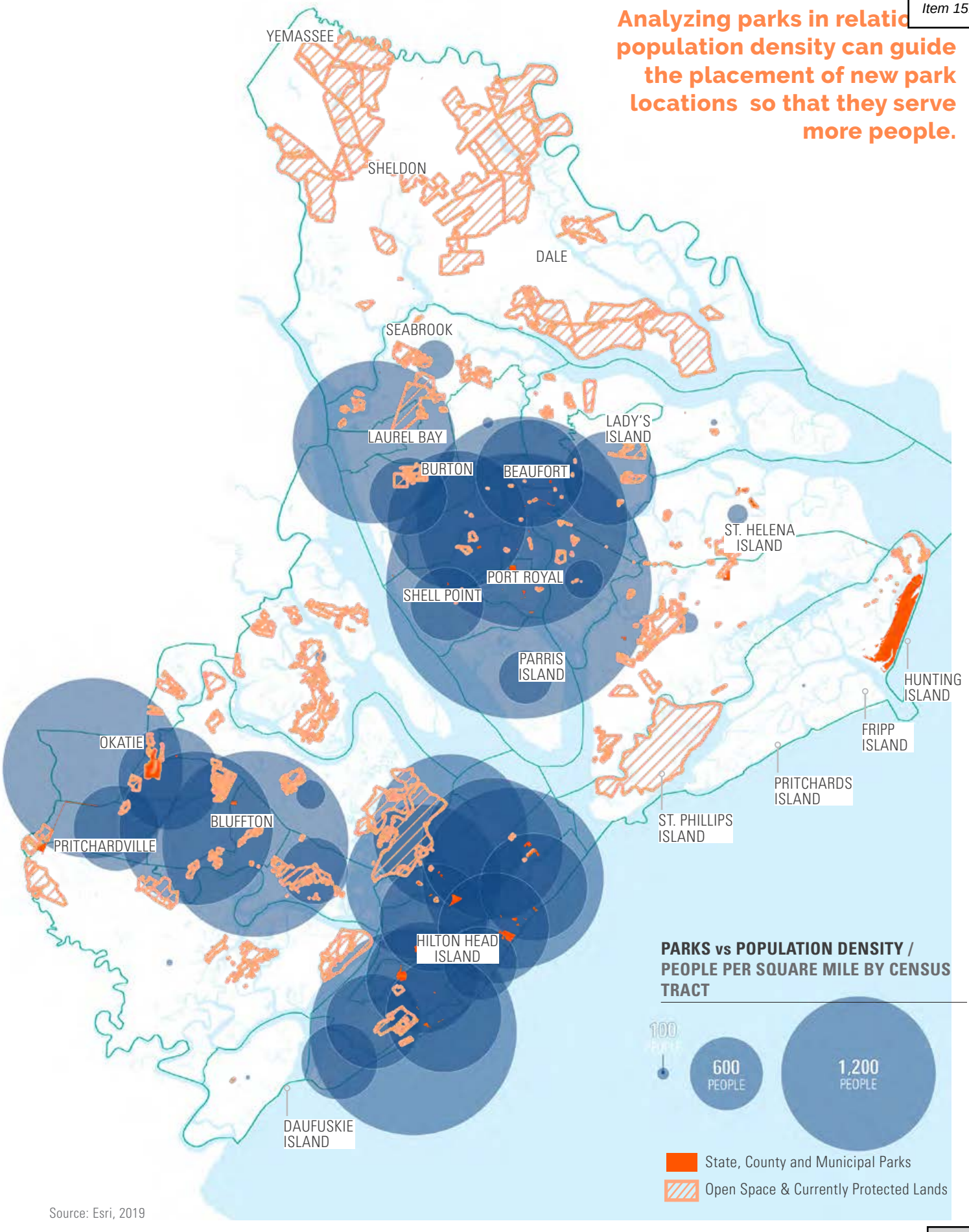
CF 7.6 Work with BJWSA to provide additional fire hydrants on Warsaw Island, extending and replacing lines as necessary. Apply for grant funding as appropriate, including CDBG. Identify other rural areas where lack of fire hydrants or water supply pose safety concerns. Request that BJWSA include water service improvements in rural areas in their CIP.

CF 7.7. Work with BJWSA to install water lines and fire hydrants on Seabrook Road and Stuart Point Road on Port Royal Island. Apply for grant funding as appropriate, including CDBG.

E CF 8. PROVIDE PARKS AND OPEN SPACES TO MEET THE NEEDS OF CITIZENS.

- Ensure, based on establishing acceptable metrics, that passive and active parks are programmed for the diverse demography of the County,
- Locate new parks where people can access them safely by walking and biking and serve population centers; make improvements as needed for better access at existing parks.
- Link passive and active parks planning with Greenprint planning and complete streets planning.
- Increase public access to the water by improving access on waterfront and marshfront properties currently owned by the County or other public entities; by purchasing additional waterfront and marshfront properties through the Rural and Critical Land Preservation Program; and by providing incentives to encourage public access to the water in private developments.
- Pursue park facilities that generate revenue via user fees. These facilities include water parks, campgrounds, tennis facilities, and picnic shelters.
- Review the current park management organizational structure and make recommendations for reorganization if warranted.
- Develop a strategy to address park needs by expanding on existing funding options and seeking new sources of funding, including revenue-generating park programs.
- Pursue facilities in active parks that generate revenue via user fees. These facilities include water parks, campgrounds, tennis facilities, and picnic shelters.

Analyzing parks in relation to population density can guide the placement of new park locations so that they serve more people.



Source: Esri, 2019

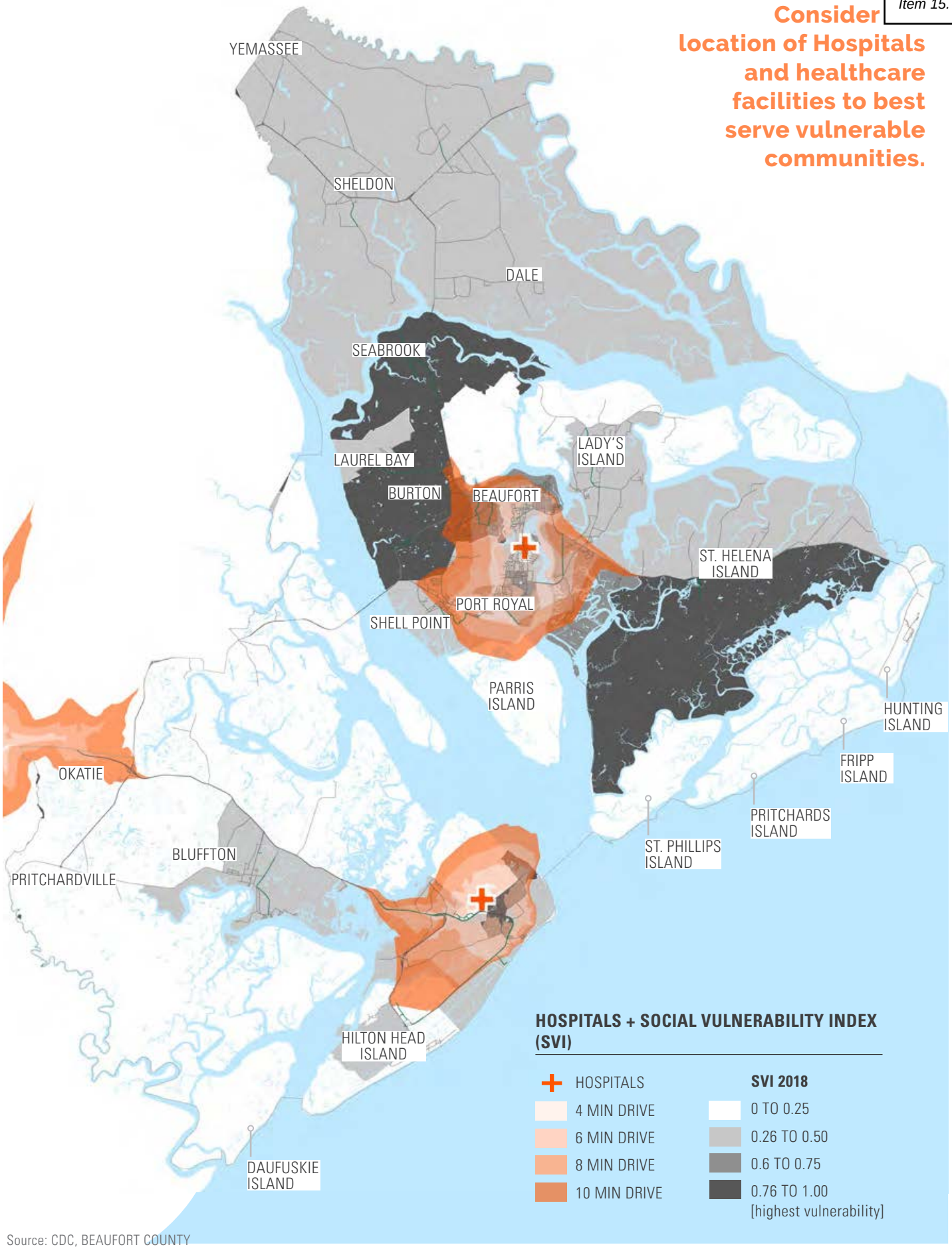
CF8. ACTIONS

CF 8.1. Create a Parks and Recreation Master Plan that establishes acceptable metrics for accessibility and programming. Ensure public participation from all areas of the County and segments of the community in the planning effort. Consider incorporating new uses in parks as appropriate such as splash pools, horseback riding, mountain bike trails, community gardens, camping, and ice skating.

CF 8.2. Implement the recommendations of the Parks and Recreation Master Plan according to the prioritization and timeline outlined in the document.

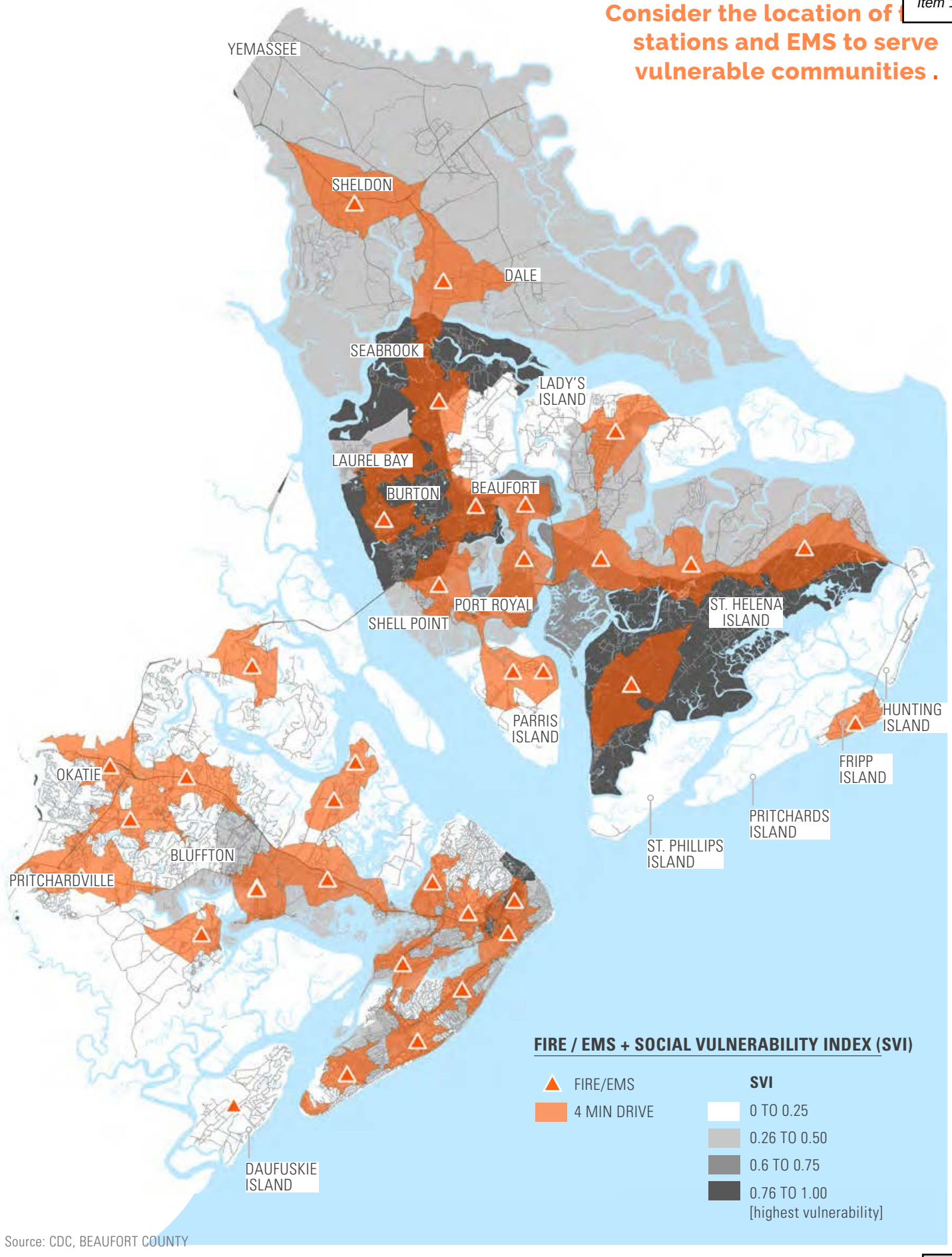
CF 8.3. Maintain a passive parks manager position to oversee the development of passive parks on Rural and Critical Land Preservation properties. Actively pursue the development of passive parks.

Consider location of Hospitals and healthcare facilities to best serve vulnerable communities.



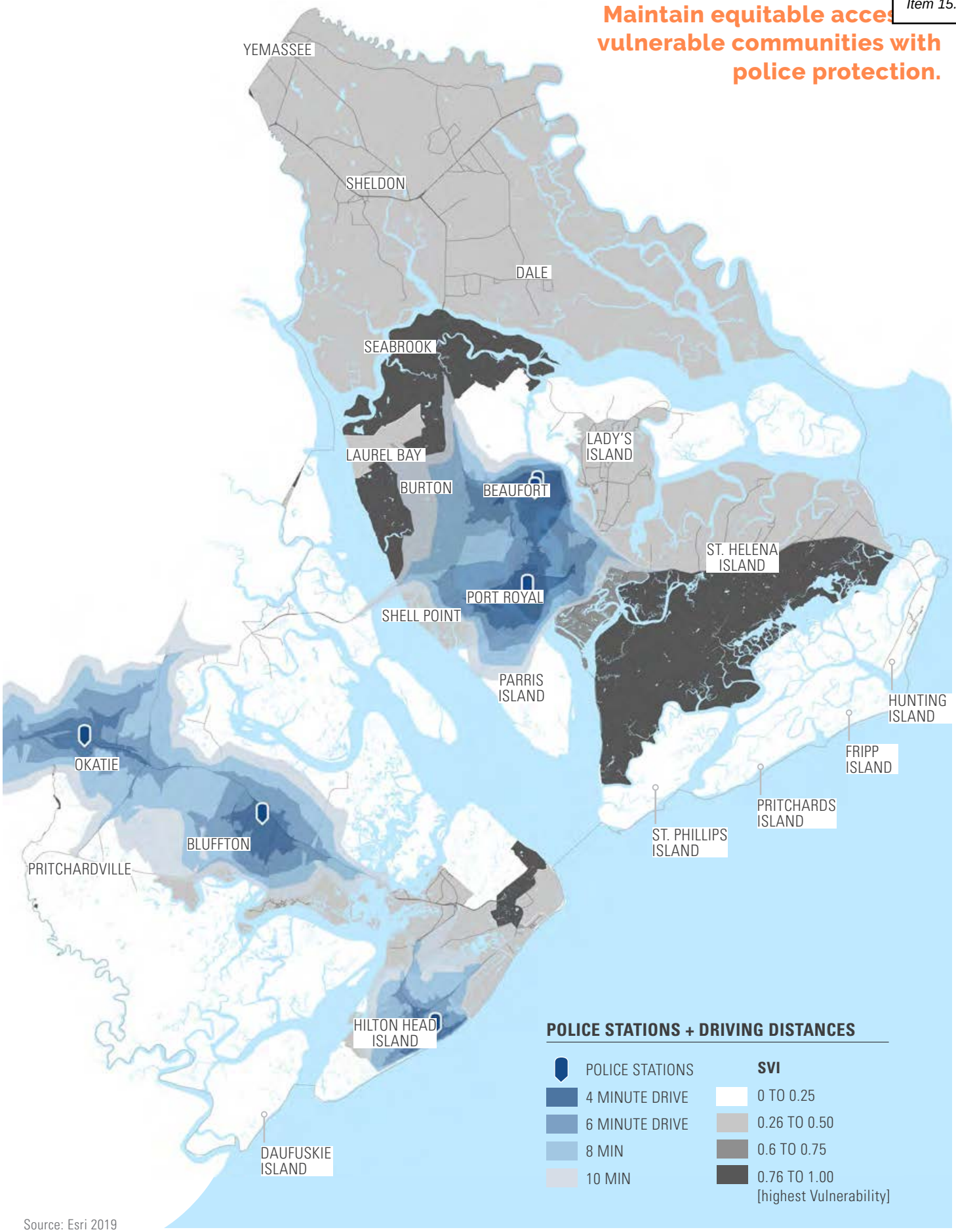
Source: CDC, BEAUFORT COUNTY

Consider the location of f stations and EMS to serve vulnerable communities .



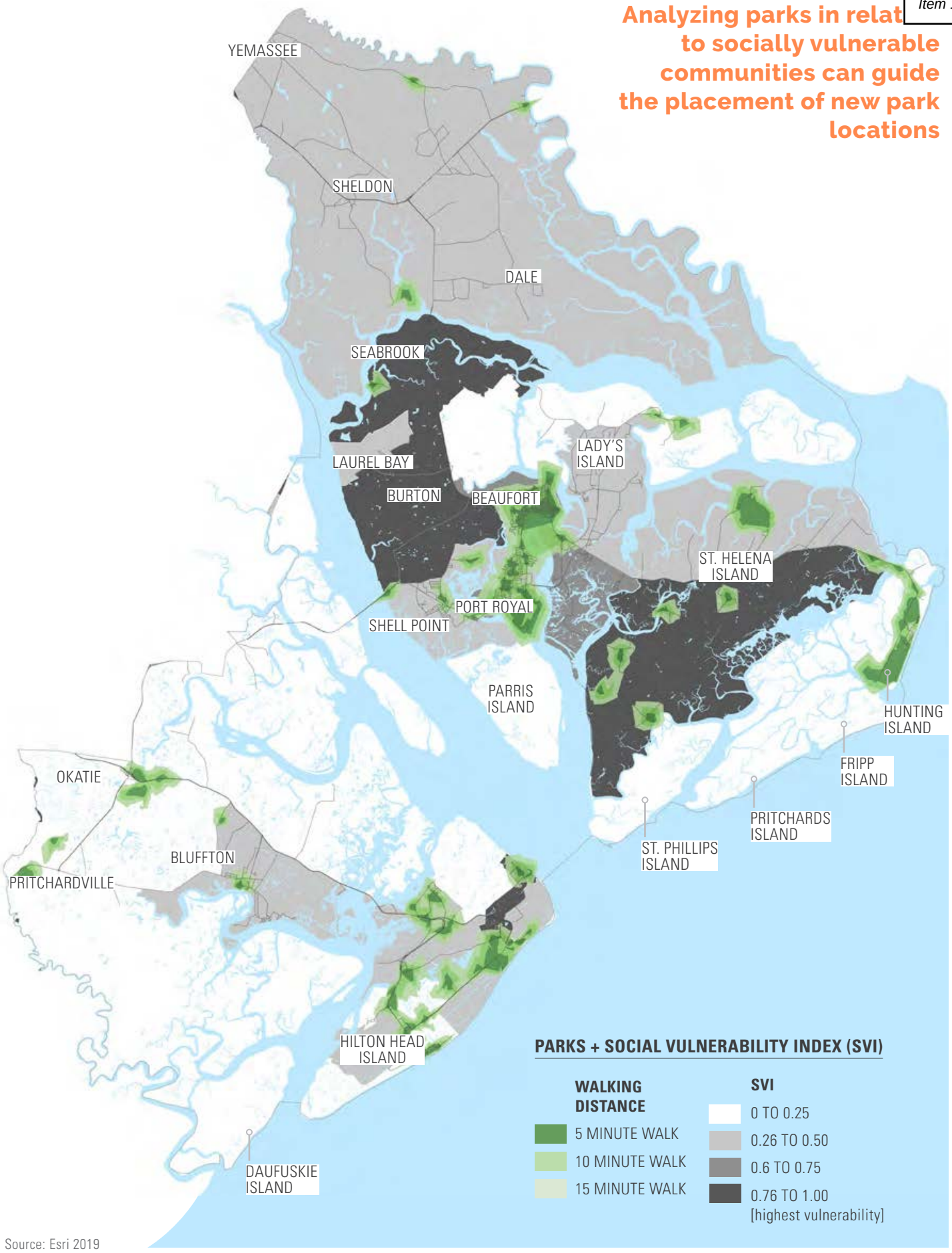
Source: CDC, BEAUFORT COUNTY

Maintain equitable acces vulnerable communities with police protection.



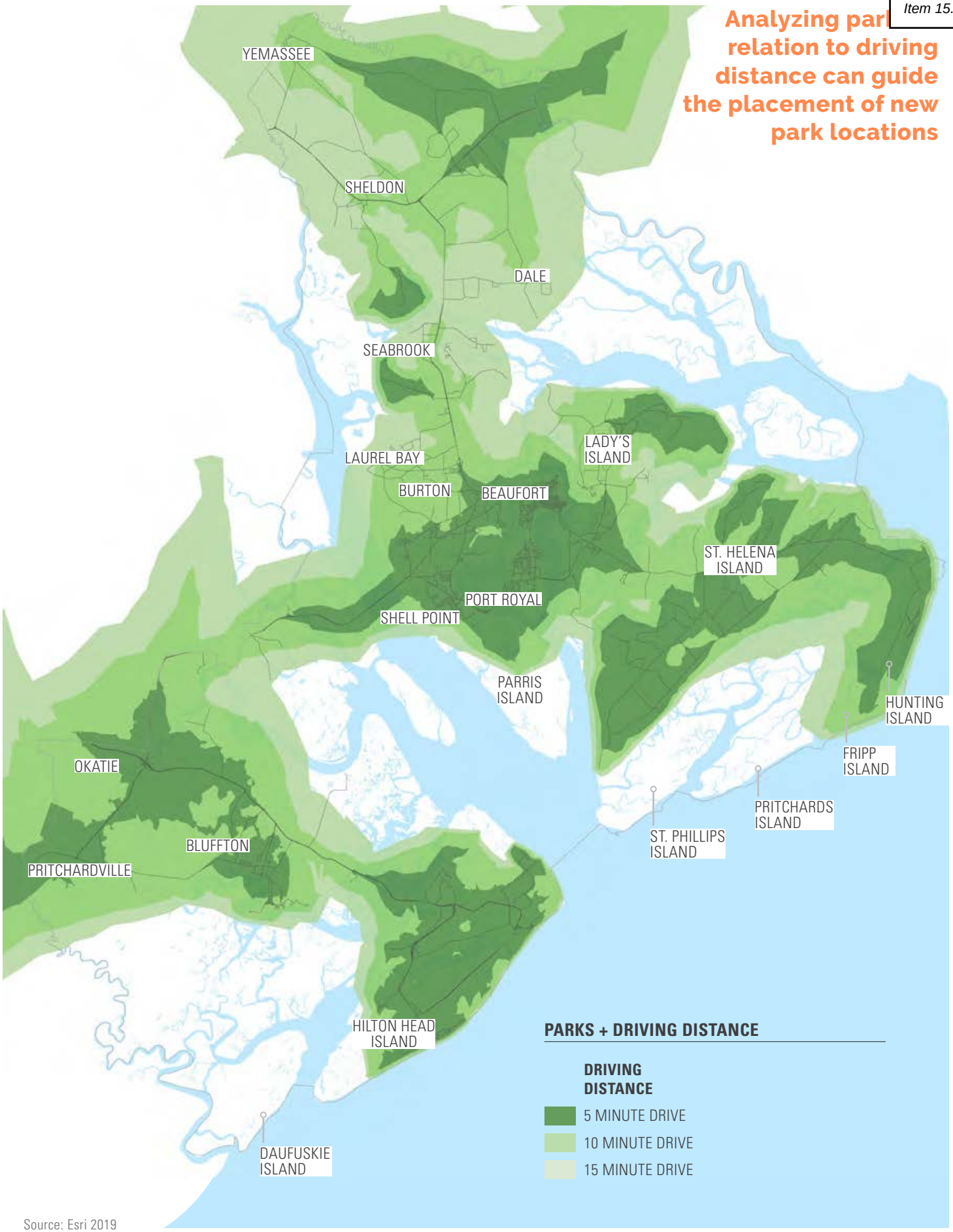
Source: Esri 2019

Analyzing parks in relat to socially vulnerable communities can guide the placement of new park locations



Source: Esri 2019

Analyzing park relation to driving distance can guide the placement of new park locations



Source: Esri 2019

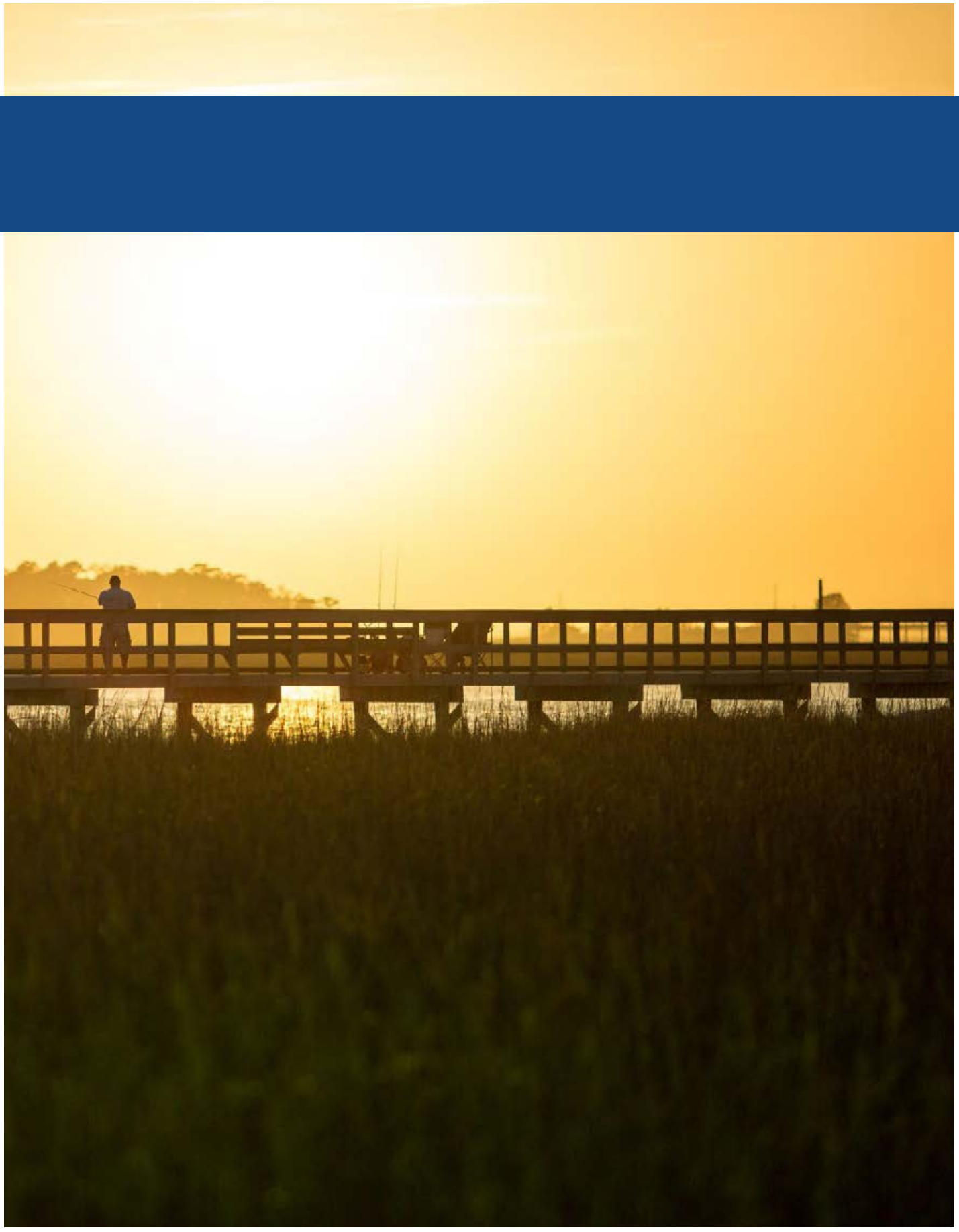


Photo source: Port Royal

BUILT ENVIRONMENT

Diverse, quality neighborhoods that support community life, work in balance and synergy with our natural environment, promote health and wellness, enable diversity, and enhance quality of life.



CORE VALUES

1. We desire a built environment that is in harmony with our natural environment.
2. We believe that development should be focused where it is best suited from an environmental, economic, infrastructure, and community service standpoint.
3. We desire development that supports and expresses our climate, landscape history, character, and lifestyle, and which promotes traditional town and neighborhood planning principles.
4. We respect private property and the ability for land-owners to profit from their land.
5. We preserve and promote our cultural, ethnic and socioeconomic diversity within our approach to planning the built environment.
6. We collaborate regionally to coordinate the development of the built environment and the protection of our natural environment.

Refer to the County Atlas, Greenprint, Action Playbook, and other supporting documents with more information.

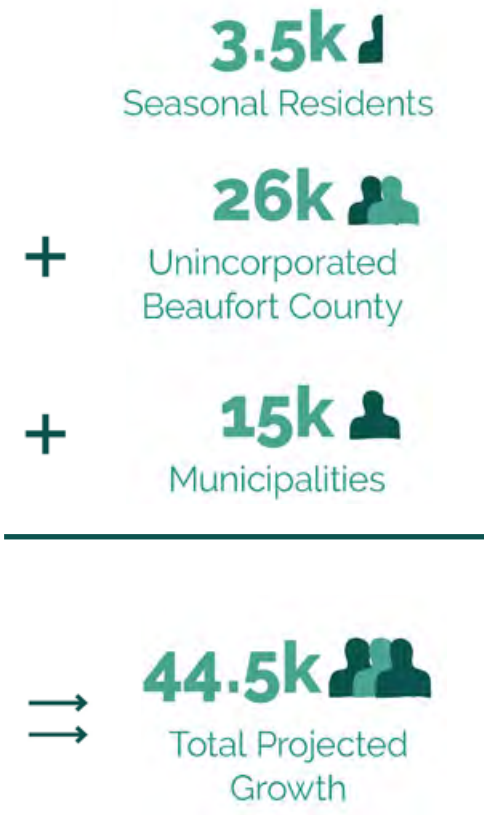
CONTEXT

Beaufort County is known for the detailed planning work it has done over the last 20 years. The County has defined where and how it wants to grow, and is implementing its long range plans through its Community Preservation Districts, rural zoning, special overlay zones, and transect-based design standards.

The County and its municipalities will continue to experience significant growth over the next decade. According to the most current estimates, the County is expected to add over 44,000 people by 2030. Of those, approximately 15,000 are assumed to be within the municipalities and 26,000 within unincorporated areas of the County. Fortunately, there is remaining land within existing PUDs and large subdivisions in the County and the municipalities that can absorb a significant quantity of this growth. Focusing on infill development (development on vacant lots within existing developed areas) will accommodate growth where infrastructure already exists. There is also zoned land serviced by infrastructure located adjacent to the municipalities and existing growth areas that is available for future growth. Given the available land that is already serviced, or near services, it is possible through education, development standards, and overlays, that the County can continue to grow while protecting rural areas and valuable natural and cultural resources.

Future growth in Jasper County, especially in Hardeeville, and also in the Town of Yemassee, will have a direct effect on Beaufort County's future from a transportation, natural resource, and service delivery standpoint. Working with Jasper County, Hardeeville, and Yemassee on shared values, policies, and standards will help reduce these impacts.

Future considerations could include additional growth boundaries, environmental corridors, complimentary zoning, collaborative growth modeling, density sharing, joint environmental stewardship, mutual commitments toward alternative modes of transportation, and other growth management concepts that would benefit the County and the region.



Source: The 2045 Low Country Council of Government transportation modelling assumptions

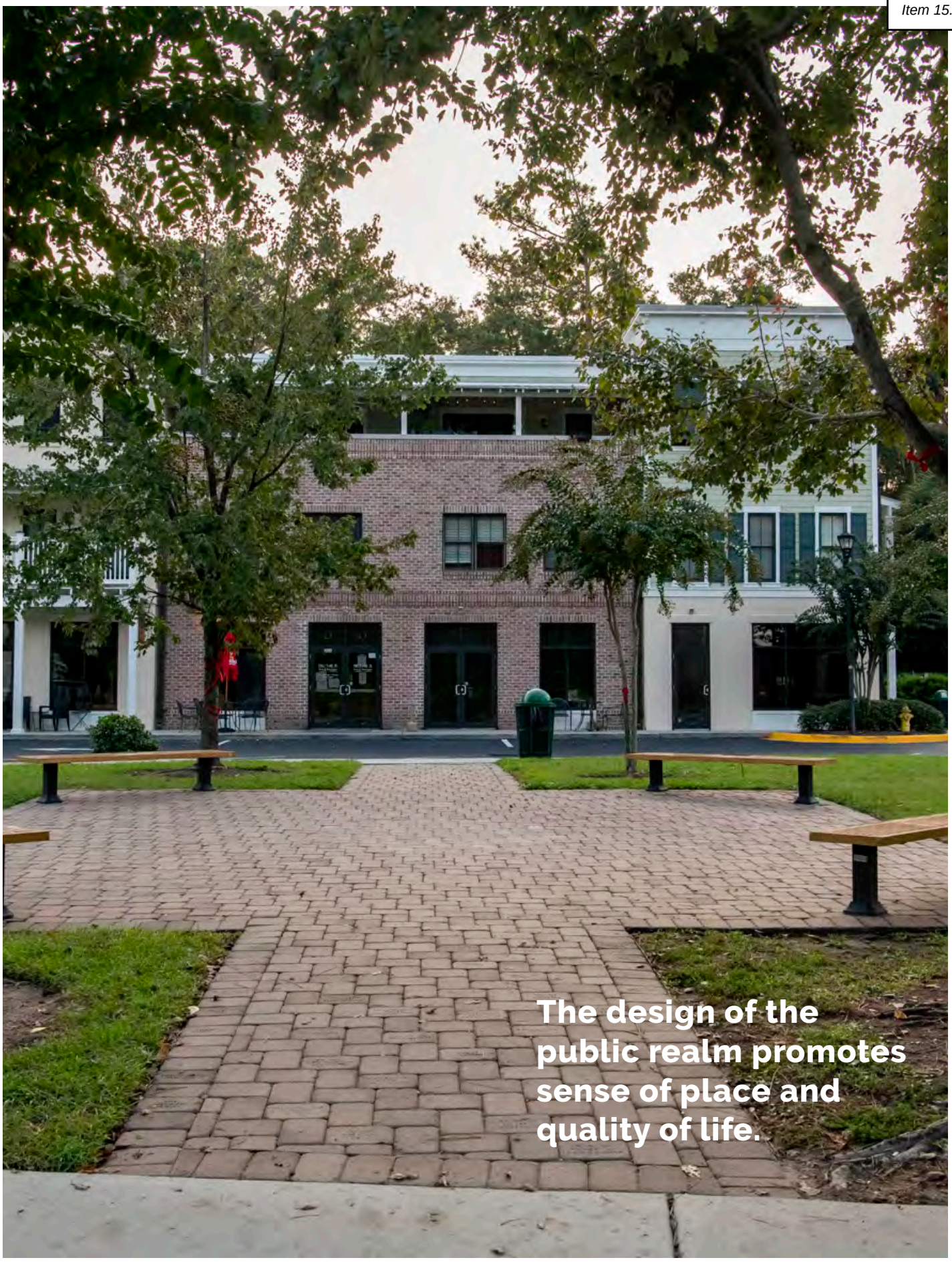


Photo source: Design Wor

GROWTH & POPULATION DATA

Beaufort County's rapid growth rate is a relatively recent phenomenon in its 240-year history.

Population	
Total Population	187,117
Land Area (sq mi)	576.0
Population Density	324.8
Change in Population 2010-2020	15.3%
Population Age 18 and Over	81.1%
Race Alone[1]	
White	69.9%
Black or African American	14.9%
American Indian and Alaska Native	0.4%
Asian	1.3%
Native Hawaiian and Other Pacific Islander	0.1%
Some Other Race	5.7%
Two or More Races	7.6%
Hispanic Origin	
Hispanic or Latino	12.5%
Not Hispanic or Latino	87.5%
Housing	
Total Housing Units	98,068
Occupied Housing Units	77.9%
Group Quarters[2]	
Group Quarters Population	4.4%
Institutional Group Quarters Population	0.3%
Non-Institutional Group Quarters Population	4.1%

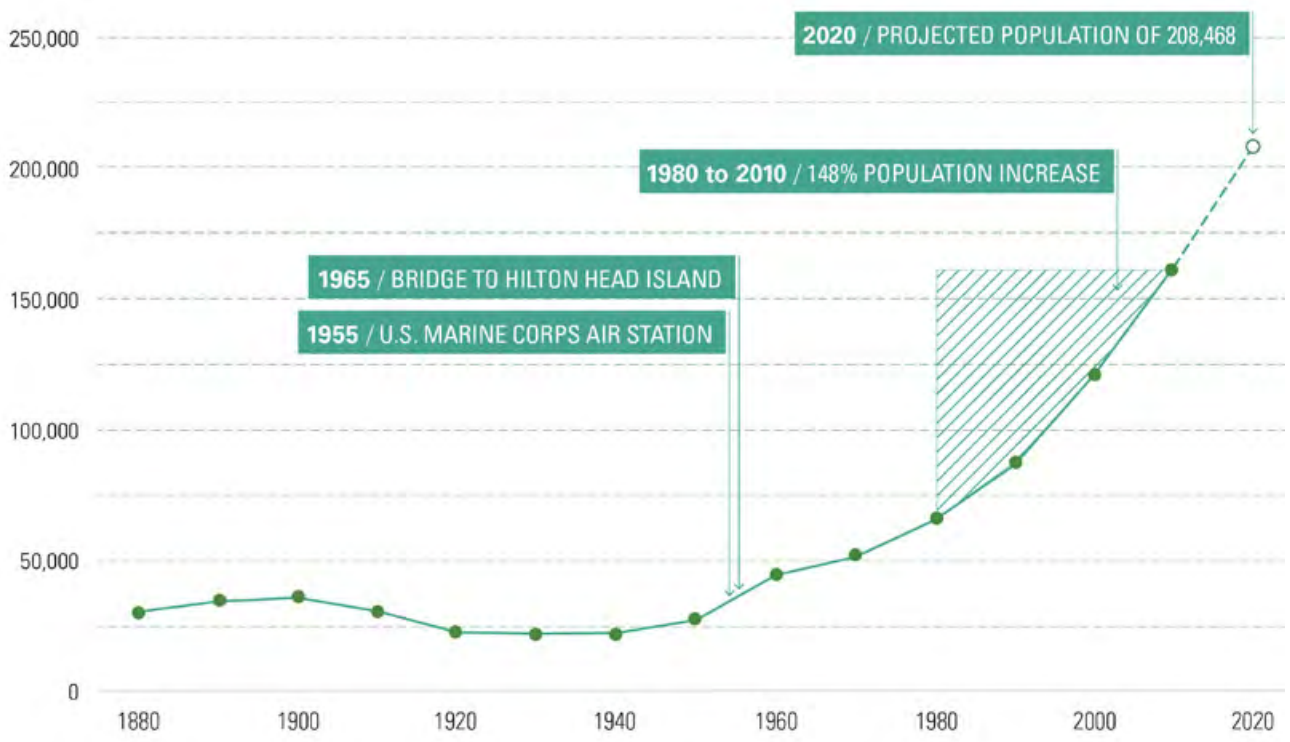
Beaufort County's population has grown significantly in the last 20 years and it's expected to continue. Much of the growth is being driven by people moving to the area from outside the county and is changing the racial and ethnic makeup of the county.

While overall the population is becoming older and more affluent, changes in prosperity and economic opportunity have not been evenly distributed across the county.

This recent rapid population growth and projected trends has policy implications for equity, public facilities, transportation, affordable housing, water quality, and natural and cultural resources.

For more detailed information on Beaufort County's population, reference the Beaufort County Atlas.

BEAUFORT COUNTY POPULATION GROWTH OVER TIME



PLANNING FOR AND MANAGING GROWTH

Beaufort County has a long history of planning for orderly and place-based growth. It has many tools in place that guide development and protect the built and natural environment. The municipalities that make up the County use similar and complementary codes and policies, which creates continuity in design and character.

And the county keeps growing! It is expected that by 2030, the population for Beaufort County will be near 224,970. And while this number sounds concerning, the analysis conducted for the 2040 Comprehensive Plan demonstrates that projected growth can be accommodated while also balancing the protection of natural and cultural resources.

Key to achieving this balance is directing growth away from sensitive natural areas and instead, targeting developed areas where infrastructure and services already exist.

This Plan provides several strategies which are outlined below to further refine how, where, and in what form Beaufort County can continue to grow.

Ongoing coordination between Beaufort County and Jasper County on shared principles, standards, limits of growth, and natural resource protection, will benefit all citizens and visitors to the region. After all, it is the unique sense of place, natural environment, and culture that fuels the economy.

Beaufort County's growth management strategy begins with a future land use map that guides land use policies and development decisions. The strategy is further refined by place type areas and growth corridors that provide more specific direction on the character and intensity of development with an emphasis on place making. Ultimately, the Greenprint Overlay is applied to establish balance and harmony between the built and natural environment.

URBAN GROWTH BOUNDARIES

PLACE TYPES AND TRANSECT ZONES

COMMUNITY PRESERVATION DISTRICTS

STORMWATER BEST MANAGEMENT PRACTICES MANUAL

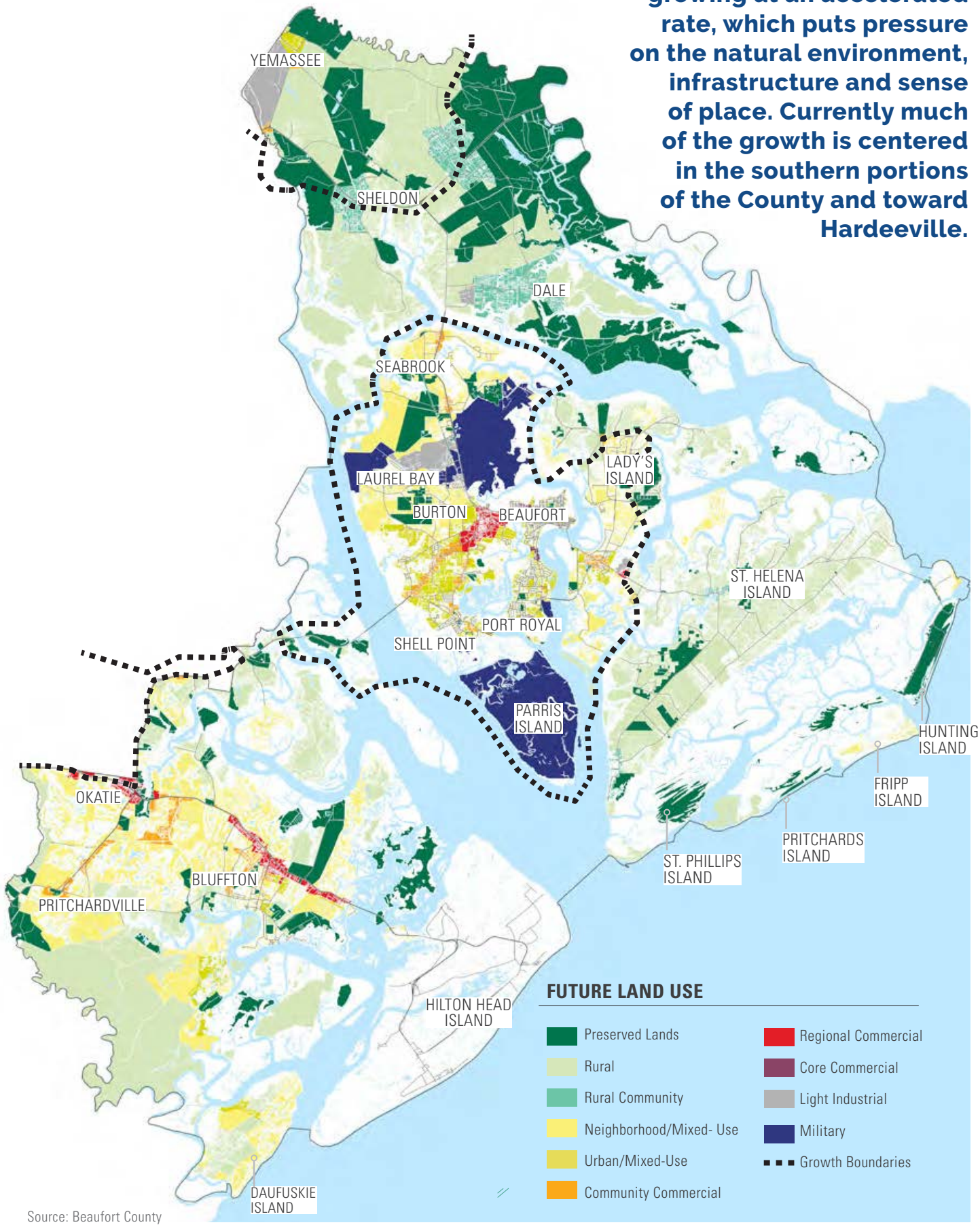
GREEN PRINT PLAN

RURAL AND CRITICAL LANDS PRESERVATION PROGRAM

RURAL ZONING AND RESOURCE PROTECTION ZONING

NATURAL RESOURCE AND TREE PROTECTION STANDARDS

The County has growing at an accelerated rate, which puts pressure on the natural environment, infrastructure and sense of place. Currently much of the growth is centered in the southern portions of the County and toward Hardeeville.



Source: Beaufort County

FUTURE LAND USE DEFINITIONS

Beaufort County's primary tool for managing growth is its future land use map. This Future Land Use Map provides the geographic framework to guide the County's land use policies and development decisions.

Rural Future Land Uses

Preserved Lands: This land use category includes all public parks; and public and private lands that are preserved through conservation easements.

Rural: Rural areas should retain their rural character with low-density residential development, supporting small scale commercial development, and agricultural land uses. The maximum gross residential density in rural areas is one dwelling unit per three acres, except for undeveloped rural marsh islands that are not accessible by car. These island shall have a maximum gross residential density of one dwelling unit per ten acres. Rural areas should not be targeted with the development of major public infrastructure or the extension of public sewer service except where a documented health, safety, and/or welfare condition warrants such an expansion.

Rural Communities: Rural communities are proposed to serve the surrounding rural area with small-scale retail and service uses and low to moderate density residential. Community-based planning is recommended to protect the unique qualities of these areas. Gross density should be approximately one dwelling unit per acre; however, slightly higher densities may be permitted in a rural center as part of a community plan.

Urban/Suburban Land Uses

Neighborhood Mixed-Use: Moderate-density residential is the primary use, with some supporting neighborhood retail establishments. New development is encouraged to be pedestrian-friendly, have a mix of housing types, a mix of land uses and interconnected streets. The maximum gross residential density is approximately two dwelling units per acre with some denser pockets of development.

Urban Mixed-Use: Future development should be compatible with the type and mix of land use currently found in the municipalities with an emphasis on infill and redevelopment and walkable, mixed-use communities. Gross residential densities are between two and four dwelling units per acre with some denser pockets of development.

Community Commercial: Community commercial uses typically serve nearby residential areas. An example of a community commercial use is a shopping district anchored by a grocery store.

Regional Commercial: Regional commercial uses are those uses which due to their size and scale will attract shoppers and visitors from a larger area of the county and outside the county. Typical uses include "big box" retail uses, chain restaurants, and supporting retail.

Core Commercial: Core commercial areas include downtown Beaufort, Bluffton, and Port Royal and are oriented as a traditional main street with a pedestrian scale and zero lot line development.

Light Industrial: Uses in this category include, but are not limited to, business parks, research and development centers, product assembly, distribution centers, cottage industries, and light and heavy industrial uses.

Military: This land use category includes all military installations including Parris Island and the U.S. Marine Corps Air Station.

Future Land Use Overlays

Growth Boundaries: Growth boundaries are a regional land use strategy that identify those areas where municipalities are likely to grow and provide services over the planning horizon period of 20 years. The areas of the county beyond the growth boundary are considered to be rural areas that should be preserved in accordance with the rural future land uses identified in this section.

Cultural Protection Overlay (CPO): The CPO applies to St. Helena Island and promotes the long-term protection of the Gullah/Geechee community by restricting incompatible development, such as gated communities, resorts, and golf courses. The CPO should be periodically reassessed to determine whether additional land use restrictions are necessary to meet the intent of the district.

Air Installation Compatible Use Zone (AICUZ): This overlay is based on the Air Installations Compatible Use Zone Study for MCAS Beaufort 2013. Residential development and places of assembly (e.g., churches, schools, etc.) should be highly limited in these areas. Light industrial, commercial, and agricultural uses are considered appropriate to this area.

1. IDENTIFY LAND AREAS MOST "SUITABLE" FOR DEVELOPMENT OR PRESERVATION

WETLANDS & HYDRIC SOILS



PROJECTED SEA LEVEL RISE



FLOOD ZONES



PLANNED UNIT DEVELOPMENTS



AREAS OUTSIDE THIS STUDY



PARCELS < 0.5 ACRE (MINIMUM LOT SIZE FOR SEPTIC)



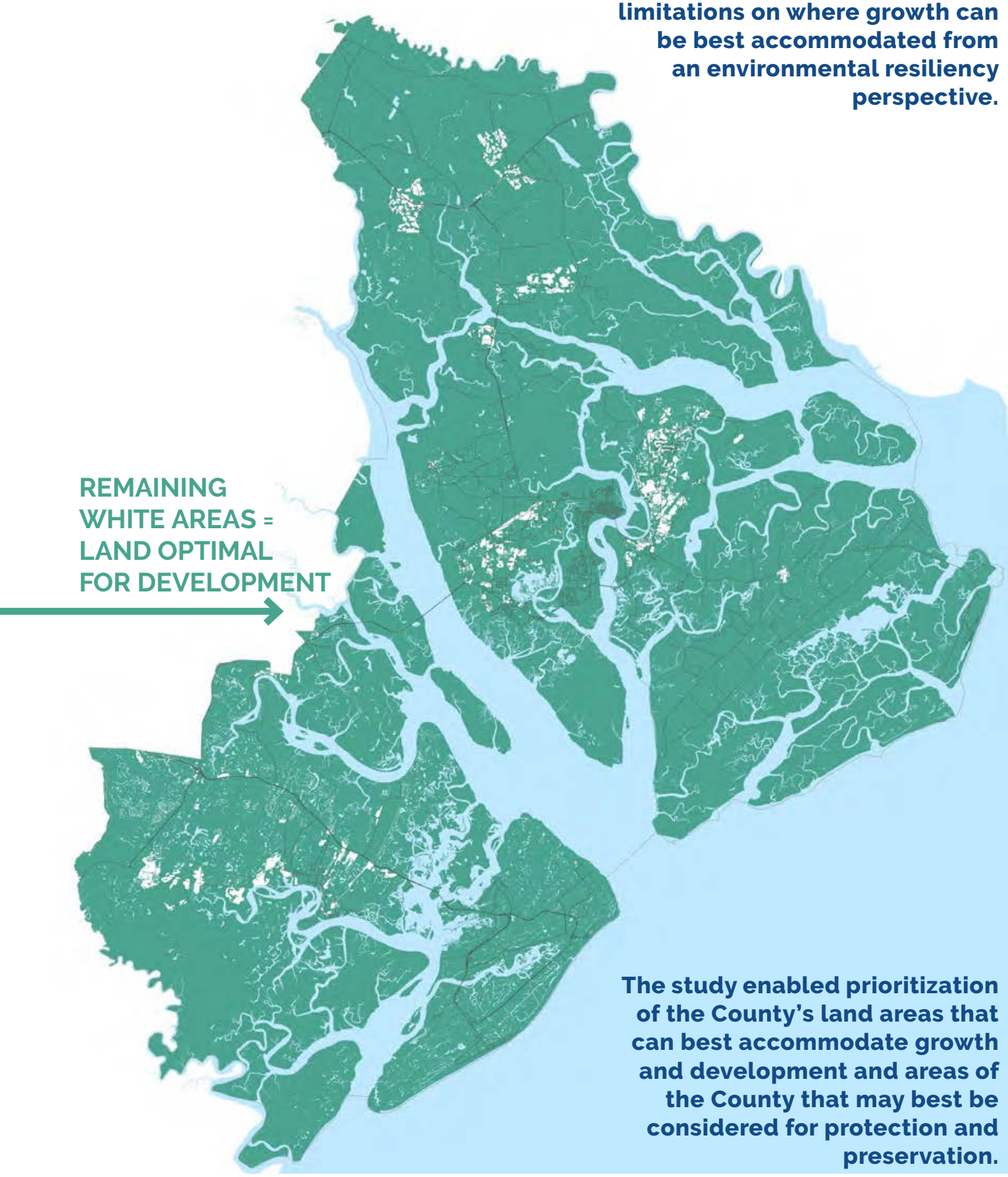
PROTECTED LANDS



RURAL + PROTECTED ZONING



A land suitability analysis created in GIS to map potential limitations on where growth can be best accommodated from an environmental resiliency perspective.



The study enabled prioritization of the County's land areas that can best accommodate growth and development and areas of the County that may best be considered for protection and preservation.

Source: Beaufort County and Design Workshop

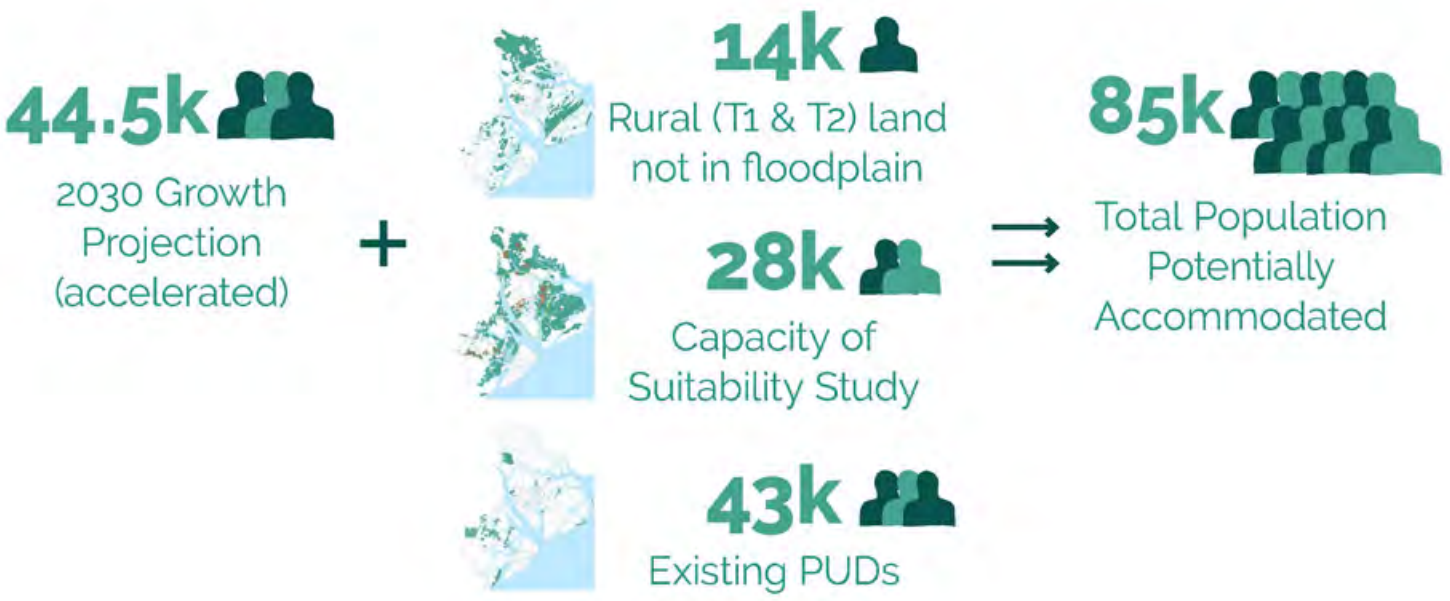
2. LEVERAGE "SUITABLE" LAND AREAS AND EXISTING CAPACITY OF PLANNED UNIT DEVELOPMENTS

As part of understanding how growth can best be accommodated, a "build-out" projection was created based on existing zoning. This was done to determine how much population growth could be absorbed by residentially-zoned land, that was considered the "most suitable' for new development or redevelopment. Part of that analysis included inventorying the available undeveloped capacity of the existing PUDs and subdivisions.

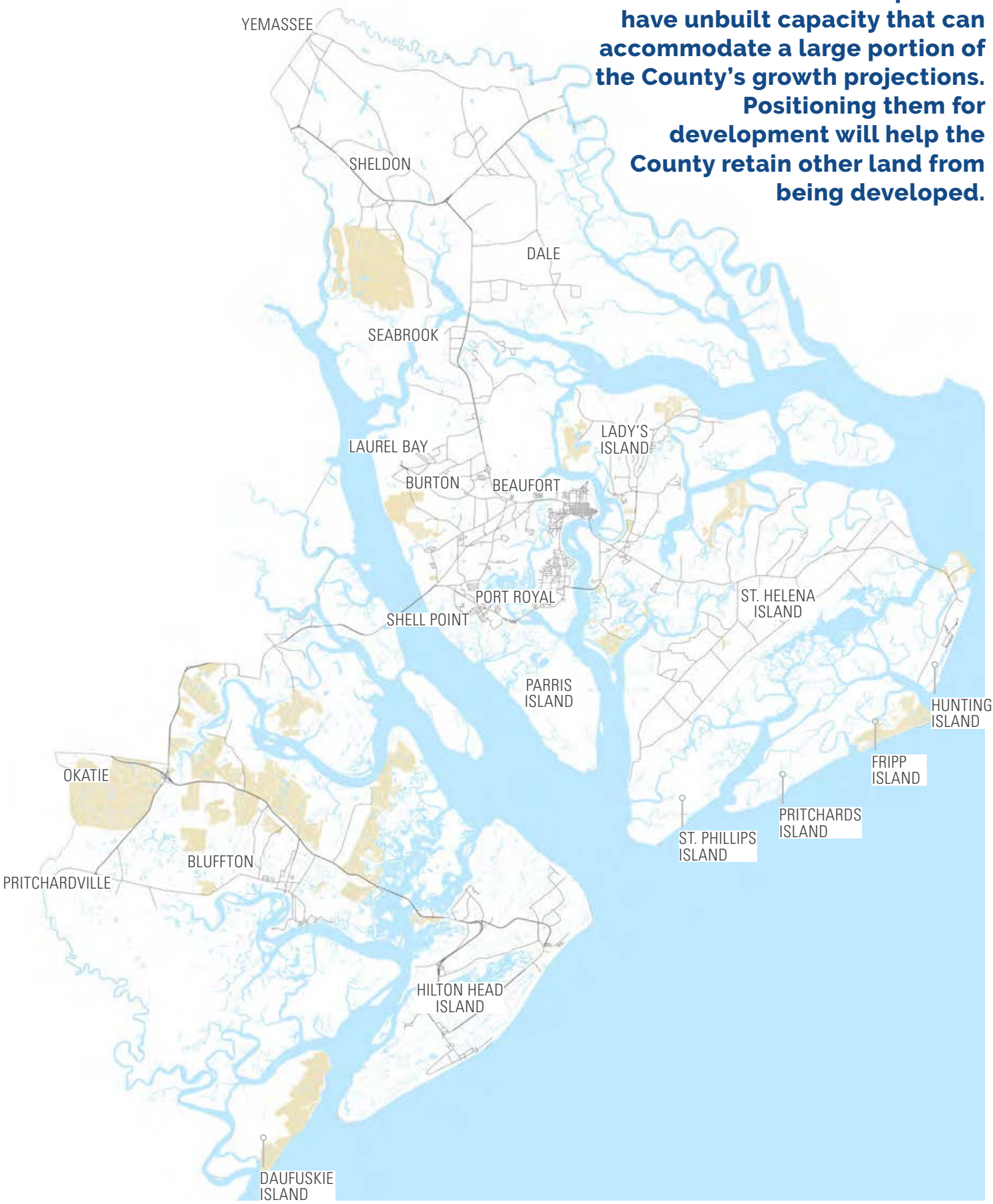
In total, the existing PUDs and subdivisions can accommodate close to 43,000 people based on available lot inventories prepared by the municipalities and the County when using county-wide average people per household. The suitable land that is zoned single family can accommodate an additional 28,000 people.

This amount, along with rural zoned land, completely accommodates the projected growth within the Long Range Transportation Plan's model for the Comprehensive Plan period.

These numbers suggest that the County and its municipalities can achieve balance between growth and environmental protection.



The County's and municipal Planned Unit Developments have unbuilt capacity that can accommodate a large portion of the County's growth projections. Positioning them for development will help the County retain other land from being developed.

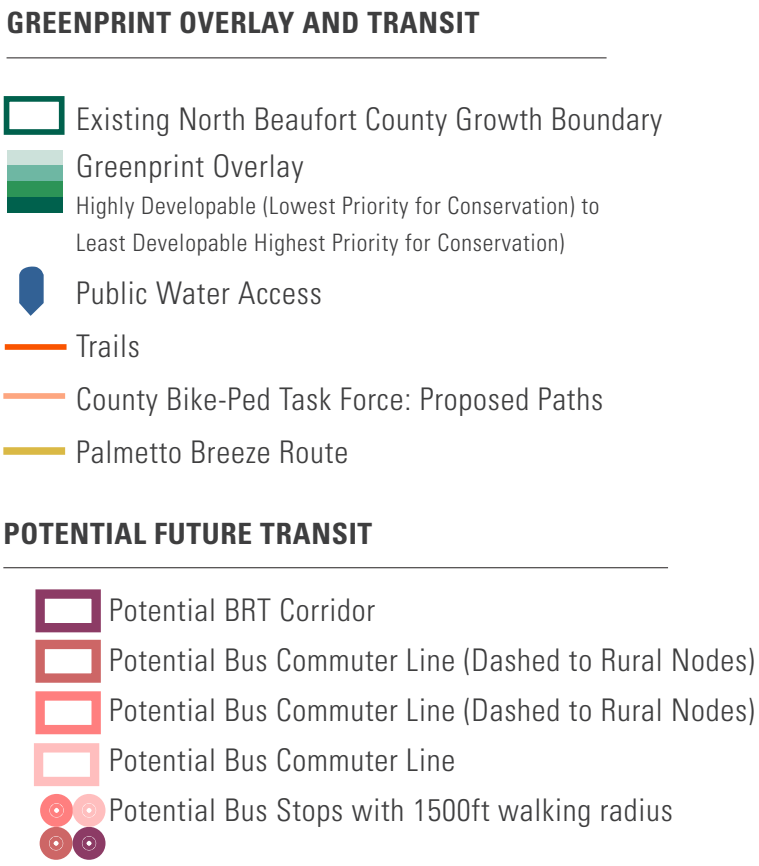


Source: Beaufort County and Design Workshop

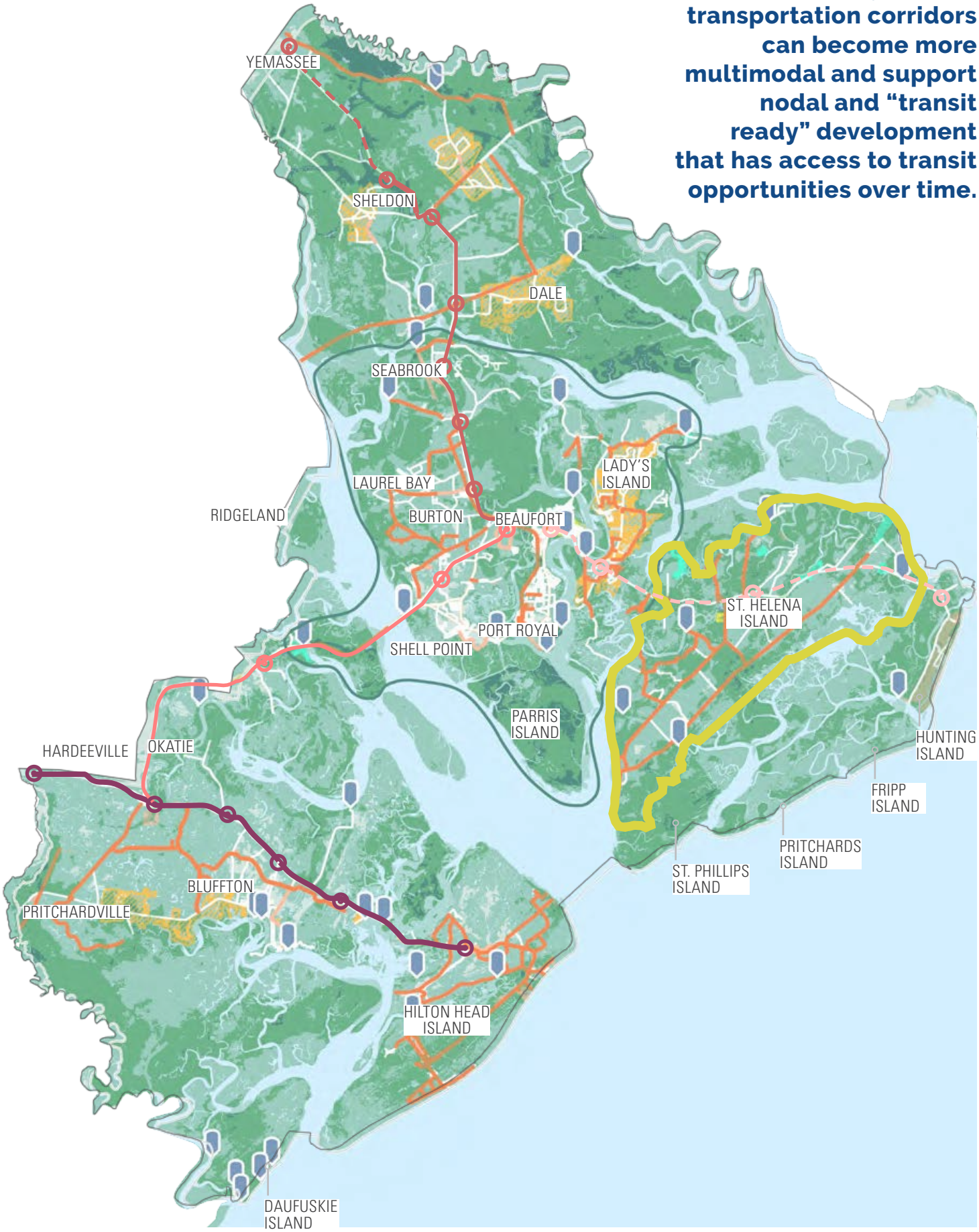
3. CREATE CONCENTRATED GROWTH CORRIDORS

Some areas of the County such as along US 278, SC 170, and areas adjacent to the municipalities may benefit from enhanced area planning to ensure that they are providing a complimentary mix of uses; affordable housing and are anticipating the potential of increased transit use over time.

As an example, a plan for US 278 can promote the inclusion of "Transit Ready Nodes" that prepare the corridor for the potential for regular fixed-route transit service (and eventual Bus Rapid Transit) services to link Bluffton and Hardeeville to jobs and amenities closer to the coast in Hilton Head. Doing so would alleviate traffic and promote a multimodal sense of place along the corridor.



The County's r… transportation corridors can become more multimodal and support nodal and "transit ready" development that has access to transit opportunities over time.



Source: Beaufort County and Design Workshop

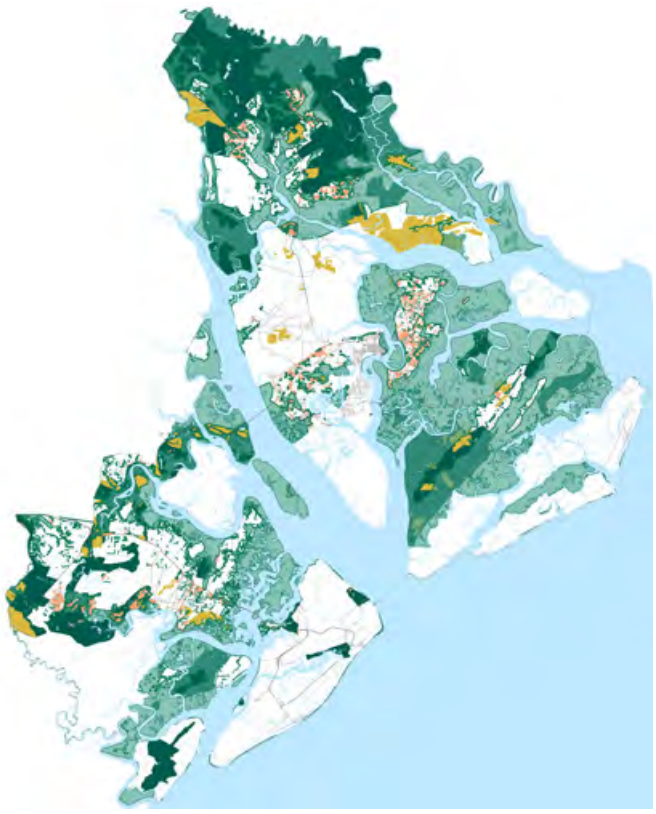
4. DESIGNATE AREAS FOR SENDING AND RECEIVING TRANSFER OF DEVELOPMENT RIGHTS

Based on the Greenprint Priority mapping, land areas can be designated as sending areas (where residential density is transferred from elsewhere) and receiving areas (where residential density is added). This tool enables lands that are within the Greenprint priority areas to participate economically while also reducing development within critical environments.



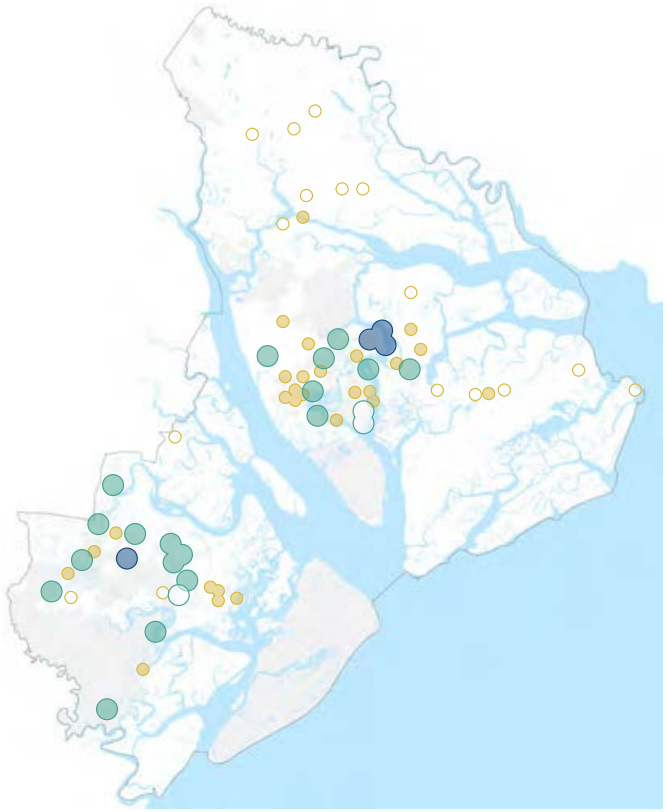
5. ESTABLISH DEVELOPMENT / CONSERVATION POLICIES BASED ON THE GREENPRINT OVERLAY MAP

Based on the Greenprint Overlay Map, zoned land areas can be further restricted to match their development standards with their natural environmental condition. These areas could be subject to new tools, policies, and codes that support a balanced approach to developing within or near sensitive and critical natural resources, protect people from rising flood waters, help preserve water quality, and reduce damages from major storm events.



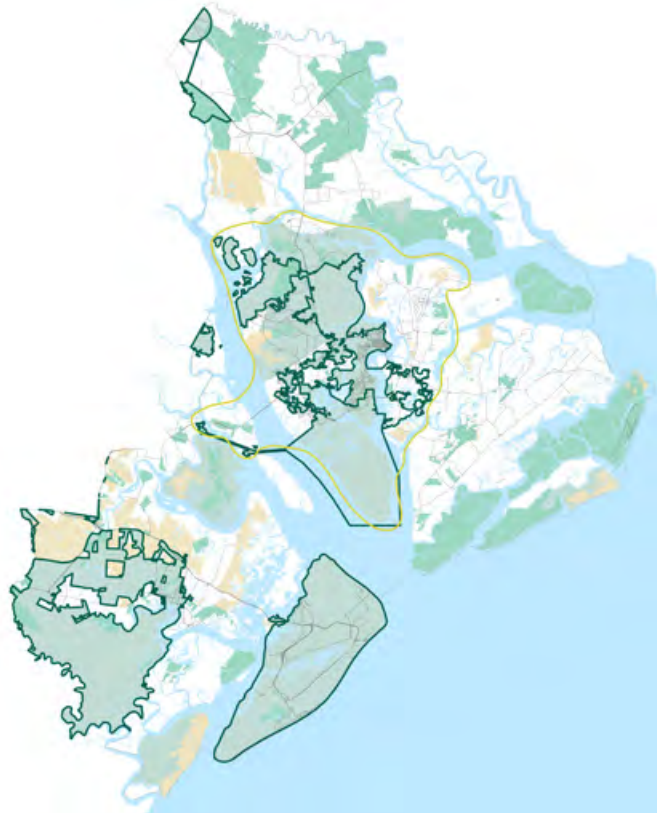
6. DESIGNATE ADDITIONAL PLACE TYPE AREAS OR COMMUNITY PRESERVATION AREAS

Community-based plans that promote mixed-use, walkable places have been successful in Dale, St. Helena Island, Lady's Island, and Seabrook in building on local character and promoting growth in proximity to existing settlements. Additional areas of the County could be considered for this type of community-based planning so that a clearer vision is established for critical areas of the County where detailed planning has not yet occurred.



7. EXPAND GROWTH MANAGEMENT POLICIES

Some fast-growing jurisdictions in other places around the country have placed annual limits on growth and/or restricted where growth can occur, tying growth to an important metric such as maintaining jobs to housing balance based on their desire to retain a particular character and quality of life. This could be considered as a way to protect adjacent counties or municipalities from sprawling development and to time development with the availability of infrastructure and services.



8. INTEGRATE THE GREENPRINT PLAN

The Greenprint Plan is the open space plan for Beaufort County. It promotes environmental health and cultural landscape preservation by protecting Beaufort County's open space for the betterment of its ecology, economy and quality of life.

The 2020 Greenprint Plan was developed in tandem with this Comprehensive Plan, presenting a unique opportunity to coordinate the plans' processes and recommendations for accommodating environmental hazards associated with sea levels and increased flooding, guiding development to places where it will work best with the natural environment, protecting environmentally and culturally precious areas of the County, and reinforcing the community vision for the Comprehensive Plan to establish balance and harmony between the built and natural environments.

The Greenprint Plan informs the Comprehensive Plan by:

- Clearly showing how future growth and the natural environment can coexist.
- Becoming a tool for the County to evaluate development proposals based on open space criteria.
- Enabling landowners, developers, and builders to be better informed about how various areas of the county are prioritized for growth and preservation.
- Influencing how and where transportation, housing, future land uses, economic development, and public facilities are located.
- Becoming the starting point for more criteria, prioritization, policies, and programs that encourage land preservation and bolster economic benefits of owning and developing land.

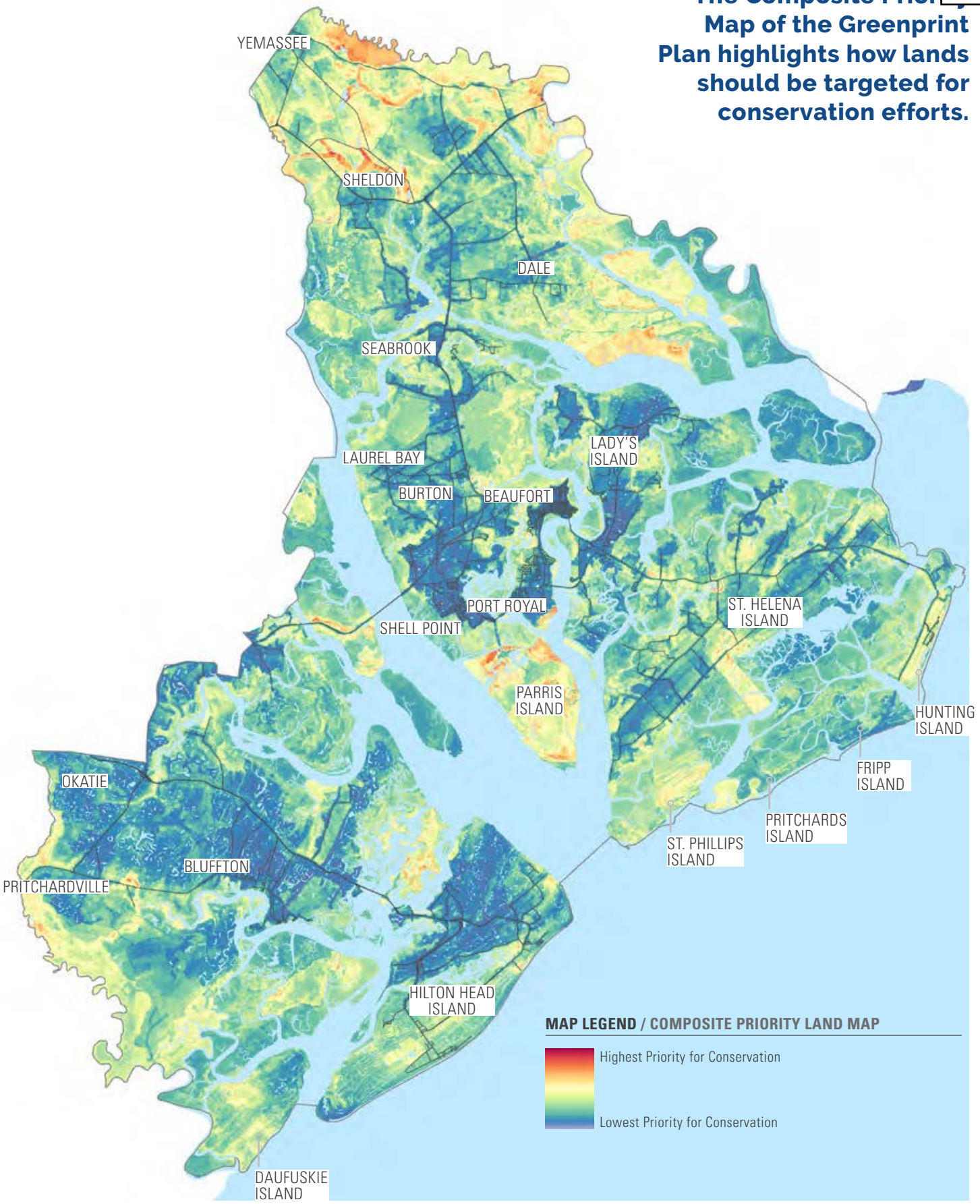
A Composite Priority Land Map was generated by weighting the environmental criteria of the Greenprint Composite Priority Land model.

The Greenprint Overlay Map reflects the open space values of Beaufort County residents and can be a powerful tool to guide Future Land Use, growth management planning, and the development of strategies, policies, plans, and overlays that define appropriate development types, densities, and standards within and adjacent to the priority areas.

By refining conservation and development approaches based on the Greenprint Overlay Map, Beaufort County can ensure its future growth is strategic, meeting the demands of population growth while protecting the natural environment that is key to the County's identity and sense of place.

Refer to Section 4.1 of the Greenprint Plan for more information about the prioritization model and mapping criteria.

The Composite Priority Map of the Greenprint Plan highlights how lands should be targeted for conservation efforts.



CROSS WALK TO COMPREHENSIVE PLAN: GREENPRINT OVERLAY MAP

The Greenprint Overlay is derived from the Greenprint Plan's prioritization mapping model. Because the model was informed by GIS data and community input, the Greenprint Overlay Map reflects the open space values of Beaufort County residents and can be a powerful tool to guide Future Land Use, growth management planning and the development of strategies, policies, plans and overlays that define appropriate development types, densities and standards within and adjacent to the priority areas.

The Greenprint Overlay Map is a consolidation of the environmental priorities, divided into four zones based on the Greenprint Composite Priority Land Map. The four zones represent different levels of environmental priority along with different levels of need for protection and conservation.

The darkest green zones representing areas most in need of protection and the lightest green zones represent areas with the least priority for protection and the most suitable for development.

This four-tiered overlay informs how new development should be positioned, where conservation-oriented development standards should be applied, and where focused conservation efforts should be prioritized.

Future land use planning should utilize the four tiered overlay when determining where and how to develop. It should also inform the creation of specific codes and overlays that will guide development as described in the table below.

Highly Developable	Lands that are the lowest priority for preservation, generally upland, and away from flooding associated issues.	Lands within these areas can and should support high levels of development intensity to support growth, employment and affordable housing goals.
Developable with Restrictions 1	Lands located close to or within lower level priority preservation environments	Lands within these areas can but with additional Low Impact Development (LID) standards and buffers to limit the impact to the critical environments they are adjacent to.
Developable with Restrictions 2	Lands located close to or within higher priority preservation environments and closer to highest priority preservation environments	Lands within these areas should only support limited development at low levels of intensity, conservation based development and the highest levels of Low Impact Design (LID) and sustainable development practices
Least Developable	Lands within highest priority preservation environments	Lands within these areas should only be preserved and not be developed



Source: Beaufort County, Design Workshop

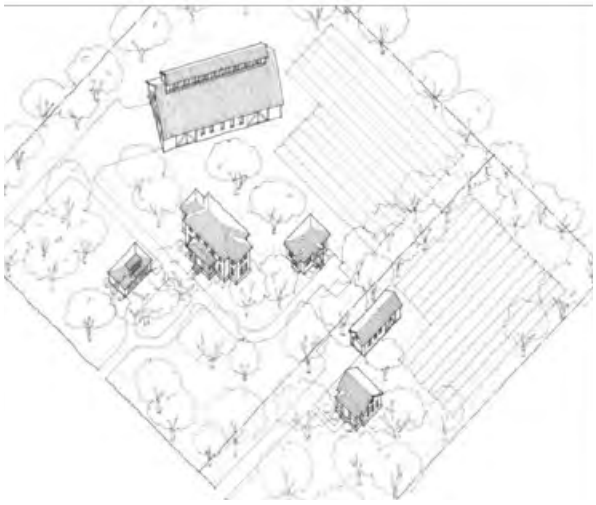
COUNTY ZONING IS BASED ON A RURAL-TO-URBAN TRANSECT





T1 Natural

T3 Edge &
T3 Hamlet Neighborhood





T2 Rural, Rural Neighborhood, Open & Rural Center Zoning

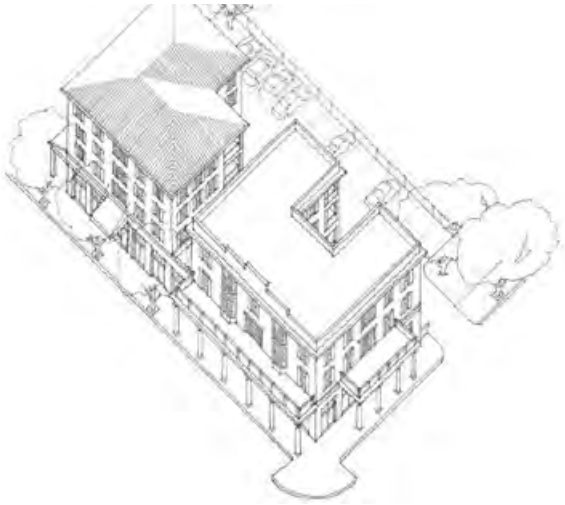
T3 Neighborhood Zoning

RURAL

Existing Transect Based Zoning can be further refined to better harmonize with the four-tiered Greenprint Overlay system to ensure balance and harmony with the natural environment.



T4 Hamlet Center



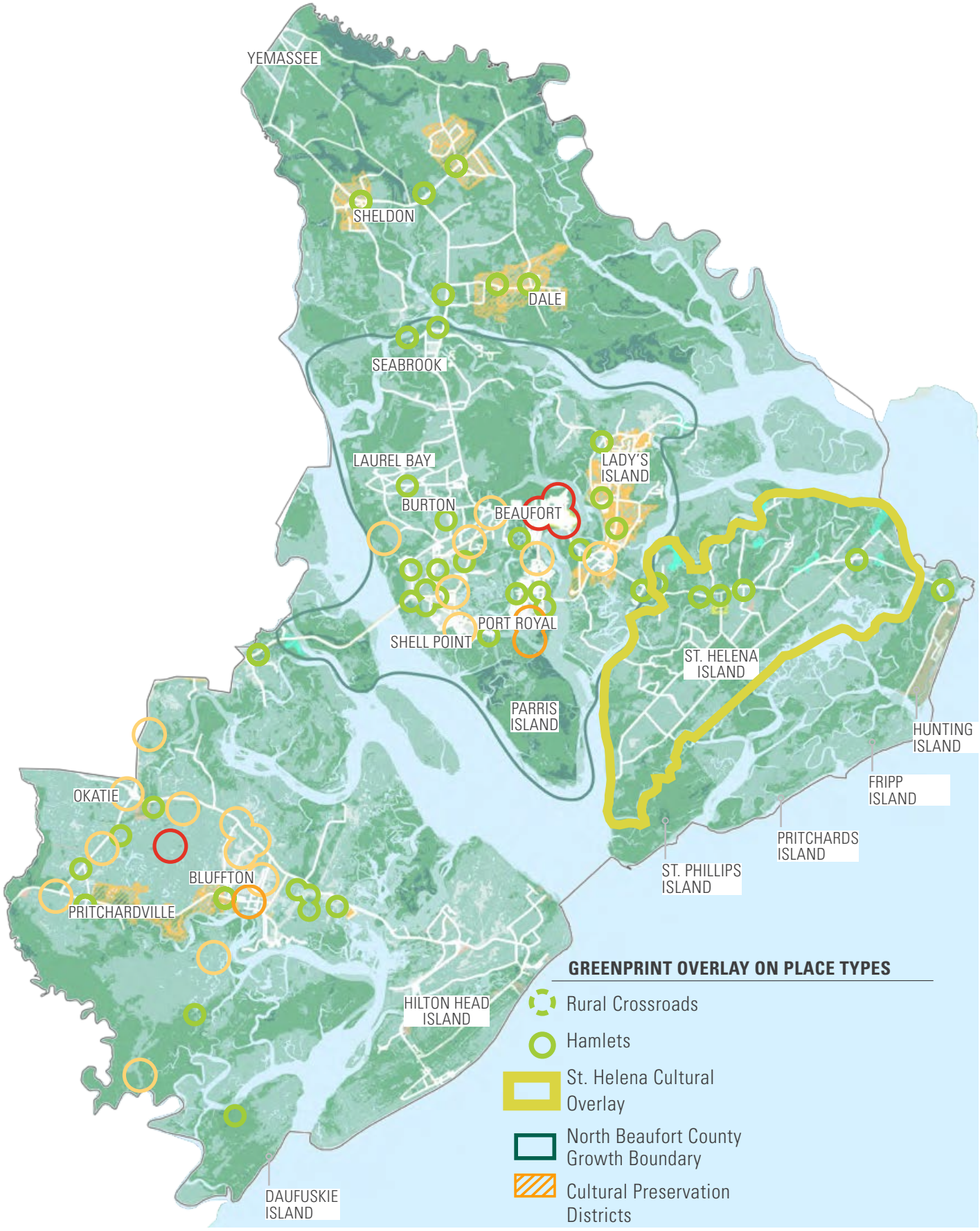
T5 Urban Center (in municipalities only)



T4 Neighborhood Center, Village Center & Mixed Use Zoning

County and Municipal Zoning Codes include the use of Transect Based Zoning, Place Types, and a Uniform Development Ordinance to define the nature and character of land use and development. These tools help retain the County's sense of place and character and ensure best practices in community and neighborhood development.

URBAN


YEMASSEE
SHELDON
DALE
SEABROOK
LAUREL BAY
LADY'S ISLAND
BURTON
BEAUFORT
PORT ROYAL
SHELL POINT
ST. HELENA ISLAND
PARRIS ISLAND
HUNTING ISLAND
FRIPP ISLAND
PRITCHARDS ISLAND
ST. PHILLIPS ISLAND
OKATIE
BLUFFTON
PRITCHARDVILLE
HILTON HEAD ISLAND
DAUFUSKIE ISLAND
GREENPRINT OVERLAY ON PLACE TYPES
Rural Crossroads
Hamlets
St. Helena Cultural Overlay
North Beaufort County Growth Boundary
Cultural Preservation Districts

STRATEGIES AND ACTIONS

R BE 1. CHANNEL NEW GROWTH INTO MUNICIPALITIES, EXISTING DEVELOPMENTS, AND PUDS THAT HAVE CAPACITY TO GROW, IN ORDER LIMIT GREENFIELD DEVELOPMENT AND PRESERVE ENVIRONMENTALLY SENSITIVE LANDS.

- Promote Infill Development and Redevelopment within the municipalities and in immediately adjoining areas in order to limit greenfield development. Make PUDs and subdivisions that are only partially developed a priority.
- Continue active engagement with the municipalities and neighboring counties on regional cooperation and planning. Use the Southern Lowcountry Regional Board (SOLOCO) and the Northern Beaufort County Regional Plan Implementation Committee to promote this cooperation.
- Revise the growth boundaries on Lady's Island to reflect the recommendations of the Lady's Island Plan 2018. Work with the City of Beaufort and Town of Port Royal to revise the growth boundaries on Port Royal Island to reflect the emphasis on infill and redevelopment.
- Work with all local governments in and adjacent to the County, to establish growth boundaries.
- Maintain and enhance rural land use policies for areas outside of growth boundaries.

BE1. ACTIONS

BE 1.1. Regularly inventory platted vacant lots in existing PUDs and subdivisions, and create an inventory of lots ideal for infill development.

BE 1.2. Formalize a regional planning program between Beaufort County, Jasper County, and the City of Hardeeville that recognizes the mutual benefit of coordinated planning along jurisdictional boundaries.

BE 1.3. Develop a SC 170 Area Plan in conjunction with the City of Hardeeville and Jasper County that defines a growth framework for the corridor and addresses issues of joint concern such as transportation and environmental protection.

BE 1.4. Work with the Town of Yemassee to develop a consistent growth management strategy for the area of the County north of US 17. The strategy should include a mutually agreed upon growth boundary.

R BE 2. ALLOW GROWTH TO MIRROR RECOMMENDATIONS OF GREENPRINT PLAN PRIORITY MAPPING (NO DEVELOPMENT, LOW IMPACT DEVELOPMENT, PRESERVING MOST CRITICAL PROPERTIES, ETC.).

- Use the Greenprint overlay that designates areas of environmental importance, such as the floodplain, to craft development standards that protect the natural environment and use to review all development and land use proposals.
- Use regulatory tools such as rural zoning, open space set-aside requirements, buffers and natural resource protection standards, as the primary tools to protect areas of environmental importance. Use land purchase and the purchase of conservation easements for the most critical properties.

P BE 3. CREATE POLICIES THAT ARE COMPATIBLE WITH THE LOCATION, CULTURE, AND ACCESSIBILITY OF AREAS TARGETED FOR GROWTH.

- Use Place Type Overlay to identify areas of the County where walkable urbanism is appropriate. Scale Place Types appropriately based on their location within the County, from most urban to most rural. The urban to rural hierarchy shall be city, town, village, hamlet, and rural crossroads.
- Create community or small area plans for areas of the County that do not have one, such as St. Helena Island, Sheldon, and Dale, using a community-based process to promote and ensure access to basic services, parks, economic opportunities and affordable housing.
- Prepare a mixed-use development plan, using a community-based process, to support walkable and "bus transit-ready" development patterns along major roads such as US 278, Bluffton Parkway, and the Okatie Highway to reduce traffic over time.

R BE 4. ENSURE THAT COUNTY LAND USE REGULATIONS AND POLICIES CREATE RESILIENT, EQUITABLE COMMUNITIES WITH A SENSE OF PLACE REFLECTIVE OF THE COUNTY'S UNIQUE CHARACTER.

- When adopting new land use policies or regulations, consider the impact, including unintended consequences, on low-income and minority communities. Periodically review existing policies.
- Continue the ban on new PUDs.

BE3 ACTIONS

BE 3.1. Reevaluate the effectiveness of existing place-making implementation tools such as the Place Type Overlay District in the Community Development Code, and make revisions as necessary.

BE 3.2. Initiate a prototype community- based Place Type implementation plan that involves property owners, business owners, and other stakeholders to serve as a vision for other areas of the county where walkable urbanism is appropriate.

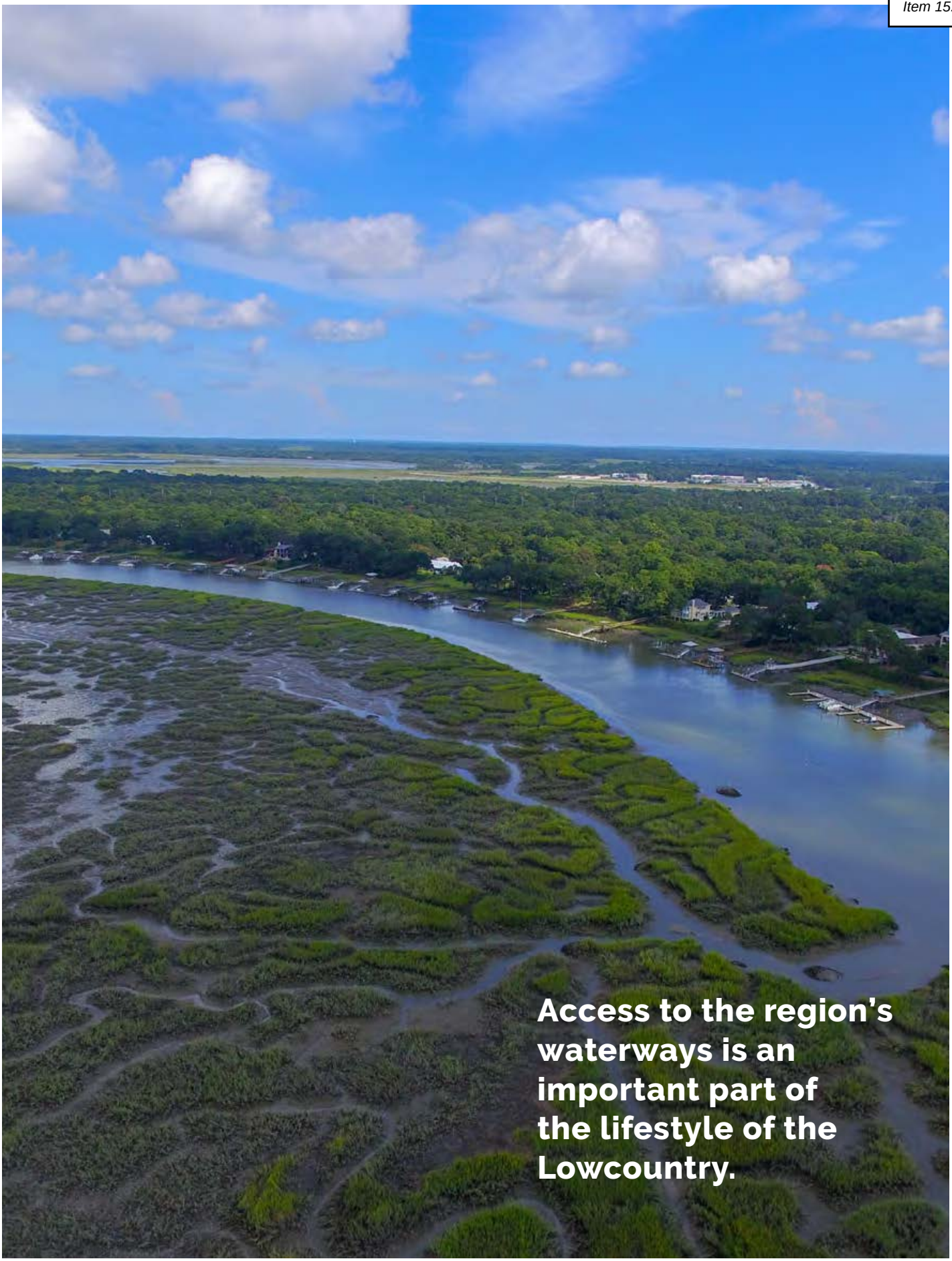
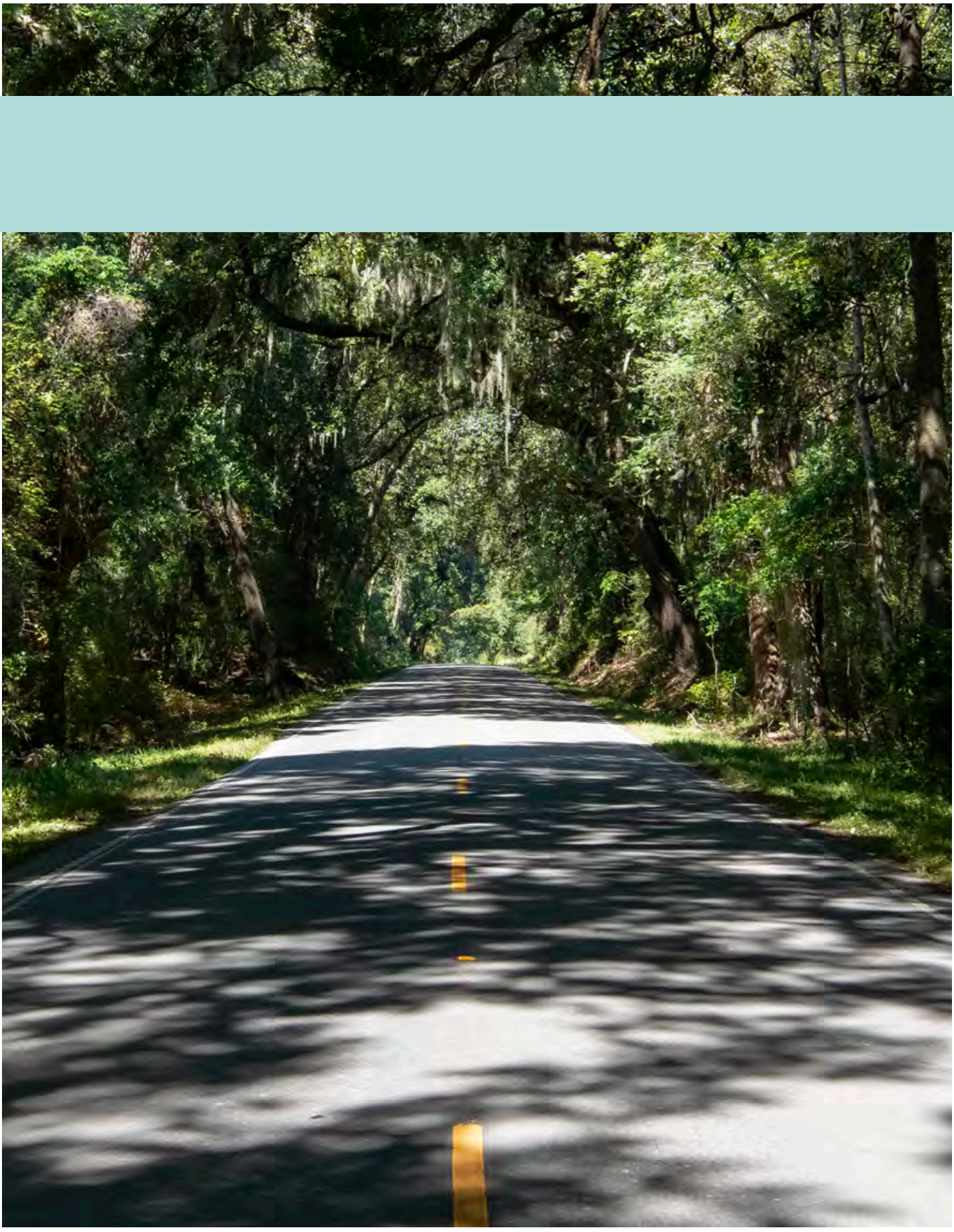


Photo source: Design Works



Scenic roadway with tree canopy in Beaufort County

Photo source: Design

FOCUSED PLANNING AREAS

A county comprising diverse, connected neighborhoods with equitable access to services and amenities where residents have a strong voice in their future.

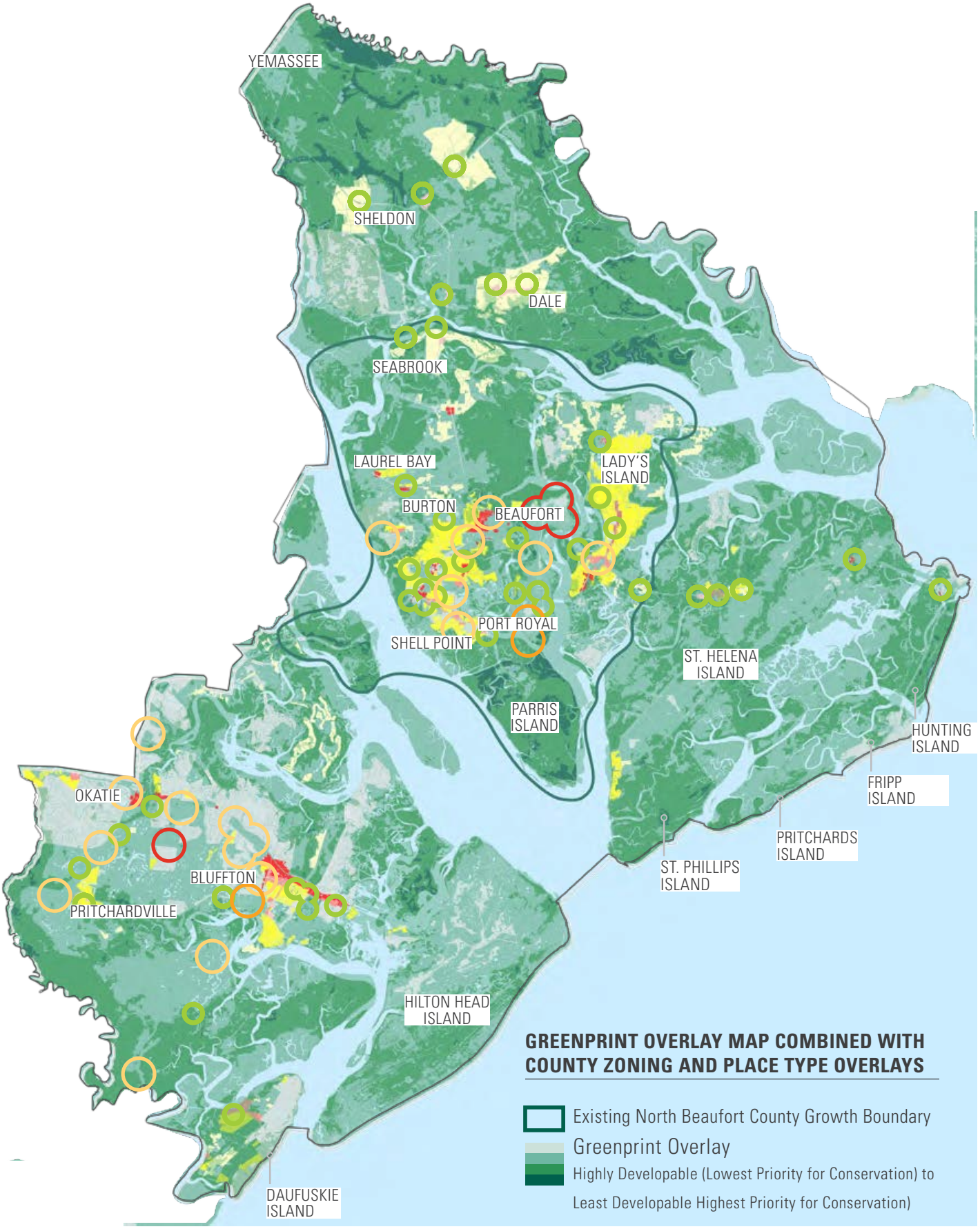


PRINCIPLES

1. We value our rural heritage and our unique and complex natural environment as a source of life, recreation, economy, culture, and sense of place.
2. We believe in allowing local communities to determine their vision and to define their growth.
3. We believe development should be done in balance with preserving our natural systems.
4. We understand our economy and lifestyle depend upon the diversity of the places and cultures that make up our County.
5. We believe that all areas of the County deserve access to infrastructure, community services, mobility, and economic prosperity, regardless of where they are located.

Refer to the County Atlas, Greenprint, Action Playbook, and other supporting documents with more information.

RURAL URBAN


YEMASSEE
SHELDON
DALE
SEABROOK
LAUREL BAY
LADY'S ISLAND
BURTON
BEAUFORT
PORT ROYAL
SHELL POINT
ST. HELENA ISLAND
PARRIS ISLAND
HUNTING ISLAND
FRIPP ISLAND
PRITCHARDS ISLAND
ST. PHILLIPS ISLAND
OKATIE
BLUFFTON
PRITCHARDVILLE
HILTON HEAD ISLAND
DAUFUSKIE ISLAND
GREENPRINT OVERLAY MAP COMBINED WITH COUNTY ZONING AND PLACE TYPE OVERLAYS
Existing North Beaufort County Growth Boundary
Greenprint Overlay
Highly Developable (Lowest Priority for Conservation) to
Least Developable Highest Priority for Conservation)

CONTEXT

Beaufort County has many unique places with different characters, history, cultures, and landscapes. In recognition of this, the County created Place Type Overlay (PTO) Zone Standards within its Community Development Code.

The PTO Zone is intended to create and reinforce walkable, urban environments with a mix of housing, civic, retail, and service choices. The PTO is made up of three place types:

- Rural Crossroads Place Type. Rural crossroads are typically located at the intersection of two or more rural roads. They provide a small amount of pedestrian-oriented, locally-serving retail in a rural context, and transition quickly into agricultural uses or the natural environment as one moves away from the intersection. Historic examples of rural crossroads include Pritchardville and the Corners Community on St. Helena Island.
- Hamlet Place Type. Hamlets are typically larger and more intense than rural crossroads and are often located at the edge of the rural and urban condition. A hamlet often has a small, pedestrian-oriented main street with surrounding and supporting residential fabric that is scaled to the size of a pedestrian shed (the distance a person would walk in five minutes, generally a quarter-mile). The main street and surrounding residential fabric transitions quickly into agricultural uses or the natural environment. A historic example of a hamlet includes the original settlement of Bluffton along Calhoun Street. The community of Habersham began as a hamlet.
- Village Place Type. Villages are made up of clusters of residential neighborhoods of sufficient intensity to support a central, mixed-use environment. The mixed-use environment can be located at the intersection of multiple neighborhoods or along a corridor between neighborhoods. Habersham is a good example of a hamlet that is evolving into a village.

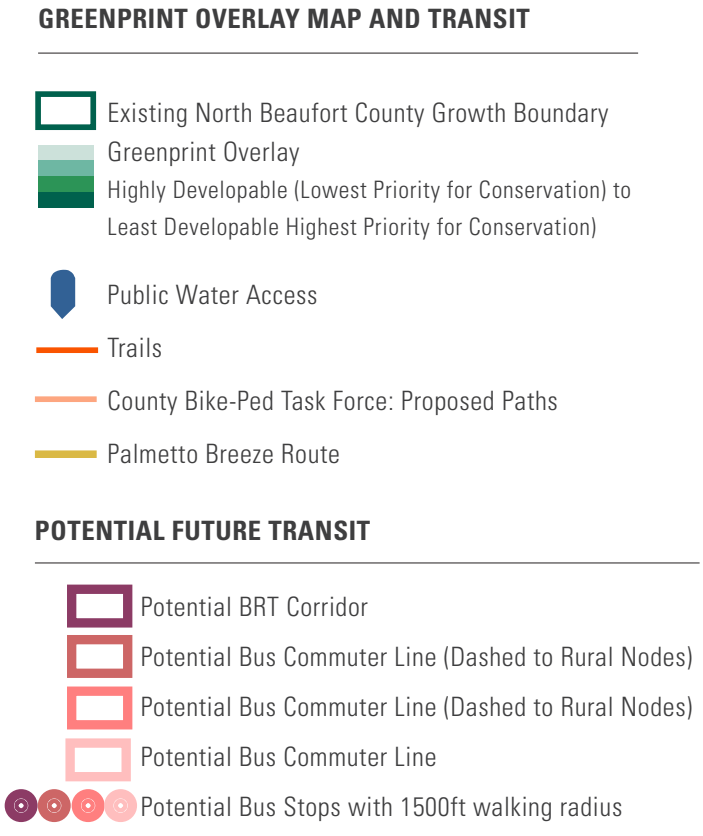
Defining Beaufort County's future growth with the use of Place Types, the Greenprint Overlay Map, and transect zoning, will help achieve the community's vision of achieving balance between the built and natural environment, as well as:

- Improve the built environment and human habitat.
- Promote development patterns that support safe, effective, and multi-modal transportation options, including auto, pedestrian, bicycle, and transit. This will minimize vehicle traffic by providing for a mix of land uses, walkability, and compact community form.
- Provide neighborhoods with a variety of housing types to serve a diverse population.
- Remove barriers and provide incentives for walkable urban projects.
- Promote the greater health benefits of a pedestrian-oriented environment.
- Reinforce the character and quality of local communities, including crossroads, neighborhoods, hamlets, and villages.
- Reduce sprawling, auto-dependent development.
- Protect and enhance real property values.
- Reinforce the unique identity of Beaufort County that builds upon the local context, climate, and history.

The Focal Area Plans that follow recognize the value of Place Types and promote their use across the County.

FUTURE LAND USE: MULTIMODAL PLACE TYPES

The use of bus transit is growing in Beaufort County and presents an important opportunity for the future. By linking municipalities, Place Types, and areas of concentrated growth, employment, or attraction, transit can help alleviate traffic along the County's major roads, enable workers to equitably access job opportunities, and provide tourists transportation choices while visiting the County. Palmetto Breeze has been actively integrating new ideas, such as the Hilton Head Trolley, to best fit transit to users. Place Types might also be developed in areas where water transit is or may become available.



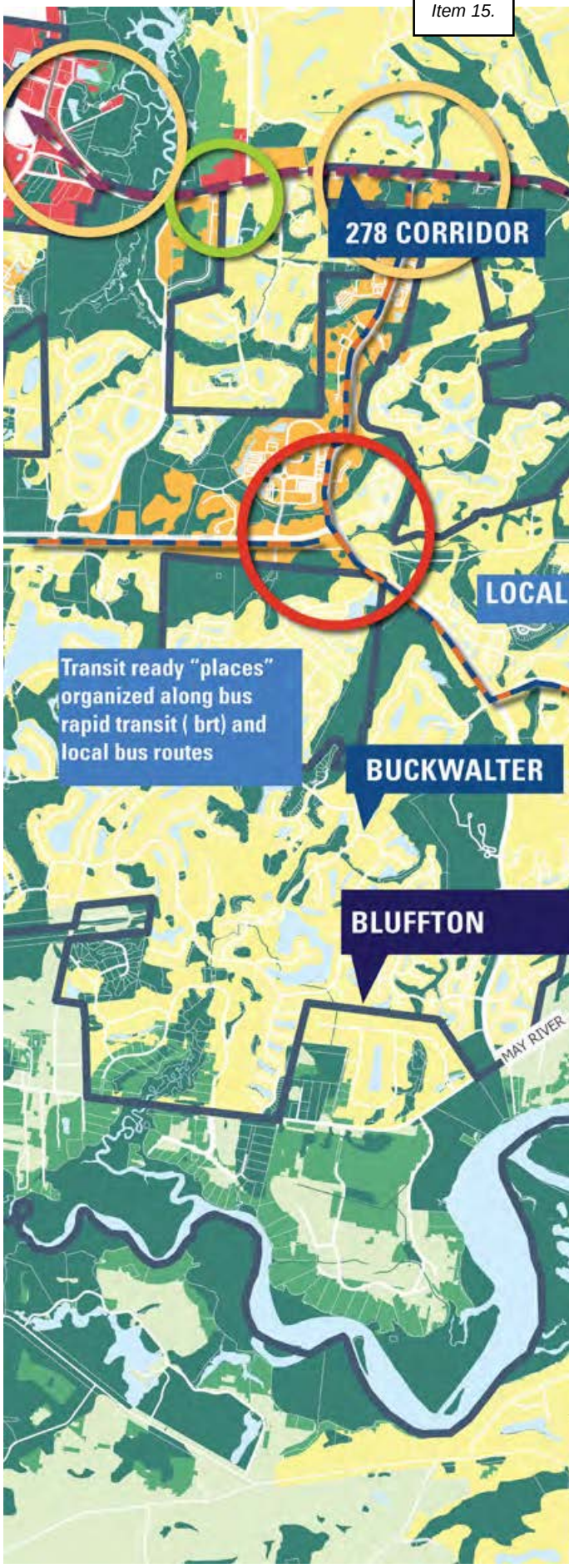


Over time, as bus services increase, attitudes shift, and the County becomes more multimodal, bus routes can better connect destinations and places within the County, enabling citizens to be able to live where they choose and ride transit to their jobs.

US 278 CORRIDOR

As the numbers of residents and commuters increase in southern Beaufort County, traffic pressure continues to grow along the US 278 Corridor. Compounded with heavy tourist traffic and the growth of Hardeeville and Jasper County, congestion will continue to build and affect quality of life and the tourism industry in the area.

Establishing Fixed-Route Transit and planning for transit-ready nodes that support mixed-use development are possible solutions to this challenge. By guiding growth to transit-ready nodes, the County and its municipalities can attain affordable housing goals while promoting internal trip capture and developing a higher quality gateway through southern Beaufort County.



BASE MAP LEGEND

Greenprint Overlay

- Highest Priority for Conservation: Developable with Restrictions 2 (light green) and Least Developable (dark green, including Marshes, Wetlands and Preserved Lands)
- Historic Districts
- Fishing Villages
- Palmetto Breeze Route

Place Type Overlays

- Rural Crossroads
- Hamlets
- Villages
- Towns
- Cities
- ProposedTrolley Route
- Proposed Bus Route

Future Land Use

- Rural
- Rural Community
- Neighborhood/Mixed- Use
- Urban/Mixed-Use
- Community Commercial
- Regional Commercial
- Core Commercial
- Light Industrial
- Military


BRT CORRIDOR
BUS
278 CORRIDOR
BRIGHTON BEACH
Connect "Places" with Bike Trails and Bike Lanes
COLLETON RIVER
SAWMILL CREEK
SIMMONSVILLE
BUCK ISLAND
BLUFFTON
BURNT CHURCH
ALLJOY
MAY RIVER


JASPER COUNTY
Coordinated development standards
HARDEEVILLE
OKATIE
OKATIE
OKATIE
170 CORRIDOR
OKATIE
OKATIE RIVER
PINCKNEY COLONY
COLLETON RIVER
FORDING ISLAND

SC 170 CORRIDOR

The SC 170 Corridor is an important part of the image and character of the County. Concerns about signage, sprawling development, traffic management, and the loss of rural lands is of concern to the residents that use this road for their primary access.

Cooperation between Beaufort County, Hardeeville, and Jasper County are key components of a shared community vision for this corridor. The corridor should have jointly planned policies and standards related to design, land use, placemaking, landscape, environmental buffers, and signage. It is also important to establish agreements on the limits of urbanization and growth in Hardeeville and Jasper County.

Establishing Place Types that coincide with major intersections, consistent buffers of native vegetation, joint review of proposed plans along the corridor, and agreement on access management standards will lead to a corridor with walkable mixed-use nodes at intervals, natural buffers between the road and development, compatible land uses across jurisdictions, and safer, better managed traffic.



JOINT 170 CORRIDOR PLANNING STANDARDS:

- Continuous access management standards.
- Multipurpose trail both sides.
- 50’ tree and landscape protection buffer both sides.
- 35 mph posted speed limit.
- Landscaped center median.
- Signalized intersections and crosswalks at major intersections.
- Beaufort County’s “Place Type” standards applied at regular intervals to create nodal development patterns.
- Coordinated development standards.
- Coordinated open space linkages.
- Coordinated streetscape standards.
- Coordinated billboard signage standards.

BASE MAP LEGEND

Greenprint Overlay

- Highest Priority for Conservation: Developable with Restrictions 2 (light green) and Least Developable (dark green, including Marshes, Wetlands and Preserved Lands)
- Historic Districts
- Fishing Villages
- Palmetto Breeze Route

Place Type Overlays

- Rural Crossroads
- Hamlets
- Villages
- Towns
- Cities
- ProposedTrolley Route
- Proposed Bus Route
- Proposed Urban Growth Boundary

Future Land Use

- Rural
- Rural Community
- Neighborhood/Mixed- Use
- Urban/Mixed-Use
- Community Commercial
- Regional Commercial
- Core Commercial
- Light Industrial
- Military

BEAUFORT & PORT ROYAL

The adoption of the 2020 Beaufort County Comprehensive Plan in concert with the Port Royal Comprehensive Plan provided an opportunity to establish shared planning principles.

Within the Beaufort & Port Royal Focal Area, emphasis should be placed on redesigning roads to be safer, multimodal, and human-scaled. Additionally, plans for a Palmetto Breeze trolley service between Port Royal and Downtown Beaufort will be an asset to mobility and sense of place, and should be prioritized.

Growth management west of Port Royal should be informed by Place Types influenced by the Greenprint Overlay Map, existing transportation network, and potential of a trolley service. A new Town Place Type along Parris Island Gateway will add a walkable destination and place to live, establishing a sense of place and identity for this portion of the County.

Joint planning and cooperation, an annexation strategy, and shared development and infrastructure service standards are key to the execution of the Port Royal and Beaufort County plans.



BASE MAP LEGEND

Greenprint Overlay

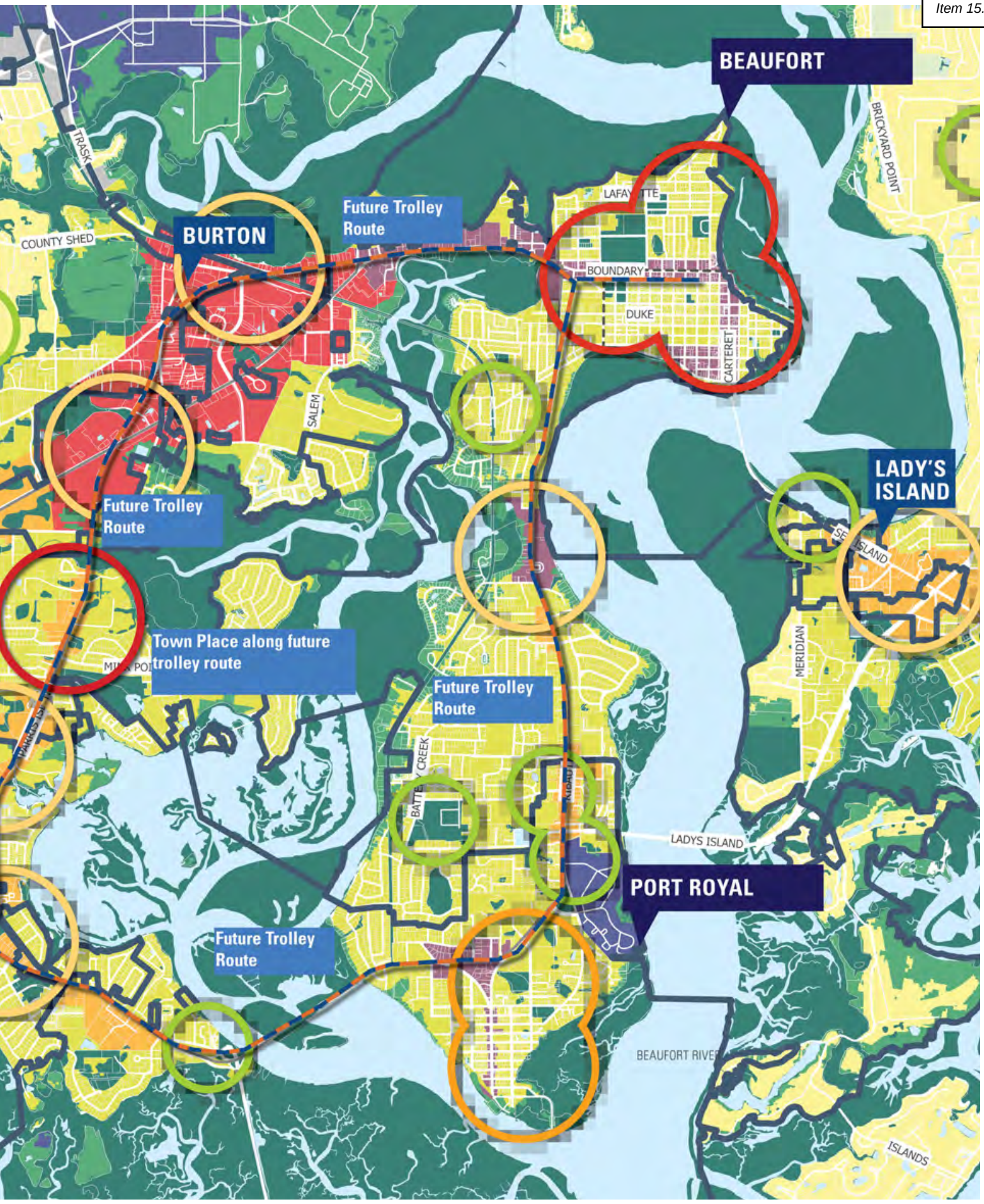
- Highest Priority for Conservation: Developable with Restrictions 2 (light green) and Least Developable (dark green, including Marshes, Wetlands and Preserved Lands)
- Historic Districts
- Fishing Villages
- Palmetto Breeze Route

Place Type Overlays

- Rural Crossroads
- Hamlets
- Villages
- Towns
- Cities
- ProposedTrolley Route
- Proposed Bus Route

Future Land Use

- Rural
- Rural Community
- Neighborhood/Mixed- Use
- Urban/Mixed-Use
- Community Commercial
- Regional Commercial
- Core Commercial
- Light Industrial
- Military


BEAUFORT
BURTON
Future Trolley Route
Future Trolley Route
Future Trolley Route
Future Trolley Route
Town Place along future trolley route
LADY'S ISLAND
PORT ROYAL
TRASK
COUNTY SHED
SALEM
BOUNDARY
DUKE
CARTERET
BRICKYARD POINT
MERIDIAN
LADYS ISLAND
BEAUFORT RIVER
ISLANDS


BEAUFORT
LADY'S ISLAND
PORT ROYAL
TRASK
BRICKYARD POINT
MIDDLE
HOLLY HALL
COUNTY SHED
BROAD RIVER
ROBERT SMALLS
PARRIS ISLAND
BATTERY CREEK
RIBAUT
LADYS ISLAND
BEAUFORT RIVER
ISLANDS

LADY'S ISLAND

The"Lady's Island Plan 2018" was adopted in April 2019. The plan was a collaborative effort between Beaufort County, the City of Beaufort, the Town of Port Royal, multiple community organizations, and local residents. The plan was prepared in response to the dramatic growth Lady's Island has experienced over the last two decades, resulting in traffic congestion, threats to natural resources, and a loss of local character. The plan, adopted by both the County and the City of Beaufort, is especially important given that a good deal of land on Lady's Island, particularly within the Island's main commercial corridor, is in the City of Beaufort's jurisdiction

Success is dependent on commitment and coordinated implementation between the County and the City of Beaufort, particularly for a master planning effort for the Village Center area to leverage the public improvements proposed for Sea Island Parkway.



The Lady's Island Plan sets out four common goals that are developed into several planning themes:

- Manage growth
- Create a Walkable Lady's Island Center
- Strengthen Neighborhoods
- Manage Traffic Congestion
- Improve the Bicycle and Pedestrian System
- Require Adequate Public Infrastructure
- Improve Transparency in Decision Making

BASE MAP LEGEND

Greenprint Overlay

- Highest Priority for Conservation: Developable with Restrictions 2 (light green) and Least Developable (dark green, including Marshes and Wetlands)
- Historic Districts
- Fishing Villages
- Palmetto Breeze Route

Place Type Overlays

- Rural Crossroads
- Hamlets
- Villages
- Towns
- Cities
- ProposedTrolley Route
- Proposed Bus Route
- Existing Northern County Growth Boundary

Future Land Use

- Rural
- Rural Community
- Neighborhood/Mixed- Use
- Urban/Mixed-Use
- Community Commercial
- Regional Commercial
- Core Commercial
- Light Industrial
- Military

ST. HELENA ISLAND

St. Helena Island is one of Beaufort County's greatest cultural and environmental assets and the people who live there want to ensure it remains that way. Planning for St. Helena must be a community-based process in order to protect the area's unique Gullah / Geechee culture. Plans and programs must be developed carefully and thoughtfully so that the island way of life is maintained, while improving health, safety, and economic outcomes by ensuring the equitable delivery of community services.

Place Types have already been established, coinciding with logical places on the Island where people can gather, shop, eat, and recreate. Rural zoning also limits the nature, density, and type of development that can be considered. The Greenprint Overlay Map also supports the locations of the Place Types as well as the need to protect the natural environment and rural character. Opportunities do exist, so long as they are desired by the community, to better connect St. Helena with bike lanes, trails, greenways, water access points, and better bus service.



BASE MAP LEGEND

Greenprint Overlay

- Highest Priority for Conservation: Developable with Restrictions 2 (light green) and Least Developable (dark green, including Marshes and Wetlands)
- Historic Districts
- Fishing Villages
- Palmetto Breeze Route

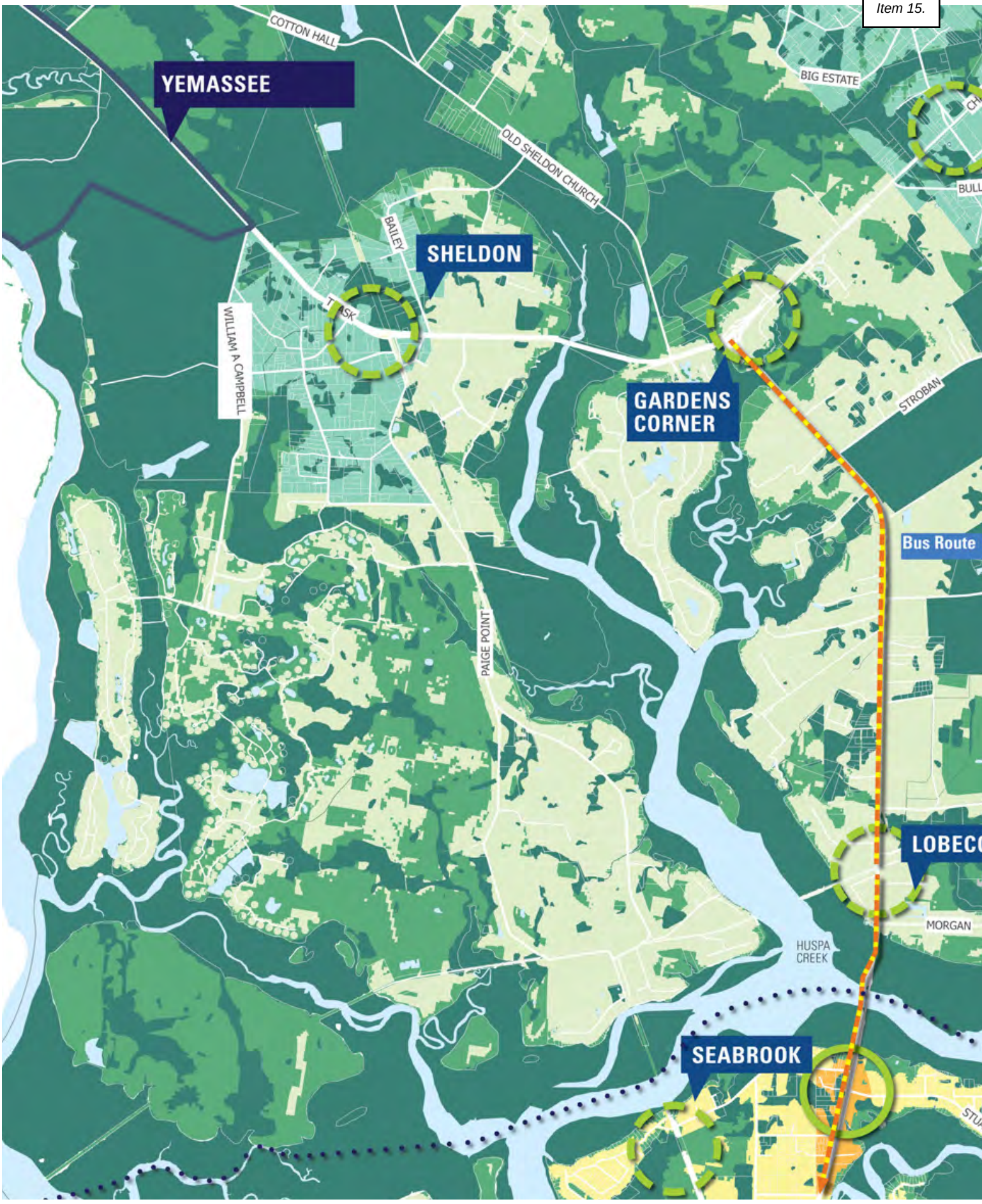
Place Type Overlays

- Rural Crossroads
- Hamlets
- Villages
- Towns
- Cities
- ProposedTrolley Route
- Proposed Bus Route
- St. Helena Cultural Overlay
- Existing Northern County Growth Boundary

Future Land Use

- Rural
- Rural Community
- Neighborhood/Mixed- Use
- Urban/Mixed-Use
- Community Commercial
- Regional Commercial
- Core Commercial
- Light Industrial
- Military


MORGAN RIVER
EDDINGS POINT
DULAMO
SEA ISLAND
ST. HELENA ISLAND
BALL PARK
HARBOR RIVER
HUNTING ISLAND
SEASIDE
Connect "Places" with Bike Trails and Bike Lanes
FRIPP ISLAND
PRITCHARDS ISLAND
TRENCHARDS INLET


YEMASSEE
COTTON HALL
OLD SHELDON CHURCH
BIG ESTATE
BAILEY
SHELDON
TRASK
WILLIAM A CAMPBELL
GARDENS CORNER
STROBAN
Bus Route
PAIGE POINT
LOBECO
MORGAN
HUSPA CREEK
SEABROOK



SHELDON, DALE, GARDENS CORNER & LOBECO

The northern portion of Beaufort County is intentionally rural. Conservation efforts, zoning protections, sewer agreements, and growth boundaries have been put in place to protect the area from sprawling development. These efforts were taken to further the vision local residents had developed for their community's future.

Yet, as Yemassee expands and develops, coordination between the Town and County will be essential to protecting the character and natural resources of the Sheldon and Gardens Corner area. Working with the Town to establish an urban growth boundary is an important first step in developing a successful growth management strategy for the area.

Furthermore, while the vision for Northern Beaufort County is to maintain its rural character, it should be noted that the land area that support the Place Types are also suitable for development based on the Land Suitability Analysis.

BASE MAP LEGEND

Greenprint Overlay

- Highest Priority for Conservation: Developable with Restrictions 2 (light green) and Least Developable (dark green, including Marshes and Wetlands)
- Historic Districts
- Fishing Villages
- Palmetto Breeze Route

Place Type Overlays

- Rural Crossroads
- Hamlets
- Villages
- Towns
- Cities
- ProposedTrolley Route
- Proposed Bus Route
- Existing Northern County Growth Boundary

Future Land Use

- Rural
- Rural Community
- Neighborhood/Mixed- Use
- Urban/Mixed-Use
- Community Commercial
- Regional Commercial
- Core Commercial
- Light Industrial
- Military

YEMASSEE

With the recent annexations of Cotton Hall and Tomotley Plantations, it is clear that the Town of Yemassee plays an important role in the future growth of the region of the county located north of US 17.

Establishing a growth boundary and shared land use vision between Beaufort County and the Town of Yemassee are key components to a successful growth management strategy that allows the Town to grow and thrive while protecting historic properties and valuable natural resources that make up the ACE Basin. This plan proposes establishing rural crossroads along US 17 that would allow compatible commercial development to serve local residents along with visitors travelling through the region. The plan also identifies land located between Cotton Hall Road and the county line that has direct rail access and close proximity to Interstate 95. This property is well suited for industrial development.

Finally, a shared vision should include building on the region's natural and historic assets. This includes protecting the scenic qualities of Old Sheldon Church Road, improving public access to the water, protecting environmentally sensitive and historic properties in the ACE Basin.



BASE MAP LEGEND

Greenprint Overlay

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- Fishing Villages
- Palmetto Breeze Route

Place Type Overlays

- Rural Crossroads
- Hamlets
- Villages
- Towns
- Cities
- ProposedTrolley Route
- Proposed Bus Route
- Proposed Urban Growth Boundary

Future Land Use

- Rural
- Rural Community
- Neighborhood/Mixed- Use
- Urban/Mixed-Use
- Community Commercial
- Regional Commercial
- Core Commercial
- Light Industrial
- Military


ater
RIVER
Scenic Highway
OLD SHELDON CHURCH
HALL
BIG ESTATE
CHARLESTON
BIG ESTATE
JENKINS
SHELDON
BAILEY
TRASH
KINLOCH
PAIGE POINT
WASHINGTON FARM
Bus Route



2040 ACTION PLAN PLAYBOOK



THE 2040 ACTION PLAN

The 2040 Comprehensive Plan, once adopted, establishes the vision and shared direction for County economic, social, cultural, and environmental actions. It will serve as the foundation on which future plans and policies are grounded. It will act as the County's "playbook" and be referred to regularly as each department establishes its work plans for the year. It will guide the County's budget and be a tool to communicate goals to residents and investors who seek to further quality of life and strengthen the standard of living of Beaufort County. The Comprehensive Plan should be a living document, "dog eared" due to constant use and added to regularly by successive County Councils through ongoing community outreach.

Consistency with State Requirements

A comprehensive plan is required by state law in all jurisdictions that have zoning. The comprehensive plan sets out a vision for the future, establishes goals, and recommends actions to achieve those goals. It links long range vision with local programs and policies.

The comprehensive plan informs County government activities to ensure Beaufort County maintains its high quality of life, unique landscape, access to nature, and Lowcountry aesthetic, and expands economic opportunities. When implemented, the comprehensive plan will enable the County to reap the rewards of its ongoing success and to build a community that attracts people to live, work, and play.

This plan looks out into the future 20 years. After five years, the plan should be reviewed and updated. Consistent with state statute requirements, the Beaufort Comprehensive Plan Update includes consideration for the nine required elements that must be addressed in the development of a Comprehensive Plan.

These include:

- Population and demographics
- Economic development, labor, and workforce
- Natural resources
- Cultural resources
- Community facilities; water, sewer, fire, EMS, education, etc.
- Housing inventory, condition, types, and affordability
- Future land use
- Transportation, improvements, efficiency, safety
- Priority investments, immediate & long term public needs

The Beaufort County Comprehensive Plan Update, however, is formatted differently than a traditional comprehensive plan to better recognize and articulate the natural interrelationship and synergies between the required elements described above. The format chosen for the Plan is based on holistic "themes", inspired by the American Planning Association (APA) in its Sustaining Places: Best Practices for Comprehensive Plans. By doing that, the state required elements listed above are woven into the goals, strategies and actions of the themes that were created for the Plan and within the chapters that were created for each theme and not divided into their own individual chapters like they usually are.

Steps to Initiate Implementation of the Plan

- Once adopted, display the Plan it where it is easily accessible for day to day use.
- Conduct necessary educational discussions and create alignment between Staff, Departments, Planning Commission and County Council with the recommendations of the Comprehensive Plan.
- Advance the Action Plan by creating work plans, schedules, and responsibilities.
- Coordinate the Plan with Capital Improvement Plans (CIP) and the Strategic Plan.
- Coordinate the Action Plan with existing plans and studies or ones currently being created.
- Identify "low-hanging fruit" to enable items to be more readily implemented to establish momentum.
- Regularly set priorities for short, medium, and long-term actions based on yearly financial capabilities, the emergence of opportunities and ongoing community support.
- Manage the execution of the Action Plan by establishing a single point of contact who will oversee its implementation and identify key leaders from every department to champion it.
- Establish a method to monitor the progress of the Plan including a "dash board" and adherence to metrics.
- Conduct an annual report to County Council on the ongoing progress on the Plan.
- Evaluate and appraise the Plan every 5 years as required.
- Use the vision, goals and strategies of the Comprehensive Plan to influence future planning efforts.
- Coordinate the Plan with regional jurisdictions, towns, cities and counties.

Priority Investment Element Actions

The Priority Investment Act (Act No. 31 of 2007) requires the "analysis of federal and state funding for public infrastructure that may be available" to support the expenditures needed to implement the Plan. The funding needs required for implementation will be determined and prioritized through the CIP process. As described below, there are many ways that the Actions of the Plan can and will be funded. The following list describes possible revenue sources, both existing and potential, for how items described in the Action Plan might be funded:

- Real and Personal Property Taxes
- County Sales Taxes
- Capital Project Sales Taxes (CPST
- Local Option Sales Taxes (LOST)
- Vehicle Taxes
- Utility User Charges (rates)
- Stormwater Utility Fees
- Business License Fees
- Utility Impact and Connection Fees
- Fees In Lieu of Development (parks)
- Permitting Fees (building and development)
- Development Agreements
- Tax Increment Financing (TIF)
- Revenue and General Obligation Bonds
- State and Federal Grant Funding
- Hospitality and Accommodations Tax

Implementing and Updating the 2040 Comprehensive Plan

The Comprehensive Plan Update, as well as the Action Plan located within it, should be viewed as a high-level document that provides broad guidance. It is not intended to be a rigid prescription for how to accomplish the vision or each goal or strategy. It is also a long term plan that will span several election and economic cycles. To this end, it allows those in charge of its implementation to determine the most appropriate courses of action to achieve it's implementation, based on current best practices, staffing, funding, the nature of the task and current conditions. As to be expected, given their complexity, many of the goals and strategies of the Plan will require additional actions, prioritization, planning, community involvement, and funding, as well as ongoing review and evaluation.

The Comprehensive Plan will be reviewed at least every five years and updated at least every ten years as required. When the County conducts a review or update to the Plan, it will evaluate the need to update any or all of the required elements of the Plan, based on conditions at the time. To the extent the review necessitates an amendment to the Priority Investment Element or the other relevant elements of the Plan, the County will coordinate with adjacent and relevant jurisdictions and agencies, as required by the South Carolina Planning Enabling Act.

The Action Plan

The Action Plan describes essential items to be acted upon and provides the Planning Commission and County Council a guide for future funding, planning and investment. The Action Plan focuses on tasks, derived from the process, that can chart a positive course for the County's future. Its plans and policies, near mid and long-term actions, and the identification of departmental responsibilities. It establishes the initial "Playbook" to follow to achieve the vision of the Plan. The following pages provide the actions that are being committed to for each Theme as part of the Action Plan of the 2040 Comprehensive Plan.

COORDINATION WITH THE CIP

By implementing the Comprehensive Plan in coordination with it's Capital Improvement Plan (CIP) and the County Council Strategic Plan– the County will maintain alignment around prioritizing investment and expenditures, land use and growth management policies, economic development strategies, housing policies, delivery of services, infrastructure development, shared commitment and focus, as well as compatibility between the County's growth policies and those of the region, the Council of Government, and other units of local government and agencies with whom coordination is important.

COORDINATION WITH COUNTY COUNCIL STRATEGIC PLAN

The Comprehensive Plan should also be the inspiration for the Strategic Plan created annually by County Council, so that all three items - the Comprehensive Plan, the CIP and the Strategic Plan are working together to guide the County's actions, expenditures and priorities. In that respect, the Strategic Plan should be the tool that prioritizes the actions of the Comprehensive Plan each time one is created.

COORDINATION WITH OTHER PLANNING DOCUMENTS

BEAUFORT COUNTY ATLAS

A living document in a simple template that can be updated over time. The starting reference point for current and future Beaufort County planning projects.



PEOPLE OF BEAUFORT COUNTY

County Comprehensive Plan references County Atlas.

BEAUFORT COUNTY COMPREHENSIVE PLAN

A simple and visual comprehensive plan update with succinct analysis and concrete recommendations organized by theme.

County Comprehensive Plan and Green Print Plan reference each other.

GREENPRINT PLAN

A simple and visual Green Print Plan update with succinct analysis and concrete recommendations organized by theme.

MUNICIPAL COMP PLANS

PARKS AND RECREATION PLANS

SOUTHERN LOWCOUNTY ORDINANCE AND DESIGN MANUAL

TRANSPORTATION PLANS

2040 ACTION PLAN: NATURAL ENVIRONMENT

NE 1.1. Monitor effectiveness of existing ordinances and programs and update as necessary to protect water quality and natural resources.	**NE 1.2.** Seek referendums on additional funding for the Rural and Critical Lands Preservation Program every four years.	**NE 1.3.** Require new developments and encourage existing developments to adopt a tree management plan.	**NE 1.4.** Support Port Royal Sound Foundation's application to the EPA's National Estuary Program. Seek partnership with Port Royal Sound Foundation to monitor water quality and provide educational opportunities for the community about the importance of keeping our waterways healthy.	**NE 1.5.** Evaluate the time period that a property owner must wait after clear cutting property before applying for a development permit.
INVESTMENT				
Medium	Low	High	Medium	Low
TIMING				
3-6 years	Ongoing	1-3 Years	1-3 Years	1-3 Years
ENTITY				
0CRM; Beaufort County Stormwater Utility, Water Quality Monitoring Program; County Planning & Zoning Department	County Council, Natural Resources Committee; Beaufort County Open Land Trust	County Planning & Zoning Department	Port Royal Sound Foundation; Beaufort County Stormwater Utility, Water Quality Monitoring Program; County Council	County Planing and Zoning

NE 2.1. Provide critical environmental systems maps on the County website.	**NE 2.2.** Update environmental systems mapping (five-year cycle) to reflect ongoing research and actual conditions of flooding and sea level rise.	**NE 3.1.** . Install and monitor tidal gauges at several locations in Beaufort County to provide a thorough representation of tidal activity across the county.	**NE 3.2.** Install groundwater monitoring wells at various locations including agricultural areas and low-lying communities that rely on septic systems.	**NE 3.3.** Adopt comprehensive water plans for vulnerable areas of the County by studying and analyzing how stormwater, sea level rise, and storm surge interact in an area determined by geographic and geological conditions.
Medium	Medium	High	High	High
1-3 Years	Ongoing	1-3 Years	1-3 Years	3-6 Years
County Planning & Zoning Department; County Floodplain Manager; SC Sea Grant Consortium; GIS Department	County Planning & Zoning Department; County Floodplain Manager; SC Sea Grant Consortium; GIS Department	DNR; NOAA; SC Sea Grant Consortium; LCOG; US DOD	DHEC, USGS	DHEC; USGS; County Planning & Zoning Department

2040 ACTION PLAN: NATURAL ENVIRONMENT

	NE 3.4. Engage residents in the Community Collaborative Rain, Hail, and Snow Network (CoCoRaHS) program through collaboration with the Office of the State Climatologist and the National Weather Service.	**NE 4.1.** Adopt a coastal resilience overlay district to require notification prior to real estate closings of the vulnerability of property to coastal flooding in low lying areas.	**NE 4.2.** Adopt additional feet of freeboard above BFE as well as uniform policies for adjacent properties outside the flood area.	**NE 4.3.** Review the County's Community Rating Service (CRS) program and make changes to regulations and programs as appropriate with the goal of improving the County's CRS rating. Every improvement in the CRS rating saves flood policy holders 5% in premiums.
INVESTMENT	Low	Low	Low	Medium
TIMING	Ongoing	1-3 years	1-3 years	3-6 years
ENTITY	DNR; Beaufort County Floodplain Manager	County Planning & Zoning Department	County Planning & Zoning Department	County Planning & Zoning Department; County Floodplain Manager

NE 5.1. Develop a flood, sea level rise, and climate change roadshow program to connect with community groups, homeowners' associations, professional organizations not already served by existing programs, and other similar organizations for community outreach and education.	**NE 5.2.** Maintain an ongoing collaborative working group, similar to the Sea Level Rise Task Force, for discussions and feedback involving recommendations and other proactive activities related to sea level rise and resilience.	**NE 5.3.** Hire a Resilience Officer to oversee hazard mitigation planning in the county, including, but not limited to, assisting vulnerable communities, applying for grants, creating outreach education programs, and continually assessing hazard risks and creating policies to mitigate them.	**NE 6.1.** Develop a county- level website that houses Beaufort County specific flooding and sea level rise information, including housing reports, outreach materials, the GIS portal that has sea level rise mapping, and other data sources. This website can potentially count as Community Rating System outreach credit if National Flood Insurance Program information is included.
Low	Low	High	Medium
3-6 years	Ongoing	1-3 years	1-3 years
County Floodplain Manager; Port Royal Sound Foundation; Gullah/ Geechee Sustainability Think Tank; SC Sea Grant Consortium	County Planning & Zoning Department; County Floodplain Manager; SC Sea Grant Consortium; municipalities	County Council	County Planning & Zoning Department; County Floodplain Manager; County Public Works Department; GIS Department

2040 ACTION PLAN: CULTURE

	C 1.1.	C 1.2.	C 1.3.	C 2.1.
	Improve access to the water at Fort Frederick, Jenkins Creek Boat Landing, and Station Creek Boat Landing.	Develop a comprehensive study of Beaufort County's boating needs. Develop a list of improvements necessary to accommodate existing and future requirements.	Build a kayak launch at Fort Frederick and develop a blueway trail on the Beaufort River and associated creeks.	Partner with the Town of Hilton Head Island to plan and implement the Historic Mitchelville Freedom Park.
INVESTMENT	High	Medium	High	Low
TIMING	1-3 Years	1-3 Years	3-6 Years	3-6 Years
ENTITY	County Public Works Department; County Passive Parks Manager; County Capital Projects Department	County Planning & Zoning Department; Beaufort Sail & Power Squadron; Gullah/Geechee Fishing Association; municipalities	County Planning & Zoning Department; County Capital Projects Department; County Passive Parks Manager	County Planning & Zoning Department; County Capital Projects Department; Town of HHI; County Passive Parks Manager

C 2.2. In partnership with community members, including the Gullah/Geechee Sea Island Coalition and the St. Helena Island Cultural Protection Overlay District Committee, conduct a baseline cultural resource inventory and vulnerability assessment of buildings, archaeological sites, traditionally used roads, waterways, water access points, fishing areas, burial sites, and sacred grounds to inform protection and stewardship practices for Gullah/ Geechee communities.	**C 3.1.** . Update the Beaufort County Above Ground Historic Resources Survey.	**C 4.1.** Use the Rural and Critical Land Preservation Program to promote active agriculture and the preservation of agricultural lands, and continue to target the purchase of development rights on active agricultural lands.
Medium	Medium	Low
3-6 Years	3-6 Years	Ongoing
County Planning & Zoning Department; Gullah/Geechee Sea Island Coalition; Gullah Geechee Cultural Heritage Corridor	County Planning & Zoning Department	County Planning & Zoning Department; Beaufort County Open Land Trust; Rural and Critical Lands Preservation Board; Clemson Cooperative Extension

2040 ACTION PLAN: CULTURE

C 5.1. In conjunction with Clemson Extension, create a website with information on locally grown produce, and retail and restaurants using locally sourced food. The web site should promote organizations that advocate local foods such as Lowcountry Local First and Fresh on the Menu.

C 6.1. Periodically evaluate Beaufort County's rural land use policies, including family compound uses, to determine that they are accomplishing the policy goals of preserving the rural landscape and way of life, and that they are fair and equitable to local residents and property owners.

C 6.2. Develop a brochure designed to help small rural landowners understand how to subdivide and transfer land. The brochure should explain family compounds, policies for small rural landowners, home occupation and home business provisions, cottage industry provision, resources for heirs' property, etc.

INVESTMENT	Low	Low	Low
TIMING	Ongoing	1-3 Years	Ongoing
ENTITY	County Planning & Zoning Department; Clemson Extension	County Planning & Zoning Department; Planning Commission	County Planning & Zoning Department

2040 ACTION PLAN: ECONOMY

E 1.1. Seek partnership with Port Royal Sound Foundation to educate the community about the Port Royal Sound as a critical economic driver for the community and the importance of keeping it healthy.	**E 2.1.** Continue to partner with the Marine Corps to preserve open space around MCAS to protect the facility from undesirable encroachment. This partnership expands the County's efforts to preserve rural and critical land while ensuring the ability of MCAS to remain militarily viable and vital to the national defense.	**E 2.2.** Implement transfer of development rights program to compensate affected property owners within the MCAS Airport Overlay District.	**E 2.3.** Support implementation of the recommendations of the Military Installation Resilience Review being conducted for the County's military facilities.
Low	Low	Medium	Low
Ongoing	Ongoing	3-6 Years	1-3 Years
Port Royal Sound Foundation, School District, Chamber of Commerce	County Planning & Zoning Department; BC Open Land Trust; Rural and Critical Lands Preservation Board; Marine Corps	County Planning & Zoning Department	County Planning & Zoning Department; Northern Regional Plan Implementation Committee; County Council; City of Beaufort; Town of Port Royal

2040 ACTION PLAN: ECONOMY

	E 3.1. Provide the Beaufort County Economic Development Corporation with a list of properties meeting locational requirements for office and light industrial uses on a regular basis.	**E 3.2.** Purchase approximately 30 acres in 3 or 6 acre tranches in each local jurisdiction within Beaufort County through the Beaufort County Economic Development Corporation, to provide ample spaces for companies wishing to expand or move to Beaufort County.	**E 4.1.** Provide more flexibility in commercial zoning districts to permit smaller non-retail commercial uses such as small assembly facilities and light industrial operations, or contractor's offices that do not adversely impact surrounding retail uses.
INVESTMENT	High	Low	Low
TIMING	Ongoing	6-10 Years	3-6 Years
ENTITY	County Planning & Zoning Department	County Council; Beaufort County Economic Development Corporation	County Planning & Zoning Department

E 4.2. Create incentives, such as an accelerated building permit process, height and density bonuses and fee reductions and waivers, for commercial and industrial projects that intend to meet either LEED or Energy Star standards.	**E 5.1.** Target land purchases to incentivize the location of new employers in walkable mixed-use communities such as Buckwalter Place.
Medium	High
3-6 Years	6-10 Years
County Planning & Zoning Department; Beaufort County Economic Development Corporation	Beaufort County Economic Development Corporation

2040 ACTION PLAN: MOBILITY

	M 1.1.	**M 1.2.**	**M 2.1.**	**M 2.2.**
	Formally adopt a Complete Streets policy that requires all streets to be planned, designed, operated, and maintained to enable safe access for all users, including pedestrians, bicyclists, motorists and transit riders of all ages and abilities. All future transportation projects should adhere to the Complete Streets policy in an appropriate urban, suburban, or rural context.	Prepare corridor master plans so that major arterial and state highways can evolve into complete streets.	Develop a funding strategy and implement the transportation projects in the 10-year Capital Improvements Program.	Update impact fees every five years to insure that future development is paying for its impact on the transportation network.
INVESTMENT	Low	High	High	Medium
TIMING	1-3 Years	3-6 Years	6-10 Years	Ongoing
ENTITY	County Planning & Zoning Department; County Capital Projects Department; SCDOT	County Planning & Zoning Department; County Capital Projects Department; SCDOT	County Planning & Zoning Department; County Capital Projects Department; County Council Finance Committee	County Capital Projects Department; County Council

M 2.3. Place an initiative on the 2022 ballot to reimpose a 1% capital project sales tax to fund transportation improvements that includes roads and multi-use pathways. Establish a regular schedule for future referendums.

M 2.4. Include needed transportation improvements in the LATS Long Range Transportation Plan to insure maximum utilization of Guideshare funding for county transportation projects.

M 5.1. Complete the Spanish Moss Trail and make continuous progress on the greenway, trail, sidewalk, and bicycle lane projects.

M 5.2. Dedicate a staff position to plan and implement bicycle and pedestrian facilities.

Medium	Low	High	Medium
1-3 Years	1-3 Years	6-10 Years	1-3 Years
County Capital Projects Department; County Council; County Transportation Committee; LCOG; municipalities	County Planning & Zoning Department; County Capital Projects Department	County Planning & Zoning Department; County Capital Projects Department; City of Beaufort; Town of Port Royal; Friends of the Spanish Moss Trail	County Council

2040 ACTION PLAN: MOBILITY

M 5.3. Develop a funding strategy and implement the bicycle and pedestrian projects in the 10-year Capital Improvements Program.

M 5.4. Adopt "Beaufort County Connects 2021", the Bicycle/Pedestrian Plan for the County.

M 6.1. Increase the numbers of park and ride locations along major transportation routes that connect employees with their jobs.

M 6.2. Promote the use of transit to reduce seasonal and local traffic and provide opportunities for employees to access job opportunities

INVESTMENT	High	Low	High	Low
TIMING	6-10 Years	1-3 Years	6-10 Years	Ongoing
ENTITY	ts Department; County Engineering Department; Bike/Ped Task Force; County Planning & Zoning Department	County Council; Municipalities	County Capital Projects Department; Palmetto Breeze	County Council; Palmetto Breeze; Chambers of Commerce (Beaufort, Bluffton, and Hilton Head)

M 6.3. Support Palmetto Breeze's efforts to establish a fixed-route bus service between Hilton Head Island and Bluffton and in the Beaufort/Port Royal area. Consider adding stops in the Sheldon/Seabrook areas.	**M 6.3.** Incentivize "transit- ready" development projects that cluster moderate to high density residential development, retail, services and employment centers within walking distance of transit stops.	**M7.1** Implement the recommendations from the 2010 Airport Layout Plan and Master Plan for the Hilton Head Island Airport.	**M 7.2.** Implement the recommendations from the 2014 Airport Layout Plan for the Beaufort Executive Airport.
High	High	High	High
3-6 Years	3-6 Years	6-10 Years	6-10 Years
County Council; Palmetto Breeze; Chambers of Commerce (Beaufort, Bluffton, Hilton Head, Port Royal, Yemassee)	County Planning & Zoning Department	County Airports Department; Airports Board; Town of Hilton Head; County Council	County Airports Department; Airports Board; City of Beaufort; County Council

2040 ACTION PLAN: HOUSING

	H 1.1. Create affordable housing location criteria and weighting to refine affordable housing location mapping included in the Comprehensive Plan. Update every five years.	**H 2.1.** Work to eliminate barriers to developing affordable and workforce housing by periodically evaluating and updating the Community Development Code.	**H 2.2.** Expand on the existing density bonuses in the Community Development Code to incentivize the creation of affordable housing by the private sector. Consider expanding the required affordability period beyond 25 years.	**H 3.1.** In cooperation with local municipalities and Jasper County, create a Regional Affordable Housing Trust Fund and provide annual funding to support affordable housing needs in the Lowcountry.
INVESTMENT	Medium	Medium	High	High
TIMING	Ongoing	1-3 years	1-3 years	3-6 years
ENTITY	County Planning & Zoning Department; Human Services Department; County Housing Coordinator	County Planning & Zoning Department; Human Services Department; County Housing Coordinator; Area Homebuilders Associations	County Planning & Zoning Department; County Housing Coordinator; Area Home Builders Associations	County Planning & Zoning Department; Human Services Department, County Housing Coordinator; local municipalities; Jasper County

H 3.2. Consider establishing an Affordable Housing Land Trust to acquire and hold land. The land is leased to others to build affordable units, with the land remaining in ownership of the trust.	**H 3.3.** Hire a housing coordinator for Beaufort County to implement the policies of this plan.	**H 3.4.** Seek funding through the Home Investment Partnership Program (HOME) and the Community Development Block Grant (CDBG) Program to rehabilitate substandard housing and create new affordable housing.	**H 3.5.** Consider prohibiting short term rentals as the primary use of the property in certain residential zones; i.e., only permit short term rentals in conjunction with 4% properties.	**H 3.6.** Review zoning districts to determine if appropriate opportunities exist to incorporate more "missing middle housing."
High	High	Medium	Low	Low
3-6 years	1-3 Years	Ongoing	1-3 Years	1-3 years
County Planning & Zoning Department; Human Services Department, County Housing Coordinator; local municipalities	County Council	Human Services Department; County Housing Coordinator; County Council; LCOG	County Planning & Zoning Department; County Council	County Planning & Zoning Department; Area Home Builders Associations

2040 ACTION PLAN: COMMUNITY FACILITIES

	CF 1.1. Map and analyze locations of existing vulnerable critical infrastructure using projected future conditions. This includes developing an inventory of low-lying public facilities and critical infrastructure, including roads, sewer, water, public buildings, and stormwater infrastructure.	**CF 1.2.** Develop policies that require the design and location of future capital improvements and critical infrastructure to account for projected sea level rise and lifespan of structure.	**CF 2.1.** Conduct an energy audit for all County facilities (existing, undergoing renovation, and under design). The County should consider entering into an energy performance contract with an Energy Service Company to perform the audit and implement the improvements.	**CF 2.2.** Install electric vehicle charging stations at every Council facility that houses a sizeable workforce or has high public visitation.
INVESTMENT	High	Medium	High	High
TIMING	1-3 years	1-3 years	1-3 years	3-6 years
ENTITY	County Planning & Zoning Department; County Floodplain Manager; Stormwater Department	County Planning & Zoning Department; County Floodplain Manager; County Capital Projects	County Facility Management Department	County Facility Management Department; County Public Works Department

CF 3.1. Adopt county-wide policies that limit residential density for developments that are not served by public sewer.	**CF 3.2.** . Work with BJWSA to identify and prioritize areas with the highest concentration of on-lot septic systems for connection to sewer if these neighborhoods are within urbanized areas or within designated growth boundaries.	**CF 4.1.** Install trash compacting equipment to increase the efficiency and capacity of County high usage convenience centers.	**CF 4.2.** Design and implement a plan for sustainable waste removal and disposal for the County, including multiple disposal alternatives, like various recycilng streams and composting.
Low	High	High	Medium
1-3 years	6-10 years	3-6 years	1-3 years
County Planning & Zoning Department; County Council	County Planning & Zoning Department; DHEC; BJWSA	County Solid Waste and Recycle Department	County Solid Waste and Recycle Department

2040 ACTION PLAN: COMMUNITY FACILITIES

	CF 5.1. Review and update library Impact Fees every five years.	**CF 5.2.** Renovate and repair the Beaufort, Hilton Head Island, Lobeco, and Bluffton library facilities to meet current operational needs.	**C 5.3.** Develop two additional library facilities: one 12,000 - 15,000 square foot facility in the Okatie area, and one 3,000 - 5,000 square foot facility at Burton Wells Park.	**CF 6.1.** Establish "Safe Routes to Schools"standards and routing plans, consistent with recommendations of Bike and Pedestrian Task Force, that require a strong pedestrian orientation in residential areas so that pedestrian ways are available for children to safely walk to school.
INVESTMENT	Medium	High	High	High
TIMING	Ongoing	3-6 years	6-10 years	3-6 years
ENTITY	County Council, County Capital Projects Department, Beaufort County Library	County Capital Projects Department; County Facility Management Department; Beaufort County Library	County Capital Projects Department; County Facility Management Department; Beaufort County Library	County Planning & Zoning Department; Bike/Ped Task Force; Beaufort County Schools

CF 6.2. Adopt school impact fees for Southern Beaufort County.	**CF 7.1.** Renovate the existing Emergency Medical Services (EMS) headquarters on Depot Road to meet the needs of the administration for parking, training and storage. The facility's design, circulation, and security measures need to be context sensitive to the adjacent Spanish Moss Trail.	**CF 7.2.** Expand or replace the EMS station located at the shared Bluffton Fire District Station on William Pope Drive near Sun City to adequately accommodate EMS's personnel and operational space needs.	**CF 7.3.** Construct either an extension to the existing Detention Center facility or a new facility to accommodate anticipated operational demand. The facility needs to house specific special populations such as inmates with addiction or mental health issues. The operational costs of an additional facility should be studied to determine if a true benefit would be derived from adding to the existing facility or constructing a new one.
Low	High	High	High
1-3 years	3-6 years	3-6 years	6-10 years
County Planning & Zoning Department; County Capital Projects Department; Beaufort County Schools	County Capital Projects Department; County Facility Management Department; Beaufort County Emergency Medical Services	County Capital Projects Department; County Facility Management Department; Beaufort County Emergency Medical Services	County Capital Projects Department; County Facility Management Department; Beaufort County Detention Center

2040 ACTION PLAN: COMMUNITY FACILITIES

	CF 7.4. Construct a new Law Enforcement Center to ensure that there is adequate space to house existing and future law enforcement personnel.	**CF 7.5.** Build an appropriate facility to house the Emergency Management Department within or attached to the proposed Law Enforcement Center.	**CF 7.6.** Work with BJWSA to provide additional fire hydrants on Warsaw Island, extending and replacing lines as necessary. Apply for grant funding as appropriate, including CDBG. Identify other rural areas where lack of fire hydrants or water supply pose safety concerns. Request that BJWSA include water service improvements in rural areas in their CIP. Act on the recommendations of the Parks and Recreation Master Plan according to the prioritization and timeline outlined in the document.
INVESTMENT	High	High	High
TIMING	6-10 years	6-10 years	3-6 years
ENTITY	County Capital Projects Department; County Facility Management Department; Beaufort County Sheriff's Department	County Capital Projects Department; County Facility Management Department; Beaufort County Sheriff's Department; Beaufort County Emergency Management Services	BJWSA; DHEC; Lady's Island/St. Helena Fire District Commission; Burton Fire District Commission

CF 7.7. Work with BJWSA to install water lines and fire hydrants on Seabrook Road and Stuart Point Road on Port Royal Island. Apply for grant funding as appropriate, including CDBG.	**CF 8.1.** Create a Parks and Recreation Master Plan that establishes acceptable metrics for accessibility and programming. Ensure public participation from all areas of the County and segments of the community in the planning effort.	**CF 8.2.** Implement the recommendations of the Parks and Recreation Master Plan according to the prioritization and timeline outlined in the document.	**CF 8.3.** Maintain a passive parks manager position to oversee the development of passive parks on Rural and Critical Land Preservation properties. Actively pursue the development of passive parks.
High	High	High	Low
3-6 years	1-3 years	6-10 years	Ongoing
BJWSA; DHEC; Burton Fire District Commission; LCOG	County Planning & Zoning Department; County Parks and Recreation Department	County Planning & Zoning Department; County Parks and Recreation Department; County Council	County Planning & Zoning Department; Rural and Critical Lands Preservation Board

2040 ACTION PLAN: BUILT ENVIRONMENT

	BE 1.1. Regularly inventory platted vacant lots in existing PUDs and subdivisions, and create an inventory of lots ideal for infill development.	**BE 1.2.** Formalize a regional planning program between Beaufort County, Jasper County, and the City of Hardeeville that recognizes the mutual benefit of coordinated planning along jurisdictional boundaries.	**BE 1.3.** Develop a SC 170 Area Plan in conjunction with the City of Hardeeville and Jasper County that defines a growth framework for the corridor and addresses issues of joint concern such as transportation and environmental protection.
INVESTMENT	Medium	High	High
TIMING	Ongoing	3-6 years	3-6 years
ENTITY	County Planning & Zoning Department	County Planning & Zoning Department; County Council; Jasper County; City of Hardeeville	County Planning & Zoning Department; County Council; Jasper County Planning & Building Department; City of Hardeeville Planning & Development Department, LATS

BE 1.4. Work with the Town of Yemassee to develop a consistent growth management strategy for the area of the County north of US 17. The strategy should include a mutually agreed upon growth boundary.	**BE 2.1.** Update the Greenprint Plan every five years.	**BE 3.1.** Reevaluate the effectiveness of existing place-making implementation tools such as the Place Type Overlay District in the Community Development Code, and make revisions as necessary.	**BE 3.2.** Initiate a prototype community-based Place Type implementation plan that involves property owners, business owners, and other stakeholders to serve as a vision for other areas of the county where walkable urbanism is appropriate.
Medium	High	High	High
1-3 years	Ongoing	1-3 years	3-6 years
County Planning & Zoning Department, County Council, Yemassee Town Council, Yemassee Planning	County Planning & Zoning Department; Rural and Critical Lands Preservation Board	County Planning & Zoning Department; Planning Commission	County Planning & Zoning Department; Planning Commission

2040 ACTION PLAN: ST. HELENA ISLAND

	Reevaluate the CPO District by assessing whether additional land use restrictions are necessary to meet the intent of the district. Consider the addition of specific design standards that reinforce historic Gullah/Geechee development patterns and character. Include diverse representation on the steering committee that may be formed to guide the process. Ensure public input from all segments of the community.	In partnership with the Sea Level Rise Task Force, commission a comprehensive water study and plan for St. Helena Island that considers stormwater, sea level rise, and storm surge to better define the risks posed by climate change and new development and recommend strategies to protect against these threats. This study should be aligned with County-wide Gullah/Geechee cultural inventory and vulnerability assessments.	Support nonprofit organizations, such as the Center for Heirs' Property Preservation and PAFEN, with expertise in resolving heirs' property issues. Encourage establishment of local offices in Northern Beaufort County and expansion of their programs throughout the County. Consider partnering with the municipalities to provide support for these groups by applying for grant funds, Accommodations Tax and Hospitality Tax Revenues (if appropriate), and local funds to expand efforts in the area.
INVESTMENT	Medium	High	Medium
TIMING	1-3 years	3-6 years	Ongoing
ENTITY	County Planning & Zoning Department; St. Helena Island Cultural Protection Overlay (CPO) District Committee; Gullah/Geechee Sea Island Coalition	County Planning & Zoning Department; DHEC; DNR; Gullah/ Geechee Sea Island Coalition; Sea Level Rise Task Force	Municipalities; Center for Heirs' Property Preservation; PAFEN; County Council; Gullah/ Geechee Sea Island Coalition

Consider prohibiting Mining/Resource Extraction within the Cultural Protection Overlay zone and revising conditions for Mining in the CDC to require a spacing requirememt for mines and that the presence of Prime Farmland as defined by the USDA be considered in the decision to approve a permit for mining.	Ensure that St. Helena residents are included in the planning process for the Parks and Recreation Master Plan. Consider equity issues in development of that plan.	Assess the condition of existing recreation facilities on St. Helena Island. Develop plans for improvements and add funding costs to CIP. Apply for grant funding for improvements as appropriate.	Review recreation programs on St. Helena Island. Ensure that programs are addressing community needs and that programs are expanded beyond pre-pandemic levels.
Low	Low	High	Medium
1-3 years	1-3 years	3-6 years	1-3 years
County Planning & Zoning Department	County Parks and Recreation Department; County Public Information Officer; Gullah/ Geechee Sea Island Coalition	County Parks and Recreation Department; County Planning & Zoning Department; County Capital Projects Department	County Parks and Recreation Department

2040 ACTION PLAN: ST. HELENA ISLAND

	Work with Penn Center to develop an MOU and lease agreement in order for the County to take a more active role in maintaining MLK Park on St. Helena Island and including applying for grants for park improvements.	Work with DOT to address road and drainage conditions on state-owned roads on St. Helena Island.	Ask residents to develop a specific list of areas (addresses) where drainage is an issue. Have these areas assessed by the Stormwater Utility Board and projects developed as appropriate to address concerns. Consider grant funding, including CDBG and EPA, for projects.
INVESTMENT	High	High	Medium
TIMING	1-3 years	3-6 years	1-3 years
ENTITY	Penn Center; County Parks and Recreation Department	SCDOT; County Public Works Department	County Stormwater Department; Stormwater Utility Board

Develop a strategy to permanently address maintenance and safety improvements to “legacy roads” and private roads serving low-and moderate-income property owners. Consider grant programs and public service projects to address immediate maintenance needs.	High	3-6 years	County Public Works Department; County Engineering Department; County Transportation Committee

CAPITAL IMPROVEMENT PLAN

Beaufort County's Capital Improvement Plan (CIP) was developed by the Capital Projects Department collaborating with various departments County-wide to establish a complete list of capital needs. The plan was designed to identify major, infrequent, and nonrecurring projects over a 10-year period to include improvements to new and existing infrastructure along with maintenance of existing assets. The plan will be utilized to implement a capital improvement budget with development of the operating budget. County Council and staff will review the program, its direction, progress, and financing requirements on an annual basis.

The CIP is a living, breathing document. It is intended to be a guiding document to help program funding in a systematic approach. Different levels of funding are required for different stages of the project. The plan provides a holistic look of funding needs in the foreseeable future such that the Finance Department can implement the funding mechanisms needed for the right amount, at the right time, to successfully deliver the projects for Beaufort County. A successful plan not only provides a guide map but ensures the most efficient use of resources.

The Comprehensive Plan is updated every 10 years. It is Beaufort County's intent to update the Capital Improvement Plan every 5 years. This will allow the County to review the plan and assess whether projects are completed, new projects are warranted, and if projects need to be changed in scope or cost. Adjustments will be made on an annual basis to account for project development.

	Location	Estimated Cost
ADMINISTRATIVE OFFICE SPACE		
New Arthur Horne Building	100 Ribaut Road Beaufort, SC 29902	$ 6,000,000
Renovate New Arthur Horne Building	100 Ribaut Road Beaufort, SC 29902	$ 6,000,000
New Administrative Building - North	100 Ribaut Road Beaufort, SC 29902	$ 50,000,000
New Administrative Building - South	4819 Bluffton Pkwy Bluffton, SC 29910	$ 11,000,000
Renovate Existing Myrtle Park	4820 Bluffton Pkwy Bluffton, SC 29910	$ 5,000,000
Hilton Head Island Government Building Renovation	539 William Hilton Pkwy Hilton Head Island, SC 29925	$ 2,000,000
New Public Works Facilicty - Shanklin Road	120 Shanklin Road Beaufort, SC 29906	$ 16,000,000
New Public Works Camp - St. Helena	25 Langford Road, St. Helena SC 29920 (former waterslide park)	$ 250,000
Beaufort County Health Center Renovation	601 Wilmington Street Beaufort, SC 29902	$ 370,000
Lowcountry DHEC Office Renovation	1407 King Street Beaufort, SC 29902	$ 590,000
Daufuskie Island Renovation of Store and New Restrooms		$ 335,000
Pool Improvements - Energy Conservation and Saltwater Conversion	Various Locations	$ 570,000
Sheriff Office DNA Laboratory Addition		
Records Management Building Expansion	113 Industrial Village Rd. BIV #5	$ 1,925,000
Warehouse Expansion		
Construction of 7,000 sf addition to the R.M. Warehouse (estimate $250/ft2 and $175,000 FFE)		
Specialized Equipment Replace Archive Writer		$ 25,000
Voters Registration and Elections Building	113 Industrial Village Rd. BIV #4	
Additional Warehouse Space	John Galt Road	$ 300,000
Additional Parking for Voters	John Galt Road	$ 300,000
Human Services Renovation		$ 3,000,000
Sea Trowler Resturant Renovation	35 Fording Island Road	$ 3,000,000
Renovate Courthouse	100 Ribaut Road Beaufort, SC 29902	$ 20,000,000
Justice Center South	4820 Bluffton Pkwy Bluffton, SC 29910	$ 24,000,000
		$ 150,665,000
AIRPORT - BEAUFORT EXECUTIVE		
Runway Safety Area Improvements RW 7 and 25 (incl wetlands mit cost)	39 Airport Circle Ladys Island, SC 29907	$ 4,800,000
Taxiway Extension to Runway 25 (incl wetlands mit cost)	39 Airport Circle Ladys Island, SC 29907	$ 6,000,000
Terminal Renovations	39 Airport Circle Ladys Island, SC 29907	$ 500,000
Parking Lot Relocation	39 Airport Circle Ladys Island, SC 29907	$ 1,500,000
		$ 12,800,000
AIRPORT - HILTON HEAD ISLAND		
Commercial Service Terminal Renovation and Expansion	120 Beach City Road Hilton Head Isl , SC 29926	$ 40,000,000
Commercial Service Ramp Expansion	120 Beach City Road Hilton Head Isl , SC 29926	$ 4,700,000
New ARFF Vehicle	120 Beach City Road Hilton Head Isl , SC 29926	$ 730,000
Runway and Taxiway Strengthening	120 Beach City Road Hilton Head Isl , SC 29926	$ 12,000,000
Parking improvements	120 Beach City Road Hilton Head Isl , SC 29926	$ 20,000,000
		$ 77,430,000
BOAT LANDINGS		
County-wide Boat Landing Study		$ 150,000
Ihly Farm	Ihly Farm Road Beaufort, SC 29906	$ 1,500,000
		$ 1,650,000
DISABILITY AND SPECIAL NEEDS		
Remodeling Building C and laundry room in Building B	100 Clear Water Way, Beaufort, SC 29906	$ 65,000
Purchase/Build two new Community Training Homes	Various Locations South of Broad	$ 900,000
Replacement of HVAC in Building A	100 Clear Water Way, Beaufort, SC 29906	$ 50,000
Replacement of Irrigation	100 Clear Water Way, Beaufort, SC 29906	$ 15,000
		$ 1,030,000

2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Funding Sources
$ 1,500,000	$ 1,000,000									GO Bond
				$ 3,500,000	$ 2,500,000					GO Bond
	$ 15,000,000	$ 30,000,000	$ 5,000,000							GO Bond
				$ 4,000,000	$ 7,000,000					GO Bond
						$ 5,000,000				GO Bond
		$ 2,000,000								GO Bond
			$ 2,000,000	$ 7,000,000	$ 7,000,000					GO Bond / Impact Fees
		$ 50,000	$ 75,000	$ 125,000						PW Budget over multiple years
					$ 370,000					GO Bond
						$ 590,000				GO Bond
							$ 335,000			GO Bond
								$ 570,000		GO Bond
$ 650,000	$ 850,000	$ 425,000								
										Impact Fees
										Impact Fees
	$ 25,000									Impact Fees
$ 150,000	$ 150,000									GO Bond/Grants for Critical Infrastructure
$ 150,000										GO Bond/Grants for Critical Infrastructure
						$ 3,000,000				GO Bond
		$ 3,000,000								GO Bond
						$ 2,000,000	$ 5,000,000	$ 10,000,000	$ 3,000,000	GO Bond
							$ 3,000,000	$ 15,000,000	$ 6,000,000	GO Bond
$ 100,000	$ 2,000,000	$ 2,400,000	$ 200,000							FAA,SCAC 95%, Airport 5%
				$ 1,000,000	$ 4,000,000	$ 1,000,000				FAA,SCAC 95%, Airport 5%
$ 100,000	$ 300,000	$ 100,000								Airport/County
			$ 250,000	$ 1,250,000						FAA,SCAC 95%, Airport 5%
$ 15,000,000	$ 18,000,000	$ 7,000,000								FAA,SCAC $21M, Airport $19M
$ 4,300,000										FAA,SCAC 95%, Airport 5%
$ 730,000										FAA,SCAC 95%, Airport 5%
	$ 2,000,000	$ 6,000,000	$ 4,000,000							FAA,SCAC 95%, Airport 5%
				$ 5,000,000	$ 5,000,000	$ 10,000,000				Airport/County/Fees
$ 150,000										A/H Tax
						$ 700,000	$ 800,000			GO Bond / Grants
$ 65,000										DSN Fund
		$ 450,000		$ 450,000						GO Bond / Grants
	$ 50,000									DSN Fund
$ 15,000										DSN Fund

	Location	Estimated Cost
FACILITIES MANAGEMENT		
ADA modifications to facilities	Various Locations	$ 240,000
Administration Building	100 Ribaut Road	
Fire alarm replacement		$ 65,000
Barker Field-restroom renovations	70 Baygall Road	$ 66,000
Beaufort Library-paint exterior/repair windows	311 Scott Street	$ 90,000
BIV#3-generator	106 Industrial Village Road	$ 70,000
BIV#1, 2 and 3-replace carpet	102 Industrial Village Road	$ 60,000
BIV# 5-HVAC	113 Industrial Village Road	$ 90,000
Courthouse	102 Ribaut Road	
Painting/finishes		$ 65,000
Ceremonial courtroom bench millwork repairs		$ 36,000
Replace acoustical tiles/panels/hard surfaces		$ 135,000
HVAC/Energy management system		$ 610,000
Led lighting		$ 65,000
Generator		$ 270,000
Daufuskie Island-restroom renovations	15 Haig Point Road	$ 17,000
Detention Center	106 Ribaut Road	
Fire alarm upgrade		$ 70,000
Misc. lock replacement/repairs		$ 100,000
Replace VCT/flooring covering		$ 250,000
Walk-in/refrigerator replacement		$ 160,000
Stucco repairs		$ 75,000
Repainting		$ 170,000
EMS-carpet/painting	2727 Depot Road	$ 56,000
FVS Garage-replace bay doors/roof repairs	120 Shanklin Road	$ 140,000
HH Government Center-replace roof	539 William Hilton Parkway	$ 70,000
Human Services Building	1905 Duke Street	
Repoint and seal brick veneer		$ 300,000
Painting, lighting, flooring		$ 160,000
Law Enforcement Center-replace flooring/renovate restrooms	2001 Duke Street	$ 95,000
Mosquito Control Building-Minor renovations, roof replacement	84 Shanklin Road	$ 150,000
Myrtle Park Building	4819 Bluffton Parkway	
Replace carpet		$ 65,000
HVAC improvements		$ 580,000
Generator		$ 330,000
BWSAR Building-minor renovations	817 Paris Ave.	$ 55,000
Public Works Building	120 Shanklin Road	
Roof replacement		$ 330,000
HVAC replacement		$ 65,000
Public Works Open Storage Building-replace roof	120 Shanklin Road	$ 65,000
Senior Center-interior renovations	1408 Paris Ave.	$ 40,000
DSN Clearwater-HVAC system	100 Clearwater Way	$ 125,000
Burton Wells Center-HVAC/Energy Mgmt System	One Middleton Rec Drive	$ 180,000
Buckwalter Rec Center-HVAC	900 Buckwalter Parkway	$ 90,000
Lind Brown Center-flooring	1001 Hamar Street	$ 60,000
S. O. Special Ops-Replace roof HVAC	1021 Okatie Highway	$ 45,000
DNA Lab-replace roof, HVAC	111 Industrial Village Road	$ 80,000
St. Helena Library-Replace HVAC	6355 Jonathan Francis Sr. Road	$ 70,000
ECM's-LED lighting, HVAC Energy Mgmt	Various locations	$ 250,000
		$ 6,105,000

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Funding Sources
$	40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000	$ 40,000					
		$ 65,000									
			$ 66,000								
		$ 90,000									
		$ 70,000									
						$ 60,000					
						$ 90,000					
		$ 65,000									
		$ 36,000									
			$ 135,000								
		$ 610,000									
		$ 65,000									
					$ 270,000						
$	17,000										
$	70,000										
		$ 50,000		$ 50,000							
$	250,000										
$	160,000										
$	75,000										
$	170,000										
$	56,000										
$	140,000										
		$ 70,000									
						$ 300,000					
						$ 160,000					
						$ 95,000					
$	150,000										
$	65,000										
$	580,000										
		$ 330,000									
						$ 55,000					
$	330,000										
$	65,000										
		$ 65,000									
						$ 40,000					
				$ 125,000							
			$ 180,000								
						$ 90,000					
			$ 60,000								
						$ 45,000					
						$ 80,000					
						$ 70,000					
$	50,000	$ 50,000	$ 50,000	$ 50,000	$ 50,000						

	Location	Estimated Cost
IT INFRASTRUCTURE		
Virtual Server Environment	Beaufort County IT Datacenter	$ 317,000
Network Storage Environment	Beaufort County IT Datacenter	$ 290,000
Core Routers	Beaufort County IT Datacenter	$ 110,000
County Infrastructure Firewalls	-	$ 117,000
Infrastructure Switching	Beaufort County IT Datacenter	$ 715,000
County Infrastruture Compute	Beaufort County IT Datacenter	$ 3,000,000
Infrastructure Phone System	Beaufort County IT Datacenter	$ 200,000
County Infrastructure Wireless	Beaufort County IT Datacenter	$ 340,000
Datacenter Switching	Beaufort County IT Datacenter	$ 182,000
		$ 5,271,000
LIBRARIES		
System-wide Improvements	Various Locations	
Replace Self-Checkout Machines		$ 135,000
Install Public Computer Reservation and Print Vending Solution		$ 100,000
Security Camera Installation		$ 80,000
Replace/Upgrade all public and staff computers		$ 120,000
Pritchardville/New Riverside - New Branch	May River / Buckwalter / New Riverside Area	$ 6,700,000
Construction of 15,000 sf facility (estimate $350/ft2 and $750,000 FFE)		
Bluffton Branch Library	120 Palmetto Way Bluffton, 29910	$ 500,000
Phase II of renovations based on 2019 Space Study		
Hilton Head Branch Library	11 Beach City Road HHI, 29926	$ 1,000,000
Renovations based on 2019 Space Study		
Renovation at Beaufort Branch Library Phase III	311 Scott Street Beaufort, SC 29902	$ 75,000
Renovations/Add-on/Parking		
Replace Bookmobile South	11 Beach City Road HHI, 29926	$ 150,000
Based on a 10 year lifespan, Bookmobile South (acquired in 2018) may need to be replaced in 2028/2029		
Replace Bookmobile North	311 Scott Street Beaufort, SC 29902	$ 150,000
Based on a 10 year lifespan, Bookmobile North (acquired in 2017) may need to be replaced in 2027/2028		
Lobeco Branch Library	1862 Trask Parkway Seabrook, SC 29940	TBD
Existing lease agreement with Beaufort County School District expires December 31, 2025		
Burton Wells	64 Burton Wells Road Beaufort, SC 29906	$ 3,000,000
Construction of 5,000 sf addition to Burton Wells Rec Center		
		$ 12,010,000

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Funding Sources
	$ 317,000										GO Bond
		$ 290,000									GO Bond
				$ 110,000							GO Bond
		$ 117,000									GO Bond
									$ 715,000		
		$ 375,000	$ 375,000	$ 375,000	$ 375,000		$ 375,000	$ 375,000	$ 375,000	$ 375,000	IT General Fund
		$ 200,000									Go Bond
			$ 170,000						$ 170,000		GO Bond
	$ 182,000										GO Bond
					$ 85,000	$ 50,000					Impact Fees
									$ 50,000	$ 50,000	Impact Fees
							$ 80,000				Impact Fees
				$ 120,000							County IT/Library
	$ 100,000	$ 1,900,000	$ 4,700,000								GO Bond / Impact Fees
					$ 500,000						GO Bond/ Impact Fees
				$ 1,000,000							GO Bond/Impact Fees
									$ 75,000		County Facilities
								$ 150,000			Impact Fees
							$ 150,000				Impact Fees
					TBD						County Facilities
							$ 800,000	$ 1,700,000	$ 500,000		GO Bond / Impact Fees

	Location	Estimated Cost
IT INFRASTRUCTURE		
Virtual Server Environment	Beaufort County IT Datacenter	$ 317,000
Network Storage Environment	Beaufort County IT Datacenter	$ 290,000
Core Routers	Beaufort County IT Datacenter	$ 110,000
County Infrastructure Firewalls		$ 117,000
Infrastructure Switching	Beaufort County IT Datacenter	$ 715,000
County Infrastruture Compute	Beaufort County IT Datacenter	$ 3,000,000
Infrastructure Phone System	Beaufort County IT Datacenter	$ 200,000
County Infrastructure Wireless	Beaufort County IT Datacenter	$ 340,000
Datacenter Switching	Beaufort County IT Datacenter	$ 182,000
		$ 5,271,000
LIBRARIES		
System-wide Improvements	Various Locations	
Replace Self-Checkout Machines		$ 135,000
Install Public Computer Reservation and Print Vending Solution		$ 100,000
Security Camera Installation		$ 80,000
Replace/Upgrade all public and staff computers		$ 120,000
Pritchardville/New Riverside - New Branch	May River / Buckwalter / New Riverside Area	$ 6,700,000
Construction of 15,000 sf facility (estimate $350/ft2 and $750,000 FFE)		
Bluffton Branch Library	120 Palmetto Way Bluffton, 29910	$ 500,000
Phase II of renovations based on 2019 Space Study		
Hilton Head Branch Library	11 Beach City Road HHI, 29926	$ 1,000,000
Renovations based on 2019 Space Study		
Renovation at Beaufort Branch Library Phase III	311 Scott Street Beaufort, SC 29902	$ 75,000
Renovations/Add-on/Parking		
Replace Bookmobile South	11 Beach City Road HHI, 29926	$ 150,000
Based on a 10 year lifespan, Bookmobile South (acquired in 2018) may need to be replaced in 2028/2029		
Replace Bookmobile North	311 Scott Street Beaufort, SC 29902	$ 150,000
Based on a 10 year lifespan, Bookmobile North (acquired in 2017) may need to be replaced in 2027/2028		
Lobeco Branch Library	1862 Trask Parkway Seabrook, SC 29940	TBD
Existing lease agreement with Beaufort County School District expires December 31, 2025		
Burton Wells	64 Burton Wells Road Beaufort, SC 29906	$ 3,000,000
Construction of 5,000 sf addition to Burton Wells Rec Center		
		$ 12,010,000

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Funding Sources
	$ 317,000										GO Bond
		$ 290,000									GO Bond
				$ 110,000							GO Bond
		$ 117,000									GO Bond
									$ 715,000		
		$ 375,000	$ 375,000	$ 375,000	$ 375,000		$ 375,000	$ 375,000	$ 375,000	$ 375,000	IT General Fund
		$ 200,000									Go Bond
			$ 170,000						$ 170,000		GO Bond
	$ 182,000										GO Bond
					$ 85,000	$ 50,000					Impact Fees
									$ 50,000	$ 50,000	Impact Fees
							$ 80,000				Impact Fees
				$ 120,000							County IT/Library
	$ 100,000	$ 1,900,000	$ 4,700,000								GO Bond / Impact Fees
					$ 500,000						GO Bond/ Impact Fees
				$ 1,000,000							GO Bond/Impact Fees
									$ 75,000		County Facilities
								$ 150,000			Impact Fees
							$ 150,000				Impact Fees
					TBD						County Facilities
							$ 800,000	$ 1,700,000	$ 500,000		GO Bond / Impact Fees

	Location	Estimated Cost
PATHWAYS PROJECTS		
Stuart Point Road		$ 1,500,000
Big Estate Road		$ 2,000,000
Middle Road		$ 1,500,000
Dr. Martin Luther King, Jr. Road		$ 1,500,000
Meridian Road		$ 1,750,000
Broad River Drive		$ 2,000,000
Ribaut Road to Parris Island Gateway		$ 750,000
Depot Road		$ 725,000
Salem Road/Old Salem Road		$ 1,500,000
Broad River Blvd/Riley Road		$ 750,000
Burton Hill/Old Salem Road		$ 2,000,000
Burnt Church Road		$ 1,500,000
Bluffton Parkway		$ 250,000
Ulmer Road/Shad Road		$ 2,000,000
Laurel Bay Road Pathway Widening		$ 3,900,000
Joe Frazier Road		$ 1,800,000
Lake Point Drive and Old Miller Road Pathway Connection		$ 3,000,000
Alljoy Road		$ 750,000
Spanish Moss Trail Extension		$ 750,000
Pine Grove Road/Burton Wells Road		$ 1,000,000
Seabrook Road		$ 1,000,000
US 17 Pathway Extension		$ 1,000,000
Bruce K Smalls		$ 750,000
Big Road		$ 1,500,000
Detour Road		$ 1,500,000
New River Liner Trail from Hwy 46 South to New River (paving)		$ 750,000
SC46 from New River Park to New River Linear Trail		$ 300,000
Buck Island Road from Bluffton Pkwy to US 278		$ 500,000
Sams Point Road from Wallace Road to southern termini of Middle Road Pathway		$ 550,000
Russel Bell Bridge from Spanish Moss Trail to Broad River Drive		$ 650,000
Lady's Island Drive to Port Royal Elementary / Live Oaks Park via Old Shell Road / 14th Street		$ 650,000
Rugrack Road from Joseph Shanklin Elementary to Laurel Bay Road (sidewalk)		$ 150,000
Spanish Moss Trailfrom Clarendon to Whale Branch		$ 1,500,000
New River Linear Trail from SC46 to Del Webb Trailhead (paving)		$ 900,000
Sawmill Creek Road (sidewalk)		$ 350,000
Okatie Center Blvd N & S and US278 from SC170 to University Blvd		$ 1,100,000
Dr. Martin Luther King, Jr. Road to St. Helena Elementary School		$ 400,000
Wallace Road and Sunset Blvd		$ 750,000
Sams Point Road from traffic circle to Springfield Road		$ 1,250,000
Burton Wells Park to Habersham Market		$ 250,000
Shell Point Road from Broad River Drive to Savannah Hwy		$ 800,000
US21 from Seabrook Road to Keans Neck Road		$ 850,000
US21 from Detour Road to Seabrook Road (sidewalk)		$ 480,000
McTeer Bridge Protected Bike Lanes		$ 300,000
SC46 from traffic circle to Buckwalter Parkway		$ 2,400,000
Northbound side of SC170 from SC46 to Bluffton Parkway		$ 1,700,000
US21 from Sams Point Way to Airport Circle		$ 400,000
Chowan Creek Bluff from US21 to Lady's Island Elementary		$ 230,000
Old Miller Road / Lake Point Drive Connection		$ 200,000
Marsh Road from Duke Street to Boundary Street (a portion to be boardwalk for marsh protection)		$ 150,000
		$ 54,235,000

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Funding Sources
		$ 1,500,000									Sales Tax
					$ 2,000,000						To be determined
			$ 1,500,000								Sales Tax
		$ 1,500,000									Sales Tax
					$ 1,750,000						To be determined
					$ 2,000,000						To be determined
		$ 750,000									Sales Tax
		$ 725,000									Sales Tax / Grants
			$ 1,500,000								Sales Tax
				$ 750,000		$ 1,500,000					To be determined
						$ 2,000,000					To be determined
					$ 1,500,000						Impact Fees
		$ 250,000									Sales Tax
							$ 2,000,000				To be determined
					$ 3,900,000						To be determined
							$ 1,800,000				To be determined
							$ 3,000,000				To be determined
			$ 750,000								Sales Tax
			$ 750,000								To be determined
			$ 1,000,000								To be determined
				$ 1,000,000							To be determined
				$ 1,000,000							To be determined
				$ 750,000							To be determined
				$ 1,500,000							To be determined
				$ 1,500,000							To be determined
				$ 750,000							To be determined
			$ 300,000								To be determined
					$ 500,000						To be determined
			$ 550,000								To be determined
			$ 650,000								To be determined
		$ 650,000									To be determined
		$ 150,000									To be determined
					$ 1,500,000						To be determined
							$ 900,000				To be determined
									$ 350,000		To be determined
										$ 1,100,000	To be determined
						$ 400,000					To be determined
							$ 750,000				To be determined
									$ 1,250,000		To be determined
						$ 250,000					To be determined
								$ 800,000			To be determined
								$ 850,000			To be determined
						$ 480,000					To be determined
								$ 300,000			To be determined
									$ 2,400,000		To be determined
										$ 1,700,000	To be determined
							$ 400,000				To be determined
							$ 230,000				To be determined
										$ 200,000	To be determined
						$ 150,000					To be determined
											To be determined

	Location	Estimated Cost
PARKS AND RECREATION		
New Okatie Recreational Complex		$ 530,000
Buckwalter Recreation Athletic Complex Expansion	905 Buckwalter Pkwy Bluffton, SC 29910	$ 12,000,000
Buckwalter Recreation Center Improvements	905 Buckwalter Pkwy Bluffton, SC 29910	$ 230,000
Bluffton Center Improvements	905 Buckwalter Pkwy Bluffton, SC 29910	$ 565,000
Bluffton Pool Improvements	55 Pritchard Road Bluffton, SC 29910	$ 650,000
MC Riley Complex Reconfiguration and Improvements	185 Goethe Road Bluffton, SC 29910	$ 1,300,000
Agnes Major Improvements	21 Agnes Major Road Seabrook, SC 29940	$ 555,000
Basil Green Complex Improvements	15000 Rodgers Street Beaufort, SC 29902	$ 4,000,000
Battery Creek Pool Improvements	1 Blue Dolphin Dr. Beaufort, SC 29906	$ 650,000
Beaufort High School Pool Improvements	84 Sea Island Pkwy Beaufort, SC 29907	$ 650,000
Booker T. Washington Improvements	182 Booker T. Washington Circle Yemassee, SC 29945	$ 225,000
Broomfield Ballfield Improvements	205 Brickyard Point Road N. Beaufort, SC 29907	$ 225,000
Burton Wells Master Plan	64 Burton Wells Road Beaufort, SC 29906	$ 12,000,000
Burton Wells Improvements	64 Burton Wells Road Beaufort, SC 29906	$ 75,000
Coursen Tate Improvements	9 Springfield Road Beaufort, SC 29907	$ 800,000
Dale Center Improvements	15 Community Center Road Seabrook, SC 29940	$ 365,000
Downtown Tennis Court Improvements	1105 Bladen Street Beaufort, SC 29902	$ 340,000
Gloria Potts Improvements	130 Seaside Road St. Helena, SC 29920	$ 170,000
Lind Brown Improvements	1001 Hamar Street Beaufort, SC 29902	$ 2,585,000
Metz Improvements	1812 National Street Beaufort, SC 29902	$ 220,000
Port Royal Park Improvements		$ 555,000
Scott Park Improvements	242 Scott Hill Road St. Helena, SC 29920	$ 205,000
Shell Point Park Improvements	381 Broad River Road Beaufort, SC 29906	$ 190,000
Southside Park Improvements	1408 Battery Creek Road Beaufort, SC 29902	$ 110,000
Wesley Felix Improvements	179 Ball Park Road St. Helena, SC 29920	$ 165,000
Lady's Island Community Park Phase II		$ 1,800,000
		$ 41,160,000
PASSIVE PARKS		
Fort Fremont Park Phase II - Interpretive Center	1126 State Road S-7-45 St. Helena, SC 29920	$ 2,000,000
Widgeon Point Park	43 Okatie Hwy Okatie, SC 29909	$ 1,300,000
Okatie Park Development		$ 5,000,000
Develop Jones Tract Park		$ 5,000,000
Develop Okatie Preserve	Hwy 278/170 Bluffton, SC 29910	$ 4,000,000
		$ 17,300,000

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Funding Sources
			$ 530,000								PALS Impact Fees / Grants / Bonds
300000	$ 900,000	$ 5,600,000	$ 3,200,000	$ 2,000,000							PALS Impact Fees / Grants / Bonds
				$ 150,000			$ 80,000				PALS Impact Fees / Grants / Bonds
		$ 25,000	$ 20,000		$ 80,000	$ 80,000	$ 350,000	$ 10,000			PALS Impact Fees / Grants / Bonds
		$ 100,000	$ 400,000	$ 100,000	$ 50,000						PALS Impact Fees / Grants / Bonds
				$ 500,000	$ 400,000	$ 100,000	$ 300,000				PALS Impact Fees / Grants / Bonds
		$ 15,000	$ 80,000		$ 300,000	$ 160,000					PALS Impact Fees / Grants / Bonds
		$ 800,000	$ 1,500,000	$ 900,000	$ 800,000						PALS Impact Fees / Grants / Bonds
				$ 200,000	$ 350,000	$ 100,000					PALS Impact Fees / Grants / Bonds
					$ 200,000	$ 350,000	$ 100,000				PALS Impact Fees / Grants / Bonds
			$ 15,000		$ 60,000	$ 150,000					PALS Impact Fees / Grants / Bonds
			$ 15,000				$ 150,000		$ 60,000		PALS Impact Fees / Grants / Bonds
					$ 1,500,000	$ 3,000,000	$ 3,000,000	$ 2,500,000	$ 1,200,000	$ 800,000	Funds Needed
		$ 20,000	$ 25,000	$ 30,000							PALS Impact Fees / Grants / Bonds
		$ 600,000				$ 80,000		$ 120,000			PALS Impact Fees / Grants / Bonds
				$ 25,000	$ 40,000		$ 80,000	$ 200,000	$ 20,000		PALS Impact Fees / Grants / Bonds
	$ 60,000	$ 200,000	$ 80,000								PALS Impact Fees / Grants / Bonds
					$ 80,000		$ 30,000	$ 60,000			PALS Impact Fees / Grants / Bonds
				$ 25,000		$ 700,000	$ 500,000	$ 1,200,000	$ 160,000		PALS Impact Fees / Grants / Bonds
					$ 220,000						PALS Impact Fees / Grants / Bonds
					$ 250,000	$ 100,000	$ 80,000	$ 125,000			PALS Impact Fees / Grants / Bonds
				$ 65,000	$ 80,000		$ 60,000				PALS Impact Fees / Grants / Bonds
				$ 50,000			$ 80,000		$ 60,000		PALS Impact Fees / Grants / Bonds
				$ 50,000					$ 60,000		PALS Impact Fees / Grants / Bonds
				$ 65,000					$ 100,000		PALS Impact Fees / Grants / Bonds
						$ 1,000,000	$ 800,000				PALS Impact Fees / Grants / Bonds
$ 1,700,000	$ 300,000										Rural & Critical
$ 1,000,000	$ 300,000										Rural & Critical
	$ 1,000,000	$ 3,000,000	$ 1,000,000								
			$ 800,000	$ 3,200,000	$ 1,000,000						GO Bonds
				$ 2,000,000	$ 2,000,000						GO Bonds

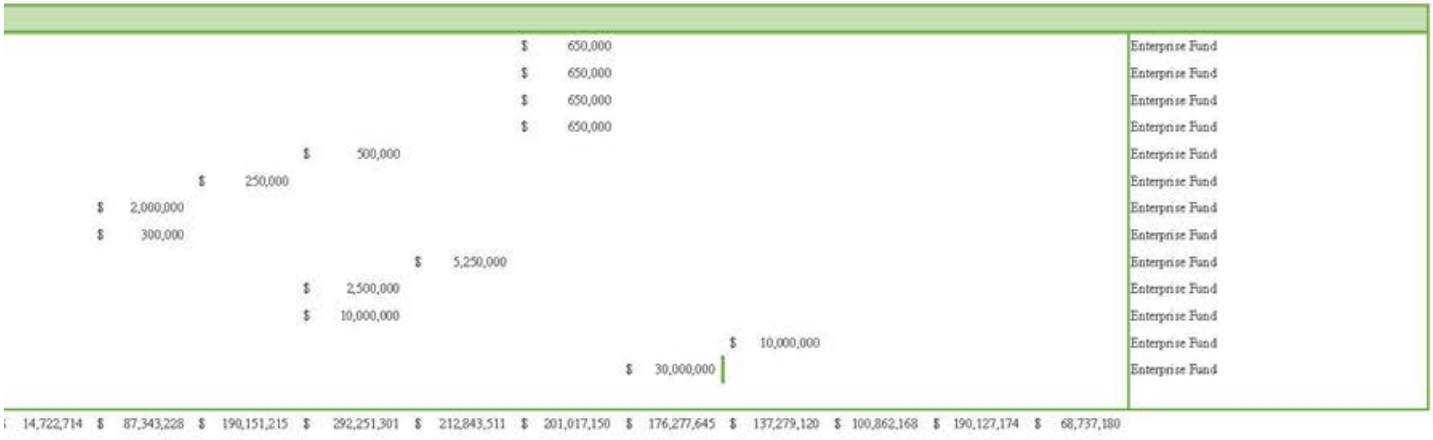
	Location	Estimated Cost
PUBLIC SAFETY		
New EMS Facilities	Various Locations	$ 3,388,000
North Shanklin Facility		
South Station 31 Facility		
Cherry Point New Facility		$ 1,300,000
Ladys Island/St Helena New Facility		$ 1,300,000
Palmetto Bluff New Facility		$ 1,300,000
Big Estate/Gardens Corner New Facility		$ 1,425,000
Base Headquarters - Depot		$ 6,000,000
Sun City Station	Various Locations	$ 1,000,000
EMS Facility Renovations		
Parris Island Gateway, Burton FD		$ 125,000
Kean Neck Road, Sheldon FD		$ 100,000
Sea Island Parkway, Ladys Island/St Helena FD		$ 50,000
Sam's Point Road, Ladys Island/St Helena FD		$ 75,000
Shanklin Road Facility		$ 25,000
Detention Center Expansion - Property Acquisition	100 Ribaut Road Beaufort, SC 29902	$ 6,000,000
Transform Pre-class 16-bed open bay unit into modular cells	100 Ribaut Road Beaufort, SC 29902	$ 250,000
Retrofit cell doors w/food pass entry	100 Ribaut Road Beaufort, SC 29902	$ 485,000
Detention Center Expansion	100 Ribaut Road Beaufort, SC 29902	$ 92,000,000
LEC, EM Complex	TBD	$ 111,000,000
30 Acres for LEC, EM, EMS and MIS Complex		
Construction of 70,000 sf for LEC & EM Facility		
Sheriff's Office (50,000 sf)		
Emergency Management Center (20,000 sf)		
Sale of Depot Road Facility		$ (500,000)
Station Alerting System	2001 Duke Street Beaufort, SC 29902	$ 2,500,000
Old Federal Courthouse Renovation	1501 Bay Street Beaufort, SC 29901	$ 3,000,000
Special Ops Building	HWY 170 Okatie, SC 29909	$ 7,000,000
		$ 237,823,000
PUBLIC WORKS		
Public Works		
Countywide Parking lot study analysis/assessment - Phase I (Study only)	Various Locations	$ 100,000
Countywide Parking lot study analysis/assessment - Phase II (Repairs)	Various Locations	$ 2,000,000
Mosquito Control	84 Shanklin Road Beaufort, SC 29906	
Biosafety Level 2 Surveillance Laboratory		$ 600,000
10-Bay Pole Shelter		$ 165,000
Stormwater		
Brewer Memorial Park Demonstration Wet Pond Project Feasibility		$ 672,459
Salt Creek South M1		$ 2,117,730
Shanklin Road M2		$ 3,458,787
Mossy Oaks Watershed		$ 220,404
Evergreen Tract Detention Basin		$ 1,060,806
Rock Springs Creek 1		$ 430,524
Lucy Point Creek (Tuxedo)		$ 438,293
Albergotti Creek 2		$ 602,447
Factory Creek I		$ 68,727
Factory Creek II		$ 66,390
Graves/Pepper Hall P3		$ 500,000
Shell Point		$ 98,000
Huspah Creek		$ 595,000
Traffic Operations		
Traffic Operations ITS		$ 65,000
Traffic Sign Shop	23 Shelter Church Road Beaufort, SC 29906	$ 250,000
		$ 13,509,567

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Funding Sources
2,257,500	$ 967,500	$ 163,000									GO Bond
		$ 1,300,000									GO Bond
		$ 1,300,000									GO Bond
				$ 1,300,000							GO Bond
								$ 1,425,000			GO Bond
		$ 1,500,000	$ 2,200,000	$ 2,300,000							
	30,000	$ 500,000	$ 470,000								GO Bond / BTFD
											GO Bond
			$ 125,000								GO Bond
				$ 100,000							GO Bond
			$ 50,000								GO Bond
				$ 75,000							GO Bond
		$ 25,000									Budget
			$ 1,500,000	$ 3,200,000	$ 1,300,000						GO Bond
		$ 250,000									GO Bond
		$ 485,000									GO Bond
									$ 500,000	$ 3,000,000	GO Bond
								$ 6,000,000	$ 80,000,000	$ 25,000,000	
											GO Bond
											GO Bond
					$ (500,000)						
				$ 1,500,000	$ 1,000,000						
	$ 3,000,000										
						$ 7,000,000					
			$ 100,000								Public Works General Fund
				$ 400,000	$ 400,000	$ 400,000	$ 400,000	$ 400,000			GO Bond / Grant
			$ 200,000	$ 400,000							Mos. Control General Fund
		$ 165,000									Mos. Control General Fund
10,760	$ 643,106										Stormwater Fees
36,098	$ 248,496	$ 823,424	$ 823,424								Stormwater Fees
70,356	$ 341,820	$ 1,100,000	$ 1,100,000								Stormwater Fees
15,404	$ 205,000										Stormwater Fees
32,726	$ 840,000										Stormwater Fees
	$ 43,052		$ 86,105	$ 301,367							Stormwater Fees
		$ 87,659	$ 350,634								Stormwater Fees
						$ 120,489	$ 481,958				Stormwater Fees
	$ 327										Stormwater Fees
	$ 20,551										Stormwater Fees
	$ 500,000										Stormwater Fees
43,750	$ 54,250										Stormwater Fees
		$ 227,000	$ 368,000								Stormwater Fees
		$ 65,000									1% Sales Tax
	$ 100,000	$ 150,000									General Fund

	Location	Estimated Cost	
ROAD PROJECTS			
US 278 Bridge Widening 6-lane from Bluffton 5A to Jenkins Island		$ 245,000,000	$
US 278/SC170 Interchange - Ramp reconfiguration for added capacity		$ 25,000,000	
US 278 Access Management		$ 12,600,000	
SC 170 (US 278 to Tide Watch Dr.)		$ 41,000,000	
SC 170 (Tide Watch Dr to Argent Blvd)		$ 40,000,000	
SC 170 (Argent Blvd to SC 462)		$ 10,000,000	
Buckwalter Parkway Access Management - Roadway Connectivity		$ 10,000,000	
Bluffton Parkway Access Management - Roadway Connectivity		$ 20,000,000	
SC 46 Widening (Jasper County Line to SC 170)		$ 45,000,000	
SC 46 Widening (SC 170 to Buck Island Road)		$ 40,000,000	
Burnt Church Road Widening (Bluffton Pkwy to Alljoy Road)		$ 15,000,000	
Buck Island Road Widening (US 278 to Bluffton Parkway)		$ 10,000,000	
Lake Point Drive / Old Miller Road Connection		$ 2,000,000	
Innovation Drive		$ 2,500,000	
16 Traffic Signals		$ 8,000,000	
Rose Hill to Buck Island Road Connection		$ 4,000,000	
Bruin Road Extension (Burnt Church Rd to Buckingham Plantation)		$ 20,000,000	
Foreman Hill Road Improvements		$ 1,000,000	
Bluffton Parkway 5B		$ 50,000,000	
US 278 Widening (SC 170 to Jasper County Line)		$ 20,000,000	
H.E. McCracken Circle		$ 5,000,000	
Hampton Parkway Realignment		$ 6,000,000	
Gum Tree Road (US 278 to Squire Pope Road)		$ 20,000,000	
Gum Tree Interchange		$ 35,000,000	
US 278 Access Road (Squire Pope Road to Gum Tree Road)		$ 80,000,000	
Wilburn Rd/Bus Dr Improvements		$ 6,000,000	
US 21/SC 802 Connector SE (Hazel Farms Road)		$ 5,244,000	$
US 21/SC 802 Connector NW (Sunset/Miller Road)		$ 6,500,000	$
US 21/SC 802 Intersection Improvement (Sea Island Pkwy/Sams Pt. Road)		$ 2,500,000	$
Sea Island Parkway Improvements		$ 40,000,000	$
Joe Frazier Road Improvements		$ 7,000,000	
US 21 at US 128 (Savannah Hwy) Intersection Improvement		$ 1,000,000	
US 21/SC 128 Intersecion Improvement (Ribaut Road/Lady's Island Drive)		$ 1,000,000	
Spine Road-Port Royal Port		$ 5,000,000	
10 Traffic Signals		$ 5,000,000	
Port Royal Road Interconnectivity (Ribaut Rd to WestvVine Dr)		$ 2,000,000	
Boundary Street Connectivity (Polk St. Parallel Road)		$ 6,000,000	
Calhoun Street		$ 2,500,000	$
Duke Street		$ 1,750,000	
Boundary Street Improvements - Phase 2 (Neil Road to Albergotti Creek Bridge)		$ 60,000,000	
Ribaut Road Improvements (Boundary Street to Parris Island Bridge)		$ 60,000,000	
US 21 (Carteret St) Upgrades (Ribaut Rd to Woods Memorial Bridge)		$ 10,000,000	
US 21 (Lady's Island Drive) Improvements (Lady's Island Bridge to US 21/Sea Island Parkway)		$ 10,000,000	
US21 Improvements (Trask Parkway to Parris Island Bridge)		$ 10,000,000	
SC 170 Access Management Connectivity NOB		$ 4,000,000	
SC 170/US 21 Intersection Improvement		$ 5,000,000	
US 21/SC 128 Intersecion Improvement (Ribaut Road/Old Savannah Hwy)		$ 5,000,000	
SC 170 Robert Smalls Parkway (Boundary Street to Broad River Bridge)		$ 8,000,000	
US 17A By-Pass (Yemassee)		$ 10,000,000	
SC 68 Improvements (I-95 to US 17A)		$ 5,000,000	
I-95 Exit 38 Improvements		$ 5,000,000	
Beaufort - Yemassee Rail Trail		$ 15,000,000	
		$ 1,065,594,000	

2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	Funding Sources
$ 2,000,000	$ 11,000,000	$ 25,000,000	$ 67,000,000	$ 80,000,000	$ 60,000,000						1% Sales Tax/SIB
		$ 15,000,000	$ 10,000,000								1% Sales Tax/SIB
						$ 12,600,000					Impact Fees / Grants
	$ 2,000,000	$ 15,000,000	$ 24,000,000								Impact Fees / Grants
	$ 2,000,000	$ 13,000,000	$ 12,500,000	$ 12,500,000							Impact Fees / Grants
		$ 2,000,000	$ 4,000,000	$ 4,000,000							
		$ 2,000,000		$ 2,000,000		$ 2,000,000		$ 2,000,000		$ 2,000,000	Impact Fees / Grants
	$ 4,000,000		$ 4,000,000		$ 4,000,000		$ 4,000,000		$ 4,000,000		
								$ 10,000,000	$ 25,000,000	$ 10,000,000	
				$ 10,000,000	$ 20,000,000	$ 10,000,000					
	$ 3,000,000	$ 7,000,000	$ 5,000,000								Impact Fees / Grants
		$ 1,000,000	$ 6,000,000	$ 3,000,000							Impact Fees / Grants
		$ 2,000,000									Impact Fees / Grants
	$ 2,500,000										Impact Fees / Grants
	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000	$ 1,000,000			
					$ 2,000,000	$ 2,000,000					
								$ 3,000,000	$ 12,000,000	$ 5,000,000	
							$ 1,000,000				
					$ 5,000,000	$ 20,000,000	$ 20,000,000	$ 5,000,000			
		$ 3,000,000	$ 12,000,000	$ 5,000,000							
					$ 1,000,000	$ 4,000,000					
						$ 1,500,000	$ 4,500,000				
		$ 3,000,000	$ 12,000,000	$ 5,000,000							
				$ 5,000,000	$ 20,000,000	$ 10,000,000					
							$ 10,000,000	$ 30,000,000	$ 30,000,000	$ 10,000,000	
				$ 1,000,000	$ 5,000,000						
$ 744,000	$ 3,500,000	$ 1,000,000									
$ 500,000	$ 3,000,000	$ 3,000,000									
$ 500,000	$ 2,000,000										
$ 1,000,000	$ 5,000,000	$ 15,000,000	$ 15,000,000	$ 4,000,000							
			$ 1,000,000	$ 4,000,000	$ 2,000,000						
			$ 1,000,000								
		$ 1,000,000									
	$ 5,000,000										
	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	$ 500,000	
	$ 2,000,000										
	$ 1,000,000	$ 5,000,000									
$ 500,000	$ 2,000,000										
	$ 250,000	$ 1,500,000									
					$ 6,000,000	$ 25,000,000	$ 20,000,000	$ 9,000,000			
		$ 6,000,000	$ 25,000,000	$ 20,000,000	$ 9,000,000						
				$ 4,000,000	$ 6,000,000						
					$ 4,000,000	$ 6,000,000					
						$ 4,000,000	$ 6,000,000				
				$ 2,000,000				$ 2,000,000			
							$ 5,000,000				
				$ 5,000,000							
					$ 4,000,000	$ 4,000,000					
							$ 3,000,000	$ 7,000,000			
					$ 1,000,000	$ 4,000,000					
									$ 5,000,000		
					$ 1,500,000	$ 1,500,000	$ 6,000,000	$ 6,000,000			

SOLID WASTE AND RECYCLING		
Bluffton Convenience Center Improvements	104 Simmonsville Road, Bluffton, SC	$ 650,000
Hilton Head Convenience Center Improvements	26 Summit Drive, Hilton Head, SC	$ 650,000
Shanklin Convenience Center Improvements	80 Shanklin Road, Beaufort SC	$ 650,000
St. Helena Convenience Center Improvements	639 Sea Island Parkway, St. Helena Island SC	$ 650,000
Household Hazardous Waste Facility	108 Shanklin Road, Beaufort SC	$ 500,000
Upgrade White Goods Collection Area	80 Shanklin Road, Beaufort SC	$ 250,000
MRF Facility - Phase 1 (Dual Stream)	104 Simmonsville Road, Bluffton, SC	$ 2,000,000
New Tire Facility - South	104 Simmonsville Road, Bluffton, SC	$ 300,000
MRF Facility - Phase 2 (Single Stream)	104 Simmonsville Road, Bluffton, SC	$ 5,250,000
LCD Compost Site	TBD	$ 2,500,000
MSW Transfer Facility	TBD	$ 10,000,000
C&D Transfer Facility	TBD	$ 10,000,000
Waste to Energy Facility	TBD	$ 30,000,000
		$ 63,400,000



					$ 650,000						Enterprise Fund
					$ 650,000						Enterprise Fund
					$ 650,000						Enterprise Fund
					$ 650,000						Enterprise Fund
			$ 500,000								Enterprise Fund
		$ 250,000									Enterprise Fund
	$ 2,000,000										Enterprise Fund
	$ 300,000										Enterprise Fund
				$ 5,250,000							Enterprise Fund
			$ 2,500,000								Enterprise Fund
			$ 10,000,000								Enterprise Fund
							$ 10,000,000				Enterprise Fund
						$ 30,000,000					Enterprise Fund
14,722,714	$ 87,343,228	$ 190,151,215	$ 292,251,301	$ 212,843,511	$ 201,017,150	$ 176,277,645	$ 137,279,120	$ 100,862,168	$ 190,127,174	$ 68,737,180	

APPENDIX

Low Country Gullah Culture

Special Resource Study and Final Environmental Impact Statement

National Park Service
U.S. Department of the Interior

Southeast Regional Office
Atlanta, Georgia

Item 15.

















2448

Low Country Gullah Culture

Special Resource Study and Final Environmental Impact Statement

July 2005

National Park Service
Southeast Regional Office
Planning and Compliance Division
100 Alabama Street, SW
Atlanta, Georgia 30303

www.nps.gov

This document may be cited as:

National Park Service. *Low Country Gullah Culture Special Resource Study and Final Environmental Impact Statement.* Atlanta, GA: NPS Southeast Regional Office, 2005.

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NORTH
CAROLINA
SOUTH
CAROLINA
GEORGIA
FLORIDA
50 MILES FROM SHORE
WILMINGTON
LITTLE RIVER
GEORGETOWN
CHARLESTON
BEAUFORT
SAVANNAH
DARIEN
BRUNSWICK
JACKSONVILLE
AREA MAP

1 Purpose and Need for the Study

Introduction

The Low Country Gullah Culture Special Resource Study (SRS) was authorized by Congress to determine whether or not the National Park Service (NPS) should have a role in preserving Gullah culture and if so, what that role might be. The enabling legislation for the SRS was introduced in 1999 by United States Congressman James Clyburn (D- South Carolina) and was authorized in the Interior Appropriations Act of 2000 (see Appendix A). This act directed the NPS to determine the national significance of Gullah culture, as well as the suitability and feasibility of adding various elements of Gullah culture to the National Park System. The standards used to determine national significance, suitability, and feasibility are listed in greater detail in Chapter 3. Under the guidelines of this study, the NPS was directed:

- to analyze the multi- faceted components of Gullah culture (known as Geechee in Georgia and Florida) using the established criteria for the study of areas for potential inclusion in the National Park System and;
- to evaluate the resources of the Gullah/Geechee people and cultural landscape for potential national significance and;
- to determine how these resources could be protected, interpreted, and used for the benefit of the Gullah/Geechee people and the general public and;
- to make recommendations to Congress based on those criteria.

Special resource studies generally focus on one site or tract of land that is being considered for protection. This study, however, focuses on the life ways and traditions of a living culture in the Low Country and Sea Islands, a semi- tropical area filled with palmetto trees and live oaks draped with Spanish moss that lies along the southeastern coast of the United States. The Sea Islands are situated just off the coasts of South Carolina and Georgia and are separated from the mainland by a maze of creeks, gently meandering tidal rivers, and marsh lands. The influence of the ocean on the coastal plain extends about 30 miles inland with the flow of tidewater rivers. Boundary lines of many coastal counties, as well as the boundaries of this study, reflect this natural demarcation. Most of the rice plantations, and therefore the largest concentrations of Gullah/Geechee people, were within the tidewater river area.

The NPS held community and stakeholder meetings to gather advice and feedback on desired outcomes of the study. These meetings assisted the NPS in developing alternatives for managing associated cultural and natural resources and creating interpretive and educational programs. Preliminary alternatives were first presented at community forums in October and November 2002. Responses from these meetings were incorporated into the final alternatives, which are presented in this document. Summaries of these public comments are in Appendix C.

The Gullah/Geechee study area stretches along the southeastern coast roughly from the Cape Fear River near the North Carolina/South Carolina line to the St. John's River near Jacksonville, Florida and 30 miles inland following estuarine boundaries. The land mass of this area, which is included in the coastal plain and the 79 barrier islands that hug the coast, encompasses approximately 12,315 square miles, nearly the size of the state of Maryland. Counties included in this region are the

northeastern Florida counties of Duval and Nassau; the Georgia counties of Bryan, Camden, Chatham, Glynn, Liberty, and McIntosh; the South Carolina Counties of Beaufort, Charleston, Colleton, Georgetown, Horry, Jasper, and parts of Berkeley and Dorchester; and the North Carolina counties of Brunswick and New Hanover. Four metropolitan areas are located within this region: Myrtle Beach, South Carolina; Charleston, South Carolina; Savannah, Georgia; and Jacksonville, Florida. According to the 2000 census, only 20% of the Low Country population lived in rural areas.

The Gullah/Geechee story represents a crucial component of local, regional, and national history. Preserving and interpreting Gullah/Geechee culture and its associated sites is significant to people of all racial, regional, and ethnic backgrounds and is vital to telling the story of the American heritage. Through this study, the NPS has sought to determine whether it has a role in the interpretation and preservation of this unique culture. While the NPS may be able to do a great deal to assist in interpretation of the culture, the preservation of lands lies largely in the hands of government entities that regulate property taxes and control real estate development, and the Gullah/Geechee people themselves. As stated later in this document, the NPS may be able to support preservation efforts by assisting Gullah/Geechee communities in making contact with private and/or public funding organizations, offering training courses to assist them in preservation endeavors, and providing grants to assist communities in preserving cultural and heritage resources.

In May 2004, the National Trust for Historic Preservation (NTHP) named the Gullah/Geechee culture, coastline, and Sea Islands to its list of 11 Most Endangered Historic Sites. The NTHP designation describes threats from new bridges and roads that "have opened the area to intensive development and tourism, and sprawling resorts, residential subdivisions and strip malls are sprouting everywhere. Family cemeteries, archaeological sites and fishing grounds are being paved over or put off- limits by new owners, and familiar landmarks – stores, churches, schools and houses – are being demolished or replaced with new structures." (See www.nationaltrust.org/11Most/2004/gullah-geechee.html.)

Management Alternatives

This report explores four concepts for the future protection, interpretation, and management of Gullah/Geechee cultural resources, as well as a no action alternative. Each of the four action alternatives, which are summarized below, presents viable options for the interpretation of Gullah/Geechee culture. These alternatives are not mutually exclusive and could be adopted in part or *in toto*. Pursuant to Public Law 105- 391, known as the National Parks Omnibus Management Act of 1998, the study also identifies the most *effective and efficient* alternative for protecting significant resources and providing for public enjoyment. Selection of the most effective and efficient alternative, as well as other recommendations contained in this study, do not guarantee future funding, support, or any subsequent action by Congress, the Department of the Interior, or the NPS.

Under *Alternative A*, three coastal heritage centers would be established through partnerships among the NPS and other government agencies and nonprofit organizations. The centers would be dispersed along the southeastern U.S. coast where host and neighboring communities could provide support. The centers would interpret the history and evolving culture of the Gullah/Geechee people from colonial times to the 21st century and would provide learning opportunities for the casual visitor, students, and residents of nearby communities. Coastal heritage centers would provide interpretive information and serve as gateways to historical and culturally significant places chosen by local communities for visitation.

Under *Alternative B*, existing national park units would collaborate with state and local park sites located in the project area to administer multi- partner interpretive and educational programs.

Cooperative agreements among agencies would identify and delegate administrative, operational, and program functions for each partner.

Under *Alternative C*, a National Heritage Area (NHA) would be established to connect and associate Gullah/Geechee resources. The NPS would provide startup and related administrative assistance for the heritage area. Overall management of the heritage partnership would eventually be administered by one or more local entities that would guide and oversee the goals and objectives of the heritage area. The NPS has identified Alternative C as the most effective and efficient alternative.

Under *Alternative D*, Alternatives A and C would be joined together as a single alternative to create a NHA anchored by coastal heritage centers. The centers would provide educational information and serve as gateways that would direct visitors to historical and culturally significant places that have been chosen for inclusion as sites and stops within the NHA. As in Alternative A, the centers would be operated through partnerships among the NPS and other government agencies and nonprofit organizations.

The management alternatives, including the most effective and efficient alternative, are discussed in greater detail in Chapter 4.

Public and Community Involvement

The project began with a series of six public meetings held in communities along the Southeast coast. The meeting sites originally selected were Jacksonville, Florida; St. Simons Island and Savannah, Georgia; and St. Helena Island, Charleston, and Georgetown in South Carolina. In response to requests from participants, a seventh meeting was held in Little River, South Carolina, a small community which lies on the South Carolina/North Carolina line.

From the outset, the project team recognized the inadequacy of the usual public meeting procedure for reflecting the concerns of Gullah/Geechee people and communities. For that reason, a concerted effort was made to find local sponsors for the meetings. Often, these were churches or other community institutions where participants could feel welcome and comfortable.

Typically, a representative from the sponsoring organization gave welcoming remarks. In keeping with Gullah/Geechee custom, clergymen or elders in the audience opened and closed each meeting with prayer. Following the prayer, SRS team members used visual aids to explain the study process and its objectives. All meetings were recorded via audiotape, videotape, court reporter, or combinations of these methods (See Appendix C). At the request of the transcriptionist, the facilitator of the first meeting suggested that participants speak in English rather than Gullah. His remarks provoked polite but critical response from some of the more outspoken audience members and set the tone for occasional use of the Gullah language during the meeting (Behre 2000; Frazier 2000).

Initial Community Meetings		
Date	*City/Town*	*Location/Sponsor*
May 2, 2000	Charleston, SC	Emanuel AME Church
May 16, 2000	Georgetown, SC	Bethel AME Church
June 1, 2000	St. Helena Island, SC	Penn Center
June 6, 2000	Jacksonville, FL	Ritz Theatre & LaVilla Museum
June 8, 2000	St. Simons Island, GA	Lighthouse Museum/Old Post Office
June 13, 2000	Savannah, GA	First Bryan AME Church
August 28, 2000	Little River, SC	St. Paul AME Church

The meetings were generally well- attended, and many people expressed their thoughts, feelings, and suggestions. Some discussed the importance of Gullah/Geechee heritage, cooking, music, language, and traditions and their significance in the lives of all Low Country residents. Others talked of Gullah artists, writers, musicians, artisans, and craftsmen who have made substantial contributions to the cultural fabric of America and have not received recognition. Many stated that the Gullah people are ready, willing, and able to tell their own story in their own words.

At two of the meetings, Jacksonville, Florida, and Little River, South Carolina, both of which are located near the boundaries of the study area, some of the attendees stood and stated that they had come out of curiosity, not understanding that they themselves were a part of the Gullah/Geechee culture. Some of these people thanked team members for "telling me who I am." Such comments may be a reflection of assimilation pressures on Gullah/Geechee social identity.

Meeting Transcripts

Project personnel realized early that community meetings were of great importance to the study and thus required more than an impressionistic assessment of the comments. Accurate statistical information was needed to glean the maximum benefit from the remarks made by the more than 100 speakers who attended one or more of the seven community meetings. To this end, verbatim transcripts of each meeting were prepared under contract with local court reporting companies.

Transcripts of meeting tapes were reviewed and edited for accuracy by Alada Shinault- Small, an African American affiliated with the Avery Research Center for African American History and Culture at the College of Charleston. Shinault- Small is familiar with the people and speech patterns of the study area. She also analyzed sign- in sheets and prepared a demographic summary of those in attendance by gender, community, organizational affiliation, and race ("race" refers to categories commonly understood by the general public and as used in the U.S. census).

A scope of work for a detailed content analysis was prepared in the NPS Southeast Regional Office, and the work was contracted to James K. Dias, Ph.D., a statistician experienced in the social sciences. The contract was let through a cooperative agreement with the Historic Charleston Foundation.

Meeting transcripts and the transcript analysis document will be archived at the Avery Research Center for African American History and Culture in Charleston, South Carolina.

Transcript Analysis

Meaningful content analysis required an empirical derivation of topics and concepts from a sample of the transcripts. Five College of Charleston students from the Low Country area were selected to assist in this process. This transcription coding team, directed by Shinault- Small, included four female students and one male student, all of whom were African American and came from diverse socio-economic backgrounds.

Working independently, the students produced a collective master list of key words and concepts in the transcripts. Once this master list of keywords was completed, the final coding list of topics and concepts was derived by *post- hoc* analysis of consensus among the panelists. Using this completed list, the panel coded all of the transcripts for key concepts. Dr. Dias used the raw coding data produced by the panel, to conduct the statistical content analysis of the transcripts. The content analysis, by its nature, represents frequency of topics and makes no attempt to represent the intensity of sentiments expressed by speakers.

Transcript Data (White Speakers)	
Key Topics and Themes, (White Speakers)	*Frequency of Mention*
Individual/Family History	13
Rice/Indigo/Gullah Culture/History	12
Area History	11
Cultural Preservation	9
Geographic Sites	8
Educational Activities [informal and formal]	8
Preservation of Culture	7
Community Involvement	6
Unknown local history	5
Architectural Preservation	5

Transcript Data (Black Speakers)	
Key Topics and Themes (Black Speakers)	*Frequency of Mention*
Individual/Family History	57
Educational Activities [informal and formal]	37
Cultural Preservation	33
Cultural Pride	32
Youth Involvement in Education Process	29
Rice/Indigo/Gullah Culture/History	27
Area History	26
Unknown Local History	24
Community Involvement	23
Gullah Language	22

Full results of the analysis of the seven initial community meetings are presented in the final contract report. Most notable results from the study as contained in the executive summary include:

- Only 9% of the speakers identified themselves as specifically affiliated with a Gullah/Geechee organization;
- 66% of the speakers were black;
- The majority of speakers, both white and black, were female;
- Since some individuals attended more than one of the seven meetings, adjustments were made to prevent double- counting of these individuals;
- In the course of their remarks, speakers collectively mentioned some 200 place names, 14 church congregations, and nine traditional customs pertaining to religion.

Of 124 keywords and concepts mentioned in the transcripts, the top ten in frequency of mention, by race of speaker, follow in the tables above. Other frequently mentioned topics, especially from African American speakers, included traditional arts/sweetgrass baskets, oral history, land retention, community empowerment, economic growth, and cemetery/graveyard accessibility and preservation.

There were no statistically significant differences in key word rankings by meeting location, race, organizational affiliation, or gender. Nonetheless, there were some interesting if not statistically significant tendencies. For example, Individual/ Family History ranked number one for both white and black speakers. While Educational Activities ranked second with black speakers, it ranked only sixth with white speakers. Conversely, Rice/Indigo/Gullah Culture/ History ranked second with white speakers but only seventh with black speakers. Gullah Language, which ranked tenth with black speakers, did not appear in the top ten for white speakers (Dias 2001).

It is noteworthy that family history was one of the most frequently mentioned concerns in the first series of community meetings in 2000. Increasingly, researchers have focused attention on the family and kinship structures of Gullah/Geechee people and the impact of current economic and demographic change.

In addition to the bare statistical results, a detailed examination of meeting transcripts provided important general insights and guidance for subsequent community outreach and ethnographic understanding of Gullah/Geechee communities. Likewise, the specifics of the content analysis became an important factor in the development of alternatives that were responsive to the views expressed by meeting participants. After the transcript analysis was completed, a summary of the results was widely disseminated via newsletter. No attempt was made to assess any possible influence this distribution of data might have had on subsequent feedback from Gullah/Geechee people.

Small Meetings in Key Counties

As previously stated, project personnel recognized the inadequacy of the usual public meeting procedure for reflecting the concerns of Gullah and Geechee people and communities, whose ways of life past and present are the object of this study. Applied anthropological experience has demonstrated the shortcomings of the standard public meeting format for reaching "culturally different" populations. These shortcomings include unfamiliarity with public speaking, small-community group pressure to refrain from external airing of differences of opinion, and physical disabilities and familial responsibilities that can impair accessibility to large public forums.

Recognizing these drawbacks to open communication, the project team sought to create opportunities for a broader spectrum of Gullah/Geechee people to participate in the process and to express their views and concerns in more comfortable settings. Fieldworkers accomplished this task over a three- year period by making multiple visits to communities within five key counties, beginning with Michael Allen (Education Specialist, Charles Pinckney National Historic Site) in the year 2000 who built on contacts he had made with Gullah and Geechee people that predated the official start of the SRS. The counties chosen for this part of the research were Glynn and McIntosh counties in Georgia and Beaufort, Charleston, and Georgetown counties in South Carolina.

The principal researcher for this study was Cynthia H. Porcher, a Low Country native and former community health outreach specialist with more than thirty years experience in the area. Ironically, this study returned her to the Sea Islands of Beaufort County, South Carolina, the site of her first field research study during the late 1960s. The differences she observed in the cultural landscape of the islands were striking. Three interns provided assistance to the chief fieldworker. They were Alyssa Stewart Lee, graduate student in City and Regional Planning at Georgia Institute of Technology, and two who were studying cultural anthropology, Jonna Hausser Weaver from State University of West Georgia and Kareema Hunter from Georgia State University. Two Mt. Pleasant basketmakers, Vera Manigault and Jeanette Lee, accompanied researchers on some of the trips. The lead fieldworker and one of the interns were white; the other two interns were of African American descent.

During the fieldwork phase of the project, community leaders in the key counties accompanied the principal researcher to a large number of culturally significant sites related to Gullah/Geechee culture. The lead researcher conducted a photographic inventory of these sites and collected GIS data in selected areas.

Several speakers at public meetings in 2000 expressed their concerns about the number of outside researchers who have come into Gullah communities to study or write about their culture. Over the years numerous researchers have, in fact, visited these communities and used the acquired information for their own purposes with little or no feedback to the communities involved. Many researchers have never reported their findings in non- academic forums, asked for editorial assistance, or sent copies of their work to those who helped them. As a result, Gullah/Geechee people say they have felt exploited and believe that they should share in any financial gain made from telling their story. Commodification by the tourist industry of baskets, basketmakers, and other elements of the culture may in fact take dollars from the people themselves. (*cf*. Hargrove 1997, 2002)

Special Resource Study field researchers spent a great deal of time building rapport with community leaders. Frequently, the lead researcher became involved in local preservation efforts and fundraising activities. Through singing, laughing, worshipping, praying, sharing meals, and talking into the "wee hours" with Gullah/Geechee people in the key counties, close relationships were developed. Through these relationships, SRS field researchers realized that such experiences were crucial to their understanding of the hopes, fears, and goals of Gullah/Geechee people at the grassroots level, who might not consider attending, much less speaking, at a community meeting. Other field researchers have spent long periods of time in Gullah/Geechee communities and also formed close relationships.

However, this level of community involvement with grass- roots people is extremely rare in NPS special resource studies such as this.

Unlike some previous researchers and writers, the SRS team made a concerted effort to provide feedback about the progress of the study to local Gullah/Geechee communities. This has been accomplished through newsletters, follow- up meetings, personal contact, sharing of photographs, and social interaction. Likewise, an earlier draft of this report was distributed to key individuals in Gullah/Geechee communities as well as to respected external specialists for review and commentary.

In field trips to Gullah/Geechee communities, the principal researcher and her assistants employed methods like those described in the NPS Applied Ethnography Program specifications for a Rapid Ethnographic Assessment Project (REAP). These methods included transect walks (and drives) with local residents, mapping of key social and cultural sites (whether marked by a building or other man-made structure or not), formal interviews with community members, participation in naturally occurring functional equivalents of "focus groups" (*e.g.,* church meetings), photo- documentation of events, and informal interviews with meeting and event participants. Although a full- fledged REAP was not performed for any single community, collectively, the results of community visits (some repeatedly) provide an area- wide baseline of preliminary ethnographic information for future planning and research. See Appendix B for details of fieldwork activities.

Using the standard ethnographic method of participant observation, the lead researcher and her Gullah/Geechee acquaintances began to share stories of their childhoods. The stories were interspersed with comments such as, "YOU did that, too? I thought only WE did that!" These revelations led to a much clearer understanding of the extent of the shared cultural traditions of black and white southerners and helped to foster greater appreciation of the significance of Gullah/Geechee people to American culture. Although the lead researcher interacted with a broad spectrum of Gullah/Geechee people in terms of age, gender, and occupation, there were certain categories of people, such as teenagers and small children, who were underrepresented in her contacts.

One of the most extreme incidents of positive feedback occurred in a small community meeting at a church near Mt. Pleasant, South Carolina. Following the lead researcher's presentation on the progress of the SRS, an elder from the community asked to see the slide program again. After the meeting, the white- haired lady approached the lead researcher, held both her hands and said, "Write down your name for me 'cause I'm gonna remember you. I'm goin' home and tell my grands about you. You tol' me about my culture; you tol' me my history. When I say my prayers tonight, I'm gonna thank God for you."

While such expressions of interest in Gullah/Geechee traditions and culture are frequent, some Gullah and Geechee people do not wish to dwell on negative aspects of bygone eras nor pursue history for history's sake. For example, in rural Johns Island, South Carolina, SRS researchers talked to some people who wanted to put "all that stuff" behind them. Such sentiments appear to be longstanding on Johns Island. When Guy and Candie Carawan (1989) lived on the island during the 1960s, they frequently heard comments such as, "Why would we want to dig up the past and talk about slavery, segregation, and all that stuff." People were well below the poverty level, often had poor housing, and did not have access to good medical care. Past history appeared to be less important to those people who are struggling for survival in the present.

Today on Johns Island, poverty is still an issue, but there is growing interest and conscious effort to perpetuate selected elements of Gullah historical heritage. The Senior Citizens' Center sponsors a Gullah Theatre group. All presentations are made in the Gullah language, and young people who participate must practice carefully with the elders to be sure they have learned correct pronunciation of their lines. Pride in Gullah heritage and language appears to be spreading among the young people on the island.



Richard Sussman of the SRS team answers questions about alternatives, St. Simon's Island meeting, 2002.

Preliminary Alternatives

When the transcript analysis was complete, the SRS team gathered in Atlanta to brainstorm project alternatives based on community input. Seven draft alternatives were developed. Porcher took these alternatives back into the communities for further comment. Numerous informal meetings were held at churches, community gatherings, private residences, over lunch – any time and place that a group was gathering. Some meetings included presentations featuring local sites, and discussion of the preliminary alternatives. The process of overall evaluation was difficult in the beginning, as nearly every community wanted a center of its own. Eventually, groups became willing to take a more detached view and consider the alternatives as a whole. Based on information from these informal meetings, the SRS team was able to go forward with three alternatives that were later presented at a second round of formal community meetings.

Community Meetings: Round Two

A follow- up series of large venue public meetings was held during the fall of 2002. These meetings were held in the same locations as the original meetings in 2000, but were conducted as workshops rather than as open forums. The three action alternatives were presented at separate stations in the meeting room. Maps and graphic representations helped to clarify the alternatives.

The SRS team answered questions, discussed and explained alternatives, discussed alternatives, and encouraged every participant to write comments on easel pads provided at each station. Team members were available to record comments for those who were uncomfortable with writing. Participants were urged to share literature from the meetings with church and community organizations. They were also invited to contact team members by telephone, letter, and/or e- mail to make further comments or suggestions. All responses to these suggested preliminary alternatives were considered in the development of the final list of alternatives presented later in this document.

The workshop format of the 2002 meetings did not allow for a transcript analysis comparable to that of the first round of meetings. However, all of the comments received have been recorded and are presented in Appendix C. Reaction to the format of the second round of meetings was mixed. Some of the participants seemed to be satisfied with the individual interpersonal approach, while others said that the workshop format did not allow for sufficient public expression of preferences.

Community Discussions of Proposed Alternatives		
Date	*City/Town*	*Location/Sponsor*
October 15, 2002	Charleston, SC	Avery Research Center
October 17, 2002	Jacksonville, FL	Urban League Center
October 21, 2002	St. Simons Island, GA	Emanuel Baptist Church
October 22, 2002	Savannah, GA	First African Baptist Church
October 24, 2002	St. Helena Island, SC	Penn Center
October 29, 2002	Little River, SC	St. Paul AME Church
November 4, 2002	Georgetown, SC	Bethel AME Church

It is important to note that some issues and community concerns brought forth at these meetings fall outside the traditional purview of the NPS. Among these issues are:



Participants discuss alternatives presented at the St. Simon's Island Gullah/Geechee SRS community meeting.

- Land retention and zoning;
- Property tax rate controls and other means of protecting longtime landowners;
- Creating job opportunities at NPS sites within the study area that do not conform to the standard guidelines for employment as defined by the Office of Personnel Management (OPM), for which making exceptions are beyond the authority of local park administrators;
- Cemetery access and preservation;
- More readily obtaining status in the National Register of Historic Places for culturally significant lands whether or not they contain archaeological sites or historic buildings;
- Routinely permitting Gullah/Geechee basketmakers to harvest raw materials on federal properties;
- Direct sales of Gullah/Geechee crafts on NPS sites.

For additional information on agencies and programs that may provide help, see "Cultural Resource Preservation Tools and Methods" later in this document.

Writing the Report

After completion of both rounds of community meetings and review of the literature, Cynthia H. Porcher, principal researcher, and J. Anthony Paredes, NPS regional ethnographer, coauthored a preliminary draft of the main document for review by the SRS team. Other members of the team provided editorial advice and wrote sections of the report. A small panel of historical and cultural professionals in the NPS Southeast Regional Office then reviewed the draft report.

Following this review, Porcher and Paredes prepared a revised draft for internal NPS review at the regional and national levels. Once that review was complete, a draft report was distributed to a panel of experts on Gullah/Geechee and African American history, society, and culture. The peer panel was comprised of individuals from academic institutions, museums, and Gullah/Geechee communities themselves. With the compiled comments of NPS in- house and peer panel review, the SRS team prepared the draft for public review, which was announced on December 1, 2003, with request for comments by February 1, 2004. The deadline was later extended to February 17, 2004. This final version of the report was revised to reflect the suggestions, concerns, and comments received from organizations, agencies, and private individuals.

Scholarly Overview

Gullah/Geechee people and their culture have been subject to intense academic research by anthropologists, sociologists, ethnographers, folklorists, linguists, and archaeologists for more than 100 years. They may well be the most extensively studied African American population in the United States. From the onset, much of this study has focused on the distinct creole language traditionally spoken by the Gullah people of South Carolina, which is known as Geechee in coastal Georgia.



Map illustrating areas from which enslaved Africans were brought. *Courtesy SC ETV Commission*

Equally important to this linguistic research are studies of Gullah and Geechee folklore and oral traditions. In addition, there is a longstanding body of research on Gullah/Geechee arts, crafts, music, and religious customs.

For the past several decades, historians and social scientists have devoted increased attention to research on Gullah/Geechee social traditions and community life. More recently, applied researchers from a number of disciplines have examined the effects of multiple economic and social stresses on Gullah/Geechee communities and the psychological and cultural responses of Gullah/Geechee peoples to those stresses. Paralleling the social and cultural research on Gullah/Geechee people is a small but significant body of biomedical, anthropometric, and genetic study of the Gullah/Geechee population (Pollitzer 1999).

As a result of this extensive scholarly investigation of Gullah language, history, culture, and population genetics, it became quite clear that the Gullah/Geechee people are the most distinctive of all African American populations in the United States. Recognizing the relevance of Gullah/Geechee studies in academic and scientific arenas, the SRS team was careful to ensure that the external academic credibility of the study be maintained, as well as, seeking to incorporate the grassroots views of the culture by Gullah/Geechee people themselves.

Shortly before this SRS began, the ethnography program of the NPS Southeast Regional Office contracted two Gullah- related projects. One of these studies was a broad historic and demographic overview of coastal South Carolina, Georgia, and Northeast Florida. The University of Georgia research team, which conducted the study, was led by an anthropologist, Benjamin Blount, who had several years of research experience on the African American commercial fishermen of Georgia (Blount 2000). Results of the project served as an initial foundation for tracking population change in the Gullah/Geechee region. The other project was an annotated bibliography prepared by an independent researcher, Roslyn Saunders of Georgetown, South Carolina. The Saunders bibliography is presented in Appendix E.

Near the beginning of the SRS, the late William S. Pollitzer, emeritus professor of anthropology at the University of North Carolina, published his authoritative synthesis of Gullah history, culture, and population biology, *The Gullah People and Their African Heritage* (1999). Pollitzer's book won the 2000 George Mooney prize from the Southern Anthropological Society and the John B. Cowelti Award from the American Culture Association. His work brought together a vast body of research that traced the origins of Gullah/Geechee people to West and Central Africa and detailed their distinctiveness as a population group.

The historical scope of Pollitzer's study began with the period of slave importation and continued through the 20th century. He discusses the demographic and economic pressure placed on the culture by rapid coastal economic development and points out that the very survival of the Gullah/Geechee as a people is at risk.

Pollitzer's work demonstrates that the Gullah/Geechee people are a distinctive biological population with less European admixture than other African Americans. He further demonstrates how the Gullah/Geechee people show greater continuity with African and Afro- Caribbean languages and

cultures than do most other African American groups in the United States. Pollitzer prepared a condensation of this monumental work on the Gullah people for inclusion in this study. The condensed work is included here as Appendix D by permission of the publisher and may not be further reproduced from this report.

Despite his wide- ranging synthesis of published studies, Pollitzer did not claim his work to be an exhaustive search of scholarly literature. There is limited coverage of very recent publications and of unpublished theses and dissertations. To compensate for this limitation, the SRS team commissioned a survey of Gullah/Geechee literature. This study, contracted through the Historic Charleston Foundation, was conducted by Melissa D. Hargrove, a University of Tennessee doctoral student in cultural anthropology, who has been conducting ethnographic research in various Gullah/Geechee communities since 1997. Beginning with Saunders' annotated bibliography, Hargrove synthesized the results of many documents, both published and unpublished.

Prominent researchers of Gullah culture, including Pollitzer himself, reviewed Hargrove's draft report. The resulting revised report is included here as Appendix F. This document reaffirms the distinctiveness of Gullah language, people, and culture, while providing an introduction to the current cultural stress faced by the Gullah/Geechee people. In addition to the work by Saunders and Hargrove, members of the SRS research team, particularly the principal researcher, did considerable library and Internet research on pertinent topics.

2 Affected People and Environment

Gullah and Geechee Peoples: History, Language, Society, Culture, and Change

Since scholars are not in agreement as to the origins of the terms "Gullah" and "Geechee," the vernacular use of the terms will suffice for the purpose of this study. Gullah people are, therefore, those located in coastal South Carolina and Geechee people are those who live along the Georgia coast and into Florida. Geechee people in Georgia refer to themselves as Freshwater Geechee if they live on the mainland and Saltwater Geechee if they live on the Sea Islands. In some circumstances, the term "Geechee" has been used as a blanket term to describe people who live in the Low Country, regardless of ethnicity. "Geechee" has also been used in a derogatory manner to show disdain for African American people from the Low Country region, regardless of specific location.

Gullah/Geechee people of today are descendants of enslaved Africans from various ethnic groups of west and central Africa who were brought to the New World and forced to work on the plantations of coastal South Carolina, Georgia, North Carolina, and Florida. According to the records of the Port of Charleston, South Carolina, their African origins include Angola (39%), Senegambia (20%), the Windward Coast (17%), the Gold Coast (13%), Sierra Leone (6%), and Madagascar, Mozambique, and the two Bights (5% combined) (Pollitzer, 1999:43).

Once in the Low Country, men and women of various African ethnic groups mixed in ways that did not occur in their homeland. On the plantation, enslaved Africans met other enslaved Africans from more ethnic groups than they ever would have encountered in a lifetime of living in Africa. Diverse African cultural traditions, languages, and religions were mixed and fused in combinations that did not exist in Africa. This new culture, African in origin but unlike any particular African culture, developed and flourished along the southeast Atlantic coastline and barrier islands. The new culture came to be called Gullah or Geechee, depending on geographic location (Joyner 1994).

Gullah/Geechee people are survivors – unique groups of African Americans who lived near the coast and on barrier islands that were separated from the mainland by creeks, rivers, and marshes. Because of their geographic protection from outsiders and strong sense of family and community, Gullah/Geechee people maintained a separate creole language and developed a distinct culture, which included more of the African cultural tradition than in the cultural patterns of African American populations in other parts of the United States.

The isolation of sea island communities from outsiders was vital to the survival of Gullah/Geechee community cultures. Although Gullah/Geechee people traveled to and from the mainland and to nearby islands, outsiders seldom came into their communities, especially after the Civil War. The separation of Gullah/Geechee people, which began in colonial times in response to tropical fevers, later became an isolation of choice. People chose to come back to their homes, their families, their language, and their way of life – a slow- paced life among majestic trees, tidal marshes, and dirt roads traversed by ox and mule carts – places where small boats, horses, mules and feet were the primary forms of transportation. Thus, within these rural communities, people were able to maintain the language, arts, crafts, religious beliefs, folklore, rituals, and food preferences that are distinctly connected to their West African roots. The islands were accessible only by boat until the first bridges were built around 1950.



Before bridges, flat bottomed boats were used to travel in the creeks, cuts, and canals between islands and to the mainland. *Charleston Museum*

Coastal development, changing job markets, and population shifts have forced many Gullah/Geechee people to leave their ancestral family lands. The traditional economy of farming, fishing, hunting, and small- scale marketing of subsistence products has been replaced by a suburban and resort service economy. These changes threaten Gullah/Geechee cultural survival and their distinct identity as a people who have survived since colonial times.

Many traditional Gullah/Geechee communities have been lost to real estate development, encroachment by outsiders, and the resulting economic hardship. The remaining communities have become models for understanding negative as well as positive impacts of burgeoning tourism and large scale economic development in coastal regions of the American South. Despite the losses of recent decades, the Gullah/Geechee people remain a testament to the power of human adaptability and survival amid major stresses and assaults from many fronts in the rapidly changing economic environment of the modern world.

Historical Overview

Gullah/Geechee people of today trace their ancestry primarily to the enslaved Africans who were forced to live and labor in the coastal counties of South Carolina, Georgia, southern North Carolina, and northern Florida. Africans from diverse societies and environments – men, women, and children – were taken forcibly from their homes and families and sold into slavery. Often, African kings and warlords took prisoners from rival groups and kept them as slaves or traded them for guns, ammunition, and clothing, or even to settle debts. Sometimes, Africans were kidnapped after being enticed by brightly colored merchandise; sometimes, villages were burned and raided (WPA 1985). At the beginning of European expansion into Africa, Arab slave traders continued to transport captive people from the interior of Africa, just as they had done for centuries. Following the European discovery of the Americas, these enslaved people became forced emigrants in the Triangular Slave Trade between England, Africa, and the New World.

According to African scholar Walter Rodney, the scope of the Atlantic slave trade conducted along the Upper Guinea Coast during the latter half of the 18th century has not yet been fully understood. He believes that the development of the Gullah culture along the coast of South Carolina supports his contention. During that timeframe the Africans who arrived "transferred a medium of culture, communalism, and spirituality that assimilated with the existing African traditions, both of which necessarily adapted to Euro- American ambiance." Rodney, who believes that Africa's loss was America's gain, revealed his thoughts on the tragedy of the Atlantic slave trade in the following statement.

> The impression that African society was being overwhelmed by its involvement with the European economy was most strongly conveyed at points when Africans conceded that their slaving activities were the consequences of the fact that nothing but slaves would purchase European goods. Yet European consumer goods

> contributed nothing to the development of African production. Only the rulers benefited narrowly, by receiving the best cloth, drinking the most alcohol, and preserving the widest collection of durable items for prestige purposes. It is this factor of realized self- interest which goes some way towards explaining the otherwise incomprehensible actions of Africans toward Africans (Rodney 1981:253).

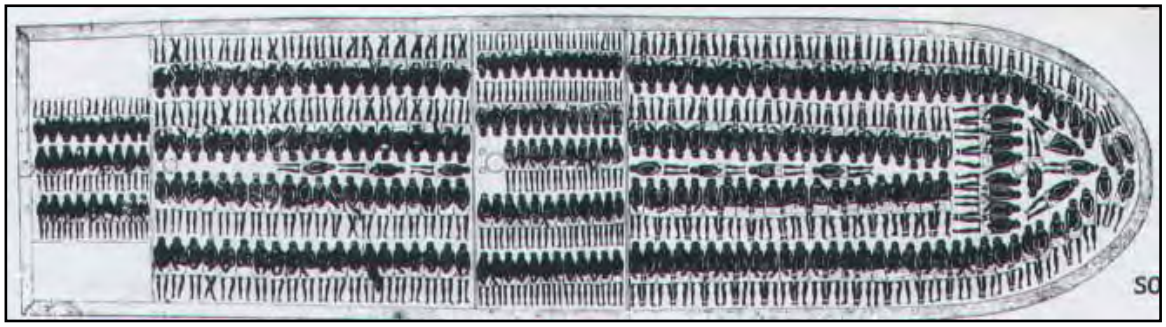
When considering the African roots of Gullah/Geechee people, it is important to remember that Africa is not a country, *i.e.*, there is no single African culture but a diverse mix of cultures and languages in widely varying environments from deserts to rain forests. Enslaved Africans did not bring a unique set of cultural, linguistic, and spiritual practices that could be considered a singular African heritage. Gullah and Geechee people did not, therefore, derive from a single society in one environment, or from a single geographic location in Africa but from many places with diverse environments, cultures, and languages (Levine 1978). Rather than sharing a common African culture, they created a new creole culture in the Low Country and Sea Islands (Hine and Thompson 1998). There is evidence that some planters made a concerted effort to purchase slaves who came from different areas of Africa so they would not be able to communicate with one another and would be less of a threat to the vastly outnumbered European population (Edgar 1998).

The British slave trade became known as the Triangular Slave Trade due to the three- stop passage taken by many slavers. Ships left England loaded with goods such as cloth, guns, and ammunition and sailed to the slave trading ports of West Africa where they traded their wares for captive Africans. The captives were warehoused in forts or large castles or held in open *barracoons* (outdoor prisons) at slave ports such as Goree in Senegal, James Island in the Gambia River, and Bunce Island in the Sierra Leone River. Each fort had a "door of no return" through which captive Africans left their homeland for the last time. As the survivors of imprisonment waited to be herded onto slave ships, they had no control over their destiny and no idea that they would never again set foot on their native African soil (Clarke 1995). Once the forced emigrants were loaded, slavers set sail for the New World to trade their human cargo for sugar, molasses, indigo, naval stores, and other products for the third leg of the triangular route, which led them back to England.



Avery Research Center for African-American History and Culture

The second leg of the triangular trade route – the voyage from Africa to the New World – was called the Middle Passage. The Middle Passage was the most horrendous leg of the trip because there was human cargo in the



Cut away diagram of 1790 slave ship hold showing cramped conditions of enslaved Africans.

holds. Slave merchants shopped for slaves as if they were merchandise. They hired doctors to examine and inspect the captive Africans, so that only those who would bring a good price in the Americas were selected for the voyage. Characteristics such as physical fitness, healthy eyes, good teeth, and absence of venereal disease were basic requirements. The physician accompanied the captives on the voyage and monitored infectious diseases such as small pox, yellow fever, and dysentery (flux) that were often rampant aboard ship. Upon advice from the doctor, captives with symptoms were thrown overboard to prevent the spread of sickness (Palmer 1992).

In 1745, a slaver belonging to the Asciento Company arrived at Charleston with a cargo of Africans. John Newton, who later became a priest of the Church of England, was mate on the vessel. Newton called upon his experiences in the slave trade when he wrote the well- known hymn "Amazing Grace." Newton's own description of the voyage from Africa follows:

> I find by my journal of a voyage to South Carolina that we left the Windward Coast of Africa with 218 slaves, and buried 62 [at sea] on our passage over, while many more died on our arrival and were buried ashore.
>
> When the weather will not admit the slaves being brought on deck, the heat and smell of the rooms would be insupportable to a person unaccustomed to them. If the rooms can be constantly aired, and they not detained too long on board, perhaps not many die; but the contrary is often their lot. They are kept down to breathe the hot and corrupted air for sometimes a week; this added to the galling of their irons, and the despondency which seizes their spirits, soon becomes fatal.
>
> Every morning several instances are found of the dead and living, like the captives of Mezentius, fastened together.
>
> Epidemical fevers break out and infect the seamen likewise. And thus the oppressed and the oppressor fall by the same stroke.
>
> Usually two- thirds of a cargo of slaves are males and it is always taken for granted that they will gain their liberty if possible. They are always chained to rings fastened on the decks.
>
> I have seen slaves that were guilty of insurrection subjected to the most unmerciful whippings, continued till the poor creatures have not had power to groan under their sufferings. I have seen them agonizing for days under the torture of a thumbscrew.
>
> I have seen even worse – but I cannot mention it.
>
> I have heard a captain boast of his conduct toward a number of slaves who attempted to rise up on him. After he had suppressed the insurrection, he sat in judgment upon the insurgents; and, not only in cold blood, adjudged several of them to die, but studied with no small attention, how to make death as excruciating as possible. For the reader's sake I repress the recital of the particulars.
>
> From the women there is no danger of insurrection; and they are carefully kept from the men. A mate purchased a woman with a fine child and because the child cried he threw it into the sea. The child was silenced, but twas not so easy to pacify the mother and she was too valuable to throw into the sea.
>
> Poor Africans! The only liberty of which they have any notion is an exemption from being sold. But they are never secure. It often happens that the black that sells one of his race on board a ship, is himself within the same week bought and sold by one of his superiors, to the same vessel.

> When the slaves were landed in South Carolina, some families that were separated in different parts of the ship showed joy when brought together.
>
> After a careful perusal of what I have written, weighing every paragraph distinctly, I can find nothing to retract. – Rev. John Newton. London (Newton 1998)



"Of this mixture [gunpowder, lemon-juice, and palm oil], the unresisting captive received a coating, which by the hand of another sailor, was rubbed into the skin, and then polished with a 'danby brush,' until the sable epidermis glistened like a newly-blackened boot ... It was not the first time those unfeeling men had assisted in the spectacle of a slavers' cargo being made ready for market." [Caption from UVA image LCP-31] *University of Virginia Libraries*

While there were ships built specifically for the transport of African slaves, many slaver vessels were converted livestock ships that carried upwards of 500 enslaved Africans in space designed to hold 200. Captive Africans were frequently chained together head to foot, and forced to lie back to belly in their own excrement and vomit. Women and children were held on separate levels from the men. Most slavers traveled in spring and summer so that the captives could be kept naked, as slavers did not want to spend extra money on clothing (Teague and Cowan 1969). While privations were agonizing due to the "close packing" of the legal slave trade, they became excruciatingly worse with the dense packing of the smuggling trade. By the 1840s, a three- foot head clearance was considered the norm for the stowage cargo and some ships had less than two feet vertical clearance (Davidson 1993:22).

Rice, yams, corn, salt fish, peas, palm oil and beans were used to feed the captives. Most slave vessels had a twice daily feeding schedule with the mixture served from large tubs. Captives were given wooden spoons and gathered around the food tub in groups of ten. Sharks that followed slave vessels were frequently caught to supplement the food supply (Rawley 1981). Depending on weather conditions, the Middle Passage voyage lasted between five and twelve weeks and frequently was a time of mutinies and revolts. The stench arising from the slaver ships was said to be so intense that it was noticeable on shore before the ships were visible on the horizon.

Although food and water were strictly rationed during the voyage, an effort was made to "fatten" the captives before they were sold. To make their skin look healthy and shiny, captives were rubbed with a combination of gunpowder, lemon juice and palm oil and then polished with a "danby brush."

> They came ashore in nakedness and hunger, but were lucky to be alive. The months before had been a living nightmare; for many now the deliverance from that nightmare would be a brief prelude to death itself. The slave trade had begun to kill them; disease would finish the job. And whatever the survivors would then remember could be only a series of jagged and traumatic sufferings. Seized in their villages along the West African coastline, these once able- bodied men and women had been dragged to slave prisons on the coast itself, infamous *barracoons* where, well-guarded by their captors, they had lingered for weeks, even months, until a slaving ship bound for the Americas at last came by, and anchored for just long enough to buy them from their captors (Davidson 1993:21).

While there is no way to determine how many lives were lost in the Middle Passage, only about one third of those who left Africa are said to have survived the journey. The bodies of the millions of


TO BE SOLD, on board the Ship *Bance-Island*, on tueſday the 6th of *May* next, at *Aſhley-Ferry*; a choice cargo of about 250 fine healthy

NEGROES,

juſt arrived from the Windward & Rice Coaſt. —The utmoſt care has already been taken, and ſhall be continued, to keep them free from the leaſt danger of being infected with the SMALL-POX, no boat having been on board, and all other communication with people from *Charles-Town* prevented.

Auſtin, Laurens, & Appleby.

N. B. Full one Half of the above Negroes have had the SMALL-POX in their own Country..

18th century advertisement announcing the sale of a cargo of slaves aboard the ship Bance-Island, then anchored off Charleston, SC, during a smallpox epidemic. *Library of Congress, Washington, DC*

Africans thought to have perished during the voyages were thrown overboard to the waiting sharks. According to oral tradition, if it were possible to view the floor of the Atlantic Ocean, there would be a trail of human bones that stretches from Africa to the Americas (Clarke 1995).

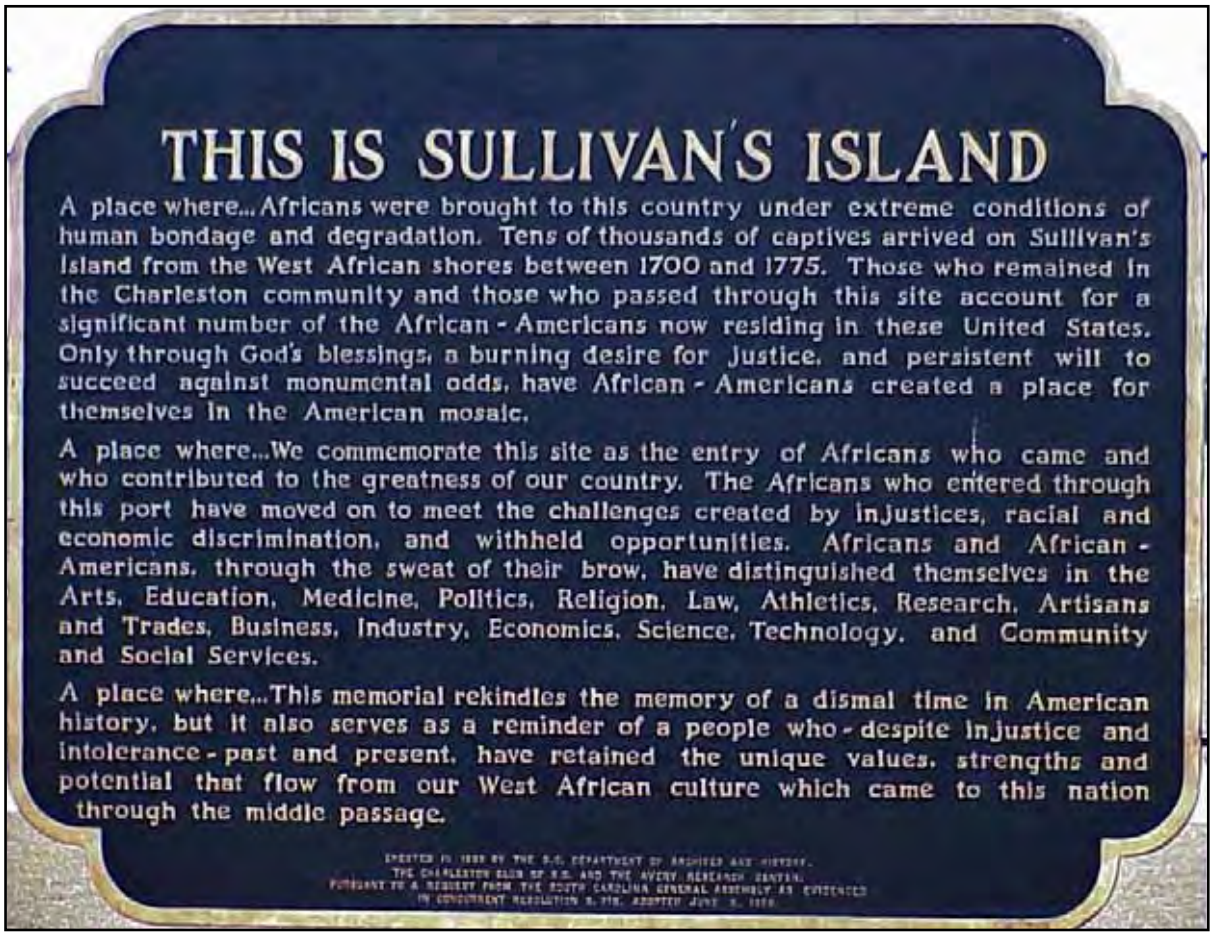
Over 90% of enslaved African people were sold in South America – primarily Brazil – or in the Caribbean islands. Because of the well-established plantation system in the islands, many enslaved people who were destined for the Low Country went first to the West Indies where they were "seasoned" – acclimated to the diseases and slavery conditions of the New World. Although there was a mortality rate of about 30% during the seasoning period, slaves were considered more valuable if they had undergone the process. Since many of the early Carolina colonists came from Barbados, Nevis, and other islands of the British West Indies; they were familiar with the slave labor system and brought slaves and the system with them to the colony. The Caribbean connection was the primary source for enslaved Africans who entered the Carolina Colony during the 17th century and remained important throughout the history of the Low Country slave trade.

The transatlantic slavers not only carried human cargo to the American colonies, but also brought diseases that were endemic in Africa. *Anopheles* and *Aedes* mosquitoes, vectors that carried deadly malaria and yellow fever, were inadvertent passengers (Tibbetts 2000). These very insects may have contributed to the survival of African traditions along the southern coastline, as Africans from the subtropical regions of Africa had a degree of genetic immunity to these diseases. Mosquitoes capable of carrying malaria already existed in the Low Country and undoubtedly became carriers of the milder forms of the disease by biting European settlers from areas where the fever was endemic (Pollitzer 1999). Mosquitoes began to carry the most deadly *Falciparium* form of malaria after coming in contact with Africans (See discussion of population genetics, which follows in the Demographic History section).

By the early 18th century, Charles Town in South Carolina had replaced the Chesapeake area as the largest trans- Atlantic slave market on the coast of British North America. Africans destined for the Charles Town market were first unloaded on Sullivan's Island, near the present site of Fort Moultrie, where they were quarantined in pest houses, usually for a minimum of ten days (Littlefield 1986). There are records indicating the existence of a pest house on Sullivan's Island as early as 1712 (Waring 1964).

When James Oglethorpe founded the Georgia colony in 1732, slavery was not permitted, and for the first few years, the colony failed to thrive economically. In 1750, Georgia became the last of the colonies to legalize human bondage, paving the way to develop a plantation economy like South Carolina to her north (DeLoach 1931).

In 1750, when slavery became legal in Georgia, Africans brought through the port at Savannah were held in pest houses on Tybee Island, near what is now Fort Pulaski National Monument. Both Fort



Historical marker, Sullivan's Island, SC, near Fort Moultrie. Although some people have referred to Sullivan's Island as the Ellis Island for Africans, the analagy seems questionable. Immigrants to Ellis Island came voluntarily, while Africans came to Sullivan's Island against their wills and in chains. *Carlin Timmons, NPS*

Moultrie and Fort Pulaski were built using the labor of enslaved Africans who were rented from nearby plantations. Although there are no remaining pest house structures in South Carolina or Georgia, there is a historic marker on Sullivan's Island near Fort Moultrie, a unit of Fort Sumter National Monument. The marker commemorates not only the enslaved Africans who landed there but also those who lost their lives in the treacherous Middle Passage. Historic maps indicate that the Sullivan's Island pest house was located west of what is now the Ft. Moultrie Visitor Center (Hofbauer 1997a, 1997b; Quick 1997).

If archeological remnants of Sullivan's Island pest house buildings existed today, they would probably be located under water on the land side of the island or beneath existing private homes. The Tybee Island pest house building, located near Lazaretto Creek, was badly damaged during an 1893 hurricane and was never rebuilt. When the U.S. Highway 80 Bridge over Lazaretto Creek was relocated in 1960, the construction project apparently destroyed any remnants of the original pest house structures. There are a few remaining graves in the area that may date to the time of the Lazaretto Creek pest house.

The total number of enslaved Africans who entered North America at Sullivan's Island may never be known, but it is estimated that 40% of all African Americans today can trace their roots to that small barrier island near Charleston, South Carolina. Peter Wood suggests that Sullivan's Island was to Africans as Ellis Island was to European immigrants (Wood 1974); however, this comparison is rather

specious given that immigrants to Ellis Island came by choice and those to Sullivan's Island came by force.

Once the captive Africans had endured the required quarantine period in pest houses and were deemed free of infectious disease, a merchant or merchant company took responsibility for them and arranged for their sale (Littlefield 1986). Before being placed on the auction block and sold to the highest bidder, Africans were stripped naked, washed, shaved, and rubbed with palm oil. Wounds or scars on their bodies were filled with tar. Before making purchases, potential buyers inspected the teeth and bodies of enslaved men and women in minute detail. According to historian Sharla Fett, "With the commodification of black bodies came the objectification of African American health. The intersection of medicine with the southern political economy produced a narrow definition of slave health …" (Fett 2000:32).



By 1790, Low Country population was 78% black. The black majority in South Carolina and Georgia continued well into the 20th Century.

While historians are in disagreement over exactly how many enslaved Africans were shipped to the New World, between 1451 and 1870 an estimated 12 to 15 million slaves were exported from Africa. Close to 70% of slave sales occurred between 1700 and 1850. However, less than 10% of the total number of captive Africans was sold in North America. After disembarking their human cargo in the Americas, slaver ships were loaded with commodities such as cotton, sugar, tobacco, molasses, and rum for European markets. Thus, every leg of the triangular journey was profitable to the British Crown, thus creating wealth based on human misery.

The Rice Coast of Africa, encompassing the modern countries of Senegal, Gambia, Guinea- Bissau, Sierra Leone, and Liberia, is a region of diverse culture, language, and geography that extends about 700 miles from the Sahara Desert to the rain forest. According to Pollitzer (1999), nearly 61% of enslaved Africans brought into South Carolina and Georgia between 1749 and 1787 came from the rice- growing regions of West Africa, either directly or by way of the Caribbean. Many of these people had been slaves in their native land; thus they were somewhat prepared for commercial plantation rice cultivation along the Carolina coast.

Rice plantations were large operations with independent internal economies – not unlike the manor system of the Old World. Agriculture was not, therefore, the only skill required to keep the plantation operational. Many enslaved men and women had been skilled artisans in Africa – blacksmiths, potters, coopers, carpenters, fishermen, miners – and brought valuable skills to their new homeland. Many enslaved women had knowledge of herbal cures, nursing the sick, and midwifery. Some slaves were trained to perform specialized trades after they arrived in the colonies. All of these skills contributed to the financial success of the plantation and the wealth of the planter (Chase 1978; Goodson 1987; Haller 1972).

> Although the early rice planters along the Carolina coast were aware that Africans were as diverse as Europeans, they molded them into a cohesive workforce, ignored ethnic distinctions, and discouraged native customs. For survival, slaves had to submerge differences and create a common culture. Later, white historians homogenized them and constructed stereotypes of the 'Negro' that obliterated their varied ethnicity … While many aspects of Gullah life have been reported, no one has synthesized this varied information to present a complete and integrated picture (Pollitzer 1999).

After European colonization, slavery in the Americas was always closely connected to the idea of race. In earlier times and elsewhere in the world, enslaved peoples were often from nearby places and, thus, of the same physical type and of similar culture as were the masters who owned them. As these slaves became free, they often could return home or could readily mix and assimilate within the larger society of their former masters. Their prior slave status would soon be forgotten. In contrast, the form of slavery that Europeans established in North America firmly linked that "peculiar institution" to the notion of categorically distinct races – a system that was the basis for racial prejudice (Degler 1959).

Development of the Plantation Economy

> *"The only commodity of Consequence produced in South Carolina is Rice, and they reckon it as much as their staple Commodity, as Sugar is to Barbados and Jamaica, or Tobacco to Virginia and Maryland." – James Glen, 1761* (Milling 1951: 95)

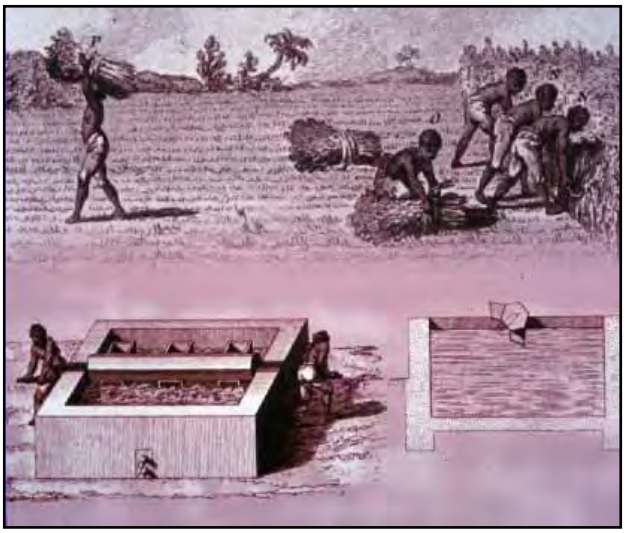
South Carolina was chartered in 1670 as a proprietary or for-profit colony. Most of the original settlers came to Carolina from Barbados, and some brought enslaved Africans along with them. As such, it was very important to identify lucrative staple crops and products for export. Sugarcane, though successful in the West Indies, failed in Carolina, as did olives, ginger, and grapes. Sugarcane was later to become a successful crop in the Georgia Colony and the Florida territory. At the beginning of the colony, there was no predominant labor force and no principal economic activity. In the late 17th century, every able-bodied person engaged in hard physical labor just to survive, and in most cases, colonists worked side by side with indentured Europeans, captive Indians, and enslaved Africans. They usually lived together under the same roof in barracks-like buildings. For a variety of reasons, there was a shift to importation of enslaved Africans, who could neither escape to their homelands nor easily blend into the predominantly European population. Thus, the effects of slavery lived on in the form of presumed white superiority which bred racism and intolerance. Nonetheless, in a few places in the Americas, peoples of African descent were able to reconstitute their own separate societies to some extent. In South America, some like the Saramanka of Surinam (Price 1996; Price and Price 1999) achieved almost complete autonomy in their jungle refuge. Others, like the Gullah/Geechee people, while not autonomous, did enjoy a degree of insulation from racial oppression in their largely isolated Low Country and Sea Island communities.

Estimated Population of South Carolina, 1670-1775

Year	*Whites*	*Blacks*	*Indian Slaves*	*Total*
1670	170	30	- - -	200
1680	1,000	200	- - -	1,200
1690	2,400	1,500	100	3,900
1700	3,300	2,400	200	5,900
1710	4,200	4,300	1,500	10,000
1720	6,500	9,900	2,000	18,400
1730	10,000	20,000	500	30,500
1740	15,000	39,200	- - -	54,200
1750	25,000	40,000	- - -	65,000
1760	37,100	57,000	- - -	94,100
1770	42,200	82,000	- - -	124,200
1775	- - -	102,000	- - -	- - -

Source: US Census Data

During the late 1670s, cattle were brought from the Virginia colony to provide meat and dairy



Indigo harvesting and processing in SC. *NPS*

products for early Carolinians. Plans were to confine the cattle in pastures, as was the European custom, and to butcher them each winter, saving only a few animals to replenish the herd. Barbadians were somewhat familiar with open range grazing, but the enslaved Africans had more experience. Herds soon began to free graze, not unlike the large herds along the upper Guinea coast in West Africa (Carney 2001; Ver Steeg 1984; Wood 1974). Since forage was plentiful, there was no need for herd-attenuating slaughters. Cattle herds multiplied and flourished on their own with few labor requirements. Ownership was determined by a system of branding. Thus, raising livestock for export was the key to economic survival during the first 30 years of the colony, and planters in many regions of the Americas exhibited a preference for slaves with knowledge of cattle- raising and equestrian skills (Carney 2001).

The task of raising and tending the cattle quickly fell to the enslaved Africans, some of whom came from Senegambia, a region in West Africa where cattle raising was a common part of local agriculture. Some of the British colonists came from Barbados, where they had been familiar with open grazing methods. Consequently, the herding and husbandry skills from both places were creolized into a South Carolina colonial method (Otto 1986, 1987; Wood 1974). These men were called "cowboys" in much the same way as male house servants were referred to as "house boys" (Edgar 1998). Feral hogs that remained from early Spanish colonies were raised, also by the free- range method, in large numbers for both the table and the export trade.

At the beginning of the 18th century, naval stores (tar, pitch, rosin, and turpentine) and timber for the British ship building industry were the most successful exports. The naval stores industry, which utilized the vast forests of longleaf pine, was important to the economic development of the states along the southeastern Atlantic coast from the 18th through the early 20th centuries (Harmon and Snedeker 1997). Deer hides were obtained through trade with American Indians, but enslaved Africans generally processed, counted, and weighed the hides for shipment. Salt meats, wood, and barrel staves – made almost exclusively by enslaved Africans – were shipped to West Indies in return for sugar, molasses, currency, and more slaves. The money and slaves earned from the export of salt meats, hides, and naval stores enabled Carolina planters to purchase additional lands and to plant rice (Dethloff 1982).

Since every colony searched for a single staple crop that would create wealth, experimentation with exotic crops was encouraged. Rice became the favored crop in South Carolina, but commitment to rice came about slowly (Wood 1974). The English first began to experiment with rice in the 1680s, but the transition from naval stores, mixed agriculture, and cattle rising to a rice- based economy took several decades. Rice cultivation techniques and free- range cattle farming are but two examples of the African influence on coastal plantation life (Wood 1974).

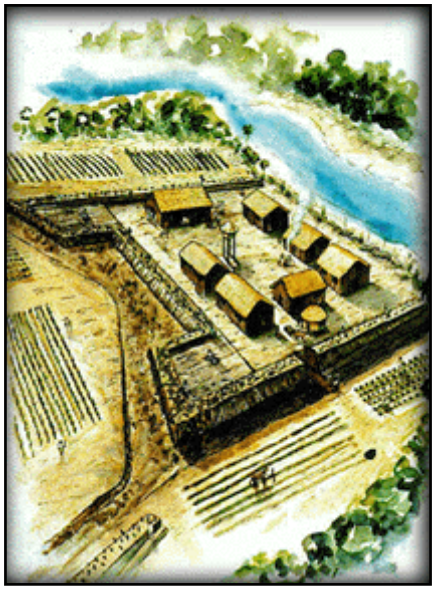
During the early decades of rice cultivation, rice was grown on dry land and later in inland swamps. The colossal amount of labor required to shape plantations from wilderness and swamp created instability between slaves and planters. Survival and success during this frontier period required a state of mutual interdependence and negotiated relationships. The back- breaking labor required to clear land and swamps for rice culture was extremely taxing on the enslaved workers. Many lost their

lives in the process; others attempted escape even though the risks of capture and death were great, as death seemed preferable to their enslaved condition (Carney 2001; Edgar 1998).

Indigo was first grown in an attempt to diversify the rice economy and to utilize land that was unsuitable for rice production. Beginning near Charles Town, indigo production quickly spread rapidly throughout the low country and into the middle and back country. Between 1744 and 1774 indigo became a major cash crop as production increased from just a few pounds to over a million pounds per year. The dye was exported to England from the 1740s until the American Revolution. Cotton replaced indigo as a market crop after 1800 (Edgar 1998; Wallace 1909).

The Quest for Freedom

Even during the early years of the Carolina colony, enslaved Africans were unhappy with their condition of forced servitude and dreamed of freedom. The royal edict of 1733 created religious sanctuary for runaway slaves in the Spanish Florida colony, and word quickly spread northward through Georgia, where slavery was prohibited, to the rapidly expanding plantations of Carolina, where over 30,000 enslaved Africans labored in the rice fields. Many were emboldened to make escape attempts, despite the knowledge that captured runaways were tortured or executed as an example to others. Slavery became legal in Georgia in 1750, and soon after, Georgia slaves began to attempt the difficult escape route to the Florida sanctuary (Landers 1999). In many respects, the flight to Florida was a precursor to the Underground Railroad, and is one of the many types of resistance attempted by enslaved Africans before slavery was finally abolished.

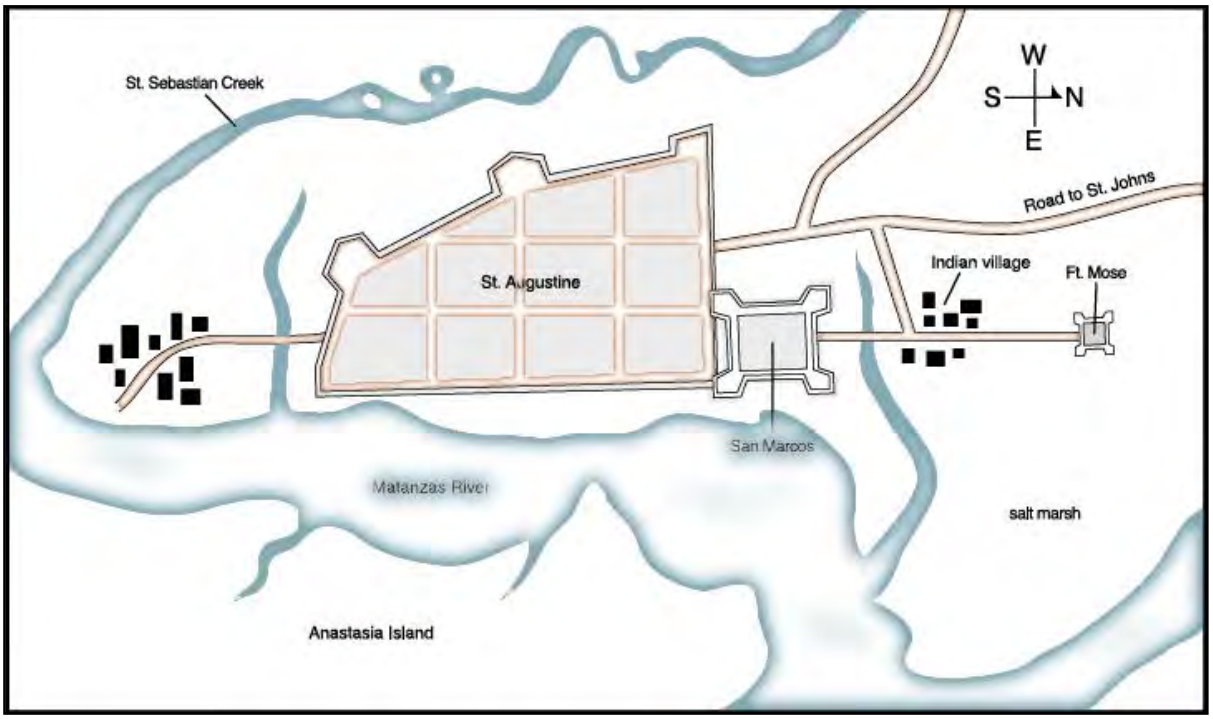


First North American free black town at Gracia Real de Santa Teresa de Mose, near St. Augustine, FL. *NPS*

On March 15, 1739, Governor Montiano of Florida granted unconditional freedom to all fugitives from Carolina. He also freed runaways who had been given previously to important citizens to satisfy the debts of his financially strapped government. When the Crown reviewed Montiano's actions, it approved his decree and ordered that in addition to freedom for Carolina slaves who had arrived in Florida thus far, "all those who in the future come as fugitives from the English colonies" should be given immediate freedom in the name of the king. The royal edict was ordered to be posted in public places so that no one could claim ignorance of the ruling.

The new settlement of Gracia Real de Santa Teresa de Mose, located about two miles to the north of St. Augustine, was established between March and November 1738 by a group of about 100 runaway slaves from South Carolina. Mose, thus, became the first legally sanctioned free black settlement on the North American continent ("Holding the Fort" 1987). When they arrived in Florida, runaways had joined the Spanish militia and formed a free black company. Francisco Menendez, a Mandingo who was also an escaped slave, became Captain of the Fort Mose militia. With Menendez at the helm, the freedmen used their skills as carpenters, ironsmiths, and stonecutters to build a walled fort for the protection of St. Augustine and thatched shelters for themselves. Captain Sebastian Sanchez, a royal official, supervised the construction of the fort to ensure that it met military requirements.

The village was surrounded by fertile lands, hardwood forests, and grassy savannahs filled with wild game of all descriptions. The salt water creek that ran through the settlement provided fish and



Map of Ft. Mose showing its relationship to St. Augustine. *NPS*

shellfish of all types. The freedmen and women soon dug new fields and planted crops. Until those crops could be harvested, the governor provided corn, biscuits, and beef from government stores.

A priest was assigned to the new settlement to baptize children, train adults in the Catholic catechism so that they could be candidates for baptism, and to perform marriages and other sacraments. Mose thus became a village of converts. Most of the new Florida settlers were men, as women were frequently unwilling to leave children or aged family members, who were unable to make the dangerous journey through the swamps to Florida. Because there were only five women in the group, the men quickly made unions with local African and Indian women (Landers 1999).

On November 21, 1738, a group of 21 men, women, and children left Port Royal, located in what is now Beaufort County, South Carolina, on a stolen launch, and made it safely to St. Augustine, Florida. Governor Montiano granted their request for asylum, and they joined their countrymen at Mose, where they began new lives as freedmen. In early 1739, Carolina authorities traveled to St. Augustine to request return of their runaways. Governor Montiano, however, refused, citing the royal edict of 1733 that granted religious sanctuary. William Bull, then Governor of South Carolina later wrote that the planters were very dissatisfied "to find their property now become so precarious and uncertain." He further added that Carolina planters "feared that Negroes, which were their chief support, may in little time become their Enemies, if not their Masters, and that this Government is unable to withstand or prevent it." In April of 1739, a frustrated South Carolina legislature voted to offer bounties for escaped slaves, even for adult scalps "with the two ears," as examples to deter other slaves from attempting escape (Landers 1999:33- 4).

A team of archaeologists, led by Kathleen A. Deagan of the Florida State Museum, began excavations at Fort Mose in 1985. Artifacts from the dig became part of a traveling exhibition designed to enhance understanding of the African American experience in the Americas. Fort Mose was designated a National Historic Landmark in 1994 and is the premier site on the Florida Black Heritage Trail (MacMahon and Deagan 1996). According to Robert L. Hall of the University of Maryland in

Baltimore County, the dig reflects a "renewed interest in black resistance to slavery in the New World" (quoted in *Scientific American* 1987:19).



"Black Lucy" stands idle near the old jail, a relic of the days when she met ships at the wharfs and picked up free black mariners for imprisonment while their ships were in port.

The Stono Rebellion, which occurred on Sunday, September 9, 1739, was the largest slave uprising in the Colonies before the American Revolution. Before daylight that morning, a group of about a dozen "Angolan" slaves, led by slave named Jemmie, met in St. Paul's Parish, about 20 miles south of Charleston, South Carolina. They burst into Hutchenson's Store at the Stono Bridge, killed the shopkeepers, and stole all the guns and ammunition. Once armed, the men and women organized themselves into military formation led by two drummers and a standard bearer. As they marched south, presumably toward St. Augustine, Florida, they shouted, "Liberty!" Along the way, up to 100 others joined the ranks, as they raided plantations, burned houses, and executed Europeans. That afternoon, the slaves stopped to rest in a large field near the Edisto River. By that time, they had marched about ten miles and had killed 20 to 25 whites (Wax 1982; Wood 1999).

Late in the afternoon, a retaliatory force sent by Governor Bull, set out to capture the runaways. They overtook the group in a field near Jacksonboro, South Carolina, where the rebels had stopped for what the white pursuers saw as "drunken dance." John Thornton, however, later identified the "dance" as a traditional feature of war in Central Africa. Thornton contends that the slaves were probably not from Angola but from Kongo, commonly referred to as the Angola Coast by slave traders. Kongo was a Catholic kingdom where many people spoke Portuguese. Thornton, as well as many contemporary Carolinians, believed that the rebels might well have understood both the offer of religious protection to Catholics and have been able to understand the Spanish language because of its kinship to Portuguese (Thornton 1992). In the ensuing attack, about 40 Africans and 20 Europeans were killed. Nearly all of the Africans who were not killed on the first day of battle were soon captured and executed. If any of the runaways escaped death, they may have sought sanctuary at Mose. Although the rebellion had lasted only one day, it led to a "heightened degree of white repression and a reduced amount of black autonomy" in Carolina (Wood 1974). Both of these factors made the risks of escape to St. Augustine seem even more worthwhile to enslaved Africans.

In June of 1740, a group of 150 slaves rebelled along the Ashley River near Charles Town, South Carolina. Although they presumably sought freedom in Florida, these slaves chose a particularly difficult time for their escape, as Georgia and South Carolina were at that very moment attacking Spanish Florida. Fifty of the rebels were captured by Carolinians and were hanged at the rate of ten per day to frighten other slaves against attempting to escape. Nothing is known of the fate of the remaining 100 escapees (Landers 1999).

Fort Mose proved vital in defending St. Augustine during Oglethorpe's attack in 1740, even though the small fort was destroyed by the British during the attack. British sources later described the fort as constructed of stone, "four square with a flanker at each corner, banked with earth, having a ditch without on all sides lined round with prickly royal and had a well and house within, and a look- out" (*St. Augustine Expedition of 1740* 1954: 25).

After the war, the people of Fort Mose joined the community of St. Augustine until 1752 after a second Fort Mose was constructed near the site of the first. The former enslaved Africans, who were



Enslaved Africans were often hired out for public works projects or for other tasks when they were not needed by their own masters. In Charleston, SC, such slaves were required to wear a metal badge, such as the ones above, on their persons at all times to prove they were not runaways. *Avery Research Center*

predominantly from the British colonies of South Carolina and Georgia, lived there as free people until 1763 when the First Treaty of Paris gave Florida to Great Britain. At that time the inhabitants of Fort Mose and most other subjects of the Spanish Crown relocated to Cuba. Today the site of Fort Mose is a National Historic Landmark.

Slaves continued to escape and revolts until freedom came. The white minority feared Negro uprisings, and passed many laws restricting the movement of slaves. Often runaways did not stray far from home, choosing to either "lose themselves" in the bustle of a city such as Charleston or Savannah or hide in the woods, where they could pilfer food from nearby plantations. Those who attempted to reach the northern free states usually escaped through the swamps or by boat to avoid the armed slave patrols, colloquially referred to as "pateroles," that were constantly in search of runaways.

One of the best- known rebellions was attempted in 1821. Denmark Vesey, a literate and charismatic free Negro who lived in Charleston, planned the insurrection. He was familiar with the Haitian slave revolt and kept in touch with black leaders there. Vesey recruited a band of between 6,600 and 9,000 Negro men during the four years of planning. They met in secrecy at a farm which could be reached by water so that they could avoid the slave patrols. Just before the uprising was to take place, Vesey's plans were betrayed by some of his followers. Vesey blamed the failure of the rebellion on human frailty.

The white men's vengeance was swift and sweeping. One hundred thirty- one Negroes were arrested, but they refused to confess. Twenty- two slaves were hanged together on one gallows. With the hangman's rope around their necks, many cried out to their fellow slaves to keep revolting until freedom came. Only the protests of slave owners who did not want their property destroyed prevented widespread slaughter of all those involved (Buckmaster 1993).



A group of slaves escape by boat. *UNC, Southern History Collection*

As a result of Vesey's attempted rebellion, new and stricter laws were passed to control the movement of slaves. Slave patrols were increased. Slave travel between plantations was curtailed. Negroes were not allowed to congregate in groups. Negro seamen who came into the Port of Charleston were picked up in a cage- like prison wagon at the docks and taken to jail,

where they were detained from the time of their ship's arrival until it again set sail. Ship's captains were required to pay room and board for their detained seamen. The prison wagon came to be called "Black Lucy" and still stands today on the grounds of the old Charleston Jail. In addition, slaves who were hired out to work in the city were required to wear metal tags on their bodies so that they could be readily identified.



Map depicting tidal rice cultivation in SC. *SCDAH*

Tidal Irrigation Methods Improve Efficiency of Rice Production

The tidal method of rice production and irrigation was introduced in South Carolina during the 1750s. The new system improved yields and revolutionized rice cultivation in the coastal Southeast between 1783 and the early 19th century. This highly productive method was practical only on the lower stretches of a few rivers from the Cape Fear River in North Carolina to the St. John's River in northern Florida. Creation of a tidal rice plantation or conversion of an existing rice plantation to the tidal method required a substantial capital investment and a tremendous amount of back- breaking labor. Slaves cleared riverside swamps of timber and undergrowth, surrounded them with earthen levees, and then constructed an intricate system of dams, dikes, floodgates, ditches, and drains. The planters relied on the rise and fall of the tide to irrigate their fields several times during the growing season to encourage rice growth and control weeds and pests. The entire hydraulic apparatus of a rice plantation required constant maintenance by skilled slaves.

The tidal irrigation method marked the beginning of major rice production in Georgia. Far fewer enslaved Africans, however, were imported into Georgia than South Carolina to her north. Until 1766, most slaves came to Georgia via the West Indies and/or Charles Town. At about that time, Georgians began to establish their own trans- Atlantic connections for direct slave trade with Africa; however, Charleston still remained the major *entrepot* (Wax 1984).

As rice became more and more prominent in the economy, slaves from the rice growing regions of Africa became highly prized for their technical knowledge and skills in rice cultivation and irrigation. Some West Africans had experience in clearing swamps, building dikes, and using the tides to irrigate fields. They all understood the necessity of coating the seeds with clay so that they would not float to the surface when the fields were flooded. When the grain was ripe, children were sent to the fields to chase away the rice birds (bobolinks) just as they had done in Africa (Littlefield 1991; Carney and Porcher 1993).

Rice was not only the favored staple food of these enslaved laborers, but also was a part of their cultural identity. Rice came with them in the slave vessels and was processed during the voyage by captive women aboard the ships. Because it had been loaded on ships in its unprocessed state, any rice

remaining after the voyage would have been suitable for planting. Although first used for export and to feed slaves and farm animals, rice later became the favored staple food in the homes of European colonists.

> When New World slaves planted rice in the spring by pressing a hole with the heel and covering the seeds with the foot, the motion used was demonstrably similar to that employed in West Africa. In summer, when Carolina blacks moved through the rice fields in a row, hoeing in unison to work songs, the pattern of cultivation was not one imposed by European owners but rather one retained from West African forebears. And in October when the threshed grain was "fanned" in the wind, the wide, flat winnowing baskets were made by black hands after an African design (Wood 1974: 61).

Rice planting on the Windward Coast of Africa had been a time of celebration, a time of renewal and promise. In the New World, however, as enslaved Africans worked under the blazing sun and faced the lash of the whip; there was only misery, rampant disease, and fear of death. Yet they still sang – not the songs of celebration, but songs that bespoke escape and freedom. Work songs with their veiled references to freedom were part of their African heritage and helped to maintain the rhythm of their tasks and perhaps to make their arduous labor more bearable (Parrish 1992).

Rice exports from South Carolina began at about 12,000 pounds in 1698 but increased to 18 million pounds by 1730. In 1770, 83 million pounds of rice were exported, predominantly from South Carolina and Georgia (Kolchin 1994). During the summer months, there were thousands of acres of rice fields full of the ripened grain. The fields were said to present a level and unbroken surface such that one could look up and down the river for miles and see no obstruction. Although rice production drove the economy, rice was never grown to any large extent on the Sea Islands, since salt water would be poisonous to the crop. Some sea islands, however, had fresh water ponds that allowed rice to be grown for local consumption (Emerson 1911; Johnson 1930).

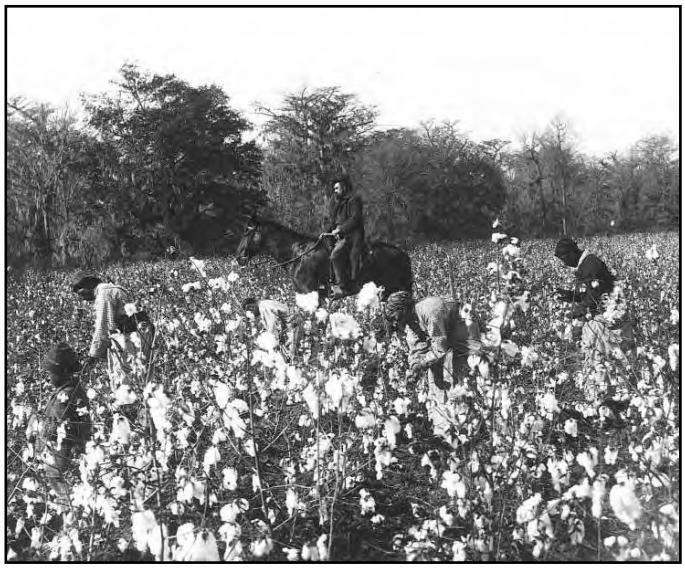
In 1750, when slavery became legal in Georgia, South Carolina planters were lured southward by new investment opportunities along the Georgia coastline and into the northeast corner of Florida. Georgia planters soon became concerned about slaves escaping to freedom in Florida (Landers 1999). In 1765, naturalist John Bartram noted the presence of flourishing rice plantations along the Savannah and Ogeechee Rivers. These plantations extended into the Altamaha Delta and southward along the Satilla River, where Bartram observed African slaves clearing the swamps (Slaughter 1996).



John Seabrook's Wharf, Edisto Island, Charleston County, SC, ca. 1862-1863 from US Navy Photographs of the War of the Rebellion. Note Sea Island cotton drying on the ground. *Library of Congress American Memory Collection*

As the Revolutionary War loomed on the horizon, both South Carolina and Georgia made extensive use of hired slaves (actually leased from their owners) in war preparations. Hired Negroes from the Gullah/Geechee coast performed many public works functions in the cities and assisted in the construction of defensive fortifications, particularly in Charleston and Savannah areas. Enslaved Africans were not allowed to bear arms, as the vastly out- numbered colonists always feared revolt. When a British invasion of South Carolina was threatened in the spring of 1776, a law was passed ordering execution for any Negro who joined British forces, supplied provisions, or provided intelligence to them. To

thwart that pending attack, a fort was built on Sullivan's Island, key to the defense of Charleston Harbor. Hired slaves did much of the work in the construction of the palmetto log fort – later called Fort Moultrie – that staved off the British attack. The supply of Negro labor never met the demands of the military, thus, if owners balked at leasing their laborers, their slaves were impressed into service. Thus, enslaved men played an important but involuntary role in the defeat of the British (Quarles 1973).



Negro workers pick cotton while overseer watches from his horse. *Penn Center Archives*

Early in the war, Congress considered enlistment of Negroes, but the plan was voted down by southern delegates. As the war progressed, it became apparent that the Continental Army needed reinforcement from any possible source. Thus, driven into action by the British occupation of Savannah and the opening of a second British campaign to subjugate the South, on March 29, 1779, Congress recommended to South Carolina and Georgia that they "take measures immediately for raising three thousand able- bodied negroes." Slave owners were to receive a sum of not more than $1,000 for "each active able- bodied negro man of standard size, not exceeding thirty- five years of age." Enslaved Africans who served "well and faithfully" to the end of the war were to receive $50 and their freedom (Farley 1978; Quarles 1973:60, quoting from *Journal of Continental Congress* XXIII: 387- 388).

As a result of the Revolutionary War, many southern planters suffered major financial losses due to the interruption of trade, the loss of the indigo market with England, and the loss of many enslaved laborers. In the years following the war, large numbers of new slaves were imported from Africa to fill the void. Sea Island planters sought economic salvation in luxurious long staple, black seed cotton that was later to be known as Sea Island cotton. Sea Island cotton was developed in 1786 by William Elliott of Hilton Head Island, South Carolina. First grown successfully as a commercial crop around 1790, this fine cotton could only be grown in a small section of the coastal zone south of Charleston to northern Florida. Unlike the low- growing plants of short staple upland cotton, the bushy plants of Sea Island cotton grew six to eight feet tall (Richard D. Porcher, personal communication 2003).

Continued crop development by seed selection increased the quality of this long staple cotton, which is said to be the finest cotton ever grown. After a time it became apparent that sea island cotton of the highest quality was grown on James, Johns, Edisto, Wadmalaw, and St. Helena Islands in South Carolina, and cultivation was later curtailed on the Georgia and Florida islands.

> On the barrier islands … The soil, temperature, and rainfall patterns had proven ideal for growing the long- staple cotton prized by manufacturers of luxury textiles – cotton so fine that it was ginned by hand and packed in bags rather than bales, so valuable that it commanded several times the price of the short- staple cotton grown in the upcountry, so particular in its quality that some planters sold their crops year after year directly to English buyers in private bargains, rather than go through normal market channels. The land that made it all possible kept its fertility only through annual applications of mud dug from the swamps and hauled to the fields by the slaves (Harris 2001: 11, 15).



Negro field workers carrying bundles of Sea Island cotton from the fields. Sea Island cotton was bagged rather than baled. The cotton was weighed, bagged, and taken to the cotton dock for shipment to England. Note that bundles were carried on the workers heads in the African tradition. *Charleston Museum*

Virtually the entire crop of Sea Island cotton was shipped to the textile mills of England where the long silky fibers were woven into the finest muslins and laces. Despite recent research in both England and the United States, no examples of these fine fabrics have been found to exist today (Richard D. Porcher, personal communication 2003). Later, during the American Civil War, because of strong British demand for Sea Island cotton, many believed that the British would come to the aid of the Confederacy and that the war would be over quickly. However, that was not to be the case, and cultivation of the cotton was disrupted by the war. Sea Island cotton was eventually totally lost to the boll weevil.

Profits from the triangular slave trade helped to fund the rapid mechanization of industry in England. The 1793 invention of the cotton gin, at roughly the same time as the advent of mechanized textile production in England, were key components of what became known as the Industrial Revolution. The new machines made short staple cotton profitable and ensured the growth and spread of cotton agriculture. Since the supply of long staple cotton could never meet the demand, many varieties of poorer quality short staple, green seed cotton were planted outside the coastal zone to meet the growing demands of the world market.

Although the importation of slaves had been voluntarily banned in South Carolina in 1787, planters called for change, as they needed a new influx of African slaves to harvest their highly profitable cotton crops. Between 1804 and 1808, over 40,000 enslaved Africans, most of whom came from Angola, were transported into South Carolina.

The importation of new slaves from Africa was abolished in 1808, but the law did not prohibit internal slave trade. Planters became more reliant on the natural reproduction of existing slaves, and encouraged the formation of slave families for that purpose. Since enslaved Africans were not so easily replaced, their healthcare became more important.

During this time, there was a dramatic rise in the internal slave trade, which was not regulated by federal government mandates. Speculators purchased gangs of slaves at estate or bankruptcy sales and sold them to planters who needed to increase their labor force. In addition to slaves entering the market from estate and bankruptcy sales, surplus enslaved Africans from the upper south, where tobacco had exhausted the soil, were sent "down the river" to the plantations in Georgia and South Carolina, which were in need of additional labor for cotton and rice. Slavery extended westward through this process (Littlefield 1983; Russell 1999; Smith 1985).

Being sold from rural to urban settings or from one region of the south to another frequently caused great emotional pain and suffering for enslaved Africans and resulted in the loss of contact with family members. Perhaps the most difficult adjustment was for a slave accustomed to living in the city who was sent to live on a remote plantation. According to John Hope Franklin and Loren Schweninger in their book *Runaway Slaves: Rebels on the Plantation*:



Ruins of slave hospital at Retreat Plantation, St. Simons Island, GA. The building once stood two and one half stories high and contained ten rooms. Two women lived there to provide traditional medicines and nursing care. A doctor was summoned from Darien when necessary. Doctors were frequently paid on a "per head" basis to care for both black and white plantation residents. This practice may represent an early form of managed healthcare.

> Lymus, a twenty- eight- year- old Charleston bricklayer, was sold to Thomas Butler King, a planter on St. Simons, a barrier island fronting on the Atlantic Ocean and surrounded by salt marshes and tidal streams. A few years later, the famous Englishwoman Frances Anne (Fanny) Kemble gave her impression of the condition of slaves on St. Simons: the 'filthy and wretched' quarters, the meals of corn grits and 'small rice' (unfit for market), and the 'inhumanity of allowing a man to strop and lash a woman, the mother of ten children; to extract from her, toil.' Lymus discovered as well that the slaves on St. Simons were different from himself in dress, manner, beliefs, and speech, speaking Gullah with its African rhythm and inflections. A short time after his arrival, he managed to escape from the island and was seen on the road going from Darien to Savannah. He 'will probably endeavor to make his way back to Charleston,' King's agent wrote, hiring himself out at plantations along the way (2000:54).

Although banned in the United States, importation of African slaves was legal in the Florida territory until 1821. There were undoubtedly many thousands of captives from Africa who were legally imported into the Florida territory prior to 1821 and smuggled into Georgia and South Carolina. Ports known to have served as receiving centers for slave smuggling were Beaufort and surrounding islands in South Carolina, Cumberland Island, Darien, and Harris Neck in Georgia, as well as St. Mary's and Fernandina in Florida. The newly enslaved African people came directly from Africa and brought a re- infusion of African customs, traditions, and culture to the creolized Africans on Low Country plantations. The rapid influx of new Africans led to a caste- like social system in many slave



Ruins of tabby slave cabin, Kingsley Plantation, Timucuan Ecological and Historic Preserve, near Jacksonville, FL.



18th century drawing depicting crowded conditions aboard slaver vessels. *SCDAH*



Tending the rice trunk. *Charleston Museum*

communities. American-born slaves believed they had better skills and therefore deserved higher status. New arrivals were assigned less desirable tasks and remained on the bottom rung of the social structure until they learned the ways of the slave communities. Creolization was, therefore, a continuous process during the slave era.

Zephaniah Kingsley, son of a loyalist who was forced to leave Charleston during the Revolutionary War, was a major player in the illegal slave trade. Although Kingsley bought, married, and later freed an enslaved Negro woman, he was, nonetheless, a staunch advocate of the slavery system. The Spanish Crown granted Kingsley 3,300 acres of land in Florida on condition that he introduce Negro slaves in sufficient numbers to improve and cultivate the land. Thus, Kingsley, his wife, and 74 slaves arrived in Florida in 1803. He later purchased a large plantation on Fort George Island, just north of what is now Jacksonville in Duval County, Florida. He and his wife, Anna Madgigene Jai, who was an African princess, lived and raised their children there. The plantation, now called Kingsley, is part of Timucuan Ecological and Historic Preserve. The Kingsley slave cabins were arranged in a circular pattern similar to African villages. It is believed that Kingsley's wife, herself an African and former slave, influenced the arrangement of the buildings to follow African tradition (Fairbanks 1974; Williams 1950).

By 1813, Kingsley had developed a slave trading business at the mouth of the St. John's River on King George Island, which proved to be a strategic location for smuggling slaves into isolated areas on the Georgia and South Carolina coasts. For a time, Kingsley engaged in his own triangular slave trade route by sailing to Liverpool, England, with his crop of Sea Island cotton, purchasing textiles and other products, and then sailing on to the west coast of Africa to purchase Negroes.



Carrying bundles of rice on a South Carolina plantation. *GWU Exhibit: "The Cultural Landscape of the Plantation."*



Planting a rice field, probably in NC, late 1800s. *NC Dept. of Cultural Resources, Division of Archives and History*

When foreign slave trade became illegal in Florida in 1821, there were profiteers who bred and trained captive human beings for the Georgia and South Carolina slave market. Zephaniah Kingsley is, perhaps, one of the best documented examples. Kingsley had extensive enough holdings, acreage, and slaves to continue with his slave business after the ban on foreign slave trade. Kingsley raised, trained enslaved Africans to be exceptional field hands or skilled laborers. He then illegally transported and sold these "seasoned"slaves to rice plantations in Georgia and South Carolina and to the cotton plantations of the Sea Islands. Records show that "Kingsley's Negroes" were held in high regard on the illegal market and brought an excellent price, as cotton and rice plantations were in constant need of new labor (Gray 1973; May 1945; Rehder 1999; Smith 1973, 1985; Williams 1950).

Conditions aboard smuggler vessels were horrendous. Lieutenant Patrick Forbes, captain of HMS *Bonetta*, was carrying out orders from the British government orders to suppress the smuggling of slaves along the African coast. In 1848, Forbes wrote the following eyewitness account of conditions aboard a smuggler ship:

> The form of stowage is that the poor wretch shall be seated on his hams, and the head thrust between the knees, and so close that when one moves the mass must. Because of this stowage, the body of the victim becomes contracted into the deformity of the position, and some that die during the night stiffen in a sitting posture; others, who outlive the voyage, are crippled for life …" (Davidson 1993:22).

The Role of Gullah/Geechee People in the Plantation Economy

When enslaved Africans arrived in the Low Country, they may have recognized some similarities between their new home and the native land they had been forced to leave. They surely realized that the Low Country area was suitable for growing rice, and some were able to acquire enough seed to grow rice for their families. These enslaved Africans eventually shared their knowledge of rice cultivation with plantation owners and talked of the many growing methods in their native West Africa.

Peter Wood (1974) and Daniel Littlefield (1991) first emphasized the diffusion of rice cultivation skills from West Africa to South Carolina. Judith Carney, referring to the research of Wood and Littlefield, noted that rather than studying the impact of one culture upon another, they pointed out the way in which:

55 PRIME NEGROES,

Accustomed to the culture of Rice.

By LOUIS D. DeSAUSSURE.

On Wednesday, 21st January, 1857, at Ryan & Sons lot Chalmer Street will be sold in families, at 11 o'clock, A. M., in the city of Charleston,

An uncommonly prime gang of Rice-Field Negroes.

CONDITIONS :—One-third Cash. Balance by Bond, payable in two equal annual Instalments, with interest, payable annually from day of sale, to be secured by a mortgage of the property, and approved personal security. Purchasers to pay for papers.

Nos.		Ages.	
1	John	50	trusty driver, full hand.
2	Mary	40	prime
3	June	20	"
4	Paddy	16	3-4 hand, cart boy
5	Lydia	9	
6	Love	6	
7	Charity	2	
—7			
8	Ben	60	1-2 hand
9	Patty	60	"
10	George	30	prime
11	July	28	"
~~12~~	~~Jacob~~	~~26~~	~~"~~
13	Bacchus	25	"
14	Flanders	23	"
—7			
15	Patience	30	full hand & house serv't
16	Clarinda	14	house girl
17	Infant	5	months
—3			
18	Guy	35	prime hand, deaf
19	Hannah	35	" trusty
20	Harriet	15	3-4 prime girl
21	Cretia	7	
22	Joshua	2	
23	Binah	20	prime
24	Abram	1	
25	Cyrus	22	prime
26	Plymouth	19	"
—9			
27	Nanny	35	full hand
28	Bess	7	
29	Scilla	30	full hand, recently had dys-

Nos.		Ages.	
30	Taggy	40	3-4 hand
31	Juba	50	1-2 hand, plantation cook
32	Tenah	22	prime
33	Infant	6	months
34	Jenny	20	prime
35	Manwell	1	
36	Moses	23	prime
—6			
37	Paul	35	~~prime~~, trunk minder
—1			
38	Jacob	45	full hand, ploughman and wagoner.
—1			
39	Manwell	55	1-2 jobbing carpenter
40	Dorcas	40	3-4 child's nurse
41	Penda	4	
42	Rinah	20	prime
43	May	2	
—5			
44	London	50	~~full hand~~, complains.
45	Martha	23	prime
46	Jack	19	full hand, ploughman
47	Solomon	16	3-4 "
48	Andrew	13	1-4 hand
—4			
49	Pompey	30	full hand, one eye
50	Dianah	28	3-4 hand
51	Maggy	5	
—3			
52	Adam	55	3-4 hand
53	Maria	50	1-2 hand, sick nurse, sickly
54	Mary	20	prime

Sale handbill showing names, ages, and skills of enslaved Africans to be sold.
Rare Book, Manuscript, and Special Collections Library, Duke University

> … Africans from diverse ethnicities, thrown together in slavery, created a new way of life in coastal Carolina, where a crop known only to some of them became the plantation staple. The association of agricultural skills with certain African ethnicities … called for a research perspective emphasizing … culture in relationship to technology and the environment (2001:14).

South Carolina rice culture, which began during the late 17th century on the mainland, used the upland or dry land method of cultivation, which was dependent upon rainfall for irrigation. By the early 18th century, most planters were growing rice in freshwater inland swamps, where a portion of the swamp was dammed to provide a reliable water supply for irrigation. This method provided higher yields and profits, as the crop was not dependent on rainfall. In the 17th and early 18th centuries, before the inland swamp and tidal methods of rice cultivation became prevalent, the average yield was 1,000 pounds clean rice per acre. By the 1770s the figure had risen to 1,500 pounds per acre (Edgar 1998).



Gullah workers on rice barge near Georgetown, SC, ca. 1890. *SCDAH*

In the 1730s a few planters began to experiment with the tidal rice cultivation in which the power of the tidewater rivers was harnessed to irrigate the crop. Because of the tremendous expense involved in creating the fields for tidal cultivation, few planters utilized this method until after the American Revolution (Edgar 1998; Chaplin 1992).

The transition from inland swamp cultivation to tidal rice cultivation required extraordinary physical labor. Enslaved Africans cleared mammoth virgin cypress-gum forests with trees as large as five feet in diameter. Using only hand tools, oxen, and sweat to do a back- breaking job that would be difficult even with today's mechanical implements, enslaved Africans built earthen dikes, ten to twelve feet in height. Many lost their lives to alligators, venomous snakes, and disease. The region around what is now Georgetown County, South Carolina, contained the largest number of rice plantations and yielded the largest exports of processed rice.

As George Rogers wrote in his *History of Georgetown County, South Carolina*:

> [The low country portion of the] Georgetown District was the principal rice-growing area in the United States. In 1840 the district produced 36,360,000 of a total national crop of 80,841,422 pounds of rice … In 1840 Georgetown District came very close to producing one- half of the total rice crop of the United States (1970: 324).

Captain Basil Hall, 19th century world traveler and author, recorded his observations of rice cultivation as follows:

> [Rice] is the most unhealthy work in which the slaves were employed, and they sank under it in great numbers. The causes of this dreadful mortality are the constant moisture and heat of the atmosphere, together with the alternate floodings and dryings of the fields, on which the negroes are perpetually at work, often ankle deep in mud, with their bare heads exposed to the fierce rays of the sun (1829).



Two women hulling rice, using a mortar and pestle in the African tradition. Sapelo Island, GA, ca 1900. After the rice was pounded with pestles to remove the tough outer hull, it was carried up into the winnowing house to finish the cleaning process. *GADAH*

Swampy mosquito- filled rice fields favored diseases such as malaria, amoebiasis, cholera, and yellow fever – diseases which were deadly to Europeans, American Indians, and enslaved Africans. Many Africans, from the Rice Coast of West Africa, however, possessed a degree of immunity to malaria. Rice planters were often absentee owners who spent the sickly months from early May to late October in the pinelands and the winter social season in their elegant city homes. As a consequence, the year- long process of rice production was frequently managed by the slaves themselves under the direction of a white overseer and a black driver (Pollitzer 1999; Young 1993).

Rice harvesting began with the threshing of the rice. Stalks were then tied into bundles and left on the ground with the heads outward. Enslaved Africans walked down the rows with a flailing stick to beat the grain from the stalks with flailing sticks. The "rough rice" was husked with a mortar and pestle made of very soft pine. This process required a skilled tapping and rolling motion to keep whole grains intact. According to historical accounts, a skilled worker could produce 95% whole grains, while a careless, fatigued, or less skilled worker might break more than half of the grains. Hulls and chaff were then separated from the grains by the winnowing process, which involved tossing the grain into the air from a fanner basket.

Enslaved Africans, however, did a great deal more than clear swamps, dig ditches, prepare rice fields for cultivation, and labor through the year- long process of rice production. The aforementioned tools and techniques came directly from West Africa (Edgar, 1998; Littlefield 1981, 1995; Carney and R. D. Porcher 1993; Clowse 1971). Carney refers to the transfer of rice and rice growing techniques to the Americas as the "diffusion of an indigenous knowledge system" (2001:6).

According to Carney, early records and recent archaeology show that over 100 years before the colonization of South Carolina, an irrigated rice system that harnessed the tides to flood the fields was in place along the estuaries of the Gambia River in West Africa. Africans also used the upland rice method, where rain water was collected in holding ponds to irrigate the fields. These knowledge systems, well established on the floodplains of West Africa, were brought across the Atlantic Middle Passage by slaves who shared their agricultural knowledge with their European owners (Carney 2001; Carney 1993).

The floodgates used in tidewater rice production were referred to as rice trunks in South Carolina. David Doar, descendant of a rice planter, was curious about the use of that term and solved the mystery before writing a book on rice culture, which was published under the sponsorship of the Charleston Museum. In this volume, Doar stated:

> For years the origin of this name [rice trunk] bothered me. I asked every old planter I knew, but no one could enlighten me. One day a friend of mine who planted on one of the lowest places … said to me with a smiling face: 'I have solved that little trunk question. In putting down another one, I unearthed the granddaddy of plug trunks made long before I was born.' It was simply a hollow cypress log with a large hole from top to bottom. When it was to be stopped up, a large plug was put in tightly and it acted on the same principle as a wooden spigot to a beer keg (1936:12).

Although the plug trunk was later replaced by a mechanical hanging gate that regulated the flow of water into the rice fields, the terminology remained the same throughout the colonial period. The term rice trunk was, thus, a carry over from the earliest method of water control in the Low Country – a method used in West Africa during that time period and still used today for mangrove rice production in Africa (Carney 2001). The emergence of rice as the chief export crop along the southeast coast was largely due to this transfer of knowledge from West Africa – agronomic knowledge of cultivation methods, systems of water control, and milling techniques. There is documentary evidence to show that in the period between 1695 and 1715, as rice took hold in the colony, the population of African slaves grew equal to and then surpassed the European population. Enslaved Africans from the rice growing regions demonstrated their engineering expertise in tidal rice production, which is a function of coastal geomorphology, hydrology, and rainfall. Historically, enslaved African ancestors of Gullah/ Geechee people were unique among Africans for their major roles in the development of the rice plantation and the agricultural economy of the region (Carney 1993, 2001).

The Task System: How It Fostered Gullah/Geechee Culture

> *"Don't done your task, driver wave that whip, put you over a barrel, beat you so blood run down."* Hagar Brown, former slave, The Oaks Plantation near Georgetown, South Carolina. – UNC, Southern Historical Collection

The task system was predominant along the South Carolina, Georgia, and north Florida coasts, and differed significantly from the dawn- to- dark gang system practiced in the other colonies. Despite differences in work patterns, enslaved Africans from both the gang and task systems created work rhythms by singing as they labored in the fields. Many of these work songs had secret meanings that referred to freedom, escape, flight to Africa, and sometimes even death (Hargis and Horan 1997).

Rather than working sun- up to sunset, task system slaves were assigned a specific amount of work that was to be completed in one day. This measure of work was called a task, and for an able- bodied field hand, this task could vary from one- fourth acre to one- half acre to be worked depending on the difficulty of the required work. Children and older people were assigned a half task or a quarter task according to their abilities. Once the day's task was complete, their work was done for the day. Slaves were accountable for the results of their labors, but were not necessarily under constant supervision. Slaves were sometimes rented to other plantations or public works projects. In some cases, the funds generated went to the master, but slaves were generally allowed to keep a part or all of the money they earned.

Thus, workers had time for themselves or to help family members who worked more slowly. Elderly slaves were given partial tasks that varied according to their abilities. Those who were unable to work took over child care and other domestic duties in the slave village (Close 1997). In the evenings or on Sundays, enslaved Africans often went to work for themselves, cultivating small gardens adjoining their homes on nearby vacant land. They were able to raise poultry and livestock, fish, gather oysters and crabs, produce handicrafts, and to play music, sing and dance with others in their slave community. At times they were forced to perform for the master, his family, and guests.

Not only did the task system inspire individual initiative and foster development of a strong work ethic, it also encouraged family, religious, and community activities by which the slaves were able to carry on their African- derived customs and practices without fear of interference. There were, of course, some slave owners who foiled these practices by ensuring that assigned tasks were impossible to complete, but most planters saw the perquisites of the task system as morale boosters for their labor force (Hargis and Horan 1997).



Former slave playing banjo, ca. 1902. African in origin, the banjo was often played by slaves in their quarters. Often, under the guise of humor, slave musicians both mocked and criticized their masters. *GWU Exhibit: Culural Landscape of the Plantation; V.C. Schreck, GWU Folklife Exhibit*

Under the task system, enslaved Africans could accumulate money and property. Some were even able to buy freedom for themselves or family members (Hargis and Horan 1997; Morgan 1983). Enslaved men and boys hunted and fished extensively to supplement table rations drawn from their owners and sold excess meat, fish, and skins or traded them for clothing and other goods. Some enslaved Africans established elaborate trading systems for their crops and crafts. Since most plantations had river access, many of the goods were bartered and sold along the rivers, which were the major transportation routes of the day (Crook 2001).

Enslaved Africans had many talents that helped keep the village- like plantation running smoothly and required little or no added expense to the owners. Planters relied on slaves to provide their services as blacksmiths, carpenters, shoemakers, spinners, tanners, coopers, weavers, and other artisan skills. In addition to these skills, enslaved Africans were talented at medicine, midwifery, cooking, quilting, music, song, and dance. As a result of these many skills, enslaved people saw themselves as competent, gifted people who were being held unjustly in bondage against their wills. They often used their talents to portray their work in humorous terms or to secretly deride their masters as in the song below:

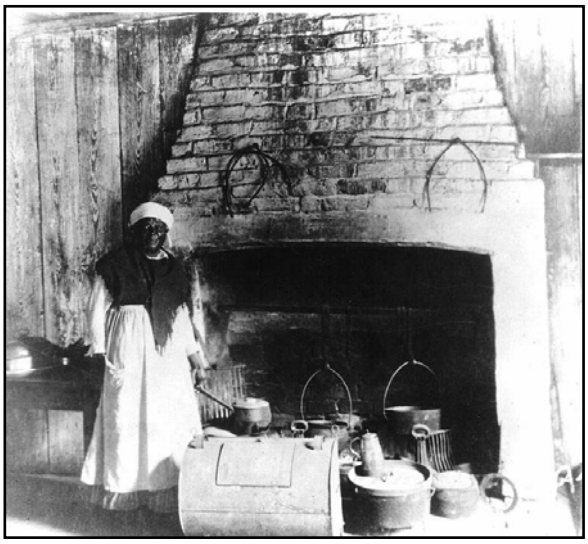
> My old Mistis promise me
> Dat when she died, she gwine set me free.
> But she lived so long and got so po'
> Dat she lef me diggin' wid er garden ho'.
> – Song remembered by former slave Abram Harris of South Carolina

Charles Fairbanks's excavation of a deteriorating slave cabin on Kingsley Plantation, Ft. George Island, Florida, was one of the earliest attempts to view slave life from an archaeological prospective. Since the masses of southerners, both black and white, were illiterate, they did not record their daily experiences for posterity as did the upper class. Consequently, historians are dependent upon the work of historical archaeologists to discover the lost legacy of enslaved Africans and ordinary white people who lived in the planter- dominated society of coastal Georgia and South Carolina (Otto and Burns 1983). Fairbanks documented stories of both fishing and hunting by slaves to supplement their rations. He not only found a lead slip- sinker weight but also found lead shot, a gunflint, and a percussion cap in slave refuse (Ascher and Fairbanks1971; Fairbanks 1974; Ehrenhard and Bullard 1981).

> Probably no historian … will ever know how much our portrayal of Southern society would have been altered if small planters and poor whites [and slaves] had left as many records as the large planters have. In a sense, all studies based on literary sources are selective, the people they describe are selective, the generalizations apply



Last standing slave cabin, Oryzantia Plantation, Hobcaw Barony, Georgetown County, SC.



Kitchen building at Refuge Plantation, Camden Co., GA. Ca. 1880. Note heavy iron cooking pots hanging in fireplace. *L.D. Andrew, from GWU Exhibit: "The Cultural Landscape of the Plantation."*

> only to that small percentage of the population which has left written records (Blassingame 1979).

The American Revolution brought about even more slave autonomy in the Low Country and Sea Islands. The general disruption of war and the military obligations of white men increased the existing tendency toward owner absenteeism and served to increase the isolation between enslaved Africans and the white population. Immediately after the war there was a major surge in the importation of new African slaves to compensate for wartime losses and to secure slave laborers before the federal government curtailed the practice. The late 18th century was, therefore, a time of owner absenteeism, slave isolation, the task system, and an internal slave trade economy. During this period, Gullah/Geechee language and culture took firm root and became the embodiment of the coastal region's cultural distinctiveness (Kolchin 1994).

The fact that enslaved Africans had a measure of independence, free time, and responsibility on the rice plantations is not only testimony to their diligence, ingenuity, skill, and adaptability but is also a source of connection and loyalty to the land itself – a connection that continues to the present in Gullah/Geechee communities and often continues among Gullah/ Geechee people who have left the coastal area. This love of and spiritual connection to the land is yet another reason why loss of family lands has dealt such a devastating blow to the social structure and cultural values of these communities (Armstrong 1980).

Although the task system may have made life a little easier for slaves on coastal plantations, in no way did it compensate for the yoke of slavery under which they were forced to live and work. Like the gang slaves, those under the task system sang work songs that often had secret meanings referring to freedom, escape, or flight to Africa. In some cases the songs called for freedom through death (Hargis and Horan 1997; Parrish 1992).

Although some privileges were granted to laborers under the task system, the fact remains that they were still slaves and were under the direct control of their masters. These human beings were chattel, personal property of their masters, and were subject to arbitrary beatings and other harsh punishments.



Gullah/Geechee farm workers hoeing ricefields, ca. 1900.
Charleston Museum

Enslaved Africans were continuously under the threat of being taken to the auction house and sold to satisfy the debts of their master or his heirs, or, even worse, that their families would be split up and sold. Slaves never accepted their condition, and engaged in work stoppages and work slow downs as a means of protest. They knew their own worth and knew that they produced the crops that made the planters wealthy. Some even kept mental notes of what they believed they were owed. When freedom came, many slaves felt that the plantation where they had been enslaved was rightfully theirs.

While working under the task system provided limited independence and small amounts of personal time to field workers, the task system did not apply to household slaves. Often domestic slaves are imagined as having easier lives than those who worked in the fields – once again conjuring Hollywood images of smiling black mammies in the big house, cooking and tending to the children. According to Catherine Clinton in *The Plantation Mistress*, this antebellum Mammy never existed (1982: 201- 02):

> This familiar denizen of the Big House [Mammy] is not merely a stereotype, but in fact a figment of the combined romantic imaginations of the contemporary southern ideologue and the modern southern historians … Not until after Emancipation did black women run white households or occupy any significant number of the special positions ascribed to them in folklore and fiction.

Clinton believes that "Mammy" was created by antebellum white southerners to depict a familial relationship between black women and white men in response to antislavery attacks from the North. After the war the "Mammy" image may have been embellished for the sake of nostalgia (1982). Cheryl Thurber echoes these sentiments in her "Development of the Mammy Image and Mythology" (1992).

While their work may have been physically easier than field work and their living conditions and clothing slightly better, the work assigned to domestic slaves was never- ending. They were generally on 24- hour call – some were even required to sleep on a pallet near their mistress's bed. Domestic servants were allowed little time for their own meals and practically no time with their own families. When they were permitted to eat, they ate the leftovers or scraps from the family meal. Field hands, however, had more leisure time and freedom of movement with Sundays and later afternoons off to tend their own fields (Harper 1985).

Cooks and their helpers spent most of their time in the kitchen building, where the cooking fire was kept blazing all day and banked at night. The kitchen was an inferno- like sweatshop, particularly during the hot summer months. The cook's work was dangerous, as she was constantly lifting heavy pots, sometimes causing her long skirts and sleeves to come very close to the fire. Although they may have cooked meals for the planter, they were not allowed even to taste what they had prepared until after the master and his family finished their meal. Covered walkways led between the kitchen building and the dining room of the main house. These walkways came to be called whistle walks, as slave women were forced to whistle while carrying food so that they could not eat along the way. Frequently, they were required to eat while squatting before the kitchen fireplace as they cooked for the next meal.

House slaves were more often sexually abused and exploited than field hands. Enslaved women may have survived the Middle Passage only to see themselves and their daughters confronted with yet another terror. Mulatto children fathered by the master or his sons were rarely acknowledged. In her *Diary from Dixie*, Mary Boykin Chesnut, who was mistress of Mulberry Plantation, a major rice producer on the Cooper River in Berkeley County, South Carolina, wrote:

> God forgive us, but ours is a monstrous system, a wrong and iniquity … [A slaveholder's] wife and daughters in the might of their purity and innocence are supposed never to dream of what is plain before their eyes as sunlight, and they play their parts of unsuspecting angels to the letter (Chestnut 1997).

Some masters flaunted their slave relationships, while others kept their illicit liaisons secret. Some of these men sold their mulatto offspring to protect their wives, while others insisted that these children become house slaves. In either case, such children were often separated from their black families. Since it was almost impossible for wives involved in these triangular situations to get out of their marriages, they sometimes took out their frustration in unfair, cruel behavior toward their household slaves.

Planters endeavored to promote and regulate slave marriages for a number of reasons, the most common of which was their hope that slave marriages would yield offspring and thereby increase their wealth. Slave women were ordered to report pregnancies to the overseer, who supposedly granted them lighter workloads. The productive role of women working in the fields and their reproductive roles created an interesting interplay between the annual cycles of crop production and the birth of children.

Procreative activities were subtly coordinated by the nature of the work the women performed. Cheryll Ann Cody studied the reproductive histories of 1,000 slave women on the Ravenel cotton plantations in South Carolina, and found that many enslaved women bore their children in strong seasonal patterns that reflected plantation work and planting schedules. Over one third of the slave children were born during the months of August, September, and October, which indicates that a large number of these women became pregnant during the months of November, December, and January, when labor requirements were reduced due to completion of the harvest and harsh weather (Cody 1996).

The seasonality of conceptions and births had a severe impact on the survival rate of slave infants. Late summer and early fall, times when many women were in their last months of pregnancy, was also the time of the most demanding labor on cotton and rice plantations, and led to a high rate of infant mortality. Women who had given birth were frequently allowed three weeks respite from field work and increased allotments of food and clothing. However, the fact that they were forced to labor in the fields right up until the time of delivery and return to the fields so soon after, indicates that the planters' primary interest was in plantation production rather than reproduction issues (Schwalm 1997).

The Impact of Gullah/Geechee Ancestors On the Coastal Landscape

The labors of Gullah/Geechee ancestors left an indelible mark on the Low Country environment. The Low Country is a place where natural, historic, and cultural resources are inexorably intertwined to form this distinctive setting. Early settlers who came to the Carolina Colony found tall virgin forests of longleaf pine. These forests were the source of the first export products, naval stores, timber, and deerskins. For the deerskin trade, European settlers depended upon indigenous peoples beyond the frontier to supply the trading houses of Charleston, Savannah, and elsewhere. As fields were cleared



Enslaved Africans shooting rice birds (bobolinks). The birds often appeared on plantation tables. *Charleston Museum*



Enslaved African children sitting near slave quarters on a South Carolina rice plantation. *Charleston Museum*

for agriculture, lumber from felled trees could be exported. Thick cypress- gum forests grew along the river banks.

Then came the process that would change the terrain forever. Rice became king, but its status was attained through the forced labor of enslaved Africans. They cleared the cypress- gum forests, where trees were so thick that it was impossible to see the sky. On this land they built an extensive dike system with rice trunks or sluice gates to control the periodic flooding of rice fields. Even today it is nearly impossible to look out over a coastal waterway and not see lingering images of rice fields – imprints of unique patterns of forced human labor. The patchwork outlines of these former rice fields remain as silent tributes to the enslaved Africans who built them.

The blood, sweat, and back- breaking physical labor of these Africans, direct ancestors of the Gullah/Geechee people, made a lasting mark on the tidal river ecosystems of the Low Country. These slave- built structures have remained highly visible and valuable contributory elements of the coastal environment for nearly 200 years. In addition to clearing forests and constructing the rice fields, slaves built boats and canals to carry rice through the salt marshes to the rivers. The rice culture in South Carolina and Georgia caused the most extensive environmental changes of that era along the eastern seaboard.

University of South Carolina archaeologist Leland Ferguson described a rice plantation in terms that may make clear the magnitude of physical labor demanded of the enslaved Africans (1992):

> These fields are surrounded by more than a mile of earthen dikes or 'banks' as they were called. Built by slaves, these banks … were taller than a person and up to 15 feet wide. By [1800], rice banks on the 12½ mile stretch of the East Branch of the Cooper River measured more than 55 miles long and contained more than 6.4 million feet of earth … This means that … working in the water and muck with no more than shovels, hoes, and baskets … by 1850 Carolina slaves … on [tidal] plantations like Middleburg throughout the rice growing district had built a system of banks and canals … nearly three times the volume of Cheops, the world's largest pyramid.

Many abandoned rice fields are now covered over with wild grasses that provide feasts for many thousands of birds and provide havens near the shoreline for river alligators. The pulpwood industry developed around second growth forests. Without the intrusion of rice fields into the cultural landscape of South Carolina and Georgia, there might not be as many lush marshes to serve as

breeding grounds for shrimp and other marine organisms. The wetlands and estuaries along the tidewater river systems that serve as wildlife refuges would be considerably smaller. There would be far fewer migratory and aquatic/marine birds.

Plantation owners of today have become an important force in land conservation efforts and have provided a model for rural land use and conservation nationwide. Tens of thousands of acres of plantation lands have been placed in conservation easements during the past 25 years, thus preventing development and logging. These protected private lands have become the heart of larger conservation efforts such as the ACE Basin (Ashepoo, Combahee, and Edisto River Basin); where over 40,000 acres are currently under protection. The Historic Ricefields Association strongly promoted establishment of The Waccamaw National Wildlife Refuge in the forested floodplains of the Pee Dee and Waccamaw Rivers (Tibbetts 1999).

Ironically, wildlife refuges and conservation easements, while staving off development and protecting the land and its floral and faunal habitats, do not address the plight of landless Gullah/Geechee people. While the land may be protected, its resources are still denied to the people who historically lived there. By law, the lands, waters, seashores, and marshes become unavailable to those who would hunt, fish, shrimp, crab, gather oysters, and collect wild plants for medicinal and craft uses. Under the terms of some forms of natural resource protection, access to baptismal sites and other places of cultural significance may become off- limits to traditional users. Gullah/Geechee culture is traditionally tied to the land, the water, and their natural resources, therefore making access to land and waterways a truly vital part of any efforts to preserve traditional life ways of Gullah and Geechee peoples.

Researchers with the Sea Grant Consortium are currently studying the areas along the Cooper River where breached impoundments are allowing the land to grow thick with vegetation. Unless these dikes are replaced or repaired, the fields could become cypress- gum forests once again. Some landowners want to rebuild the dikes and manage for waterfowl. Boaters and fisherman want the breached dikes to remain as they are because unrepaired impoundments (rice fields) provide excellent fishing sites. (Tibbetts 1999)

At present, environmental scientists are studying the ecology and plant progression of abandoned rice fields within the context of historical land use patterns. They are collecting data and trying to understand the ecological interaction between the river and various stages of plant growth within the fields. As their database grows, scientists hope to be able to predict the impacts of various management options and know more about the ecological consequences of each.

The rice culture and other agricultural endeavors, along with related traditions that have evolved over the centuries, combine to make the Gullah/Geechee people and their surroundings significant in both the regional and national experience. Continued use of this region by Gullah/Geechee people, whose culture and traditions helped to shape the landscape and were in turn shaped by the coastal environment, serves to further enhance the significance of the land and the people.

From Slavery to Freedom to Gated Resorts: Gullah/Geechee Communities From the Civil War to the Present

> *I felt like a bird out of a cage. Amen. Amen. Amen. I could hardly ask to feel any better than I did on that day.* – Houston Holloway, former slave from Georgia recalling the time when slavery ended

> *We has a right to the land where we are located. For why? I tell you. Our wives, our children, our husbands has been sold over and over again to purchase the lands we now locates upon; that the reason we have a divine right to the land … And then didn't we*

> *clear the land, and raise the crops of corn, of cotton, of tobacco, of rice, of sugar, of everything?* – Former slave Bayley Wyat, 1866

The famous Cornerstone Speech was delivered extemporaneously on March 21, 1861, by Alexander Hamilton Stephens, Vice President of the Confederacy, to the largest crowd ever to assemble at the Athaeneum in Savannah, Georgia. His remarks were interrupted by frequent bursts of applause from the audience. Although no official printed version of the speech exists, the text was later printed in the *Savannah Republican* (Cleveland 1886: 717- 729):

> … the new [Confederate] Constitution has put at rest forever all the agitating questions relating to our peculiar institutions – African slavery as it exists among us – the proper status of the negro in our form of civilization … The prevailing ideas entertained by him [Jefferson] and most of the leading statesmen at the time of the formation of the old Constitution were, that the enslavement of the African was in violation of the laws of nature; that it was wrong in principle, socially, morally and politically … Those ideas, however, were fundamentally wrong. They rested upon the assumption of the equality of races. This was an error. It was a sandy foundation, and the idea of a Government built upon it – when the 'storm came and the wind blew, it fell' (Cleveland 1886: 717- 729; Stephens 1862: 44- 46).

At the beginning of the Civil War in April 1861, the slave population of America was estimated to be about 4,000,000. Many thousands were hired out by their masters to build Confederate fortifications and to work as contract laborers for the Confederate Army.

Early in the war, there was no plan to use Africans as soldiers in either army. U.S. Army General David Hunter, however, recruited slaves from Hilton Head and Port Royal Islands in South Carolina, to form the 1st South Carolina Volunteer Infantry Regiment. Both the federal government and Secretary of War Edwin Stanton opposed the radical idea and forced Hunter to disband the regiment. Viewpoints changed later that year, and the War Department authorized General Rufus Saxon, Hunter's successor, to raise 5,000 troops of African descent. Many of the original soldiers recruited by Hunter were mustered into the 51st Massachusetts Regiment under Captain Thomas Wentworth Higginson. In January 1863 the troops came together at the John Joyner Smith plantation, now the site of the U.S. Naval Hospital in Beaufort, South Carolina, to hear the Emancipation Proclamation read for the first time.

In 1864, the regiment was redesignated as the 33rd Regiment of the United States Colored Infantry. They saw considerable action along the coasts of South Carolina, Georgia, and Florida and participated in the occupations of Charleston and Savannah. In addition, they saw action at the Battle of Honey Hill in Jasper County, South Carolina and at the capture of Confederate fortifications on James Island in Charleston County, South Carolina. A historical marker located in the Beaufort National Cemetery now commemorates their contribution to the war effort. The text of the marker follows:

> The 1st South Carolina Volunteer Infantry Regiment was raised from the sea island slaves living near Port Royal. Elements of the regiment were formed on Hilton Head in May 1862. In August 1862, the regiment was reorganized near Beaufort at the Smith plantation. It was commanded by the noted abolitionist Thomas Higginson who led the regiment on raids along the Georgia coast. On January 1, 1863, the regiment was formally mustered into the United States Army. The regiment saw extensive service on the South Carolina, Georgia and Florida coasts. On February 8, 1864, the regiment was redesignated as the 33rd Infantry Regiment of the United States Colored Troops. The regiment assisted in the occupation of Charleston, Savannah, Augusta, and other points until it was mustered out on January 31, 1866.

President Lincoln issued the Emancipation Proclamation in October of 1862, but it did not become effective until the first day of January 1863. During that period, rebel states who re- joined the Union would be allowed to keep their slaves. The proclamation applied only to "rebellious states" and stated "that all persons held as slaves are, and henceforward shall be free." The proclamation not only opened the door for newly freed slaves to enlist in the Union Army but also specifically called upon them to enlist. Black soldiers had not been recruited prior to that time because they were prohibited from enlisting by an obscure federal law from the 1790s. Under the Proclamation, freedmen would be welcomed "into the armed service of the United States to garrison forts, positions, stations, and other places, and to man vessels of all sorts in said service." Lincoln further stated, "The colored population is the great available and yet unavailed of force for restoring the Union."



Robert Scott Smalls (1839-1916) was born into slavery in Beaufort County, SC. He served in both the SC Senate and the US Congress, and a delegate to the SC Constitutional Convention.

After the Emancipation, some newly freed slaves left the plantations and joined the Union Army, but many adopted a "wait and see" stance. Some evacuated with their masters' families; some stayed behind and farmed the land where they once had been enslaved.

Freedmen who opted for service in the Union Army faced additional difficulties created by racial prejudice, which was rampant even in the North. Segregated units were formed, usually consisting of black enlisted men commanded by white officers. Although many blacks served in the artillery and infantry, discriminatory practices within the military resulted in the assignment of large numbers of freedmen to the performance of non- combat, support duties as cooks, laborers, and teamsters. African American soldiers were paid $10 per month, from which $3 was deducted for clothing. White soldiers were paid $13 per month, from which no clothing allowance was deducted. Black soldiers faced much greater peril and suffering than did their white counterparts if they were captured by the Confederate Army.

In spite of their many hardships, African American soldiers comprised about 10 per cent of the Union Army. They served the Army well and distinguished themselves in many battles even though it is estimated that one third of all African American enlistees lost their lives, most to disease. By the time the war was over, around 180,000 African American soldiers had joined the fight.

Circumstances were different in the Union Navy. African American sailors were generally experienced harbor pilots or cargo workers. Although no former slaves served as officers, there was no segregation aboard ship. Quarters were much too small, and the workload much too heavy for racial segregation to occur.

Robert Scott Smalls, who was born a slave in Beaufort County, South Carolina, is one of the best-known Gullah participants in the Union war effort. He was taken to Charleston as a youth, where he worked at a variety of jobs along the waterfront and learned many seafaring skills. Smalls was never satisfied with his enslaved status and was determined to free himself. He taught himself to read and write, mastered the difficult currents and channels of Charleston Harbor, and waited for his chance to escape.



Funding is being sought to create a park at the Mitchellville Site, Hilton Head Island, SC.

During the Civil War, Smalls became the *de facto* pilot of a transport steamer, the *Planter*, which was under contract to the Confederates. On the evening of May 12, while the *Planter* was docked in Charleston Harbor, the white Confederate officers went ashore to attend a party and left the black crew alone. Before dawn on May 13, 1862, while the ship's white officers slept, Smalls smuggled his wife and three children aboard the *Planter* and took command of the vessel. As Smalls had been the wheelman, he was familiar with Charleston Harbor as well as Confederate gun and troop positions. He and his crew of 12 slaves sailed the *Planter* past the other Confederate ships in the harbor, gave the correct whistle signal as he passed the Confederate forts in the harbor, and sailed out to sea.

When he had sailed beyond the range of Confederate guns, Smalls hoisted a white flag and delivered the *Planter* to the commanding officer of the Union blockade. Smalls and his black crew were welcomed as heroes, and the ship was received as contraband. Later, Smalls stated that he intended the *Planter* to be a contribution by black Americans to the cause of freedom.

President Lincoln later received Smalls and his crew in Washington where he thanked them for their bravery and valor. Congress passed a bill, which was signed by Lincoln, which awarded prize money to Smalls and his associates for their gallantry. Smalls was given official command of the *Planter*, a position he held until the end of the war (Miller 1995; Sterling 1958; Uya 1971).

Following the war, Smalls returned to his home state of South Carolina and entered politics. He served in the South Carolina Senate from 1868 to 1870. In 1875 he was elected to the U.S. Congress as a Republican for the first of five terms. While serving in the Congress, Smalls fought for equal travel accommodations for black Americans and for the civil and legal protection of children of mixed racial parentage. He was one of the six black members of the South Carolina constitutional convention of 1895. After leaving Congress, Smalls was duty collector for the port of Beaufort. He retained his interest in the military and served as a major general in the South Carolina militia.

On November 1, 1895, Smalls made the following statement, "My people need no special defense, for the past history of them in this country proves them to be the equal of any people anywhere. All they need is an equal chance in the battle of life." This statement has been carved in stone at the site of his memorial at Tabernacle Baptist Church in Beaufort, South Carolina.

Although there are documented reports of enslaved Africans fighting as soldiers in both the Confederate Army and Navy, there is controversy surrounding the issue of numbers. The Confederate Army, like the Union Army, was segregated, but also like the Union Navy, the Confederate Navy was not segregated by race (Werlich 1990).

> As a major port, Charleston had a pool of local seamen, who formed the nucleus of [Admiral John Randolph] Tucker's crews. Beauregard readily permitted his navy colleague to seek recruits from the ranks of the general's army. Long before Richmond, in desperation, seriously considered placing blacks in the army, Tucker's squadron had at least three black sailors, freemen serving on the *Chicora* (Werlich 1990: 62).

After the fall of Charleston, Tucker and his men evacuated to Virginia, where he organized a naval battalion which participated in several land engagements including the defense of Richmond. They later marched with the Army of Northern Virginia to Appomattox and are listed on the surrender rolls. Charles Cleaper, Joseph Johnson, and J. Heck – Tucker's three black sailors from the *Chicora* – were the only African American soldiers to participate in General Robert E. Lee's campaign (Werlich 1990).



The sewer comes to Sunrise Drive in the Harrington section of St. Simons Island, GA. For sale signs soon followed.

Slaves often went to war with their masters and were servants or stewards. In South Carolina and perhaps in other areas, the legislature voted pensions for "faithful negroes (*sic*) who stood by their masters" (*The Chattanooga Times* March 7, 1923 quoted in Segars and Barrow 2001:74). Other black southerners served in non-combatant roles as teamsters, musicians, hospital attendants, blacksmiths, hostlers, foragers, cooks, wheelwrights, and laborers on fortifications and were paid the same wage as Confederate privates. Although in today's military these support functions are performed by soldiers, such was not the case at the time of the Civil War (Segars and Barrow 2001).

Toward the end of the war, however, the Confederate Army was desperately in need of more soldiers, and some people began to speculate that it might be better to use slaves to fight than to lose the war. Up until the very last weeks of the war, members of the Confederate Congress, as well as General Robert E. Lee and President Jefferson Davis, were hotly debating the question of whether to use slaves in the Southern armies. In March of 1865, the Confederate government began actively recruiting and enlisting black soldiers. In early 1865, Robert E. Lee publicly advocated the enlistment of black troops, and in March, the Confederate Congress authorized raising 300,000 new troops "irrespective of color." General Ordinance No. 14 stated:

> "No slave will be accepted unless with his own consent and with the approbation of his master by a written instrument conferring the rights of freedmen …" (U.S. Army Official Records: 1161; Rollins 1994: 26).

On January 12, 1865, Major- General William Tecumseh Sherman, who was in the midst of his infamous "march to the sea," met with Secretary of War Edwin Stanton and 20 black clergy and community leaders from Savannah, Georgia, to discuss the future of former slaves after their emancipation. In his memoirs, Sherman states that he asked the black leaders if they preferred to live among the white people or in separate communities. Garrison Frasier, spokesman for the group, replied, "I would prefer to live by ourselves, for there is a prejudice against us in the South that will take years to get over." Nineteen of the twenty black men agreed. Sherman and Stanton considered this information, and four days later on January 16, 1865, Sherman issued Special Field Orders Number 15, in which he set aside:

> 1. The islands from Charleston south, the abandoned rice- fields along the rivers for thirty miles back from the sea, and the country bordering the St. John's River, Florida, are reserved and set apart for the settlement of the negroes now made free by the acts of war and the proclamation of the President of the United States.
>
> 2. At Beaufort, Hilton Head, Savannah, Fernandina, St. Augustine, and Jacksonville, the blacks may remain in their chosen or accustomed vocations; but on the islands,

> and in the settlements hereafter to be established, no white person whatever, unless military officers and soldiers detailed for duty, will be permitted to reside; and the sole and exclusive management of affairs will be left to the freed people themselves, subject only to the United States military authority, and the acts of Congress. By the laws of war, and orders of the President of the United States, the negro is free, and must be dealt with as such …
>
> 3. Whenever three respectable negroes, heads of families, shall desire to settle on land, and shall have selected for that purpose an island or a locality clearly defined within the limits above designated, the Inspector of Settlements and Plantations will himself, or by such subordinate officer as he may appoint, give them a license to settle such island or district, and afford them such assistance as he can to enable them to establish a peaceable agricultural settlement. The three parties named will subdivide the land, under the supervision of the inspector, among themselves, and such others as may choose to settle near them, so that each family shall have a plot of not more than forty acres of tillable ground, and, when it borders on some water channel, with not more than eight hundred feet water- front, in the possession of which land the military authorities will afford them protection until such time as they can protect themselves or until Congress shall regulate their title … (Sherman 1875).

Thus, each family was to receive 40 acres of land and, when available, an army surplus mule to work the land. Sherman assigned General Rufus Saxton to implement the Order. According to Sherman, he wanted to "… give the freedmen protection, land and schools as far and as fast as he can" (1990). The Bureau of Freedmen, Refugees, and Abandoned Lands was formed to assist with land acquisition and to provide schools for the newly freed people throughout the South. Eventually over 40,000 blacks were settled on 40- acre tracts. However, many were driven from their newly acquired land during the summer and fall of 1865, when President Andrew Johnson reversed Sherman's order, issued special pardons to Confederate rebels, and returned much of the property to its former owners. Thus, among African Americans, the phrase "40 acres and a mule" has become synonymous with an empty promise.

Slavery in the United States was finally outlawed on January 31, 1865, by the 13th Amendment to the United States Constitution, which states:

> Neither slavery nor involuntary servitude, except as a punishment for crime whereof the party shall have been duly convicted, shall exist within the United States, or any place subject to their jurisdiction.

Strategies to disfranchise and further undo the empowerment gained by African Americans drove both the South's economic and social policies immediately following the Civil War. The implications of these policies for African Americans were the significant push factor that drove the out- migration of Gullah/Geechee people. In 1900, migration patterns of most African Americans were limited geographically. Almost 90 % of all African Americans lived in the South and many continued to stay until the Civil Rights Movement of the 1960s created another large out- migration (See Demographic History section).

Scholarly opinion is mixed as to when racial segregation became standard practice. According to George Tindall:

> At the end of the Reconstruction period the pattern of racial segregation had not been rigidly defined. [During the next 20 years] segregation became an established and unquestioned fact in all the institutions and relationships between the two races" (1966:291).

Joel Williamson, on the other hand, believes that "well before the end of Reconstruction, separation had crystallized into a comprehensive pattern which, in essence, remained unaltered until the middle of the twentieth century" (1965:275).

After freedom came, Gullah/Geechee people acquired land in many ways. Some received lands via the Special Field Orders, some joined in groups to purchase lands, others claimed land that had been abandoned by its former owners. Land ownership became and continues to be a very high priority for these previously enslaved peoples. Small settlements, often beginning as intergenerational family compounds, sprang up – sometimes on lands where new landowners had previously been enslaved. These small communities, bound together by family ties, helped one another through the time of extreme poverty in the immediate aftermath of the war.

Subsistence farming and fishing were the greatest sources of table food and income. Open lands were also available for hunting and provided yet another means to supplement the table. Utilizing the resources available to them, Gullah/Geechee people developed an economic base that ensured community solidarity and self- sufficiency. Because of this independence, Gullah/Geechee people were not subjected to the share cropping system to the same extent as were freedmen farther inland. Elders of these socially well integrated Gullah/Geechee communities passed on distinct language, stories, customs, and social practices to each new generation. In this respect, women were especially important in the transmission of distinctive Gullah/Geechee family rituals and esoteric cultural lore.

Able- bodied family members provided table food and other resources to the elders, the disabled, and those unable to fend for themselves. This system of providing food and resources continued to function during the Great Depression, as close family ties and sharing of sustenance kept communities together. Development and crystallization of distinct free- holder Gullah/Geechee communities and family compounds continued through the late 19th and early 20th centuries.

Toward the end of the 19th century, the timber industry, seafood processing, subsistence farming, and commercial fishing contributed to a "Golden Age" of Gullah/Geechee economic self- sufficiency, relative freedom from outsider intrusion, and blossoming of performing and graphic arts.

The late 19th century also saw the construction of the United States Naval Station, Port Royal, which lies along Port Royal Sound [Beaufort County, SC]. The base was re- named as a Marine Corps Recruit Depot in 1915 and continues to play a significant role in the local economy.

The early 20th Century brought about the "discovery" of Gullah/Geechee language and culture by artists and scholars. During the same timeframe, there was a parallel "discovery" by those desiring Gullah/Geechee natural resources and lands. Northern commercial fishermen with capital and large motorized vessels slowly began to replace small independent black fishermen and shrimpers from Charleston to Florida. Some African American men went to work on the larger vessels; others shifted to the pulpwood industry. Gilded Age magnates, automobile touring, and bridges brought the first major wave of modern outside land pressure, stress, and influence to coastal communities of the Gullah and Geechee people.

World War II brought significant changes to the area. In addition to the Marine base at Parris Island, the government acquired lands in the Harris Neck Community in McIntosh County, Georgia, to build coastal defense air strips. The post- war boom and the invention of air conditioning further stimulated an influx of middle class Americans in significant numbers as year- round residents of the coast.



This 1950s era barbershop (above) stands abandoned in the Harrington community, St. Simons Island, GA.



These St. Simons Island row houses (left) were built in the 1940s to house employees of Sea Island resorts. The houses now stand empty, but could possibly be adapted for re-use as bed and breakfast cottages.



This 100 year-old structure was once Boney Brown's Store and family residence on Squire Pope Road, Hilton Head Island, SC. Although the Brown-Grant family had hoped to save the building, it was recently demolished.



During the 1940s and '50s, Hazel's Café was a thriving restaurant in the Southend Community on St. Simon's Island, GA. Today the building is used for private parties.



Charlie Simmons once owned the gasoline powered boat that made daily runs from Broad Creek on Hilton Head Island to Daufuskie, Beaufort, and Savannah. The building above once served those waiting to catch the boat. It was later made into a "juke joint" and then a fish camp. A restaurant is now planned for the site.

Thus, Hilton Head Island, ironically the location of administrative headquarters for the Freedman's Bureau in the early days of Reconstruction, became, one hundred years later, the type- case reference point for massive social displacement and economic "swamping" of Gullah/Geechee people and their culture. "We don't want another Hilton Head" is commonly used nowadays as a precautionary warning against unbridled development of undisturbed locales yet to be "discovered" by outsiders. In some areas, land use conflicts have been occurring for decades, but in some parts of the region many landowners ignored planning issues until quite recently (Heflin 1993).

Many Gullah/Geechee people, who live in rural communities, have traditionally relied on septic systems and well water. Improperly located systems, more maintenance and increased population density, however, may lead to septic system failure and contamination of groundwater.

In such cases, even these rural residents may request access to public sewer and water. Ironically, developers often join residents in lobbying for new water and sewer lines. New water and sewer lines frequently attract rapid growth of large residential subdivisions and subsequent commercial strip development. As commuter traffic clogs the roadways, residents demand new or expanded roads, which attract even more people. The increased services lead to higher taxes, rural sprawl, and ultimately to the suburban sprawl that is rampant along the coasts of both South Carolina and Georgia (Tibbetts 2001).

Although Gullah/Geechee people have made gains in civil rights, the intrusions of development and the subsequent population explosion along the coast have brought a growing awareness of the imminent loss of their language, their culture, their traditional way of life. Gullah/Geechee people do not seek to live in the past or to arrest the flow of history. Rather, they are a living, changing people – a culture of survivors who seek to adapt and thrive in the 21st century in new ways, but without exploitation, without gentrification or commodification, and without the intrusion of a "New Plantation" economy (Pinsky 1983, 1992).

Demographic History

Until recently, the Gullah/Geechee people of the Low Country and Sea Islands of South Carolina and Georgia were for the most part a genetically isolated and insulated population. Due to the continued importation of slaves into the 19th Century, this population was among the last in the United States to receive a genetic contribution directly from Africa. Because of their isolation, the Gullah/Geechee people are more closely related anthropometrically to their West African ancestors than other African American populations. They also show less evidence of European ancestry (Pollitzer 1999).

When Europeans and Africans first arrived in coastal South Carolina and Georgia, the area was fairly thickly populated by American Indians, but as a result of the introduction of exotic diseases from Europe and Africa, there was a quick die- off of the Indian population along the coast. Through the early years of the colonies, small pox, pneumonia, tuberculosis, swamp fevers and agues plagued white colonists and their enslaved African and American Indian laborers. While small pox struck all races with equal force, tuberculosis and respiratory ailments took a higher toll on the black population. However, when faced with the swamp fevers such as malaria and yellow fever, there was from the beginning a noticeably lower rate of morbidity and mortality among the enslaved population. This immunity among slaves was only partial, but was also inheritable. Planters may not have known the reason for this immunity, but they quickly recognized the economic advantages of the condition. Thus, planters and their families moved away from the swampy rice fields during the mosquito season and left the plantations to be managed, for the most part, by the slaves themselves (Dobyns 1983; Pollitzer 1958; Waring 1964; Wood 1974).

Through the early 20th century, the African- derived population was the demographically dominant population. This was due in part to the frequency of the hemoglobin beta gene (HBB) found on chromosome 11p15.4. This gene occurred at a higher rate in Gullah/Geechee people than in other African American populations, but was about equal to the West African rate. Carrier frequency of HBB varies significantly around the world, but high rates are generally associated with regions such as coastal Africa and Mediterranean countries where there is a high incidence of malaria. Carriers of the gene in its heterozygous form (inherited from only one parent) exhibit a significant degree of protection from malaria, a disease that plagued the Low Country through the 18th and 19th centuries.

The cost of this genetic adaptation was, however, very high. The same gene in its homozygous state (inherited from both parents) causes sickle cell anemia, and early death. Those born entirely without the trait were subject to lethal malarial infections that led to high infant mortality. Sickle cell anemia has appeared in Gullah/Geechee people at a higher level than in other African American populations. As increasing marriage to non- Gullah/Geechee people continues to dilute the gene pool, the sickle cell trait is occurring with less frequency (Curtin 1968; McNeill 1977; Pollitzer 1999; Wood 1974).

The black majority dominated the Low Country until well into the 20th century (Wood 1974). As the population of the Low Country grew between 1900 and 1950, the coastal regions and Sea Islands grew 115% in comparison to an average of 104% for the states of South Carolina, North Carolina, Georgia, and Florida. The national growth rate during that period was only 99%. The population increase of whites drove the overall growth rate. The African American population exhibited a fairly stagnant rate of change.

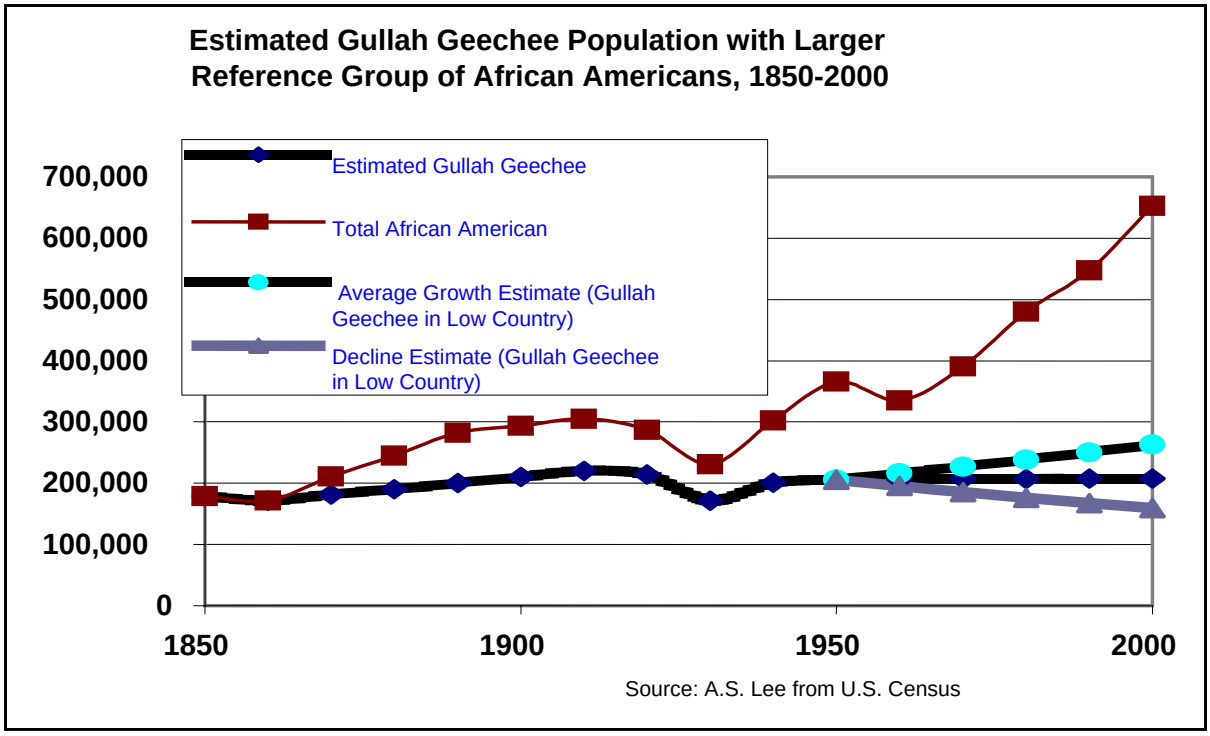
The first half of the 20th century reflects the most dramatic rate of change for racial composition in the Low Country. The ratio of black to white population, which had been 3 to 1 in 1850, declined to 2 to 1 in 1900 and to 1/2 to 1 in 1950. The white population of Georgia began to exceed the black population during the 1930s; while in South Carolina this change did not come about until the 1950s. The large deviation of racial population ratios may be attributed to a combination of several factors, including white migration into the area, black emigration to the North or to Low Country cities, agricultural trends, health care, and military presence (See chart to follow).

Between 1900 and 1930, tens of thousands of Gullah/Geechee people left the South and headed north where they could escape the poor southern economy and the segregationist Jim Crow laws. During that period, the population of St. Helena Island, South Carolina, decreased from 8,285 to 4,458 (Kiser 1932). This out- migration resulted in a second diaspora of Gullah/Geechee people and extended the reach of their culture far from the coasts of Georgia and South Carolina and into the heart of urban America. As Al Calloway, one of the commentators on the public review draft of this report stated:

> Most Americans have no idea how many African Americans are 'touched' by what some of us grew up calling 'Geechee.' The church I grew up in – The Metropolitan AME Methodist Church in Harlem, New York City – had an original membership of mostly first generation removed South Carolinians and Georgians. They came from the Charleston area and the islands around, as well as from coastal Georgia. The red rice, greens, candied yams, deep fried chicken and cornbread cooked every Sunday at church, and the accents and strange words used and understood, especially by the adults, gave a sense of belonging to a tradition far different from the fare encountered outside those walls. The music was haunting, spiritual, deep gospel. All the way from Mother Africa.

Shifts in Total African American Population 1995 - 2000			
State	*In*	*Out*	*Net Gain*
Florida	168,862	117,576	51,286
Georgia	253,237	122,488	130,749
North Carolina	142,875	89,504	53,371
South Carolina	77,555	61,302	16,253
Total Net Gain	642,529	390,870	251,659
Source: US Census Data			

Coastal Population Growth 1850-2000			
Location	*1850-1900*	*1900-1950*	*1950-2000*
United States	229%	99%	86%
South Carolina, Georgia, Florida	146%	104%	238%
Study Area	75%	115%	151%
Source: US Census Data			



Around the middle of the 20th century, there was significant immigration into the study area by African Americans and others from different regions of the United States. At the same time, there were increased incentives for Gullah emigration from the region, thus increasing Gullah/Geechee out- marriage. In general, genetic isolation of the traditional local African American population has been reduced, with a concomitant reduction in Gullah/Geechee population distinctiveness to whatever extent it previously existed.

The trend of African American population decline as a percentage of the total population began to change with the passage of the Civil Rights Act of 1964. This legislation delineated the framework for



Charlie Mule cart view of Sapelo Island, Cultural Day 2002. *Diedre Laird, SC Desk, Charlotte Observer*

equal status under the law for all Americans. During the mid 1970s, as job opportunities dwindled and racial tensions intensified in northern urban areas, fewer blacks left the area. While the African American population has increased steadily since the 1960 census, the proportion of African Americans has remained steady at approximately 30% of the total population (Lee 2002). Blacks started returning to the South from other regions between 1975 and 1980. Since that time, the Northeast and Midwest have experienced net losses in African American population, while the West and the South have experienced gains.

Because of Gullah/Geechee out- migration and the immigration of African Americans from other regions, it is difficult to determine from available census data just how many Gullah/Geechee people specifically live in the South Carolina/Georgia coastal area at present. Similarly, attempting to estimate the total number of Gullah/Geechee people everywhere in the world today would be virtually impossible. Nonetheless, by projecting local historic African American demographic growth rates using pre- 1950 census data, the project team estimates that there are between 159,222 and 262,623 Gullah/Geechee people within the total African American population of 652,701 reported in the 2000 census for the coastal counties of South Carolina and Georgia.

Cultural survival does not, however, require genetic isolation. Indeed, some degree of continuing out- marriage has always been adaptively advantageous to small human populations – culturally, socially, politically, and genetically. The same is true of the Gullah/Geechee population under the current conditions of stress and change. Nonetheless, perception of the loss of Gullah/Geechee social integrity resulting from persistent and expanding marriage to non- Gullah in combination with other social changes – may be perceived as a major stressor

Gullah/Geechee Language

> *If you get the full Gullah, it's a song language. That's the deep Gullah. It is a song language and not a deaf language like English. The speaker of a song language doesn't mean exactly just the words alone, but when he has once spoken them, he really couldn't have said it any better. If you catch the song, you can tell exactly what he means. – Sam Gadsden, born 1882 (Lindsay 2000)*

A unique creole language is spoken along the Sea Islands and adjacent mainland of South Carolina and Georgia. The linguistically distinct Gullah language is found in both South Carolina and Georgia, but the language and its speakers are typically referred to as "Geechee" in Georgia. As a creole language, Gullah began as a pidgin, a simplified speech used for communication among people of different languages. The pidgin likely began in the castles and *barracoons*, outdoor prison- like enclosures where captives were held before being loaded onto the slave ships. The language, with its vocabulary and grammatical roots in European and African languages, developed for practical purposes as a way for Africans and their captors from different linguistic origins to communicate with one another.

Creolization is a linguistic process that emerges from pidgin speech codes. If a pidgin becomes the only form of communication for a succeeding generation of speakers, the processes of linguistic evolution takes over to produce a complete language. Thus creole languages have their own phonological, syntactical, and grammatical rules even though the vocabulary is derived from the ancestral languages which gave rise to the pidgin (*cf.* Hall 1965).

This ability to communicate was instrumental in the blending of diverse cultural experiences and retention of African roots. As the Atlantic slave trade continued to flourish, vocabulary from English, French, Portuguese, and other European languages were added to the mix to facilitate communication with European slave owners. The Gullah/Geechee language is the only distinctly African American creole language in the United States. It has indirectly influenced the vocabulary of the American South and has contributed to traditional Southern speech patterns.

Although many Gullah/Geechee words are derived from English, Gullah is decidedly not a dialect of English. Gullah is recognized by linguists as a separate language distinguished from English by mutual unintelligibility, *i.e.*, native speakers of only Gullah or only English would not be able to understand one another. Even during the Ebonics controversy of the 1990s, the integrity of Gullah as a language was not seriously questioned by linguistic scholars.

In addition to its phonological and syntactic distinctiveness, Gullah has retained certain lexical items and morphological features derived from various African languages. Gullah existed as a largely ignored linguistic phenomenon until the research of Lorenzo Dow Turner (1949) in the 1940s. Turner, a North Carolina native who was the first professionally trained African American linguist, demonstrated that Gullah/Geechee languages contained linguistic features drawn directly from the languages of West Africa. It was these Africanisms, first noted by Turner, that were for many years the focus of Gullah linguistic studies. More recently, however, linguists have produced highly technical studies of such aspects of Gullah language as stress patterns, tense- mood- aspect, and variations in auxiliary verb use (Hopkins 1994). Although challenging for the layman to understand, such technical studies of the Gullah language contribute to general scientific understanding of the nature of human language and linguistic change.

Although Turner died in 1972, his widow Lois Turner Williams believes that his research should live, not only as a chronicle of the past but also as a lesson for the present. "He understood the structure of their [Gullah] speech didn't come about because of any laziness or an inability to make the proper sounds," as had been frequently put forth by some. His research clearly demonstrated that Gullah

Gullah	English
ooman	woman
oonuh	you
tittuh	sister
enty?	Is that so?
buckruh	white man
E	he, she, it, his, her
day clean	dawn
coota	turtle
krak teet	talk
nyam	eat
gwine	going
wegitubble	vegetable

speech patterns are not an indicator of intelligence but from the Gullah/Geechee language and culture that had been passed down through the generations by oral tradition (Richissin 1997).

Despite its legitimacy as a language, use of Gullah or Geechee was for many years considered to be a mark of low status and ignorance and, thus, was a source of pejorative remarks. Many people, including educators, viewed it as substandard or broken English, and encouraged children to give up their native language in favor of so- called "standard English." There was, of course, no option for learning English as a second language, since Gullah was not widely viewed as a legitimate language at that time. Since Emancipation, distinctive Gullah language and folk culture have been subjected to strong acculturative forces and concomitant pressure to assimilate rather than remain ethnically distinct. Assimilation came more rapidly for people in mainland communities that did not have the protection of isolation.

Delo Washington, St. Helena native and retired professor from California State University at Stanislaus, describes the negativity once associated with use of the Gullah language:

> For a long time, it was considered negative to be Gullah, though we didn't grow up feeling negative about ourselves. But we were considered strange people with a strange language. You couldn't get a job speaking that way. In the '60s, scholars and others began to take a different view of the Gullah- Geechee culture. Africa was seen in a more positive light, particularly by African Americans (Glanton 2001).

Contempt for the language and derision toward those who use it were recently discussed with one of its most famous speakers, United States Supreme Court Justice Clarence Thomas. Thomas, who was born in Pin Point, Georgia, a small tidewater community southeast of Savannah, remembers his Geechee beginnings. In December 2000, Justice Thomas participated in a televised question and answer session with high school students. When asked why he did not pose questions in oral arguments before the Supreme Court. Thomas replied,

> … But I'm going to give you a more personal reason, and I think this is probably the first time I ever even told anybody about it … When I was 16, I was sitting as the only black kid in my class, and I had grown up speaking a kind of a dialect. It's called Geechee. Some people call it Gullah now, and people praise it now. But they used to make fun of us back then. It's not Standard English. When I transferred to an all-white school at your age, I was self- conscious … I was trying to speak Standard English. I was thinking in Standard English but speaking another language … I just started developing the habit of listening … I didn't ask questions in college or law school. And I found that I could learn better just listening … ("In His Own Words" 2000; Wermiel 2002).

Over the past several years, Justice Thomas has become more interested in learning about his ancestry and cultural heritage and in sharing the experiences of his youth. He has recently expressed an interest in researching and writing a book about his Gullah/Geechee heritage. "This is a passion of mine, starting to work on a book. For years I've been interested in figuring out all of this" (Davis 2001;

Milloy 2000). Some Gullah/Geechee people within the study area have expressed negative feelings toward Justice Thomas because they believe he has not claimed his heritage and does not contribute to Gullah preservation efforts.

The Gullah language passed through the generations as an oral tradition and has no widely accepted written form. The absence of a standard written form of the language makes preservation even more difficult. As with any living language, Gullah/Geechee continued to evolve through the centuries, but since the mid 1950s the language has changed substantially. The language has incorporated more and more "standard" English loan- words. Accents, cadences, and speech patterns are becoming more anglicized. Loss of the language is of grave concern to many people who attended the Special Resource Study public meetings.

The elders are dying, and young people in many communities often seem to have no interest in learning to speak "that funny way that old folks talk," as was stated by a meeting participant. For that reason, many of those in attendance at SRS public meetings felt strongly that educational programs were necessary so that their young people could learn to have pride and respect for their ancestry, heritage, culture, and language. Some organizations are providing cultural education for the children in their communities, including instruction in the language. Extinction of the language would mean not only a loss to linguistic science but also the disappearance of a mode of practical communication and artistic expression that is at the core of Gullah/Geechee cultural identity.

The Gullah language is at a critical point for its survival. Gullah is now most frequently spoken in the home or by the elders of the community, although young people are beginning to take more interest in their cultural heritage. By the late 20th century, as the number of native speakers of Gullah dwindled, pride and concern for the preservation of the language began to surge in some communities. Formal artistic use of Gullah language is increasing among writers, storytellers, performance artists, and even tour guides. Some common Gullah words and phrases, which were heard frequently during this study, are illustrated in the table above (Frazier 1995; Geraty 1998).

Although their work is sometimes considered controversial by some Gullah people, non- Gullah people have contributed to the preservation of Gullah language and plantation spirituals. Virginia Mixson Geraty, a public school librarian, spent much of her life documenting the Gullah language that she first heard as a five year- old child on Yonges Island, South Carolina. As she once recalled, "I just fell in love with the language. It sounded like the women were singing" (*Post and Courier* Editorial: A10). She recognized the problems incurred by Gullah- speaking students at her school and sought ways to help them survive academically within a system that did not yet recognize Gullah as a true language.

Geraty, who died in 2004, made the study and preservation of the Gullah language her passion and her life's work, beginning at a time when people who spoke Gullah were ridiculed. Former South Carolina state Representative Lucille Whipper, a member of the steering committee for the International African American Museum in Charleston, was quoted as saying that Mrs. Geraty was ahead of her time, explaining: "I give her credit for early on recognizing the significance of the Gullah language and its impact on our culture, and being very persistent in her attempts to preserve Gullah and give it the respectability that is now more accepted. We have come a long way from thinking it was degrading to recognize the positive influence of Gullah" (Hardin 2004).

The Society for the Preservation of Spirituals, a group of white planter descendants, was formed in 1922 to sing African American spirituals in the Gullah language. They feared that the congregational style of singing this powerful music would be lost as printed hymnals became more and more prevalent. Determined to preserve the traditional style of performing Gullah spirituals, members resolved to collect Low Country spirituals, to sing them as authentically as possible in Gullah, and to pass the tradition on to the next generation. In 1936, the society acquired a recording device that made recordings on aluminum discs. Members carried the machine in a Model T Ford, jacked up the car,

wrapped a belt around the axle to power a generator, dropped a microphone through the church window, and recorded services at African American churches in Charleston and surrounding Sea Islands. The 50 aluminum disks recordings are now deposited in the Archive of American Folk Song. In 2004, the society published a book and compact disc of the spirituals collected and sung by three generations of members. Since African Americans are now actively involved in the preservation and performance of their musical heritage, the society no longer performs in public, but members still gather to sing the songs they love and consider to be a part of their own heritage (*Spirituals of the Carolina Low Country* 2004).



African American monument, Savannah, GA.

Gullah/Geechee Traditions, Crafts, and Arts

The distinctiveness of Gullah/Geechee culture is clearly defined through a variety of artistic and craft traditions. Many writers and scholars have studied and/or described and analyzed metalworking, quilting, basketry, net making, woodcarving, music, and folklore.



Philip Simmons, born in 1912 on Daniel Island, has spent most of his life in Charleston, SC. He is known worldwide for his ironworking skills.

Some of the earliest scholarly research on Gullah folklore was by Elsie Clews Parsons (1923), a major figure in early American anthropology. Following in Parsons' tradition have been dozens of folklorists, musicologists, ethnologists, literary scholars, and others who have attempted to describe, analyze and place into functional context the arts and crafts of Gullah/Geechee people.

Gullah/Geechee people have a rich tradition of oral literature and history including legends, folktales, stories, and accounts of supernatural events such as spiritual attacks by hags and other evil entities (Hufford 1976; Ross 1980). Gullah/Geechee also articulated their oral history through songs. Some elements of Gullah/Geechee culture have been popularized through the creative arts in such works as George Gershwin's folk opera *Porgy and Bess* (1934).

Gershwin's opera, the best known of all American operas, was based on *Porgy*, a novel by DuBose and Dorothy Heyward (2001), which was set in Charleston, South Carolina, but several of its key characters and themes are clearly Gullah in culture. Julia Peterkin received the Pullitzer prize for her novel *Scarlet Sister Mary* (1928), in which she candidly portrayed Gullah women and the richness of rural black culture in a manner than was unusual for her time. Peterkin's novels were also dramatized but did not achieve the success of *Porgy and Bess*.

Literature and Art

Generations of Americans have delighted in the *Uncle Remus* tales, which have left an indelible if somewhat distorted imprint on American mass culture. The *Uncle Remus* tales, despite being recorded by a white journalist, are now generally held by African American scholars as good representations of the animal folktales told by enslaved Africans on Turnwold Plantation near Eatonton, Georgia. Since the slave culture was primarily one of oral tradition, Joel Chandler Harris' 19th century documentation of the folklore and stories may have, in fact, helped to preserve them. Although the *Uncle Remus* tales were collected on an inland plantation, they derive from the traditions of enslaved Africans of the Gullah/Geechee coast. Further impressing the tales of Br'er Rabbit on American popular culture was Walt Disney's *Song of the South*, a motion picture adaptation of the *Uncle Remus* stories. Although controversial for its benign view of slavery and portrayal of contented slaves, the Disney movie left a lasting mark on American culture (Brausch 2000; Flusche 1975).

The *Uncle Remus* stories were animal trickster tales in which animals took on human emotions and behaviors − a blend of ancestral African elements with American experience − clear examples of cultural exchange. While ethnologists may debate the specific African, European, or American Indian sources for these tales, they are a coherent body of oral literature, which is a distinctly Gullah/Geechee creation. The tales usually portrayed weak characters outwitting the strong and fostered the idea of freedom within the confines of slavery. Br'er Rabbit, a classic animal trickster, was likely called "Buh Rabbit" in the Low Country and Sea Islands. Gullah/Geechee children learned



Ron Daise, of St. Helena Island, SC, historian, author, and performer.

many lessons from these stories, not the least of which were derived from allegories of the manipulation of power by the weak as well as the strong.

Perhaps more directly authentic to the study area but less well-known are the tales in the volume *Bo Rabbit Smart for True: Folktales from the Gullah* (Jaquith, *et. al*., 1981). Jaquith adapted her stories from the 1949 recordings of Albert Stoddard, who was born on Daufuskie Island, SC, in 1872. When he returned to Daufuskie after completing college, Stoddard began the task of writing the stories in Gullah. When he was 77 years old, Stoddard recorded the stories – just as he had heard them in his youth – for the Archive of Folksong of the Library of Congress (Stoddard, 1949).

Today, many Gullah/Geechee performers, artists, and community activists are telling their own stories. Ron and Natalie Daise, who wrote and starred in the nationally televised children's program *Gullah- Gullah Island*, are among the best known of these performers. Ron Daise, a native of St. Helena Island, has written several books and produced recordings on Gullah themes. Storytellers such as Carolyn "Jabulile" White, Minerva King, Alada "Muima" Shinault- Small, and others travel around the country recounting the animal stories of their island childhoods.

Artist John W. Jones of Columbia, South Carolina, bases his paintings on the vignettes or images of enslaved Africans that appeared on Confederate currency. Jones' work was featured in "Confederate Currency: The Color of Money," an exhibition at the Avery Research Center at the College of Charleston. In reviewing the exhibit, Steve Lopez of *Time* magazine said, "… John W. Jones took the romanticized slave- labor scenes from Confederate money and reproduced them in oil paintings paired with the bills themselves. The effect is to punctuate the exploitation of blacks for profit."

Jonathan Green, a native of Gardens Corner in Beaufort County, South Carolina, is world- renowned for his painting. Green, who draws inspiration from his Gullah/Geechee heritage, the people of his



Artist Jonathan Green expresses his Gullah heritage through colorful paintings.



Inlet Bounty depicts the use of traditional handmade castnet and the spiritual connection of Gullah/ Geechee people to the water. – Image provided by Jonathan Green

experience, and the memories of his youth in South Carolina; proclaims his Gullah ancestry through his brightly colored paintings. Green's paintings, reflecting Gullah lifestyles through colorful dress, foods, and scenery, are in the permanent collections of several major galleries (Buckman 2003).

Casting in the creeks with handmade nets is not only a cultural tradition but also reflects the spiritual connection of Gullah and Geechee people to the water. Jonathan Green depicted this connection in his painting entitled *Inlet Bounty*.

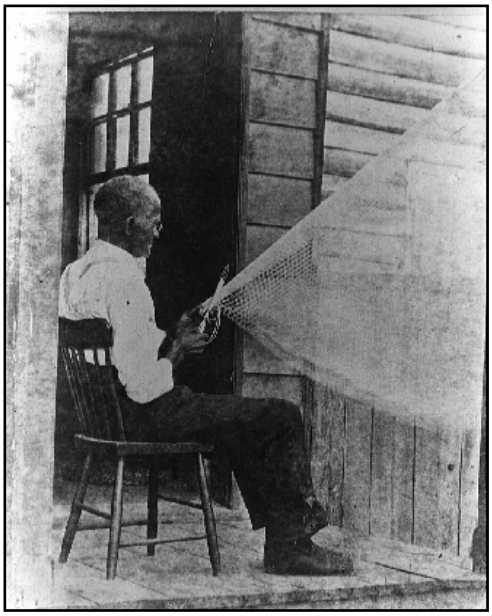


Ce Ce Williams of McClellanville, SC, demonstrates his net-making skills, Charles Pincknev NHS. Mt. Pleasant. SC.

Crafts, Arts, and Foods

Gullah/Geechee arts and crafts – including traditional cuisine – show promise for becoming highly marketable and profitable commodities and important symbols of the continued viability of Gullah/Geechee culture. Traditional arts and crafts are second only to language as a rallying point for Gullah/Geechee cultural awareness and ethnic consolidation.

Practitioners of the traditional Gullah/Geechee art of making cast nets are becoming harder and harder to find. Charles C. Williams, better known as "Ce Ce" of McClellanville, South Carolina, is one of the few remaining net makers in the area. He learned the art from his father, and he is afraid that he will be the last net maker in his family. According to Williams, knitting handmade nets requires a great deal of time and patience – more time and patience than many of today's young people are willing to invest. Nylon nets are much cheaper, but says Williams, "This here cotton lasts forever, if you take care of it." He is now making small nets for display purposes. Williams is adapting his art to the market. There are other net makers still working on sea islands such as Sapelo, Wadmalaw, St. Helena, and several other locations within the study area. Many of the current netmakers are, however, older men who fear that the net making tradition will die with them.



Former slave from coastal Georgia knitting a net, early 20th century. *Georgia Historical Society*

Enslaved Africans, who were transported to the Low Country, brought with them a rich heritage of textile art, including a tradition of sewing strips of cloth into larger patterns (Twining and Baird 1991). Enslaved women were often called upon to assist European women with their quilt making and thus learned European styles and techniques. When quilting for their own families, however, enslaved women combined their African textile traditions with European quilting methods, thus creating a unique creolized art form. Many of their patterns, particularly the strip quilt, showed a clear continuity with West African textile tradition (David 1989; Joyner 1985).

Quilting began on the plantations to supplement the blankets that were distributed by masters about every three years. Slave women frequently gathered in the evenings, after completing their work in the fields, to make warm and colorful quilts. Thus, quilting was both a time of work and a time of social



Andrew Rodrigues tells the story of an enslaved African woman who was forcibly taken from her homeland to a new and different life in the Low Country. The "story quilt" was designed and constructed by his wife Vermelle "Bunny" Rodrigues, Pawley's Island, SC.

interaction. Quilts were usually made in the bright colors of African tradition rather than the softer colors preferred by Europeans.

The most common designs were patchwork, mosaic designs constructed from many types of cloth, although they also made pieced, strip, and appliquéd quilts. Enslaved women also made mattresses, which they stuffed with Spanish moss or stained cotton, and pillows stuffed with chicken or goose feathers (David 1989; Joyner 1985; Tournier 1984).

Today in the Low Country and Sea Islands, Gullah/Geechee women continue to follow the quilting traditions of their ancestors. Patchwork, strip, and appliquéd quilts are frequently seen in craft shops, festivals, and craft shows. "Story quilts," such as the one pictured here, are popular collectors' items and are also used in educational presentations. There are African American quilting groups in Georgetown, on Wadmalaw Island, and other locations throughout the region.

Beginning during slavery and continuing into the present, blacks and whites in the Low Country area have eaten the same vegetables, fruits, game, and seafood from the local area. Some items were imported from Europe and some, such as okra, rice, yams, peas, hot peppers, peanuts, sesame seeds (locally known as benne seeds), sorghum, and watermelon came from Africa via the slave trade – even though some of these domesticated plants may have originated in South America or Asia. American Indian foods such as corn, squash, tomatoes, and berries added to the blend.

Rice became the staple of choice for Europeans, who at first looked upon it as fodder for livestock, food for slaves, or a commodity for export. Geobotanists agree that coffee, America's favorite non-alcoholic beverage, originated in Ethiopia, where the wild berries were generally mixed with fat and eaten. Kola nuts, which had been chewed as a stimulant in Africa for centuries, became the basic ingredient in "cola" drinks throughout the world (Boswell 1949; Fox 1964; Knox and Huffaker 1996).

Enslaved Africans mixed bacon, peas, seafood, vegetables, chicken, or ham with rice to make pilau (commonly called "perlow"), and many of these dishes are still served today in Low Country homes. Hoppin' John, okra rice, and red rice are among the best known examples (Grime 1976; Hess 1992). Black cooks also created stew- like mixtures of seafood and/or meats with vegetables and served them over the ever- present rice. Okra soup is still a Low Country staple. At meal time in Low Country homes of both races, the rice is put on the stove first; then comes the decision of what to cook to go with it. Traditionally, the family rice pot, which must be a heavy pot with a tight- fitting lid and of appropriate size for the family, is used at every meal. The rice pot itself becomes so much a part of family tradition that it is actually handed down in the family as a treasured heirloom.

Gantt and Gerald (2003) cite the following slave recipe for cooking rice:

> *Fust t'ing yo' roll up yo' sleeves 'es high as yo' kin, en yo' tak soap en yo' wash yo' hand clean. Den yo' wash yo' pot clean. Fill um wid col' wata en put on de fia. Now w'ile you' wata de bile, yo' put yo' rice een a piggin en yo' wash um well. Den when yo' dun put salt een yo' pot, en bile high. Yo' put yo rice een en le'um bile till 'e swell, den yo' pour off de*



Smoked mullet is a crowd favorite on Cultural Day, Sapelo Island, Georgia. *Diedre Laird, SC Desk, Charlotte Observer*



Home cooked Low Country foods are favorites at the annual Cultural Day Festival on Sapelo Island, GA. One of many menus available at Sapelo Island's annual Cultural Day celebration. *Diedre Laird, SC Desk, Charlotte Observer*

> *wata en put yo' pot back o de stove, fo' steam.* – Goliath, a former slave of F. W. Allston, Brookgreen Plantation, ca.1937

Average weekly food ration given in the 1800s, Brookgreen Plantation, Murrell's Inlet, South Carolina:

10 quarts rice or peas	
1 bushel sweet potatoes	1 peck meal
1 pint molasses	1 peck grits
2 pounds pork	bacon and beef (summer)

Enslaved African cooks had creative genius when it came to making "sumpin" from "nuttin" in their own kitchens – they were experts at stretching their rations, adding fish and game to the mix, or making communal stews shared with neighbors in the tradition of their African ancestors. They also added vegetables grown in their own gardens and leftovers from their masters' hog killings. Many of these "variety meats" such as pigs' feet, ears, jowls, heads, and entrails are still favored treats in many Gullah/Geechee households today.

As described above, enslaved cooks applied African cooking methods and seasoning to the ingredients available to them in plantation kitchens and their own homes. English, French, and Spanish traditions common to the area also contributed to the mix. Grits, corn bread, butter beans, chili peppers, file, squash, and other items came from American Indians in the region. In the process of cooking with the great variety of foods available in their environment, creative black women unintentionally invented what is now known as southern cooking, although credit for this accomplishment is rarely if ever given. According to Joyner (1999), "The combination created a distinctive southern cuisine, originated and perfected by black cooks in white kitchens, as well as in their own homes."

Food has always played a very important role in the social traditions of all southerners. Family gatherings, funerals, religious occasions, celebrations, and Sunday dinners are often accompanied by tables heavy- laden with a great variety of meats, seafood, vegetables, rice dishes, and desserts.



Elijah Ford is one of several retired men in the Phillips Community who sew sweetgrass baskets.

Frequently, certain family members are given the honor of preparing specific dishes for such family meals and do so until they die or are no longer able to cook.

Food is also a key component of celebrations and festivals. Penn Center's Heritage Days, Sapelo Island's Cultural Day, St. Simons Island's Georgia Sea Island Festival, the Beaufort Gullah Festival, and many other festivals, both large and small, are known for fine foods prepared in traditional ways by local residents. Gullah/Geechee cooking – southern cooking – is definitely in the mainstream and is no longer confined to Gullah/Geechee communities.

Two of the most important outward signs of Gullah/Geechee ethnicity – coiled basketry and musical shouts – have lately achieved great prominence. Both the design and construction techniques relating to the art of coiled basketry have clear roots in African culture. Early baskets were made for various practical agricultural and domestic uses in the plantation economy and were generally made by men or elders who were unable to work in the fields. Basketry and other crafts became part of the bartering system and became another source of income for enslaved Gullah/Geechee people. Such artisan skills became even more important for economic survival in the lean years immediately following the Civil War (Derby 1989).

Dale Rosengarten (1986) tells the story of Gullah/Geechee basketry from its African roots to its earliest beginnings in late 17th- century Carolina.

> Among the most readily identifiable products of this cultural tenacity are coiled sea grass baskets produced along the Southeastern coast. They belong to a basket sewing tradition – centered today in the small community of Mt. Pleasant just north of Charleston – that has survived in America for over 300 years.

Rosengarten describes the evolution of this African craft from agricultural necessity to art form. Although her work is generally highly regarded, a few modern basket makers take exception to Rosengarten's use of the term "sea grass" to describe what they call "sweetgrass baskets." To such comments, Rosengarten offers this explanation:

> I'd like to clarify why McKissick Museum used the term "sea grass" in the subtitle of the exhibition and catalogue called *Row upon Row*. We wanted a term that would refer to both bulrush [*scrirpus robustus*] "work" baskets, common during the era of rice plantations, and sweetgrass [*muhlenbergia filipes*] "show" baskets, a Mt. Pleasant specialty since the early 20th century. Bulrush has again come back into wide use by the basket makers, so we felt calling the tradition "sweetgrass" was not inclusive enough. We decided on "seagrass" because it was used historically and doesn't refer to any particular plant (Rosengarten, email communication, 2003).

This seemingly minor difference in vocabulary is a good example of how local perceptions of Gullah/Geechee practices can be at odds with scholarly descriptions using the more general and abstract terminology characteristic of academic discourse.

Although basketmaking was common on many of the Sea Islands, the art form has persisted and proliferated around Mt. Pleasant, South Carolina, due to market demand and the creativity and innovation of local artisans. Early in the 20th century, basket makers around Mt. Pleasant began



Sweetgrass basket marker stands at the intersection of Hamlin Road and US Highway 17, Mt. Pleasant, South Carolina.



Cecelia Anderson of Mt. Pleasant, South Carolina, is shown sewing a sweetgrass basket, ca. 1930. *Charleston Museum*

making "show baskets" to sell to tourists and local retailers. These baskets differed from the traditional "work baskets" in style, artistic design, and use of palm [*sabal palmetto*] leaf rather than palm butt for sewing the rows together. Basket makers were quick to adapt their styles to the market and constantly invented new styles and shapes (Hofbauer 1997a).

Around 1916, Clarence Legerton, a white entrepreneur from Charleston, recognized the artistic and commercial value of sweetgrass "show" baskets and formed the Sea Grass Basket Company at 263 King Street, as a mail order source. Legerton, who later changed the name of his business to Seagrassco, purchased thousands of dollars worth of baskets for about 50 cents apiece from Mt. Pleasant area women. Sam Coakley, a Mt. Pleasant area resident, served as liaison between Legerton and the basketmakers.

In 1930, a few months after the Grace Memorial Bridge, which crosses the Cooper River between Charleston and Mt. Pleasant, was opened to traffic, Lottie Swinton placed a chair along Highway 17 and began to sell baskets to tourists. Other basket makers soon followed suit and began displaying their wares in simple stands along the road (Derby 1980).

Mrs. Betsy Johnson had a sweet shop on the highway, where she sold cakes, sodas, candy, and sandwiches. Her husband Eddie Johnson hammered nails into the outside wall of the store to display baskets for sale. Johnson soon purchased baskets from others in the community to increase the inventory.

The practice continues today, and as a result, the section of US Highway 17 that stretches between Mt. Pleasant and McClellanville, South Carolina, has come to be known as the "Gullah Highway" (Rosengarten 1986). The road is also referred to by some local basket makers as AME Highway after Goodwill African Methodist Episcopal (AME) Church which is located on the same stretch of road. A historical marker commemorating the long Gullah tradition of sewing sweetgrass baskets was erected in 1972 by the Christ Church Parish Historical Society and the Original Sweetgrass Marketplace Coalition. The marker is located at the site of the first roadside basket stand at the intersection of Highway 17N and Hamlin Road (Hofbauer 1997b; Quick 1997).

Following the success of roadside sales, basket makers soon began to display and sell their wares in downtown Charleston at the City Market. In the mid 1970s, around the time of the United States

Bicentennial, sweetgrass baskets and their makers became recognized both nationally and internationally as Gullah/Geechee cultural icons.

The Smithsonian Institution was crucial in this recognition of the artistic and intrinsic value of the baskets, and within a few years, sweetgrass baskets were featured in museums and galleries around the world. (Gullah baskets, probably collected by northern tourists before the 1940s, show up in such distant and out- of- the- way places as the Booth Memorial Park Museum in Stratford, Connecticut.)

During the late 20th century and continuing into the present, basketmaking became a focal point for dynamic change and evolution in Gullah/Geechee culture, as basket makers continue to develop new styles and forms to meet a growing demand for their work. Vera Manigault of Mt. Pleasant is now sewing "colorful baskets," which feature natural dyes of several colors.

According to Manigault, she received the idea and the process in a vision and has since obtained a trademark on the name and the technique (Manigault, personal communication 2000). Manigault has traveled throughout the United States to tell about the rich history of sweetgrass basketry and to demonstrate her craft.

Like most basket makers in the area, Manigault continues to develop her artistic talents in new and different basket forms and styles. Today's basketry often bears little resemblance to the utilitarian baskets once used for agricultural purposes. Napkin rings, earrings, hair ornaments, and even electric lamps are frequently available at roadside stands. These items are in themselves testament to the ever-changing dynamic nature of Gullah/Geechee culture, while remaining connected to the past. In addition to traditional roadside stands, sweetgrass baskets are now available for sale at craft fairs, in gift shops, and on the Internet.

Basketry also serves as a symbolic flash point for conflicts with economic developers over such issues as access to raw materials and commodification of the baskets and their makers. Sweetgrass once grew like a weed on barrier islands, in roadside ditches, and along the edges of farmer's fields. However, as rural areas are developed, collecting longleaf pine [*pinus palustris*] needles, sweetgrass, and palm has become more and more difficult and may soon put this cottage industry at risk (Hicks 2004; Hitchcock 1995). Frequently, South Carolina basket makers are forced to purchase their raw materials from sources in Florida; some are returning to the use of bulrush to replace all or part of the sweetgrass (Wexler 1993). The principal researcher in this study learned firsthand that collecting basket materials frequently involves snakes, bees, chiggers, mosquitoes, and other hazards including occasional trespassing.



Vera Manigault, a Mt. Pleasant area basketmaker, demonstrates the art of sewing sweetgrass baskets. *Diedre Laird, SC Desk, Charlotte Observer*

As a result of the decline in local sweetgrass availability, a few publicly minded businesses and communities are planting sweetgrass as an ornamental plant so that basketmakers will continue to have access to the materials of their craft. Some private developments now open their gates for sweetgrass collection, and some even encourage it. Land manager Karl Ohlandt of Dewees Island has been replenishing sweetgrass behind the dunes. Each year Ohlandt invites basket makers to take the ferry to Dewees to harvest the grass (Hicks 2004). In addition, the United States Forest Service has

recently published a report, which states that the local supply of sweetgrass is rapidly dwindling due to the building boom in the Charleston area. The Forest Service is doing its part to keep sweetgrass alive by growing test plots in the Francis Marion National Forest (Hart, Halfacre, and Burke 2004).

Both sweetgrass baskets and their makers are now recognized as major tourist attractions, and baskets have become high- end collectibles. In popular representations of the South Carolina Low Country, coiled sweetgrass baskets have become almost synonymous with Gullah/Geechee culture.

In 1988, Dale Rosengarten, then affiliated with the McKissick Museum at the University of South Carolina, and Henrietta Snipes, a Mt. Pleasant basketmaker, founded the Sweetgrass Cultural Preservation Society in order to "help our young people to develop their skills and to preserve our heritage in the art of basket making." Now a non- profit corporation, the group has changed its name to the Original Sweetgrass Marketplace Coalition, but continues with the same mission. M. Jeannette Lee, a Mt. Pleasant basket maker who now serves as coordinator of the group, says members make presentations, educate tourists about baskets and their history, and teach sweetgrass basketmaking in the schools. Lee received the Jean Laney Harris Folk Heritage Award in 2000 in recognition of her continuation of traditional arts that have been passed down through generations of South Carolinians. Martha Gaillard, Lee's mother, was born to sharecropper parents in a slave cabin on Boone Hall plantation. Jeannette Lee wrote the following brief history of the basketmaking tradition.

Sweetgrass Baskets: A Blessing from God
A Proud Tradition and a Valuable Investment

Because of their ancestors' ability to cultivate rice, Africans from the Windward or Rice Coast of West Africa were particularly sought after to become enslaved persons in the…Atlantic Slave Trade. These enslaved persons felt that they would never get to return to their homeland, so they tried to bring any scrap of material that would remind them of home. So they brought pieces of their culture with them in their heads or secreted away on their bodies.

The sweetgrass basket is an example of a significant retention of the African heritage transported across the Atlantic. The sweetgrass basket, originally designed as a tool of rice production and processing, had a very real and significant religious connection for the displaced Africans.

From the Bible, we find the words bulrush and palm. These items, prevalent in Africa, proved to be a very welcome connection to the homeland. Incorporating these two ingredients in their handicraft kept the Africans close to their beloved homeland and continually reinforced their relations with their faith in the God of their salvation.

The sweetgrass basket can be traced to ancient handicraft. It is one of the oldest African crafts in America. It made its appearance in South Carolina during the 17th century. The first known sweetgrass basket in South Carolina is the fanner used for rice winnowing.

The early sweetgrass baskets were strictly for agricultural purposes. They were used in the planting and harvesting of the coastal money crops – rice, cotton, and others. The agricultural baskets were made of bulrush, sweetgrass, and split oak. Later, longleaf pine needles were introduced to the mix.

On many plantations, particularly Boone Hall, even after slavery, basket making continued. There were buyers who came in, while some ladies sold their baskets in the city market. Buyers and sellers rode the ferry to and from Charleston for the basket trade.

After the 1890s, sweetgrass baskets evolved from their agricultural purpose to other everyday uses. These baskets were no longer made from bulrush. The baskets were made from sweetgrass, pine needles, and palmetto, as they are today. These materials were found to enhance the appearance of the baskets.

Around 1948, plastics of various colors were introduced to replace the palmetto strips. Its use did not last long because there was only one supplier of the plastics. Most basket sewers reverted to palmetto strips.

The monetary value of sweetgrass baskets surged with the opening of the Grace Memorial Bridge in 1929 and the paving of Highway 17 in 1931. One lady of vision, Lottie "Winee" Moultrie Swinton, began a long-standing tradition by placing a chair along the highway to display baskets for sale. Lydia Spann Graddick [Jeanette Lee's grandmother] quickly followed. Soon others joined in, and roadside basket stands were born.

The art and craft of basket making is handed down from generation to generation. It requires a lot of patience, as well as creativity. Each piece is unique in that there are no set patterns; each artist develops his/her own style.

Sweetgrass baskets are very durable. Their uses range from practical daily use to show pieces. They are a large part of the Charleston area's attraction to tourists. Each year gathering materials for use in the baskets becomes more difficult as the Lowcountry's marshes are lost to developers.

Sweetgrass basket sewing is viewed as a gift from God. The basketmakers profess to continue their craft as long as there is material available. The art form is continuing to be passed down to new generations.

Today, sweetgrass baskets are displayed on roadside stands along Highway 17 just north of Mt. Pleasant, South Carolina, and in the Charleston City Market. Sewers also display their wares at the "Four Corners of Law" at Broad and Meeting Streets in Charleston. Show pieces are found in the Charleston Visitors Center, Charleston International Airport, Gibbes Art Gallery, the Smithsonian Museum, and other centers.

On November 22, 1997, a historical Sweetgrass Basket Makers' Marker was erected to commemorate the legacy and history of sweetgrass baskets. The marker was placed at the intersection of Hamlin Road and Highway 17 where the first basket stand was located. The historical marker was erected by the Original Sweetgrass Basket Makers Coalition and the Christ Church Parish Historical Preservation Society, Inc.

– M. Jeanette Lee, Coordinator, Original Sweetgrass Basket Makers Coalition



Jeanette Lee's baskets at Penn Center Culture Day.

Performing Arts

Less tangible than baskets, cast nets, quilts, and food is the growing success and popularity currently experienced by the growing number of performers of traditional Gullah/Geechee music. Many of these groups reach out to their audience and create an interactive performance that enables those in attendance to share in the singing, clapping, and rhythms of the music. Among the most notable of these are the McIntosh County Shouters, the Georgia Sea Island Singers; the Moving Star Hall Singers of Johns Island, South Carolina; the Brotherhood Gospel Singers of Mt. Pleasant, South Carolina; and the Plantation Singers of Charleston, South Carolina. Appreciation of traditional Gullah/Geechee music has increased to the point that some groups, such as the Hallelujah Singers, who are not native Gullah/Geechee people, are now performing the music.



Georgia Sea Island Singers perform at Charles Pinckney National Historic Site, Mt. Pleasant, SC.

Frankie Quimby, leader of the Georgia Sea Island Singers says, “I’m a firm believer that you can't know where you're going until you realize where you've come from. We have dedicated our lives to trying to preserve that rich heritage and culture that our ancestors handed down to us” (Quimby, personal communication 2000). The Georgia Sea Island Singers have performed both at the Smithsonian and the White House. They performed at the 2004 G8 Conference at Sea Island, Georgia, and have plans for another White House visit.



McIntosh County Shouters. *McIntosh County Shouters*

The McIntosh County Shouters of Bolden, Georgia, are among the last active practitioners of one of the most venerable of African American song, rhythm, and movement traditions, the shout, also known as the ring shout. The tradition of the shout itself is actually in the fervor of the hand clapping and audible foot work, rather than in the song.

First described by outsiders in 1845, the stylistic antecedents of the ring shout are indisputably African in origin and proliferated in the Gullah/Geechee religious institution of the praise house. Only members of the praise house could watch or participate in the shout. New members were frequently asked to lead the shout to demonstrate their skills (Simpson 1985) and as a rite of welcoming and initiating them to the local “praise house” congregation (Washington 1994). The shout grew in popularity in the study area when slave owners outlawed the use of drums for fear that slaves would use them to communicate between plantations. Washington describes the shout as “affirming the longevity of shared African memories, nestled within accepted aspects of American religious culture” (Washington 1994:71).

The shout consists of call-and-response singing and rhythmic dance movements in a counterclockwise circle. Shouters progress around the circle with a shuffling movement wherein feet are never crossed and never leave the ground. There are interlocking, percussive body rhythms and a type of group devotion embedded in the shout that has made it a lifeline to the West African cultural



Prayer Meeting on a Georgia Plantation: "Religious dancing of the Blacks, termed 'Shouting'. Although dating from the post-emancipation period, this scene is evocative of the late slave period. Only a portion of the author's detailed description is given here: "Just before they break up, when the 'spirit is upon them' ... they engage in a kind of shaker dance, which they term singularly enough, shouting ... A ring of singers is formed in an open space in the room, and they, without holding on to each other's hands, walk slowly around and around in a circle ... They then utter a kind of melodious chant, which gradually increases in strength, and in noise, until it fairly shakes the house, and it can be heard for a long distance ... I know of nothing similar to this dancing or shouting, in the religious excercises of any other class of people. It is entirely unknown among the white Christians here" (Stearns 1872:371-2). *University of Virginia Library online digital images (http://hitchcock.itc.virginia.edu/slavery)*

legacy through times of slavery and into the 21st century. Shouters of today move in a counter clockwise circle, pounding canes on the wooden floor or a sheet of plywood in a manner not unlike early foot drums. This rhythmic movement has been described as "playing the body parts with percussive strength" or "interpretation of the parts of the body as independent instruments of percussive force" (Thompson 1981).

Art Rosenbaum of the University of Georgia, who has been crucial in documenting the ring- shouting tradition, describes it as "an impressive fusion of call- and- response singing, polyrhythmic percussion and formalized, dance- like movements" [that has] "had a profound influence on African American music and religious practice." The shout tradition has been maintained, both by isolation and by "community cohesiveness and sufficient economic support for survival" (Rosenbaum 1998). Perhaps the latest incarnation of simple percussive rhythms is demonstrated in the recent *Stomp* phenomenon on Broadway and among African American college students (Fine, 2003; Rath 2000).

Gullah/Geechee entrepreneurs have formed tour businesses in Charleston, Savannah, St. Helena Island, Hilton Head Island, and many other places. Alphonso Brown, musician, choir director, and story teller, now runs Gullah Tours in Charleston. One of the highlights of his tours is a visit with famed Charleston blacksmith and gate maker, Philip Simmons.

Today, all over the Low Country, Gullah/Geechee performers, artists, and community activists are telling their own stories. Nearly every community has story tellers, crafts people, artists and/or

performers who are keeping alive the story of the Gullah/Geechee people and their African connections. Some have written books and/or produced plays. Festivals are held up and down the coastline to celebrate Gullah/Geechee culture, traditions, and foods. While these festivals provide a day or two of entertainment and extraordinary foods, they also serve as an educational resource for those from within Gullah/Geechee communities as well as outsiders.

These performers and countless others have elevated Gullah/Geechee music to a level of worldwide recognition and appreciation. Gullah/Geechee musicians have performed nationally and internationally in such places as the White House, the Olympic Games, Moja Arts Festival, Newport Festival, Piccolo Spoleto Festival, Carnegie Hall, in governor's mansions, on national television, and in several PBS documentaries, including the recent *This Far by Faith: African American Spiritual Journey* (2003).

Musical traditions of the Gullah/Geechee people have also heavily influenced both the music of the Low Country and the music of the entire nation. According to Joyner (1999):

> … Most white southerners grew up with the songs of black southerners falling upon their ears … Most southern whites understood that the songs of black southerners somehow captured the essence of the southern irony, of the southern tragedy, and of the southern hope … They were profoundly influenced by the songs of their black neighbors … In the convergence of various African cultures and European cultures in the American South, white southerners had their old cultures Africanized by their black neighbors and black southerners had their old cultures Europeanized by their white neighbors.

Some of this musical syncretism, *i.e.*, the blending of elements of two or more cultures into a distinct new cultural form, is well- known today as jazz, blues, and gospel.

The ethnological sleuthing of scholars such as Mary Twining and Dale Rosengarten has produced some very dramatic evidence for direct, specific African origins of Gullah quilting patterns, basketry, and music. The musical connection is well- illustrated by the poignant story portrayed in the documentary, *The Language You Cry In* (1998), and merits further discussion here.



Anita Singleton-Prather, Gullah storyteller from St. Helena Island, SC, performs as "Aunt Pearlie Sue," Charles Pinckney NHS. *C. Timmons, NPS*



This 1930s photograph shows oyster boats at the docks on Lady's Island, Beaufort Co., SC, waiting for the next run to the oyster banks. Today all of the oyster and crab factories in the area have been closed. *WPA*



Charleston's famous mosquito fleet, described in DuBose Heyward's Porgy and Bess, was challenged by larger motorized vessels and was finally destroyed in a 1940 hurricane. *Charleston Museum*



Charles "CeCe" Williams of McClellanville, SC, demonstrates the traditional practice of net casting with one of his hand made nets. Residential development has made water access much more difficult. - Diedre Laird. SC Desk, Charlotte Observer

African Cultural Survival in Gullah/Geechee Culture: A Dramatic Case Study

During the early 1930s, Lorenzo Dow Turner, an African American linguist, catalogued over 3,000 names and words of African origin along the coasts of South Carolina and Georgia. When he visited the small fishing village of Harris Neck in McIntosh County, Georgia, he met Amelia Dawley, who could sing a five line song in an African language. Amelia did not know the meaning of the song, but she knew that she had learned it from her grandmother who told her never to forget the song because it was her connection to the ancestors. Turner did not recognize the language, but it was later identified by Solomon Caulker, a graduate student from Sierra Leone as Mende, his native tongue. Although Caulker had never heard that specific song, he recognized its type as an old hymn, a women's song once used to call villagers together for a funeral.

In the 1980s, forty years after Turner's visit to the Georgia coast, Joseph A. Opala, an American working at Fourah Bay College in Sierra Leone, was studying the Bunce Island slave trade. Many enslaved people had been sent from Bunce Island to rice plantations in Georgia and South Carolina. Opala joined forces with Sierra Leonean linguist Tazieff Koroma and ethnomusicologist Cynthia Schmidt to find the roots of Amelia Dawley's song. Remarkably, they found an old woman named Baindu Jabati in the remote village of Senehun Ngoal who had preserved a strikingly similar song. The song was a funeral dirge no longer used in the village. Baindu's grandmother had taught her the song and told her that someday a lost kinsman would return who would be recognized by this song.

Opala and his team traveled to Georgia where they located Mary Moran, daughter of Amelia Dawley. Mary remembered hearing her mother sing the song and was able to sing it herself for the researchers. A reunion trip to Africa was immediately planned but was later postponed due to wars in the region. In 1997, Mary and 14 members of her family traveled to the African village of Senehun Ngola, where they were greeted with warmth and jubilation. Opala asked Nabi Jah, 90- year- old chief of the village why a Mende woman exiled two hundred years ago would have preserved this particular song. Nabi Jah replied that to him the answer was obvious. "That song would be the most valuable thing she could take. It could connect her to all her ancestors and to their continued blessings." Then he quoted a Mende proverb, "You know who a person really is by the language they cry in."

Perhaps an unknown Mende woman, kidnapped and taken thousands of miles from her home, believed that her village funeral song would connect her and her descendants forever with their lost family in Africa. Her descendants today, in both Africa and America, can indeed use her song to trace their connections to one another after more than two centuries.

A documentary film, appropriately entitled *The Language You Cry In* (1998), was produced to commemorate the story of Amelia's song and the reunion trip to Africa. In his review of the film, Philip D. Morgan, commented:

> That a Mende burial song has survived among the Gullah people and can be traced to a particular location in Sierra Leone is a testament to the remarkable tenacity and spirit of an enslaved people. It also took impressive scholarly sleuthing to recover the precise links between an African village and a diaspora population in Lowcountry South Carolina and Georgia … (1998).

The government of Sierra Leone has issued repeated invitations for Mary Moran and her family to make a return visit to their home in Africa. "We regard you," one official letter from the Sierra Leone Government said, "as the descendants of Mende people taken forcibly from our shores more than two hundred years ago."

Amelia Dawley's Song
Ah wakuh muh monuh kambay yah lee luh lay tambay
Ah wakuh muh monuh kambay yah lee luh lay kah.
Ha suh wileego seehai yuh gbangah lilly
Ha suh wileego dwelin duh kwen
Ha suh wileego seehi uh kwendaiyah.
Everyone come together, let us work hard;
the grave is not yet finished; let his heart be perfectly at peace.
Everyone come together, let us work hard:
the grave is not yet finished; let his heart be at peace at once.
Sudden death commands everyone's attention, like a firing gun.
Sudden death commands everyone's attention, oh elders, oh heads of family
Sudden death commands everyone's attention, like a distant drum beat.
– (translated by Tazieff Koroma, Edward Benya, and Joseph Opala



Wilson Moran wears African clothing he brought back from the reunion trip to Africa.

Mary Moran's son Wilson has been involved in this special resource study from the beginning and has added valuable insights and comments to the process. Moran took the field research team on a tour of the area around Harris Neck in McIntosh County, Georgia, and shared the story of the Geechee community once located there. According to Moran, Harris Neck was once a thriving community with a church, a cemetery, a school, and a post office. Residents were not dependent on cotton culture or sharecropping. Moran recalled his grandfather's self- sufficiency on the 111 acres of land he once owned. The family grew table crops, raised animals, fished, and trapped mink and other animals for meat and skins. Moran remembers traveling up and down the coast to barter for whatever else they needed.

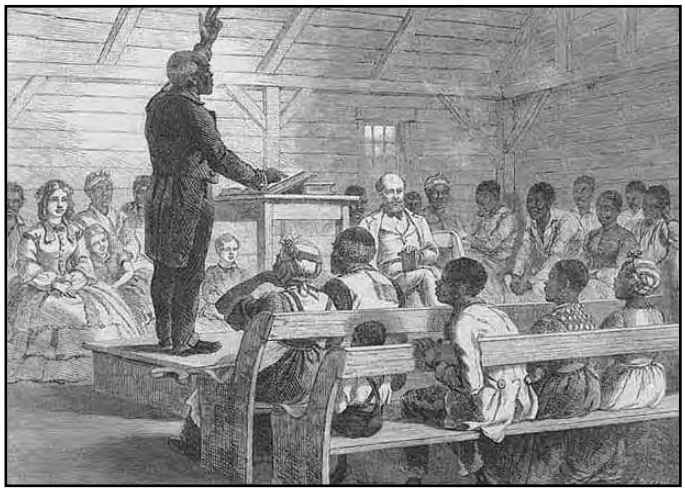
After the tour, Moran invited the field research team to share a meal in his home and introduced them to his wife Ernestine and to his parents. Members of the field research team chatted with her as she fried fish for supper. As of this writing (Fall 2004), Mary Moran is alive and in good health.

During the 1940s, the Harris Neck lands were condemned for strategic military defense purposes, and the 75 families living on the property were relocated. Thus, the Harris Neck Community ceased to exist in 1942. The property is now included in the Harris Neck National Wildlife Refuge, administered by the U. S. Fish and Wildlife Service. Amelia Dawley is buried in a small community cemetery inside the refuge. Today the Moran family still raises some table crops, and Wilson is "in the creek" (fishing, shrimping, or gathering shellfish) as often as possible. He takes pride in teaching his grandson the traditional skills and stories he once learned from his own grandfather.

Gullah/Geechee Institutions

Even before Emancipation, a distinct body of social institutions and cultural traditions evolved to sustain and order Gullah/Geechee community life. Relative isolation and autonomy from a minority white population in the Low Country and Sea Islands helped to sustain the traditions of Gullah/Geechee populations. While sharing general characteristics with similar communities worldwide, *e.g.*, importance of wider kinship connections, these institutions and traditions support the persistence of unique Gullah/Geechee communities.

In these institutions and traditions, Gullah/Geechee communities sometimes show close similarities to other Afro- American creole cultures of the Western Hemisphere, as well as direct parallels to specific African analogs. Sometimes, the similarities can be striking, as in the funerary custom found in both South Carolina and the Virgin Islands. For example, both on St. John, U.S. Virgin Islands, and in at least some Gullah/Geechee communities, there is a death rite of passing an infant or young child across the body of a deceased relative to ensure the spiritual well- being of the child (Creel 1988; Hjerpe 2000:18; Nichols 1989).



Slaves and the master's family worship together on a South Carolina plantation. (Reproduction of a draw99ing from the Illustrated London News, December 5, 1863.) *US Gov't Publications*

Despite the absence of official political institutions in most Gullah/Geechee communities, leadership and social control have been effectively maintained by kinship and religion. Through multi- family residential compounds, extended kinship ties, and respect for elders, Gullah/Geechee people historically maintained a high degree of social solidarity and insularity from outsiders. Women served as leaders in some areas of religious life and frequently played a central role in perpetuating the distinctive Gullah/Geechee traditions.



Slave funeral in the woods of a coastal rice plantation. Woodcut, 1859. - Granger Collection, New York

Religion and spirituality have always played a major role in Gullah/Geechee family and community life. During slavery times, slaves worshipped with great enthusiasm, since religion offered a refuge from their many miseries and offered hope for the future. Some masters required slaves to attend church with their families. In such cases, slaves generally sat in a gallery that was designated for their use. Other plantation owners hired preachers, some of whom were white, to lead the slaves in Sunday worship services. Some masters and their families attended religious services on the plantation together with the slaves and with a black preacher in the pulpit. Slaves often turned scriptures to their own purposes. Thus, Moses became a model for their own dreams of freedom, and African traditions were woven into the Euro- Christianity they practiced.

Almost every plantation had a praise house, a small shack where the Negroes met nightly for religious services (Crum 1969). Religious and community life was centered around these praise houses, as the buildings used for both spiritual and civic activities. Even in slavery days, Gullah/Geechee people had their own internal community standards of conduct and those who did not follow the community

rules were punished. The elders managed these grassroots courts, and generally were able to keep strict order in the community. Many of these praise houses are still standing and some remain a vital part of Gullah/Geechee spiritual life.

Funerals were frequent events for enslaved Africans, since deaths occurred by the thousands, particularly among children. In the coastal region, historians estimate that nearly 90% of enslaved African children died before they reached the age of 16. Funerals were generally held outside and at night, possibly so that people from other plantations might attend, but more likely because that was the only time that people were not working. Creel cites the story of a 19th- century slave funeral as related by a former South Carolina bondsman. The funeral was for Mary, a very pretty and popular young woman who died after a lingering illness (1988:314- 15).

> The coffin, a rough home- made affair, was placed upon a cart, which was drawn by an old Gray, and the multitudes formed in a line in the rear, marching two deep. The procession was something like a quarter of a mile long. Perhaps every fifteenth person down the line carried an uplifted torch. As the procession moved slowly toward "the lonesome graveyard" down by the side of the swamp, they sung the well-known hymn of Dr. Isaac Watts:
>
> When I can read my title clear
> To mansions in the skies,
> I bid farewell to every fear
> And wipe my weeping eyes.
>
> Mary's baby was taken to the graveyard by its grandmother, and before the corpse was deposited in the earth, the baby was passed from one person to another across the coffin. The slaves believed that if this was not done it would be impossible to raise the infant. The mother's spirit would come back for her baby and take it to herself.
>
> … the corpse was lowered into the grave and covered, each person throwing a handful of dirt into the grave as a last farewell act of kindness to the dead … A prayer was offered … This concluded the services at the grave.

Graves were traditionally marked in a number of ways from sticks to stone slabs to a unique style of carved wooden grave markers. Some graves were marked using plants, such as cedars or yuccas. Frequently, glass, china, or objects belonging to the deceased were used to decorate the grave. At times, conchs and other shells of various kinds have been used to mark or even outline gravesites, and this practice has continued into the 21st century. The use of seashells to mark graves, while not unique to Gullah/Geechee people, has been described by people in the study area as a connection to the water that brought them and would hopefully take them back to Africa after death. Although generations of the same family might be interred within a cemetery, they were not necessarily buried in adjoining plots (Creel 1988; Vlach 1977).

Slave cemeteries were generally located on marginal property, frequently thickly covered in trees and vines, which was not likely to be used by the planter for any other purpose. Local people often say that their enslaved African ancestors preferred sites that were beside water so that their souls might easily return to Africa. Many of these cemeteries continued to be used after the Civil War and are now being lost to development.

Parsons (1923) observed that the most African American burial grounds were:

> … hidden away in remote spots among trees and underbrush. In the middle of some fields are islands of large trees the owners preferred not to make arable, because of the exhaustive work of clearing it. Old graves are now in among these trees and

> surrounding underbrush … [Burial spots were] ragged patches of live- oak and palmetto and brier tangle which throughout the Islands are a sign of graves within, – graves scattered without symmetry, and often without headstones or head- boards, or sticks …



Jonna Hausser Weaver, NPS Intern

Located near the slave quarters of Thomas Spalding's plantation and sugar mill complex, Behavior Cemetery on Sapelo Island, Georgia, is the only remaining African American burial ground on the island. At one time there was a black settlement called "Behavior" on the southern end of the island near the cemetery site, but now the only surviving black settlement on the island is Hog Hammock, located about a mile from the cemetery. Early grave markers include short posts at either end of the graves and epitaphs on wooden boards nailed to adjoining trees. Personal belongings of the deceased were often placed on the graves, including cups, dishes, oil lamps (to light the journey home), and alarm clocks (to sound on Judgment Day). Most recent markers are made of local cement but there are a few granite grave stones and metal funeral- home markers. Although oral tradition holds that burials have taken place at this site since slavery times, the death date on the oldest extant marker is 1890. Earlier markers may have been destroyed during the Civil War. Burials continue today at Behavior Cemetery, which was listed in the National Register of Historic Places in 1996 (National Register Information System, GA).



Mary Jenkins Praise House, one of several remaining praise houses on St. Helena Island.

Development along the coastline has exposed many of these formerly hidden cemetery sites and other sacred places to public view and has made them subject to theft, vandalism, and destruction, which have taken a heavy toll on these sacred places. The cemetery at Sunbury, Georgia, which contained wooden grave markers of a style that could be connected to African tradition, was recorded and photographed by scholars before the markers were stolen or destroyed (WPA1986).

Historical evidence affirms that Christian religious instruction was employed to control slave life and ease the task of plantation management. Ironically, this religious control planted a seed of Gullah/Geechee self- perception as a distinct ethnic group. Or, as Margaret Washington (1994) observed, "The Gullah called themselves 'a peculiar people,'" a phrase taken directly from the New Testament:

> But ye are a chosen generation, a royal priesthood, an holy nation, a peculiar people that ye should shew forth the praise of him who had called you out of darkness into his marvelous light [1 Peter 2:9].

Such sentiments as these provide a powerful force for the fruition of the strongest expressions of Gullah/Geechee ethnicity at the turn of the 21st century.

Although many Gullah/Geechee people subscribe to the basic tenets of European Christianity, African- derived practices and customs appear as a fundamental part of Gullah/Geechee expression





Retreat Plantation is now a gated club. Retreat Burying Ground, in use since 1800, is currently surrounded by a golf course. Although the cemetery is on private property, families of those buried in the cemetery are allowed to visit grave sites. Burials still take place in the cemetery. Many private owners of traditional Gullah/Geechee cemeteries are not as cooperative with relatives of those buried at the sites. *Jonna Hausser Weaver, NPS Intern (2002)*

of Christian worship. According to Joyner (1994), the Christian concept of afterlife was juxtaposed to the concepts of many African religions. Under those belief systems, the afterlife was to be very much as life had been on earth. Thus, for Africans of those religious beliefs who had come to America, afterlife would be a continuation of enslavement. Therefore, acceptance of the Christian idea of afterlife became an integral component of Gullah/Geechee Christianity.

After the close of the Civil War, local Gullah/Geechee settlements began to establish their own congregations and erect church buildings. Some of those early churches, such as First African Baptist Church on Daufuskie Island, have been listed in the National Register of Historic Places. Churches of various denominations are located all over the countryside in the study area such that even very small communities may have more than one church. Small cemeteries frequently adjoin church buildings.

On Johns Island, South Carolina, enslaved Africans first held religious meetings near Gregg Plantation. The services were held outdoors as bush arbor camp meetings within a simple structure consisting of a roof supported by uprights [bush arbor]. Hebron Presbyterian Church later became the first building to house the congregation. The church, which still stands on Bohicket Road, was built by John Chisolm and Jackson McGill, two black craftsmen. Newly freed slaves salvaged wood from Kiawah Island, more than a mile, where a ship carrying a cargo of timbers had wrecked. The organizing pastor was Reverend Ishmael Moultrie, a freedman from St. Helena Island who had been trained at the Penn School. Hebron Church was home to the first African Americans to be trained as missionaries in the Presbyterian Church (Behre 2004).

In addition to formal worship services in churches, Gullah/Geechee people follow religious practices associated with praise houses and other more private places of religious experience. Baptismal sites and burial grounds are likewise important markers of Gullah/Geechee life, places of cultural expression, and symbolic repositories of culture- history.



Hebron Presbyterian Church, Johns Island, SC, was built with salvaged wood from a shipwreck that washed ashore on nearby Kiawah Island. Plans are underway to remodel the building as a senior citizens' center.





First African Baptist Church, located within the Daufuskie Island Historic District, has been restored. The praisehouse, once associated with the church, was demolished in 2002.

Moving Star Hall, a praise house on Johns Island built just after the Civil War, was once a gathering place for the community. The weathered clapboard building was not only an important meeting place but also a "tend the sick" and burial society, a secret lodge, and a house of worship. During the Sunday night worship services, those in attendance expressed themselves freely. Each person took a turn at preaching, testifying, praying, or raising a song. The Moving Hall Singers were organized there in 1962 (Carawan 1989, 1995).

Mrs. Alice Wine, an elder in the community, had this to say about Moving Star Hall:

> We don't have class meeting in the hall anymore. I miss it. We don't have it now because all these young preachers have moved everything to the church. What are a few people going to do in a big old church like that? If the people turn out, it never be too large. I like to go to the hall 'cause you have your way. You can exercise better. You can feel yourself. You can do the same thing in the church, but the church is so big.
>
> We used to have watch meetings on Christmas night. We turn out in the hall and be there till sunrise. On New Year's, people go all night and be there till New Year roll in, then they go to preaching. And about five or six o'clock, then the ladies take over to testify. You don't find that now. Some people can't even say their prayers. A lot of people miss it.

Sam Polite, senior praise house elder on Benjamin Fripp's plantation, St. Helena Island, South Carolina, was a man with white hair and worn, lined face. He was unsure of his exact age, but knew he had "ben a man fore 'gun shoot'" – *i.e.* the Battle of Port Royal, November 1861 (Washington 1994:47). Polite was seen as a man of vision and wisdom, a prophet to his people. In 1934 Rossa Cooley, then superintendent of the Penn School, recorded a sermon in which Polite made the following remarks ("The Long Look" 1994):

> God done gib de white folk a heap of things … but he ain't forgotten us … 'cause he gib us Religion and we have a right to show it out to all de world. De Buckra [white people] deys got de knowing of the whys and hows of religion, but dey ain't never got the feel of it yet. I tink God ain't have much respect for no kind of religion without de feeling. De Book say, 'They that worship me must worship me in spirit and in truth.' There might be some truth in deys- all religion, but there ain't much spirit in a religion dat's all in de head.

Today, church services and church- related events, which frequently involve the serving of food, appear to be generally well- attended. Sunday services often last for several hours and may include



Baptism rites conducted in SC Sea Islands. Image part of Doris Ulman's photographic study of Gullah people, 1929-1933. *Liturgical Art Collection, University of Notre Dame*

discussion of broader social issues either in the sermon or in discussions before or after the formal services. Thus, the church draws families and communities together into a larger social group. Although religious issues are foremost, church services also serve as a social space for the communication of secular ideas and as social and political forums for the community.

Historically, black churches have been drawn consistently into the community to deal with important issues of a nonreligious nature. As a result, churches have evolved as focal points of social change. From helping displaced families after the Civil War to a leadership role in the Civil Rights movement to health issues such as diabetes, hypertension, and HIV – black churches have confronted and continue to confront social, economic, and political problems facing the African American community. It is not by chance that a black church, First African Baptist Church in Savannah, was the site of General Sherman's first reading of Special Field Orders Number 15 and was later chosen by Dr. Martin Luther King for the first delivery of his "I Have a Dream" speech in July of 1963 (Billingsley 2002).

Kin- ties and religion continue to serve as a powerful bonding force among Gullah/Geechee people despite the stresses of dispersion due to emigration and breakup of family land holdings. There is grave concern, however, that continued family stress over land issues may lead to dissolution of kin loyalties.

With population disruption, sites of religious expression have become even more important as anchors of communities and help to foster a sense of historical continuity for Gullah/Geechee people as they encounter the challenges of the present. Although the same may be true of former schools and other meeting places, it is the preservation of religious places that is often of greatest concern.

Baptismal sites are important spiritual markers of Gullah/Geechee community life. Traditionally, many churches in Gullah/Geechee communities conducted baptismal rites in the ocean or tidal creeks. The activities began on the high tide and lasted all day, so that sins could be washed away with the ebbing tide. Many baptismal sites, as is true of family burial places, are becoming increasingly inaccessible to Gullah/Geechee people. Golf courses, resorts, fences, beachfront development, boat landings, marinas, and the coastal population explosion are all encroaching upon and in some cases overtaking these sacred sites.

At the foundation of Gullah/Geechee cultural identity are African- influenced values and principles such as belief in God, communal rather than individual identity, honoring the continuity of life by respecting kinship bonds and ancestors, respect for nature, respect and honor toward elders, and respect for the destiny of the soul (Parks 2003).

Because of their tradition of strong spiritual connections, religious institutions frequently play a leadership role in the community. These institutions have shown remarkable versatility and vitality in helping Gullah/Geechee communities adjust to rapidly changing circumstances. Several of these churches participated in this project by inviting the NPS team to hold meetings in their buildings. Frequently, community activist and/or preservation meetings are held in churches. Given the current atmosphere of expanding stresses on community life, churches and other religious organizations may have begun to reach the limits of their capacity for maintaining social and cultural cohesion.

As rural populations have become smaller, rural congregations dwindle in size, praise houses fall into disrepair, and access to baptismal and funerary sites becomes more difficult. School houses, traditional gathering places for children from the community, have fallen victim to the racial integration of school systems. Consequently, many Gullah/Geechee community activists within the study area have taken on preservation projects related to these traditional cultural sites. Particularly noteworthy are the "Rosenwald" schools within the study area, which along with "Rosenwald" schools across the South were named in 2002 by the National Trust for Historic Preservation (NTHP) as one of America's 11 Most Endangered Historic Sites (http://www.nationaltrust.org/11Most/2002/rosenwald.html). As these community institutions are lost, Gullah/Geechee people face yet another blow to their cultural identity.



Amy Roberts of SSAAHC views the place where she was baptized. Emanuel Baptist Church, St. Simons Island, GA, used this beach as a baptismal site until the mid 1960s. The church was founded in 1890 and rebuilt in 1904. Most churches in the area added indoor baptismal pools in the mid 1960s.

The Impact of Coastal Development on Gullah/Geechee People

Bill Saunders grew up on Kiawah Island, a barrier island south of Charleston, South Carolina. In 1972, Kiawah was purchased by the Kuwaiti government and was subsequently developed by the Sea Pines Corporation, which also developed Hilton Head Island in Beaufort County, South Carolina. Saunders currently (2004) lives on Johns Island near Charleston and serves on the South Carolina Public Service Commission. His personal retrospective on the subsistence existence of Gullah/Geechee islanders before 1950 and the impact of coastal development on their communities follows:

As a kid growing up on the islands in the thirties and forties, there was really no need for money. A lot of us now in our 30s and 40s are realizing we weren't so bad off then. When we were young, we looked at things as being awful. Now that attitude has changed. When I was a kid we grew our own rice, we had our own grits grinder, and we made our own pestle and mortar with which to clean our rice. We had our own smokehouse, killed our own meat, and we ate everything that was in the river in season. This time of year now you can go anyplace and buy oysters. People then never ate oysters after April. Crab wasn't eaten in the winter. All of these things replenished themselves during that time. Now we destroy them by eating them all the time.

Most of our clothes were made of material from feed bags or things that something had been bought in. We made our own mattresses, pillows, and so forth. My grandfather used to build roofs out of something that now I can't find anyone to make, or any one of the old fellows to even discuss it. They made a roof out of "palin." They had an instrument (a draw shave) they made that (when struck with a wooden mallet) would slice through pine and cut into very thin stripping like paneling, and they would overlap these strips on the roof. You could see right through it, but it wouldn't leak when rain hit it; it would just swell up. We made chimneys out of clay on the islands. We took the clay, grass, and other things and would do coloring with it. We used to make beautiful floors from rubbing colored clay onto church brick.

Most people needed to hold on to money for their nickel- and- dime insurance. Most illnesses that came up, someone had a remedy for it; we called it root medicine. They would take roots and things (such as "life- everlasting" for colds) and boil them into a medicine. We would also pack open wounds with sand or sugar. Nowadays you get a little cut, you go to the nearest hospital emergency room. There were so many things to be done and work was hard. We worked from "can see to can't see," from sunup to sundown. We were more independent and didn't recognize it. We are more dependent now than we have ever been. Most of us my age now are relooking at the past and looking at the present and saying maybe we need to go back to some of the things we came through that we didn't like too well.

People from the universities have been writing about these islands, about African heritage, and all that. I would say that as far as the islanders were concerned, I don't think that there was much pride in heritage of the past, but they were proud period. I don't think that they used to connect themselves to Africa, you know "Roots" type stuff, but they were and are just real people who show their heritage. My grandfather and many people I know never had anything, but they were so independent, they were proud of what they did for themselves. They decided what they were going to do, and what they were not going to do. They were just beautiful people. Between 1945 and 1960, we lost that. So many things changed in that era that caused a lot of people to lose sight of being proud (Saunders 1980: 481- 482).



The first inklings of massive impacts on post- Civil War Gullah/Geechee cultural stability came during the 1920s and 1930s when wealthy industrialists from the North discovered the abundant wildlife and mild winter climate of the Low Country and adjoining islands. Early

20th- century industrial magnates, such as Bernard Baruch, R. J. Reynolds, Howard Coffin, and Tom Yawkey, bought failed rice plantations from their bankrupt owners and established hunting lodges for themselves and their friends. In some cases, Gullah/Geechee people who were living on this land were allowed to continue their farming and/or work for the new landowner, while other new owners forced black families from the land.



Collecting clams for supper – trespassing required now.

With land ownership tangled in years of subdivision of property among families and inheritance of land without recording new deeds (heirs' property), Gullah/Geechee people could not prove their ownership rights to their home sites. As years passed and more people died intestate, the property became more entangled in communal ownership. Many were forced from their land and/or the land and waterways where they had traditionally farmed, hunted, and fished to supplement their tables and their incomes.

The pressures began even earlier for Gullah/Geechee people who were involved in commercial fishing. Proximity to the sea fostered an early tradition of seafood harvesting, ranging from cast netting to small- scale commercial shrimp boats. Economic gain from catching and selling seafood began before the end of slavery and continued into the 20th century. The African American shrimping fleet was a major factor in the development of commercial fishing in the region. Competition came from more sophisticated fishermen with greater capital resources. According to Benjamin Blount (2000), the formerly self- sustained Gullah/Geechee fishing boat captains were largely replaced by others and their role reduced to that of laborers in the fishing industry. Pollution from the expanding timber industry, recent catastrophic hurricanes, and pressures on commercial fishing worldwide have also contributed to further decline of the maritime economy of Gullah/Geechee people.

The military has also played a significant role in the process of change. The Marine Training Center at Parris Island in Beaufort County, South Carolina, was constructed during the 1880s. During World War II, traditional Gullah/Geechee lands in McIntosh County, Georgia, were used by the federal government for coastal defense purposes.

The great transformation, however, began in 1957 when Charles Frasier launched the construction of Sea Pines Plantation on Hilton Head Island. The availability of air conditioning made the Sea Islands more appealing to affluent people. It was not very long before other developers joined in, and resorts sprang up all over the island. Although only about 20% of the island was actually owned by Gullah/Geechee residents, much of the remaining land was owned by absentee landlords who allowed free access to their property. The absentee landlords quickly sold out to developers. Between 1950 and 2000, the population of South Carolina Low Country counties increased by 151%, while the national population as a whole increased by only 86%.

Before construction of Sea Pines Plantation, Gullah/Geechee residents had been free to hunt and fish all over Hilton Head Island. Suddenly, fences and gates blocked much of the land. Residents were cut off from their hunting and fishing grounds as well as their traditional burial grounds. Fences meant that Gullah/Geechee islanders could no longer "go in duh creek" to get supper. The Sea Pines story has been repeated on islands all over the study area.

Nick Lindsey, local historian, asked an old friend on Edisto to talk about the differences between the "old days" and today (2000), "Everything change up now. In the old day, money? Take him or leave him, be all right. Now? Must have him now. Everything change up now." Often, the changes brought



This Daufuskie Island, SC, Community Center was once the schoolhouse where Pat Conroy once taught.

about by development and modernization seem to require the discarding of the "old ways" in favor of different behavior patterns – assimilation into the ways of the newer community.

Novels such as *The Water Is Wide* and others by Pat Conroy (1972) expressed the distinctive beauty of his beloved Carolina coast in a way that appealed to people worldwide. Although it was not the author's intent, the popularity of these stories hastened the influx of people to the area. There was a resulting population shift on the Sea Islands from the traditional rural black majority to an affluent white majority. These dramatic demographic changes brought intensified racial prejudice and segregation to the islands where Gullah/Geechee people had lived for years in relative isolation from the outside world. Although Daufuskie Island, South Carolina, which Conroy called Yamacraw in his novel, still has no bridge to the mainland, nearly half of the island has been overtaken by resort development. The demarcation between planned resort communities and traditional rural agricultural lands is dramatic.

Resorts, golf courses, and coastal suburban development on the islands led to steadily increasing property values and skyrocketing taxes. Island economies changed from rural subsistence farming to a service- based economy. Native islanders were often unable to bear the tax burden, and many were forced to leave their homes. Not just Gullah/ Geechee people but all islanders of modest means, black and white, have been adversely affected by the rising taxes caused by development and population growth.

With losses of land and easy access to fishing and hunting came a decline of Gullah/ Geechee self sufficiency and autonomy. Displaced and landless Gullah/Geechee people increasingly turned to hourly labor, out- migration, or both. Although some islanders chose to remain in the vicinity to work in the resort industry, they soon found that only minimum wage service sector jobs were available to them. Low wages have forced these landless resort workers to face ever- increasing commuting distances in order to find affordable housing (Thomas 1980). Many young blacks are trapped in the low- wage, low- skill job market of the resorts. "It could be argued – and is – that white development brought economic betterment to black chambermaids and to a generation of career caddies. However, a chambermaid- caddy economy never made anyone except motel owners solvent" (Good 1969:120).

During the 1960s, as the number of outsiders relocating to the islands rose to a peak, there was a second major out- migration of Gullah/Geechee people to the North. They were essentially pushed from their homeland by loss of land for agriculture, lack of job training, lack of skilled jobs, and few opportunities for advancement (Lemann 1992). Many of these people sent their children home to the islands in the summertime, so that the youngsters could get to know their relatives and experience the simplicity of island life. Others, however, may have forever lost the connection to their ancestry and culture. It is interesting to note that some of the people who left in the 1960s are now returning to their roots and are among the most active in trying to preserve Gullah/Geechee community and tradition. Some of the "returnees" spoke with the field research team and expressed a strong, almost irresistible, spiritual need to return to their ancestral roots in the Low Country.

The construction of Interstate 95 in the mid 1970s was a major factor in the transformation of coastal zones. I- 95 is the major north/south corridor and is, thus, one of the most heavily traveled interstate

highways in the United States. Coastal regions of the study area, other than specific resort developments, were still relatively remote and isolated until after the construction of I- 95. The highway not only gave easy access to Hilton Head Island and its neighboring resorts in South Carolina but also created access to pristine islands and beaches. Development along I- 95 in Georgia has been slower to occur, perhaps because the highway lies along the inland edges of great salt marshes. These marshes are likely to be viewed by uninitiated tourists as "swamps", rather than as the highly productive ecosystems that they, in fact, are. Almost 50% of the remaining salt marsh along the eastern seaboard of the United States lies along the Georgia coastline and much of it is currently protected by government agencies.



Morris Island 2004; note Fort Sumter in the distance. *Carlin Timmons, NPS*

In addition to loss of traditional Gullah/Geechee lands, burial grounds, and culturally significant community landmarks, there are several historic properties with strong Gullah/Geechee connections that are currently at risk of loss to development. Among these is Morris Island, which is located in Charleston Harbor adjacent to Fort Sumter National Monument. During the 1700s, the island was known as Coffin Island, probably because a pest house and its associated burial ground were there.

During the Civil War, Morris Island was used by the Confederates as part of the defense of Charleston. During the Seige of Charleston in July of 1863, Union forces landed on the south end of the island. On July 18, 1863, the 54th Massachusetts Volunteer Infantry, an African American regiment portrayed in the movie *Glory*, led a fateful assault against Battery Wagner and earned itself a place in America's history. As a result of their courage in battle, Union forces were able to recruit 200,000 African American soldiers and sailors. The assault failed to take Battery Wagner and resulted in 246 deaths, 880 wounded and 389 captured. Thirty four of the deaths and 146 of the wounded were from the 54th Massachusetts. Ninety- two soldiers of the 54th were captured. In 1900, Sergeant William Carney of the 54th Massachusetts became the first African American soldier awarded the Medal of Honor for his bravery during the Wagner assault. Although the geography and size of this barrier island have changed substantially since the Civil War, the "remains of Morris Island stand as a memorial to the brave men who fought and died there" (Wise 1994).

Morris Island, which is visible from Fort Sumter National Monument, looks very much as it did in the 1860s. As there is no bridge to the island, the only access is by boat. Today the island, which is privately owned, faces an assault of a different kind. A developer has proposed to build 20 multi-million dollar residential units on a 62- acre parcel of this critically sensitive, historically important barrier island. The Civil War Preservation Trust has named Morris Island to its Most Endangered Battlefields List and the Morris Island Coalition, a group composed of many local and national organizations, is working to prevent development (http://www.MorrisIsland.org).

James Island, near Charleston, South Carolina, is another traditional Gullah Sea Island that has been overtaken by suburban sprawl. In the 17th century, a colonial town was established on James Island, and by 1720, St. Andrew's Parish Records indicated a population of 215 white taxpayers and 2500 slaves. Gullah descendants of these enslaved Africans, who farmed and fished on the island, remained the predominant population until the 1950s when James Island began to be developed as a Charleston suburb. Unlike Hilton Head, James Island is not a resort community, but the residential and commercial sprawl have gradually overcome the rural agricultural character of the island. A few black communities, such as Sol Legare, struggle to survive.



Slave cabins at McLeod Plantation, Charleston County, SC.

Similar to Charles Pinckney National Historic Site in Mt. Pleasant, South Carolina, a small piece of the island's rural past remains virtually undisturbed in the midst of 21st century suburban sprawl. McLeod Plantation, first owned by Morris Morgan in 1696, is the last survivor of the 17 plantations originally located on James Island. Samuel Perroneau, who purchased the property in 1741, is believed to be the first to cultivate the land. The slave cabins, which still exist on the property, were constructed by his son-in-law. Although producing indigo and raising beef cattle were the primary foci in the late 18th and early 19th centuries, McLeod later became one of the South's largest Sea Island cotton plantations, encompassing 900 acres at its heyday, and producing a large crop of Sea Island cotton with a labor force of 70 enslaved Africans.

The finest Sea Island cotton was produced on James, Johns, and Wadmalaw Islands, all located just south of Charleston, South Carolina. In his *Memoirs*, General William Tecumseh Sherman describes James Island as it appeared in 1846, "Looking down the bay on the right was James Island, an irregular triangle of about seven miles, the whole island in cultivation with sea island cotton" (1990:33).

As was customary in those times, planters maintained dual residency and left an overseer with the slaves to cultivate the property. William Wallace McLeod purchased the property in 1851, and the existing main house structure was built by enslaved Africans.

During the Civil War, the property was occupied for a time by Confederate troops who used the main house as a field hospital. During the final days of the war, the famed 54th and 55th Massachusetts regiments occupied the plantation and again used the main house for a hospital. Black soldiers who died there are buried in the slave cemetery, which still exists today. After emancipation, more than 20,000 displaced newly freed slaves were temporarily housed on the plantation grounds. The main house was used as a field office for the Freedmen's Bureau of Charleston.

Agricultural use of the property began again in the late 19th century and continued well into the latter half of the 20th century, when the owner began to sell off parcels of the property. Today McLeod, which is currently owned by the Historic Charleston Foundation, is surrounded by suburban residential and commercial development. Although located just minutes from downtown Charleston, the complex retains its rural character. The mature allee of live oaks extends to Wappoo Cut. A complete antebellum ensemble that survives at McLeod includes the main house, a slave street with five frame cabins, a kitchen, dairy, gin house, barn, and other agricultural buildings, all of which date from the revitalization of the property in the 1840s and 1850s for the production of sea island cotton.

At the present time, plans are underway for the McLeod property to be sold to the American College of the Building Arts, an organization with close ties to the Charleston community. Phillip Simmons, world-renowned Gullah iron worker and National Heritage Fellow, is one of the founders of the school. The college will not only teach a new generation of artisans the lost skills and crafts once practiced by enslaved Africans and other craftsmen in the Low Country, but also will serve as stewards and interpreters of this historic property.

Sapelo Island in McIntosh County, Georgia, is a 16,500-acre barrier island with no bridge connecting it to the mainland. A ferry boat, operated by the State of Georgia, transports people and supplies to and from the island from a dock in Meridian, Georgia. Approximately 96% of Sapelo land is now

owned and administered by the Georgia Department of Natural Resources (DNR). Hog Hammock, which originated *ca.*1834 as one of several slave settlements on the island, is one of the last intact Geechee island communities on the Georgia coast. The 434- acre settlement was named for Sampson Hog, an enslaved African once owned by Thomas Spalding. Approximately 60 people currently reside in Hog Hammock.



First African-Baptist Church, Raccoon Bluff, Sapelo Island, GA, has been restored with assistance from SICARS, SCAD, and Georgia DNR. The church is now listed on the National Register of Historic Places.

American Indians occupied Sapelo Island when Spanish explorers established a mission there in 1566. Patrick MacKay purchased the island in 1762 and introduced large- scale plantation agriculture and slave labor. Upon MacKay's death, the land was sold to John McQueen of South Carolina. McQueen later sold the land to a group of French royalists who had fled the French Revolution. The Frenchmen divided the island into plantation tracts including Chocolate, Bourbon, and Raccoon Bluff on the north end of the island. In 1800, the lands were sold to Edward Swarback, and English sea captain, and Richard Leake, father- in- law of Thomas Spalding. When Leake died in 1802, Spalding inherited the south end of the island.

Thomas Spalding was an agriculturist, banker, and politician, who led the island through its only significant money making period. McIntosh County tax records indicate that by 1825, Spalding's land holdings totaled 7,910 acres. He relied on his workforce of 400 enslaved Africans on Sapelo to produce Sea Island cotton, sugarcane, corn, and rice. Balili, a slave who served as an overseer of Spalding's vast plantation, was the most influential enslaved African on the island. He was a Muslim and maintained writings in Arabic that are now held in the University of Georgia Library. Balili helped to ensure the survival of African traditions by instilling African customs and teaching the Gullah/Geechee language to slaves on Sapelo. During the Spalding era, there were at least five slave settlements on the island: Raccoon Bluff, Shell Hammock, Belle Marsh, Lumber Landing, and Hog Hammock.

In January 1865, when General William T. Sherman issued Special Field Orders 15, which decreed that freed slaves be given land on which to live and farm, Spalding's freed slaves established self- sufficient freedmen communities at Shell Hammock, Hog Hammock, Raccoon Bluff, and Behavior, where they engaged in timbering or farming. Many of these citizens became indebted to unscrupulous financial speculators and subsequently lost their property. Thus, the Spalding family was able to regain control over the island. It is believed that the Spalding family forced all blacks, who were not Spalding slaves or their descendants, to leave the island (Cyriaque 2001, Olsen n.d.).

Richard J. Reynolds, tobacco heir from North Carolina, purchased Sapelo in 1934. Between the late 1940s and 1960, all black residents of the island were forced to leave Raccoon Bluff, Lumber Landing, Belle Marsh, Hanging Bull, and Shell Hammock and were consolidated into the Hog Hammock area. Hog Hammock residents, who are direct descendants of Africans brought to Sapelo in the early 1800s and freedmen who purchased property after the Civil War, have held on to their land for over 130 years. The community includes approximately 434 acres of land located in the south- central area of the island. The settlement once had a population of over 300, but isolation and lack of career opportunities have contributed to a steady decline. Today, there are about 70 permanent residents, some of whom are renting rooms and creating craft items to encourage tourists to visit the island.



Last state-operated school boat takes Sandy Island children to school on the mainland.

Some coastal islands such as Sandy Island, located between the Waccamaw and the Great Pee Dee Rivers in Georgetown County, South Carolina, and across the Intracoastal Waterway from Murrell's Inlet, South Carolina, are protected from development. Two small Gullah villages with about 120 residents remain on the southeast corner of the island. Most of the residents are descended from the slaves of around a dozen rice plantations that once flourished on the island. Islanders commute across the Intracoastal Waterway to jobs on the South Carolina's Grand Strand. Island children ride the only state- operated school ferry in South Carolina.

The pristine beaches of Sandy Island, South Carolina, were once seriously threatened. Textile magnate Roger Milliken and the late industrialist Craig Wall owned most of the 12,000- acre island and were determined to build a bridge from the mainland and develop an exclusive gated community. Although they struggled for 10 years, Milliken and Wall were never allowed to construct the bridge. Thus, Sandy Island, once the largest privately owned fresh- water island on the East Coast, was sold in 1996 to the State of South Carolina for 11 million dollars. It is now managed by the Nature Conservancy as part of the newly created Waccamaw National Wildlife Refuge (WNWR). Although the preserve is open to the public and has several boat landings and nature trails, the rights of property owners adjacent to the WNWR are protected. Thus, Sandy Island landowners may continue to live within their communities without fear of encroachment and resort development (Huntley 1997: 1A).

The Sea Islands are not the only areas at great risk. Mainland Gullah/Geechee communities are also threatened by increasing coastal development and population growth with the resulting encroachment into rural neighborhoods. Sandfly Community, a historic freedmen's hamlet near Savannah in Chatham County, Georgia, has been fighting a battle to keep Target and/or Wal- Mart from building in their tiny community. Ironically, these chain stores expect to draw their customer base from nearby resort islands rather than the Sandfly community itself. Thus far, Sandfly residents have succeeded in stopping the construction of a Target store, but a new 24- hour Super Wal- Mart is currently under construction. The fight is continuing, but the outlook is discouraging (Jacobs 2004).

Once there were several postbellum freedmen communities in or near Mt. Pleasant, South Carolina, in upper Charleston County. Among these are Green Hill, Phillips, Snowden, Scanlonville, Hamlin,

Six Mile, Seven Mile, and Ten Mile. The Town of Mt. Pleasant Historical Commission has been erecting markers to designate these historically significant black neighborhoods.



Green Hill, first called Spark Hill, was established in 1870 when Hardy Green bought 30 acres of land. It was a farming community where produce and livestock were raised and transported by boat to the Charleston City Market. In the 1920s and 1930s, goods were transported by mule drawn wagons to a ferry at Shem Creek. The road they once traveled to reach the ferry is now known as Mathis Ferry Road. According to local lore, Mathis Ferry is a corruption of Matthews Ferry, named for William Matthews, who is believed to have built both the house at Snee Farm and the one at Tibwin, two existing Low Country plantations that will be discussed later in this report. Electricity came to the community in 1942 and paved roads in 1951. The area was annexed into the Town of Mt. Pleasant in 1983.

Today, Green Hill is a thriving residential community. Most homes are owner occupied, and many of these owners are descendants of the first Spark Hill property owners. Although somewhat secluded off Mathis Ferry Road, the community is currently surrounded by upscale residential development. Some residents believe that their neighborhood may not survive. East Cooper Habitat for Humanity has recently begun building homes in Green Hill. Several have been completed and 14 more are to be built in 2004 (Parker 2004).



Snowden residents, though surrounded by suburban development, appear to be holding onto their lands. Snowden, however, is facing a struggle to obtain a public wastewater system. Surrounded on two sides by modern affluent subdivisions, Snowden residents are still dependent on septic tanks, many of which are malfunctioning. According to residents, much of the undeveloped land in the community cannot be utilized unless a sewer system is in place. That leaves a great deal of marsh front property unavailable for subdividing among heirs. Drainage ditches carry runoff from overflowing untreated wastewater. During hot weather, the ditches are infested with mosquitoes and other insects, which are drawn to the foul odor. The untreated wastewater eventually finds its way to the neighborhood marshlands and from there to the Wando River. Construction of the sewer system is not due to begin until July 2005 and will take a year or more to complete (Vari 2004).



Hamlin is being crowded by the upscale Hamlin Plantation subdivision, which threatens to raise property values and taxes for lifelong Hamlin residents. Their ancestors sacrificed to purchase the land, and the land therefore provides a connection to those ancestors. Land values are of no consequence to these residents, who have no intention of selling their land unless forced to do so.

Both Scanlonville and Phillips are under serious threat and have sought help from the South Carolina Department of Archives and History to be designated as historic communities. Both communities have been thwarted in their preservation efforts by





the lack of standing historic structures at least fifty years old, as ordinarily required for National Register of Historic Places status. Another tack for pursuing potential National Register status could be for the communities to seek recognition as either cultural landscapes or "traditional cultural properties."

Scanlonville was formed as a voluntary association of freedmen, who sought to be landowners. Robert L. Scanlon purchased the 614- acre Remley Plantation at auction and held the land in trust for the Charleston Land Company. By 1870, the land had been platted into home sites, farm lots, and a communal park and cemetery. Although Chicora Foundation prepared an archaeological and historical study of the neighborhood for submission to the South Carolina Department of Archives and History (SCDAH) for historic neighborhood designation, the lack of standing structures was cited as the reason for refusing such designation. The cemetery, however, was approved for listing in the National Register.

Phillips Community: A Case Study

Phillips Community is located along South Carolina Highway 41, in an unincorporated area of Charleston County just northwest of Mt. Pleasant. The community began in 1878 when ten- acre parcels of land from Phillips Plantation were "sold to the Negroes" for $63.00. To these new freedmen, $63.00 was a princely sum. Extant plats and maps verify the sale, timeframe, and boundaries of the land transfer. The fact that descendants of the original purchasers have held on to the land for well over 100 years, signifies the depth of family connection and commitment to the land and is a tribute to their once enslaved ancestors.



Phillips Plantation, once part of Laurel Hill and Boone Hall Plantations, was the first plantation owned by Dr. John Rutledge, who came to South Carolina from Ulster, Ireland. Rutledge married Sarah Hext, granddaughter of John Boone of Boone Hall, and acquired the land that became Phillips Plantation through the marriage. Rutledge's sons John and Edward gained national prominence as delegates to the First and Second Continental Congresses and later as governors of South Carolina. John was a signer of the Constitution and became the second Chief Justice of the United States Supreme Court. Edward is known as the youngest signer of the Declaration of Independence.



Rev. Henry Palmer, Sr., tends the goats and hogs in his yard. Although surrounded by surburban development, Phillips is still predominantly rural.



Benj. Bennett, Co. A. 128, U. S. C. I.

Today, as it has been for more than a century, Phillips is a small, rural Gullah/Geechee community that still occupies the footprint of the original settlement. Landowners in the area are descendants of the freedmen who purchased the land more than 125 years ago. Since families never thought it necessary to subdivide the land and have individual ownership, land was shared among family members. As family groups have grown, the land has been shared to form family compounds. Because much of the land was not formally transferred by wills and registered deeds, most of the community land base has become a classic example of "heirs' property."





Two of the oldest houses in Phillips. Vernacular architecture is giving way to modern brick houses and mobile homes.

Phillips is currently bordered on all sides by upscale residential development. Parker Island, location of the traditional cemetery, has been reborn as River Town Country Club. Graves have been vandalized and many grave markers have been stolen. Elders in the Phillips community remember when there were many stones, but as of this writing, there are but four remaining grave stones, all dating to the 19th century, one of which is for Benjamin Bennett, a veteran of the United States Colored Infantry during the Civil War. Currently, there is no protection for this cemetery. The remaining stones and unmarked graves lie in the rear of private subdivision lots where they are inaccessible to descendants and unprotected from further vandalism.

A logging bridge once existed between Phillips and Parker Island. The bridge was not only a link to the cemetery, but also a neighborhood gathering place where people swam, fished, caught crabs, and socialized. Once construction of the River Town Golf Club was completed, contractors bulldozed the bridge access on the Parker Island side and destroyed the cultural link which had existed for many generations.



Richard Habersham stands on the old bridge that once connected Phillips to Parker Island.



Tomb of Dr. John Rutledge SC Hwy. 41, Phillips Community.



One of two abandoned wells in the Phillips Community. Well was constructed with bricks handmade on Parker Island, which is now River Town Country Club.

Not only have Phillips residents lost their path to Parker Island, but they have also lost their neighborhood gathering place. Chemical runoff from the golf course has had a serious impact on the marshes and waters of Horlbeck Creek. The fish and crabs are no longer abundant. Fiddler crabs, though plentiful on the Phillips side, decline in number and disappear entirely as one approaches the golf links. Even places of traditional cultural expression like the Parker Island Bridge, are compromised by the impact of real estate development.

The most valuable cultural resource in these places is strong family connection to the land, a link that has existed for more than 125 years. Such stories of cultural loss have been repeated again and again in Gullah/Geechee communities within the study area. Vernacular architecture is gradually giving way to brick houses and mobile homes.

Now an even greater threat looms over this historic neighborhood. Plans are under way to widen South Carolina Highway 41 which runs through the Phillips Community. The road widening project has been designed to reduce traffic congestion caused by upscale residential development nearby. Although other options may be available, the path of least resistance seems to be through this historically black village. Dr. John Rutledge's brick tomb lies hidden from public view, adjacent to Highway 41 in the Phillips Community and would be lost in the road widening project. Phillips residents see this tomb and the Rutledge connection to Phillips as a part of their own history. Another piece of their story may soon be lost. If, however, the Town of Mt. Pleasant chooses to use federal funds for this road project, there still may be hope for saving these culturally important sites.

Phillips Neighborhood Association, a grassroots organization led by Richard Habersham, has been gathering historical data, holding meetings, and trying to work to save the community. Communities like Phillips or Scanlonville, which have few historic buildings remaining, could seek recognition as "traditional cultural properties" through the National Register of Historic Places. "Traditional" in this context refers to those

beliefs, customs, and practices of a living community of people that have been passed down through the generations, usually orally or through practice. Information on evaluating and documenting traditional cultural properties is contained in National Register Bulletin 38. For more information, see www.cr.nps.gov/nr/publications/bulletins/nrb38.



Meeting of St. Simons African American Heritage Coalition (SSAAHC), First African Baptist Church

Gullah/Geechee Revitalization

Historically, societies under stress from war, rapid economic change, population losses, and political oppression frequently undergo what anthropologist Anthony F. C. Wallace (1970) calls "revitalization processes" of socio- cultural change in order to survive. Oftentimes, these processes take various forms of "nativism," described by an earlier anthropological theorist, Ralph Linton (1943). Nativism includes not only "nativistic movements," such as the 19th- century Ghost Dances of the Plains Indians or the Cargo Cults of Melanesia, but also other less obvious forms of "nativism" evidenced in, for example, "the Englishman's insistence on dressing for dinner even when alone in a remote outpost of empire" (237). In Linton's scheme, nativism can assume many forms, which may be analyzed as various combinations of the "magical" and "rational," the "perpetuative" and "revivalistic." In the model developed by Wallace, revitalization movements depend upon a consciously conceived effort by charismatic leaders to conceptualize a new goal culture, convert followers to this vision, and attempt to establish a new "steady state" of social "equilibrium."

These concepts and models of revitalization and nativism have special relevance for understanding what Gullah/Geechee people are doing today to grapple with the increasing forces of modernization, urbanization, and globalization that endanger their collective cultural memory and their traditional social identities. In their struggles, Gullah/Geechee people confront the problems of specific local communities and in their cultural world at large – sometimes stretching far beyond the Carolina/Georgia coast.



Gullah/Geechee people are pursuing many approaches to cultural survival. A number of communities have organized festivals and other fundraisers to support cultural education and historic preservation movements to rescue and restore significant buildings and/or educate communities and their children in the importance of their culture and heritage. Lorraine White, a music teacher at Alston Middle School, and Becky Dingle, Social Studies Coordinator for the Dorchester County, South Carolina, School System, received a grant from the South Carolina Humanities Council to teach students about Gullah culture. White, a descendant of Drayton Hall slaves, coordinated the year- long program. Field trips included Drayton Hall and the Avery Institute.

Local artists such as sweetgrass basket makers and professional dancers came to Alston to talk with the students. The program was designed to immerse both black and white students in the Gullah culture in an effort to promote understanding and acceptance of others. Together White, who is black and Dingle, who is white, developed a poignant program with Dingle telling a story that is liberally



SSAAHC members posted this sign to discourage land sales in traditional African American communities. *Jeanne Cyriaque, Georgia DNR*



Amy Roberts examines deteriorating window sill, Harrington School House. SSAAHC hopes to restore the school as a museum or community center on St. Simons Island, GA.

sprinkled with White's singing. After the conclusion of the grant program, White and Dingle have continued to present their programs in schools and other venues throughout the area.

Amy Roberts and the St. Simons African American Heritage Coalition (SSAAHC), a 501(c)(3) non-profit corporation established in 2000, are working not only to teach children about their culture, but also are trying to save the historically black Harrington School building on the Island. In the spring of 2002 SSAAHC launched a land retention initiative; owners placed bright yellow signs on their property declaring, "Don't Ask – Won't Sell." Fundraising activities – from weekly barbecues to an annual Georgia Sea Island Festival – have helped in their efforts. The Trust for Public Land is now working with SSAAHC to assist in the acquisition of Harrington School.

A key part of SSAAHC's purpose has been to teach the area young people about their rich cultural heritage so that they will learn to take pride in their Geechee ancestry. To this end, the group sponsors bus trips to culturally significant sites such as Penn Center, Seabrook Village, and American Beach. As part of this project, Vera Manigault of Mt. Pleasant, South Carolina, traveled to St. Simon's Island to demonstrate her craft and teach them basic basketry skills.

Sapelo Island Cultural and Revitalization Society (SICARS) was founded in 1993, incorporated in 1994 as a Community Land Trust, and achieved 501(c)(3) non- profit status in 1995. The organization's mission is to "address systemic threats to the survival of the community through land retention strategies, land use planning, and policy reform. These threats include tax and government planning agendas that directly affect our community and encourage or directly create the loss of descendant-owned land." Believing that the Sapelo Island community "… can take ownership and responsibility for our future only to the extent that we can develop an accountable, representative, and well-informed leadership," SICARS has taken political action to halt further land losses through public education on heirs' property, land retention, tax reforms, and zoning laws (SICARS home page http://www.sapeloislandgeorgia.org).

SICARS sponsors, organizes, and promotes heritage/cultural tourism events such as the annual Cultural Day Festival to teach both Gullah/Geechee people and outsiders about the richness of Gullah/Geechee culture and to raise funds for community projects. SICARS, with the assistance of the Savannah School of Arts and Design (SCAD) and the Georgia State Preservation Division of the Department of Natural Resources, restored the First African Baptist Church building at the historic

Sapelo Island settlement site known as "Raccoon Bluff." Raccoon Bluff, sold to freedmen in 1871, is the only part of Sapelo never owned by the Spalding family (Olsen n.d.).



Marquetta L. Goodwine, Founder, Gullah/Geechee Sea Island Coalition.

SICARS has recently received a Georgia Heritage grant to develop a restoration plan for Farmers' Alliance Hall, which was built in 1929 by the Colored Farmers' National Alliance and Cooperative Union. The main floor was historically used as a brokering agency for local Geechee farmers, while the second floor was the local Masonic Hall and meeting place for the Order of the Eastern Star. Today the Farmers' Alliance Building serves as the backdrop for entertainment at the annual Sapelo Cultural Day festival. Ray Crook, who has spent a number of years working on the Gullah/Geechee archaeology of Sapelo Island (2001), collaborated with local Geechee historian Cornelia Bailey to record oral histories and traditions of elders from Hog Hammock Community. The proceeds from the resulting publication were dedicated toward the restoration of Farmers' Alliance Hall (Crook *et al*. 2003). Long- term plans include creation and construction of a living history village project on 16 acres near Hog Hammock. SICARS also plans a study to determine the feasibility of purchasing its own ferry boat to transport residents and visitors to and from Sapelo.

One of the newer organizations in the study area is the Daufuskie Island Historical Foundation (DIHF), a 501(c)(3) non- profit corporation. DIHF was organized in 2001 for the preservation of the cultural heritage of Daufuskie Island, South Carolina, and for acquisition, preservation, and restoration of historical sites, documents, and artifacts. The Foundation has purchased two historic structures on the island – Mt Carmel Baptist Church and the Brothers and Sisters Oyster Society Hall – both of which were listed in the National Register of Historic Places in 1982 as part of the Daufuskie Island Historic District (National Register Information System, SC). The church building has been restored for use as an island historical museum.

Newly formed preservation groups, such as DIHF, and grassroots organizations such as SSAAHC and SICARS, are but a few of many similar organizations along the Gullah/Geechee coast. Working in concert with more external non- profit organizations, such as the South Carolina Bar Foundation and the Penn Center, local community- based organizations throughout the study area are fighting to keep their traditional homelands from being overrun by suburban sprawl and resort development. These groups seek to heighten awareness of heirs' property problems and educate their constituents about conditions that make traditional communal land ownership unworkable today.

By far the most dramatic and visible movement – locally, nationally, internationally – to affect Gullah/Geechee cultural revitalization region- wide is the Gullah/Geechee Sea Island Coalition (Goodwine 2000). The Gullah/Geechee Sea Island Coalition was founded in 1996 in Brooklyn, New York, by Marquetta L. Goodwine, a native of St. Helena Island, South Carolina, who returned to full-time residence on the island around 1999. Director Goodwine describes the organization as a community- based organization that "promotes and participates in the preservation of Gullah and Geechee history, heritage, culture, and language; works toward Sea Island land re- acquisition and maintenance; and celebrates Gullah/Geechee culture through artistic and educational means electronically and via 'grassroots scholarship'" (Goodwine, Gullah/Geechee Sea Island Coalition home page).

Goodwine and the Coalition worked with the Beaufort County Planning Commission to establish specific zoning protection for Gullah lands by establishing a "Cultural Protection Overlay (CPO) District." As of this writing, Beaufort County is believed to be the only county in the United States to have specific laws to protect Gullah culture. The laws establish this CPO District "to preserve traditional land use patterns and to retain established customs and rural way of life" (Beaufort County Planning Department, Electronic document 1). In addition to the CPO, these laws provide protection for family compounds, lands that have remained within a family for a period of 50 years or more, "to allow longtime rural residents to protect a traditional way of life and provide affordable housing for family members, who in turn will help stabilize and preserve the county's rural communities." Owners of such family compounds, working within the prescribed guidelines, are granted density bonuses that allow for traditional clustering of family residences (Beaufort County Planning Department, Electronic document 2).

In addition to leading the practical efforts of the Coalition, Goodwine proselytizes for an almost quasi- transcendental achievement of cultural solidarity, consolidation of Gullah/Geechee ethnic identity, and even "nationhood" of Gullah and Geechee people throughout the Low Country and Sea Islands. Such a development is a specific manifestation of panhuman processes of social and cultural change identified by anthropologist Wolf (1994). For her efforts, according to Goodwine, some of her followers "enstooled" her in 2001 as "Queen Quet, Chieftess of the Gullah/Geechee Nation." The group has adopted a formal constitution and a national flag. Goodwine's more far- reaching efforts include a videotaped message – *Yeddy Wi: Gullah/Geechee Living Ways* – which was presented to the First International Conference on the Right to Self- determination & the United Nations, Geneva, Switzerland, in 2000 (Kly 2001).

Goodwine also leads an effort to win eventual reparations for past wrongs to Gullah/Geechee people, with reparation funds to be managed by her and the "Wisdom Circle Council of Elders of the Gullah/Geechee Nation" (Goodwine, 2002; *cf.* Kly 1994a, 1994b). Nonetheless, she recently wrote in response to the public review draft of this document, "… the ultimate goal of the Gullah/Geechee Nation is not reparations … It is self- determination and empowerment of Gullah/Geechee people to return to being self- sustaining."

The coastal area, which Goodwine describes as a "Gullah/Geechee nation," though having no federal recognition or status, has all the earmarks of classic revitalization movements. Such movements have been described by anthropologists as processes for indigenous peoples and others whose cultural identity and way of life is threatened (*cf.* Paredes 1974). Strictly speaking, Gullah/Geechee people are not indigenous to North America. The point may be made, however, that despite ancestral roots in Africa, Gullah or Geechee culture developed in America as a distinct "creole" society. In this respect, Gullah/Geechee language and culture could be said to be "indigenous" to the Low Country and the Sea Islands. Whether or not they are "indigenous," Gullah/Geechee people presumably are covered by the "United Nations Declaration on the Rights of Persons Belonging to National or Ethnic, Religious and Linguistic Minorities," as Goodwine (1998) has suggested.

As with some leaders of revitalization movements throughout history, Goodwine attracts followers with near religious fervor while repelling others who look at the movement with skepticism, among whom are many Gullah/Geechee people themselves. Some people grant unwavering loyalty to Goodwine's political and cultural legitimacy and view her as a true savior of her people; others dismiss her as a self- serving opportunist. Some change their minds. Although to outsiders Goodwine might sometimes appear to be speaking for all Gullah/Geechee people, many prefer to speak for themselves or through less- publicized grassroots organizations in their own communities.

From small- scaled localized efforts at saving historic buildings to the more sweeping vision of "Queen Quet," much that Gullah/Geechee people do today can be comprehended within a framework of ideas discussed by renowned anthropologist Wolf under the rubric of "peoplehood"

(see also Deloria 1969). Peoples disfranchised, marginalized, and oppressed by the expansion of nation- states, colonial empires, and industrial economies;

> … arise and define themselves as against others also engaged in the process of development and self- definition. There is hardly a study of an ethnic group now that does not describe how the locals use 'agency' to 'construct themselves' in relation to power and interest. This is … much to the good. It transcends the bland, power-irrelevant relativism of much of the talk about "culture" (Wolf 1994:6).

Conditions along the Gullah/Geechee coast at the beginning of the 21st century are ripe for classic processes of cultural revitalization and affirmations of "peoplehood." Tourism, rapid economic development, land losses, and dwindling community autonomy are major stresses. Added to these is a decline in traditional sources of income from fishing, lumbering, and agriculture. These multiple stressors from many directions place Gullah/Geechee people in an at- risk condition which Faulkenberry, *et al*. (2000: 94, 95) described as a culture of servitude:

> Sam Vaughn, a white business owner, echoed a deep concern for the future, shared by many residents: 'We've got a whole culture … of servitude [on the islands]. A hundred years ago they had plantations. They were owned by white masters … [African Americans] lived … outside the plantation … What do we have now? We have a plantation, that's run by people who've moved to the community who want the same kind of services. We have buses that transport people from outlying areas off the plantation to come and do the plantation work.'
>
> Insightful African and Euro- American residents recognize the danger in allowing this new 'culture of servitude' to develop even more … without … [certain] … modifications, the ecological and economic impact of tourism and development along South Carolina's coast will exacerbate class and racial divisions, further erode the social fabric of the islands, increase the psychological frustration and despair of the lower middle class, and commodify existing cultural traditions. On the other hand, with prudent and immediate actions to eliminate the expanding 'culture of servitude,' the pleasurable quality of life in this beautiful part of the United States will continue.

Development of gated communities has rendered some sacred sites and cemeteries inaccessible. Not only do some Gullah/Geechee people feel choked out of their communities, but also in some respects, they view resort development as virtual reincarnation of the plantation system. Some of these people expressed their frustration to the SRS research team. With only minimum wage service sector jobs available, they feel subservient once again to their resort "masters." Many of these exclusive communities have even used the word plantation as part of their names (Pinskey 1982, 1993).

In her review of scholarly writing, Hargrove (2000) has described the inexorable confluence of external pressures for change on one Gullah community. She concludes with a hopeful note that this NPS Special Resource Study could itself serve as a catalyst for reconstituting Gullah social vitality. It is, indeed, the conundrum of this SRS that the study itself has become intertwined with the very cultural resource that it purports to study, i.e., contemporary Gullah/Geechee culture. The SRS has become one of a suite of ongoing activities that Gullah/Geechee people and communities seek to turn to their advantage in order to "save our culture."

The very existence of all the many Gullah/Geechee efforts at cultural preservation and revitalization could be seen as evidence in themselves of the precariousness of Gullah/Geechee survival. Even so, the fact remains that the survival of a recognizable, distinct Gullah/Geechee culture is questionable. Indeed, Gullah/Geechee people of Georgia are included in a recent scholarly work entitled

Endangered Peoples of North America: Struggles to Survive and Thrive (Greaves 2002). As William Pollitzer so bluntly yet hopefully wrote:

> The sea islanders of today are threatened by the ever- increasing pace of modern life with its economic demands. They are not a museum piece, relics of the past, but rather survivors of enslavement, bondage, discrimination, and white privilege – fellow human beings entitled to work out their own destiny. Hopefully the best of sea island life, language, customs, and values can be preserved, even as the people take advantage of new opportunities and move into mainstream America.
>
> The Gullah people can cherish individual differences and take pride in a unique heritage … The Sea Islands will then become more than the 'see islands' for tourists; … and the Low Country will become the High Country of the African American experience (1999).



Children play on the grounds of Farmers' Alliance Hall, which serves as the backdrop for the annual Cultural Day celebration on Sapelo Island. *Diedre Laird, SC Desk, Charlotte Observer*

3 National Park Service Standards for National Significance, Suitability, and Feasibility

Relating the NPS to Gullah/Geechee Peoples and Culture

If there is to be any involvement of the NPS in Gullah/Geechee society and culture, it must be in accordance with NPS standards and meet the criteria for national significance, suitability, and feasibility, as set forth in NPS Management Policies. If an area meets the standards of national significance, additional information is gathered about its suitability and feasibility as a potential addition to the National Park System and alternatives for management and protection.

NPS Standards for National Significance, Suitability, and Feasibility

National Significance: According to NPS Management Policies an area may be considered nationally significant only if it meets all the following criteria:

- Area is an outstanding example of a particular type of resource;
- Area possesses exceptional value or quality in illustrating or interpreting the natural or cultural themes of our nation's heritage;
- Area offers superlative opportunities for public enjoyment or scientific study;
- Area retains a high degree of integrity as a true, accurate, and relatively unspoiled example of a resource;
- In addition to the above criteria, an area that is determined to be nationally significant must also meet criteria for suitability and feasibility in order to qualify for potential inclusion in the park system.

Suitability: An area is considered suitable for addition to the National Park System if:

- It represents a natural or cultural resource type that is not already adequately represented in the National Park System;
- It is not comparably represented and protected for public enjoyment by other federal agencies; tribal, state, or local governments; or the private sector.

Feasibility: To be feasible as part of the National Park System, an area must be of sufficient size and appropriate configuration, considering natural systems and/or historic settings to ensure sustainable resource protection and accommodate public use. The area must also have potential for efficient administration at a reasonable cost. A number of factors are taken into consideration when assessing feasibility. Specific factors that are considered include:

- Current and potential uses of the study area and surrounding lands for preservation, interpretation, research, education, and recreation;
- Land ownership patterns within the proposed area;

- Current and potential threats to the cultural, natural, and historical resources;
- Degradation of existing resources;
- Staffing requirements to administer a new NPS unit or NPS partnered site;
- Local planning, land use, and zoning requirements in the study area;
- Level of both local and broader public support;
- Both economic and socio- economic impacts of a new unit designation to the National Park System.

National Significance of the Gullah/Geechee Culture

The Gullah/Geechee people of the Low Country and Sea Islands of South Carolina, Georgia, Florida, and North Carolina are a distinctive people. They are also the only African American population of the United States with a separate, long- standing name identifying them as a separate people. They are distinct among African American peoples in this development of a tradition that depends as much upon maritime resources as upon land resources. Historically, they are speakers of the only true African American creole language of the continental United States.

Gullah/Geechee people are the most African of African Americans in physical type, language, and culture; yet, they are a uniquely American cultural type formed by the fusion of African cultural heritage and American experience. Through the diffusion and expansion of their population, the Gullah/Geechee people have become the source for many elements noted in other African American cultures. Of all African American cultures in the United States, the folk customs, oral history and literature, crafts and arts of the Gullah/Geechee people show the strongest continuities with indigenous cultures of Africa. The Gullah/Geechee culture also bears strong similarities to creole and maroon cultures of the Caribbean.

Thus, Gullah/Geechee cultural heritage, culinary practices, music, language, and traditions have made significant contributions, not only to the lives of southerners but also to all Americans. Today, Gullah/Geechee lands, landmarks, structures, sacred sites, language, cultural identity, and their very existence as a distinct population are under extreme stress from rampant coastal development, population growth, lack of recognition, and lack of significant financial resources. Most Americans do not know of their existence or of the role they played in the formation of America. Today, there is a brief window of time in which there will be an opportunity to save this living people and their cultural landscape and to preserve a significant part of American heritage.

In many respects, the Gullah/Geechee cultural region directly parallels that of the Afro- Carib Garifuna people of Belize. The “cultural space” of these Garifuna people was selected in 2001 by UNESCO, the United Nations Educational, Scientific and Cultural Organization, as a Masterpiece of the Oral and Intangible Heritage of Humanity, a distinction for which the Gullah/Geechee people themselves might qualify (Global Garifuna Network, Electronic Document; UNESCO, Electronic Document).

Recognizing the pivotal place that Gullah/Geechee people, language, folklore, and culture have occupied in African American scholarship, the NPS Special Resource Study team commissioned one of the most outstanding and erudite of African American scholars, Professor Richard A. Long, to prepare a statement on the national significance of Gullah/Geechee culture. Long holds the Atticus Good Chair at Emory University and was founder of the Center for African and African American Studies at Atlanta University. Dr. Long’s statement follows:

Gullah Culture Special Resource Study Statement of National Historical and Cultural Significance - *Professor Richard A. Long, Emory University*

The cultural group known as the Gullah/Geechee people is an African- descended American population associated geographically with off- shore islands (the Sea Islands) and coastal areas of South Carolina and Georgia, an area which, particularly in South Carolina, is known as the Low Country. The Gullah area extends geographically, in the view of some observers, to adjoining coastal areas of North Carolina and northern Florida, though a strong claim may be made only for the occasional presence of isolated Gullah clusters in the latter state.

Historically, the Gullah area is associated prominently with, among others, the following South Carolina Islands: Johns, Wadmalaw, Edisto, St. Helena, Hilton Head; and the Georgia Islands: Tybee, Ossabaw, Sapelo, St. Simons, Jekyll, and Cumberland. The coastal cities of Charleston and Beaufort, South Carolina, and Savannah, Georgia, have been the urban spaces which are considered integral to Gullah culture, and *entrepots*, sites of settlements and centers from which important influences have radiated.

The Gullah, long forming the bulk of the African American population in the geographical region delimited above, are coeval in historic depth with the earliest European Americans in the region. The plantation economy, the dominant social and economic matrix of the region, was initiated in the late 17th century by British immigrants from the Caribbean seeking to duplicate on the mainland the Barbadian enterprise. These immigrants brought in their trained enslaved Africans and subsequently fulfilled their increasing labor needs by further importations of enslaved Africans, both from the Caribbean and directly from Africa.

A number of factors gave rise in the 18th century to Gullah culture among the descendents of the enslaved Africans and successive waves of the newly enslaved. This culture has many distinctive traits, most dramatically a language, now recognized as a fully mature creole language rather than a variety of "broken" English. The most prominent factor in the rise of Gullah culture was the relative isolation of the large African population which worked the plantations, producing successively sugar- cane, indigo, rice and cotton. Over a few generations, the interactions among the Africans of various origins, and the relative sparseness of direct European intervention, produced a viable neo- African culture. A description of the African origins of the Gullah population is provided in William Pollitzer, *The Gullah People and Their African Heritage* (Athens: The University of Georgia Press, 1999); the processes by which the Gullah culture was created are detailed in Charles Joyner, *Down by the Riverside: A South Carolina Slave Community* (Urbana: University of Illinois Press, 1984).

Gullah culture may be viewed usefully through three frames. The first, a diasporic frame, takes into account the Gullah and the plantation societies of the Caribbean; the second, a national frame, considers the Gullah in relation to wider plantation society in the United States; a third frame is the consideration of the Gullah as an autonomous group.

Within the diasporic frame many comparisons have been pursued. The development of Haitian peasant culture with its distinctive language (Haitian Creole), religious syncretism (vodun), burial customs, crafts, verbal arts—storytelling and proverbial discourse, offers an interesting but relatively unexplored parallel. The persistence of African folklore among the Gullah and in the Caribbean has been the subject of considerable inquiry beginning with the comparative researches of Elsie Clews Parsons, *Folk- Lore of the Sea Islands, South Carolina* (Cambridge: American Folklore Society, 1923) and extending to a recent study by Mella Davis, *African Trickster Tales in Diaspora: Resistance in the Creole- Speaking South Carolina Sea Islands and Guadeloupe* (Ph.D. Dissertation, Northwestern University, 1998).

The diasporic perspective has been brought to bear most intensively on the study of the Gullah language, the first scientific study of which was Lorenzo Dow Turner's, *Africanisms in the Gullah Dialect* (Chicago: University of Chicago Press, 1979). A re- evaluation of Turner's work was undertaken by Michael Montgomery and others in *The Crucible of Carolina: Essays in the Development of Gullah Language and Culture* (Athens: University of Georgia Press, 1994).

The setting of Gullah culture within the national frame requires an overall concept of African American Culture which posits a folk- rural culture having been created in plantation America during the 18th century in the Upper South (Maryland and Virginia) and the Lower South (South Carolina and Georgia) and then extended with the extension of the plantation economy to the states of, the Deep South (Alabama, Mississippi, Louisiana) in the early 19th century. This folk- rural culture was characterized by a much more intimate contact between European and African Americans and consequently developed variations from European practices rather than stark contrasts with them: language, religion, musical practice, social structure, in the African American folk- rural culture may be regarded on a spectrum in which Gullah culture may be seen as a neo- African pole, the other pole being African Americans totally assimilated to European American norms.

With Abolition, there was begun a general migration toward cities, North and South, which produced an African American folk- urban culture. This trend was less profound among the Gullah, marking another distinction between them and larger African American culture.

As an autonomous group, the Gullah people, their culture, and their geographical setting have had an extended presence in the American mind, beginning with the work of South Carolina writer, William Gilmore Simms (see Nell Munroe Nixon, "Gullah and Backwoods Dialect in Selected Works by William Gilmore Simms" (Ph.D. Dissertation, University of North Carolina at Greensboro, 1971). Fanny Kemble's *Residence on a Georgia Plantation, 1838- 1839* (1963) provided a view of plantation life in the Gullah area at a crucial moment in American history. Yet another perspective on Gullah life was provided by the New England writer Thomas Wentworth Higginson in *Army Life in a Black Regiment* (1869).

The Sea Islands area was the site of an ambitious Abolitionist project at Port Royal, memorably chronicled by Willie Lee Rose, *Rehearsal for Reconstruction: The Port Royal Experiment* (Indianapolis: Bobbs- Merrill, 1964). A classic of African American autobiography, *The Journals of Charlotte Forten*, edited by Ray Allen Billington (1953), provides a vibrant day- to- day account of the "experiment."

Delineations of the Gullah, the Sea Islands, and of Charleston interweave with the flowering of African American consciousness and cultural activity which occurred in the 1920's. In 1922, a racially insensitive compiler, Ambrose Gonzales, aroused interest with his folkloric collection *The Black Border: Gullah Stories of the Carolina Coast* (Columbia, SC: State Publishing Company). Two South Carolina novelists emerge later in the decade: DuBose Heyward, author of *Porgy* (1925) and Julia Peterkin, author of *Scarlet Sister Mary* (1929). Porgy was successfully dramatized for Broadway. *Scarlet Sister Mary* received the Pulitzer Prize and was also dramatized, though less successfully. *Porgy* was transmuted into the Gershwin opera *Porgy and Bess* (1934), the best known of all American operatic works.

A culminating moment in the examination of Gullah culture was provided by a book which came out of the Georgia Writers Project of the 1930s; the African background of Gullah culture was highlighted through the autobiographical vignettes of Gullah life compiled in *Drums and Shadows* (1940). Coincident with the black consciousness of the 1960s, and inspired both by *Drums and Shadows* and Turner's *Africanisms in the Gullah Dialect*, a current of scholarship on the Gullah language began to flow which has continued until the present. In addition to the collective volume edited by Montgomery, already cited, another collected work has appeared: *Sea Islands Roots: African Presence in the Carolinas and Georgia,* edited by Mary A. Twining and Keith E. Baird (Trenton, New Jersey: Africa World Press, 1991). Individual and highly specialized studies have appeared. For Littlefield, *Rice*

and Slaves: Ethnicity and the Slave Trade in Colonial South Carolina (Baton Rouge, Louisiana: LSU press, (1981) and two decades later, Judith Ann Carney, *Black Rice: The African Origins of Rice Cultivation in the Americas* (Cambridge: Harvard University Press, 2001).

The visualization of Gullah culture has been a continuing project beginning in the 1920s with the portrait sketches undertaken by Winold Reiss on St. Helena Island. More recent have been the photographic installations of Carrie Mae Weems, *Sea Island Series* (1992), the film, *Daughters of the Dust* (1991) by Julie Dash, and the paintings of Jonathan Green, published in *Gullah Images* (Columbia, South Carolina: USC Press, 1996).

It is of great interest to note that the broader African American culture is frequently characterized or represented by evidence from Gullah culture. One need look no further than the seminal collection of songs compiled primarily at Port Royal during the Civil War. Appearing in 1867 as *Slave Songs* of the United States, this work is the fount of the written tradition on African American folk music. Generalizations about African American folklore and folk life sometimes repose primarily on Gullah evidence. A consequence of this tendency is a penchant for asserting that somehow Gullah culture is more "authentic" or fundamental than other manifestations of African American culture. Such a reading, of course, is a distortion of history and a disservice both to Gullah culture and to African American culture generally.

The Gullah world is a unique socio- cultural entity of intense historical and intellectual interest to scholars, artists, tourists and to those indigenous to that world. Its geographical extension and high profile sites such as Penn Center and the Charleston Market make the Gullah area an eminently feasible entity for public patronage and appreciation in a manner similar to other present and proposed National Park Service areas characterized by their embodiment of cultural history. The Gullah world provides an outstanding and indeed unique American example of an historical process, that of creolization as it is now understood by anthropology and linguistics. The Gullah area offers superlative opportunities for public use and enjoyment as well as for scientific study. The Gullah experience is an exceptional illustration of cultural creativity within the context of the American experience. The Gullah world manifests a high degree of integrity as a true, accurate, and relatively unspoiled example of an American resource.

A wide range of scholarly projects have addressed Gullah culture during the last half- century and a number of research institutions in Charleston and elsewhere have recently placed Gullah culture on their agenda. Nevertheless, a strong coordinating presence such as only the National Park Service can offer is necessary if the full value of these various endeavors is not to be dissipated, since these endeavors are dispersed over state boundaries and deployed in both private and public organisms. No entity comparable to Gullah culture is currently in or likely to be proposed to the National Park Service.

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Graduate Institute of Liberal Arts
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Atlanta, Georgia

Suitability of the Gullah/Geechee Culture

For the reasons described below, the Gullah/Geechee culture meets the criteria of suitability for addition to the National Park System:

- The Gullah/Geechee culture is distinctive and is not yet represented and protected as an entity in the National Park System, or by any other agency. Several existing NPS sites tell a part of the story, but none has its main interpretive focus on this unique culture;

- The Gullah/Geechee story of slavery and its realities is uncomfortable for many people, regardless of race. School books have rarely presented the story in any semblance of its harsh reality. These captive African people were forcibly taken from their homeland, survived the treacherous Middle Passage, and sold into slavery. Thus, albeit unwittingly and without credit, they became major contributors to the economic success, infrastructure, and cultural fabric of the states and nation. Their story must be told;

- The opportunity to interpret Gullah/Geechee culture within the NPS is timely, given the current interest in US/African affairs. Dr. Condelezza Rice, National Security Advisor to President George W. Bush, made the following statement on 3 July 2003, ". . . Africa is a part of America's history. You know, Europeans and Africans came to this country together − Africans in chains. Slavery was, of course, America's birth defect. And we've been trying to deal with the consequences of it ever since and to bring about reconciliation. The President on Goree Island is going to have a chance to talk about that experience, but also to look forward to the tremendous contributions of African Americans to this country. So America is a country of immigrants, but, of course, our experience with Africa has this other piece that wasn't exactly an immigrant experience. And yet it is the motherland, of course, a source of cultural pride for a substantial part of America's population."

- Historic sites of importance to the European settlers of the Low Country have been, for the most part, identified, mapped, and studied in great detail. Gullah/Geechee historic, archaeological, and cultural sites have not been so well documented and many are already lost;

- The Gullah/Geechee study area is an assemblage of rich and varied resources representing a unique aspect of historical archaeology and culture;

- The study area represents a complex mixture of people and their origins, traditions, customs, beliefs, and folkways of interest to the included states and to the entire nation.

- The coastal patterns of natural, estuarine, scenic, and cultural resource features, qualities, processes, uses, values, and relationships should be conserved;

- The Gullah/Geechee study team, with the advice of many people from the affected communities, has concluded that a wide array of themes and concepts can be developed and interpreted accurately and effectively through the proposed alternatives.

Feasibility of the Gullah/Geechee Culture

The Gullah/Geechee culture, language, and lands are in imminent danger of loss to encroaching resort development, general coastal population growth, and the emigration of their people for higher education and professional employment. In some cases, tiny frame houses have been taxed at enormous rates due to their location on or near resort islands. Some historically Gullah/Geechee islands, such as Hilton Head, are almost totally lost to development. Other areas are losing ground by

the day. Defining some means of preserving and interpreting this fragile culture is of the utmost urgency or all will be lost. In all of this, as one Gullah woman (Joyce Coakley) commented on the public review draft of this report, "Careful consideration should be given to the skill, expertise, and collective memory of the senior citizens of the community" (22 Jan 2004).

The feasibility of Gullah/Geechee sites within the NPS is greatly enhanced by the formation of partnerships among federal, state, and local entities. The primary goal of these relationships would be to develop cooperative programs through the use of existing public lands, thus avoiding the expenditure of public funds for land acquisition. Appropriated funds could be directed towards preservation, restoration, and program development that serve to commemorate Gullah/Geechee history and culture. All of the alternatives presented in this study would require funding, some more than others, but without land acquisition costs the feasibility of all alternatives is greatly enhanced.

4 Alternatives

Alternative A: Gullah/Geechee Coastal Heritage Centers

The Gullah/Geechee SRS is an unusual undertaking for the NPS because it is directed toward a living people and their evolving culture and because the cultural community boundaries cross state lines. Alternative A presents a departure from traditional NPS initiatives in response to this non- traditional study.

Three Gullah/Geechee coastal heritage centers, located in South Carolina and Georgia and convenient to the study area, would be established through partnerships among government agencies and nonprofit organizations. Ideally, these centers would be established and developed through cooperative use of existing public lands, requiring no funding for land acquisition or removal of lands from the Gullah/Geechee communities. Funding could thus be directed toward preservation, restoration, construction, and interpretation of Gullah/Geechee history and culture. Under this alternative, grants could also be available to assist in local preservation and revitalization projects.

Some existing NPS parks already include information on Gullah/Geechee people, history, and culture as part of their interpretive activities. For example, Charles Pinckney National Historic Site includes exhibits on Gullah contributions to the development of the Low Country during colonial and early American eras. These exhibits are in accordance with the Site's establishing legislation, which mandates furthering the appreciation and understanding of Charles Pinckney the man but also of the local social and cultural characteristics of his life and time as exhibited on Snee Farm. Conversely, Kingsley Plantation (a unit of Timucuan Ecological and Historic Preserve) has sponsored in recent years a "Heritage Celebration" as part of its interpretation of that plantation that brings together a variety of modern- day African American performers and demonstrators, including Gullah basketmakers and Geechee "shouters."

These existing NPS efforts in educating the public about Gullah/Geechee people and culture are consistent with the established missions of the park units that have undertaken such efforts. Such activities are necessarily and appropriately selective and limited in their presentation of the larger Gullah/Geechee story. Alternative A would facilitate and coordinate interpretation of different aspects of the Gullah/Geechee experience at different locations without any modification of the existing mission of established NPS units. Hence, for example, the primary mission of Charles Pinckney National Historic Site would remain the celebration and interpretation of Charles Pinckney's role at the Constitutional Convention and the life of the early nation.

The NPS would seek to recruit well- qualified individuals from the Gullah/Geechee community to assist in developing and presenting these interpretive programs. Legislation would be sought to facilitate recruitment and employment of Gullah/Geechee persons with roots in the surrounding communities. In addition, Gullah/Geechee businesses would be considered in the awarding of outsourcing contracts related to the coastal centers. Gullah/Geechee artisans and crafts people would have the opportunity to perform and sell their products directly to the public at these locations.

High school students and young adults from Gullah/Geechee communities would be encouraged to participate in such programs as Youth Conservation Corps (YCC), Student Conservation Association (SCA), and AmeriCorps. Work experience with these organizations could provide special consideration to those seeking NPS employment.

Training and assistance could be made available to community groups seeking National Register status or historical markers for local historic sites. These groups could also be directed toward grants and other funding for any local projects that may not qualify for grants described within this alternative. Community education programs, seminars, and conferences could be sponsored jointly through resulting partnerships.

All three coastal heritage centers would present an interpretive overview of Gullah/Geechee history and culture, but each site might also emphasize a particular piece of the story that is relevant to the locale. Each center would thereby complement the others by featuring a different operational and interpretive emphasis. In combination, these units would, therefore, offer diverse programs and services that provide comprehensive interpretive, educational, and resource preservation experiences relating to Gullah/Geechee people − their language, their culture, their history, as well as current issues facing Gullah/Geechee people and their communities. The centers might well serve as catalysts for local preservation efforts.

Leaders in some Gullah/Geechee communities have expressed serious reservations with regard to increased visitation in their communities − "The last thing we need is more tourists!" (Goodwine, personal communication 2002), while Gullah/Geechee communities, such as Hog Hammock on Sapelo Island, Georgia; actively seek heritage tourism and its possible economic benefits. The location of heritage centers adjacent to but not within Gullah/Geechee communities would appear to address both issues. Should economic growth and development occur as a result of the centers, entrepreneurial and employment opportunities would be close to but not intrusive upon historic sites. Visitors to the heritage centers could be directed into the communities that seek to increase heritage tourism rather than those who prefer privacy.

Coastal heritage centers would serve as gateways by offering interpretive materials, descriptive maps, and contact information for historical and cultural sites within the study area. This gateway system would serve to provide educational/interpretive materials to visitors, while protecting fragile sites within the neighborhoods and communities from a mass influx of people. Visitors who desire more detailed information and/or persons seeking to determine their own ancestral ties to the Gullah/Geechee culture would be directed to make contact with resource people within the communities.

The three projected sites in this alternative are dispersed in strategic locations along the coast where host and neighboring communities could provide support for the centers. Thus, these centers would not relegate Gullah/Geechee history and culture to a museum environment but rather would seek to interpret the history and evolving culture of the Gullah/Geechee people into the 21st century. Centers would serve 21st century Gullah/Geechee people by providing opportunities for them to research their roots and cultural heritage and by creating a venue for educational programs dealing with issues facing their communities today. Residents of Gullah/Geechee communities would be encouraged to participate as partners in the interpretive process so that their voices might be heard in visitor programs. Centers would be most effective if they sought the advice of neighboring Gullah/Geechee communities and encouraged local people to participate in the interpretation of their culture.

The selection of plantations as Gullah/Geechee interpretive sites may at first summon the stereotypical image of enslaved Africans happily working on the plantation, and the master living in his fine plantation house. The plantation was, however, one of the first places where enslaved Africans demonstrated their innate intelligence, agricultural knowledge, multiple artisan skills, and musical/artistic ability. The plantation is the place where accurate interpretation can dispel the erroneous stereotypical images of *Gone with the Wind* and replace them with a vision of the harsh reality of slavery.

There are already a number of historic plantation houses open to the public, but many of these focus on the "big house" and the planter's family. If enslaved Africans are mentioned at all, the interpretive

material may focus on the story of one enslaved African or one enslaved family who was particularly loyal to the master. Interpretation at these sites generally omits the fact that as many as nine out of ten people who lived on the plantation were enslaved Africans. Although there has been some effort in recent years to include the slavery story, a great deal of work needs to be done before visitors at these sites will hear any semblance of the real story (Loewen 2000). Alternative A presents an opportunity to develop a model on which other plantation sites could base their interpretive programs.

For many years, slavery was described as a benign institution under which enslaved people were well cared for and did not mind being controlled by their masters. The slave narratives, however, collected during the 1930s – recollections of elders who had themselves been slaves in their younger days – presented actual memories of slavery times. Reading their words or hearing their voices removes slavery from the abstraction of a distant time and forces a connection to the challenges and plight of these enslaved human beings. Although the accuracy of these reminiscences has sometimes been questioned due to the methods used to collect the oral histories, the stories are, nonetheless, dramatic reminders of what many people choose to deny or forget (Blasingame 1979). In most cases, however, the slave narratives contradict the stereotypical smiling slave images that still remain in the minds of many and replace them with the story of captive human beings who longed to control their own destinies. Freedom was foremost in the minds of these captive human beings, a fact which was demonstrated by their efforts to escape even from the slaver ships that brought them to the Americas. Slave uprisings were a fact of life from early colonial days and put fear in the hearts and minds of the white minority. Clearly, slavery and its inhumanity still haunt the collective historical memory of Americans.

The interpretation of the realities of life for all inhabitants of the study area may be met with skepticism and apprehension – even shame and embarrassment – from various segments of the population. Yet, an agency such as the NPS—in its effort to present a fair and balanced interpretation of the Nation's heritage—addresses such issues even though they may be painful or uncomfortable to some visitors.

There is no simple solution to the interpretation of controversial issues. If the ultimate interpretive goal here is to tell the whole story, or at least as much of the story as can be accurately portrayed, then all sides must be represented and synthesized into a comprehensive interpretation of the past – warts and all. Only then will it be possible to understand the struggles and appreciate the myriad contributions of Africans to the fabric of America. Knowledge and understanding may, therefore, effect reconciliation, mutual respect, cohesion, and national well- being.

Alternative A, Site I: Three Sites Combined in Partnership to Form the Northern Anchor

The first coastal heritage center project involves partnerships between the U.S. Forest Service (USFS), South Carolina Parks, Recreation, and Tourism (SCPRT), and the NPS for the combined use of Tibwin Plantation, Hampton Plantation State Historic Site, and Charles Pinckney National Historic Site. All three sites are located just off U. S. Highway 17 in upper Charleston County. An interpretive center, serving these locations, would be constructed on Highway 17 at an undetermined site.

Tibwin, Hampton, and Snee Farm (Charles Pinckney National Historic Site) each have an important story to tell. Each of the sites was owned by founding families of South Carolina. Each had numerous enslaved Africans who cleared the land, constructed the homes, planted the crops, and made other significant contributions to the infrastructure and wealth of the state and nation. Together, these sites have a synergistic relationship that enhances interpretation of South Carolina from the earliest colonial beginnings, to the signing of the Declaration of Independence, the Revolutionary War, the framing and signing of the Constitution, the growth of the new nation, the Civil War, and beyond. The three sites represent a 300- year continuum of coastal history intertwined with the story of the Gullah/Geechee people, their language, their skills, and their historic ties to Africa, their unique New World culture, and their contributions to the American story. Gullah/Geechee people and their culture are an inseparable part of the fabric of what is often thought of as southern culture. Telling a more complete story at these three sites will underscore the contributions and significance of the Gullah/Geechee people to the development of state, regional, and national history and culture.

Hampton, Tibwin, and Snee Farm provide many interpretive opportunities relating to early agricultural practices associated with indigo and rice production and processing, production of table crops, and fishing. Additional possibilities for education and interpretation include:

- Displays and demonstrations of traditional Gullah crafts, festivals, programs, concerts, and other special events;
- Educational programs through collaboration with partner organizations. Topics might include traditional arts and crafts, land tenure, heirs' property issues, historic preservation, economic development, grant writing, heritage tourism, and agricultural tourism;
- Production of sweetgrass and other raw materials for basket makers;
- Heirloom agriculture and early agricultural methods;
- Rice cultivation, both upland and tidal;
- Traditional game hunting methods;
- Traditional fishing, shrimping, crabbing, and oyster gathering;
- Traditional cooking methods;
- Water transportation;
- Production and interpretation of medicinal herbs;
- Visual arts;
- Music and rhythms;
- Construction and use of traditional percussion instruments;
- Quilting and other textile arts.



In 2002, the house at Tibwin was stabilized and re-roofed by the NPS Williamsport Preservation Center.

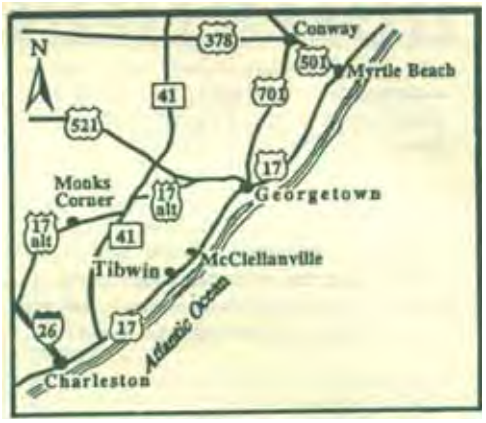
Alternative A, Site I-A: Tibwin Plantation

Tibwin Plantation, dating from an early 18th- century land grant to John Collins, is one of the oldest English agricultural sites on the South Carolina coast and was perhaps home to one of the earliest populations of enslaved African people. The Collins family retained the land until 1794 when the property was sold to William Matthews, one of the largest landowners east of the Cooper River. Matthews is believed to have built a one and- a- half- story cottage at Tibwin *ca* 1805, and is also credited with building a similar cottage at what is now Charles Pinckney National Historic Site.

Tibwin is one of the last surviving coastal plantation homes between Mount Pleasant and Georgetown. Because of its location on salt water, only upland rice could be grown on the property. A rice mill, said to have been designed by Jonathan Lucas, a skilled English millwright who invented the water powered rice mill, was located in the area.

Tibwin is not well- known outside the McClellanville area, possibly because the property was privately owned until it was purchased by the USFS in 1996 as part of an approximately 338- acre tract between the Francis Marion National Forest and the Cape Romaine National Wildlife Refuge. Although severely damaged by Hurricane Hugo, Tibwin is considered to be the most historically significant building in the 260,000- acre Francis Marion National Forest.

There are several Gullah/Geechee communities in the surrounding area with close ties to the Tibwin land. Local residents, along with Historic Charleston Foundation (HCF), and Robert Morgan, USFS archaeologist, have been working together to find a means of preserving the Tibwin house. Morgan has worked diligently to keep the plight of the house before his agency and the public. HCF applied for and received a rural development grant from the Forest Service to make a thorough study of the Tibwin house. Ralph Muldrow, architectural historian at the College of Charleston, undertook the



Map courtesy Santee Historical Society

study and presented a detailed document to the Foundation. Muldrow resisted suggestions that the house be "mothballed" or dismantled and stored, stating, "Once you take it down, it will end up in a dump" (Behre 2001).

For many years, the Tibwin project has been a preservation challenge. Federal law requires agencies to take into account how their activities will affect historic properties and encourages their preservation and use. Although the property is owned by the USFS, the agency receives virtually no funding to care for historic buildings. Because Tibwin is on federal property, it was difficult to raise private funds to protect and restore the house. Residents of the adjoining Gullah community and area preservation groups have expressed their strong support for this project (Behre 2001).

The house at Tibwin was constructed by enslaved African artisans, and according to Muldrow, "Even with half of it rotted away, the house is still stronger than many others. You just have to have the determination to bring it back" (Behre 2002). The original structure was once situated closer to the water, but was moved to its present site after an 1822 hurricane. Hand hewn beams bear carved markings that indicate the placement of these timbers when the house was rebuilt on higher land. The original Tibwin house was of simple story and- a- half construction, quite similar to the farmhouse at Charles Pinckney National Historic Site, but there have been additions and remodeling over the years.

The NPS Williamsport Preservation Center recently replaced the roof and stabilized the farmhouse. Basic renovation would be required before the building could be opened to the public. Outbuildings on the Tibwin site could be restored or rebuilt for use as an artisan center for demonstrating and teaching Gullah arts, crafts, and music. The USFS may be able to locate suitable habitats on the property for a sweetgrass demonstration plot for teaching cultivation of the grass and its use in traditional Gullah basketry.

In addition to remnants of the plantation past, Tibwin's lands feature a rich natural environment, including tidal marshes, freshwater ponds, hardwood bottomlands, pine uplands, Carolina bays, and wetlands that support marine life, songbirds, waterfowl, raptors, alligators, and other wildlife. The USFS has established waterfowl refuge areas on the Tibwin property that bounds the Atlantic Intracoastal Waterway. This restricted area would not be open to visitation. There is, however, the possibility that a viewing tower could be constructed so that visitors might observe the rich and diverse population of waterfowl on the refuge. Water access for fishing and shrimping is available to visitors at nearby locations. Special events, such as youth hunts and hunts for the mobility impaired, are traditionally held at Tibwin. For safety reasons, public visitation might be limited or banned during these events.



During the late 1750s, enslaved artisans renovated the simple farmhouse at Hampton Plantation into the 13-room Georgian-styled mansion that exists today.

Alternative A, Site I-B: Hampton Plantation State Historic Site

Hampton Plantation State Historic Site, a 322- acre park located on the South Santee River, was once a major rice plantation owned by Daniel Horry II. Enslaved African artisans constructed the original one and- a- half- story farmhouse, which was quite similar to the houses at both Tibwin and Snee Farm. During the late 1750s enslaved artisans renovated the farmhouse into the 13- room Georgian-styled mansion that exists today. The large Adamesque portico is said to have been added in preparation for George Washington's visit to Hampton during his southern tour.

Daniel Horry II's second wife was Harriott Pinckney, daughter of Eliza Lucas Pinckney and sister to Charles Cotesworth Pinckney. After Horry's death in 1785, Harriott and her mother stayed at Hampton and were there to greet George Washington when he stopped for breakfast on May 1, 1791. President Washington also stopped for breakfast at Snee Farm (CHPI), which he referred to as the "Country Seat of Governor Pinckney," on May 10 of the same year.

The latest restoration of the house includes cutaway sections of walls and ceilings that illustrate the building's evolution from simple farmhouse to grand mansion. The house has been left unfurnished to highlight architectural and construction details. A historic kitchen building is located adjacent to the main house. Archaeological sites record the story of the rice and decline of the Low Country Rice Culture and the enslaved Africans whose labor made great wealth possible.

Both upland and tidal rice were grown at Hampton, and in 1850, over 250,000 pounds of rice were grown and processed with the labor of enslaved Africans. The majority of the tidal rice fields at Hampton were located on Hampton Island across Wambaw Creek from the main house. This island is now owned by the USFS. SCPRT has indicated a willingness to investigate providing visitor transportation to the island, if the land is made available for interpretation.

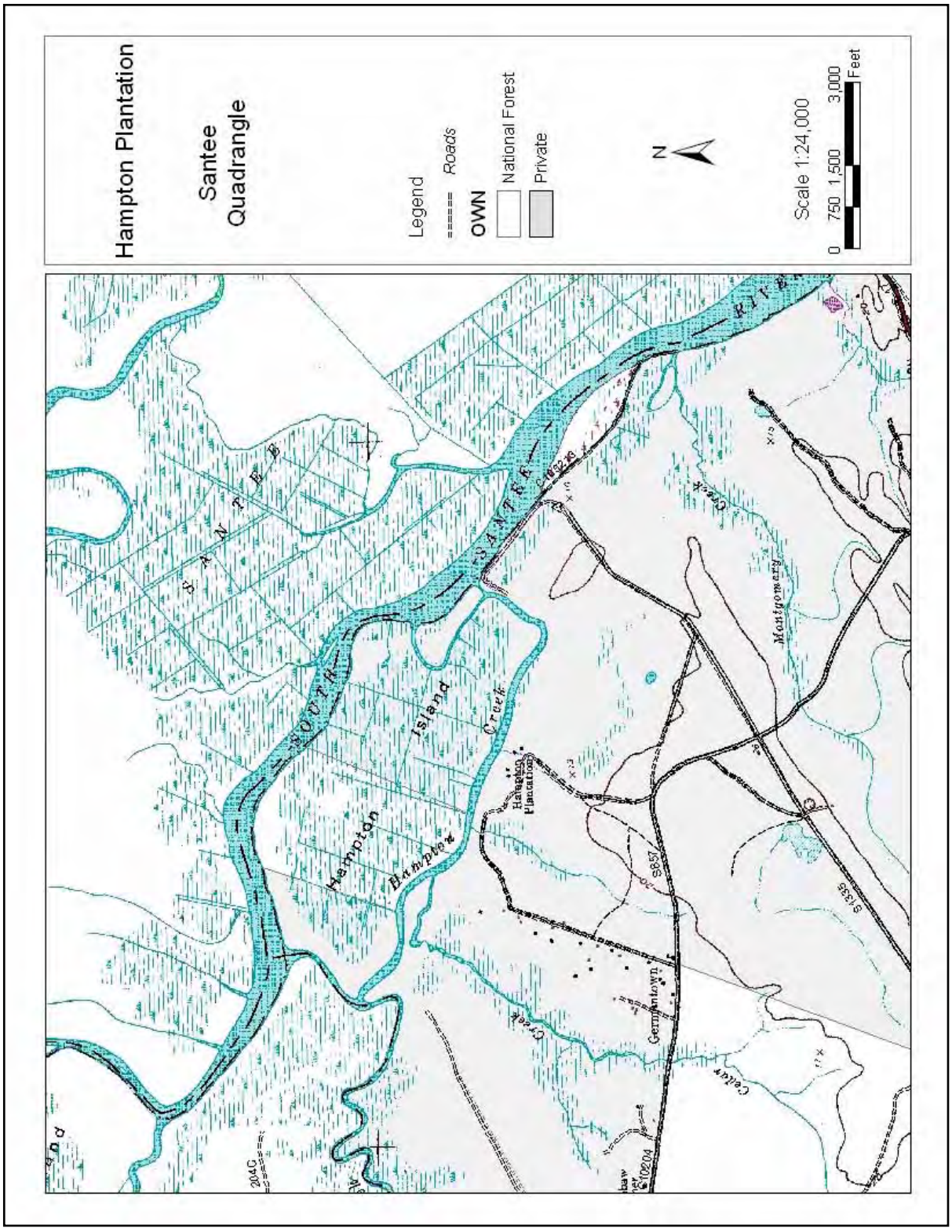
Hampton, now a National Historic Landmark, was once home to the Horry, Pinckney, and Rutledge families, who were prominent planters, major slaveholders, and political leaders. Ledgers from Hampton Plantation are archived in the Library of Congress. These records show that newly freed slaves stayed at Hampton and were paid for their labors. Descendants of these slaves still live in neighboring communities, and some own property that was once part of Hampton. The park includes miles of nature trails and areas for picnics and family reunions.



This chimney at Hampton was built by freedman using materials salvaged from other structures.



1936 Aerial photograph of Hampton Plantation showing Hampton Island where tidal rice was grown. *USFS*



Courtesy US Forest Service



This Low Country cottage, built ca. 1828, serves as a visitor center and museum for Charles Pinckney National Historic Site, Mt. Pleasant, SC. *Carlin Timmons, NPS*

Alternative A, Site I-C: Charles Pinckney National Historic Site

Charles Pinckney National Historic Site, a 28- acre park located on Long Point Road in Mt. Pleasant, South Carolina, is all that remains of Snee Farm, the smallest of the seven plantations owned by Charles Pinckney.

Pinckney was a four- term governor of South Carolina and a principal framer and signer of the United States Constitution. He married Mary Eleanor Laurens, daughter of Henry Laurens, who was a major importer and seller of enslaved Africans. Laurens was also named to attend the Constitutional Convention in Philadelphia, but ill health forced him to stay at home.

At the Constitutional Convention, Charles Pinckney adamantly refused to allow even the mention of slavery into U. S. Constitution. He believed that any attempt by convention delegates to halt the slave trade would be met with vehement resistance in the South, and could derail the entire Constitution process. Pinckney's insistence that slavery not be addressed protected his own lifestyle as well as that of his wealthy family and friends. As a result of his arguments, the labor- intensive cultivation of rice continued at the expense of the enslaved African workers. Pinckney also proposed that the legislative branch consist of a Senate and a House of Representatives, with the House elected proportionate to the white population. Under Pinckney's proposal, a slave would be counted as only three- fifths of a person for the purpose of representation.

Charles Pinckney was cousin to Charles Cotesworth Pinckney, whose mother, Eliza Lucas Pinckney, was instrumental in the establishment of indigo culture in the Carolina Colony. Charles Cotesworth Pinckney, also a signer of the Constitution, was the first major slaveholder to speak out in favor of religion for slaves. In 1829, Pinckney addressed the Agricultural Society of South Carolina. His thoughts on providing religious instruction to enslaved Africans were not, however, altruistic in nature:

> Nothing is better calculated to render man satisfied with his destiny in this world, than a conviction that its hardships and trials are as transitory as its honors and enjoyments; and that good conduct, founded on Christian principles, will ensure superior rewards in that which is future and eternal. A firm persuasion that is both our interest and duty to afford religious instruction to the blacks, induces me to dwell on this subject.

Pinckney believed that if "true religion" became part of their lives, slaves would become happy in their lot and be "more anxious to promote their owner's welfare."

Records at Charles Pinckney National Historic Site tell of the 46 slaves who worked the plantation in 1787. The Low Country farmhouse at Snee Farm was built around 1828 by William Matthews, who is thought to have also built the house at Tibwin. Early drawings show that the houses were of quite similar construction, though both have undergone additions and renovations that render these architectural similarities more difficult to see. Archeologists have identified and marked the locations of the slave village and many of the outbuildings associated with the Snee Farm site. New wayside interpretive signs will be in place in the near future. Pinckney owned a total of 240 slaves at his various plantations.

Tyson Gibbs, assistant professor in the Institute of Anthropology at the University of North Texas at Denton, Texas, was funded by the NPS Applied Ethnography Program to document the lifeways of peoples traditionally associated with National Parks. The NPS program is designed to document the life experiences of various populations living on and near NPS properties in the United States. Gibbs's work will be a valuable addendum to the research conducted in this SRS. According to Gibbs (2002):

> What makes the Snee Farm project unique is the availability of descendants of persons associated with the Snee Farm Plantation at various points over the past 100 years. Many of the descendants of the original slaves also once worked for owners of Snee Farm properties . . . . The core mission of the Snee Farm project was to locate former employees and relatives of former employees of Snee Farm Plantation and to interview them about their experiences as part of the Snee Farm work force . . . . [many of whom] have lived in Mt. Pleasant for several generations . . . . Such continuation of family connections is one of the interesting features of the workers in many South Carolina plantation properties.

Charles Pinckney National Historic Site is located near the Gullah basket stands on Highway 17. Several surviving Gullah settlements are also in the vicinity. Descendants of Pinckney slaves worked on Snee Farm until the mid 20th century.

Alternative A, Site II: Museum and Research Center, Penn Center, Penn Historic District, St. Helena Island, South Carolina

Penn School is one of the most historically significant educational and cultural institutions in the United States. The school was established in 1862 by a group of churches and abolitionists from Pennsylvania who formed the Freedmen Association to educate newly freed slaves. Laura M. Towne and Ellen Murray were founders and first teachers at the school, which was located on the lands of the former Pope's Plantation (Wolf 1997). Charlotte Forten, who arrived a few months later, was the first black teacher at the school.



Brick Baptist Church, St. Helena Island, SC.

Classes were first held in a single room on Oak Plantation. Because freedmen understood that learning to read and write would help them achieve self sufficiency, the school quickly outgrew the small classroom. The school was relocated in the Brick Baptist Church, where it stayed for about three years. At that time Penn School was able to purchase a 50-acre tract across from Brick Church. They purchased the land from freedman Hasting Gantt. A prefabricated building was then shipped from Pennsylvania, and became the first Penn School building.

Penn School not only taught literacy skills but also taught vocational skills to newly freed slaves. For over 50 years Native Island Basketry was part of the industrial curriculum. The students were all male. The baskets produced at Penn School were of the older, coarser style, with coils of rush rather than sweetgrass. Each basket produced at the school was marked with a trademark tag, which indicated its origin on the Penn School campus.

Although Penn School is no longer in operation, Penn Center, a non-profit African American cultural and community action foundation, now occupies the campus. Scholars from around the world come to study Gullah/Geechee culture and African American history there. Penn Center is located on St. Helena Island, a sub-tropical barrier island well known for its intact Gullah communities such as Frogmore. Like most Sea Islands, St. Helena is struggling with encroachment and land retention issues due to the population explosion on nearby resort islands. Penn Center has been involved in many community-based projects, such as bringing public water to the islands, helping farmers to establish cooperatives, and advocating better housing and health care for low-income people.

During the Civil Rights' Movement of the 1960s, Dr. Martin Luther King, Jr., and his staff met frequently at Penn Center. Dr. King saw the site as a place of retreat where he could formulate his thoughts and write his speeches for the struggle ahead. The Southern Christian Leadership Conference, founded by King, held annual meetings at Penn Center. Penn Center was designated a National Historic Landmark in 1974. Since then, the NPS has enjoyed a continuous relationship with the organization and has funded numerous preservation projects on the campus.

In 1988, Penn Center hosted Joseph Saidu Momoh, then President of Sierra Leone. As a result of his visit, a delegation of Gullah/Geechee people from South Carolina and Georgia embarked on a journey to Africa as guests of the Sierra Leonian government. Some three years later, Penn Center, in



Butler Building, Penn Center, site of possible museum/curatorial/learning center facility.

cooperation with the South Carolina Educational Television Network (SC- ETV), produced a documentary entitled, *Family across the Sea*. This video chronicles that reunion visit and explores the remarkable cultural connections between Low Country Gullah/Geechee people and the people of Sierra Leone, Africa.

The historic Butler Building, a stucco classroom building once used by the Penn School, could be adapted for use as a public museum and learning center/research facility. NPS learning center facilities are designed to increase research opportunities for both scholars and lay people and could improve Penn Center's ability to inventory, monitor, and care for the historical and natural resources under its care.

At the present time, documents, photographs, and films related to the history of Penn School are housed in the Folklife Archives at the University of North Carolina at Chapel Hill, where they are being well- conserved and preserved. Plans are underway to have these records digitized and/or microfilmed so that they will be available to the general public at the Penn Center. Use of digitized records rather than fragile originals makes the information much more available to the community. These images would be housed in the learning center/public research facility in the historic Butler Building.

The museum would house interpretive exhibits specifically related to Gullah/Geechee history and culture. The facilities in the Butler Building would be in addition to the existing York W. Bailey

Museum, which interprets the history of Penn School. The Butler Building could be designed to house a climate- controlled curatorial facility to house important artifacts related to the Penn School and Gullah/Geechee history.

Other facilities at Penn Center, such as Frissell Community House, could be made available for educational programs and performances. Penn Center, NPS, and community organizations could collaborate on academic meetings, workshops, cultural performances, and other educational programs. Such community programs might include traditional arts and crafts, land tenure, heirs' property, historic preservation, economic development, grant writing, heritage tourism, and agricultural tourism.



York W.Bailey Museum, Penn Historic District, St. Helena Island, SC.



Farmers' Alliance Hall, Sapelo Island, McIntosh County, GA. Restoration plans are underway.

Alternative A, Site III: New Coastal Heritage Center, McIntosh County, Georgia

McIntosh County, Georgia, home of the world renowned McIntosh County Shouters, is a rural county located along the southern Georgia coast. The county, intersected by both U.S. Highway 17 and Interstate 95, is thus an important intercept point for travelers going both north and south along these routes. Highway 99, a spur of Highway 17 which has received designation as a National Scenic Byway, extends through the rural communities of Eulonia, Meridian, Carnegan and on into Glynn County. Unlike most Scenic Byways, Highway 99 is more culturally significant than beautiful at this time.

Historically, McIntosh County is known for rice and sugar production, commercial fishing, and the lumber and pulpwood industries. Many tabby structures exist throughout the county and surrounding area. Sapelo Island, well- known for its intact Gullah community, traditions, and festivals, is located in McIntosh County. According to local historian Buddy Sullivan (2000):

> Few Georgia counties – even those in Sherman's path in late 1864 – suffered the hardship and deprivation of Civil War as much as McIntosh County. The fortunes of the planters were irretrievably lost, the plantations were destroyed, the lumber industry devastated, and the once- thriving seaport town of Darien was destroyed as the result of the 'total war' tactics of a renegade Union field officer.
>
> Darien, the county seat, was burned by federal troops in June 1863. Due to its location at the mouth of the Altamaha River system and proximity to the ocean and because of international demand for Georgia yellow pine timber, Darien was re- built and became a major timber port. The timber boom lasted from 1866 to World War I.

Among the 159 counties in Georgia, McIntosh is listed as 155th in economic ranking and is designated as economically distressed. A small county with a population of 11,000 people, McIntosh is about equally divided demographically between black and white citizens. Only about one- third of the county's land is privately owned, with one- third in state and federal government ownership and the other one- third owned by the timber industry. Both local citizens and county officials have expressed considerable interest and support for this project. While government agencies have suggested sites within the town of Darien, many residents of Geechee communities in the area have expressed opposition to locations within the town. They prefer that the center be located in a rural area of the county.

Many travelers on I- 95 already stop at the outlet mall at Exit 49 near Darien, and many of these visitors may be interested in the learning opportunities at a Gullah/Geechee coastal heritage center. Mall officials have expressed interest in a partnership with this project and would provide promotional space at no charge.

Under this alternative the Georgia Department of Natural Resources (DNR) and/or the Trust for Public Land in partnership with the NPS, would provide an as yet undesignated property for a Gullah/Geechee coastal heritage center to be constructed by the NPS. This center could include museum exhibits (both visual and auditory), demonstrations of artisan skills and crafts, agricultural interpretation (sugar, rice, and Sea Island cotton), interpretation of the fishing and timber industries, appropriate space for musical and dramatic performances and community education programs. There would be a retail outlet for Gullah crafts, books, and visual art. The center would also serve to direct interested visitors to Gullah/Geechee sites in the four- state area and/or to contacts within neighboring communities. Although plans for the center would clearly be dependent on the yet to be designated site, local Geechee consultation and participation would be sought in the design phase of this building and would be continued through its construction and eventual operation.

The Gullah/Geechee coastal heritage center in McIntosh County, Georgia, would thus become the southern anchor point or gateway. From this site visitors could be directed to Gullah/Geechee related sites in the immediate area as well as to those along the entire coast. Gullah/Geechee related sites in this area of Georgia include, but are not limited to:

- Butler Island, Altamaha National Wildlife Refuge, McIntosh County;
- Harris Neck National Wildlife Preserve, Harris Neck, McIntosh County;
- Sapelo Island Visitors Center, Meridian, McIntosh County;
- Hog Hammock Community, Sapelo Island, McIntosh County;
- Seabrook Village, Midway, Liberty County;
- Harrington School, St. Simons Island, Glynn County;
- Hofwyl- Broadfield Plantation, Glynn County.



Tabby ruins are all that remain of the old sugar works and rum refinery at the Thicket, Carnochan Creek, near Darien, McIntosh County, GA.



First African Baptist Church, Darien, GA



Chimney from steam-powered rice mill, Butler Island Plantation, now Altamaha National Wildlife Refuge.



Hofwyl-Broadfield Plantation State Historic Site, located along the marshlands of the Altahama River in McIntosh County, GA. Tabby ruins of the rice mill remain. The house was built by slave labor during the 1850s.

Alternative A Area Map



Alternative B: Expanding the Gullah/Geechee Story

Under this alternative, existing NPS units would collaborate with state and local park sites located in the Gullah/Geechee project area to administer a multi- partner interpretive and educational program. Cooperative agreements among agencies would identify and delegate administrative, operational, and program functions for each partner. It is also possible that private historic sites could be considered for inclusion in this program.

For example, the NPS and the State of South Carolina might enter into a cooperative agreement to create a partnership between Charles Pinckney National Historic Site and Hampton Plantation State Historic Site to collaborate on the development of interpretive educational programs on Gullah/Geechee culture in the Charleston area.

The primary goal of this alternative would be to increase interpretation of Gullah/Geechee history and culture in all appropriate sites within the study area. These sites might then complement each other by providing varied programs on Gullah/Geechee culture to visitors. NPS units best suited to this alternative are:

- Charles Pinckney National Historic Site;
- Fort Moultrie, a unit of Fort Sumter National Monument;
- Fort Pulaski National Monument;
- Cumberland Island National Seashore;
- Timucuan Ecological and Historic Preserve (Kingsley Plantation);
- Fort Frederica National Monument.

Each of these NPS units has an existing association with the Gullah/Geechee story that is not currently specifically addressed in the enabling legislation. The expansion of interpretive programs and other management functions to include aspects of the story of Gullah/Geechee history and culture would be viable at these parks.

Expansion of the missions of park units to include preservation and interpretation of Gullah/Geechee culture could permit fuller coverage of many more aspects of Gullah/Geechee life, past and present, than is represented in existing efforts. Such expansion could apply principally to those parks within the historic Gullah/Geechee culture which currently do not include Gullah/Geechee history and culture in their interpretive programs as part of their established missions. For those parks that already include Gullah/Geechee history and culture in their interpretive programs, expanding the "Gullah/Geechee story" could enhance public appreciation and understanding of the specific individuals and events for which the park units were established in the first place.

This alternative may require specific enhancement of park legislation for each of the affected units. In developing interpretive programs, park managers could work closely with Gullah/Geechee organizations and individuals in local communities, as well as academicians and researchers, to ensure accuracy and appropriate respect for existing cultural practices and traditions.

NPS costs associated with potential expansion of interpretive programs at up to five existing park units, might include:

- Increase in staff to handle increased interpretive emphasis—possible staff collaboration/sharing with state and local sites;
- Exhibit expansion and upgrading;
- Modest facility expansion to accommodate new and enhanced interpretive programs.

Numerous opportunities exist within the coastal multi- state study area for partnership endeavors among existing NPS units, state park sites, as well as county and local parks. The following list includes some appropriate state and county sites in South Carolina, Georgia, and Florida. This list is by no means inclusive; other appropriate sites are welcome as partners in this project.

South Carolina

- Charles Towne Landing State Historic Site (SCPRT);
- Caw Caw Interpretive Center (Charleston County PRC);
- Hampton State Historic Site (SCPRT);
- Edisto Island State Park (SCPRT);
- Hunting Island State Park (SCPRT).

Georgia

- Sapelo Island National Reserve;
- Hofwyl- Broadfield Plantation State Historic Site;
- LeConte- Woodmanston Plantation;
- Butler Island Rice Plantation State Historic Site (Altamaha State Wildlife Management Area).

Florida

- Talbot Island State Park.

Alternative B was frequently discussed at community meetings. Some people expressed fear that these existing units, which may have traditionally told a less than complete story, could not be trusted to tell the full story in an accurate manner. Most people, however, felt that it was worthwhile to move ahead with this process. Many expressed their belief that work on this alternative should begin immediately and without regard to the funding outcomes of the other alternatives.



First African Baptist Church,
Cumberland Island National Sea Shore,
Camden Co., GA.



Butler Island, Altamaha State Wildlife
Management Area, McIntosh Co., GA.



Restored slave cabin, Kingsley Plantation,
Timucuan Ecological and Historic Preserve,
near Jacksonville, FL.



Harris Neck National Wildlife Refuge,
Harris Neck, McIntosh Co, GA.

Alternative B Area Map



Alternative C: Gullah/Geechee National Heritage Area

Under this alternative, a NHA would be established to connect coastal resources, including cultural landscapes, archaeological sites, historic structures, and places of continuing ethnological importance that tell the story of Gullah/Geechee culture. This multi- state heritage partnership could interpret the entire Gullah/Geechee coastal area. Gullah/Geechee community organizations and associations would have a strong governing role in the administration of any designated heritage area. Appropriate sites within each of the included counties could be designated and listed as important places to visit within the heritage corridor.

A NHA is defined by the NPS as a place, designated by Congress where natural, cultural, historic and scenic resources combine to form a cohesive, nationally distinctive cultural area arising from patterns of human activity and shaped by the geography of the region. These patterns of activity make NHAs representative of the national experience through the physical features that remain and the traditions that have evolved in them. Continued use of NHAs by people whose traditions helped to shape the landscapes enhances their significance. Not only is it important to note that the land base of the Gullah/Geechee coast encompasses an area that historically gave rise to the culture, but this same land base is also the focus of a continuing struggle for cultural survival and the people's tangible and intangible cultural heritage.

A heritage area is both a place and a concept. Physically, heritage areas are regions with concentrations of important historic, cultural, natural, and recreational resources. These are places known for their unique culture and identity, as well as being good places to live and visit. As a concept, a heritage area serves to combine resource conservation and education with economic development, typically in the form of tourism. Usually, there are a number of sensitive sites within a heritage area that may be shielded from public visitation. However, there must be enough sites suitable for public view concentrated within a given area to create a sense of continuity for visitors along the way.

Heritage areas are inclusive of diverse peoples and their cultures because they encompass living landscapes and traditional uses of the land. A recent NPS survey shows that almost 45 million people across 17 states live within NHAs. Heritage areas are just one of a growing number of collaborative, community- based conservation strategies that have developed in recent years to identify, preserve, and interpret resources. By establishing a heritage area, communities work in partnership across jurisdictional boundaries to plan for their future, based on their shared heritage from the past.

NHAs have significance and value in their own right, as they encompass some of the most important cultural resources in the nation. More than 20% of all the National Historic Landmarks in the United States are located in such areas. Also of importance is the regional financial impact of heritage area designation. Gateway communities in particular can benefit from heritage planning that reinvigorates local tourist offerings with real and authentic experiences. The heritage area approach is one more link in a national network of parks and conservation areas between important natural resources and the people who live and work in related gateway communities.

The NPS has outlined four critical steps that need to be taken prior to Congressional designation of a NHA. These steps are:

- Completion of a site inventory and suitability/feasibility study;
- Public involvement in the process of the suitability/feasibility study;
- Demonstration of widespread public support among most residents of the heritage area for the proposed NHA designation;

- Commitment to the proposal from appropriate partners, which may include governments, industry, and private non- profit organizations, in addition to the broad spectrum of local citizenry.

Although the findings of this SRS go a long way towards addressing these critical steps, there is still a significant amount of work that would need to be completed as part of a suitability and feasibility study. A comprehensive site inventory should be of particular significance to the Gullah/Geechee population. Historic sites of importance to European settlers of the Low Country have been identified, mapped, and studied in great detail. African American sites have not been as well documented. An inventory would create a more complete picture of the cultural history and development of the Gullah/Geechee people throughout the study area. Despite much scholarly work on Gullah/Geechee culture, physical sites and places of cultural expression have not been as well documented.

The request for NHA designation must emanate as a grass- roots proposal. Involvement by the NPS would likely be as start- up coordinator, and could include providing initial technical assistance for general planning, resource management, and interpretation. Overall management of the heritage partnership would eventually be administered by one or more local entities that would represent Gullah and Geechee people of each of the states in the NHA. The entity, outlined in the designation legislation, may be a state or local agency, a commission, or a private nonprofit corporation. This entity would guide and oversee the goals and objectives of the heritage area as specified under an agreement with the Secretary of the Interior that would specify measures for administration of the heritage area and related authorities. An important criterion for the prosperity and self- sustainability of the NHA would be a clear indication of the ability of the entity to assume long- term responsibility for management of the area.

Although there is no lack of grass- roots organizations within the study area, no single one has a sufficiently broad constituency, structure, and scope to be the start- up organization at this time. A feasibility study would examine more closely whether the proposed heritage area can achieve self- sufficiency without federal support. Although start- up funding may be available, a heritage area must become financially self- sufficient within a specified time frame, usually ten to fifteen years.

Upon designation, a NHA must develop a management plan to serve as a road map for all stakeholders who support the vision for the area. The plan must be developed within the timeframe specified in the legislation (usually 3- 5 years) and approved by the Secretary of the Interior. For designated areas, the NPS role is:

- to work with the area on the management plan that will guide the heritage development of the region;
- to establish appropriate frameworks and procedures for ongoing oversight, advice, and consultation from residents of Gullah/Geechee communities (as defined in NPS cultural resource management policies);
- to enter into a cooperative agreement that defines the NPS partnership role and to amend this agreement annually to allocate appropriated funds for the identified projects that will be undertaken to further the plan;
- to monitor the expenditure of funds;
- to ensure that the funds are properly matched and meet all other requirements;
- to review annual reports prepared by each management entity.

Alternative C Area Map



Alternative D: Alternatives A and C in Combination

Alternative D combines Alternatives A and C into a single alternative. Alternative D came about as a result of suggestions and comments made by participants in community forums held in 2002. In brief, Alternative D proposes the establishment of heritage centers to serve as gateways or welcome centers that would attract visitors, provide basic interpretive information about Gullah/Geechee culture, and channel visitors to designated sites throughout the Gullah/Geechee NHA. Coastal heritage centers would enhance the visitor experience of Gullah/Geechee culture and heritage through interpretive exhibits, music, art, and a variety of educational programs involving Gullah/Geechee people telling their own stories. The centers could also provide maps of the NHA, information about food and lodging, and interpretive information about historic and cultural sites within communities.

Visitors could be directed to significant sites within every county in the NHA, as well as to persons within local communities for guided tours and/or other experiences. The Gullah/Geechee NHA and coastal heritage centers would work together to direct visitors to NHA designated sites throughout the NHA and to protect fragile cultural and historic sites from excessive visitation. The centers could provide research facilities, meeting space, vending areas, and community learning opportunities that relate to current problems facing the Gullah/Geechee people at large.

Alternative E: No Action

The No Action alternative represents a continuation of existing conditions. There is no NPS role under this alternative. The NPS would have no financial involvement. Several agencies within the area fund, operate, and/or maintain their resources in accordance with their abilities. At this time, there is no unified resource protection program for the Gullah/Geechee study area, but interpretation of Gullah/Geechee culture in NPS sites would continue at the current level. Adoption of Alternative E does not imply that there is no national significance to Gullah/Geechee culture, but that no appropriate action can be identified under NPS mandates.

Cost Estimates of Alternatives A - E

The NPS applies Class C estimates to determine potential development costs for the alternatives described in this SRS. Class C estimates are conceptual and based largely on square foot costs of similar construction or development. Class C estimates are prepared without a fully defined scope of work, which is the case with these alternatives. The accepted industry accuracy range for Class C estimates is from - 30 to +50 percent. A design contingency of 15 to 30 percent is also added to the estimate.

Alternative A: Gullah/Geechee Coastal Heritage Centers

Development Cost: $12 million

The estimated cost assumes total NPS construction and site development costs associated with the three heritage center sites, as described in the *Alternatives* section. Although the NPS would assume all construction and site development costs, this alternative proposes to locate the heritage centers on existing public lands, thereby requiring no funding for land acquisition or removal of lands from Gullah/Geechee communities.

Operations and Maintenance Cost: $1 million annually

The three heritage centers would be staffed with various NPS personnel that would assist with facilities maintenance, visitor use and interpretive services, and resource protection. Through the establishment of cooperative agreements, NPS would seek to share some functions with partners, including other government agencies and non- profit organizations. Consequently, projected NPS costs for annual operations and maintenance could be reduced as other entities assume increased management roles.

Alternative B: Expanding Gullah/Geechee Story

Development Cost: $1 million

The estimated cost assumes extensive development of interpretive programs and exhibits at existing NPS parks in the Gullah/Geechee study area, as described earlier in the *Alternatives* section. Costs include some projected expansion of existing NPS facilities to accommodate the expanded interpretive programs.

Operations and Maintenance Cost: $300,000 annually

The estimated cost provides funding for additional NPS staff to administer expanded Gullah/Geechee interpretive programs and provide other services, including facilities maintenance and resource management and protection. NPS could share some functions with partners, including other government agencies and nonprofit organizations.

Alternative C: Gullah/Geechee National Heritage Area

Federal funding for the establishment of a NHA could be up to a maximum of $1 million annually, not exceeding a total of $10 million over the period of NPS involvement. Overall management of the heritage area would eventually be administered by one or more local entities that would guide and oversee the goals and objectives of the heritage area.

Although there would be no direct NPS ownership or management of resources in the heritage area, except existing NPS units, an agreement between the Secretary of the Interior and the management entity(ies) would specify measures to administer the heritage area. Typically, funding would cover activities such as start- up costs, planning, development, administration, operations, and maintenance.

Although initial funding may be available, a NHA must become financially self- sufficient within a specified time frame, usually ten years.

Alternative D: Alternatives A and C in Combination

This alternative combines the estimated costs of alternatives A and C as described above. Alternative D assumes NPS costs associated with construction and site development for the three heritage center sites plus funding for the NHA.

Alternative E: No Action

No federal funds would be expended under this alternative.

Most Effective and Efficient Alternative: Alternative C

The NPS considers Alternative C, which proposes the establishment of a Gullah/Geechee NHA, to be the most effective and efficient alternative for protecting significant resources and providing for public enjoyment.

A Gullah/Geechee NHA would be cost- effective because it can facilitate the leveraging of funds and resources through a working partnership among federal, state, and local entities. The NPS, along with other federal agencies, can bring national recognition to the NHA and provide other technical assistance on a case- by- case basis. However, overall management of the heritage partnership would eventually be administered by one or more local entities that would represent Gullah and Geechee people of each of the states in the NHA.

As indicated in the *Cost Estimates* section, federal funding for the establishment of a Gullah/Geechee NHA could be up to a maximum of $1 million annually, not to exceed a total of $10 million over the period of NPS involvement. The NHA would essentially become the responsibility of the people living within its boundaries. As its stakeholders, they would ensure that the heritage area's resources are protected, interpreted, and preserved. The federal government would not assume any ownership of land, impose zoning or land use controls in heritage areas, or take responsibility for permanent funding. Likewise, there would be no direct NPS ownership or management of resources in the heritage area, except at existing National Park System units.

During the SRS community involvement process substantial support was voiced for the establishment of cultural heritage centers. Supporters of the heritage area concept also expressed interest in developing such centers as strategic anchors within the heritage area to help attract visitors and bring together members of the Gullah/Geechee community. Many people envisioned the centers serving to promote the NHA as well as specific sites within Gullah/Geechee communities. In addition, many felt the centers could serve as catalysts for other preservation projects within the area and for development of the NHA itself.

Cultural heritage centers could play an important role in preserving Gullah/Geechee culture. Centers could be viable through the implementation of Alternative C if the NHA management entity identifies centers as an important component of the heritage area. Steps for their establishment would be spelled out in the NHA management plan. Such steps could include a funding strategy and potential partnerships for the development and operation of the centers. The plan might also identify strategies for developing and implementing an interpretation plan, or assisting in the rehabilitation of a number of Gullah/Geechee cultural sites.

Environmentally Preferred Alternative: Alternative C

The environmentally preferred alternative is the alternative that would best promote the national environmental policy, as expressed in the National Environmental Policy Act. The environmentally preferred alternative would cause the least damage to the biological and physical environment, and would best protect, preserve, and enhance historical, cultural, and natural resources.

Section 101(b) of the National Environmental Policy Act identifies six criteria to help determine the environmentally preferred alternative. The act directs that federal plans should:

- Fulfill the responsibilities of each generation as trustee of the environment for succeeding generations.
- Assure for all Americans safe, healthful, productive, and esthetically and culturally pleasing surroundings.
- Attain the widest range of beneficial uses of the environment without degradation, risk to health or safety, or other undesirable and unintended consequences.
- Preserve important historical, cultural, and natural aspects of our national heritage, and maintain, whenever possible, an environment which supports diversity and variety of individual choice.
- Achieve a balance between population and resource use which would permit high standards of living and a wide sharing of life's amenities.
- Enhance the quality of renewable resources and approach the maximum attainable recycling of depletable resources.

Based upon the application of the national environmental policy goals set forth above, the environmentally preferred alternative is Alternative C. Although Alternative E would involve the fewest impacts to natural resources because it would not entail any ground disturbing activities, its impacts to cultural resources would be adverse because it would not address ongoing threats to Gullah/Geechee culture and would not afford new opportunities to help perpetuate and increase awareness of that culture. Alternatives A and D would each entail adverse effects to natural resources in the vicinity of the proposed cultural centers. Perhaps more importantly, these alternatives would tend to concentrate effort and expenditures in support of Gullah/Geechee culture in three relatively discrete areas. In contrast, Alternative C would disperse preservation efforts and available funding opportunities to projects throughout a multi- state heritage area, thereby affording a wide a range of benefits to Gullah/Geechee culture and supporting greater diversity and variety of individual choice. Furthermore, Alternative C would achieve the best balance between population and resource use and preservation, thereby permitting high standards of living and a wide sharing of life's amenities. For each of the foregoing reasons, Alternative C is the environmentally preferred alternative.

Partial Listing of Potential Partners for NPS Alternatives

Advisory Council on Historic Preservation
African American heritage and preservation organizations in all 4 states
American College of the Building Arts
American Trails
Amtrak/NPS Trails to Rails partnership
Association of Partners for Public Lands (APPL)
Atlantic Beach Historical Society
Avery Research Center for African American History and Culture, College of Charleston
Berkeley- Dorchester- Charleston Council of Governments
Bureau of Land Management
Carlie Towne Gullah/Geechee People Foundation
Carolina Gold Rice Foundation
Center for Coastal and Environmental Health and Biomolecular Research, NOAA
City of Charleston Department of Cultural Affairs (Piccolo Spoleto and MOJA Arts Festivals)
Charleston County Parks and Recreation Commission (PRC)
Charleston Museum
Chicora Foundation
Christ Church Parish Preservation Society, Inc.
Clemson Extension Service
Coastal Conservation League
Coastal Georgia Historical Society
Coastal Georgia Rural Development Center
Coastal Heritage Society [Georgia]
Colonial Dorchester State Historic Site
County and Municipal Governments in South Carolina, Georgia, Florida, North Carolina
Daufuskie Island Historical Foundation
Departments of education in the four states (South Carolina, Georgia, Florida, North Carolina)
Environmental Alliance for Senior Involvement (EASI)
Environmental Careers Organization
Federation of Southern Cooperatives Land Assistance Fund
First African Baptist Church, Savannah, Georgia
Florida, Georgia, North Carolina, South Carolina state park systems
Fort Morris State Historic Site
Friends of Snee Farm
Geechee Institute, Savannah, Georgia
Georgia Department of Natural Resources (DNR)
Georgia Historical Society
Georgia Conservancy
Georgia Trust for Historic Preservation
Gullah Festival of South Carolina, Inc.
Gullah/Geechee Sea Island Coalition
Historic Charleston Foundation and McLeod Plantation
Historic Savannah Foundation
Hobcaw Barony (Belle B. Baruch Foundation)
International Museum of African American History
Individual Gullah/Geechee artisans and their representative groups
Landowners on Sea Islands, both private and corporate
LeConte- Woodmanston Plantation National Historic Site
Lighthouse Museum, St. Simon's Island, GA
Lowcountry Council of Governments

Massie Heritage Center
McClellanville Museum
McIntosh SEAD
Melon Bluff Nature and Heritage Preserve
Middleton Place Foundation
Morris Island Coalition
National Trust for Historic Preservation
Neighborhood America
Original Sweetgrass Basket Makers Association
Orton Plantation Gardens, Winnabow, North Carolina
Penn Center, St. Helena Island, South Carolina
Rice Museum, Georgetown, South Carolina
St. James Santee Parish Historical Society
St. Simons African American Heritage Coalition (SSAAHC)
St. Simons Island Land Trust
Sams Memorial Community Economic Development, Inc., Darien, Georgia
Sandfly Community Betterment Association
Sapelo Island Cultural and Revitalization Society (SICARS)
Sapelo Island National Estuarine Research Reserve
Seabrook Village Foundation, Midway, Georgia
Sea Grant Consortium in South Carolina and Georgia
Sea Island Youth Build, United States Department of Housing and Urban Development (HUD)
Sea Islands Rural Collaborative
Sewee to Santee Community Development Corporation, McClellanville, South Carolina
Slave Relic Historic Museum, Walterboro, South Carolina
Smithsonian Institution, American Folklife Center, Washington, DC
Snowden Community Civic Association, Mt. Pleasant, South Carolina
South Carolina African American Heritage Commission
South Carolina Artisan Center, Walterboro, South Carolina
South Carolina Bar Foundation, Columbia, South Carolina
South Carolina Coastal Development Corporation, St. Helena Island, South Carolina
South Carolina Department of Parks, Recreation, and Tourism (SCPRT)
South Carolina National Heritage Corridor
South Carolina State University 1890 Research and Extension Program
Southeast Georgia Community Development Corporation
Southern Passages Heritage Coast
State and local historic sites within study area
State and local museums and libraries within the Gullah/Geechee study area
State governments of North Carolina, South Carolina, Georgia, Florida
State Historic Preservation Offices within study area
Tourism groups and Chambers of Commerce within the study area
Town of Edisto Beach, South Carolina
Town of Mt. Pleasant, South Carolina
University of Georgia Extension Service
U.S. Department of Agriculture Liaison Office
U.S. Fish and Wildlife Service
U.S. Forest Service
Watson- Brown Foundation

Partial Listing of Colleges and Universities within the Study Area

Allen University (Historically Black Colleges and Universities)
Armstrong Atlantic University
Benedict College (Historically Black Colleges and Universities)
Charleston Southern University
Claflin University (Historically Black Colleges and Universities)
Clemson University
Coastal Carolina University
Coastal Georgia Community College
College of Charleston
Edward Waters College (Historically Black Colleges and Universities)
Francis Marion University
Georgia Southern University
Georgia State University
Florida A & M University (Historically Black Colleges and Universities)
Florida State University
Morris College (Historically Black Colleges and Universities)
Savannah College of Art and Design (SCAD)
Savannah State College (Historically Black Colleges and Universities)
South Carolina State University (Historically Black Colleges and Universities)
State University of West Georgia
The Citadel
Trident Technical College
University of Florida
University of Georgia
University of North Carolina
University of North Carolina at Wilmington
University of South Carolina
University of South Carolina at Beaufort
Voorhees College (Historically Black Colleges and Universities)

5 Environmental Consequences

Environmental Impact of Alternatives A-E

This chapter analyzes the general impacts that could result from implementing the alternatives described in this study. In addition to impacts on visitor experience and education potential, this assessment includes impacts on Gullah/Geechee culture, historic sites and structures, the economy and local communities, and the natural environment. The five alternatives are compared under each impact category. Existing conditions in the study area are described under Alternative E (no action).

Should Congress choose to authorize one of the alternatives in this study or some other alternative, the NPS will be required to prepare a plan specifying how it will meet its responsibilities under the legislation. As part of the planning process, NPS will undertake a more detailed analysis of the environmental impacts of the authorized actions.

Impacts of Visitor Experience and Educational Potential

Alternative A (Gullah/Geechee Coastal Heritage Centers)

Under this alternative, the NPS and/or its governmental and non- profit partners would operate three cultural centers to present a focused interpretive overview of the Gullah/Geechee culture. Because each center would offer a different operational and interpretive emphasis, visitors and students would have the opportunity to gain a more in- depth understanding of major facets of Gullah/Geechee culture than would be possible under the other alternatives. However, the fact that the cultural centers would be located relatively far apart means that access to this interpretive/educational experience would be more limited than under alternatives B, C and D.

Alternative B (Expanding the Gullah/Geechee Story)

Under this alternative, the NPS and partner agencies would expand the mission of existing park sites to interpret Gullah/Geechee culture. Information about Gullah/Geechee culture would thus be widely dispersed over a multi- state area. Moreover, this alternative would allow the Gullah/Geechee story to be interpreted within the context of particular sites of established historical and cultural importance. Some might view this approach as giving added depth and context to interpretations of Gullah/Geechee culture, while others might feel that it prevents a more focused interpretation of the culture itself.

Alternative C (Gullah/Geechee National Heritage Area)

Establishment of a Gullah/Geechee NHA would allow local communities, organizations, and individuals to come together to achieve goals and implement a vision with respect to interpreting and perpetuating Gullah/Geechee culture. Information about Gullah/Geechee culture would be widely available among a multitude of public and private sites included within the heritage area. Local planners and community activists, with technical assistance from the NPS, would decide how the heritage area is to be promoted to a wide audience and how information about individual sites would

be disseminated to potential visitors. Responsibility for interpretation would largely be shared with individual sites. This alternative requires the greatest amount of commitment and effort from local people in order to be successful.

Alternative D (Alternatives A and C in Combination)

This alternative would provide opportunities for visitor use and education at a combination of cultural centers and sites located within a heritage area. This alternative would combine the benefits of in- depth interpretation of specific themes (cultural centers) and dispersed interpretation of multiple sites (heritage area).

Alternative E (No Action)

Opportunities would remain available for visitors to learn about Gullah culture at various widely dispersed sites throughout North Carolina, South Carolina, Georgia, and Florida. However, activities would not be coordinated, and many visitors would not be aware that such opportunities are available.

Impacts on Gullah/Geechee Culture

Alternative A (Gullah/Geechee Coastal Heritage Centers)

Under this alternative, various programs would be made available to assist members of Gullah/Geechee communities. Internship opportunities could be arranged for young people, training could be offered in seeking grants and official recognition for historic sites, and space could be made available at the cultural centers for artisans, performers, and craftspeople and those wishing to demonstrate cultural practices. The NPS would seek to recruit well- qualified individuals from Gullah/Geechee communities to assist in developing and presenting interpretive programs to create a greater appreciation of Gullah/Geechee culture in the public at large. However, interpretive programs would have to meet NPS standards for historical and scholarly presentations, and some members of the community might disagree with the interpretations offered at the centers. Issues regarding who "controls" the Gullah/Geechee story may be more likely to arise under this alternative than under the heritage area concept (Alternative C).

Alternative B (Expanding the Gullah/Geechee Story)

Existing park sites would be encouraged to recruit well- qualified individuals from Gullah/Geechee communities to assist in developing and presenting new interpretive programs. These programs would be designed to expand upon each park's existing purpose and significance to include aspects of Gullah/Geechee culture. As with Alternative A, issues regarding who "controls" the Gullah/Geechee story could arise under this alternative. Given the potentially large number of sites that could be included under this alternative, the potential exists to expose a wide spectrum of the public to Gullah/Geechee culture. This exposure could be beneficial to individuals and communities seeking to increase awareness of the culture and perpetuate cultural practices.

Alternative C (Gullah/Geechee National Heritage Area)

To a greater extent than Alternatives A and B, this alternative has the potential to involve a wide and diverse range of participants in interpreting Gullah/Geechee culture and perpetuating Gullah/Geechee cultural practices. With a management commission that can be made up of local people, and with responsibility for interpretation shared with individual sites, the heritage area concept allows a variety of complementary and even conflicting points of view to find expression, as

befits a living, changing culture. This alternative thus provides Gullah/Geechee people the greatest amount of control over their story. Given the large and diverse array of sites that could be included in a heritage area, the potential exists to expose a wide spectrum of the public to Gullah/Geechee culture.

Alternative D (Alternatives A and C in Combination)

This alternative would combine the benefits from the various programs designed to assist Gullah/Geechee communities with the economic benefits offered by tourism to the cultural centers and the heritage area.

Alternative E (no action)

Opportunities would remain available for members of the Gullah/Geechee community to preserve their culture, protect ancestral lands, and educate visitors about Gullah/Geechee culture. However, funding for these opportunities would be harder to come by and activities would be less coordinated over a large area than under the action alternatives.

Impacts on Cultural Sites and Structures

Alternative A (Gullah/Geechee Coastal Heritage Centers)

This alternative would direct new funding for restoration and preservation of existing structures at the proposed heritage centers. Funding would be concentrated at the sites chosen for such centers, e.g., Tibwin Plantation, Hampton Plantation State Historic Site, and the Penn Center. However, each heritage center would direct visitors to other important Gullah/Geechee sites, thereby raising the profile of these sites and possibly making it easier to engage in private fundraising activities for restoration and preservation. In addition, grants may be available to assist in local preservation projects. Overall, this alternative would likely result in beneficial impacts to fewer sites and structures than Alternative C, but the sites and structures affected would receive more thorough and effective treatments.

Alternative B (Expanding the Gullah/Geechee Story)

This alternative would be limited to existing park sites. Expanding the interpretive focus to include Gullah/Geechee culture would not be likely to result in major enhancements of cultural resources, as most such resources will already be subject to a high degree of protective effort.

Alternative C (Gullah/Geechee National Heritage Area)

Under this alternative, a heritage area commission would work with landowners, communities, institutions, and government offices to document and protect important cultural resources (landscapes and structures) of the heritage area. Technical assistance and grant money may be available to rehabilitate and restore historic structures meeting eligibility requirements. In all likelihood, any such grants would have to be matched by local contributions.

Alternative D (Alternatives A and C in Combination)

This alternative would direct funds appropriated by Congress toward rehabilitation/restoration of specified structures at the cultural centers, as well as qualifying structures in the heritage area. (Please note that there is no guarantee Congress would appropriate any funds for this purpose.) Funds for

structures in the heritage area would come in the form of grants and would likely be subject to a requirement that the grants be matched.

Alternative E (no action)

Opportunities would remain for members of Gullah/Geechee communities to raise funds for historic preservation from foundations and other private and public funding sources. However, fundraising would continue to face the obstacles that have hampered past efforts, including ignorance of Gullah/Geechee culture in society at large and limited availability of government grants and matching funds.

Impact on the Economy and Local Communities

Alternative A (Gullah/Geechee Coastal Heritage Centers)

This alternative would attract visitors to the locations of the heritage centers and would direct some of these visitors to other significant sites in adjacent communities. Economic benefits would depend on the level of visitation generated by the centers. The fact that the three centers would be located relatively far apart would mean that economic benefits to the Gullah/Geechee community would be concentrated in fewer areas under this alternative than under the other action alternatives. However, the centers would be sited in such a way as to protect fragile sites from being overwhelmed by visitors.

Alternative B (Expanding the Gullah/Geechee Story)

This alternative could attract additional visitors to existing park areas by expanding the interpretive focus of these areas to include Gullah/Geechee culture. In addition, the expanded interpretive focus could direct some of these visitors to other important Gullah/Geechee sites in adjacent communities. Given the large number of sites that could be included in this alternative and the occurrence of these sites over a large geographic area, it is possible that the economic benefits of tourism would be more widely dispersed under this alternative than would be possible under Alternative A. Dispersed visitation patterns could also prevent fragile sites from being overwhelmed by visitors.

Alternative C (Gullah/Geechee National Heritage Area)

With proper development and promotion, a heritage area could result in increased tourism for many sites associated with Gullah/Geechee culture, with associated economic benefits and demands on infrastructure. A major benefit of the heritage area concept is that it may make possible the interpretation of more individual sites than would be feasible under alternatives A and B. However, a heritage area can only be successful if local communities and individuals are willing to make the large commitments of time and financial resources necessary to start and maintain a heritage area commission. Although Federal funds may be available to assist with start- up of the commission, a heritage area must become financially self- sufficient within a specified time frame, usually ten years.

Alternative D (Alternatives A and C in Combination)

This alternative would generate localized economic benefits associated with the construction of new cultural centers. Additional benefits would arise over a larger area as a result of tourism to both the cultural centers and sites within the heritage area. Large increases in tourism could result in additional public costs to expand necessary infrastructure.

Alternative E (no action)

Economic opportunities would remain available for members of the Gullah/Geechee community at sites throughout North Carolina, South Carolina, Georgia, and Florida. However, efforts to improve these opportunities would not have the benefit of enhanced public awareness of Gullah/Geechee culture that would come from interpretation activities at one or more park units, or throughout a heritage area. In addition, such efforts would lack the resources, in the form of both financial and technical assistance that could be made available under the action alternatives.

Impacts on the Natural Environment

Alternative A (Gullah/Geechee Coastal Heritage Centers)

Restoration and adaptive use of existing structures at the cultural centers would not have long- term impacts on natural resources. Development of new structures − for example, at an as yet undesignated site in McIntosh County, Georgia − could result in long- term disturbance to soils, vegetation, and wildlife habitat over a relatively small area.

Alternative B (Expanding the Gullah/Geechee Story)

This alternative would most likely involve an expansion of interpretive focus only and would not involve any construction of new facilities. However, to the extent that any new facilities were constructed, the result could be long- term disturbance to soils, vegetation, and wildlife habitat over a relatively small area.

Alternative C (Gullah/Geechee National Heritage Area)

Under this alternative, a heritage area commission would work with landowners, communities, institutions, and government offices to document and protect important natural resources of the heritage area. Protection for important natural areas could come in the form of zoning restrictions, conservation easements, or similar measures. No land could be acquired by the commission and private property rights would be protected.

Alternative D (Alternatives A and C in Combination)

Development of the cultural centers, together with construction of new cultural facilities in the heritage area, could result in the loss of some natural resources on a relatively small scale. The heritage commission could provide incentives and take other actions short of acquiring land to provide a measure of protection to important natural resources.

Alternative E (no action)

Under this alternative, present trends with respect to natural resources would remain largely unchanged. Accelerated development in coastal areas would continue to result in losses of important natural areas.

Environmental Justice

Alternatives A, B, C, and D

According to the Environmental Protection Agency, environmental justice is the fair treatment and meaningful involvement of all people, regardless of race, color, national origin, or income, with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. Presidential Executive Order 12898, "General Actions to Address Environmental Justice in Minority Populations and Low- Income Populations," requires all federal agencies to incorporate environmental justice into their missions by identifying and addressing any disproportionately high and/or adverse human health or environmental effects of their programs and policies on minorities and low- income populations and communities.

The action alternatives considered in this study would not have adverse health or environmental effects on minorities or low- income populations or communities as defined in the Environmental Protection Agency's Draft Environmental Justice Guidance (July 1996). In fact, the alternatives outlined herein offer various proposed ways for assisting Gullah/Geechee people in improving their economic well- being and perpetuating their culture.

Cultural Resource Preservation Tools and Methods

The action alternatives presented in this study provide different strategies for the preservation and interpretation of Gullah/Geechee culture and outline specific NPS roles and responsibilities in an implementation scenario for each alternative. There are, however, many effective cultural preservation programs and tools available to local communities that are beyond the purview of the alternatives described in this study. As this study has noted, during the public meeting and consultation process, several important issues and concerns were identified that lie outside the direct authority of the NPS to address effectively. Of paramount concern was the increasing loss of land and associated Gullah/Geechee resources due to development pressures and changing local tax bases.

The following programs and tools have proven to be effective in addressing some of the critical concerns identified in this study related to the preservation of Gullah/Geechee culture and associated resources. Two of these programs, the Certified Local Government Program and the Historic Landscape Initiative, are administered by the NPS to assist local communities throughout the country with cultural resource preservation. Each State Historic Preservation Office (SHPO) can also provide more detailed information on these and related state- specific tools and programs available for cultural preservation (see list below).

Conservation Easements

A conservation easement is a legal agreement between a landowner and a land trust or government agency that permanently limits uses of the land in order to protect its conservation values. Conservation easements (not withstanding the negative impact of such easements on the traditional culture and life ways of Gullah and Geechee peoples, as noted earlier in the text of this report) are used to protect resources such as productive agricultural land, ground and surface water, riverfront land, wildlife habitat, historic sites, or scenic views. The easement is either voluntarily sold or donated by the landowner, and constitutes a legally binding agreement that prohibits certain types of development (residential or commercial) from taking place on the land. Easements are used by landowners ("grantors") to authorize a qualified conservation organization or public agency ("grantee") to monitor and enforce the restrictions set forth in the agreement. Conservation

easements are flexible documents tailored to each property and the needs of individual landowners. They may cover an entire parcel or portions of a property. Conservation easements can be an effective complement to government acquisition programs and the regulation of uses to protect environmentally sensitive land.

Every state in the nation has laws pertaining to conservation easements. The National Conference of Commissioners on Uniform State Laws adopted the Uniform Conservation Easement Act in 1981. The Act was designed to serve as a model for state legislation to allow qualified public agencies and private conservation organizations to accept, acquire, and hold less- than- fee- simple interests in land for the purposes of conservation and preservation. Different land trusts and government entities have different requirements that must be satisfied. A general description of valid conservation purposes – and one that must be satisfied to be eligible for tax benefits — is provided by the Internal Revenue Code Section 170(h) (4)(A).

Many conservation easements involve the participation of a land trust. These nonprofit organizations have been established for the specific purpose of protecting land. The IRS recognizes them as publicly- supported charitable organizations. More than 1,100 land trusts in the United States protect over four million acres of farms, wetlands, wildlife habitat, urban gardens and parks, forests, watersheds, coastlines, river corridors, aquifer recharge areas, and trails.

A land trust is considered a qualified easement holder, and land trusts are good sources of information for private landowners that wish to explore the possibility of a conservation easement for their land. Though local, state and federal government agencies may purchase and accept donations of conservation easements, land trusts play the most critical role in working with landowners to protect conservation lands. Many landowners are more comfortable donating land to a private, nonprofit organization than to a unit of government, especially if the land trust is locally based. Land trusts often can step in to negotiate easements and raise funds for their purchase more quickly than a public agency. For further information on conservation easements, contact the following agencies:

National

Trust for Public Land
116 New Montgomery Street, 4th Floor
San Francisco, CA 94105
415.495.4014
http://www.tpl.org

Land Trust Alliance
1331 H Street NW, Suite 400
Washington, DC 20005- 4734
202.638.4725

USDA Natural Resources Conservation Service
P.O. Box 2890
Washington, DC 20013
202.720.7246
http://www.nrcs.usda.gov

South Carolina

Beaufort County Open Land Trust
P.O. Box 75
Beaufort, SC 29901- 0075
Phone: 843.521.2175

Edisto Island Open Land Trust
P.O. Box 1
Edisto Island, SC 29438- 0001
Phone: 843.869.9004

Hilton Head Island Land Trust
18 Wild Laurel Lane
Hilton Head Island, SC 29926- 2649
Phone: 843.689.2595

Kiawah Island Natural Habitat Conservancy
23 Beachwalker Drive
Kiawah Island, SC 29455- 5652
Phone: 843.768.2029

Lowcountry Open Land Trust
485 East Bay Street
Charleston, SC 29403- 6336
Phone: 843.577.6510
FAX: 843.577.0501

The Nature Conservancy
South Carolina Field Office
P.O. Box 5475
Columbia, SC 29250
Phone: 803.254.9049

Lord Berkeley Conservation Trust
223 N Live Oak Drive, A- 3
Moncks Corner, SC 29461- 3707
Phone: 843.719.4725
FAX: 843.719.4207

Georgia

Camden County Land Trust
308 Mush Bluff Trail
St. Mary's, Georgia 31558
Phone: 912.925.3159
FAX: 912.927.9766

Coastal Georgia Land Trust
428 Bull Street, Suite 210
Savannah, Georgia 31401
Phone: 912.231.0507
http://www.cglt.org

Sapelo Island Cultural and Revitalization Society (SICARS)
P.O. Box 6
Sapelo Island, Georgia 31327
Phone: 912.485.2197
FAX: 912.485.2263

St. Simons Land Trust
P.O. Box 24615
1624 Frederica Road, Suite 6
St. Simons Island, Georgia 31522
Phone: 912.638.9109
http://www.sslt.org

The Trust for Public Land
Georgia Office
1447 Peachtree Street, Suite 601
Atlanta, Georgia 30309
Phone: 404.873.7306

The Nature Conservancy
Georgia Field Office
1330 West Peachtree Street, Suite 410
Atlanta, Georgia 30309- 2904
Phone: 404.873.6946

North Carolina

The Nature Conservancy
North Carolina Field Office
One University Place, Suite 290
4705 University Drive
Durham, North Carolina 27707
919.403.8558

North Carolina Coastal Land Trust
3806- B Park Avenue
Wilmington, North Carolina 28403
910.790.4524

Florida

The Nature Conservancy
Florida Field Office
222 South Westmonte Drive, Suite 300
Altamonte Springs, Florida 32714

North Florida Land Trust
4400 Marsh Landing Boulevard, Suite 4
Ponte Vedra Beach, Florida 32082

Certified Local Government Programs

Jointly administered by NPS in partnership with SHPOs, the Certified Local Government Program (CLG) is a local, State, and federal partnership that promotes historic preservation and development at the grassroots level. The CLG Program integrates local governments with the national historic preservation program through activities that strengthen decision- making regarding historic places at the local level. Local planning office staffs often play key roles in CLG projects, giving historic preservation a better chance of being integrated into local land- use policy.

The primary goals of the CLG Program are:

- to develop and maintain local historic preservation programs that will influence the zoning and permitting decisions critical to preserving historic properties; and
- to ensure the broadest possible participation of local governments in the national historic preservation program while maintaining preservation standards established by the Secretary of the Interior.

Local governments can significantly strengthen their local historic preservation efforts by achieving CLG status. Both the NPS and State governments, through their SHPOs, provide valuable technical assistance and matching grants to communities whose local governments are endeavoring to keep for future generations what is significant from their community's past.

Using grants awarded by SHPOs, a CLG may produce historic theme or context studies, cultural resource inventories, assessments of properties to determine their eligibility for local and National Register of Historic Places designation, building reuse and feasibility studies, design guidelines and

conservation ordinances, and publications to educate the public about the benefits of historic preservation. For further information, contact:

Certified Local Government Program
Heritage Preservation Services
National Park Service
1849 C Street, NW, North Carolina- 330
Washington, DC 20240
202.343.9575

State Historic Preservation Offices

North Carolina
State Historic Preservation Office
4617 Mail Service Center
Raleigh, North Carolina 27699- 4617
919.733.4763
http://www.hpo.dcr.state.nc.us

South Carolina
State Historic Preservation Office
8301 Parklane Road
Columbia, South Carolina 29223
803.896.6100
http://www.state.sc.us/scdah/histrcpl.htm

Georgia
State Historic Preservation Office
Department of Natural Resources
156 Trinity Avenue, SW, Suite 101
Atlanta, Georgia 30303- 3600
404.656.2840
http://www.dnr.state.ga.us/dnr/histpres

Florida
State Historic Preservation Office
Bureau of Historic Preservation
500 South Bronough Street
Tallahassee, Florida 32399- 0250
850.245.6333
http://www.flheritage.com

Archaeological Resources

Departments of Archaeology at universities and colleges throughout the study area.

National Park Service
U. S. Department of the Interior
Southeast Archeological Center
2035 E. Paul Dirac Drive
Johnson Building, Suite 120
Tallahassee, Florida 32310
850.580.3011
http://www.cr.nps.gov/seac

Historic Landscape Initiative

The Historic Landscape Initiative is an NPS program that promotes responsible preservation practices to protect the nation's designed landscapes, like parks and gardens, as well as vernacular historic landscapes, such as farms and industrial sites.

In partnership with federal and state agencies, professional organizations, and colleges and universities, the Historic Landscape Initiative develops and disseminates guidelines for significant historic landscape preservation; produces innovative tools to raise the awareness of the general public; organizes and conducts training symposia and workshops; and provides technical assistance for significant properties and districts. The information provided by the Initiative has influenced project work at local, regional, national, and even international levels.

For some cultural landscapes, especially those that are best considered ethnographic or heritage landscapes, these Guidelines may not apply. However, if people working with these properties decide

that community coherence may be affected by physical place and space – or if there is potential for loss of landscape character whose significance is rooted in the community's activities and processes (or other aspects of its history)- - this guide may be of service. An ethnographic landscape is a landscape containing a variety of natural and cultural resources that associated people define as heritage resources. Examples are contemporary settlements, sacred religious sites, and massive geological structures. Small plant communities, animals, subsistence and ceremonial grounds are often components. Gullah/Geechee lands and communities meet these criteria.

The Historic Landscape Initiative develops preservation planning tools that respect and reveal the relationship between Americans and their land. This initiative provides essential guidance to accomplish sound preservation practice on a variety of landscapes, from parks and gardens to rural villages and agricultural landscapes. Together, the publications, workshops, technical assistance, and national policy direction provided by the Historic Landscape Initiative make up a critical base of information widely used by a diverse audience that includes professional planners, landscape architects, architects, and historians, as well as historic property managers, administrators, homeowners, academics, and students. It is estimated that information generated by the Initiative has reached over 700,000 individuals nationwide. For further information, contact:

Historic Landscape Initiative
Heritage Preservation Services
National Park Service
1201 Eye St., NW
Washington, DC 20005
202.354.2257
FAX: 202.371.1791
http://www.cr.nps.gov/hps/hli/hliterm.htm
http://www.cr.nps.gov/hps/hli/introguid.htm

6 References

References Cited

Armstrong, Thomas. "From Task Labor to Free Labor: The Transition along Georgia's Rice Coast, 1820- 1880." *Georgia Historical Quarterly* 64 (Winter 1980): 432- 447.

Ascher, Robert and Charles Fairbanks. "Excavation of a Slave Cabin: Georgia, USA, 1834- 1865." *Historical Archeology* 5 (1971): 3- 17.

Beaufort County Planning Department. "Cultural Protection Overlay (CPO) District." Electronic doc. 1. <http://livepublish.municode.com/16/lpext.dll?f=templates&fn=main- hit- j.htm&2.0>

Beaufort County Planning Department. "Family Compounds." Electronic doc. 2. <http://livepublish.municode.com/16/lpext.dll?f=templates&fn=main- j.htm&vid=10400>

Behre, Robert. "Park Service Gets Lesson in Gullah Language." [Charleston, SC] *Post and Courier* (May 13, 2000): B1.

- - - . "Climbing 'Jacob's Ladder': Restoration Effort in Works at Old Hebron Presbyterian Church." [Charleston, SC] *Post and Courier* (October 3, 2004): A1.

Billingsley, Andrew, Lawrence N. Jones, and C. Eric Lincoln (Introduction). *Mighty Like a River: The Black Church and Social Reform*. New York: Oxford University Press, 2002.

Blassingame, John W. *The Slave Community: Plantation Life in the Antebellum South*. New York: Oxford University Press, [2nd ed.] 1979.

Blount, Benjamin G. "African- Americans in the Coastal Zone of Georgia." In *Endangered Peoples of North America: Struggles to Survive and Thrive*, Tom Greaves, ed. (Endangered Peoples of the World Series) Westport, CT: Greenwood Press, 2002.

Boswell, Victor. "Our Vegetable Travelers." *National Geographic* 96 (August 1949): 193- 211.

Brausch, Walter M. *Br'er Rabbit, Uncle Remus, and the Cornfield Journalist: The Tale of Joel Chandler Harris*. Macon, GA: Mercer University Press, 2000.

Buckman, Michelle. "Jonathan Green's Gullah Inspiration." *South Carolina Magazine* (May/June 2003): 42- 44.

Buckmaster, Henrietta. *Let My People Go*. Columbia, SC: University of South Carolina Press, [1941] 1993.

Carawan, Guy and Candie. *Ain't You Got a Right to the Tree of Life?: The People of John's Island, South Carolina, Their Faces, Their Words, and Their Songs*. Athens, GA: University of Georgia Press, [rev. ed.] 1989.

- - - . "Singing and Shouting in Moving Star Hall." *Black Music Research Journal* 15:1 (Spring 1995): 1- 15.

Carney, Judith Ann. *Black Rice: The African Origins of Rice Cultivation in the Americas*. Cambridge, MA: Harvard University Press, 2002.

- - - . "From Hands to Tutors: African Expertise in the South Carolina Rice Economy." *Agricultural History* 67:3 (Summer 1993): 1- 30.

Carney, Judith Ann, and Richard Dwight Porcher. "Geographies of the Past: Rice, Slaves, and Technological Transfer in South Carolina." *Southeastern Geographer* 33:2 (November 1993):127-147.

Carpenter, A. "The History of Rice in Africa." In I. Buddenhagen and J. Perseley, eds. *Rice in Africa*. London: Academic Press, 1997, 3- 10.

Chase, Judith Wragg. "American Heritage from Ante- Bellum Black Craftsmen." *Southern Folklore Quarterly* 42: (1978): 135- 158.

Chesnut, Mary Boykin Miller, *et al*. *Diary from Dixie*. New York: Random House, 1997.

Clarke, John Henrik. "Introduction." In Tom Feelings. *The Middle Passage: White Ships, Black Cargo*. New York: Dial Books, 1995.

Chaplin, Joyce E. "Tidal Rice Cultivation and the Problem of Slavery in South Carolina and Georgia." *William and Mary Quarterly* [3rd series] 49 (January 1991): 31- 39.

Cleveland, Henry. *Alexander H. Stephens, in Public and Private: With Letters and Speeches, before, during, and since the War*. Philadelphia: 1886, 717- 729.

Clifton, James M. "The Rice Driver: His Role in Slave Management." *South Carolina Historical Magazine* 82:4 (October 1981).

Clinton, Catherine. *The Plantation Mistress: Woman's World in the Old South*. New York: Pantheon Books, 1982.

- - - . *Tara Revisited: Women, War, and the Plantation Legend*. New York: Abbeville Press, 1995.

Close, Stacey K. *Elderly Slaves of the Plantation South*. New York: Garland Publishing, [rev. ed.] 1997.

Clowse, Converse D. *Economic Beginnings in Colonial South Carolina, 1670- 1730*. Columbia, SC: University of South Carolina Press, 1971.

Cody, Cheryll Ann. "Cycles of Work and of Childbearing: Seasonality in Women's Lives on Low-Country Plantations." In David Barry Gasper and Darlene Clark Hine, *More than Chattel*. Bloomington, IN: Indiana University Press, 1996.

Conroy, Pat. *The Water Is Wide*. Boston, MA: Houghton Mifflin, 1972.

Creel, Margaret Washington. *A Peculiar People: Slave Religion and Community Culture among the Gullahs*. New York: New York University Press, 1988.

Crook, Ray. "Gullah and the Task System." *Anthropology of Work Review* 22:3 (2001).

Crook, Ray, Cornelia Walker Bailey, *et al*. *Sapelo Voices: Historical Anthropology and the Oral Traditions of Gullah- Geechee Communities of Sapelo Island, Georgia*. Carrollton, GA: State University of West Georgia Press, 2003.

Crum, Mason. *Gullah: Negro Life in the Carolina Sea Islands*. Westport, CT: Greenwood Publishing Group, Inc., [1940] 1969.

Curtin, Philip D. "Epidemiology and the Slave Trade." *Political Science Quarterly* 83 (1968): 195- 218.

Cyriaque, Jeanne. "Exploring the History of African Americans on Sapelo Island." *Reflections* 1:2 (February 2001): 1- 3, Atlanta: Historic Preservation Division, Georgia Department of Natural Resources.

Davis, Jingle. "Coastal Culture Book Is on Justice's Docket." *The Atlanta Journal and Constitution* (February 15, 2001): C1.

Degler, Carl N. "Slavery and the Genesis of American Race Prejudice." *Contemporary Studies in Society and History*. 2 (1959): 49- 66.

DeLoach, Jennie McMillan. "Slavery Days in Georgia – First Negroes Who Came to the State Were Brought by the Asciento Company, Jointly Owned by Queen Ann of England and King Phillip V of Spain." [Atlanta] *Constitution Magazine* (August 2, 1931): 7, 20.

Derby, Doris D. "Black Women Basket Makers: A Study of Domestic Economy in Charleston County, South Carolina." Ph.D. dissertation, University of Illinois at Urbana- Champaign, 1980.

Dias, James K. "Gullah/Geechee Special Resource Study: Analysis of Community Meeting Transcripts." Unpublished report prepared for National Park Service, Southeast Regional Office, Atlanta, GA.

Dobyns, Henry F. *Their Number Became Thinned: Native American Population Dynamics in Eastern North America*. Knoxville, TN: University of Tennessee Press, 1983.

Edgar, Walter. *South Carolina, a History*. Columbia, SC: University of South Carolina Press, 1998.

Emerson, Frederick V. "Geographical Influences in American Slavery." *Geographical Society Bulletin* 63 (1911): 108- 9.

Fairbanks, Charles H. "The Kingsley Slave Cabins in Duval County Florida, 1968." In Stanley South, ed. *Conference on Historic Site Archaeology Papers*, Vol. 7. Columbia, SC: Institute of Archaeology and Anthropology, University of South Carolina, 1974, 62- 93.

Farley, M. Foster. "The South Carolina Negro in the American Revolution, 1775- 1783." *South Carolina Historical Magazine* 79:2 (April 1978): 75- 86.

Faulkenberry, Lisa V., John M. Cogeshall, Kenneth Backman, and Sheila Backman. "A Culture of Servitude." *Human Organization: Journal of the Society for Applied Anthropology* 59:1 (Spring 2000): 86- 95.

Ferguson, Leland. *Uncommon Ground: Archaeology and Early African America, 1650- 1800*. Washington, DC: Smithsonian Institution Press, 1992.

Fett, Sharla M. *Working Cures: Healing, Health, and Power on Southern Slave Plantations*. Chapel Hill, NC: University of North Carolina Press, 2002.

Fine, Elizabeth C. "Cultural Cross Roads: Stepping." *American Legacy* 9:2 (2003):19- 22.

Flusche, Michael. "Joel Chandler Harris and the Folklore of Slavery." *Journal of American Studies* 9 (December 1975): 347- 363.

Forbes, Patrick E. *Six Months' Service in the African Blockade*. London: Dawsons [1849] 1969. Quoted in Basil Davidson. *The Black Man's Burden: Africa and the Curse of the Nation- State*. Three Rivers, MI: Three Rivers Press, 1993.

Fox, Ruth. *Food Wonders of the World*. Battle Creek, MI: Kellogg Corporation, 1964.

Franklin, John Hope, and Loren Schweninger. *Runaway Slaves: Rebels on the Plantation*. New York: Oxford, 2000.

Frazier, Herb. "Basketweaving Traced to Ancient African Craft." [Charleston, SC] *Post and Courier* (4 September 1972).

- - - . "Genetic Links of Two Coasts Studies." [Charleston, SC] *Post and Courier* (March 16, 1997): A16.

- - - . "Park Service Gets a Lesson in Gullah Language." [Charleston, SC] *Post and Courier* (May 3, 2000): A1.

Gantt, Jesse Edward, Jr., and Veronica Davis Gerald. *The Ultimate Gullah Cookbook*. Beaufort, SC: Sands Publishing Co., 2003.

Geraty, Virginia Mixson. *Gullah fuh Oonuh: A Guide to the Gullah Language*. Orangeburg, South Carolina: Sandlapper Publishing Co, Inc., 1998.

Gershwin, George, Aldridge Grainger, and Ira Gershwin. *Porgy and Bess*. Miami, FL: Warner Brothers Publications, 1994.

Gibbs, Tyson. *African Americans at Snee Farm Plantation, Mount Pleasant*. Final Report for P5440990154. Atlanta, GA: National Park Service, Southeast Regional Office, 2002.

Glanton, Dahleen. "Small Island of Gullah Culture Tries to Stay Afloat." *Chicago Tribune*: June 4, 2001, n.p.

Global Garifuna Network, "Garifuna Culture Proclaimed as 'Masterpiece of the Oral and Intangible Heritage of Humanity.'" Electronic document. <http://www.garinet.com/cgi/bin/gknews_ssi.cgi?ACTION=VIEW_ONE_NEWS&ITEM=32>

Good, Paul. *The American Serfs*. New York: Ballantine Books, 1969.

Goodson, Martia Graham. "Medical- Botanical Contributions of African Slave Women to American Medicine." *Western Journal of Black Studies* 11 (1987), 198- 203.

Goodwine, Marquetta L. Presentation at "Gwine Bak: Gullah/Geechee Living Ways." Conference, St. Helena Island, SC, July 5- 7, 2002. - - - Gullah/Geechee Sea Island Coalition. Electronic document <http://users.aol.com/queenmut/GullGeeCo.html#background>

- - - . *The Legacy of Ibo Landing: Gullah Roots of African American Culture*. Atlanta: Clarity Press, 1998.

- - - . "Yeddy Wi: Gullah/Geechee Living Ways." (Written transcript of video taped presentation to the First International Conference on the Right to Self- determination & the United Nations), Geneva, Switzerland, 2000.

Gray, Lewis Cecil. *History of Agriculture in the Southern United States to 1860*. Fairfield, NJ: Augustus M. Kelley Publishers, [1933] 1973.

Grime, William E. *Ethno- Botany of the Black Americans*. Algonac, MI: Reference Publications, 1976.

Hall, Captain Basil. *Travels in North America 1827- 1828*. Edinburgh, Scotland: Cadell and Co., 1829.

Hall, Robert A., Jr. *Pidgin and Creole Languages*. Ithaca, NY: Cornell University Press, 1966.

Haller, John S. "The Negro and the Southern Physician: A Study of Medical and Racial Attitudes, 1800- 1860." *Medical History* 16 (1972): 263- 75.

Hargis, Peggy G., and Patrick M. Horan. "The 'Low- Country Advantage' for African- Americans in Georgia, 1880- 1930." *Journal of Interdisciplinary History* 28:1 (Summer 1997): 27- 46.

Hargrove, Melissa D. "Marketing Gullah: Identity, Cultural Politics, and Tourism." M.S. thesis, University of Tennessee, 1997.

- - - . "Culture for Sale: Marketing Gullah Identity in the South Carolina Sea Islands." *Southern Anthropologist* 29:1(Fall 2002).

- - - . "Overview and Synthesis of Scholarly Literature." Unpublished manuscript prepared for Department of Planning and Compliance, Southeast Regional Office, National Park Service, 2000.

Harmon, Michael A., and Rodney J. Snedeker. "The Archaeological Record of Tar and Pitch Production in Coastal South Carolina." In Linda F. Stine, Martha Zierden, Lesley M. Drucker, and Christopher Judge, eds. *Carolina's Historical Landscapes: Archaeological Perspectives*. Knoxville, TN: University of Tennessee Press, 1997.

Harris, Joel Chandler. *Uncle Remus: His Songs and His Sayings*. Cary, NC: Cherokee Publishing Co., [reprint] 1995.

Harris, J. William. *Deep South: Delta, Piedmont, and Sea Island Society in the Age of Segregation*. Baltimore, MD: Johns Hopkins University Press, 2001.

Hart, Zachary H., Angela C. Halfacre, and Marianne K. Burke. "Community Participation in Preservation of Lowcountry South Carolina Sweetgrass (*Muhlenbergia filipes*)." *Economic Botany* 58:2 (2004): 161- 171.

Haywood, C. Robert. "Mercantilism and South Carolina Agriculture." *South Carolina Historical Magazine* 60:1 (January 1959):15- 27.

Heflin, Frank. "Closed Gates Trouble Outsiders. Common- Interest Housing Developments Ban Beach Access in South Carolina." *The Progressive* 57 (October 1993): 32- 3.

Hess, Karen. *The Carolina Rice Kitchen, The African Connection*. Columbia, South Carolina: University of South Carolina Press, 1992.

Heyward, DuBose and Dorothy. *Porgy*. Oxford, MS: University of Mississippi Press, reprint ed. 2001.

Hicks, Bryan. "Short on Sweetgrass: Efforts Made to Increase Growth and Access as Supply Dwindles." [Charleston, SC] *Post and Courier* (September 6, 2004): A1.

Higginson, Thomas Wentworth. *Army Life in a Black Regiment*. Mineola, NY: Dover Publications, Inc., [1869] 2003.

Hine, Darlene Clark, and Kathleen Thompson. *A Shining Thread of Hope: The History of Black Women in America*. New York: Broadway Books- Random House, 1998.

Hitchcock, Susan L. "Sweetgrass Basketry and the Changing South Carolina Landscape." Georgia Landscape, School of Environmental Design, University of Georgia (1995), 23- 26.

Hjerpe, Karen. "Cultural Heritage Revisited." Ethnographic Study of St. John, USVI, Final Report: Histories and Identities. Atlanta, GA: Southeast Regional Office, National Park Service, 2000.

Hofbauer, Lisa. "A Sweet Tradition." [Charleston, SC] *Post and Courier*, 6 July 1997a: B01.

- - - . "Marker Validates History of Sweetgrass Weaving." [Charleston, SC] *Post and Courier*, (November 23, 1997b): B3.

"Holding the Fort: Fort Mose Possibly First Settlement of Free Blacks in America." *Scientific American* 257 (August 1987): 18- 19.

Hopkins, Tometro. "Variation in the Use of the Auxiliary Verb *Da* in Contemporary Gullah." In Michael Montgomery, ed. *The Crucible of Carolina: Essays in the Development of Gullah Language and Culture*. Athens, GA: University of Georgia Press, 1994, 60- 86.

Huntley, Dan. "Escaping Progress: Sandy Island Will Stay Unspoiled." *Charlotte Observer* (August 2, 1997): A1.

"In His Own Words: Justice Clarence Thomas." *New York Times*, (19 Dec 2000): n. p. <http://www.nytimes.com/2000/12/14/politics/14TWOR.html?ex=1065585600&en=4aef54af5349bd6b=5070>

Jacobs, Andrew. "In Historic Black Hamlet, Wal- Mart Finds Resistance." *New York Times* (March 6, 2004): A8.

Jacquith, Priscilla, *et al. Bo Rabbit Smart for True: Folktales from the Gullah*. New York: Philomel Books- Putnam Publishing Group, 1981.

Johnson, Guion Griffis. *A Social History of the Sea Islands, with Special Reference to St. Helena Island, South Carolina*. Chapel Hill: University of North Carolina Press, 1930.

Joyner, Charles W. "'Believer I Know': The Emergence of African American Christianity." In Paul E. Johnson and Vincent Harding. *African American Christianity: Essays in History*. Berkeley, CA: University of California Press, 1994.

- - - *Down by the Riverside: A South Carolina Slave Community*. Chicago: University of Illinois Press, 1985.

- - - . *Shared Traditions: Southern History and Folk Culture, 1799- 1860*. Columbia, South Carolina: University of South Carolina Press, 1999.

Kemble, Frances Anne. *Journal of a Residence on a Georgia Plantation in 1838- 1839*. Catherine Clinton, ed. Cambridge, MA: Harvard University Press, 2000.

Kiser, Clyde Vernon. *Sea Island to City: A Study of St. Helena Islanders in Harlem and Other Urban Centers*. New York: Antheneum [1931] 1969.

Kly, Yosef N. *In Pursuit of the Right to Self- determination: Collected Papers & Proceedings of the First International Conference on the Right to Self- Determination*. Atlanta, GA: Clarity Press, 2001.

- - - . *The 1503 Petition for Reparations for African Americans* (delivered to the UN in 1994a without response) <http://www.afre- ngo.com/beta/petition.htm>

- - - , ed. *African- American's Guide to Minority Rights, Self- Determination and Reparations*. Atlanta, GA: Clarity Press, 1994b.

Knox, Kevin and Julie Sheldon Huffaker. *Coffee Basics: A Quick and Easy Guide*. New York: John Wiley, 1996.

Landers, Jane G. *Black Society in Spanish Florida*. Chicago: University of Illinois Press, 1999.

The Language You Cry In: The Story of a Mende Song. Alvaro Toepke and Angel Serrano producer/directors; Vertamae Grosvenor, narrator. California Newsreel Distr., 1998.

Lee, Alyssa Stewart. "People and Places of Gullah Geechee Culture: Demographic Trends (1850- 2000) in the Southeastern Coastal Counties of the United States." Unpublished manuscript prepared for Low Country Gullah Special Resource Study, National Park Service, Department of Planning and Compliance, Southeast Regional Office, 2002.

Lemann, Nicholas. *The Promised Land: The Great Black Migration and How it Changed America*. New York: Vintage Press, 1992.

Levine, Lawrence W. *Black Culture and Black Consciousness: Afro- American Folk Thought from Slavery to Freedom*. New York: Oxford University Press, 1978.

Lindsey, Nick. *And I'm Glad: An Oral History of Edisto Island* [SC]. Charleston, SC: Tempus Publishing, Inc., 2000.

Linton, Ralph, and A. Irving Hollowell. "Nativistic Movements." *American Anthropologist* (New Series) 45:2 (1943): 230- 240.

Littlefield, Daniel C. "Charleston and Internal Slave Redistribution." *South Carolina Historical Magazine* 87:2 (April 1986): 93- 105.

- - - . *Rice and the Making of South Carolina: An Introductory Essay*. Columbia, South Carolina: SC Department of Archives and History, 1995.

- - - . *Rice and Slaves: Ethnicity and the Slave Trade in Colonial South Carolina*. Urbana, IL: University of Illinois Press, 1991.

Loewen, James W. "Lies Across the South." *Southern Exposure* 28:1 (Spring and Summer 2000): 33- 48.

"The Long Look." n.d., miscellaneous correspondence, vol. 17, Penn School Papers, Southern Historical Collection, University of North Carolina, Chapel Hill, NC. Quoted by Margaret Washington in "Community Regulation and Cultural Specialization in Gullah Folk Religion." In Paul E. Johnson, ed. *African American Folk Religion*. Berkeley, CA: University of California Press, 1994.

Lopez, Steve. "Confederate Currency: The Color of Money." *Time* (30 April 2001).

MacMahon, Darcie and Kathleen Deagan. "Legacy of Fort Mose." *Archaeology* 49 (September/October 1996): 54- 8.

May, Philip. "Zephaniah Kingsley, Non- Conformist, 1765- 1843." *Florida Historical Quarterly* 23 (October 1945): 145- 59.

McNeill, William. *Plagues and Peoples*. New York: Anchor, 1977.

Miller, Edward A. *Gullah Statesman: Robert Smalls from Slavery to Congress, 1839- 1915*. Columbia, SC: University of South Carolina Press, 1995.

Milling, Chapman A., ed. *Colonial South Carolina: Two Contemporary Descriptions*. Columbia, SC: University of South Carolina Press, [republication of James Glen's *Description of South Carolina*. London, 1761] 1951.

Milloy, Courtland. "Good Questions, Bad Answers from Thomas." *Washington Post* (December 17, 2000).

Morgan, Phillip D. "The Ownership of Property by Slaves in the Mid- Nineteenth- Century Low Country." *Journal of Southern History* 49 (August 1983): 399- 420.

- - - . "Review of *The Language You Cry In*." California Newsreel website. <http://www.newsreel.org/films/langyou.htm>, 1998.

National Register Information System for Beaufort County, SC. http://www.nr.nps.gov/iwisapi/explorer.dll?IWS_SCHEMA=NRIS1&IWS_LOGIN=1&IWS_REPORT=100000066

National Register Information System for McIntosh County, GA. http://www.nr.nps.gov/iwisapi/explorer.dll?IWS_SCHEMA=NRIS1&IWS_LOGIN=1&IWS_REPORT=100000066

National Trust for Historic Preservation, 11 Most Endangered List, 2004. http://www.nationaltrust.org/11Most/2004/gullah- geechee.html

Newton, John. *The Life and Spirituality of John Newton: An Authentic Narrative*. (Introduction by Bruce D. Hindmarsh). Vancouver, BC: Regent College Publishing, [1841] 1998.

Nichols, Elaine, ed. *The Last Miles of the Way: African- American Homegoing Traditions, 1890- Present*. Columbia, SC: South Carolina State Museum, 1989.

Official Records of the War of the Rebellion. U.S. Government. 4:3, 1161.

Olsen, Margaret M. *Sapelo Island: Georgia's Coastal Treasure*. Georgia Department of Natural Resources and National Oceanic and Atmospheric Administration, n.d.

Otto, John Solomon and Augustus Marion Burns, III. "Black Folks and Poor Buckras: Archaeological Evidence of Slave and Overseer Living Conditions on an Antebellum Plantation." *Journal of Black Studies* 14: 2 (December 1983): 185- 200.

Palmer, Colin. "The Cruelest Commerce." *National Geographic*. Washington, DC: National Geographic Society, Sept. 1992.

Paredes, J. Anthony. "The Emergence of Contemporary Eastern Creek Indian Identity." In Thomas Fitzgerald, ed. *Social and Cultural Identity: Problems of Persistence and Change*. Southern Anthropological Society Proceedings, Number 8. Athens, GA: University of Georgia Press, 1974, 63- 80.

Parker, Jim. "Evolving Habitat." [Charleston, SC] *Post and Courier* (July 31, 2004): 4G.

Parks, Fayth M. "The Role of African- American Folk Beliefs in the Modern Therapeutic Process." *Clinical Psychology: Science and Practice* 10:4 (Winter 2003): 456- 67.

Parrish, Lydia. *Slaves Songs of the Georgia Sea Islands*. Athens, GA: University of Georgia Press, 1992.

Parsons, Elsie Worthington Clews, ed. *Folk- Lore of the Sea Islands, South Carolina*. New York: American Folklore Society, 1923.

Peterkin, Julia Mood. *Scarlet Sister Mary*. Athens: University of Georgia Press, reprint 1998.

Pinsky, Mark. "Hilton Head Report: Sea Island Plantations Revisited." *Southern Exposure* 10 (May-June 1982): 33.

- - - . "South Carolina – The New Plantations." *Economist* 16 (October 1993).

Pollitzer, William. *The Gullah People and Their African Heritage*. Athens, GA: University of Georgia Press, 1999.

- - - . "The Negroes of Charleston [SC]: A Study of Hemoglobin Types, Serology, and Morphology." *American Journal of Physical Anthropology* 60 (1958).

Price, Richard, ed. *Maroon Societies: Rebel Slave Communities in the Americas.* Baltimore, MD: Johns Hopkins University Press, [3rd ed.] 1996.

Price, Richard and Sally Price. *Maroon Arts: Cultural Vitality in the African Diaspora*. Boston, MA: Beacon Press, 1999.

Quarles, Benjamin. *The Negro in the American Revolution*. New York: W. W. Norton, [1961] 1973.

Quick, David. "Marker to Recognize Basketmakers." [Charleston, SC] *Post and Courier* (20 November 1997): P1.

Rath, Richard Culler. "Drums and Power: Ways of Creolizing Music in Coastal South Carolina and Georgia, 1730- 1790." In David Buisseret and Steven Reinhardt, eds. *Creolization in the Americas.* College Station, TX: Texas A & M University Press, 2000.

Rawley, James A. *The Transatlantic Slave Trade*. New York: W. W. Norton, Co., 1981.

Rehder, John B. *Delta Sugar: Louisiana's Vanishing Plantation Landscape (Creating the North American Landscape)*. Baltimore, MD: Johns Hopkins University Press, 1999.

Richissin, Todd. "Carrying a Song Back Home." [Raleigh, NC] *News and Observer* (12 May 1997): 1A, 10A.

Rodney, Walter. *A History of the Upper Guinea Coast, 1545- 1800*. New York: Monthly Review Press, 1981.

Rogers, George C., Jr. *History of Georgetown County, South Carolina*. Columbia, SC: University of South Carolina Press, 1970.

Rollins, Richard, ed. *Black Southerners in Gray: Essays on Afro- Americans in Confederate Armies*. Redondo Beach, CA: Rank and File Publications, 1997.

Rosenbaum, Art. *Shout Because You're Free: The African American Ring Shout Tradition in Coastal Georgia*. Athens, GA: University of Georgia Press, 1998.

Ross, Joe. "Hags out of Their Skins." *Journal of American Folklore* 93:368 (1980): 183- 186.

St. Augustine Expedition of 1740: A Report to the South Carolina General Assembly Reprinted from the Colonial Records of South Carolina, with an Introduction by John Tate Lanning. Columbia, SC: University of South Carolina Press, 1954.

Saunders, William C. "Sea Islands: Then and Now." *Journal of Black Studies* 10: 4 (June 1980): 481- 92.

Schwalm, Leslie A. *A Hard Fight for We: Women's Transition from Slavery to Freedom in South Carolina*. Champaign, IL: University of Illinois Press, 1997.

Segars, J. H. and Charles Kelly Barrow. *Black Southerners in Confederate Armies: A Collection of Historical Accounts*. Atlanta, GA: Southern Lion Books, 2001.

Sherman, William Tecumseh and Charles Royster, ed. *Memoirs of General William T. Sherman*. New York: Library of America, [1875] 1990.

Simpson, Robert. "The Shout and Shouting in Slave Religion in the United States." *Southern Quarterly* 23:3 (Spring 1985): 40- 46.

Smith, Julia Floyd. *Slavery and Plantation Growth in Antebellum Florida*. Gainesville, FL: University of Florida Press, 1973.

Stearns, Charles. *The Black Man of the South.* New York, 1872.

Stephens, Alexander H. "Cornerstone Address, March 21, 1861." In Frank Moore, ed. *The Rebellion Record: A Diary of American Events with Documents, Narratives, Illustrative Incidents, Poetry, etc.*, v. 1, New York: O.P. Putnam, 1862, 44- 46.

Spirituals of the Carolina Low Country. Charleston, SC: Society for the Preservation of Spirituals, 2004.

Teague, Michael and Zelide Cowan. "*Nil Disprandum*." *American Heritage* 20:2 (February 1969): 20- 25.

This Far by Faith: African American Spiritual Journeys. Co- production of Blackside Inc. and The Faith Project, in association with the Independent Television Service; presented on PBS by WGBH and ITVS, 2003.

Thomas, June Sheralyn Manning. "The Impact of Corporate Tourism on Gullah Blacks: Notes on Issues of Employment." *Phylon* 41:1 (Spring 1980), 1- 11.

Thompson, Robert Farris. *The Four Moments of the Sun: Kongo Art in Two Worlds*. Washington, DC: National Gallery of Art, 1981.

Tibbetts, John H. "Coastal Growth Hits Home." *Coastal Heritage* 16:2 (Fall 2001): 1- 12. SC Sea Grant Consortium, Charleston, SC.

- - - . "Living Soul of Gullah." *Coastal Heritage* 14: 4 (Spring 2000): 1- 11. SC Sea Grant Consortium, Charleston, SC. <http://www.scseagrant.org/pdf_files/ch_spring_2000.pdf>

- - - . "Riches to Ruin: Pharaohs of the New World." *Coastal Heritage* 14:2 (Fall 1999): 1- 16. SC Sea Grant Consortium, Charleston, SC. <http://www.scseagrant.org/pdf_files/ch_fall_99.pdf>

Tindall, George B. *South Carolina Negroes, 1877- 1900*. Baton Rouge, LA: Louisiana State University Press, 1966.

Trinkley, Michael, ed. *Archaeological and Historical Examinations of Three Eighteenth and Nineteenth Century Plantations on the Waccamaw Neck*. Columbia, SC: Chicora Foundation, 1992.

- - - . *Scanlonville, Charleston County, South Carolina: The Community and the Cemetery*. Columbia, SC: Chicora Foundation, 2001.

Turner, Lorenzo Dow. *Africanisms in the Gullah Dialect*. Columbia, SC: University of South Carolina Press, [1949] 2002.

Twining, Mary A. and Keith E. Baird, ed. *Sea Island Roots: African Presence in the Carolinas and Georgia*. Trenton, NJ: Africa World Press, 1991.

UNESCO. "UNESCO to Protect Masterpieces of the Oral and Intangible Heritage of Humanity," Electronic document <http://www.unesco.org/bpi/eng/unescopress/ 2000/00- 48e.shtml>

Uya, Okon Edet. *From Slavery to Public Service: Robert Smalls, 1839- 1915*. New York: Oxford University Press, 1971.

Vari, Jeff. "Snowden Community Seeing Light at End of Sewer Tunnel." [Mt. Pleasant, SC] *Moultrie News* (March 3, 2004): 1.

"Virginia Mixson Geraty." Editorial [Charleston, SC] *Post and Courier* (November 30, 2004): A10.

Vlach, John Michael. "Graveyards and Afro American Art." *Southern Exposure* 5 (1977): 161- 165.

Wallace, Anthony F. C. *Culture and Personality*. New York: Random House, [2nd ed.] 1970.

Wallace, David D. "Indigo Culture in the South." In Julian A. C. Chandler, ed. *The South in the Building of the Nation* (vol. 5). Richmond, 1909- 1913, 178- 83.

Waring, Joseph Ioor, MD. *A History of Medicine in South Carolina 1670- 1825*. Columbia, SC: R. L. Bryan Co., 1964.

Washington, Margaret. "Community Regulation and Cultural Specialization in Gullah Folk Religion." In Paul E. Johnson, ed. *African American Christianity: Essays in History*. Berkeley, CA: University of California Press, 1994.

Wax, Darold D. "The Great Risk We Run: The Aftermath of the Slave Rebellion at Stono, South Carolina. *Journal of Negro History* 67 (1982): 136- 147.

- - - . "New Negroes Are Always in Demand: The Slave Trade in Eighteenth Century Georgia." *Georgia Historical Quarterly* 68 (1984) 193- 220.

"Welcome to the home of Sapelo Island Cultural and Revitalization Society (SICARS)." Electronic document. <http://www.sapeloislandgeorgia.org/index.html>

Werlich, David P. *Admiral of the Amazon: John Randolph Tucker, His Confederate Colleagues and Peru*. Charlottesville, VA: University of Virginia Press, 1990.

Wermiel, Stephen J. "Clarence Thomas after ten Years: Some Reflections." *American University Journal of Gender, Social Policy & the Law* 10:2 (2002): 315- 25.

Wexler, Mark. "Sweet Tradition: African Americans' Tradition of Basket Weaving from Sweetgrass." *National Wildlife* 31 (1993): 38- 41.

Williams, Edwin L. "Negro Slavery in Florida." *Florida Historical Quarterly* 27 (October 1949): 93- 110 and 28 (January 1950): 180- 204.

Williamson, Joel. *After Slavery: The Negro in South Carolina During Reconstruction, 1861- 1877*. Chapel Hill, NC: University of North Carolina Press, 1965.

Wise, Stephen R. *Gate of Hell: Campaign for Charleston Harbor, 1863*. Columbia, SC: University of South Carolina Press, 1994.

Wolf, Eric R. "Perilous Ideas: Race, Culture, People." *Current Anthropology* 35 (1994): 1- 12.

Wolf, Kurt J. "Laura M. Towne and the Freed People of South Carolina." *South Carolina Historical Magazine* 98:4 (October 1997) 375- 405.

Wood, Peter H. *Black Majority, Negroes in Colonial South Carolina from 1670 through the Stono Rebellion*. New York: W. W. Norton, Inc., 1974a.

- - - . "'It Was a Negro Taught Them': A New Look at Labor in Early South Carolina." *Journal of Asian and African Studies* 9 (1974b): 159- 179.

Wood, Virginia Steele. *Live Oaking: Southern Timber for Tall Ships*. Boston, MA: Northeastern University Press, 1981.

Works Progress Administration (WPA), Georgia Writers Project, Savannah Unit. *Drums and Shadows: Survival Studies among the Georgia Coastal Negroes*. (Introduction by Charles Joyner). Athens: GA: Brown Thrasher, [1940] 1986.

Additional References and Suggested Reading

Abbott, Martin. "Freedom's Cry: Negroes and Their Meetings in South Carolina, 1865- 1869." *Phylon Quarterly* 20:3 (1959): 263- 72.

Abedon, Emily. "Georgia Singers Preserve Sea Island Culture." [Charleston, SC] *Post and Courier* (June 3, 1998): A5.

Abrahams, Roger D. *Singing the Master: The Emergence of African- American Culture in the Plantation South*. New York: Pantheon Books, 1992.

An Account of the Late Intended Insurrection among a Portion of the Blacks of this City. Charleston, SC: Corporation of Charleston, 1822

Adams, Eric. "Religion and Freedom: Artifacts Indicate That African Culture Persisted Even in Slavery." *African- American Archaeology* 11 (Summer 1994): 1- 2.

Adams, Natalie P. "Early African- American Domestic Architecture from Berkeley County, South Carolina." M.S. thesis, University of South Carolina, 1990.

- - - . "Elite Ideology and African- American Resistance: Architectural Resistance at South Carolina Slave Settlements." Paper presented at the Society for Historical Archaeology Meetings, Kingston, Jamaica, 1992.

Adams, Natalie P., Michael Trinkley, Debi Hacker, *et al*. "In the Shadow of the Big House: Domestic Slaves at Stoney/Baynard Plantation, Hilton Head Island, South Carolina." report prepared for Friends of Stoney Baynard Plantation and the Environmental and Historical Museum of Hilton Head Island, SC. Columbia, SC: Chicora Foundation, 1995.

Adams, William Hampton. "Health and Medical Care on Antebellum Southern Plantations." *Plantation Society in the Americas* 2 (1989): 259- 78.

Adams, William H., and Sarah Jane Boling. "Status and Ceramics for Planters and Slaves on Three Georgia Coastal Plantations." *Historical Archaeology* 23:1(1989): 69- 96.

Addo, Linda D. "A Historical Analysis of the Impact of Selected Teachers on Education for Blacks in Coastal South Carolina, 1862- 1970." Ed.D. dissertation, University of North Carolina at Greensboro, 1988.

Affleck, Richard M. "Power and Space Settlement Pattern Change at Middleburg Plantation, Berkeley County, South Carolina." M.S. thesis, University of South Carolina, 1990.

African- American National Register Sites & Historical Markers in South Carolina. Columbia, SC: South Carolina Department of Archives and History, 2002.

Aina, Olaiya, Meta Van Sickle, and Mary Blake. "A Case Study of South Carolina Sea Island Language: What Happens When a Creole Language Doesn't Mix with Standard School Language?" *Journal of Interdisciplinary Education* 5:1 (Summer 2002): 195.

Alanen, Arnold R., and Robert Z. Melnick, eds. *Preserving Cultural Landscapes in America*. Baltimore: Johns Hopkins University Press, 2000.

Albanese, Anthony Gerald. "The Plantation as a School: The Sea Islands of Georgia and South Carolina, A Test Case, 1800- 1860." Ed.D. dissertation, Rutgers University, 1970.

Allen, Ray. "An American Folk Opera? Triangulating Folkness, Blackness, and Americaness in Gershwin and Heyward's 'Porgy and Bess.'" *Journal of American Folklore* 117 (Summer 2004): 243- 61.

Allen, William Francis, *et al*., eds. *Slave Songs of the United States*. Bedford, MA: Applewood Books, [1867]1995.

Alleyne, Warren and Henry Fraser. *The Barbados- Carolina Connection*. London: Macmillan Caribbean, 1988.

Anderson, David G. "The Archaeology of Tenancy in the Southeast: A View from the South Carolina Low Country." *South Carolina Antiquities* 14 (1982): 72- 86.

Anderson, Frank, Jr. "Gullah Christianity: An Analysis of the Ethical Dimensions of Gullah Culture and Their Implications for the Practical Theology of Contemporary African American Churches." Ph.D. dissertation, Mid- America Baptist Theological Seminary, 1994.

Anderson, James D. "Aunt Jemima in Dialectics: Genovese on Slave Culture." *Journal of African American History* 87:1 (Winter 2002): 26- 42.

Anderson, Mary Crow, ed. *Two Scholarly Friends*. Columbia, SC: University of South Carolina Press, 1993.

Anderson, Ralph V. and Robert E. Gallman. "Slaves as Fixed Capital: Slave Labor and Economic Development." *Journal of American History* 44 (1977): 24- 46.

Andrew, James O. "The Southern Slave Population." *Methodist Magazine and Quarterly Review* 31 (1831): 315- 22.

Andrews, William L., David A. Davis, and Tampathia Evans, eds. *North Carolina Slave Narratives: The Lives of Moses Roper, Lunsford Lane, Moses Grandy, and Thomas H. Jones*. (The John Hope Franklin Series in African American History and Culture). Chapel Hill, NC: University of North Carolina Press, 2003.

Anthony, Ronald W. "Cultural Diversity at Mid to Late 18th Century Lowcountry Plantation Slave Settlements." M.A. thesis, University of South Carolina, 1989.

Antsey, Roger. *The Atlantic Slave Trade and British Abolition, 1760- 1810*. Atlantic Highlands, NJ: Humanities Press, 1975.

Anziano, Satina. "Lillie: Copula Usage Study of a Mesolectal Gullah Speaker from the Federal Writers Project." M.A. thesis, University of South Carolina, 1998.

Anzilotti, Cara. "Autonomy and the Female Planter in Colonial South Carolina." *Journal of Southern History* 63:1 (1997): 239- 68.

Aptheker, Herbert. *American Negro Slave Revolts*. New York: International Publishers, [5th ed.] 1993.

- - - . "The Negro in the Union Navy." *Journal of Negro History* 32:2 (April 1947): 169- 200.

"Archaeological Survey of Parker Island, Charleston County, South Carolina." Report on file, Brockington and Associates, Atlanta, GA.

Arnett, Paul, and William Arnett, eds. *Souls Grown Deep: African American Vernacular Art of the South: The Tree Gave the Dove a Leaf*. New York: Schomburg Center for Research in Black Culture, 2000.

Arnett, Paul, William Arnett, and Lowery Sims. *Souls Grown Deep: African American Vernacular Art of the South*, Vol. 2. New York: Schomburg Center for Research in Black Culture, 2001.

Ashe, Jeanne Moutoussamy. *Daufuskie Island: A Photographic Essay*. Columbia, SC: University of South Carolina Press, 1982.

Ashley, Dottie. "'Hush Dat Gullah' Speaks Volumes About Culture." [Charleston, SC] *Post and Courier* (October 3, 1995): B4.

Asim, Jabari. "Carrie Mae Weems Makes Provocative Statements about Race and Gender in her Photographs. Her Work Explores the Space Where Experience and Imagination Cross Paths to Make Art." *St. Louis Post- Dispatch* (April 18, 1993): n.p.

Auslander, Mark. "'Return to Sender': Confronting Lynching and Our Haunted Landscapes." *Southern Changes* 24:1- 2 (Spring- Summer 2002): 4- 7.

Austen, Ralph A. "Social and Historical Analysis of African Trickster Tales: Some Preliminary Reflections." *Plantation Society* 2 (1982): 135- 148.

Austin, Allan D. *African Muslims in Antebellum America: Transatlantic Stories and Spiritual Struggles*. New York: Routledge Publications, 1997.

Babson, David W. "The Archaeology of Racism and Ethnicity on Southern Plantations." *Historical Archaeology* 24: 4 (Winter 1990): 20- 28.

- - - . "The Tanner Road Settlement: The Archaeology of Racism on Limerick Plantation." M. A. thesis, University of South Carolina, 1987.

Babson, Jennifer. "Divers Search for Slave Ship." *Miami Times* (August 29, 2004): B1.

Bacon, A. M. "Folklore Ethnology: Conjuring and Conjure Doctors." *Southern Workman* 24 (1895): 193- 194 and 209- 211.

Baer, Hans A. "Black Spiritual Churches: A Neglected Socio- Religious Institution. *Phylon* 65 (September 1981): 207- 23.

- - - . "Toward a Systematic Typology of Black Folk Healers." *Phylon* 66 (December 1982): 327- 43.

Bagwell, James E. Rice *Gold: James Hamilton Couper and Plantation Life on the Georgia Coast*. Macon, GA: Mercer University Press, 2000.

Bailey, Beryl. "Toward a New Perspective in Negro English Dialectology." *American Speech* 40 (1965): 171- 7.

Bailey, Cornelia Walker. *God, Dr. Buzzard, and the Bolito Man: A Saltwater Geechee Talks about Life on Sapelo Island*. New York: Doubleday, 2000.

- - - . "Still Gullah: A Sea Island Sister Struggles to Preserve the Old Ways." *Essence* 28:10 (February 1998): 134- 137.

Bailey, Margaret. "Students Examine Gullah: 30 Visit Island to Learn about Disappearing Language." [Augusta, GA] *Augusta Chronicle* (October 7, 2003): B2.

Baird, Keith E. "Guy B. Johnson Revisited: Another Look at Gullah." *Journal of Black Studies* 10:4 (1980): 425- 436.

Baldwin, Agnes Leland. *Plantations of the Low Country: South Carolina, 1697- 1865*. Greensboro, NC: Legacy Publications, 1985.

Ball, Edward. "The Life of Angola Amy of Coming Tee and Kensington Plantations, South Carolina." *Journal of the African American History and Genealogical Society* 15:1 (1996): 1- 5.

- - - . *Peninsula of Lies: A True Story of Mysterious Birth and Taboo Love*. New York: Simon and Schuster, 2004.

- - - . *Slaves in the Family*. New York: Random House, 1998.

- - - . *The Sweet Hell Inside: A Family History*. New York: William Morrow, 2001.

Ballanta, Nicholas G. J. *Saint Helena Island Spirituals*. New York: G. Schirmer, Inc., 1925.

Baptist, Edward E. "'Cuffy,' 'Fancy Maids,' and 'One- Eyed Men': Rape, Commodification, and the Domestic Slave Trade in the United States." *American Historical Review* 106 (December 2001): 1619- 50.

- - - . "The Migration of Planters to Antebellum Florida: Kinship and Power." *Journal of Southern History* 62:3 (August 1996):527- 54.

Barbatsis, Gretchen, ed. *The Color of Money: Images of Slavery in Confederate and Southern States Currency*. West Columbia, SC: The Olive Press, 2002.

Barrett, John G. *Sherman's March through the Carolinas*. Chapel Hill: University of North Carolina Press, 1956.

Barile, Kerri S. "Race, the National Register, and Cultural Resource Management: Creating an Historic Context for Postbellum Sites." *Historical Archaeology* 38:1 (Spring 2004).

- - - . "Testing the Oral History at Middleburg Plantation, Berkeley County, South Carolina." *African-American Archeology* 26 (Early Winter 1999).

Barrow, Charles Kelley, *et al. The Forgotten Confederates: A Collection of Historical Accounts about Black Southerners in Gray*. Atlanta, GA: Southern Heritage Press, 1995.

Barry, John M. *Natural Vegetation of South Carolina*. Columbia, SC: University of South Carolina Press, 1980.

Bartelme, Tony. "Families Evicted from Heirs' Property: Deputies Enforce Court's Directive after Relative's Lawsuit Leads to Sale Order." [Charleston, SC] *Post and Courier* (September 28, 2001.):B1.

- - - . "Father Dreads Family's Eviction in Heirs' Property Dispute." [Charleston, SC] *Post and Courier* (September 27, 2001): A1.

- - - . "Heirs Property Tangle Leads to Loss of Land." [Charleston, SC] *Post and Courier* (December 24, 2000): A1.

- - - . "Residents on Heirs Property Face Legal Risks." [Charleston, SC] *Post and Courier* (October 8, 2001): B1.

- - - . "Robert Smalls Sailed Away to Freedom." [Charleston, SC] *Post and Courier* (February 11, 1998): B1.

Bascom, William R. "Acculturation among the Gullah Negroes." *American Anthropologist*, New Series 43:1 (1941): 43- 50.

- - - . "Gullah Folk Beliefs Concerning Childbirth." Paper given at the American Folklore Society, Andover, MA, December 1941.

- - - . "Gullah Superstitions Persist." *El Palacio* 49:2 (February 1942): 48.

Bascom, William R., and Melville J. Herskovits, eds. *Continuity and Change in African Cultures*. Chicago, IL: University of Chicago Press, [1959] 1962.

Bass, Robert D. "Negro Songs from the PeeDee Country." *Journal of American Folklore* 44:2 (1931) 418- 436.

Bassett, John Spencer. *Slavery and Servitude in the Colony of North Carolina*. Johns Hopkins University Studies in Historical and Political Science Series 17: 7 & 8. Baltimore, MD: Johns Hopkins University Press, 1899.

Bassett, Victor H. "Plantation Medicine." *Journal of the Medical Association of Georgia* 20 (March 1940): 112- 22.

Bauer, Raymond, and Alice H Bauer. "Day to Day Resistance to Slavery." *Journal of Negro History* 27 (October 1942): 388- 419.

Baugh, John. *Out of the Mouths of Slaves: African American Language and Educational Malpractice*. Austin, TX: University of Texas Press, 1999.

Baumhofer, Hermino Munz. "Economic Changes in St. Helena's Parish, 1860- 70." *South Carolina Historical and Genealogical Magazine* 50:3 (January 1949).

Beam, Scott P. "Environmental Dependency: The Bridge between Natural History and Cultural History Interpretation." *Legacy* 4:6 (1993): 24- 25.

Becker, Erin. "The Glories of Gullah: Events Celebrate Rich, Distinctive Lowcountry Language and Culture." [Hilton Head Island, SC] *Island Packet* (February 2, 2002).

- - - . "Living History: Historic Battle Comes to Life Once Again Through Lectures, Tours, and Other Activities." [Hilton Head Island, SC] *Island Packet* (September 22, 2002).

Becker, Robert. "South Carolina's Rural Life: Can It Be Saved?" Coastal Heritage 6: 6 (1992), n.p.

Begley, Paul R. *African American Genealogical Research*. Columbia, SC: SC Dept. of Archives and History, [rev. ed.] 1997.

Behre, Robert. "Black Churches on U. S. Trust's Endangered List." [Charleston, SC] *Post and Courier* (July 12, 1996): B3.

- - - . "Black History on Map." [Charleston, SC] *Post and Courier* (November 8, 1999): B1.

- - - . "Conferees Hope to Clear Away Plantation Myths." [Charleston, SC] *Post and Courier* (March 20, 2000): C1.

- - - . "Georgia Group Not Afraid to Shout!" [Charleston, SC] *Post and Courier* (June 6, 1998): A9.

- - - . "History Traced in Remains of Buildings at Pinckney Site." [Charleston, SC] *Post and Courier* (October 21, 2002): B1.

- - - . "Mr. Pinckney Slept Here: Dig Seals Historic Hunch." [Charleston, SC] *Post and Courier* (April 3, 1999): A1.

- - - . "Plantation Home Tibwin Rescued from Neglect." [Charleston. SC] *Post and Courier* (November 12, 2002): 1B.

- - - . "Sweetgrass Turns Sour." [Charleston, SC] *Post and Courier* (July 26, 2004): n.p.

Bell, Karen. B. "'The Ogeechee Troubles': Federal Land Restoration and the 'Lived Realities' of Temporary Proprietors, 1865- 1868." *Georgia Historical Quarterly* 85 (2001): 473- 79.

Bell, Malcolm, Jr. *Major Butler's Legacy: Five Generations of a Slaveholding Family*. Athens, GA: University of Georgia Press, 1987.

Bellows, Barbara Lawrence. "Tempering the Wind: The Southern Response to Urban Poverty, 1850-1865 (Georgia, South Carolina, Virginia)." Ph.D. dissertation, University of South Carolina, 1983.

Benberry, Cuesta. "The Threads of African- American Quilters are Woven into History." *American Visions* 8:6 (1994): 14- 18.

Benmaman, Virginia Doubchan. "An Investigation of Reading Comprehension Ability in Black Fourth and Fifth Grade Students Who Are Reading Below Grade Level Utilizing Materials Written in Gullah and Standard English." Ed.D. dissertation, University of South Carolina, 1975.

Bennett, John. *Doctor to the Dead*: *Grotesque Legends and Folk Tales of Old Charleston*. Columbia, SC: University of South Carolina Press, [1946] 1995.

- - - . "Gullah: A Negro Patois." *South Atlantic Quarterly* 8:4 (1908): 333- 47 and 9:1 (1909): 39- 52.

Bennett, Lerone, Jr. "Chronicles of Black Courage: Robert Smalls Sailed Confederate Ship out of Charleston Harbor." *Ebony* 57:1 (November 2001): 158- 62.

Beoku- Betts, Josephine. "'She Make Funny Flat Cake She Call Saraka': Gullah Women and Food Practices under Slavery." In Larry E Hudson, Jr., ed. *Working Toward Freedom: Slave Society and Domestic Economy in the American South*. Rochester, NY: University of Rochester Press, 1994, 211- 31.

- - - . "We Got Our Way of Cooking Things." *Gender and Society* 9:5 (1995): 535- 55.

- - - . "When Black Is Not Enough: Doing Field Research Among Gullah." *National Women's Studies Association Journal* 6 (1994): 413- 33.

Berkeley, Edmund and Dorothy Smith Berkeley. *The Life and Travels of John Bartram from Lake Ontario to the River St. John*. Tallahassee, FL: Florida State University Press, 1982.

Berkin, Carol. *First Generations: Women in Colonial America*. New York: Hill & Wang Publishers, 1997.

Berlin, Ira. "From Creole to African: Atlantic Creoles and the Origins of African- American Society in Mainland North America." *William and Mary Quarterly*, 3rd ser., 53 (April 1996): 251- 88.

- - - . *Generations of Captivity: A History of African- American Slaves*. Cambridge, MA: Belknap Press, 2003.

- - - . *Many Thousands Gone: The First Two Centuries of Slavery in North America*. Cambridge, MA: Harvard University Press, 1998.

- - - . *Slaves without Masters: The Free Negro in the Antebellum South*. New York: Pantheon Books, 1974.

Berlin, Ira, *et al.,* eds. *Freedom: A Documentary History of Emancipation, 1861- 1867*. New York: Cambridge University Press, 1986.

- - - . *Free at Last: A Documentary History of Slavery, Freedom, and the Civil War*. New York: The New Press, 1992.

Berlin, Ira, Barbara J. Fields, Joseph P. Reidy, and Leslie S. Rowland. "The Moment of Freedom." *Southern Exposure* 10 (September/October 1982): 60- 64.

Berlin, Ira, Francine C. Cary, Steven F. Miller, and Leslie S. Rowland, "Family and Freedom: Black Families in the American Civil War." *History Today* 37 (January 1987): 8- 15.

Berlin, Ira, Steven F. Miller, and Leslie S. Rowland. "Afro- American Families in the Transition from Slavery to Freedom." In *Radical History Review* 42 (1988): 89- 121.

- - - . "Emancipated Citizens." *Constitution* 6 (Fall 1994): 78- 87.

- - - . "Missing: A Freedman Seeks His Family." *American Visions* 3 (February 1988): 8- 9.

Berlin, Ira, and Philip D. Morgan, eds. *Cultivation and Culture: Labor and the Shaping of Slave Life in the Americas*. Charlottesville, VA: University Press of Virginia, 1993.

- - - . *The Slaves' Economy: Independent Production by Slaves in the Americas*. Portland, OR: Frank Cass, [1991] 1995.

Berlin, Ira, and Leslie S. Rowland. "The Underground Railroad: Travels above Ground." *Potomac Review* 24 (Fall 1999): 33- 36.

Berlin, Jacqueline. "Feeling the Squeeze on St. Simons: Development Is New Threat to Old Villages." *Brunswick News* (February 3, 2001): 2A

- - - . "St. Simons Island Neighborhoods Rich with History, Memories." *Brunswick News* (February 3, 2001): 2A.

Berry, Harrison. *Slavery and Abolitionism, as Viewed by a Georgia Slave, by Harrison Berry, Born 1816, the Property of W. S. Price, Covington, GA*. Wilmington, DE: Scholarly Resources, [1861]1970.

Bigham, Shauna, and Robert May. "The Times O' All Times: Masters, Slaves, and Christmas in the Old South." *Journal of the New Republic* 18 (1998).

Billington, Ray Allen, and Brenda Stevenson, eds. *The Journal of Charlotte Forten: A Free Negro in the Slave Era*. New York: W. W. Norton & Co., 1981.

Biondi, Marlene. "The Wisdom of the Sweetgrass Basket Makers." *Southern Pride* (July 1997). Located at <http://www.southernpride.com/1997/july/sweetgrass/index.htm>

Birnie, C. W. "Education of the Negro in Charleston, South Carolina, Prior to the Civil War." *Journal of Negro History* 12 (January 1927): 13- 21.

Bishir, Catherine W. "Black Builders in Antebellum North Carolina." *North Carolina Historical Review* 61:4 (October 1984): 423- 61.

Black, Blanton Emanuel. "The Rise and Decline of Plantation Agriculture in Coastal Georgia." M.S. thesis, University of Chicago, 1937.

Blackburn, George M. and Sherman L. Richards. "A Demographic History of Slavery: Georgetown County, South Carolina, 1850." *South Carolina Historical Magazine* 76:3 (1975): 215- 224.

- - - . "The Mother- Headed Family among Free Negroes in Charleston, South Carolina, 1850- 1860." *Phylon* 65 (March 1981): 11- 25.

Blackerby, H. C. *Blacks in Blue and Gray: Afro- American Service in the Civil War*. Tuscaloosa, AL: Portals Press, 1979.

Blanck, Emily Vanessa. "Revolutionizing Slavery: The Legal Culture of Slavery in Revolutionary Massachusetts and South Carolina." Ph.D. dissertation, Emory University, 2003.

Blanton, Joshua E. "'I Sho Ben Lub Dat Buckra.'" *Southern Workman* 37 (1908): 242- 246.

Blassingame, John W. "Using the Testimony of Ex- Slaves: Approaches and Problems." *Journal of Southern History* 41 (November 1975): 473- 92.

Bleser, Carol K. "Southern Planter Wives and Slavery." In David R Chesnutt and Clyde N. Wilson, eds. *The Meaning of South Carolina History: Essays in Honor of George C Rogers, Jr.* Columbia, SC: University of South Carolina Press, 1993.

Bleser, Carol K., ed. *Secret and Sacred: The Diaries of James Henry Hammond, a Southern Slaveholder*. New York: Oxford University Press, 1988.

Bleser, Carol K. Rothrock. *The Promised Land: The History of the South Carolina Land Commission 1869- 1890*. Columbia, SC: University of South Carolina Press, 1969.

Blight, David W. *Race and Reunion: The Civil War in American Memory*. Cambridge, MA: Belknap Press, 2002.

Blockson, Charles L. *Black Genealogy: How to Discover Your Own Family's Roots and Trace Your Ancestors back Through an Eventful Past, Even to a Specific African Kingdom*. Baltimore, MD: Black Classic Press, 1977.

- - - . "Nowhere to Lay Down Weary Head." *National Geographic* 72 (December 1987): 734- 43.

Blount, Benjamin. "Marginalization of African Americans." *Urban Anthropology* 29:3 (2000).

- - - . ed. "Population Characteristics of the South Atlantic Bight: Demographic Change on the Coasts of South Carolina, Georgia, and Northeast Florida 1850- 1990." Paper produced under the auspices of the Cultural Resource Stewardship, Southeast Region, National Park Service and the Georgia Trust for Historic Preservation, Feb. 2000.

Blum, Elizabeth D. "Power, Danger, and Control: Slave Women's Perceptions of Wilderness in the Nineteenth Century." *Women's Studies* 31:2 (2002): 247- 65.

Blythe, Robert W., Emily Kleine, and Steven H. Moffson. *Charles Pinckney National Historic Site Historic Resource Study*. Atlanta, GA: Cultural Resources Stewardship, Southeast Regional Office, National Park Service, 2000.

Boffield, Rodney. "North Carolina Black Maritime Culture." *North Carolina Folklore Journal* 27:2 (1979): 61- 66.

Boles, John B., ed. *Masters and Slaves in the House of the Lord: Race and Religion in the American South, 1740- 1870*. Lexington, KY: University of Kentucky Press, 1988.

Bolster, W. Jeffrey. *Black Jacks: African American Seamen in the Age of Sail*. Cambridge, MA: Harvard University Press, [reprint] 1998.

Bolton, H. Carrington. "Decoration of Graves of Negroes in South Carolina." *Journal of American Folklore* 4 (1891): 214- 17.

Boney, F.N. "Slaves as Guinea Pigs: Georgia and Alabama Episodes of Medical Experimentation." *Alabama Review* (January 1983): 45- 51.

Bonner, James C. *A History of Georgia Agriculture, 1732- 1860*. Athens, GA: University of Georgia Press, 1980.

Boothe, Heather. "Tools for Learning about the Past to Protect the Future: Archeology in the Classroom." *Legacy*: 11:1 (2000): 10- 12, 37.

Bost, Dolores. "Using Gullah in Public Life: The Life and Work of a Pastor in the Sea Islands (South Carolina)." Ed.D. Dissertation, Columbia University Teachers College, 2001.

Bowes, Frederick Patten. *The Culture of Early Charleston* [revision of 1941 Ph.D. dissertation]. Chapel Hill, NC: University of NC Press, 1942.

Bradley, Frances W. "Gullah Proverbs." *Southern Folklore Quarterly* 1:1 (1937): 99- 101.

Bradley, Mark L. "'This Monstrous Proposition': North Carolina and the Confederate Debate on Arming Slaves." *North Carolina Historical Review* 80 (April 2003): 153- 87.

Bradshaw, John M. "An Investigation of the Slave- Breeding Practices in the Ante- bellum South." M.A. thesis, California State University San Bernardino, 1983.

Bradshaw, Timothy E. Jr. *Battery Wagner: The Siege, the Men Who Fought, and the Casualties*. Columbia, SC: Palmetto Historical Works, 1993.

Bragg, John. "A Cantometric Analysis of Folk Music in a Sea Island Community." *North Carolina Folklore Journal* 26:3 (1978): 157- 163.

Branch, Muriel Miller. *The Water Brought Us: The Story of the Gullah Speaking People*. Cambridge, MA: Harvard University Press, 2001.

Brauner, David. "Doris Ulmann: 'God's Work.'" *Jerusalem Post* (August 12, 1999): n.p.

Breed, Allen G. "Descendants of Georgia Slaves Cling to Island Home: Tourists Drawn to See Old Ways, Hear Stories of Bygone Days." *Chicago Tribune* (May 19, 1999): A8.

- - - . "Sea Islanders Dispute Land Claim." [Hilton Head Island, SC] *Island Packet* (August 4, 2002).

Brewer, J. Mason. *Worser Days and Better Times: The Folklore of the North Carolina Negro*. Chicago: Quadrangle Books, 1965.

Brewster, Lawrence Fay. "The Summer Migrations and Resorts of South Carolina Lowcountry Planters." Ph.D. dissertation, Duke University, 1942.

Broadbent, Stephanie. "Glimpsing History, Looking Forward: New Tour Will Focus on Gullah Culture While Raising Money to Preserve Landmarks." *Savannah Morning News* (May 9, 2000): n.p.

Brock, Wendell. "Spoleto's Changing World: Reflecting a Rich Diversity, Charleston Festival Embraces African- American Culture, Audiences for the First Time; Some Say It's Long Overdue." *Atlanta Journal Constitution* (April 19, 1998): LO1.

Brockington, Paul E., Jr. "A Cultural Resource Survey at Snee Farm, 38CH917, 1987." Report on file at Brockington Associates, Atlanta, Georgia.

Brockington, Paul E. Jr., Linda F. Stone, and Connie M. Huddleston. *Searching for the Slave Village at Snee Farm Plantation: The 1987 Archaeological Investigations*. Atlanta: Brockington and Associates, 1991.

Brooke, James. "Africans See Their Culture Live in United States." *New York Times* (October 25, 1987): P5N.

Brooks, Robert Preston, ed. "Letters of James Hamilton Couper to His Wife, 1833- 35." *Georgia Historical Quarterly* 14 (1930): 150- 73.

Brown, Ann. "Savannah: Sophisticated South." *Black Enterprise* (January 1, 2000).

Brown, Jessica, Nora Mitchell, and Fausto Sarmiento. "Landscape Stewardship: New Directions in Conservation of Nature and Culture." *The George Wright Forum* 17:1 (2000): 12- 70.

Brown, John. *Slave Life in Georgia: A Narrative of the Life, Sufferings, and Escape of John Brown, Fugitive Slave*. F. N. Boney, ed. Savannah, GA: Beehive Press, [reprint] 1972.

Brown, Kathleen. *Good Wives, Nasty Wenches and Anxious Patriarchs*. Chapel Hill, NC: University of North Carolina Press, 1996.

Brown, Kenneth L. "Ethnographic Analogy, Archaeology, and the African Diaspora: Perspectives from a Tenant Community." *Historical Archaeology* 38:1 (Spring 2004): 79- 89.

Brown, Linda Meggett. "The Color of Money: Artist Re- creates Scenes Found on Confederate Money." *Black Issues in Higher Education* (March 29, 2001).

Brown, Thomas J. and Kitty Green. *Lessons Learned from the Gullah Experience: Powerful Forces in Educating African- American Youth*. Columbia, MD: Brown and Associates, 1998.

Bryan, Jonathan. *Journal of a Visit to the Georgia Islands of St. Catherines, Green, Ossabaw, Sapelo, St. Simons, Jekyll, and Cumberland: With Comments on the Florida Islands of Amelia, Talbot, and St. George, in 1753*. Mary R. Bullard and Virginia Steele Wood, eds. Macon, GA: Mercer University Press, 1996.

Bryan, Leon Stone, Jr. "Slavery on a PeeDee River Rice Plantation, 1825- 1865." M. A. thesis, Johns Hopkins University, 1963.

Buchanan, P., B. Herman, O. Rideout, V. E. Tolson, and M. Wenger. "Architectural Investigations at Snee Farm." Report prepared for Friends of Snee Farm, 1991.

Bullard, Mary Ricketson. *Black Liberation on Cumberland Island in 1815*. South Dartmouth MA: M. R. Bullard, 1983

- - - . *Cumberland Island: A History*. Athens, GA: University of Georgia Press, 2003.

- - - . *Robert Stafford of Cumberland Island: Growth of a Planter*. Athens, GA: University of Georgia Press, 1995.

Burch, Audra D. S. "A Culture at Risk: The Low- Profile Gullah Community, Descended from African Slaves, Is Fighting for the Preservation of Its Ways." *Miami Herald* (November 30, 2003): A1.

- - - . "SC Natives Take Steps to Preserve Gullah Way." [Myrtle Beach, SC] *Sun News* (December 8, 2003): C1.

- - - . "Threatened by Change, Gullah Fighting to Preserve Their Culture." *Miami Herald* (December 7, 2003): n.p.

Burger, Ann. "Okra: Lowcountry's Love- or- Hate Veggie." [Charleston, SC] *Post and Courier* (July 1, 1998): P1.

Burgi, Robbi. "Fort Mose: Fortress of Freedom." *Florida History & the Arts*. 4: 2 (Winter 2001).

Burn, Billie. *An Island Named Daufuskie*. Spartanburg, SC: The Reprint Co., 1991.

- - - . *Stirrin' the Pots on Daufuskie*. Spartanburg, SC: The Reprint Co., 1999.

Burns, Elizabeth Jacoby. "The Industrial Education Myth: Character Building at Penn School, 1900-1948." Ph.D. dissertation, University of North Carolina, 1974.

Burns, Holly. "A Living Art: Basketmaker Henrietta Snype Weaves Centuries of Culture and Generations of Skill into her Work." *Charleston Magazine* (October 2004): 84- 89.

Burnside, Madeleine. *Spirits of the Passage: The Transatlantic Slave Trade in the Seventeenth Century*. New York: Simon & Schuster, 1997.

Burris, Roddie. "SC Tracks Underground Railroad through Runaway Slave Lore." [Columbia, SC] *State* (January 13, 2002): n.p.

Burritt, Chris. "Daufuskie Island Sings the Sloppy Jalopy Blues: Getting Street Legal a Whole heap of Trouble." *Atlanta Journal Constitution* (April 2, 1995): A3.

Burt, Philip. "Gullah- Geechee Traditions: Preserving the Past." *Savannah Magazine* 13:3 (2002): 36-40.

Burton, Michael L. and Douglas R. White. "Sexual Division of Labor in Agriculture." *American Anthropologist* 86 series 2 (Summer 1984): 568- 83.

Butler, Jon. *The Huguenots in America: A Refugee People in New World Society*. Cambridge, MA: Harvard University Press, 1983.

Bynum, Russ. "Savannah Cashes in on Boom in Black Tourism." *Savannah Morning News* (June 8, 2001): n.p.

- - - . "Slave Descendants' Quest: Save Their Dying Culture." *Miami Herald* (March 14, 2001): E5.

Byrne, William A. "The Burden and Heat of the Day: Slavery and Servitude in Savannah, 1733- 1865." Ph.D. dissertation, Florida State University, 1979.

- - - . "The Hiring of Woodson: Slave Carpenter of Savannah." *Georgia Historical Quarterly* 77 (Summer 1993): 245- 63.

- - - . "Slavery in Savannah, Georgia." Ph.D. dissertation, Florida State University, 1974.

Camp, Stephanie M. H. "'I Could Not Stay There': Enslaved Women, Truancy and the Geography of Everyday Forms of Resistance in the Antebellum Plantation South." *Slavery and Abolition* 23 (December 2002): 1- 20.

- - - . "The Pleasures of Resistance: Enslaved Women and Body Politics in the Plantation South, 1830-1861." *Journal of Southern History* 68 (August 2002).

Campbell, Edward D. C., Jr. *Before Freedom Came: African- American Life in the Antebellum South*. Charlottesville, VA: University of Virginia Press, 1991.

Campbell, Emory S. *Gullah Cultural Legacies: A Synopsis of Gullah Traditions, Customary Beliefs, Art Forms and Speech on Hilton Head Island and Vicinal Sea Islands in South Carolina and Georgia*. Hilton Head, SC: Gullah Heritage Consulting Services, 2002.

Campbell, John. "Work, Pregnancy and Infant Mortality among Southern Slaves." *Journal of Interdisciplinary History* 14 (Spring 1984): 793- 812.

Campbell, Stanley. *The Slave Catchers: Enforcement of the Fugitive Slave Law, 1850- 1860*. Chapel Hill, NC: University of North Carolina Press, 1972.

Cane River National Heritage Area Management Plan. Denver, CO: NPS Denver Service Center, 2002.

Canipe, Jeremy T. "Black Wilmington: Free African Americans on the Lower Cape Fear, 1760- 1860." M.A. thesis, Wake Forest University, 1997.

Carbone, John S. *The Civil War in Coastal North Carolina*. Raleigh, NC: North Carolina Office of Archives and History, 2003.

Carey, Anthony Gene. *Parties, Slavery and the Union in Antebellum Georgia*. Athens, GA: University of Georgia Press, 1997.

Carillo, Karen Juanita. "An African- American Burial Ground Surfaces in Charleston, SC." *New York Amsterdam News* (January 31, 2001): n.p.

Carll- White, M. Allison. "'Great Neatness of Finish': Slave Carpenters in South Carolina's Charleston District, 1760- 1800." *Southern Studies* 26:2 (1987): 89- 100.

- - - . "The Role of Black Artisans in the Building Trades and the Decorative Arts in South Carolina's Charleston District, 1760- 1800." Ph.D. dissertation, University of Tennessee, 1996.

- - - . "South Carolina's Forgotten Craftsmen." *South Carolina Historical Magazine* 86 (January 1985):32- 38.

Carney, Judith A. "The African Antecedents of Uncle Ben in U.S. Rice History." *Journal of Historical Geography* 29:1 (2003): 1- 21.

- - - . "The African Origins of Carolina Rice Culture." *Ecumene* 7:2 (2000): 125- 49.

- - - . "Indigenous Soil and Water Management in Sene- gambian Rice Farming Systems." *Agriculture and Human Values* 8 (1991): 37- 48.

- - - . "Landscapes of Technology Transfer: Rice Cultivation and African Continuities." *Technology and Culture* 37: 1 (January 1996): 5- 35.

- - - . "Rice Milling, Gender and Slave Labor in Colonial South Carolina." *Past and Present* 153 (November 1996): 108- 34.

- - - . "The Role of African Rice and Slaves in the History of Rice Cultivation in the Americas." *Human Ecology* 26 (December 1998): 525- 45.

- - - . "The Social History of Gambian Rice Production: An Analysis of Food Security Strategies." Ph.D. dissertation, University of California, Berkeley, 1986.

Carpenter, James G. "The Rice Plantation Lands of Georgetown County, South Carolina: A Historical Geographic Study." M.S. thesis, University of South Carolina, 1973.

Carter, Harold A. *The Prayer Tradition of Black People*. Valley Forge, PA: Judson Press, 1976.

Cash, Wilbur J. *The Mind of the South*. New York: Vintage Books, [1941]1991.

Cassidy, Frederic G. "*The Place of Gullah*." *American Speech* 55:1 (Spring 1980): 3- 16.

- - - . "Some Similarities between Gullah and Caribbean Creoles." In Michael Montgomery and Guy Bailey, eds. *Language Varieties in the South: Perspectives in Black and White*. Tuscaloosa, AL: University of Alabama Press, 1986, 30- 37.

- - - . "Sources of the African Element of Gullah." In Lawrence Carrington, ed. *Studies in Caribbean Language*. Papers from the Third Biennial Conference of the SCL. St. Augustine, FL: SCL, 1983.

Castel, Albert. "'Captain, We Will Meet You on the Other Shore': The Story of Some Black Union Soldiers from Georgia as Told by a White Union Officer from Michigan." *Georgia Historical Quarterly* 87 (Summer 2003): 275- 96.

Cate, Margaret Davis. *Early Days of Coastal Georgia*. St. Simons Island, GA: Fort Frederica Association, 1955.

Ceceleski, David S. “The Shores of Freedom: The Maritime Underground Railroad in North Carolina, 1800- 1860.” *North Carolina Historical Review* 71 (April 1994): 174- 206.

- - - . *The Waterman’s Song: Slavery and Freedom in Maritime North Carolina*. Chapel Hill, NC: University of North Carolina Press, 2001.

Cecil- Fronsman, Bill. *Common Whites: Class and Culture in Antebellum North Carolina*. Lexington, KY: University Press of Kentucky, 1992.

“Celebrating a Grand Idea.” *Cincinnati Post* (June 15, 2002).

Chandler, Genevieve Willcox. “Sandy Island Across the Waccamaw: Before and After.” In Clarke A. Wilcox, ed. *Musings of a Hermit, with Historical Sketches of the Waccamaw Neck*. Charleston, SC: self published, [2nd ed.] 1967.

Chaplin, Joyce E. *An Anxious Pursuit: Agricultural Innovation in the Lower South, 1730- 1815*. Chapel Hill, NC: University of North Carolina Press, 1993.

- - - . “Tidal Rice Cultivation and the Problem of Slavery in South Carolina and Georgia, 1760- 1815. *William and Mary Quarterly* [3rd series] 49 (June 1992): 29- 61.

Chase, Judith Wragg. “American Heritage from Ante- bellum Black Craftsmen.” *Southern Folklore Quarterly* 42 (1978): 140- 41.

Cheesier, Ron. “The Gullah Bible: A Link between Past and Future.” *American Visions* (June 1988): 32- 36.

Chesnutt, David Rogers. “South Carolina’s Expansion into Colonial Georgia, 1720- 1765. Ph.D. dissertation, University of Georgia, 1993.

- - - . “South Carolina’s Penetration of Georgia in the 1760’s: Henry Laurens as a Case Study.” *South Carolina Historical Magazine* 73:4 (October 1972): 194- 208.

Chibbaro, Anthony. *South Carolina’s Lowcountry*. Charleston, SC: Arcadia Publishing Co., 1999.

Childs, St. Julien Ravenel. “Kitchen Physick, Medical and Surgical Care of Slaves on an Eighteenth Century Rice Plantation.” *Mississippi Valley Historical Review* 20 (1939): 549- 54.

- - - . *Malaria and Colonization in the Carolina Lowcountry, 1526- 1696*. (Johns Hopkins University Studies in Historical and Political Science, series 58:1) Baltimore, MD: Johns Hopkins University Press, 1940.

Chireau, Yvonne P. *Black Magic: Religion and the African American Conjuring Tradition*. Berkeley, CA: University of California Press, 2003.

- - - . “Conjure and Christianity in the Nineteenth Century: Religious Elements in African American Magic.” *Religion and American Culture* 7:2 (Summer 1997): 225- 46.

Christensen, Abigail M. H. “Spirituals and Shouts of Southern Negroes.” *Journal of American Folklore* 7 (1894): 154- 155.

Cihlar, Christopher Andrew. “Resort Development: The Challenge of Benefiting the Original Community.” Ph.D. dissertation, Cornell University, 2003.

Cimbala, Paul A. “The Freedmen’s Bureau, the Freedmen, and Sherman’s Grant in Reconstruction Georgia, 1865- 1867.” *Journal of Southern History* 55:4 (November 1989): 399- 420.

- - - . “The Terms of Freedom: The Freedman’s Bureau and Reconstruction in Georgia, 1865- 1870.” Ph.D. dissertation, Emory University, 1983.

- - - . *Under the Guardianship of the Nation: The Freemen’s Bureau and the Reconstruction of Georgia*. Athens, GA: University of Georgia Press, 2003.

Clark, Carol. "Southern Sanctuary: Off the Georgia Coast, Tiny Sapelo Island Is an Isolated Refuge of Marine Life, Wild Tidal Marshes and a Unique Culture That Is Struggling to Keep Its African Traditions Alive." *Los Angeles Times* (May 26, 2002): L1.

Clark, H. Sol. "A Geechee Returns Home: Early Memoirs of a Savannah Attorney." *Journal of Southern Legal History* 1:2 (Fall/Winter 1991): 445- 454.

Clark, Jane. "Blacksmith, 86, Keeps the Embers Glowing." *USA Today* (May 14, 1999).

Clark, Septima. *Ready from Within: Septima Clark and the Civil Rights Movement*. Atlanta, GA: Wild Trees Press: 1986.

Clark, Truman R. "History Gives Lie to Myth of Black Confederate Soldiers." *The Houston Chronicle*. August 29, 1999, n.p.

Clarke, Erskine. *Our Southern Zion: A History of Calvinism in the South Carolina Low Country, 1690-1990*. Tuscaloosa, AL: University of Alabama Press, 1996.

- - - . *Wrestlin' Jacob: A Portrait of Religion in Antebellum Georgia and the Carolina Lowcountry*. Tuscaloosa, AL: University of Alabama Press, reprint 2000.

Clifton, James M. "The Antebellum Rice Planter As Revealed in the Letterbook of Charles Manigault, 1846- 1848." *South Carolina Historical Magazine* 74 (July- Oct 1973): 308.

- - - . "Golden Grains of White: Rice Planting on the Lower Cape Fear." *North Carolina Historical Review* 50:4 (1973): 365- 93.

- - - . "A Half- Century of a Georgia Rice Plantation." *North Carolina Historical Review* 47 (October 1970): 392- 395.

- - - , ed. *Life and Labor on Argyle Island: Letters and Documents of a Savannah River Rice Plantation, 1822- 1867*. Charlottesville, VA: University of Virginia Press, [reprint ed.] 1982.

- - - . "The Rice Driver: His Role in Slave Management." *South Carolina Historical Magazine* 82:3 (October 1981): 333- 355.

- - - . "The Rice Industry in Colonial America." *Agricultural History* 55 (1981): 266- 283.

Clinton, Catherine. "Bloody Terrain: Freedwomen, Sexuality and Violence during Reconstruction." *Georgia Historical Quarterly* 76 (Summer 1992).

Close, Stacey K. *Elderly Slaves of the Plantation South*. New York: Garland, [rev. ed.] 1996.

Clowse, Converse D. "Shipowning and Shipbuilding in Colonial South Carolina: An Overview." *American Neptune* 44 (1984): 221- 224.

Clyburn, James E. "Preserve Eroding Gullah/Geechee Cultural Treasures." [Charleston, SC] *Post and Courier* (August 9, 2004): 9A.

"Coastal County in Search of Historic Black Cemeteries." *Atlanta Journal Constitution* (September 19, 1999): M2.

Cobb, Jimmy Gene. "A Study of White Protestants' Attitudes toward Negroes in Charleston, South Carolina, 1790- 1845." Ph.D. dissertation, Baylor University, 1976.

Coclanis, Peter. "Bitter Harvest: The South Carolina Lowcountry in Historical Perspective." *Journal of Economic History* 45:2 (June 1985): 252- 59.

- - - . "Distant Thunder: The Creation of a World Market in Rice and the Transformations It Wrought." *American Historical Review* 98 (October 1993): 1050- 78.

- - - . "Economy and Society in the Early Modern South: Charleston and the Evolution of the South Carolina Low Country." Ph.D. dissertation, Columbia University, 1984.

- - - . *The Shadow of a Dream: Economic Life and Death in the South Carolina Low Country, 1670- 1920*. New York: Oxford University Press, 1989.

Coclanis, Peter A., and J. C. Marlow. "Inland Rice Production in the South Atlantic States: A Picture in Black and White. *Agricultural History* 72:1 (1998):197- 211.

Cody, Cheryll Ann. "Naming, Kinship, and Estate Dispersal: Notes on Slave Family Life on a South Carolina Plantation, 1786 to 1833." *William and Mary Quarterly* (3rd series) 39:1 (1982): 192- 211.

- - - . "Sale and Separation: Four Crises for Enslaved Women on the Ball Plantations, 1764- 1854." In Larry E. Hudson, Jr., ed. *Working toward Freedom: Slave Society and Domestic Economy in the American South*. Rochester, NY: University of Rochester Press, 1994, 119- 42.

- - - . "Slave Demography and Family Formation: A Community Study of the Ball Family Plantations, 1720- 1896." Ph.D. dissertation, University of Minnesota, 1982.

- - - . "There Was No 'Absalom' on the Ball Plantations: Slave Naming Practices in the South Carolina Low Country, 1720- 1865." *American Historical Review* 92:3 (June 1987): 563- 96.

Cohen, David and Jack P. Greene, eds. *Neither Slave nor Free: The Freedmen of African Descent in the Slave Societies of the New World*. Baltimore, MD: Johns Hopkins University Press, 1972.

Cohen, Hennig. "Burial of the Drowned Among the Gullah Negroes." *Southern Folklore Quarterly 22*: 93- 97.

- - - . "Slave Names in Colonial South Carolina." *American Speech* 27:2 (May 1952): 102- 107.

Colburn, David R., and Jane L. Landers, eds. *The African American Heritage of Florida*. Gainesville, FL: University Press of Florida, 1995.

Colchin, Peter. *American Slavery: 1619- 1877*. New York: Hill and Wang Publishers, 1993.

Collier, John, Jr., and Malcolm Collier. *Visual Anthropology: Photography as a Resource Method*. Albuquerque, NM: University of New Mexico Press, rev. ed. [1967] 1992.

Collins, Lisa Gale. "Visualizing Culture: Art and the Sea Islands." *International Review of African American Art* 19:1 (2003): 52- 9.

"Common Myths about Heirs Property." [Charleston, SC] *Post and Courier* (September 28, 2002): A15.

Conley, Dorothy L. "Origin of the Negro Spirituals." *Negro History Bulletin* 25 (May 1962): 179.

Connor, Cynthia. "'Sleep on and Take Your Rest': Black Mortuary Behavior on the East Branch of the Cooper River, South Carolina." M.A. thesis, University of South Carolina, 1989.

Conroy, Pat. *The Water is Wide*. New York: Old New York Bookshop Press, 1990.

Cook, Elizabeth W. "Group Wants Cemetery Honored: Original Islanders, a Sullivan's Island Organization of Current and Former Black Residents Would Like to Erect a Monument or Set up Passive Park in an Old Black Cemetery." [Charleston, SC] *Post and Courier* (February, 17 2000): EC1.

Cook, Mary Ann. "Shout Tradition Lives in Exhibit at Avery Center." [Charleston, SC] *Post and Courier* (May 18, 1995): P1.

Cooke, Michael A. "Sickle Cell Anemia as a Community and Public Health Issue: South Carolina, 1971- 1981." *South Carolina Historical Magazine* 94:3 (July 1993): 193- 209.

Coon, David L. "The Development of Market Agriculture in South Carolina." Ph.D. dissertation, University of Illinois, 1972.

Copage, Eric V. "African- American Sites Look Back and Forward." *New York Times* (February 17, 2000): G12.

Copenhaver, J. R. "Culture of Indigo in the Provinces of South Carolina and Georgia." *Industrial and Engineering Chemistry* 22:4 (1930): 894- 900.

Cornelius, Janet Duitsman. "God's Schoolmasters: Southern Evangelists to the Slaves, 1830- 1860." Ph.D. dissertation, University of Illinois at Urbana- Champaign, 1976.

- - - . "Shout Because You're Free: The African American Ring Shout Tradition in Coastal Georgia." *Journal of Southern History* 66 (November 1, 2000): n.p.

- - - . *Slave Missions and the Black Church in the Antebellum South*. Columbia, SC: University of South Carolina Press, 1999.

- - - . "'We Slipped and Learned to Read': Slave Accounts of the Literacy Process, 1830- 1865." *Phylon* 44:3 (1960): 171- 86.

- - - . *When I Can Read My Title Clear: Literacy, Slavery, and Religion in the Antebellum South*. Columbia, South Carolina: University of South Carolina Press, 1991.

Cottman, Michael H. *The Wreck of the Henrietta Marie: An African American Spiritual Journal to Uncover a Sunken Ship's Past*. New York: Harmony Books, 1999.

Cotton, Sarah Mitchell. "Bodies of Knowledge: The Influence of Slaves on the Antebellum Medical Community." M.A. thesis, Virginia Polytechnic Institute and State University, 1997.

Coulter, Ellis M. *Wormsloe: Two Centuries of a Georgia Plantation*. Athens, GA: University of Georgia Press, 1955.

Countryman, Edward. *How Did American Slavery Begin: Readings (Historians at Work)*. Bedford, MA: St. Martin's, 1999.

Cox, Jack F., compiler. *The 1850 Census of Georgia Slave Owners*. Baltimore, MD: Clearfield, 1999.

Craft, Mary- Kathryn. "Author Teaches Gullah Culture." [Myrtle Beach, SC] *Sun News* (October 18, 2000): C2.

- - - . "Discover Gullah Cooking." [Myrtle Beach, SC] *Sun News* (June 11, 2003): E1.

Creel, Margaret Washington. "Antebellum Religion among the Gullahs: A Study of Slave Conversion and Religious Culture in the South Carolina Sea Islands." Ph.D. dissertation, University of California Davis, 1980.

Crews, Walter. "Negro Craftsmen Ply an Ancient Art by the Side of a Bustling Highway." [Charleston, SC] *Evening Post* (June 27, 1954): n.p.

Crook, Ray. "The Sapelo Gullah Project." *Reflections* 1:2 (February 2001): 4- 5. Atlanta: Historic Preservation Division, Georgia Department of Natural Resources.

Crow, Jeffrey J. *The Black Experience in Revolutionary North Carolina*. Raleigh, NC: Division of Archives and History, 1996.

- - - . "Slave Rebelliousness and Social Conflict in North Carolina, 1775- 1802." *William and Mary Quarterly* 37:1 (January 1980): 79- 102.

Crow, Jeffrey J., Paul D. Escott, and Flora J. Hatley. *A History of African Americans in North Carolina*. Raleigh, NC: North Carolina Department of Commerce and Department of Cultural Resources, [1992] 2002.

Crowley, John E. "The Importance of Kinship: Testamentary Evidence from South Carolina." *Journal of Interdisciplinary History* 16:4 (Spring 1986): 559- 577.

Culpepper, Linda Parramore. "Black Charlestonians in the Mountains: African American Community Building in Post- Civil War Flat Rock, North Carolina." *Journal of Appalachian Studies* 8 (Fall 2002): 362- 81.

Cunningham, Bernateen W. “Attitudes of School Personnel in Charleston, South Carolina, Toward the Gullah Dialect.” M.A. thesis, University of Tennessee, 1989.

Cunningham, Irma Aloyce Ewing. “A Syntactic Analysis of Sea Island Creole (Gullah).” Ph.D. dissertation, University of Michigan, 1970.

Curry, Andrew. “The Gullahs’ Last Stand? The Last of Georgia’s Isolated Slave Islands is Threatened by Modernity.” *U.S. News and World Report* (June 18, 2001): 40.

Curtin, Philip D., ed. *Africa Remembered: Narratives by West Africans from the Era of the Slave Trade*. Prospect Heights, IL: Waveland Press, [reprint] 1997.

- - - . *The Atlantic Slave Trade: A Census*. Madison, WI: University of Wisconsin Press, 1969.

- - - . *Economic Change in Precolonial Africa: Senegambia in the Era of the Slave Trade*. Milwaukee, WI: University of Wisconsin Press, 1975.

- - - . “Epidemiology and the Slave Trade.” *Political Science Quarterly* 83 (1968): 190- 216.

- - - . *The Rise and Fall of the Plantation Complex*: *Essays in Atlantic History*. New York: Oxford University Press, 1999.

Curtis, Judy. “Artists of Gullah.” *Living in South Carolina* (Berkeley Electric Cooperative) 53:5 (May 2000): 12- 13.

Dabbs, Edith M. *Face of an Island*. Columbia, SC: R. L. Bryan Co., 1970.

- - - . *Sea Island Diary: A History of St. Helena Island*. Spartanburg, SC: Reprint Co., 1993.

Dabney, Charles W. “Penn School on St. Helena Island.” *Southern Workman* 60:278 (April 1931): 25.

Daise, Ronald. *Reminiscences of Sea Island Heritage: Legacy of Freedmen on St. Helena Island*. Orangeburg, South Carolina: Sandlapper Publishing, Inc., 1986.

Danielson, Michael N. *Profits and Politics in Paradise*. Columbia, SC: University of South Carolina Press, 1995.

Darby, James C. “On Planting and Managing a Rice Crop.” *Southern Agriculturist* (June 1829):247- 54.

Dargan, William T. “Congregational Singing Traditions in South Carolina.” *Black Music Research Journal* 15:1 (Spring 1995): 29- 73.

David, Hilda Black. “The African- American Women of Edisto Island, South Carolina.” Ph.D. dissertation, Emory University, 1990.

- - - . “Constructing a New World: Charleston's Artisans and the Transformation of the South Carolina Lowcountry, 1700- 1800.” M.A. thesis, Johns Hopkins, 2001.

David, Marc Charlton. “The Penn School of St. Helena: Breaking the Shackles of Illiteracy on the Sea Islands of South Carolina, 1862- 1922. Ph.D. dissertation, Syracuse University, 1999.

Davidson, Basil. *Africa in History*. New York: Simon and Schuster, [rev. ed.] 1995.

- - - . *The African Genius: An Introduction to African Social and Cultural History*. Boston: Little, Brown & Co., [reissue] 1989.

- - - . *The African Slave Trade: Precolonial History, 1450- 1850* (originally published as *Black Mother: The Years of the African Slave Trade*). Boston: Little, Brown & Co., 1961.

- - - . *African Slave Trade Revised and Expanded*. Boston: Back Bay Books, [rev. ed.] 1988.

- - - . *The Black Man’s Burden: Africa and the Curse of the Nation- State*. Three Rivers, MI: Three Rivers Press, 1993.

Davis, Angela Y. "Reflections on the Black Woman's Role in the Slave Community." *The Black Scholar* 3 (December 1971): 3- 15.

Davis, David Brion. *The Problem of Slavery in the Age of Revolution 1770- 1823*. New York: Oxford University Press, 1999.

Davis, Esther S. *Memories of Mulberry*. Camden, SC: self published, 1975.

Davis, Gerald L. "Afro- American Coil Basketry in Charleston County, South Carolina: Affective Characteristics of an Artistic Craft in a Social Context." In Don Yoder, ed. *American Folklife*. Austin, TX: University of Texas Press, 1976.

Davis, Harold E. *The Fledgling Province: Social and Cultural Life in Colonial Georgia, 1773- 1776*. Chapel Hill, NC: University of North Carolina Press, 1976.

Davis, Jingle. "Access to State's Coast Getting Easier at Sapelo." *Atlanta Journal Constitution* (December 18, 1994): D3.

- - - . "Black Owners Hold Tight to Land." *Atlanta Journal Constitution* (December 20, 2001):A1.

- - - . "Coastal Groups Organize to Preserve Pristine Areas. 'Central Park' Needed? Islanders Move to Support Green and Historic Zoning." *Atlanta Journal Constitution* (February 25, 2001): F3.

- - - . "DNR Plan for Sapelo Emphasizes Natural Approach. Meeting Center, Lodge Ruled out in Latest Proposal." *Atlanta Journal Constitution* (December 9, 1989): C5.

- - - . "Georgia Coastal Town Fights to Ban Wal- Mart." *Atlanta Journal Constitution* (October 17, 2002): F5.

- - - . "Gullah Sings a Lilting Song: Isolation in Rural Communities on Georgia's Coast: Isolation Helped Preserve a Language and Way of Life for Generations – But Now They're Melting into the Mainstream." *Atlanta Journal Constitution* (November 10, 1996): G8.

- - - . "The Haven of Hog Hammock." *Atlanta Journal Constitution* (June 25, 1995): C1.

- - - . "On Cultural Survival of the Gullah." *Atlanta Journal Constitution* (November 10, 1996): G1.

- - - . "Preserving Culture of Coast's Gullah- Geechee People Studied." *Atlanta Journal Constitution* (December 10, 2003): B1.

- - - . "Revisions Urged in Island Plan: Draft Guidelines for Sapelo Favor Hunting, Environmentalists Say, But: There's Still Time for Public Input and Changes." *Atlanta Journal Constitution* (November 28, 1997): G2.

- - - . "Saving of Gullah Culture Gets Look." *Atlanta Journal Constitution* (October 15, 2002): B1.

- - - . "Saving the Soul of a Culture: A Three- year Study by the National Park Service Aims to Preserve the History, Heritage of the Gullah- Geechee People." *Atlanta Journal Constitution* (February 4, 2001): M1.

- - - . "State Sets Hearings on Sapelo Land Rules: Plan Drawn to Protect Gullah Community." *Atlanta Journal Constitution* (August 24, 1995): D6.

- - - . "To Preserve and Protect: A Classic Tabby Home in Coastal Georgia Could Soon House a Project Teaching Young Artisans Restoration Skills." *Atlanta Journal Constitution* (April 30, 1995): C1.

Davis, John Martin, Jr. "Bankless in Beaufort: A Reexamination of the 1873 Failure of the Freedman's Savings Branch at Beaufort, South Carolina." *SC Historical Magazine* 104 (January 2003): 25- 55.

Davis, Mella. "African Trickster Tales in Diaspora: Resistance in the Creole- Speaking South Carolina Sea Islands and Guadeloupe." Ph.D. dissertation, Northwestern University, 1998.

Dawson, Victoria. “Cast in Bondage: Copper Neck Tags Evoke the Experience of American Slaves Hired Out as Part- time Laborers.” *Smithsonian* (February 2003). Available online at <http://www.smithsonianmag.com/smithsonian/issues03/feb03/object.html>

Day, Gregory. “Afro- Carolinian Art, Towards the History of a Southern Expressive Tradition.” *Contemporary Art/Southeast*. 1:5 (1978) 10- 21.

Day, Kay Young. “Kinship in a Changing Economy.” In Robert L. Hall, ed. *Holding on to the Land and the Lord: Kinship, Ritual, Land Tenure, and Social Policy in the Rural South*. Athens, GA: University of Georgia Press, 1982.

Day, Virginia Kay. “My Family Is Me: Women's Kin Networks and Social Power in a Black Sea Island Community.” Ph.D. dissertation, Rutgers University, 1986.

“Daycleaning: Bringing a Spiritual Perspective to Daily Life.” *Christian Science Monitor* (April 24, 2000): n.p.

Deagan, Kathleen A. and Darcie A. MacMahon. *Fort Mose: Colonial America’s Black Fortress of Freedom*. Gainesville, FL: University Press of Florida, 1995.

Dean, William. “Humanities School Weaves Lowcountry Crafts to African Roots.” [Beaufort, SC] *Carolina Morning News* (August 31, 2000): n.p.

Deas- Moore, Vennie. “Home Remedies, Herb Doctors, and Granny Midwives.” *The World and I*. 2:1 (January 1987): 474- 485.

- - - . “Mrs. Agnes: An Oral History Interview with 100- Year- Old African- American Woman.” *1990 National Interpreters Workshop* (1990): 118- 119.

Debolt, Margaret Wayt. *Savannah: A Historical Portrait*. Gloucester Point, VA: Hallmark Publishers, [1976] 2001.

DeCamp. David. “Toward a Generative Analysis of a Post- Creole Speech Continuum.” In Dell Hymes, ed. *Pidginization and Creolization of Languages*. Cambridge: Cambridge University Press, 1971.

Dennis, Samuel Frederick, Jr. “Seeing the Lowcountry Landscape: ‘Race,’ Gender, and Nature in Lowcountry South Carolina and Georgia, 1750- 2000.” Ph. D. dissertation, Pennsylvania State University, 2000.

Derby, Doris Adelaide. “Afro- American Baskets.” *World Heritage Museum Notes* 3 (1976).

- - - . “Black Women Basket Makers: A Study of Domestic Economy in Charleston, South Carolina.” Ph.D. dissertation, University of Illinois Urbana- Champaign, 1980.

Derks, Scott. “Dat Not Be My Echo.” *South Carolina Wildlife* (July- August 1979): 44- 50.

Dessens, Nathalie. *Myths of the Plantation Society: Slavery in the American South and West Indies*. Gainesville, FL: University Press of Florida, 2003.

Dethloff, Henry C. “The Colonial Rice Trade.” *Agricultural History* 56 (1982): 231- 43.

- - - . A *History of the American Rice Industry, 1685- 1985*. College Station, TX: Texas A & M University Press, 1988.

“Development Threatens Sweetgrass.” [Myrtle Beach, SC] *Myrtle Beach Sun- Times* (September 7, 2004).

Devera, Dora. “Tales Preserve Gullah Culture.” [Charleston, SC] *Post and Courier* (April 3, 1997): P1.

Devlin, George Alfred. “South Carolina and Black Migrations, 1865- 1930.” Ph.D. dissertation, University of South Carolina, 1984.

Devereaux, Anthony Q. *The Rice Princes: A Rice Epoch Revisited*. Columbia, SC: The State Printing Co, 1973.

"Development Overtakes Island's Black Culture: Daufuskie Island, SC, Residents React to Developers." *New York Times* (April 4, 1994): B11.

Dewig, Rob. "Building a Better Bateau." *Savannah Morning News* (August 24, 1999): n.p.

- - - . "Finding the Key to Daufuskie." *Savannah Morning News* (August 31, 1999): n.p.

- - - . "Gullah Documentary in the Works." *Savannah Morning News* (October 5, 2002): A1.

Diawara, Manthia. "Slavery and the Content of History." *Black Renaissance/Renaissance Noire* 2:1 (Fall/Winter 1998): 5- 6.

Dilliard, J. L. "The Evidence for Pidgin/Creolization in Early American English." In David Buisseret and Steven Reinhardt, eds. *Creolization in the Americas*. College Station, TX: Texas A & M University Press, 2000.

Dilliard, Philip D. "The Confederate Debate Over Arming Slaves: Views from Macon and Augusta Newspapers." *Georgia Historical Quarterly* 79 (Spring 1995): 117- 146.

Dilsaver, Larry M. *Cumberland Island National Seashore: A History of Conservation Conflict*. Charlottesville, VA: University of Virginia Press, 2004.

Diouf, Sylviane Anna, ed. *Fighting the Slave Trade: West African Strategies*. Athens, OH: Ohio University Press, 2003.

- - - . *Servants of Allah: African Muslims Enslaved in the Americas*. New York: New York University Press, 1998.

Doar, David. *Rice and Rice Planting in the South Carolina Low Country*. Charleston, SC: Charleston Museum, 1936.

Donnan, Elizabeth. *Documents Illustrative of the History of the Slave Trade to America*, 4 vols. Washington, DC: Carnegie Institution, 1935.

- - - . "The Slave Trade into South Carolina before the Revolution." *American Historical Review* 33 (October- July 1927- 28): 804- 28.

Douglas, Tyees. "Cainhoy Residents Hear about Heirs Property Through Preservation Project." [Charleston, SC] *Post and Courier* (October 17, 2002): B1.

- - - . "PBS Films a Gullah 'Porgy.'" [Charleston, SC] *Post and Courier* (August 20, 1995): D1.

Douthat, Strat. "Descendants of Slaves Struggle to Pay Taxes, Keep Land: Development Shoves Aside SC's Sea Island Residents." *Los Angeles Times* (January 4, 1987): 22A.

Dozier, Richard K. "A Historical Survey: Black Architects and Craftsmen." *Black World* 23 (1974): 4- 15.

Drago, Edmund L., ed. *Broke by the War: Letters of a Slave Trader*. Columbia, SC: University of South Carolina Press, 1991.

- - - . "Georgia's First Black Voter Registrars during Reconstruction." *Georgia Historical Quarterly* 78:4 (Winter 1994): 760- 93.

- - - . "How Sherman's March through Georgia Affected the Slaves." *Georgia Historical Quarterly* 57:3 (Fall 1973):361- 75.

Drago, Edmund, and Ralph Melnick. "The Old Slave Mart Museum, Charleston, South Carolina: Rediscovering the Past." *Civil War History* 27 (June 1981): 138- 50.

Dreyer, Henry Manning, Jr. "Aspects of the Gullah Dialect in Southeastern Regional Literature." M. A. thesis, West Georgia College, 1993.

Drucker, Lesley M. "Archeological Investigations at Brookgreen Gardens: The Oaks and Laurel Hill Plantations." Paper presented to the Sixth Annual Conference on South Carolina Archeology, University of South Carolina, 1980.

- - - . "Socioeconomic Patterning at an Undocumented Late 18th Century Lowcountry Site: Spiers Landing, South Carolina, 1780- 1830." *Historical Archaeology* 15:2 (1981): 58- 68.

DuBois, W. E. B. *Black Folk, Then and Now*. New York: Kraus- Thomson Organization, 1990.

Dufault, Robert J., Mary Jackson, and Stephen K. Salvo. "Sweetgrass: History, Basketry, and Constraints to Industry Growth." J. Janick and J. E. Simon, eds. *New Crops*. New York: Wiley and Sons, 1993.

Duncan, John Donald. "Servitude and Slavery in Colonial South Carolina, 1670- 1776." Ph.D. dissertation, Emory University, 1972.

Duncan, S. Heather. "Tied to the Land: African- influenced Culture Fighting to Stay Alive on the Coast." [Macon, GA] *Macon Telegraph* (September 22, 2003): n.p.

Dundes, Alan. "Jumping the Broom': On the Origin and Meaning of an African American Wedding Custom." *Journal of American Folklore* 109:433 (1996): 324- 329.

Dunn, Richard S. "The English Sugar Islands and the Founding of South Carolina." *South Carolina Historical Magazine* (April 1971): 81- 93.

Durden, Robert. *The Gray and the Black: The Confederate Debate on Emancipation*. Baton Rouge, LA: Louisiana State University Press, 1972.

Dusinberre, William. *Them Dark Days: Slavery in the American Rice Swamps*. Athens, GA: University of Georgia Press, 2000.

Dzurica, Georgia. "Freedom's Walls: First African Baptist Church in Savannah." *House & Garden* 68:5 (May 1999): 92.

Eaddy, Mary Ann. "Slave Housing on the Rice Plantations, Georgetown County, South Carolina." M.A. thesis, George Washington University, Washington, D.C., 1985.

Easterby, James Harold, contributor. "Shipbuilding on St. Helena Island in 1816: the Diary of Ebenzer Coffin." *South Carolina Historical and Genealogical Magazine*. 47 (1948): 117- 120.

- - - , ed. *The South Carolina Rice Plantation as Revealed in the Papers of F. W. Allston*. Chicago: University of Chicago Press, 1945.

- - - . South Carolina Through New England Eyes: Almira Coffin's Visit to the Low Country in 1851." *South Carolina Historical Magazine* 45 (1944): 127- 36.

Eberly, Charlene. "'Across the Colour Wall': Gullah Linguistic and Literary Representations in DuBose Heyward's *Porgy*." M.A. thesis, Florida International University, 2004.

Eckert, Fred J. "Discovery Island: 'I Came to South Carolina on a Sad Note, But after Visiting Here, I'm Returning Rejoiced.'" *St. Louis Post Dispatch* (February 16, 1997): n.p.

- - - . "Guardians of Gullah Tradition." *The Washington Times* (May 24, 1998), n.p.

Edelson, S. Max. "Planting the Lowcountry: Agricultural Enterprise and Economic Experience in the Lower South, 1695- 1785 (Plantations, Indigo, Rice)" Ph.D. dissertation, Johns Hopkins University, 1998.

Edelstein, Stuart J. *The Sickled Cell: From Myths to Molecules*. Cambridge, Massachusetts: Harvard University Press, 1986.

Edgar, Heather Joy Hecht. "Biological Distance and the African American Dentition." Ph. D. dissertation, Ohio State University, 2002.

Edgar, Walter. "Beyond the Tumult and the Shouting: Black and White in South Carolina in the 1990's." In Jan Nordby Gretlund, ed. *The Southern State of Mind*. Columbia, SC: University of South Carolina Press, 1999, 95- 106.

Edwards, Paul, ed. *Equiano's Travels: His Autobiography, The Interesting Narrative of the Life of Olaudah Equiano or Gustavus Vassa, the African*. Edinburgh, Scotland: Heineman, 1967.

Egemony, Uche N. "First: A History of First African Baptist Church, the Oldest Continuous Black Baptist Church in North America." Ph.D. dissertation, Emory University, 2003.

Egerton, Douglas R. "'Fly across the River': The Easter Slave Conspiracy of 1802." *North Carolina Historical Review* 68 (April 1991): 87- 110.

Elliott, William. "On Cultivation of Sea Island Cotton." *Southern Agriculturist* 1:2 (April, 1828):154.

Elmore, Charles J. *General David Hunter's Proclamation: The Quest for African- American Freedom Before and During the Civil War*. Port Washington, NY: Eastern National, 2002.

Elkins, Stanley M. *Slavery: A Problem in American Institutional and Intellectual Life*. Chicago, IL: University of Chicago Press [3rd rev. ed.], 1976.

Eltis, David. *The Rise of African Slavery in the Americas*. New York: Cambridge University Press, 2000.

Eltis, David, David Richardson, Stephen Behrendt, and Herbert S Klein. *The Trans- Atlantic Slave Trade: A Database on CD- ROM*. Cambridge, England: Cambridge University Press, 1999.

Emerson, Matthew C. "Afro- American Archaeology: Identifying Black Mortuary Customs in the American South." Honors thesis, Brown University, 1979.

Emert, Phyllis Raybin. *Colonial Triangular Trade: An Economy Based on Human Misery*. Carlisle, MA: Discovery Enterprises, Ltd., 1996.

Emory, Thomas. *The Confederacy as a Revolutionary Experience*. (see Chapter 4, "Black Confederates: Slavery and Wartime." Englewood Cliffs, NJ: Prentice Hall, 1971, 119- 132.

Epps, Edwin Carlyle. "Pat Conroy and the Daufuskie Island School." Ph.D. dissertation, University of Michigan, 1993.

Epstein, Dena J. *Sinful Tunes and Spirituals: Black Folk Music to the Civil War*. Urbana, IL: University of Illinois Press, 1977.

- - - . "Slave Music in the United States before 1860: A Survey of Sources." *Journal of the Music Librarians Association* 20: 1 and 2 (1963): 127- 45; 377- 90.

Ehrenhard, John E., and Mary R. Bullard. *Stafford Plantation, Cumberland Island National Seashore, Georgia: Archeological Investigations of a Slave Cabin*. Tallahassee, FL.: Southeast Archeological Center, National Park Service, 1981.

Errante, James R. "The Significance of Waterscapes in the Context of South Carolina's Tidal Rice Growing Plantations. In Kathy Bolen, Kathy Forbes, and Ruth Trocolli, eds. *Critical Approaches to Archaeology and Anthropology, Annual Papers of the University of South Carolina Anthropology Students Association*. Columbia, SC: University of South Carolina, 1989.

Escott, Paul D. "The Context of Freedom: Georgia's Slaves during the Civil War" *Georgia Historical Quarterly* 58:1 (Spring 1974): 79- 104.

Espenshade, Chris. "Excavations at the Eigelberger Plantation, Daufuskie Island, South Carolina." *African- American Archaeologist* 15 (Fall 1995).

- - - . "Some Thoughts on Spalling on South Carolina Colonoware." *African- American Archaeology* 23 (Winter 1999).

Estes- Hicks, Onita. "The Way We Were: Precious Memories of the Black Segregated South." *African American Review* 27 (Spring 1993): 9- 18.

Exploring a Common Past: Researching and Interpreting the Underground Railroad. Washington, DC: Park History Program, National Park Service, [2nd ed.] 1998.

Fairbanks, Charles H. "The Plantation Archaeology of the Southeastern Coast." 18:1 (1984): 1- 14.

Farrell, Edmund J. "Oral Histories as Living Literature." Presented at Nation Council of Teachers of English. Cincinnati, OH. ERIC, ED196013.

Fasold, Ralph. "The Relationship between Black and White Speech in the South." *American Speech* 56 (1981): 163- 189.

Faulkenberry, Lisa. "A Culture of Servitude: Economic and Social Impacts of Tourism in the South Carolina Sea Islands." M.A. thesis, Clemson University, 1997.

Fauset, Arthur H. "Folklore from St. Helena, South Carolina." *Journal of American Folklore* 38 (1925): 217- 38.

Faust, Drew Gilpin. "Culture, Conflict, and Community: The Meaning of Power on an Ante- Bellum Plantation." *Journal of Social History* 14:1 (Fall 1980): 83- 98.

Feelings, Tom. *The Middle Passage: White Ships, Black Cargo*. New York: Dial Books, 1995.

Fenn, Elizabeth A. "Honoring the Ancestor: Kongo- American Graves in the American South." *Southern Exposure* 28 (1985): 42- 57.

Ferguson, Leland. "Afro- American Slavery and the 'Invisible' Archeological Record of South Carolina." *Papers of the Conference on Historical Sites Archeology* 14:13- 19. Columbia, SC, 1982.

Ferguson, Leland, and David Babson. "Survey of Plantation Sites along the East Branch of the Cooper River: A Model for Predicting Archaeological Site Location." Manuscript on file, Dept. of Anthropology, University of South Carolina, Columbia, SC, 1986.

Ferguson, Sally Ann H. "Christian Violence and the Slave Narratives." *American Literature* 68 (June 1996): 197- 320.

Ferguson, T. Reed. *The John Couper Family at Cannon's Poin*t. Macon, GA: Mercer University Press, 1994.

Ferrell, Adam. "Man Wants Land to Convey Island's History." *Post and Courier* (April 1, 2004): B1.

Fett, Sharla M. "Body and Soul: African- American Healing in Antebellum Southern Plantation Communities, 1800- 1860." Ph.D. dissertation, Rutgers University, 1995.

Fickling, Susan M. "The Christianization of the Negro in South Carolina, 1830- 1860." M.A. thesis, University of South Carolina, 1923.

Fields, Dorothy Jenkins. "Miami Must Preserve and Pass on Culture." *Miami Times* (December 16, 2003): n.p.

Finley, Cheryl. "The Door of No Return." *Common- Place* 1:4 (July 2001): http://www.historycooperative.org/journals/cp/vol- 01/no- 04/finley/

Fischer, Kirsten. *Sex, Race, and Resistance in Colonial North Carolina*. Ithaca, NY: Cornell University Press, 2002.

Fitchett, E. Horace. "The Free Negro in Charleston, South Carolina." Ph.D. dissertation, University of Chicago, 1950.

- - - . "The Traditions of the Free Negro in Charleston, South Carolina." *Journal of Negro History* 25 (1940): 139- 152.

Flanders, Ralph B. "The Free Negro in Antebellum Georgia." *North Carolina Historical Review* 9 (July 1932): 260- 74.

- - - . *Plantation Slavery in Georgia*. Chapel Hill: University of North Carolina Press, 1933.

Fleetwood, William C. *Tidecraft: An Introductory Look at the Boats of Lower South Carolina, Georgia, and Northern Florida, 1650- 1950*. Savannah, GA: Coastal Heritage Society, 1982.

Flusche, Michael. "Joel Chandler Harris and the Folklore of Slavery." *Journal of American Studies* 9 (December 1975): 347- 363.

Fogel, Robert William. *Without Consent or Contract: The Rise and Fall of American Slavery*. New York: W. W. Norton & Co., reprint ed. 1994.

Fogel, Robert William, and L. Engerman. *Time on the Cross: The Economics of American Negro Slavery*. New York: W. W. Norton & Co., [reissue edition] 1995.

"Folklore and Ethnology: Hags and Their Ways." *Southern Workman* 23:2 (February 1894): 26- 7.

"Folklore from St. Helena, South Carolina." *Journal of American Folklore* 39:148 (1925): 217- 38.

Foner, Eric. *Reconstruction: America's Unfinished Revolution, 1863- 1877*. Gloucester, MA: Peter Smith Publishers, Inc., 2001.

- - - . *Who Owns History? Rethinking the Past in a Changing World*. New York: Hill and Wang Publishers, 2003.

Forbes, Ella. "African Resistance to Enslavement: The Nature and Evidentiary Record." *Journal of Black Studies* 23:1 (September 1992): 39- 59.

Ford, Omar. "Beaufort Part of Tubman Study." [Hilton Head Island, SC] *Island Packet* (March 8, 2003).

- - - . "Display Captures Elements of Gullah Culture." [Beaufort, SC] *Beaufort Gazette* (December 28, 2003): n.p.

- - - . "Government Officials Look to Protect Gullah- Geechee Culture." [Beaufort, SC] *Beaufort Gazette* (May 27, 2004): n.p.

- - - . "Gullah People Hope to Preserve Culture." [Beaufort, SC] *Beaufort Gazette* (October 3, 2004): A1.

- - - . "National Park Study Available for Public Review." [Beaufort, SC] *Beaufort Gazette* (December 17, 2003): n.p.

- - - . "Penn Center Seeks Rejuvenated Image." [Hilton Head Island, SC] *Island Packet* (June 17, 2003).

- - - . "Preserving Culture Gets OK in House." [Beaufort, SC] *Beaufort Gazette* (September 30, 2004): n.p.

- - - . "Report on Gullah Culture Brings Mixed Reviews." [Hilton Head Island, SC] *Island Packet* (October 26, 2002).

Ford, Timothy. "South Carolina Travel Diary, 1785- 1786." *South Carolina Historical and Genealogical Magazine* 13 (1912): 132- 204.

Foskett, Ken. "Trials of Life: Racism Was One Challenge; Another Was Meeting his Grandfather's Expectations." *Atlanta Journal Constitution* (July 2, 2001): A1.

Fox- Genovese, Elizabeth. "Strategies and Forms of Resistance: Focus on Slave Women of the United States." In Darlene Clark Hine, ed. *Black Women in American History* (vol. 4) New York: Carlson Publishing, 1990, 409- 431.

- - - . *Within the Plantation Household, Black & White Women of the South*. Chapel Hill, NC: University of North Carolina Press, 1988.

Franklin, John Hope. "Introduction." In *The Rich Heritage of African Americans in North Carolina*. Raleigh, NC: North Carolina Department of Commerce and Department of Cultural Resources, 2001, 2- 3.

- - - . *The Free Negro in North Carolina, 1790- 1860*. Chapel Hill, NC: University of North Carolina Press, 1943.

- - - . Negro Episcopalians in Ante Bellum North Carolina." *Historical Magazine of the Protestant Episcopal Church* 13 (1944): 216- 34.

- - - . "Slaves Virtually Free in Ante- bellum North Carolina." *Journal of Negro History* 28 (January 1943): 284- 310.

Franklin, John Hope, and Alfred A. Moss, Jr. *From Slavery to Freedom*. New York: Alfred A. Knopf, [8th ed.] 2000.

Franklin, John Hope, and Loren Sscweninger. "Fleeing Death, Seeking Life." *American Visions* 14 (August 1999): n.p.

- - - . *Runaway Slaves: Rebels on the Plantation*.New York: Oxford University Press, 2000.

Franklin, Maria. "'Power to the People': Sociopolitics and the Archaeology of Black Americans." *Historical Archaeology* 31:3 (1997): 36- 50.

Franklin, V. P. *Self- Determination: A Cultural History of the Faith of the Fathers*. Westport, CT: Lawrence Hill, 1984.

Fraser, Walter J. *Charleston! Charleston!: The History of a Southern City*. Columbia, SC: University of South Carolina Press, 1990.

Frazier, Eric. "She Who Guards Gullah: A Fading Culture's Controversial Keeper." [Charlotte, NC] *Charlotte Observer* (September 12, 2004): 1E.

- - - . "Community Pays Respects to Three African Ancestors." [Charleston, SC] *Post and Courier* (December 31, 1999): A1.

- - - . "Linguists Fear the End May Be Near for Gullah." [Charleston, SC] *Post and Courier* (March 6, 1995): A1.

Frazier, Herb. "Genetic Links of Two Coasts Studies." [Charleston, SC] *Post and Courier* (March 16, 1997): A16.

- - - . "Group Seeks to Restore Fort Tied to Local Slavery: Thousands Shipped from Bunce Island." [Charleston, SC] *Post and Courier* (June 5, 1998): B1.

- - - . "'Gullah Cousin' Kindles Kinship." [Charleston, SC] *Post and Courier* (November 9, 1995): P2.

- - - . "Gullah Heritage Bill Gets House OK: $10 Million Would Help Preserve Culture." [Charleston, SC] *Post and Courier* (September 29, 2004): A1.

- - - . "Journey for a Song: Music Links Georgians to Africa." *Post and Courier* [Charleston, SC] (March 16, 1997): A1.

- - - . "Riverside Became a Refuge Amid Segregation: Black Owned Businesses that Thrived around Beaches Gradually Died after Integration." [Charleston, SC] *Post and Courier* (August 12, 2001): A1.

- - - . "St. Augustine Fort's History Twined with Colonial Slaves." [Charleston, SC] *Post and Courier* (July 6, 1999): A6.

- - - . "Scholars Differ on Gullah Origin." [Charleston, SC] *Post and Courier* (February 2, 1997): P2.

- - - . “Sisters in Song: Musical Roots Run Under an Ocean to Bind Two Women with Oral History.” *Chicago Tribune* (May 9, 1997): A1.

- - - . “Song Stays Nearly Same Through Ages.” [Charleston, SC] *Post and Courier* (March 16, 1997): A16.

- - - . “A Struggle for Sweetgrass.” [Charleston, SC] *Post and Courier* (September 13, 1999), n.p.

- - - . “Time Blurs Family Ties to Ancient Homeland.” [Charleston, SC] *Post and Courier* (August 7, 1995): A11.

- - - . “Transatlantic Link Bonds Lowcountry and Africa.” [Charleston, SC] *Post and Courier* (August 7, 1995): A11.

Fredrickson, George M. *The Black Image in the White Mind: The Debate on Afro- American Character and Destiny, 1817- 1914*. New York, Harper and Row, 1971.

- - - . “Masters and Mudsills: The Role of Race in the Planter Ideology of South Carolina.” *South Atlantic Urban Studies* 2 (Spring 1978):34- 48.

Freehling, William W. “James Henley Thornwell’s Mysterious Antislavery Movement.” *Journal of Southern History* 57 (August 1991): 383- 406.

- - - . *Prelude to the Civil War: The Nullification Controversy in South Carolina, 1816- 1836*. New York: Harper Collins, 1968.

Freehling, William W. and Craig M. Simpson, eds. *Secession Debated: Georgia’s Showdown in 1860*. New York: Oxford University Press, 1992.

French, Austa Malinda. *Slavery in South Carolina and the Ex- slaves: Or, the Port Royal Mission*. New York: Negro Universities Press reprint [1862], 1969.

Frey, Sylvia R. “‘Bitter Fruit from the Sweet Stem of Liberty’: Georgia Slavery and the American Revolution.” Paper presented at the annual meeting of the American Historical Association, New York, NY, 1985.

- - - . *Water from the Rock: Black Resistance in a Revolutionary Age*. Princeton, NJ: Princeton University Press, 1991.

Frey, Sylvia R., and Betty Wood, *Come Shouting to Zion: African American Protestantism in the American South and British Caribbean to 1830*. Chapel Hill: University of North Carolina Press, 1998.

“From the Distant Past: A Slave Ship Speaks.” *Miami Times* (February 27, 1997): n.p.

Fry, Gladys- Marie. *Stitched from the Soul: Slave Quilts from the Antebellum South*. Chapel Hill, NC: University of North Carolina Press, [2nd ed.] 2002.

Furtwangler, Carol. “Sea Islanders Keepers of African Tradition.” [Charleston, SC] *Post and Courier* (June 4, 1998): D22.

- - - . “Shouters: Audience Left Wanting More.” [Charleston, SC] *Post and Courier* (June 7, 1998): A17.

Gailliard, Kenneth A. “Gullah Culture Study Hits Strand.” [Myrtle Beach, SC] *Sun News* (May 18, 2000): C2.

Galardi, Patricia Ann. “A Comparison of Gullah Family Attitudes towards Education for Participants and Nonparticipants: The Effect of the Early Childhood At- Risk Family Initiative.” Ph.D. dissertation, University of South Carolina, 2002.

Gallay, Alan. The *Indian Slave Trade: The Rise of the English Empire in the American South, 1670- 1717*. New Haven, CT: Yale University Press, 2002.

- - - . "The Great Sellout: George Whitefield on Slavery." In Winfred B Moor, Jr. and Joseph F. Tripp, eds. *Looking South: Chapters in the Story of an American Region*. New York: Greenwood, 1989, 17-30.

Gallman, Robert E. "Slavery and Southern Economic Growth." *Southern Economic Journal* 45:4 (April 1979): 1007- 22.

Galvin, Mary L. "Decoctions for Carolinians: The Creation of a Creole Medicine Chest in Colonial South Carolina." In David Buisseret and Steven Reinhardt, eds. *Creolization in the Americas*. College Station, TX: Texas A & M University Press, 2000.

Gannett, William C. "The Freedmen at Port Royal." *North American Review* 101:19 (1865).

Garland, Charles and Herbert S. Klein. "The Allotment of Space for African Slaves aboard Eighteenth Century British Slave Ships." *William and Mary Quarterly* 3rd series 42:2 (April 1985): 238- 48.

Gartland, Michael. "Music History Made at Scanlonville Site." [Charleston, SC] *Post and Courier* (September 4, 2003): C9.

Genovese, Eugene D. "Black Plantation Preachers in the Slave South." *Southern Studies* 2 (Fall/Winter 1991): 203- 9.

- - - . *From Rebellion to Revolution: African American Slave Revolts in the Making of the Modern World*. Baton Rouge, LA: Louisiana State University Press, 1979.

Georgia Historical Society. *Savannah's River Plantations*. Mt. Pleasant, SC: Arcadia Publishing Co., 1998.

- - - . "Georgia Slaveholder Looks at Africa." *Georgia Historical Quarterly* 51:2 (1967): 186- 93.

- - - . *Roll, Jordan Roll: The World the Slaves Made*. New York: Pantheon Books, 1974.

- - - . "The Significance of the Slave Plantation for Southern Economic Development." *Journal of Southern History* 28 (November 1962): 422- 37.

- - - . *'Slavery Ordained of God': The Southern Slaveholders' View of Biblical History and Modern Politics*. Gettysburg, PA. Gettysburg College Press, 1985.

- - - . *The Southern Front: History and Politics in the Cultural War*. Columbia, MO: University of Missouri Press, 1995.

Geraty, Virginia M. "The Gullah Language." *Charleston Magazine* 3:4 (1989): 12- 13.

- - - . *A Teacher's Guide to the Gullah Language, 2001*. Charleston, SC: V.M. Geraty, 2001.

Geraty, Virginia M. and Dan T. Ouzts. "Gullah Language and Dolch 22." *Florida Reading Quarterly Links To Literacy* 24 (1988): 16- 18.

Gertjegerdes- Myricks, Petra. "Lest We Forget: Basket Weaving an African/American Tradition." [Columbus, GA] *Columbus Times* (September 5, 2000): n.p.

Gessell, Elizabeth Anne. "Nowhere but Heaven: Savannah, Georgia during the Era of the First Great Migration." Ph.D. dissertation, University of California Berkeley, 2003.

Gettleman, Jeffrey. "Fighting Against the Tide: Two Very Different Women Battle to Preserve the Sea Islands, Primeval Southern Marshes Rich in History." *Los Angeles Times* (November 27, 2001): E1.

Gibbons, Letitia L. "A Statistical Analysis of Factors Affecting the Morbidity Rate of Sickle Cell Anemia." M.S. thesis, University of South Carolina, 1986.

Gibbs, Tyson, *et al.* "An Anthropological Examination of Slave Nutritional Adequacy." *Medical Anthropology* 4 (Spring 1980): 175- 262.

Gibe, James G. "Necessary but Insufficient: Plantation Archaeology Reports and Community Action." *Historical Archaeology* 31:3 (1997):51- 64.

Gibson, H. E. "African Legacy: Folk Medicine among the Gullahs." *Negro Digest* 40:1 (1962): 77- 80

Gillespie, Michele. *Free Labor in an Unfree World: White Artisans in Slaveholding Georgia, 1789- 1860*. Athens, GA: University of Georgia Press, 2000.

Ginn, Doris O. "Out of Africa: The Sociolinguistic Partnership of Gullah with American Englishes in U.S. Classrooms and Communities." Paper presented at the National Council of Teachers of English Conference on English Education, San Francisco, CA, 2003.

Glanton, Dahleen. "Gullah Culture in Danger of Fading Away." *Chicago Tribune* (June 8, 2001): A1.

- - - . "Small Island of Gullah Culture Tries to Stay Afloat." *Chicago Tribune* (June 4, 2001): A1.

Glatthaar, Joseph. *The March to the Sea and Beyond: Sherman's Troops in the Savannah and Carolinas Campaigns*. New York: New York University Press, 1985.

Glen, Isabella C. *Life on St. Helena Island*. New York: Carlton Press, 1980.

Glennie, Alexander. *Sermons Preached on Plantations to Congregations of Negroes*. Charleston, SC: A. E. Miller, 1844.

God's Gonna Trouble the Water – Leaving Slavery Behind: Music and Other Sources of Strength of the Gullah Culture. South Carolina Educational Television Network, Columbia, SC, n.d.

Goines, Leonard. "The Music of Georgia and Carolina Sea Islands." *Allegro* 74:1 (1974): 5- 16.

Gold, Matea. "South Carolina: A Lush Dip in the Sea Islands." *Los Angeles Times* (May 23, 2004): L13.

Goldsmith, Peter David. "Afro- American Denominationalism: Ideology and Class Consciousness in a Coastal Georgia Community." Ph.D. dissertation, University of Chicago, 1982.

- - - . *When I Rise Cryin' Holy: African American Denominationism on the Georgia Coast*. New York: AMS Press, 1989.

Goldstein, David. "Thomas Says His Silence Is an Asset." *Miami Herald* (December 14, 2000): A25.

Goldstein, Kenneth. *A Guide for Field Workers in Folklore*. Hatboro, NC: Folklore Association, 1964.

Gomez, Michael A. *Exchanging Our Country Marks: The Transformation of African Identities in the Colonial and Antebellum South*. Chapel Hill, NC: University of North Carolina Press, 1998.

- - - . "Muslims in Early America." *Journal of Southern History* 60 (November 1994): 671- 710.

Goodheart, Adam. "Facing the Slave Past: Historic Sites Grapple with America's Greatest Shame." *Preservation* 53:5 (September/October 2001): 36- 43.

Goodman, Rhonda Christina. "Denmark Vesey and the Slave Insurrection Trial Narratives: The African- American Social Landscape of Antebellum Charleston, South Carolina." M.A. thesis, University of Delaware Wintherthur, 2000.

Goodson, Martia G. "Medical- Botanical Contributions of African Slave Women to American Medicine." *Western Journal of Black Studies* 11 (1987): 198- 203.

Gordan, Linda. "Black and White Visions of Welfare: Women's Welfare Activism, 1890- 1945." *Journal of American History* 78 (September 1991).

Gordon, Asa H. *The Georgia Negro: A History*. Spartanburg, SC: The Reprint Co., [1933] 1972.

- - - . *Sketches of Negro Life and History in South Carolina*. Columbia, SC: University of South Carolina Press, [2nd ed.] 1971.

Gordon, Robert W. "Negro 'Shouts' from Georgia." In Alan Dundes, ed. *Mother Wit from the Laughing Barrel*. Jackson, Mississippi: University Press of Mississippi, 1990.

Gorn, Elliott J. "Black Spirits: The Ghostlore of Afro- American Slaves." *American Quarterly* 36:4 (Autumn 1984): 549- 565.

Gorrell, Gena K. *North Star to Freedom*. New York: Delacorte Books for Young Readers, 1997

Graham, Denishia. "Going Back Home: Hebron Church was Built by Freed Slaves Using Lumber from an 1868 Shipwreck." [Charleston, SC] *Post and Courier* (May 55, 2003): A1.

- - - . "Historic Church Focus of Gullah Gala." [Charleston, SC] *Post and Courier* (April 22, 2004): B3.

- - - . "Passion and Faith Energize Woman Trying to Revive Lowcountry Tradition." [Charleston, SC] *Post and Courier* (November 14, 2003).

- - - . "Visitors Explore John's Island Connection to Their Native Africa." [Charleston, SC] *Post and Courier* (August 1, 2002): C1.

- - - . "Volunteers Continue Efforts to Restore Historic Cemetery." [Charleston, SC] *Post and Courier* (February 28, 2002): C1.

Graham, Glennon. "From Slavery to Serfdom: Rural Black Agriculturists in South Carolina, 1865-1900." Ph.D. dissertation, Northwestern University, 1982.

Granger, Mary, ed. *Savannah River Plantations*. Savannah Writer's Project. Savannah, GA: Georgia Historical Society, 1947.

Grant, Carolyn. "Love of Daufuskie Island, Teaching Animated her Life." [Hilton Head Island, SC] *Island Packet* (July 15, 2002).

Grant, Donald L. *The Way It Was in the South: The Black Experience*. Athens, GA: University of Georgia Press, 2001.

Gray, Lewis Cecil. "Economic Efficiency and Competitive Advantage of Slavery under the Plantation System." *Agricultural History* 4 (April 1930): 31- 47.

Graydon, Nell S. *Tales of Edisto*. Orangeburg, SC: Sandlapper Publishing, 1955.

Green, Ernest David. "Origins of American Policing: Slave Patrols in South Carolina from Colonial Times to 1865." Ph.D. dissertation, Howard University, 1998.

Green, Harold Dean, Jr. "St. Helena Island Ethnobotanical Collection and Conservation Project." M.S. thesis, University of Georgia, 1997.

Green, Jonathan. *Gullah Images: The Art of Jonathan Green*. Columbia, SC: University of South Carolina Press, 1996.

Greenberg, Kenneth S. *Honor and Slavery: Lies, Duels, Noses, Masks, Dressing as a Woman, Gifts, Strangers, Humanitarianism, Death, Slave Rebellions, the Proslavery Argument, Baseball, Hunting, and Gambling in the Old South*. Princeton, NJ: Princeton University Press, 1996.

Greene, Harlan. "'The Little Shining Word': From Porgo to Porgy." *South Carolina Historical Magazine* 87 (January 1986): 75- 81.

Greene, Harlan, *et al*. *Slave Badges and the Slave- Hire System in Charleston, South Carolina, 1783- 1865*. Jefferson, NC: McFarland & Co., 2004.

Greene, Jack P. "Colonial South Carolina and the Caribbean Connection." *South Carolina Historical Magazine* 88 (December 1987):192- 210.

- - - . "'Slavery or Independence': Some Reflections on the Relationship among Liberty, Black Bondage, and Equality in Revolutionary South Carolina." *South Carolina Historical Magazine* 80:3 (July 1979): 193- 214.

Greene, Melissa Fay. *Praying for Sheetrock: A Work of Nonfiction*. New York: Ballentine- Random House [reprint], 1992.

Greenfield, Eloise. *How They Got Over: African Americans and the Call of the Sea*. New York: Harper Collins, 2003.

Gregorie, Anne King. *Christ Church 1706- 1959, A Plantation Parish of the South Carolina Establishment*. Charleston: The Dalcho Historical Society, 1961.

Gregorson, John. "Swing Low: Collards, Grits and Hand- Pulled Pork Are Becoming the Stuff of Haute Cuisine in the Deep South. Is Yankee Country Next?" *Food Processing* (March 1, 2004): n.p.

Gresham, Charles A., and Donald D. Hook. "Rice Fields of South Carolina: A Resource Inventory and Management Policy Evaluation." *Coastal Zone Management Journal* 9 (1982): 183- 203.

Grime, William, ed. *Botany of the Black Americans*. St. Clair Shores, MI: Scholarly Press, Inc., 1976.

Grimm, Fred. "Culture vs. Condos: Sea Island Gullahs Are Making Way for Monied Whites." *Miami Herald* (June 27, 1988): D1.

Griswold, Francis. *A Sea Island Lady*. Beaufort, SC: Beaufort Book Co., 1939.

Gritzner, Janet Bigbee "Tabby in the Colonial Southeast: The Culture History of an American Building Material." Ph.D. dissertation, Louisiana State University, 1978.

Grogan, Gregg. "Frankie and Doug Quimby Sing Songs of Slavery to Keep Alive the Lore of their Forebears." *People Weekly* (October 12, 1987).

Groover, Mark D. "Creolization and the Archaeology of Multiethnic Households in the American South." *Historical Archaeology* 34:3 (Fall 2000).

Grovsner, Verta Mae. "What Does South Carolina Lowcountry Mean to Me? Home!" [Washington, DC] *Washington Star* (April 1971): n.p.

Gudmestad, Robert H. A *Troublesome Commerce: The Transformation of the Interstate Slave Trade*. Baton Rouge, LA: University of Louisiana Press, 2003.

"Gullah Language May Be in Jeopardy." *Black Issues in Higher Education* 12 (April 20, 1995): 47.

"Gullah: On the Question of Afro- American Language." *Anthropological Linguistics* 20:9 (1978): 422- 27.

"The Gullah Tradition." *Essence* 28:10 (February 1998): 127- 130.

Gundaker, Grey. "Tradition and Innovation in African- American Yards." *African Arts* 26:2 (April 1993): 58- 71, 94.

Gutman, Herbert. *Black Family in Slavery and Freedom, 1750- 1925*. New York: Pantheon Books, 1976.

Guthrie, Patricia. *Catching Sense: African American Communities on a South Carolina Sea Island*. Westport, CT: Bergin and Garvey, 1996.

Hackenburg, Robert A. "Closing the Gap between Anthropology and Public Policy: The Route through Cultural Heritage Development." *Human Organization* 61:3 (Fall 2002): 288- 98.

Hadden, Sally E. *Slave Patrols: Law and Violence in Virginia and the Carolinas*. Cambridge, MA: Harvard University Press, 2001.

Hadler, Jeffrey. "Remus Orthography: The History of the Representation of the African- American Voice." *Journal of Folklore Research* 35 (1998): 99- 123.

Haglund, Noah. "Encouraging Words Close Annual Gullah Economic Summit." [Beaufort, SC] *Beaufort Gazette* (February 29, 2004).

Haines, Brenda J. “Are Islanders Better off than in 1926?” [Hilton Head Island, SC] *Island Packet* (May 15, 2004).

Hair, P.E.H. “Sierra Leone Idioms in the Gullah Dialect of American English.” *Sierra Leone Language Review* 4 (1965) 79- 84.

Haley, Alex. “Sea Islanders, Strong- willed Survivors, Face Their Uncertain Future Together. Smithsonian 13 (1982): 88- 96.

Halfacre, Angela C., Jeremy D. Browning, and Brian P. Ballard. “Environmental Decision- Making and Community Involvement: The Case of Sandy Island, South Carolina.” Southeastern Geographer 41:1 (May 2001): 136- 52.

Hall, John A. “‘A Rigour of Confinement Which Violates Humanity’: Jail Conditions in South Carolina During the 1790s.” *Southern Studies: An Interdisciplinary Journal of the South* 24 (Fall 1985): 284- 94.

Haller, Charlotte A. “‘And Made Us to Be a Kingdom’: Race, Antislavery, and Black Evangelicals in North Carolina’s Early Republic.” *North Carolina Historical Review* 80:2 (April 2003): 125- 152.

Haller, John S., Jr. “The Negro and the Southern Physician: A Study of Medical and Racial Attitudes 1800- 1860.” *Medical History* 16 (1972): 239- 44.

Hamby, Erin Brooke. “The Roots of Healing: Archaeological and historical Investigations of African-American Herbal Medicine.” Ph.D. dissertation, University of Tennessee, 2004.

Hamilton, J. G. de Roulhac. “The Freedmen’s Bureau in North Carolina.” *South Atlantic Quarterly* 8 (1909): 52- 61.

Hamilton, Kendra. “Telling the Untold Story: Plans for Three New African American Museums Are Under Way, Signaling a Growing Interest in Black History, Culture. But is it Too Much of a Good Thing?” *Black Issues in Higher Education* (February 12, 2004).

Hamilton, Kendra Yvette. “‘The Almost Purple Blackness of Unadulterated Congo Blood’: High Art and Popular Culture Sightings/Sitings of the Gullah.” Ph.D. dissertation, University of Virginia, 1998.

Hamilton, Virginia. *The People Could Fly: American Black Folktales*. New York: Alfred A. Knopf, 1985.

Hancock, Ian F. “Gullah and Barbadian: Origins and Relationships.” *American Speech* 55:1 (Spring 1980): 17- 35.

Handlin, Oscar, and Mary Flug Handlin. “Origins of the Southern Labor System.” *William and Mary Quarterly,* 3rd series 7 (1950):199- 222.

Hansen, Chadwick. “Jenny’s Toe Revisited: White Responses to Afro- American Shaking Dances.” *American Music* 5: 1 (Spring 1987): 1- 19.

Hansen, Joyce. *Bury Me Not in a Land of Slaves: African- Americans in the Time of Reconstruction*. New York: Franklin Watts- Grolier Publishing, 2000.

Hansen, Joyce, Gary McGowan, and James Ransome. *Freedom Roads: Searching for the Underground Railroad*. New York: Cricket Books, 2003.

Hardin, Jason. “Ambitious Project Aims to Protect Cemeteries.” [Charleston, SC] *Post and Courier* (November 25, 2001): B1.

- - - . “Defining Downtown’s Black ‘Exodus.’” [Charleston, SC] *Post and Courier* (April 15, 2001): A1.

- - - . “Virginia Geraty, Gullah Preservationist, Dies at 89.” [Charleston, SC] *Post and Courier* (November 30, 2004): B1.

Hargrove, Melissa D. “Marketing Gullah: Identity, Cultural Politics, and Tourism.” M.S. thesis, University of Tennessee, 2000.

Haring, Lee. "A Characteristic African Folktale Pattern." *African Folklore*, Richard Dorson, ed. Bloomington, IN: Indiana University Press, 1972.

Harper, C. W. "Black Aristocrats: Domestic Servants on the Antebellum Plantation. *Phylon* 46:2 (June 1985): 123- 35.

Harris, J. William. *Deep Souths: Delta, Piedmont, and Sea Island Society in the Age of Segregation*. Baltimore, MD: Johns Hopkins University Press, 2001.

- - - . *Society and Culture in the Slave South*. New York: Routledge, 1993.

Harris, Jessica B. "Cultural Crossroads: Black and Unknown Hands." *American Legacy* 7:1 (Spring 2001): 14- 16.

- - - . *Iron Pots and Wooden Spoons*: *Africa's Gifts to New World Cooking*. New York: Atheneum, 1989.

- - - . *The Welcome Table: African American Heritage Cooking*. New York: Simon and Schuster, 1995.

Harris, Robert L., Jr. "Charleston's Free Afro- American Elite: The Brown Fellowship Society and the Humane Brotherhood." *South Carolina Historical Magazine* 82:4 (October 1981): 289- 310.

Harris, Ron. "The Gullahs: An Upside- Down World, Development Displaces Native Islanders." *Los Angeles Times* (August 28, 1988): A1.

Harris, Yvonne Bailey. "The History of the Penn School under its Founders at St. Helena Island, Frogmore, South Carolina, 1682- 1908." Ph.D. dissertation, American University, 1979.

Hart, Edward B. "Gullah Spirituals in Prayer Meetings on Johns Island, South Carolina." Ph.D. dissertation, University of South Carolina, 1993.

Hart, Emma Frances Katherine. "Constructing a New World: Charleston's Artisans and the Transformation of the South Carolina Lowcountry, 1700- 1800. M.A. thesis, Emory University, 2001.

Haskell, Ann Sullivan. "The Representation of Gullah- Influenced Dialect in Twentieth Century South Carolina Prose, 1922- 30." Ph.D. dissertation, University of Pennsylvania, 1964.

Hastings, Michael. "Island Bounty: Woman Who Grew Up on Daufuskie Island Writes about the Culture's Traditional Food." *Winston Salem Journal* (April 9, 2003): E1.

Hawkins, John. "Magical Medical Practice in South Carolina." *Popular Science* 70 (1907): 165- 174.

Hawley, Thomas Earl Jr. "The Slave Tradition of Singing among the Gullah of Johns Island, South Carolina." Ph.D. dissertation, University of Maryland- Baltimore County, 1993.

Hayes, James P. *James and Related Sea Islands*. Charleston, SC: Walker, Evans, & Cogswell Co., 1978.

Haywood, C. Robert. "Mercantilism and South Carolina Agriculture." *South Carolina Historical Magazine* 60:1 (January 1959): 15- 27.

Heard, George Alexander. "St. Simon's Island during the War Between the States." *Georgia Historic Quarterly* 22:3 (September 1938): 249- 272.

Helsey, Alexia Jones. *South Carolina's African- American Confederate Pensioners, 1923- 1925*. Columbia, SC: South Carolina Department of Archives and History, 1998.

Helsley, Alexia Jones, and Patrick McCawley. *The Many Faces of Slavery*. Columbia, SC: South Carolina Department of Archives and History, 1999.

Helwig, Adelaide B. "The Early History of Barbados and Her Influence upon the Development of South Carolina." Ph.D. dissertation, University of California,- Berkeley, 1931.

Hemmingway, Theodore. "Beneath the Yoke of Bondage: A History of Black Folks in South Carolina." Ph.D. dissertation, University of South Carolina, 1976.

Hendrick, Bill. "African- American DNA Roots Project: A Genetic Map to Past." *Atlanta Journal Constitution* (December 14, 2003): NS9. <http://www.bumc.bu.edu/rootsproject>

Hendricks, Dave. "Damage at Cemetery Upsets Family." [Hilton Head Island, SC] *Island Packet* (May 11, 2002).

- - - . "Residents to Help with Cemetery Upkeep." [Hilton Head Island, SC] *Island Packet* (May 14, 2002).

Hendrix, Steve. "Sweet Georgia Coast: The Millionaires Are Gone from the Barrier Islands. But They Left a Rich Legacy Behind." *Washington Post* (May 19, 2002).

Hennesy, Melinda Meek. "Racial Violence during Reconstruction: The 1876 Riots in Charleston and Cainhoy." *South Carolina Historical Magazine* 86:2 (April 1985): 100- 112.

Henry, Howell M. *The Police Control of the Slave in South Carolina*. New York: Negro Universities Press, [1914] 1968.

Herman, Bernard L., and Carter L. Hudgins. "Slave and Servant Housing in Charleston, 1770- 1820." *Historical Archaeology* 33:3 (Fall 1999): 88- 101.

Herron, Leonora, and Alice M. Bacon. "Conjuring and Conjure Doctors." *Southern Workman* 24:1 (1895): 118- 24.

Hersh, Allison. "Glimpses of Gullah: Artist Captures in Brilliant Colors the Rich History of Every Day Life in Savannah's African- American Neighborhoods." *Savannah Morning News* (September 3, 2000): 1E, 5E.

- - - . "Lowcountry Sanctuary." *Savannah Morning News* (June 30, 2002): *Coastal Living*.

Herskovits, Melville Jean. *The Myth of the Negro Past*. Boston, MA: Beacon Press [1941], 1990.

Hewitt, Gary Livingston. "Expansion and Improvement: Land, People and Politics in South Carolina and Georgia, 1690- 1745." Ph.D. dissertation, Princeton University, 1996.

Heyer, Kathryn Wilson. "Rootwork: Psychological Aspects of Malign Magical and Illness Beliefs in a South Carolina Sea Island Community." Ph.D. dissertation, University of Connecticut, 1982.

Heyward, Duncan Clinch. *Seed from Madagascar*. Spartanburg, SC: The Reprint Co., [1937] 1972.

Hicks, Kyra E. *Black Threads: An African American Quilting Sourcebook*. New York: McFarland & Co., 2003.

Higginbotham, A. Leon. "The Ancestry of Inferiority (1619- 1662)." In *Shades of Freedom: Racial Politics and Presumptions of the American Legal Process* (Oxford World's Classics, vol. 2), A. Leon Higgenbotham. New York: Oxford University Press, 1996.

Higgins, W. Robert. "Charles Town Merchants and Factors Dealing in the External Negro Trade." *South Carolina Historical Magazine* 65:4 (October 1964): 205- 217.

- - - . "The Geographical Origins of Negro Slaves in Colonial South Carolina." *South Atlantic Quarterly* 70 (1971): 34- 47.

Hill, John Hampden. Papers, 1875- 1880, Brunswick, New Hanover, and Pender Counties, North Carolina. Southern Historical Collection, Manuscripts Department, Academic Affairs Library of the University of North Carolina, Chapel Hill, NC.

Hill, Pascoe G. *Fifty Days on Board a Slave Vessel in the Mozambique Channel, April and May 1843*. Baltimore, MD: Black Classic Press, [1848] 1993.

Hill, Walter Byron. "Family, Life, and Work Culture: Black Charleston, South Carolina, 1880- 1910." Ph.D. dissertation, University of Maryland, 1989.

Hilliard, Sam Bowers. "Antebellum Tidewater Rice Culture in South Carolina and Georgia." In James R. Gibson, ed. *European Settlement and Development in North America: Essays on Geographical Change in Honor and Memory of Andrew Hill Clark*. Toronto: University of Toronto Press, 1978. 91- 115.

- - - . *Hog Meat and Hoe Cake: Food Supply in the Old South, 1840- 1860*. Carbondale, IL: Southern Illinois University Press, 1972.

- - - . "The Tidewater Rice Plantation: An Ingenious Adaptation to Nature." *Geoscience and Man*. 12 (1975): 57- 66.

Hine, Darlene Clark. "Female Slave Resistance: The Economics of Sex." *Western Journal of Black Studies* 3:2 (1979): 123- 27.

- - - . "Lifting the Veil, Shattering the Silence: Black Women's History in Slavery and Freedom." In Darlene Clark Hine, ed. *The State of Afro- American History: Past, Present, and Future*. Baton Rouge, LA: University of Louisiana Press, 1986.

- - - . "Race and the Inner Lives of Southern Black Women: Thoughts on the Culture of Dissemblance." In Virginia Bernhard, *et al*., eds. *Southern Women: Histories and Identities*. Columbia, MO: University of Missouri Press, 1992.

Hine, William C. "Black Politicians in Reconstruction Charleston, South Carolina: A Collective Study." *Journal of Southern History* 49:4 (November 1983): 555- 84.

- - - . "The 1867 Charleston Streetcar Sit- Ins: A Case of Successful Black Protest." *South Carolina Historical Magazine* 77:2 (April 1976), 110- 114.

Hirsch, Diane Sullivan. "A Lie for True: Ethnolinguistic Origins of Gullah/Geechee." Ph.D. dissertation, Union Institute and University, 2003.

Historic Resources of the Lowcountry. Yemassee, SC: Lowcountry Council of Governments, 1979. "The History of Slavery in Florida." *Miami Times* (March 2, 2004), n.p.

Hjerpe, Karen. "St. John's Legacy for Cultural Preservation." Draft report summary for Special Ethnographic Study for Virgin Islands National Park. Atlanta, GA: Southeast Regional Office, National Park Service, 2002.

Hodes, Martha. "The Sexualization of Reconstruction Politics: White Women and Black Men in the South after the Civil War." *Journal of the History of Sexuality* 3 (1993): 59- 74.

Hodges, Graham Russell. *Slavery, Freedom, and Culture among Early American Workers*. Armonk, NJ: M. E. Sharpe, 1999.

Hodges, Graham, and Freddie L Parker, eds. *Running for Freedom: Slave Runaways in North Carolina 1775- 1840*. New York: Garland Press, 1993.

Hoefer, Heather. "Church Upholds Gullah Tradition." [Hilton Head Island, SC] *Island Packet* (January 1, 2001).

Hoffman, Charles, and Tess Hoffman. "The Limits of Paternalism: Driver- Master Relations on a Bryan County Plantation." *Georgia Historical Quarterly* 67 (Fall 1983): 321- 35.

Hoffman, Edwin D. "From Slavery to Self- Reliance: The Record of Achievement of the Freedmen of the Sea Island Region." *Journal of Negro History* 41:1 (January 1956): 8- 42.

Hoffman, Paul E. "Legend, Religious Idealism, and Colonies: The Point of Santa Elena in History, 1552- 1566" [South Carolina/Georgia Coast]. *South Carolina Historical Magazine* 84 (April 1983): 59- 71.

Hogg, Peter. *Slavery: The Afro- American Experience*. London: The British Library, 1979.

Hoit- Thetford, Elizabeth, "An Educational History of the Gullahs of Coastal South Carolina from 1700- 1900." Ph.D. dissertation, East Tennessee State University, 1993.

Holbach, Julia. "As I Remember It." [Mt. Pleasant, SC] *The East Cooper Pilot* (June 1, 1977): 1, 3.

Holder, Allen. "Beyond the Books: Visit to Charleston Reveals More in- depth History." *Kansas City Star* (November 22, 2003): n.p.

Holleman, Joey. "The Battle of SC 41." [Columbia, SC] *The State* (28 September 2003): M7.

- - - . "Gullah Study Could Lead to Cultural Centers in SC" [Columbia, SC] *The State* (October 15, 2002): 1 A.

- - - . "This is Hallow Groun'." [Columbia, SC] *The State* (28 September 2003): M1.

- - - . "Road Widening Plan May Widen an Old Wound for Gullah Families." [Columbia, SC] *The State* (October 6, 2003): n.p.

- - - . "The Soul of Gullah." [Columbia, SC] *The State* (28 September 2003): M6.

- - - . "Speaking Gullah: A 'Branch of Africa's Tree.'" [Columbia, SC] *The State* (October 6, 2003).

Holloway, Joseph E., ed. *Africanisms in American Culture: Blacks in the Diaspora*. Bloomington, IN: University of Indiana Press, 1990.

- - - . "Time in the African Diaspora: The Gullah Experience." In Joseph K. Adjaye, ed. *Time in the Black Experience* (Chapter 11). Westport, CT: Greenwood Press, 1994.

Holloway, Joseph E., and Winifred K. Vass, III. *The African Heritage of American English*. Bloomington, IN: University of Indiana Press, [reprint] 1997.

Holm, John. "The Atlantic Creoles and the Language of the Ex- slave Recordings." In Guy Bailey, Natalie Maynor, and Patricia Cukor- Avila, eds. *The Emergence of Black English: Text and Commentary*. Amsterdam: John Benjamins, 1991.

Holt, Sharon Ann. "Making Freedom Pay: Freedpeople Working for Themselves: North Carolina, 1865- 1900." *Journal of Southern History* 60:2 (May 1994): 229- 262.

- - - . "On the Relationship between Gullah and Bahamian." *American Speech* 58:4 (Winter 1983): 303- 318.

Holman, Harriet R., ed. "Charleston in the Summer of 1841: The Letters of Harriet Horry Rutledge." *South Carolina Historical and Genealogical Magazine* 46 (1945): 1- 14.

Holmgren, Virginia C. *Hilton Head: A Sea Island Chronicle*. Easley, SC: Southern Historical Press, 1986.

Holt, Thomas. *Black Over White: Negro Political Leadership in South Carolina during Reconstruction*. Urbana, IL: University of Illinois Press, 1977.

Hopkins, Tometro. "Issues in the Study of Afro- creoles: Afro- Cuban and Gullah." Ph.D. dissertation, Indiana University, 1992.

Hornsby, Angela. "Cast Down But Not Out: Black Manhood and Racial Uplift in North Carolina, 1900- 1930." Ph.D. dissertation, University of North Carolina, 2003.

- - - . "Mistresses and Slaves: Plantation Women in South Carolina, 1830- 80." *Journal of Negro History* 86 (2001): n.p.

Horton, Amy. "Hanging on to Harrington: Residents, Owners Fighting the Loss of Their Community." *Brunswick News* (March 23, 2004): C1- 2.

- - - . "History, Ambiance Fades on St. Simons." *Brunswick News* (March 23, 2004): 1C.

Horton, James Oliver. "Freedom's Yoke: Gender Conventions among Antebellum Free Blacks." *Feminist Studies* 12:1 (Spring 1986): 51- 76.

- - - . “Presenting Slavery: The Perils of Telling America’s Racial Story.” *Public Historian* 21:4 (Fall 1999): 19- 38.

Hoskins, Charles Lwanga. *Out of Yamacraw and Beyond: Discovering Black Savannah*. Savannah, GA: The Gullah Press, 2002.

House, Albert V. Jr. “Deterioration of a Georgia Rice Plantation during Four Years of Civil War.” *Journal of Southern History* 9:1 (February 1943): 98- 113.

- - - . ed. *Planter Management and Capitalism in Ante- Bellum Georgia: The Journal of Hugh Fraser Grant, Rice Grower*. New York: Columbia University Press, 1954.

“How Slaves Found God: A Theologian’s Research Provides Colorful Insights into the Faith of a People in Bondage.” *Atlanta Journal Constitution* (January 7, 1995): E6.

Howard, Rosanne. “Gullah People’s History Studied.” [Myrtle Beach, SC] *Sun News* (September 26, 1998): C1.

Howe, DeWolfe M. A. “The Song of Charleston.” *Atlantic Monthly* 146 (1930):108- 111.

Huckaby, Lolita. “Park Service Plans for Gullah Preservation.” [Beaufort, SC] *Carolina Morning News* (October 26, 2002): n.p.

Hucks, J. Jenkins. *Plantation Negro Sayings on the Coast of South Carolina in Their Own Vernacular*. Georgetown, SC: Charles W. Rouse, 1899. (pamphlet)

Hudson, Larry E. *To Have and to Hold: Slave Work and Family Life in Antebellum South Carolina*. Athens, GA: University of Georgia Press, 1997.

Hufford, David J. “A New Approach to the ‘Old Hag’: The Nightmare Tradition Reexamined.” In Wayland D. Hand, ed. *American Folk Medicine*. Berkeley, CA: University of California Press, 1976.

Huggins, Nathan Irvin. *Black Odyssey: The African American Ordeal in Slavery*. New York: Vintage Books, [reprint] 1990.

Hughson, Shirley C. *The Carolina Pirates and Colonial Commerce, 1670- 1740*. Baltimore, MD: Johns Hopkins University Press, 1894.

Hunter, Frances L. “Slave Society on the Southern Plantation.” *Journal of Negro History* 7 (January 1922): 1- 10.

Hunter, Stephanie. “‘Resurrection Man’ Dug Way into History.” [Augusta, GA] *Augusta Chronicle* (June 21, 1998).

Hunter, Tera W. *To ‘Joy My Freedom’: Southern Black Women’s Lives and Labors after the Civil War*. Cambridge, MA: Harvard University Press, 1997.

Huntley, Dan. “Escaping Progress: Sandy Island Will Stay Unspoiled.” [Charlotte, NC] *The Charlotte Observer* (August 2, 1997): 1A.

- - - . “Park Help for Gullah May Avert Disaster.” [Charlotte, NC] *The Charlotte Observer* (September 19, 2004): 1Y.

- - - . “A Vanishing Culture in the Lowcountry.” [Charlotte, NC] *The Charlotte Observer* (May 26, 2004): 1Y.

- - - . “Weaver Keeps a Sweetgrass Tradition: In her Hands Centuries- Old Skill from Africa Thrives.” *The Charlotte Observer* (March 17, 2002): Y1.

Hurmence, Belinda, ed. *My Folks Don’t Want Me to Talk About Slavery: Twenty- one Oral Histories of Former North Carolina Slaves*. Winston- Salem, North Carolina: John F. Blair Publisher, 1984.

Hurston, Zora Neale. *Mules and Men*. New York: Harper and Row, Publishers, Inc., [1935] 1990.

- - - . "The Negro in Florida, 1528- 1940." Federal Writers' Program in Florida, n.d.

- - - . *Their Eyes Were Watching God*. Chicago: University of Illinois Press [1937], 1978.

Hyatt, Harry Middleton. *Hoodoo—Conjuration—Witchcraft—Rootwork*. vols. 1 & 2. Hannibal, MO: Western Publishers, 1970.

"'I'd Like to See What's Down There': Archaeology and Oral History at Drayton Hall." Coastal Carolina University and National Trust for Historic Preservation (Video 82), 1995.

Ingersoll, Ernest. "Decoration of Negro Graves." *Journal of American Folklore* 5 (1892): 68- 69.

Inscoe, John C. "Carolina Slave Names: An Index to Acculturation." *Journal of Southern History* 49 (November 1983): 527- 53.

- - - . "Generation and Gender as Reflected in Carolina Slave Naming Practices: A Challenge to the Gutman Thesis." *South Carolina Historical Magazine* 94:4 (October 1993): 252- 63.

Irele, Abiola. *The African Experience in Literature and Ideology*. Bloomington, IN: Indiana University Press, 1990.

Jackoway, Elizabeth. *Yankee Missionaries in the South: The Penn School Experiment*. Baton Rouge, LA: Louisiana State University Press, 1980.

Jackson, Antoinette. "Africans at Snee Farm Plantation: Informing Representations of Plantation Life at a National Historic Site." In Michael V. Angrosino, series ed. *Southern Anthropological Society Proceedings*, No. 36. Athens, GA: University of Georgia Press, 2003.

Jackson, Bruce, ed. *The Negro and His Folklore in Nineteenth Century Periodicals*. Austin, TX: University of Texas Press, 1967.

- - - . "The Other Kind of Doctor: Conjure and Magic in Black American Folk Medicine" in Wayland D. Hand, ed. *American Folk Medicine: A Symposium*. Berkeley: University of California Press, 1976. 258- 72.

Jackson, Gordon. "Stafford Name a Link to the Past: Descendents of Slaves Meet at Homesites of Ancestors." [Jacksonville, FL] *The Times Union* (April, 24 2004): n.p.

Jackson, John Andres. *The Experience of a Slave in South Carolina*. London: Passmore & Alabaster, 1862.

Jackson, Juanita, Sabra Slaughter and J. Herman Blake. "The Sea Islands as a Cultural Resource." *The Black Scholar* 5:6 (March 1974): 32- 39.

Jackson, Luther Porter. "Educational Efforts of the Freedmen's Bureau and Freedmen's Aid Societies in South Carolina, 1862- 1870." *Journal of Negro History* 8:1 (1923): 1- 40.

- - - . "Religious Instruction of Negroes, 1830- 1860, with Specific References to South Carolina." *Journal of Negro History* 15 (1930): 72- 114.

Jackson, Patricia Ann Jones. "The Status of Gullah: An Investigation of Convergent Processes." Ph.D. dissertation, University of Michigan, 1978.

Jackson- Opoku, Sandra. "Black Charleston." *Essence* 16 (May 1985): 20.

Jacobson, Louis. "Civil Rights: Enhancing Southern Hospitality with Truth." *National Journal* (May 12, 2001): n.p.

Jahn, Daniel. "Slaves' Descendants Fight to Preserve African Heritage in US." *Agence France Presse* (June 8, 2003): n.p.

Jakubiak, David. "Campbell's Journey a Legacy of Caring, Determination." [Hilton Head Island, SC] *Island Packet* (February 3, 2002).

Jalon, Allan M. "The Burden of Rice: A UCLA Professor Confronts Conventional Perceptions of Slaves' Technological and Agricultural Contributions to America." *Los Angeles Times* (August 20, 2001): E1.

January, Alan F. "The South Carolina Association: An Agency for Race Control in Antebellum Charleston." *South Carolina Historical Magazine* 78:3 (July 1977): 191- 201.

Jelatis, Virginia Gail. "Tangled Up in Blue: Indigo Culture and Economy in South Carolina, 1747-1800." Ph.D. dissertation, University of Minnesota, 1999.

Jenkins, Wilbert Lee. "Chaos, Conflict and Control: The Responses of Newly Freed Slaves in Charleston South Carolina to Emancipation and Reconstruction." Ph.D. dissertation, University of North Carolina Greensboro, 1991.

Jennings, Thelma. "'Us Colored Women Had to Go Through A Plenty': Sexual Exploitation of African- American Slave Women." *Journal of Women's History* 1:3 (Winter 1990): 44- 74.

Jervey, Susan Ravenel. *Two Diaries from Middle St. John's, Berkeley, South Carolina, February- May 1865*. Pinopolis, SC: self- published by St. John's Hunting Club, 1921.

Johnson, Alonzo, and Paul Jersild, eds. *"Ain't Gonna Lay my 'Ligion Down": African American Religion in the South*. Columbia, SC: University of South Carolina Press, 1996.

John, Beverly M. "Culture and Social Change: The Values and Behaviors of African- American People in the South Carolina Lowcountry and Georgia Coastal Region in the Antebellum and Postbellum Periods." Ph.D. dissertation, University of California Berkeley, 1991.

Johnson, Charles and Patricia Smith, *et al*. *Africans in America: America's Journey through Slavery*. New York: Harcourt Brace & Co., 1998.

Johnson, Daniel M., and Rex R. Campbell. *Black Migration in America: A Social Demographic History*. Durham, NC: Duke University Press, 1981.

Johnson, Guion Griffis. *Antebellum North Carolina: A Social History*. Chapel Hill: University of North Carolina Press, 1937.

- - - . "The Gullah Dialect Revisited: A Note on Linguistic Acculturation." *Journal of Black Studies* 10:4 (June 1980): 417- 24.

- - - . "The Ideology of White Supremacy, 1876- 1910." In Fletcher Green, ed. *Essays in Southern History*. Chapel Hill, NC: University of North Carolina Press, 1949.

- - - . *A Social History of the Sea Islands with Special References to St. Helena Island, South Carolina*. Chapel Hill, NC: University of North Carolina Press, 1930.

Johnson, Guy Benton. "The Gullah Dialect Revisited: A Note on Linguistic Acculturation." *Journal of Black Studies* 10:4 (June 1980): 417- 24.

- - - . *Folk Culture on St. Helena Island, South Carolina*. Chapel Hill, NC: University of North Carolina Press, 1930.

- - - . Personal and family papers. Southern Historical Collection, University of North Carolina, Chapel Hill, NC.

Johnson, Michael P. "Denmark Vesey and His Co- Conspirators." *William and Mary Quarterly* 58:4 (October 2001): 915- 975.

- - - . Planters and Patriarchy: Charleston 1800- 1860. *Journal of Southern History* 46:1 (February 1980): 45- 72.

- - - . "Runaway Slaves and the Slave Communities in South Carolina, 1799 to 1830." *William and Mary Quarterly* (3rd series) 38:3 (July 1981): 418- 41.

- - - . "Smothered Slave Infants: Were Slave Mothers at Fault?" *Journal of Southern History* 47 (November 1981): 493- 520.

Johnson, Michael P. and James L Roark. *Black Masters: A Free Family of Color in the Old South*. New York: W. W. Norton, 1986.

- - - . eds. "'A Middle Ground': Free Mulattoes and the Friendly Moralist Society of Antebellum Charleston." *Southern Studies* 21:3 (Fall 1982): 246- 65.

- - - . *No Chariot Let Down: Charleston's Free People of Color on the Eve of the Civil War*. Chapel Hill, NC: University of North Carolina Press, 2000

Johnson, Paul E., ed. *African American Christianity: Essays in History*. Berkeley, CA: University of California Press, 1994.

Johnson, Rheta Grimsley. "Hog Hammock Folks Belong on Hero List." *Atlanta Journal Constitution* (December 21, 1999): C1.

- - - . "I Fell in Love with the Idea that Working People Could Somehow Manage to Hold onto Paradise." *Atlanta Journal Constitution* (August 20, 2000):M1.

- - - . "It Was the Kind of Day that Restores your Faith in Humanity." *Atlanta Journal Constitution* (January 7, 2001):M1.

- - - . "My First Trip to Sapelo Island: Hog Hammock Clings to Shifting Sands." *Atlanta Journal Constitution* (March 14, 1999):C1.

Johnson, Walter. "Time and Revolution in African America: Temporality and the History of Atlantic Slavery." *Black Renaissance/Renaissance Noire* 3:2 (Summer 2001).

Johnson, Whittington B. "Andrew C. Marshall: A Black Religious Leader of Antebellum Savannah." *Georgia Historical Quarterly* 69:2 (1985): 173- 192.

- - - . "Free Blacks in Antebellum Savannah: An Economic Profile." *Georgia Historical Quarterly* 64 (Winter 1980): 418- 29.

Jones, Alice Eley. "West African Spiritualism in North Carolina's Buildings and Crafts." *North Carolina Folklore Journal* 47:2 (Midwinter 2000): n.p.

Jones, Bessie. *For the Ancestors: Autobiographical Memories*. John Stewart, ed. Urbana, IL: University of Illinois Press, 1983.

Jones, Bessie and Bess Lomax Hawes. *Step it Down: Games, Plays, Songs & Stories from the Afro-American Heritage*. Athens, GA: University of Georgia Press, 1972.

Jones, Charles Colcock. *The Seige of Savannah in December 1864 and the Confederate Operations in Georgia and the Third Military District of South Carolina during General Sherman's March from Atlanta to the Sea*. Albany, NY: J. Munsell, 1874.

- - - . *Suggestions on the Religious Instruction of Negroes in the Southern States*. Philadelphia: Presbyterian Board of Publication, 1847. Quoted in Robert S. Starobin. *Blacks in Bondage: Letters of American Slaves* New York: New View Points, 1974, 42.

Jones, Charles Colcock, Jr. *Negro Myths from the Georgia Coast Told in the Vernacular*. Athens, GA: University of Georgia Press, [1888] 2000.

Jones, Edward P. *The Known World*. New York: Amistad Press- Harper Collins, 2003.

Jones, J. Ralph. "Portraits of Georgia Slaves." *Georgia Review* 21 (Spring 1967).

Jones, Jacqueline. *Labor of Love, Labor of Sorrow: Black Women, Work, and the Family from Slavery to the Present*. New York: Basic Books, 1985.

Jones, Katharine. *Port Royal Under Six Flags*. Indianapolis, IN: Bobbs- Merrill Co., 1960.

Jones, Lewis P. *South Carolina, A Synoptic History for Laymen*. Lexington, South Carolina: Sandlapper Store, 1971.

Jones, Mark, John Wertheimer *et al.* "Pinkney and Sarah Ross: The Legal Journey of an Ex- Slave and His White Wife on the Carolina Borderlands during Reconstruction." *SC Historical Magazine* 103 (October 2002): 325- 50.

Jones, Norrece T., Jr. *Born a Child of Freedom, Yet a Slave: Mechanisms of Control and Strategies of Resistance in Antebellum South Carolina*. Hanover, NH: Wesleyan University Press, 1990.

- - - . "Control Mechanisms in South Carolina Slave Society, 1800- 1865." Ph.D. dissertation, Northwestern University, 1981.

Jones, Steven L. "The African- American Tradition in Vernacular Architecture." In Theresa A. Singleton. *The Archaeology of Slavery and Plantation Life*. New York: Academic Press, 1985.

Jones- Jackson, Patricia A. "Alive: African Tradition on the Sea Islands." *Negro Historical Bulletin* 46:3 (Fall 1977): 95- 96.

- - - . "The Audience in Gullah and Igbo: A Comparison of Oral Traditions." *College Language Association Journal* 27 (December 1983): 197- 209.

- - - . "Contemporary Gullah Speech: Some Persistent Linguistic Features." *Journal of Black Studies* 13:3 (1983): 289- 303.

- - - . "Gullah: On the Question of Afro- American Language." *Anthropological Linguistics* 20 (December 1978): 422- 427.

- - - . "Let the Church Say 'Amen': The Language of Religious Rituals in Coastal South Carolina." In Michael Montgomery, ed. *The Crucible of Carolina: Essays in the Development of Gullah Language & Culture*. Athens, GA: University of Georgia Press, 1994.

- - - . "Old- time Talk, We Still de Talkem Here!" *National Geographic* 172 (December 1987): 744.

- - - . "On Decreolization and Language Death in Gullah." *Language in Society* 13 (Fall 1984): 351- 362.

- - - . "Oral Tradition of Prayer in Gullah." *Journal of Religious Thought* 39 (Spring/Summer 1982): 21- 33.

- - - . "The Status of Gullah: An Investigation of Convergent Processes." Ph.D. dissertation, University of Michigan, 1978.

- - - . *When Roots Die: Endangered Traditions on the Sea Islands*. Athens, GA: University of Georgia Press, 1987.

Jordan, Ervin L., Jr. *Black Confederates and Afro- Yankees in Civil War Virginia*. Charlottesville, VA: University of Virginia Press, 1995.

Jordan, Francis Harold. "Across the Bridge: Penn School and Penn Center." Ed.D. dissertation, University of South Carolina, 1991.

Joseph, J. Walter. "Liberty: An Archaeological Examination of Social Identity within the Plantation Culture of the Lowcountry of Georgia." Ph.D. dissertation, University of Pennsylvania, 1993.

- - - . "Patterns and Process in the Plantation Archaeology of the Lowcountry of Georgia and South Carolina." *Historical Archaeology* 23:1 (1989): 55- 68.

- - - . "Resistance and Compliance: CRM and the Archaeology of the African Diaspora." *Historical Archaeology* 38:1 (Spring 2004), n.p.

Joseph, J. W., and Martha Zierdon, eds. *Another's Country: Archaeological and Historical Perspectives on Cultural Interactions in the Southern Colonies*. Tuscaloosa, AL: University of Alabama Press, 2002.

Joyce, Dee Dee. "The Charleston Landscape on the Eve of the Civil War: Race, Class, and Ethnic Relations in Ward Five." In Linda F. Stine, *et al. Carolina's Historical Landscapes: Archaeological Prospectives*. Knoxville, University of Tennessee Press, 1997.

Joyner, Brian. *African Reflections on the American Landscape: Identifying and Interpreting Africanisms*. Washington, DC: NPS, U.S. Department of the Interior, 2003

Joyner, Charles W. "The Creolization of Slave Folklife: All Saints Parish, South Carolina, as a Test Case." [Canada] *Historical Reflections* 6:2 (1979): 435- 53.

- - - . "'If You Ain't Got Education': Slave Language and Slave Thought in Antebellum Charleston." In Michael O'Brien and David Moltke- Hansen, eds. *Intellectual Life in Antebellum Charleston*, 255- 278. Knoxville: University of Tennessee Press, 1986.

- - - . "Oral History as a Communicative Event: A Folkloristic Perspective." *Oral History Review* (1979): 47- 52.

- - - . *Remember Me: Slave Life in Coastal Georgia, 1750- 1860*. Atlanta: Georgia Humanities Council, 1989.

- - - . "Slave Folklife on the Waccamaw Neck: Antebellum Black Culture in the South Carolina Lowcountry." Ph.D. dissertation, University of Pennsylvania, 1977.

- - - . "The Trickster and the Fool: Folktales and Identity among Southern Plantation Slaves." *Plantation Society* 2 (1982): 149- 156.

Joyner, Stephanie L. "Slave Housing Patterns within the Plantation Landscape of Coastal Georgia." M.S. thesis, University of Florida, 2003.

Kane, Sharyn, and Richard Keeton. *In Those Days: African- American Life near the Savannah River*. Atlanta: National Park Service, Southeast Region, 1994.

Kantrowitz, Stephen. *Ben Tillman and the Reconstruction of White Supremacy*. Chapel Hill, NC: University of North Carolina Press, 2000.

Kaplan, Bruce. "Gullah: The Unique Culture of America's Sea Islands, the African- American Language that Gave Us Uncle Remus, Struggles to Survive." *Utne Reader* (January- February 1990): 23.

Kaplan, Janice L. "West African Gullah Traditions Kept Alive on the Sea Islands." *Los Angeles Times* (July 21, 1991): A30.

- - - . "Culture Shock: Sea Islands' African Heritage Strong Despite Encroachment of Development." *Chicago Tribune* (August 11, 1991): A8.

Katz, William Loren. *Breaking the Chains: African American Slave Resistance*. New York: Athenaeum, 1990.

Kay, Marvin L., and Lorin Lee Carey. "Slave Runaways in Colonial North Carolina." *North Carolina Historical Review* 63 (January 1986): 1- 39.

- - - . *Slavery in North Carolina, 1748- 1775*. Chapel Hill, NC: University of North Carolina Press, 1995.

- - - . "'They Are Indeed the Constant Plague of Their Tyrants': Slave Defense of a Moral Economy in Colonial North Carolina, 1748- 1772." In Gad Heuman, ed. *Out of the House of Bondage: Runaways, Resistance, and Marronage in Africa and the New World*. London: Frank Cass, 1986.

Keber, Martha L. *Seas of Gold, Seas of Cotton: Christophe Poulain DuBignon of Jekyll Island*. Athens, GA: University of Georgia Press, 2002.

Keel, Bennie C. "Research Proposal for Archaeological Investigations of a Mid- 18th Century Structure at Charles Pinckney National Historic Site." Tallahassee, FL: National Park Service, Southeast Archaeological Center, 1998.

Kellison, Kimberly R. "Toward Humanitarian Ends? Protestants and Slave Reform in South Carolina, 1830- 1865." *South Carolina Historical Magazine* 103:3 (July 2002): 210- 225.

Kelso, William Martin. "Captain Jones' Wormslow: A Historical, Archaeological, and Architectural Study of an Eighteenth Century Plantation Site Near Savannah, Georgia." Ph.D. dissertation, Emory University, 1971.

Kennedy, Cynthia M. "Braided Relations, Entwined Lives: Charleston, South Carolina Women at Work and Leisure, and the Social Relations of the Slave Society, 1780- 1860." Ph.D. dissertation, University of Maryland/College Park, 1999.

Kennedy, David J. "Residential Associations as State Actors: Regulating the Impact of Gated Communities on Nonmembers." *Yale Law Journal* 105:3 (December 1995): 761- 793.

Kennedy, Lionel H. and Thomas Parker. *An Official Report of the Trials of Sundry Negroes Charged with an Attempt to Raise an Insurrection in the State of South Carolina, Preceded by an Introduction and Narrative, and in an Appendix, a Report of the Trials of Four White Persons, on Indictments for Attempting to Excite the Slaves to Insurrection*. (Prepared at the request of the Court) Charleston, SC: J. R. Schenk, 1822.

Kenney, Patricia L. "LaVilla, Florida, 1886- 1887: Reconstruction Dreams and the Formation of a Black Community." In David R. Colburn and Jane L. Landers, eds. *The African American Heritage of Florida*. Gainesville, FL: University Press of Florida, 1995, 185- 206.

Kern- Foxworth, Marilyn. *Uncle Ben, Aunt Jemima, and Rastus*: *Blacks in Advertising, Yesterday, Today, and Tomorrow*. Westport, Connecticut: Greenwood Press, 1994.

Killion, Ronald G. and Charles T. Walker. *A Treasure of Georgia Folklore*. Atlanta, GA: Cherokee Publishing Co., 1972.

- - - , eds. *Slavery Time When I Was Chillun Down on Marster's Plantation.* Savannah, GA: Beehive Press, 1973.

King, Wilma. "'Suffer with Them till Death': Slave Women and Their Children in Nineteenth Century America." In David Barry Gasper and Darlene Clark Hine *More than Chattel*. Bloomington, IN: Indiana University Press, 1996.

Kinlaw- Ross, Eleanor. *Dat Gullah and Other Geechie Traditions*. Atlanta, GA: Crick Edge Productions, 1996.

- - - . *Gullah Voices: From Slave Ships to Sea Island Plantations, Living African Culture and Language Preserved.* Audio tapes with companion volume. Crick Edge Productions, 1999.

Kiple, Kenneth F. and Virginia H. Kiple. "Black Tongue and Black Men: Pellagra and Slavery in the Antebellum South." *Journal of Southern History* 43 (August 1977): 411- 28.

- - - . "Slave Child Mortality: Some Nutritional Answers to a Perennial Puzzle." *Journal of Social History* 10 (July 1977): 284- 309.

Klein, Herbert S. *The Middle Passage: Comparative Studies in the Atlantic Slave Trade*. Princeton, NJ: Princeton University Press, 1978.

Klein, Herbert S. *et al*. "Transoceanic Mortality: The Slave Trade in Comparative Perspective." *William and Mary Quarterly* 58:1 (January 2001): 93- 118.

Klein, Thomas B. "Divergent Processes in Gullah/Geechee: Evidence from Sound Structure." Paper presented at Language Variety in the South: Historical and Contemporary Perspectives, University of Alabama, April 2004.

Klingberg, Frank Joseph. *Appraisal of the Negro in Colonial South Carolina: A Study in Americanization*. (Perspectives in American History 31). London: Porcupine Press, [1941] 1975.

Knight, Frederick Clarence. "Seeds of Change: West African Workers and the Making of the British Americas, 1650- 1850." Ph.D. dissertation, University of California Riverside, 2000.

Koger, Larry. *Black Slaveowners: Free Black Slave Masters in South Carolina, 1790- 1860*. Columbia, SC: University of South Carolina Press, [1985] 1995.

Korn, Bertram Wallace. "Jews and Negro Slavery in the Old South, 1789- 1865." In Leonard Dinnerstein and Mary Dale Palsson, eds. *Jews in the South*. Baton Rouge, LA: Louisiana State University Press, 1973.

Kovacik, Charles, and John Winberry. *South Carolina: The Making of a Landscape*. Boulder, CO: University of Colorado Press, 1987.

Krapp, George Phillip. "The English of the American Negro." *American Mercury* 2 (June 1924): 190- 195.

Krebs, Laurie. *A Day in the Life of a Colonial Indigo Planter*. New York: PowerKids Press, 2003.

Kreidler, Jan Christine Enney. "Julia Mood Peterkin: Expending Trickster Energy in Gullah Tales." Ph.D. dissertation, Indiana University of Pennsylvania, 2004.

Kretzmar, William A., Jr. "Mapping Southern English." *American Speech* 78:2 (Summer 2003): 130- 49.

Krio, Leone. "Componentiality and the Origin of Gullah in Sea and Land: Cultural and Biological Adaptations in the Southern Coastal Plain." In James L. Peacock and James C. Sabella, eds. *Southern Anthropological Society Proceedings 21*. Athens, GA: University of Georgia Press, 1988.

Kropf, Schuyler. "Turner Donates St. Helena's Island Land Back to Community." [Charleston, SC] *Post and Courier* (August 16, 2002): A1.

Kuyk, Betty M. "Seeking Family Relationships." Negro History Bulletin 42:3 (July- September 1979):60.

Lachicotte, Alberta Morel. *Georgetown Rice Plantations*. Spartanburg, SC: The Reprint Co., [1955] 1989.

Lamuniere, Michelle Chesbro. "'Roll, Jordan, Roll': The Gullah Photographs of Doris Ulmann (African Americans). M.A. thesis, University of Oregon, 1994.

Lander, Ernest. "Ante- bellum Rice Milling in South Carolina." *South Carolina Historical Magazine* 52 (July 1951): 125- 32.

Landers, Jane G. *Against the Odds: Free Blacks in the Slave Societies of the Americas* (Studies in Slave and Post- Slave Societies and Cultures). Portland, OR: Frank Cass Publishers, 1996.

- - - . "*Gracia Real de Santa Teresa de Mose*: A Free Black Town in Spanish Colonial Florida." *American Historical Review* 95 (February 1990): 9- 30.

- - - . "Spanish Sanctuary: Fugitives in Florida, 1687- 1790." *Florida Historical Quarterly* 63:2 (January 1983): 296- 313.

- - - . "Traditions of African American Freedom in Spanish Colonial Florida." In David R. Colburn and Jane L. Landers, eds. *The African American Heritage of Florida*. Gainesville, FL: University Press of Florida, 1995.

Landers, Jane G, ed. *Colonial Plantations and Economy in Florida*. Gainesville, FL. University Press of Florida, 2000.

Lane, Levin. Papers, 1802- 1858. Southern Historical Collection, Manuscripts Department, Academic Affairs Library of the University of North Carolina, Chapel Hill, NC.

Lane, Mills, ed. *Neither More nor Less than Men: Slavery in Georgia*. Savannah, GA: Beehive Press, 1993.

Lanehart, Sonja L., ed. *Sociocultural and Historical Contexts of African American English* (Varieties of English around the World, General Series 27). Philadelphia: John Benjamin Publishing Co., 2001.

"Langdon, Young, and Meares Family Papers, 1771- 1877, New Hanover County, North Carolina." Southern Historical Collection, Manuscripts Department, Academic Affairs Library of the University of North Carolina, Chapel Hill, NC.

Lange, Frederick W. and Jerome Handler, "The Ethnohistorical Approach to Slavery." In Theresa A. Singleton. The Archaeology of Slavery and Plantation Life. New York: Academic Press, 1985.

Langley, Harold D. "The Negro in the Navy and the Merchant Service, 1798- 1860." *Journal of Negro History* 52 (October 1967): 270- 87.

Larson, Scott M. "Supreme Court Rules against Sandfly Churches on Wal- Mart Development." *Savannah Morning News* (July 13, 2004): A1.

Lathan, Algerna Windley. "A Profile of Runaway Slaves in Virginia and South Carolina from 1730 through 1787." In Graham Hodges, ed. *Studies in African American History and Culture*. New York: Garland Publishing Co., 1995.

Lavely, Marcia Marvin. "A Study of American Literature Which Incorporates the Use of the Gullah Dialect (Sea Islands)." Ph.D. dissertation, University of Mississippi, 1991.

Lawler, William Stewart. "The Power of Performance and the Performance of Power: A Master/Mistress Trope for Black Cultural Difference in the African Diaspora." Ph.D. Dissertation: university of Kansan, 2001.

Lawrence, A. W. *Fortified Trade- Posts: The English in West Africa*. London: Jonathan Cape Ltd., 1969.

Lawrence, James B. "Religious Education of the Negro in the Colony of Georgia." *Georgia Historical Quarterly* 14 (March 1930): 46- 47.

Lawson, Dennis T. *No Heir to Take Its Place: The Story of Rice in Georgetown County, South Carolina*. Georgetown, SC: The Rice Museum, 1972.

Lawton, Samuel M. "The Religious Life of Coastal and Sea Island Negroes." Ph.D. dissertation, George Peabody College, 1939.

Learning, Hugo Prosper. *Hidden Americans: Maroons of Virginia and the Carolinas*. New York: Garland Publishing, 1995.

Lefebvre, Claire. "The Interplay of Relexification and Leveling in Creole Genesis and Development." *Linguistics* (March 2001).

Legare, J. D. "Account of an Agricultural Excursion Made into the South of Georgia in the Winter of 1832." *Southern Agriculturist* (April- June 1832).

Leigh, Jack. *Oystering: A Way of Life*. Charleston, SC: Carolina Art Association, 1983.

Lerner, Gerda. *The Grimke Sisters from South Carolina: Rebels against Slavery*. New York: Houghton Mifflin Co., 1967.

Leslie, Ian. "Turner Drops Lands End Damages Claim." [Hilton Head Island, SC] *Island Packet* (July 26, 2002).

Leslie, Kent Anderson. *Woman of Color, Daughter of Privilege: Amanda America Dickson, 1849- 1893*. Athens, GA: University of Georgia Press, 1995.

Lesser, Charles H. *South Carolina Begins: The Records of a Proprietary Colony, 1663- 1721*. Columbia, SC: SC Dept. of Archives and History, 1995.

- - - . *Relic of the Lost Cause: The Story of South Carolina's Ordinance of Secession*. Columbia, SC: SC Dept. of Archives and History [rev. ed.], 1996.

Levine, Lawrence W. *The Unpredictable Past: Explorations in American Cultural History*. New York: Oxford University Press, 1993.

Lewicki, Tadeusz. *West African Food in the Middle Ages*. New York: Cambridge University Press, 1974.

Lewis, Kenneth E. *Hampton Place: A South Carolina Rice Plantation*. (Research Manuscript Series 151). Publications of the South Carolina Institute of Archaeology and Anthropology, Columbia, SC: University of South Carolina, 1979.

- - - . "Plantation Layout and Function in the South Carolina Low Country." In Theresa Singleton, ed. *The Archaeology of Slavery and Plantation Life*. Orlando, FL: Academic Press, 1985.

Lewis, Kenneth E., and Helen Haskell. *Hampton II: Further Archaeological Investigations at a Santee River Plantation*. (Research Manuscript Series 161), Institute of Archaeology and Anthropology, Columbia, SC: University of South Carolina, 1980.

- - - . *The Middleton Place Privy: A Study of Discard Behavior and the Archaeological Record*. Research Manuscript Series 174. Publications of the Institute of Archaeology and Anthropology, Columbia, SC: University of South Carolina, 1981.

Lewis, James Oliver. "Presenting Slavery: The Perils of Telling America's Racial Story." *Legacy* 11:2 (2000): 10- 19.

Lewis, Laura. "Power of Gullah." [Myrtle Beach, SC] *Sun News* (January 21, 2001): E1.

- - - . "Secrets Woven Over Time." [Myrtle Beach, SC] *Sun News* (March 3, 2001): E1.

Lewis, Morey Sandlis. "Learning and Working for Ourselves: Education and Economic Development among the Georgia Freedmen, 1864- 1920." M.A. thesis, Michigan State University, 2002.

Li, Ning. "An Interactive Computer- Based Interpretation Center." *Proceedings of the 1989 National Interpreters Workshop, St. Paul, Minnesota* (1989): 79- 83.

Liebens, Johan. "Map and Database Construction for an Historic Cemetery: Methods and Applications." *Historical Archaeology* 37:4 (Winter 2003).

Lincoln, C. Eric and Lawrence H. Mamiya (Contributor). *The Black Church in the African American Experience*. Durham, NC: Duke University Press, 1990.

Linder, Suzanne C. *Historic Atlas of the Rice Plantations of the ACE Basin, 1860*. Columbia, SC: South Carolina Department of Archives and History, 1995.

Linder, Suzanne C., and Marta Leslie Thacker. *Historical Atlas of the Rice Plantations of Georgetown County and the Santee River*. Columbia, SC: SC Department of Archives and History for the Historic Ricefields Association, 2001.

Lindsay, Nick, ed. *And I'm Glad: An Oral History of Edisto Island*. Charleston, SC: Tempus Publishing, Inc., 2000.

- - - , ed. *An Oral History of Edisto Island: The Life and Times of Bubberson Brown*. Goshen, IN: Pinchpenny Press, 1977.

- - - , ed. *An Oral History of Edisto Island: Sam Gadsden Tells the Story*. Goshen, IN: Pinchpenny Press, 1977,

- - - . "Stories from Edisto Island." *Southern Exposure* 10:3 (May- June 1983): 27- 32.

Lingo, Karen. "Sing Hallelujah." *Southern Living* 32 (July 1997): 44- 5.

Linker, Kate. "Went Looking for Africa: Carrie Mae Weems, Artist." *Artforum International* (February 1993): n.p.

Little, Thomas J. "The South Carolina Slave Laws Reconsidered, 1670- 1700." *South Carolina Historical Magazine* 94:2 (April 1993): 86- 101.

Littlefield, Daniel C. "Abundance of Negroes of that Nation: The Significance of African Ethnicity in Colonial South Carolina." In David R. Chesnutt and Clyde N. Wilson, eds. *The Meaning of South Carolina History: Essays in Honor of George C Rogers, Jr*. Columbia, SC: University of South Carolina Press, 1991.

- - - . "Charleston and Internal Slave Redistribution." *South Carolina Historical Magazine* 87:2 (April 1986): 93- 105.

- - - . "Continuity and Change in Slave Culture: South Carolina and the West Indies." *Southern Studies* 26:3 (1987): 202- 216.

- - - . "Plantations, Paternalism, and Profitability: Factors Affecting African Demography in the Old British Empire." *Journal of Southern History* 46 (May 1981): 167- 82.

- - - . "Planter Preferences: A Study of Slavery and the Slave Trade in Colonial South Carolina." Ph.D. dissertation, Johns Hopkins University, 1977.

- - - . "The Slave Trade to South Carolina: A Profile." *South Carolina Historical Magazine* 101:2 (2000): 110- 141.

Litwack, Leon F. *Been in the Storm So Long: The Aftermath of Slavery*. New York: Vintage Books, 1980.

- - - . *Trouble in Mind: Black Southerners in the Age of Jim Crow*. New York: Alfred A. Knopf, 1998.

Livingstone, F. B. "Anthropological Implications of Sickle Cell Gene Distribution in West Africa." *American Anthropologist* 60:4 (1958): 533- 62.

Lloyd, Christopher. *The Navy and the Slave Trade: The Suppression of the African Slave Trade in the Nineteenth Century*. Portland, OR: Frank Cass Publishers, 1968.

"Local Gullah Culture Gets New Sign of Respect: Use National Trust Designation for Specific Improvements." [Hilton Head Island, SC] *Island Packet* (June 1, 2004).

Lockley, Timothy James. *Lines in the Sand: Race and Class in Lowcountry Georgia, 1750- 1860*. Athens, GA: University of Georgia Press, 2001.

Lofton, John M. *Denmark Vesey's Revolt: The Slave Plot that Lit a Fuse to Fort Sumter*. Kent, OH: Kent State University Press, reprint ed., 1983.

- - - . *Insurrection in South Carolina: The Turbulent World of Denmark Vesey*. Yellow Springs, OH: Antioch Press, 1964.

Louden, Mark L. "African- Americans and Minority Language Maintenance in the United States." *Journal of Negro History* 85:4 (September 2000): 223- 40.

Lovejoy, Paul E., ed. *Africans in Bondage: Studies in Slavery and the Slave Trade: Essays in Honor of Philip D. Curtin*. Madison, WI:

Lovell, Caroline Couper. *The Golden Isles of Georgia*. Boston, MA: Little, Brown, and Co., 1932.

Lowe, Richard B., and Randolph B. Campbell. "The Slave Breeding Hypothesis: A Demographic Comment on the 'Buying' and 'Selling' States." *Journal of Southern History* 42 (August 1976): 401- 12.

Lucas, J. "But Porgy Is Getting Awfully Close." *Carleton Miscellaney* 14 (Spring- Summer 1974): 67- 72.

Lumsden, C. "Gullah and its Identity: A Community at the Crossroads of Communication." Ph. D. dissertation, North Carolina State University, 2000.

Lyons, Mary E. *Catching the Fire: Philip Simmons, Blacksmith*. Boston, MA: Houghton- Mifflin, 1997.

Maccarry, Bert and Noel. "How Storytellers Contribute to a Better Understanding of Cultural Diversities." *Legacy* 2:2 (1991) 6- 7.

Mack, Linda D. “A Comparative Analysis of Linguistic Stress Patterns in Gullah (Sea Island Creole) and English Speakers.” M.A. thesis, University of Florida, 1984.

Mackall, Lloyd. “Center Director Promotes Gullah.” [Myrtle Beach, SC] *Sun News* (February 26, 2004): A1.

Mackle, Elliott. “Penn Center a Magnet for Coastal Culture.” *Atlanta Journal Constitution* (October 30, 1996): B6.

MacCleod, Duncan J. *Slavery, Race, and the American Revolution*. New York: Cambridge University Press, 1975.

MacMahon, Darcie and Kathleen Deagan. “Legacy of Fort Mose: A Florida Marsh Yields the Remnants of Colonial America’s First Free Black Settlement.” *Archaeology* 49:5 (1996).

Makoni, Sinfred, *et al*, eds. *Black Linguistics: Language, Society, and Politics in Africa and the Americas*. New York: Routledge, 2003.

Mallory, Maria. “Is the ‘Mecca of Africanism’ Not Long for this World? Gullah People of St. Helena Island.” *Business Week* (August 15, 1994): 22- 23.

Manley, Howard. “An Island’s Vanishing Culture.” *Newsweek* 117 (January 14, 1991): 27.

Mannix, Daniel P., and Malcolm Cowley. *Black Cargoes: A History of the Atlantic Slave Trade, 1518-1865*. New York: Viking Press, 1969.

Manring, Maurice M. “Aunt Jemima Explained: The Old South, the Absent Mistress, and the Slave in a Box.” *Southern Cultures* 2 (Fall 1995): 19- 44.

Marble, Laura. “Event Honors Mitchellville.” [Hilton Head Island, SC] *Island Packet* (February 3, 2002).

- - - . “Older Homes Disappearing: Pre- 1950s Dwellings Becoming Scarce.” [Hilton Head Island, SC] *Island Packet* (May 27, 2002).

- - - . “Old Stores Were Centers of Commerce and Community.” [Hilton Head Island, SC] *Island Packet* (May 28, 2002).

- - - . “Practice Still Part of Faith.” [Hilton Head Island, SC] *Island Packet* (May 21, 2001).

- - - . “Professors Finish Studying Gullah Culture.” [Hilton Head Island, SC] *Island Packet* (July 2, 2002).

- - - . “Project Analyzes ‘DNA Roots.’” [Hilton Head Island, SC] *Island Packet* (July 15, 2001).

- - - . “The Real Brer Rabbit Revealed.” [Hilton Head Island, SC] *Island Packet* (March 4, 2001).

- - - . “Restored Schoolhouse a Testament to Times Gone By.” [Hilton Head Island, SC] *Island Packet* (May 29, 2002).

Marotti, Frank, Jr. “Negotiating Freedom in St. Johns County, Florida, 1812- 1862.” Ph.D. dissertation, University of Hawaii, 2003.

Marr, Don H., Jr. “Slave Trading and Slave Traders in North Carolina.” M.A. thesis, East Carolina University, 1995.

Marscher, Bill and Fran. *The Great Sea Island Storm of 1893*. Macon, GA: Mercer University Press, [reprint] 2004.

Marsh, J. B. T. *The Story of the Jubilee Singers with Their Songs*. Boston: Houghton Mifflin and Co., 1880.

Martinez, Carlos A. “Culture Sequence on the Central Georgia Coast, 1000 B.C.- 1650 A.D.” M.A. thesis, University of Florida, 1975.

Mason, Julian. "The Etymology of 'Buckaroo.'" *American Speech* 35:1 (February 1960): 51- 55.

Massey, Gregory D. *John Laurens and the American Revolution*. Columbia, SC: University of South Carolina Press, 2000.

Mathews, John M. "Black Newspapermen and the Black Community in Georgia, 1890- 1930." Georgia Historical Quarterly 63:3 (Fall 1983): 356- 81.

Matthews, Christy S. "Where Do We Go from Here? Researching and Interpreting the African-American Experience." *Historical Archaeology* 31:3 (1997): 107- 113.

Matthews, Donald Henry. *Honoring the Ancestors: An African Cultural Interpretation of Black Religion and Literature*. New York: Oxford University Press, 1998.

Matthews, H. F. "Root Work: A Description of an Ethnomedical System in the American South." *Southern Medical Journal* 80:7 (1987): 885- 91.

Matthews, Marty D. "Charles Pinckney: A Forgotten Founder." Ph.D. Dissertation, University of South Carolina, 2001.

Matthews, T.D., F.W. Stapor, Jr., C. R. Richter, *et al.*, eds. "Ecological Characterization of the Sea Island Coastal Region of South Carolina and Georgia." In *Physical Features of the Characterization Area*. Washington, DC: U.S. Fish and Wildlife Service, Office of Biological Services, 1980.

May, Lee. "Juke Joints: Souls in Need Still Find Some Solace in Blues- Cranking, Good- Time Places." *Atlanta Journal Constitution* (April 10, 1994): M2.

Maze, Jonathan. "'Haves' Meet 'Have- nots' on Daniel Island." [Charleston, SC] *Post and Courier* (November 11, 2004): A1.

Mbuya, Judith. "Group Takes Ambassadors Beyond Beltway: Africa Seeks Grass- Roots Ties to U. S. Blacks." *The Washington Times* (June 12, 1997): n.p.

McClelland, Linda F., J. Timothy Keller, Genevieve Keller, and Robert Melnick. *Guidelines for Evaluating and Documenting Rural Historic Landscapes*. (Bulletin 30) Washington, DC: National Register of Historic Places, 1990.

McCray, Jack. "Camp Meeting Promises Uplifting Experience. [Charleston, SC] *Post and Courier* (June 5, 1998): A15.

- - - . "Play Pulls from Gullah Culture." [Charleston, SC] *Post and Courier* (May 28, 1999): A12.

McCurry, Stephanie. *Masters of Small Worlds: Yeoman Households, Gender Relations, & the Political Culture of the Antebellum South Carolina Low Country*. New York: Oxford University Press, 1995.

- - - . "The Two Faces of Republicanism: Gender and Proslavery Politics in Antebellum South Carolina." *Journal of American History* 78 (March 1992): 1248- 56.

McCusker, John J. and Russell R. Menard. *The Economy of British America, 1607- 1789*. Chapel Hill, NC: University of North Carolina Press, 1985.

McDowell, Elsa. "In Search of Sweetgrass for Basketmakers." [Charleston, SC] *Post and Courier* (December 10, 2000), n.p.

- - - . "Janie Hunter Leaves Legacy for Generations." [Charleston, SC] *Post and Courier* (June 17, 1997): B1.

- - - . "Moving Graves More Palatable to Families." [Charleston, SC] *Post and Courier* (April 26, 2001): B1.

McFarlane, Suzanne S. "The Ethnoarcheology of a Slave Community: The Couper Plantation Site." M.A. thesis, University of Florida, 1975.

McFeely, William S. *Sapelo's People: A Long Walk into Freedom*. New York: W. W. Norton & Co., 1994.

McGuire, Mary Jennie. "Getting Their Hands on the Land: The Revolution in St. Helena Parish, 1861-1900." Ph.D. dissertation, University of Michigan, 1985.

McIver, Patrona Royall. *History of Mt. Pleasant, South Carolina*. Mt. Pleasant, SC: Christ Church Parish Preservation Society, Inc., [1960] 1995.

McKee, Larry. "The Earth Is Their Witness." *The Sciences* (March/April, 1995): 35- 41.

McKinley, Shepherd W. "The Origins of 'King' Phosphate in the New South: Workers, Managers, and Entrepeneurs in South Carolina's Phosphate and Fertilizer Industries, 1865- 1884." Ph.D. dissertation, University of Delaware, 2003.

McKinney, Harold. "Negro Music." *Negro History Bulletin* 27:5 (February 1964): 120- 127.

McKinney, W. A. "Gullah: A Study in Black." M.A. thesis, Southwest Texas State University, 1941.

McLaurin, Melton A. "Commemorating Wilmington's Racial Violence of 1898: From Individual to Collective Memory." *Southern Cultures* 6 (Winter 2000): 35- 57.

McLean, David Costen, Jr. "Maternal and Paternal Population Genetic Affinities of Gullah- Speaking African- Americans." Ph.D. dissertation, Medical University of South Carolina, 2003.

- - - . "Three Novel mtDNA Restriction Site Polymorphisms Allow Exploration of Population Affinities of African Americans. *Human Biology* 75:2 (April 2003): 147- 161.

McMillan, Richard. "Savannah's Coastal Slave Trade: A Quantitative Analysis of Ship Manifests, 1840- 1850." *Georgia Historical Quarterly* 78:2 (1994): 83- 106.

McMillen, Sally. "'No Uncommon Disease': Neonatal Tetanus, Slave Infants, and the Southern Medical Profession." *Journal of the History of Medicine and Allied Sciences* 46 (1991): 291- 314.

McMillin, James A. *The Final Victims: Foreign Slave Trade to North America, 1783- 1810 (The Carolina Lowcountry and the Atlantic World)*. Columbia, SC: University of South Carolina Press, 2004.

McPherson, James M. *The Negro's Civil War: How American Blacks Felt and Acted during the War for the Union*. New York: Ballentine Books [1965], 1991.

McTyeire, H. N., C. F. Sturgis, and A. T. Holmes. *Servants: Three Premium Essays*. Charleston, SC: Southern Baptist Publication Society, 1851. [reprint edition, New York: Books for Libraries Press, 1971.]

Meaders, Daniel E. "South Carolina Fugitives as Viewed Through Local Colonial Newspapers with Emphasis on Runaway Notices, 1732- 1801." *Journal of Negro History* 60:2 (April 1975): 284- 319.

Mednick, L. and M. Orans. "The Sickle Cell Gene: Migration vs Selection." *American Anthropologist* 58 (1956): 293- 395.

Meggett, Linda L. "Basket Weavers Caught in a Bind." [Charleston, SC] *Post and Courier* (August 9, 1998): EC Zone, B1.

- - - . "Church Members Denied Access to Families' Graves." [Charleston, SC] *Post and Courier* (June 24, 1996): A1.

Meier, August, and Elliot Rudwick. *From Plantation to Ghetto*. New York: Hill and Wang, 1976.

Meggett, Linda L. "Culture Pays Price of Development." [Charleston, SC] *Post and Courier* (February 28, 1999): Zone 14.

- - - . "Polishing the 'Pearl': Atlantic Beach Gaining New Interest." [Charleston, SC] *Post and Courier* (September 7, 1997): A1.

Memminger, Christopher Gustavus, chrm. *Report of the Special Committee Appointed by the Protestant Episcopal Convention at its Session in 1858, to Report on the Duty of Clergymen in Relation to the Marriage of Slaves*. Charleston, SC: Walker, Evans, and Cogswell, 1859.

Menard, Russell R. "The Africanization of the Lowcountry Labor Force, 1670- 1730." In Winthrop D. Jordan and Sheila R Skemp, eds. *Race and Family in the Colonial South*. Jackson, MS: University Press of Mississippi, 1987, 81- 108.

- - - . "Slave Demography in the Lowcountry, 1670- 1740: From Frontier Society to Plantation Regime." *South Carolina Historical Magazine* 96:3 (Oct 1995): 280- 303.

Menchacha, Ron. "Heirs Property Owners Find Allies in Effort to Keep Land." {Charleston, SC] *Post and Courier* (September 28, 2002): A1.

Meredith, Mamie. "Negro Patois and its Humor." *American Speech* 6 (1931): 317- 21.

Merrens, H. Roy. "A View of Coastal South Carolina in 1778: The Journal of Ebenezer Hazard." *South Carolina Historical Magazine*. 73:4 (October 1972): 177- 193.

Merrens, H. Roy, and George D. Terry. "Dying in Paradise: Malaria, Mortality, and the Perceptual Environment in Colonial South Carolina." *Journal of Southern History* 50:4 (1984): 533- 50.

Meyer, Michael J. "Intrasite Spatial Patterning on a Colonial Site in the South Carolina Low Country: The Archeology of Charles Pinckney's Snee Farm." M.S. thesis, Florida State University, 1998.

Michie, James L. *Richmond Hill Plantation, 1810- 1868: The Discovery of Antebellum Life on a Waccamaw Rice Plantation*. Spartanburg, SC: The Reprint Co., 1990.

Mille, Katherine Wyly. "A Historical Analysis of Tense- Mood- Aspect in Gullah Creole: A Case of Stable Variation." Ph.D. dissertation, University of South Carolina, 1990.

Miller, Edward A. Jr. *Gullah Statesman: Robert Smalls from Slavery to Congress, 1939- 1915*. Columbia, SC: University of South Carolina Press, 1995.

Miller, Jeff. "Sweetgrass Sown So Tradition Might Live." [Columbia, SC] *The State* (June 6, 1993): A1.

Miller, Randall M. "The Man in the Middle: The Black Slave Driver." *American Heritage* 30 (1979):40- 49.

Miller, William L. "A Note on the Importance of the Interstate Slave Trade of the Ante Bellum South." *Journal of Political Economy* 63 (April 1965): 181- 87.

Minis, Wevonneda. "Avery Helped Create Leaders." [Charleston, SC] *Post and Courier* (July 1, 2004): D1.

- - - . "Emory Campbell: Keeping Penn Alive Requires All His Time." [Charleston, SC] *Post and Courier* (February 18, 1995): C1.

- - - . "Preserving the Gullah Culture: Heritage Centers May Open along the Coast of the Carolinas and Georgia." [Charleston, SC] *The Post and Courier* (February 15, 2004): E 1- 2.

- - - . "Storytelling: An Ancient Balm for the Soul." [Charleston, SC] *Post and Courier* (October 14, 1996): B6.

- - - . Surrounded by Rapid Development, Snowden Residents Contemplate Annexation into the Town of Mt. Pleasant." [Charleston, SC] *Post and Courier* (January 25, 1998): D1.

Mintz, Sidney and Richard Price. *An Anthropological Approach to the Afro- American Past: A Caribbean Perspective*. Philadelphia: Institute for the Study of Human Issues, Occasional Paper 2, 1976.

- - - . *The Birth of African- American Culture: An Anthropological Perspective*. Boston: Beacon Press [reprint], 1992.

Mitchell, Allen. *Wadmalaw Island: Leaving Traditional Roots Behind*. Roslyn, PA: Boar Hog Tree Press, 1996.

Mitchell, Elisha. "On the Medicinal Properties of the Black Root." *Charleston Medical Journal and Review* 5 (1850): 458.

Mitchell, Faith. *Hoodoo Medicine: Gullah Herbal Remedies*. Columbia, SC: Summerhouse Press, 1999.

Mitchell, Patricia B. *Soul on Rice: African Influences on American Cooking*. Chatham, VA: self-published by author, 1993.

Moerman, Daniel Ellis. "Extended Family and Popular Medicine on St. Helena, South Carolina: Adaptation to Marginality." Ph.D. dissertation, University of Michigan, 1974.

Mohr, Clarence L. "Harrison Berry [1816- 1882]: A Black Pamphleteer in Georgia during Slavery and Freedom." *Georgia Historical Quarterly* (Summer 1983): 189- 205.

- - - . "Maintaining Slavery in Wartime Georgia." In James Miller, ed. *The Complete History of Slavery*. San Diego, CA: Greenhaven Press, 2001.

- - - . *On the Threshold of Freedom: Masters and Slaves in Civil War Georgia*. Baton Rouge, LA: Louisiana State University Press, [reprint ed.] 2001.

Mohr, Nancy L. "Treasures on an Island: Preserving the Traditions of South Carolina's Gullah Culture Has Long Been the Mission of Penn School." *American Visions* 4 (October 1989): 29- 31.

Montgomery, Michael. "The Auxiliary Verb *Da* in Contemporary Gullah." In Michael Montgomery, ed. *The Crucible of Carolina: The Development of Gullah Language and Culture*. Athens, GA: University of Georgia Press, 1994.

- - - . "'He Bes Took Up with a Yankee Girl and Moved Up There to New York:' The Verb Bes in the Carolinas and Its History." *American Speech* 74:3 (Fall 1999): 240- 282.

Montgomery, William E. *Under their own Vine and Fig Tree: The African American Church in the South, 1865- 1900*. Baton Rouge, LA: University of Louisiana Press, 1993.

Moody, Jocelyn K. "Ripping Away the Veil of Slavery: Literacy, Communal Love, and Self- Esteem in Three Slave Women's Narratives." *BALF* 24 (Winter 1990): n.p.

Moore, Janie Gilliard. "Africanisms among Blacks of the Sea Islands." *Journal of Black Studies* 10:4 (June 1980): 467- 80.

Moore, Jennifer. "Prep Students Learn about Gullah Culture." [Beaufort, SC] *Carolina Morning News* (April 16, 2003): n.p.

Moore, Sue Mullins. "The Antebellum Barrier Island Plantation: In Search of an Archaeological Pattern." Ph.D. dissertation, University of Florida, 1981.

Moran, Mary H. "Meeting the Boat: Afro- American Identity on a South Carolina Sea Island." M.A. thesis, Brown University, 1981.

Moresi, Michele Gates. "Presenting Race and Slavery at Historic Sites." *CRM: The Journal of Heritage Stewardship* 1:2 (Summer 2004): 92- 4.

Morgan, Chad. "Progressive Slaveholders: Planters, Intellectuals, and Georgia's Antebellum Economic Development." *Georgia Historical Quarterly* 86:3 (Fall 2002): 398- 422.

Morgan, D. T. "George Whitefield and the Great Awakening in the Carolinas and Georgia, 1739- 40." *Georgia Historical Quarterly* 54 (Winter 1970): 517- 539.

Morgan, Edmund S. "Slavery and Freedom: The American Paradox." *Journal of American History* 59 (1972- 73):5- 29.

- - - . "Black Society in the Lowcountry, 1760- 1810." In Ira Berlin and Ronald Hoffman, eds. *Slavery and Freedom in the Age of the American Revolution*. Charlottesville, VA: University of Virginia Press, 1983.

Morgan, Jennifer Lyle. "Laboring Women: Enslaved Women, Reproduction, and Slavery in Barbados and South Carolina, 1650- 1750." Ph.D. dissertation, Duke University, 1995.

- - - . "This is 'Mines': Slavery and Reproduction in Colonial Barbados and South Carolina." In Jack P. Greene, Rosemary Brana- Shute, and Randy J. Sparks, eds. Money, Trade, and Power: The Evolution of Colonial South Carolina's Plantation Society." Columbia, SC: University of South Carolina Press, 2001.

Morgan, Kenneth. "The Organization of the Colonial American Rice Trade." *William and Mary Quarterly* (3rd series) 52:3 (July 1995): 433- 452.

- - - . "Slave Sales in Colonial Charleston." *English Historical Review* 113:453 (September 1998): 905- 27.

Morgan, Pat. "A Study of Tide Lands and Impoundments within a Three River Delta System: South Edisto, Ashepoo, and Cumbahee Rivers of South Carolina." M.A. thesis, University of Georgia, 1974.

Morgan, Philip D. "Black Life in Eighteenth- Century Charleston." *Perspectives in American History* 1 (1964): 187- 232.

- - - . "Colonial South Carolina Runaways: Their Significance for Slave Culture." *Slavery and Abolition* 6:3 (1985): 57- 78.

- - - . "Conspiracy Scares." *William and Mary Quarterly* 59:1 (January 2002): 159- 66.

- - - ."The Cultural Implications of the Atlantic Slave Trade: African Regional Origins, American Destinations and New World Developments." *Slavery and Abolition* 18:1 (April 1997): 122- 45.

- - - . *Slave Counterpoint: Black Culture in the Eighteenth- Century Chesapeake and Lowcountry*. Chapel Hill, NC: University of North Carolina Press, 1998.

- - - . "Task and Gang Systems: The Organization of Labor on New World Plantations." In Stephen Innes, ed. *Work and Labor in Early America*. Chapel Hill, NC: University of North Carolina Press, 1988.

- - - . "The Ownership of Property by Slaves in the Mid- Nineteenth- Century Low Country." *Journal of Southern History* 49 (August 1983): 399- 420.

- - - . "Three Planters and Their Slaves: Perspectives on Slavery in Virginia, South Carolina and Jamaica, 1750- 1790." In Winthrop D. Jordan and Sheila L. Skemp, eds. *Race and Family in the Colonial South*. Jackson, MS: University of Mississippi Press, 1987, 37- 79.

- - - . "Work and Culture: The Task System and the World of Low Country Blacks, 1770- 1880." *William and Mary Quarterly* (3rd series) 39:4 (October 1982): 563- 599.

Morgan, Philip D., and George Terry. "Slavery in Microcosm: A Conspiracy Scare in Colonial South Carolina." *Southern Studies* 21:2 (Summer 1982):121- 145.

Morton, Julia F. *Folk Remedies of the Low Country*. Miami, FL: E. A Seemann Publishers, 1974.

Morris, Christopher. "The Articulation of Two Worlds: The Master- Slave Relationship Reconsidered." *Journal of American History* 85 (December 1998): 982- 1007.

Morris, Frank. "Emory Campbell Pens Gullah Abstract." [Beaufort, SC] *Carolina Morning News* (November 25, 2002): n.p.

Morse, Suzanne W., and Monica Gillespie. *Solutions for America, What's Already Out There: A Sourcebook of Ideas from Successful Community Programs*. Richmond, VA: Pew Partnership for Civic Change and the University of Richmond, 2002.

"Mortuary Customs and Beliefs of South Carolina Negroes." *Journal of American Folklore* 9 (1894): 318- 19.

Mufwene, Salikoko S. *African- American English: Structure, History, and Usage*. New York: Routledge, 1998

- - - . "The Ecology of Gullah's Survival." *American Speech* 72 (Spring 1997): 69- 83.

- - - . *The Ecology of Language Evolution*. New York: Cambridge University Press, 2001.

- - - . "Equivocal Structures in Some Gullah Complex Sentences." *American Speech* 64 (1989): 304- 326.

- - - . "From Genetic Creolistics to Historical Dialectology: Ecological and Population Genetics Perspectives." *American Speech* 75:3 (Fall 2000): 262- 265.

- - - . "Gullah's Development: Myths and Sociohistorical Evidence." In Cynthia Bernstein, Robin Sabino, and Tom Nunally, eds. *Language Variety in the South Revisited.* Tuscaloosa, AL: University of Alabama Press, 1997, 113- 122.

- - - . "Investigating Gullah: Difficulties in Assuring 'Authenticity.'" In Wayne Glowka and Donald Lance, eds. *Language Variation in North American English: Research and Teaching*. New York: Modern Language Association of America, 1993, 178- 193.

- - - . "Is Gullah Decreolizing? A Comparison of a Speech Sample of the 1930's with a Speech Sample of the 1980s." In Guy Bailey, Patricia Cukor- Avila, and Natalie Maynor, Eds. *The Emergence of Black English.* Amsterdam: John Benjamins, 1991, 213- 30.

- - - . "The Linguistic Significance of African Proper Names in Gullah." *New West Indian Guide* 59 (1985):146- 66.

- - - . "Misinterpreting 'Linguistic Continuity' Charitably." In Michael Montgomery, ed. *The Crucible of Carolina: The Development of Gullah Language and Culture*. Athens: University of Georgia Press, 1994, 38- 59.

- - - . "Number Delineation in Gullah." *American Speech* 61 (1986): 33- 60.

- - - . "On Decreolization: The Case of Gullah." In Marcyliena Morgan, ed. *Language and the Social Construction of Identity in Creole Situations*. 63- 99. Los Angeles: UCLA Center for African-American Studies, 1994.

- - - . "On the Infinitive in Gullah." In Walter Edwards and Donald Winford, eds. *Verb Phrase Patterns in Black English and Creole*. Detroit, MI: Wayne State University Press, 1991, 203- 16.

- - - . "On the Status of Auxiliary Verbs in Gullah." *American Speech* 69 (1994): 58- 70.

- - - . "Restrictive Relativization in Gullah." *Journal of Pidgin and Creole Languages* 1 (1986):1- 31.

- - - . "Scope of Negation and Focus in Gullah." In Francis Byrne and Donald Winford, eds. *Focus and Grammatical Relations in Creole Languages* Amsterdam: John Benjamins, 1993, 95- 116.

- - - . "Some Reasons Why Gullah Is Not Dying Yet." *English World- Wide* 12 (1991): 215- 43.

- - - , ed. *Africanisms in Afro- American Language Varieties.* (Papers from the International Round Table of the same title hosted by the editor at the University of Georgia in 1988) Athens, GA: University of Georgia Press, 1993.

Mufwene, Salikoko and Charles Gilman. "How African Is Gullah and Why?" American Speech 62 (1987): 120- 39.

Mufwene, Salikoko S., John Rickford, Guy Baile, and John Baugh, eds. *African- American English: Structure, History, and Usage*. New York: Routledge, 1998.

Mullane, Deirdre, ed. *Crossing the Danger Water: Three Hundred Years of African- American Writing*. New York: Doubleday and Co., Inc., 1993.

Mullen, Harryette Romell. "African Signs and Spirit Writing." *Callaloo* 19:3 (Summer 1996): 670- 689.

Mullin, Michael. *Africa in America: Slave Acculturation and Resistance in the American South and the British Caribbean, 1736- 1831*. Urbana, IL: University of Illinois Press, 1992.

Murdoch, Richard K. "The Return of Runaway Slaves, 1790- 1794." *Florida Historical Quarterly* 38:2 (1959): 96- 113.

Murphy, Harry. "Gullah Dialect Preserved on Daufuskie Island: Civilization Threatens Isolation." *Atlanta Journal Constitution* (30 June 1968): 1A, 14A.

Myers, Robert Mason, ed. *The Children of Pride: A True Story of Georgia and the Civil War*. New Haven: Yale University Press, 1972.

National Register, History and Education, National Park Service. *Exploring a Common Past: Researching and Interpreting the Underground Railroad*. Washington, DC: U.S. Government Printing Office, 1998.

National Register of Historic Places, National Park Service. *How to Apply the National Register Criteria for Evaluation*. (National Register Bulletin) Washington, DC: U.S. Government Printing Office, [rev. ed.] 1997.

National Register of Historic Places, National Park Service. *How to Complete the National Register Registration Form*. (National Register Bulletin) Washington, DC: U.S. Government Printing Office, [rev. ed.] 1997.

Nas, Peter J. M. "Masterpieces of Oral and Intangible Culture: Reflections on the UNESCO World Heritage List." *Current Anthropology* 43:1 (February 2002): 139- 148.

Nash, Jonell. "The Gullah Tradition: From the Field to the Pot, Geechees Stir in Spirit: People of African Descent on the Coastal Islands off South Carolina and Georgia." *Essence* (February 1998).

Nask, R. C. "South Carolina and the Atlantic Economy in the late Seventeenth and Eighteenth Centuries." *Economic History Review* 45:4 (1992): 677- 702.

Neely, Caroline Elizabeth. "'Dat's one chile of mine you ain't never gonna sell': Gynecological Resistance within the Plantation Community." M.A. thesis, Virginia Polytechnic Institute and State University, 2000.

Neilson, Peter. *Life and Adventures of Zamba, an African Negro King; And his Experience of Slavery in South Carolina*, *Written by Himself*. London: Smith Elder, 1847.

Nelson, Timothy Jon. "Every Time I Feel the Spirit: Religious Experience and Religious Ritual in an African American Congregation." Ph.D. dissertation, University of Chicago, 1997.

"New Developer for Daufuskie: International Paper Realty Corporation." *Audubon* 87 (March 1985): 17- 8.

Newby, Idus A. *Black Carolinians: A History of Blacks in South Carolina from 1895- 1968*. Columbia, SC: University of South Carolina Press, 1973.

Newton, James E. and Ronald L.Lewis. *The Other Slaves: Mechanics, Artisans, and Craftsmen*. Boston, MA: G. K. Hall, 1978.

Newton, John and Dennis R. Hillman. *Out of the Depths*. Grand Rapids, MI: Kregel Publications, 2003.

Newton, Reginald A. "Health Care of Georgia Plantations, 1830- 1865." M.A. thesis, Atlanta University, 1998.

Nichols, Elaine, ed. *Last Miles of the Way: African- American Homecoming Traditions, 1890- Present*. Columbia, SC: South Carolina State Museum, 1989.

Nichols, Jeff. "Turning Points Have Shaped City's History." [Charleston, SC] *Post and Courier* (April 20, 1997): D1.

Nichols, Patricia Causey. "Linguistic Change in Gullah: Sex, Age, and Mobility." Ph.D. dissertation, Stanford University, 1976.

Nixon, Nell Marie. "Gullah and Backwoods Dialect in Selected Works by William Gilmore Simms." Ph.D. dissertation, University of South Carolina, 1971.

Nordan, David. "Sapelo Island: Where the Future is Yesterday." *Atlanta Journal Constitution* (April 23, 1987): 1B, 4B.

Normand, Kerry S. "By Industry and Thrift: Landownership among the Freed People of St. Helena Parish, South Carolina, 1863- 1870. " Ph.D. dissertation, Amherst College, 1994.

Oakes, James. *The Ruling Race: A History of American Slaveholders*. New York: W. W. Norton Co., [1982]1998.

Ogden, Robert C., ed. *From Servitude to Service: Being the Old South Lectures on the History and Work of Southern Institutions for the Education of the Negro*. Boston: American Unitarian Association, 1905.

Ogunleye, Tolagbe. "The Self- Emancipated Africans of Florida: Pan- African Nationalists in the 'New World.'" *Journal of Black Studies* 27:1 (September 1996): 24- 38.

Ohlandt, K. F. "Where the Sweetgrass Grows: The Restoration of a Maritime Wet Grassland, Incorporating Harvesting of *Muhlenburgia filipes*." M.S. thesis, University of Georgia, 1992

Oldendorf, Sandra Brenneman. "Highlander Folk School and the South Carolina Sea Island Schools: Implications for the Social Studies." Ph.D. dissertation, University of Kentucky, 1987.

Oldfield, John. "On the Beat: Black Policemen in Charleston, 1869- 1921." *South Carolina Historical Magazine* 102:2 (April 2001): 153- 168.

Olmstead, Frederick Law. *The Cotton Kingdom: A Traveler's Observation on Cotton and Slavery in the American Slave States, 1863- 1861*. New York: DeCapo Press, [reprint] 1996.

- - - . *A Journey in the Seaboard Slave States, with Remarks on Their Economy*. New York, [1860] 1968.

Oltman, Adele. "Sacred Mission, Worldly Ambition: A Social History of Black Baptists in Savannah, Georgia, 1918- 1939." Ph.D. dissertation, Columbia University, 1998.

Olwell, Robert Anthony. "Authority and Resistance: Social Order in a Colonial Slave Society, the South Carolina Lowcountry, 1739- 1782." Ph.D. dissertation, Johns Hopkins University, 1991.

- - - . "'Domestick Enemies': Slavery and Political Independence in South Carolina May 1775- March 1776." *Journal of Southern History* 55:1 (February 1989): 21- 48.

- - - . *Masters, Slaves, & Subjects: The Culture of Power in the South Carolina Low Country, 1740- 1790*. Ithaca, NY: Cornell University Press, 1998.

Olwell, Russell B. "New Views of Slavery: Using Recent Historical Work to Promote Critical Thinking about the 'Peculiar Institution.'" *History Teacher* 34:4 (August 2001): 459- 69.

Opala, Joseph A. *The Gullah: Rice, Slavery, and the Sierra Leone- American Connection*. Washington, DC: U.S. Department of State, 2000.

O'Neal, Catherine. "Old Culture Still Thrives on Sea Islands." *Miami Herald* (March 24, 2001): E1.

O'Neill, Stephen. "In the Shadow of Slavery: The Civil Rights Years in Charleston." Ph.D. dissertation, University of Virginia, 1994.

Orr, Noelle. "Basket Maker has small Business." [Charleston, SC] *Post and Courier* (July 18, 2002): EC Zone, D1.

- - - . "Black Culture Recalled in Music and Games." [Charleston, SC] *Post and Courier* (January 25, 2001): EC Zone, D1.

- - - . "Mt. Pleasant Cemetery Named Endangered Site." [Charleston, SC] *Post and Courier* (April 25, 2002): EC Zone, D1.

Osburn, Margaret. "Along the Side of the Road: Crafting Sea Grass Baskets." *American Visions* 3 (April 1988): 16- 21.

Oszuscik, Philippe. "African Americans in the American South." In Allen G. Noble, ed. *To Build in a New Land: Ethnic Landscapes in North America*. Baltimore, MD: Johns Hopkins University Press, 1992.

Ottenburg, Simon. "Leadership and Change in a Coastal Georgia Negro Community." *Phylon Quarterly* 20:1 (1959): 7- 18.

Otto, John Solomon. "Artifacts and Status Differences: A Comparison of Ceramic Differences from Planter, Overseer, and Slave Sites on an Antebellum Plantation." In Stanley South, ed. *Research Strategies in Historical Archaeology*. New York: Academic Press, 1977.

- - - . "Black Folks and Poor Buckras: Archeological Evidence of Slave and Overseer Living Conditions on an Antebellum Plantation." *Journal of Black Studies* 14:2 (December 1983): 185- 200.

- - - . *Cannon's Point Plantation, 1794- 1860: Living Conditions and Status Patterns in the Old South*. (Studies in Historical Archaeology). Burlington, MA: Academic Press, 1997.

- - - . "Livestock- Raising in Early South Carolina, 1670- 1700: Prelude to the Rice Plantation Economy." *Agricultural History* 61:4 (Fall 1987):13- 24.

- - - . "A New Look at Slavery." *Natural History* 88:1 (January 1979): 8- 30.

- - - . "The Origins of Cattle Ranching in Colonial South Carolina, 1670- 1715." *South Carolina Historical Magazine* 87:2 (April 1986):117- 124.

- - - . "Status Differences and the Archaeological Record: A Comparison of Planter, Overseer, and Slave Sites from Cannon's Point Plantation (1794- 1861), St. Simons Island, Georgia." Ph.D. dissertation, University of Florida, 1976.

"Our Opinions: Turner's Land Surrender? Priceless." *Atlanta Journal Constitution* (August 19, 2002): A9.

Outland, Robert B., III. "Slavery, Work, and the Geography of the North Carolina Naval Stores Industry, 1835- 1860." *Journal of Southern History* 62:1 (February 1996): 27- 56.

Ownby, Ted and Charles Joyner. *Black and White: Cultural Interaction in the Antebellum South* (Chancellor's Symposium). Jackson, MS: University Press of Mississippi, 1993.

Owens, Leslie. *This Species of Property: Slave Life and Custom in the Old South*. New York: Oxford University Press, 1976.

Padgett, James A. "The Status of Slaves in Colonial North Carolina." *Journal of Negro History* 14 (July 1929): 300- 27.

Paradis, James M. *Strike the Blow for Freedom: The 6th United States Colored Infantry in the Civil War*. Shippensburg, PA: White Mane Publishing Co., 1998.

Pargman, Sheri. "Gullah 'duh' and Periphrastic 'do' in English Dialects: Another Look at the Evidence." *American Speech* 79:1 (Spring 2004): 3- 32.

Parker, Freddie L., ed. *Stealing a Little Freedom: Advertisements for Slave Runaways in North Carolina, 1771- 1840*. New York: Garland, 1994.

Parker, William N. "Slavery and Southern Economic Development: An Hypothesis and Some Evidence." *Agricultural History* 44:1 (January 1970): 115- 125.

Parkhurst, Jessie W. "The Role of the Black Mammy in the Plantation Household." *Journal of Negro History* 23:3 (July 1938): 349- 69.

Parks, Fayth M. “The Role of African American Folk Beliefs in the Modern Therapeutic Process.” *Clinical Psychology: Science and Practice* 10:4 (2003): 456- 67.

Parra, E. J., R. A. Kittles, and G. Argyropoulos. “The Ancestral Proportions and Admixture Dynamics in Geographically Defined African Americans Living in South Carolina.” *American Journal of Physical Anthropology* 114:1 (January 2001): 18- 29.

Parrish, Lydia. *Slave Songs of the Georgia Sea Islands*. Athens, GA: University of Georgia Press, [1942] 1992.

Patterson, Jennifer. “Slavery Revisited: Using Economic Reasoning to Teach about the Past and Future.” *Social Studies* (January 2002).

Pearson, Edward A., ed. *Designs against Charleston: The Trial Record of the Denmark Vesey Slave Conspiracy of 1822*. Chapel Hill, NC: University of North Carolina Press, 1999.

- - - . “From Stono to Vesey: Slavery, Resistance and Ideology in South Carolina, 1739- 1822.” Ph.D. dissertation, University of Wisconsin- Madison, 1992.

- - - . Trials and Errors: Denmark Vesey and his Historians.” *William and Mary Quarterly* (series 3) 59:1 (January 2002): 137- 42.

Pearson, Elizabeth W., ed. *Letters From Port Royal 1862- 1868*. New York: Arno Press, [reprint] 1969.

Peasant, Julian Smith, Jr. “The Arts of the African Methodist Episcopal Church as Viewed in the Architecture, Music and Liturgy of the Nineteenth Century.” Ph.D. dissertation, Ohio University, 1992.

Pease, William H. “Three Years among the Freedmen: William C. Gannett and the Port Royal Experiment.” *Journal of Negro History* 42:2 (April 1957): 98- 117.

Peniston, Gregory S. “The Slave Builder- Artisan.” *Western Journal of Black Studies* 2:4 (1978): 284- 95.

“Penn Center Honors Folk Artist Sam Doyle.” [Beaufort, SC] *Carolina Morning News* (April 11, 2003).

Penningroth, Dylan. “Slavery, Freedom, and Social Claims to Property among African Americans in Liberty County, Georgia, 1850- 1888.” *Journal of American History* 84:2 (September 1997): 405- 35.

Perdue, Robert Eugene. *The Negro in Savannah, 1865- 1900*. New York: Exposition Press, 1973.

Perdue, Robert E., Jr. “‘African’ Baskets in South Carolina.” *Economic Botany*. 22:3 (July- September 1968): 289- 292.

Perrin, Pat, ed. *Slavery: Researching American History*. Carlisle, MA: Discovery Enterprises, Ltd., 2000.

Perry, James A. “African Roots of African- American Culture.” *The Black Collegian* (October 1998).

Perry, Phyllis Alesia. “African Legacy: Gullah Festival Is a Celebration of Culture.” *Health Quest: The Publication of Black Wellness* (May 31, 1995): n.p.

Peterkin, Julia, and Doris Ulman. Roll, Jordan, Roll. New York: Robert O. Ballou, 1933.

Peters, Erskine. “The Poetics of the Afro- American Spiritual.” *BALF* 23 (Fall 1990): 559- 578.

Peterson, Bo. “Caught Up in the Spirit of Camp Meeting.” [Charleston, SC] *Post and Courier* (June 4, 1999): A7.

- - - . “Great- grandmother’s Tales to Live on with Help of Grant.” [Charleston, SC] *Post and Courier* (April 10, 1998): B5.

Petrilli, Susan and Augusto Ponzio. “Telling Stories in the Era of Global Communication: Black Writing—Oraliture.” *Research in African Literatures* 32:1 (Spring 2001): 98- 109.

Phelts, Marsha Dean. *An American Beach for African Americans*. Gainesville, FL: University of Florida Press, 1997.

Phillips, Noelle. "Cultivating History: Foundation Prepares to Open Old Rice Plantation in Liberty County." *Savannah Morning News* (June 7, 1998): n.p.

- - - . "Liberty County Celebrates Geechee Heritage." *Savannah Morning News* (August 28, 1998): n.p.

Phillips, Ulrich Bonnell. *American Negro Slavery: A Survey of the Supply, Employment, and Control of Negro Labor as Determined by the Plantation Regime*. Baton Rouge, LA: Louisiana State University Press, 1966.

- - - . "The Decadence of the Plantation System." *American Academy of Political Science Annals* 35 (January 1910): 37- 43.

- - - . "The Slave Labor Problem in the Charleston District." In Eugene D. Genovese, ed. *Plantation, Town and Country: Essays on the Local History of American Slave Society*. Baton Rouge, LA: Louisiana State University Press, 1968. 7- 28.

Piechocinski, Elizabeth. *Once Upon an Island: The Barrier and Marsh Islands of Chatham County Georgia*. Savannah, GA: Oglethorpe Press, 2003.

Pierce, Edward L. "The Freedmen at Port Royal." *Atlantic Monthly* 12 (September 1863): 295- 8.

Piersen, William D. "White Cannibals, Black Martyrs: Fear, Depression, and Religious Faith as Causes of Suicide among New Slaves." *Journal of Negro History* 62:2 (April 1977): 147- 59.

Pierson, Gerald J. "The Nature of Resistance in South Carolina's Works Progress Administration Ex-slave Narratives." M.A. thesis, University of Toledo, 1990.

Pietak, L.M., C. Espenshade, J. Holland, and L. Kennedy. *Slave Lifeways on Spring Island: Data Recovery Excavations at 38BU5, Beaufort County, South Carolina*. Report prepared for Spring Island Company by TRC Garrow Associates, Inc., Atlanta, GA.

Pinckney, Roger. *Blue Roots: African- American Folk Magic of the Gullah People*. St. Paul, MN: Llewellyn Publications, 2000.

- - - . "Burying Miss Louise." *Orion* 23:1 (2004): 32- 5.

Pittard, Hannah. "SCAD's Relationship with Daufuskie Island Grows Stronger." [Savannah College of Art and Design, Savannah, GA] *The Campus Chronicle* 3:23 (May 9, 2003):1.

Pitts, Walter. "'If You Caint Get the Boat, Take a Log': Cultural Reinterpretation of the Afro- Baptist Ritual." *American Ethnologist* 16:2 (May 1989): 279- 93.

- - - . "Like a Tree Planted by the Water: The Musical Cycle in African- American Baptist Ritual." *Journal of American Folklore* 104 (1991): 318- 41.

Plair, Sally. *Something to Shout About: Reflections on the Gullah Spiritual*. Charleston, SC: John J. Furlong & Sons, Inc., 1972.

"Plantation Cabins: The Tabby House." *Colonial Homes* 9:2 (March/April 1982): 62- 68.

The Plantation Landscape. Columbia, SC: Chicora Foundation, 1998.

Poe, Janita. "Land Dispute Pits Turner vs. Gullah." *Atlanta Journal Constitution* (July 17, 2002):A1.

- - - . "'No Plans to Develop Land,' Turner Says. Gullah Kin Claim Acreage near Hilton Head." *Atlanta Journal Constitution* (July 18, 2002): A9.

- - - . "Turner Steps Aside for Gullah Community: Claim Waived on 68 Acres in Ownership Dispute." *Atlanta Journal Constitution* (August 16, 2002): A20.

Poliakoff, Eli A. "Charleston's Longshoremen: Organized Labor in the Anti- Union Palmetto State." *South Carolina Historical Magazine* 103:3 (July 2002): 247- 264.

Pollitzer, William S. "The Relationship of the Gullah- Speaking People of Coastal South Carolina and Georgia to Their African Ancestors." *Historical Methods* 26:1 (1993): 53- 68.

Poole, Jason. "On Borrowed Ground: Free African- American Life in Charleston, South Carolina 1810- 61." *Essays in History* 36 (1994): 1- 33. Corcoran Department of History, University of Virginia. Available at http://etext.lib.virginia.edu/journals/EH/EH36/poole1.html

Pope- Hennessy, James. *Sins of Our Fathers: A Study of the Atlantic Slave Traders, 1441- 1807*. New York: Alfred A. Knopf, 1968.

Porcher, Francis Peyre. "Report on the Indigenous Medical Plants of South Carolina." *Transactions of the American Medical Association* 2 (1849): 833.

- - - . *Resources of the Southern Fields and Forests, Medical, Economical and Agricultural: Being Also a Medical Botany of the Southern States: With Practical Information on the Useful Properties of the Trees, Plants, and Shrubs*. Charleston, SC: Walker, Evans and Cogswell Printers, 1869.

Porcher, Richard D. "Rice Culture in South Carolina: A Brief History, The Role of the Huguenots, and Preservation of Its Legacy." *Transactions of the Huguenot Society of South Carolina* 92 (1987): 11- 22.

Porcher, Richard Dwight and Douglas Alan Rayner. *A Guide to the Wildflowers of South Carolina*. Columbia, SC: University of South Carolina Press, 2001.

Porter, Arlie. "The Buzz on Mosquito Beach." [Charleston, SC] *Post and Courier* (August 25, 2003): A1.

Porter, Jeanne L. ''Opposition Is Necessary, But not Sufficient' for Sea Island Preservation: Toward a Dialogical Understanding of Leadership and Community Leadership Development." Ph.D. dissertation, Ohio University, 1995.

Postell, William D. *The Health of Slaves on Southern Plantations*. Baton Rouge, LA: Louisiana State University, 1951.

Potter, Elisabeth Walton and Beth M Boland. *Guidelines for Evaluating and Registering Cemeteries and Burial Places*. National Register Bulletin 41. Washington: National Park Service, 1992.

Potter, Leah Yale. "Carolina Freedom, Carolina Slavery: Antebellum Historians Portray the American Revolution in the Lowcountry." M.A. thesis, University of North Carolina, 1998.

Powell, Mary Pinckney. *Over Home: The Heritage of the Pinckneys of Pinckney Colony, Bluffton, South Carolina*. Columbia, SC: R. L. Bryan Co., 1982.

Powell, Steward. "An Island in the Sun Enters the Modern Age: Resort Development on Daufuskie Island, SC." *U.S. News & World Report* 101 (July 21, 1986): 16- 17.

Power, J. Tracy. *I Will Not Be Silent and I will Be Heard: Martin Luther King, Jr., the Southern Christian Leadership Conference, and Penn Center, 1964- 1967* (Topics in African American History 2). Columbia, SC: SC Dept. of Archives and History, 1993.

Powers, Bernard E., Jr. "Black Charleston: A Social History 1822- 1885." Ph.D. dissertation, Northwestern University, 1982.

- - - . *Black Charlestonians: A Social History, 1822- 1885*. Fayetteville, AR: University of Arkansas Press, 1994.

- - - . "A Founding Father and Gullah Culture," *National Parks* 72 (November/December 1998):731- 43.

- - - "Community Evolution and Race Relations in Reconstruction Charleston, South Carolina." *South Carolina Historical Magazine* 95 (January 1994): 27- 46.

"Praiseworthy: Regional Effort Restores an Edifice of Hope on Daufuskie Island." [Hilton Head Island, SC] *Island Packet* (December 2, 2002).

Prather, H. Leon. *We Have Taken a City: Wilmington's Racial Massacre and Coup of 1898*. Teaneck, NJ: Farleigh Dickinson University Press, 1984.

Price, Richard. *Maroon Societies: Rebel Slave Communities in the Americas*. Baltimore, MD: Johns Hopkins University Press, [3rd ed.] 1996.

Pringle, Elizabeth Waties Allston. *Chronicles of Chicora Wood*. Boston, MA: Christopher Press, [1922] 1940.

- - - . *A Woman Rice Planter*. Columbia, SC: University of South Carolina Press, [1914] 1992.

Printon, Stacey Elizabeth. "Exploring Cultural Landscapes: African Influences in the Design of the South Carolina Lowcountry Rice Plantation Landscape." M.A. thesis, Michigan State University, 2000.

"Project to Protect Slave Heirs' Property Reaches 5,000 People." [Charleston, SC] *Post and Courier* (September 5, 2003): B1.

Pruneau, Leigh Ann. "All the Time in Work Time: Gender and the Task System on Antebellum Lowcountry Rice Plantations." Ph.D. dissertation, University of Arizona, 1997.

Puckett, Susan. "Soul Food Revival: Grits, Greens and Sweet Potato Pie Have Tantalized a Savvy, Diverse Market North of the Mason- Dixon, but will Old Stereotypes Keep Them Out of the Mainstream?" *Restaurants and Institutions* (February 1997).

Puckette, Newbell Niles. *Folk Beliefs of the Southern Negro*. Chapel Hill, NC: University of North Carolina Press, 1926.

Purcell, Katharine Chapman. "Reflections from the Well: Julia Mood Peterkin and the Gullah Community." Ph.D. dissertation, University of North Carolina at Greensboro, 1997.

Quarles, Benjamin. "The Abduction of the 'Planter.'" Civil War History 4:1 (1958): 5- 10.

- - - .*Black Mosaic: Essays in Afro- American History and Historiography*. Amherst, MA: University of Massachusetts Press, 1988.

- - - . *The Negro in the Making of America*. New York: Collier Macmillan, 1987.

Quick, David. "Gullah Options to Be Unveiled." [Charleston, SC] *Post and Courier* (October 13, 2002): A1.

- - - . "Gullah- Geechee Future Draws Array of Opinions." [Charleston, SC] *Post and Courier* (October 16, 2002): A1.

- - - . "Gullah/Geechee Preservation Plans Drafted." [Charleston, SC] *Post and Courier* (October 15, 2002): B3.

- - - . "Residents' Group Sues to Protect Old Cemetery at Remley's Point." [Charleston, SC] *Post and Courier* (November 14, 2001): B1.

- - - . "Sullivan's Island Old- timer Hopes to Mark Black Graveyard." [Charleston, SC] *Post and Courier* (July 15, 2002): B1.

Rabinowitz, Howard N., ed. *Southern Black Leaders of the Reconstruction Era*. Urbana, IL: University of Illinois Press, 1982.

Raboteau, Albert J. "African- Americans, Exodus, and the American Israel." Paul E. Johnson, ed. *African- American Christianity: Essays in History*. Berkeley, CA: University of California Press, 1994.

- - - . *A Fire in the Bones: Reflections on African- American Religious History*. Boston, MA: Beacon Press, 1996.

- - - . *Slave Religion: The Invisible Institution in the Antebellum South*. New York: Oxford University Press, 1980.

Rada, Jeff. "Gullah Tours of Charleston." *Southern Living* 30 (February 1995):21.

Radford, John Price. "The Charleston Planters in 1860." *South Carolina Historical Magazine* 77:4 (October 1976): 227- 35.

- - - . . "Culture, Economy, and Urban Structure in Charleston, South Carolina, 1860- 1880." Ph.D. dissertation, Clark University, 1974.

- - - . "Race, Residence, and Ideology: Charleston, South Carolina, in the Mid- Nineteenth Century." *Journal of Historic Geography* 2:4 (1976): 329- 46.

Ramey, Daina L. "'A Place of Our Own': Labor, Family, and Community among Female Slaves in Piedmont and Tidewater Georgia, 1820- 1860." Ph.D. dissertation, University of California at Los Angeles, 1998.

- - - . "'She Do a Heap of Work': Female Slave Labor on Glynn County Rice and Cotton Plantations." *Georgia Historical Quarterly* 82:4 (Winter 1998): 707- 734.

Randall, Zoe. "Ha'nt Blue Shudders and Haunted Savannah Spirits." *Savannah Magazine* 9 (September- October 1999): 35- 37.

Rauschenberg, Bradford L. "Brick and Tile Manufacturing in the South Carolina Low Country, 1750- 1800." *Journal of Southern Decorative Arts* 17:2 (1991): 103- 13.

Ravenel, William Henry. "Recollections of Southern Plantation Life." *Yale Review* 26 (June 1936): 768- 75.

Raymond, Charles A. "The Religious Life of the Negro Slave." *Harper's New Monthly Magazine* 27 (October 1863): n.p.

Reed, Erin. "Grand Strand Gullah Sites Hope to Reach Historic Status." [Myrtle Beach, SC] *Sun News* (December 31, 2002): C1.

Reeves, Dick. "Gullah: Some Say the Carolina Low- Country Patois Is Disappearing." *Sandlapper*. 3 (May, 1970) 8- 11.

Reid, Tim. "Forgotten Voters on the Island of Lost Dreams." [London] *The Times* (February 2, 2004): Overseas News, 12.

Reilly, April. "Artist Jonathan Green: His Paintings Show the Innate Glamour of Black Life." *Los Angeles Sentinel* (July 21, 1994): n.p.

Reitz, Elizabeth, Tyson Gibbs, and Ted A. Rathbun. "Evidence for Subsistence on Coastal Plantations." In Theresa Singleton, ed. *The Archaeology of Slavery and Plantation Life*. Orlando, FL: Academic Press, 1985.

Reynolds, Edward. *Stand the Storm: A History of the Atlantic Slave Trade*. Chicago: Ivan R. Dee, Publisher, 1985.

Ricards, Sherman L. and George M Blackburn. "A Demographic History of Slavery: Georgetown County, South Carolina, 1850. *South Carolina Historical Magazine* 76:4 (October 1975): 215- 24.

The Rich Heritage of African Americans in North Carolina. Raleigh, NC: North Carolina Department of Commerce and Department of Cultural Resources, 1999.

Richardson, David. "The British Slave Trade to Colonial South Carolina." *Slavery and Abolition* 12:3 (1991): 125- 172.

Rickford, John Russell. "Ethnicity as a Sociolinguistic Barrier." *American Speech* 60 (1985):90- 125.

- - - . "Number Delineation in Gullah: A Response to Mufwene." *American Speech* 65 (1990): 148- 164.

- - - . *Spoken Soul: The Story of Black English*. New York: John Wiley & Sons, 2000.

- - - . "Suite for Ebony and Phonics: Reflections on the Richness and Utility of the African American English Dialect." *Discover* (December 1997).

Rickford, John and Angela. "Cut Eye and Suck Teeth: African Words and Gestures in New World Guise." *Journal of American Folklore* 89 (1976): 294- 309.

Riddle, Lyn. "Islanders Crack the Books to Save Their Past: Slaves First Became Citizens on St. Helena. Residents Are Learning How to Guard Heritage, Ward off Developers. *Los Angeles Times* (November 25, 1993): A5.

- - - . "A Powerful Lesson." *Atlanta Journal Constitution* (January 1, 1995): M1.

Riddle, Wesley Allen. "The Origins of Black Sharecropping." *Mississippi Quarterly* (December 1995): n.p.

Ripley, C. Peter, ed. *Witness for Freedom: African- American Voices on Race, Slavery, and Emancipation*. Chapel Hill, NC: University of North Carolina Press, 1993.

Ritterhouse, Jennifer. "Reading, Intimacy, and the Role of Uncle Remus in White Southern Social Memory." *Journal of Southern History* 69 (August 2003): 585- 622.

Rivers, Larry Eugene. *Slavery in Florida: Territorial Days to Emancipation*. Gainesville, FL: University Press of Florida, 2000.

- - - ."A Troublesome Property: Master- Slave Relations in Florida, 1821- 1865." In David R. Colburn and Jane L. Landers, eds. *The African American Heritage of Florida*. Gainesville, FL: University Press of Florida, 1995.

Roark, James L. *Masters without Slaves: Southern Planters in the Civil War and Reconstruction*. New York: W. W. Norton & Co., 1977.

Robbins, Gerald. "Rossa B. Cooley and Penn School: Social Dynamo in a Negro Rural Subculture, 1901- 1930." *Journal of Negro Education* 33:1 (Winter 1964): 43- 51.

Robertson, Claire. "Africa into the Americas? Slavery and Women, the Family, and the Gender Division of Labor." In David Barry Gaspar and Darlene Clark Hine, eds. *More than Chattel: Black Women and Slavery in the Americas.* Bloomington, IN: University of Indiana Press, 1996.

Robertson, David. *Denmark Vesey: The Buried History of America's Largest Slave Rebellion and the Man Who Led It*. New York: Alfred A. Knopf, 1999.

Robertson, Tatsha. "Charleston, South Carolina: A Path through Gullah Country Where So Many African Slaves Arrived, Descendants Still Preserve their History." *Boston Globe* (December 1, 2002):M1.

Robeson, Elizabeth. "The Ambiguity of Julia Peterkin." *Journal of Southern History* 61 (1995): 766- 70.

Robinson, Carline S., and William R. Dortch. *The Blacks in These Sea Islands: Then and Now*. New York: Vantage Press, 1985.

Robinson, Sallie Ann. *Gullah Home Cooking the Daufuskie Island Way*. Chapel Hill, NC: University of NC Press, 2003.

Rodney, Walter. "African Slavery and Other Forms of Social Oppression on the Upper Guinea Coast in the Context of the Atlantic Slave- Trade." *Journal of African History* 8:3 (1966): 436.

- - - . "Upper Guinea and the Significance of the Origins of Africans Enslaved in the New World. *Journal of Negro History* 54:4 (October 1969): 327- 45.

Roediger, David R. "And Die in Dixie: Funerals, Death, and Heaven in the Slave Community, 1700- 1865." *Massachusetts Review* 22 (Spring 1981): 163- 183.

Rogers, George C., Jr. *Charleston in the Age of the Pinckneys*. Columbia, SC: Reprint Co. [1969], 1980.

- - - ."The Georgetown Rice Planters on the Eve of the Civil War." *South Carolina History Illustrated* 1 (1970): 25- 33.

Rogers, Nick. "Going Global: Singleton- Prather Brings Gullah Culture to Illinois." [Springfield, IL] *State Journal- Register* (April 15, 2004): Entertainment Section, 13.

Rogers, Nikki Lynn. "The Affinity of South Carolina's 'Gullah' African Americans: Biological Tests of Cultural and Historical Hypothesis." Ph.D. dissertation, University of Tennessee, Knoxville, 2000.

Rose, Willie Lee Nichols and C. Vann Woodward "Introduction." In Willie L. Rose. *Rehearsal for Reconstruction: The Port Royal Experiment*. Athens, GA: University of Georgia Press, 1999.

Rosebrock, Abby. "Strongly Woven." [Charleston, SC] *Post and Courier* (August 12, 2003): C3.

Rosenfield, Jeff. "The Forgotten Hurricane." *Weatherwise* 51:5 (1998): 34- 9.

Rosengarten, Dale. "Lowcountry Basketry: Folk Arts in the Marketplace." *Southern Folklore* 49 (1985): 240.

- - - . "Social Origins of the African- American Lowcountry Basket." Ph.D. dissertation, Harvard University, 1997.

- - - . "Spirits of Our Ancestors: Basket Traditions in the Carolinas." In George D. Terry and Lynn Robertson Myers, eds. *Carolina Folklore: The Cradle of a Southern Tradition*. Columbia: McKissick Museum, University of South Carolina, 1985, 10- 21.

Rosengarten, Theodore. *Tombee: Portrait of a Cotton Planter with the Plantation Journal of Thomas B. Chaplin (1822- 1890)*. New York: William Morrow and Co., 1986.

Rosser, Howard Taylor. *Slave Holding in North Carolina: An Economic View*. Chapel Hill, NC: University of North Carolina Press, 1926.

Rout, Leslie B., Jr. *The African Experience in Spanish America, 1502 to the Present*. London: Markus Wiener Publishers, 1976.

Rowe, G. C. "The Negroes of the Sea Islands." *Southern Workman* 29 (1900):709- 715.

Rowland, Lawrence S., *et al. The History of Beaufort County, South Carolina, Volume I, 1514- 1861*. Columbia, SC: University of South Carolina Press, 1996.

Royle, Stephen A. "The Attitudes and Aspirations on St. Helena in the Face of Continued Economic Dependency." *Geographical Journal* 158:1 (March 1992): 31- 39.

Rozin, Skip and Salvatore Catalano. "Time Catches Up with a Special Island" (Daufuskie Island, SC). *Audubon*, September 1981.

Rucker, Walter. "Conjure, Magic, and Power: The Influence of Afro- Atlantic Religious Practices on Slave Resistance and Rebellion." *Journal of Black Studies* 32:1 (2001): 84- 103.

- - - . "Denmark Vesey: The Buried History of America's Largest Slave Rebellion and the Man Who Led It." *Journal of Negro History* 86:2 (2001): 132- 48.

Ruffins, Paul. "The Peculiar Institution: New Trends and Controversies in Researching and Teaching Slavery." *Black Issues in Higher Education* (May 24, 2001).

Russell, Robert R. "The Effects of Slavery upon Nonslaveholders in the Ante Bellum South." *Agricultural History* 15:2 (April 1941): 112- 26.

Russell, Thomas D. "Articles Sell Best Singly: The Disruption of Slave Families at Court Sales." *Utah Law Review* (1996): 1161- 1208.

- - - . "A New Image of the Slave Auction: An Empirical Look at the Role of Law in Slave Sales and a Conceptual Reevaluation of Slave Property." *Cardozo Law Review* 17 (1996): 1241- 82.

- - - . "Sale Day in Antebellum South Carolina: Slavery, Law, Economy, and Court- Supervised Sales." Ph.D. dissertation, Stanford University, 1993.

- - - . "South Carolina's Largest Slave Auctioneering Firm." *Chicago- Kent Law Review* 68 (1993): 1241- 82.

Rutledge, Archibald. *Home by the River*. Orangeburg, South Carolina: Sandlapper Publishing, Inc., [reprint] 1974.

Rymer, Russ. *American Beach: A Saga of Race, Wealth, and Memory*. New York: Harper Collins, 1998.

Sack, Kevin. "Union Is Losing Battle with an Island Resort: Daufuskie Island Club Dismisses Recently Unionized Employees." *New York Times* (February 24, 1997): A10.

Salley, Alexander S. "The Introduction of Rice into South Carolina." *Bulletin of the Historical Commission of South Carolina* 6. Columbia, SC: The State Co., 1919.

Salter, Paul. "Changing Agricultural Patterns on the South Carolina Sea Islands." *Journal of Geography*. 67: 4 (1968): 223- 228.

- - - . "Changing Economic Patterns of the South Carolina Sea Islands." Ph.D. dissertation, University of North Carolina, 1965.

Santos, Nancy. "A Gullah Tale: The Old Ones of the Gullah/Geechee Community Struggle to Hol' Fas' to their Rich Heritage." [Charleston, SC] *City Paper* (December 1, 2004): 22- 5.

Saunders, William C. "Sea Islands: Then and Now." *Journal of Black Studies*. 10:1 (June 1980): 481- 92.

Sayre, Phillip. "Three Centuries of South Carolina Tradition Woven into Baskets: Sweetgrass Baskets Made in Mt. Pleasant." *New York Times* (September 2, 1997): A15.

Savage, Beth L. *African American Historic Places*. Washington, DC: The Preservation Press, 1994.

Saville, Julie. *The Work of Reconstruction: From Slave to Wage Laborer in South Carolina 1860- 1870*. New York: Cambridge University Press, 1994.

Scarborough, Ruth. *The Opposition to Slavery in Georgia Prior to 1860*. New York: Negro University Press- Greenwood Publishing [1933], 1968.

Schafer, Daniel L. *Anna Madgigene Jai Kingsley: African Princess, Florida Slave, Plantation Slaveowner*. Gainesville, FL: University Press of Florida, 2003.

- - - . "Freedom Was as Close as the River: African Americans and the Civil War in Northeast Florida." In David R. Colburn and Jane L. Landers, eds. *The African American Heritage of Florida*. Gainesville, FL: University Press of Florida, 1995, 157- 84.

- - - . "Shades of Freedom: Anna Kingsley in Senegal, Florida, and Haiti." *Slavery and Abolition* 17:1 (1996): 130- 154.

Schmidt, Elisabeth Whitman. "Black Patriots: Unsung Heroes of the Revolution." *American Spirit: Daughters of the American Revolution Magazine* (Jan/Feb 2003):16- 19.

"School in Beaufort Keeping 'Gullah' Alive." *Savannah Morning News/Press* (27 February 1977): 1B, 5B.

Schultz, Constance. "Eliza Lucas Pinckney." In G. J. Barket- Benfield and Catherine Clinton, eds. *Portraits of American Women*. New York: St Martin's Press, 1991.

- - - , ed. *The History of South Carolina Slide Collection*. Orangeburg, SC: Sandlapper Publishing Co., Inc., 1989.

Schuyler, Robert L. "Historic and Historical Sites Archaeology as Anthropology: Basic Definitions and Relationships." *Historical Archaeology* 4 (1970): 83- 89.

Schwalm, Leslie A. "The Meaning of Freedom: African- American Women and Their Transition from Slavery to Freedom in Lowcountry South Carolina." Ph.D. dissertation, University of Wisconsin- Madison, 1991.

- - - . "'Sweet Dreams of Freedom': Freedwomen's Reconstruction of Life and Labor in Lowcountry South Carolina." *Journal of Women's History* 9:1 (1997): 9- 17.

Schwartz, Marie Jenkins. *Born in Bondage: Growing Up Enslaved in the Antebellum South*. Cambridge, MA: Harvard University Press, 2000.

Schweninger, Loren. *Black Property Owners in the South, 1790- 1915*. Urbana, IL: University of Illinois Press, 1990.

"Scientists Explore Site of First Free U.S. Blacks: Fort Mose." *Jet* 71 (February 16, 1987): 25.

Scott, Peter. "Disappearing Cemeteries: Burial Grounds Erased by 'Growth.'" *Atlanta Journal Constitution* (October 11, 1999): BM1.

Seabrook, Charles. "Gullah- Geechee Heritage in Peril, Group Says." *Atlanta Journal Constitution* (May 25, 2004): A1.

- - - . "John's Island: A Returning Native Finds the Place of His Youth Has Given Way to Progress." *Atlanta Journal Constitution* (September 12, 1985): M18.

Seabrook, Whitemarsh B. *Memoir of the Origin, Cultivation, and Uses of Cotton . . . with Special Reference to the Sea- Island Cotton Plant*. Charleston: Miller and Browne, 1824.

Segal, Jon. "Activists Circulate Property Tax Petition." [Hilton Head Island, SC] *Island Packet* (October 25, 2000).

Sharp, Sharon A. "Folk Medicine Practices: Women as Keepers and Carriers of Knowledge." *Women's Studies International Forum* 9 (1986):243- 49.

Sharrer, G. Terry. "The Indigo Bonanza in South Carolina, 1740- 1790." *Technology and Culture* 12:3 (July 1971): 447- 55.

- - - . "Indigo in Carolina. 1671- 1796." *South Carolina Historical Magazine* 72:1 (January 1972): 94- 103.

Shaw, Stephanie J. "Using the WPS Ex- Slave Narratives to Study the Impact of the Great Depression." *Journal of Southern History* 69:3 (August 2003): 623- 58.

Sherrill, Cassandra. "A Touch of West Africa: School for Sea Islanders Has Played many Roles." *Winston Salem Journal* (October 1, 2004): E 3.

Sherrod, Pamela. "The Keeper of the Gate: South Carolina Blacksmith Philip Simmons Ensures a Future of a Craft and a Past." *Chicago Tribune* (September 6, 1998): A1.

Shick, Tom W. "Healing and Race in the South Carolina Low Country." In Paul E Lovejoy, ed. *Africans in Bondage: Studies in Slavery and the Slave Trade*. Madison, WI: University of Wisconsin Press, 1986, 107- 24.

Shlasko, Ellen. "Carolina Gold: Economic and Social Change on a South Carolina Rice Plantation." Ph.D. dissertation, Yale University, 1997.

Shofner, Jerrell H. and William Warren Rogers. "Sea Island Cotton in Antebellum Florida." *Florida Historical Quarterly* 40 (April 1962): 373- 80.

Shuffleton, Frank. *A Mixed Race: Ethnicity in Early America*. New York: Oxford University Press, 1993.

Shuler, C. Osborne. "Values of Comprehensive Study of South Carolina Folk Remedies with Modern Science." Senior thesis, University of South Carolina, 1973.

Shuter, Marty. "The Gullah Gift: Jonathan Green Is Preserving the Disappearing Culture of his Youth." *Savannah News- Press* (April 23, 1995): G1, G6.

Sickels- Taves, Lauren B. and Michael S. Sheehan. *The Lost Art of Tabby Redefined: Preserving Oglethorpe's Architectural History*. West Olympia, WA: Minute Man Press, 1999.

- - - . "More with Less: Implications of Tabby Use by Slaves in Coastal Georgia." 61st Annual Meeting of the Society for American Archaeology, New Orleans, LA, April 11, 1996.

Sides, Sudie Duncan. "Southern Women and Slavery." *History Today* (January 1970): 54- 60 and (February 1970): 124- 130.

- - - . "Women and Slaves: An Interpretation Based on the Writings of Southern Women," Ph.D. dissertation, University of North Carolina, 1969.

Siebert, Ericka Martin. "African American Archaeological Sites & the National Register of Historic Places: Creating a Public Memory." *African American Archaeology* 27 (Late Winter 2000).

Siegrist, Mark Andrew. "Diction and Dialect Performance Practice in the American Negro Spiritual and Slave Songs." Ph.D. dissertation, University of Texas Austin, 1996.

"Sierra Leonean 'Slave Descendant' Discovered in USA." *All Africa News* (November 9, 2004).

Sikes, Lewright. "Medical Care for Slaves: A Preview of the Welfare State." *Georgia Historical Quarterly* 52 (1968): 405- 13.

Simms, L. Moody, Jr. "A Note of Sidney Lanier's Attitude toward the Negro and Toward Populism." *Georgia Historical Quarterly* 52 (September 1968): 305- 307.

Simms, Rupe. "Slave Christianity: A Critical Feature of Black Studies History." *Western Journal of Black Studies* (Spring 1998): 49- 56.

Simpson, Robert. "The Shout and Shouting in Slave Religion in the United States." *Southern Quarterly* 23:3 (Spring 1958): 34- 40.

Simpson, Tiwanna M. "'She Has her Country Marks Very Conspicuous in the Face': African Culture and Community in Early Georgia." Ph.D. dissertation, Ohio State University, 2002.

Sinclair, Bryan Thomas. "'O'er de crossin': The Syncretic Concept of Heaven and the Afterlife among the Gullah Slaves." M. A. thesis, University of South Carolina, 1995.

Singleton, Theresa Ann. "The African American Legacy beneath our Feet." In Beth L. Savage, ed. *African American Historic Places*. New York: John Wiley & Sons, 1995.

- - - . *The Archaeology of Slavery and Plantation Life*. New York: Academic Press, 1985.

- - - . "The Archaeology of Afro- American Slavery in Coastal Georgia: A Regional Perception of Slave Household and Community Patterns." Ph.D. Dissertation, University of Florida, 1980.

- - - . "The Slave Tag: An Artifact of Urban Slavery." *South Carolina Antiquities* 16 (1981): 41- 68.

Sinha, Manisha. *The Counterrevolution of Slavery: Politics and Ideology in Antebellum South Carolina*. Chapel Hill, NC: University of North Carolina Press, 2000.

Sirmans, Eugene. "The Legal Status of the Slave in South Carolina, 1670- 1740." *Journal of Southern History* 28 (September of 1962): 462- 473.

Sitterson, J. Carlyle. "Ante- Bellum Sugar Culture in the South Atlantic States." *Journal of Southern History* 3:2 (1937): 175- 87.

- - - . "The William J. Minor Plantations: A Study in Antebellum Absentee Ownership." *Journal of Southern History* 9 (1943): 59- 74.

Slaughter, Sabra Conway. "'The Old Ones Die and the Young Ones Leaving': The Effects of Modernization on the Community of Daufuskie Island, South Carolina." Ph.D. dissertation, University of Michigan, 1985.

Slaughter, Thomas P. *The Natures of John and William Bartram*. New York: Alfred A. Knopf, 1996.

Sledge, Mailande Cheney. "The Representation of the Gullah Dialect in Francis Griswold's 'A Sea Island Lady' (South Carolina)." Ph.D. dissertation, University of Alabama, 1985.

Smiles, Robin V. "A Responsibility to Tell." *Black Issues in Higher Education* (February 12, 2004).

Smith, C. Wayne and J. Tom Cothren, eds. *Cotton: Origin, History, Technology, and Production*. New York: John Wiley & Sons, 1999.

Smith, Franklin O. "A Cross- Generational Study of the Parental Discipline Practices and Beliefs of Gullah Blacks of the Carolina Sea Islands." Ph.D. dissertation, University of Massachusetts, 1973.

Smith, Glenn. "As Old Cemeteries Disappear, So Does the History Behind Them." [Charleston, SC] *Post and Courier* (October 10, 2004): A1.

- - - . "Fighting to Restore a Final Resting Place: Upset Relatives, Property Owner Want Cemetery Preserved." [Charleston, SC] *Post and Courier* (September 17, 2004): A1.

Smith, H. A. M. "The Baronies of South Carolina: Hobcaw." *South Carolina Gazette*, 16 June 1777.

Smith, Jennifer Carol Lund. "'Thinspace 'Twill Take Some to Study When I Get Over': Varieties of African American Education in Reconstruction Georgia." Ph.D. dissertation, University of Georgia, 1997.

Smith, John P. "Cultural Preservation of the Sea Island Gullah: A Black Social Movement in the Post-Civil Rights Era." *Rural Sociology* 56:2 (Summer 1991): 284- 98.

Smith, Julia Floyd. "Cotton and the Factorage System in Antebellum Florida." *Florida Historical Quarterly* 40:1 (July 1970): 36- 48.

- - - . "Slave Trading in Antebellum Florida." *Florida Historical Quarterly* 42 (January 1972): 252- 61.

- - - . *Slavery and Plantation Growth in Antebellum Florida: 1821- 1860*. Gainesville, FL: University Press of Florida, 1973.

- - - . *Slavery and Rice Culture in Low Country Georgia, 1760- 1860*. Knoxville, TN: University of Tennessee Press, 1985.

Smith, Laureen Elizabeth. "Audience, Performance, and Meaning in the Gullah Sea Islands." Ph.D. dissertation, George Washington University, 1999.

Smith, Mark M. *Debating Slavery: Economy and Society in the Antebellun South*. New York: Cambridge University Press, 1998.

- - - . *Listening to Nineteenth- Century America*. Chapel Hill, NC: University of North Carolina Press, 2001.

- - - . *Mastered by the Clock: Time, Slavery, and Freedom in the American South*. Chapel Hill, NC: University of North Carolina Press, 1997.

- - - , ed. *The Old South, Blackwell Readers in American Social and Cultural History Series*. Malden, MA: Blackwell Publishing, 2000.

- - - . "Remembering Mary, Shaping Revolt: Reconsidering the Stono Rebellion." *Journal of Southern History* 67:3 (August 2001): 513- 34.

Smith, Shelly Elizabeth. "The Plantations of Colonial South Carolina: Transmission and Transformation in Provincial Culture." Ph.D. dissertation, Columbia University, 1999.

Smith, Stephen D. *Whom We Would Never More See: History and Archaeology Recover the Lives and Deaths of African American Civil War Soldiers on Folly Island, South Carolina* (Topics in African American History 3). Columbia, SC: SC Department of Archives and History, 1993.

Smith, William H. "Low- Country Black English." *American Speech* 54:1 (Spring 1979): 64- 67.

Smothers, Ronald. "Proposal for Bridge Intrudes on Island Life: Sandy Island." *New York Times* (May 6, 1995):6.

Smythe, Augustine T., Robert W. Gordon, Katherine C. Hutson, *et al. The Carolina Low Country*. New York: Macmillan Co., 1932.

Sobel, Mechal. *Trabelin' On: The Slave Journey to an Afro- Baptist Faith*. Princeton, NJ: Princeton University Press [reprint], 1988.

Sohler, Elizabeth. "The Influence of Gullah Culture on the Opera *Porgy and Bess*." M.A. thesis, University of Kentucky, 1998.

Solow, Barbara. "The Transatlantic Slave Trade: A New Census." *William and Mary Quarterly* 58:1 (Jan 2001): 9- 16.

"Song Links Woman to her African Homeland." *Philadelphia Tribune* (March 7, 1997): n.p.

South Carolina Educational Television. *Family across the Sea*. Tim Carrier, dir., 1991.

Souther, Rita, Hazel Fuller, and Elisabeth Whitman Schmidt. *African American and American Indian Patriots of the Revolutionary War*. Washington, DC: National Society Daughters of the American Revolution, 2001.

Spaeth, Sigmund, ed. *Music and Dance in the Southeastern States*. New York: Alectra Press Inc., 1952.

Spalding, Phinizy. "South Carolina and Georgia: The Early Days." *South Carolina Historical Magazine* 69:2 (April 1968): 83- 96.

Spalding, Thomas. "Brief Notes on the Cultivation of Cotton, Rice, Sugar Cane and the Grape Vine." *Southern Agriculturist* (February 1828): 60- 73.

Spieler, Gerhard. "Reviewing Robert Smalls and the S. C. Militia." [Beaufort, SC] *Beaufort Gazette* (March 7, 2004): n.p.

Spirituals of the Carolina Low Country. Charleston, SC: Society for the Preservation of Spirituals, 2004.

Spruill, Julia Cherry. *Women's Life and Work in the Southern Colonies*. New York: W. W. Norton & Co., 1972.

Stafford, Frances J. "Illegal Importations: Enforcement of the Slave Trade Laws along the Florida Coast, 1810- 1828." *Florida Historical Quarterly* 46:1 (1967): 121- 133.

Stampp, Kenneth M. *The Peculiar Institution: Slavery in the Ante- Bellum South*. New York: Vintage Books, [re- issue] 1989.

Standenroess, P. J. "Victims of the African Slave Trade, a Document." *Journal of Negro History* 41:2 (1956): 148- 151.

Stanley, Amy Dru. *From Bondage to Contract: Wage Labor, Marriage, and the Market in the Age of Slave Emancipation*. New York: Cambridge University Press, 1998.

Starks, George Leroy, Jr. "Black Music in the Sea Islands of South Carolina: Its Cultural Context, Continuity and Change." Ph.D. dissertation, Wesleyan University, 1973.

- - - . "Salt and Pepper in Your Shoe: Afro- American Song Tradition on the South Carolina Sea Islands." In Irene V. Jackson, ed. *More Than Dancing: Essays on Afro- American Music and Musicians*. Westport, Connecticut: Greenwood Press, 1985.

- - - . "Singing 'Bout a Good Time': Sea Island Religious Music." *Journal of Black Studies* 10:3 (1980) 437- 44.

Starobin, Robert S. *Denmark Vesey: The Slave Conspiracy of 1882*. Engelwood Cliffs, NJ, Prentice-Hall, 1970.

- - - . "Denmark Vesey's Slave Conspiracy of 1822: A Study in Rebellion and Repression." In John Bracey, August Meier, Elliott Rudwick, eds. *American Slavery: The Question of Resistance*. Belmont, CA: Wadsworth Publishing Co., 1971, 142- 58.

- - - . *Industrial Slavery in the Old South*. New York: Oxford University Press, 1970.

Starobin, Robert S. and Ira Berlin, eds. *Blacks in Bondage: Letters of American Slaves*. Princeton, NJ: First Markus Wiener Publishers, 1994.

Statom, Thomas. "Servitude and Slavery in Colonial Georgia." Ph.D. dissertation, University of Alabama, 1978.

Stavinsky, Leonard Price. "Industrialism in Ante Bellum Charleston." *Journal of Negro History* 36:3 (July 1951): 302- 22.

- - - . "The Negro Artisan in the South Atlantic States, 1800- 1860: A Study of Status and Opportunity with Special Reference to Charleston." Ph.D. dissertation, Columbia University, 1958.

Steckel, Richard H. "A Dreadful Childhood: The Excess Mortality of American Slaves." *Social Science History* 10:4 (Winter 1986): 427- 465.

- - - . "Miscegenation and the American Slave Schedules." *Journal of Interdisciplinary History* 11:2 (Autumn 1980): 251- 63.

- - - . "Slave Mortality." *Social Science History* 3 (1979): 90- 106.

Steel, Edward M. J. "Flush Times in Brunswick, Georgia, in the 1830s." *Georgia Historical Quarterly* 39 (September 1955: 231- 38.

Steffen, Charles. "In Search of the Good Overseer: The Failure of the Agricultural Reform Movement in Lowcountry South Carolina, 1821–1834." *Journal of Southern History* 63:4 (November 1997).

Steiner, Roland. "Observations on the Practice of Conjuring in Georgia." *Journal of American Folklore* 14 (1901): 177- 81.

- - - . "'Seeking Jesus': A religious Rite of Negroes in Georgia." *Journal of American Folklore* 14:54 (1901): 172.

Stephens, Lester D. *Science, Race, and Religion in the American South: John Bachman and the Charleston Circle of Naturalists 1815- 1895*. Chapel Hill: University of North Carolina Press, 2000.

Stepto, Michael, ed. *Our Song, Our Toil: The Story of American Slavery As Told by Slaves*. New York: Millbrook Press (Simon and Schuster), 1994.

Sterling, Dorothy. *Captain of the Planter: The Story of Robert Smalls*. New York: Random House Children's Publisher, 1960.

- - - . *We Are Your Sisters: Black Women in the Nineteenth Century*. New York: W. W. Norton & Co., 1984.

Stevens, S.G. "The Origin of Sea Island Cotton." *Agricultural History* 50 (April 1976): 391- 99.

Stevenson, Sarah Anne and Dave Stockum. "Blues Music and Its Influence on Integration." *English Language and Usage* 20 (November 1999).

Stewart, Mart Allen. "Land Use and Landscapes: Environment and Social Change in Coastal Georgia, 1680- 1880." Ph.D. dissertation, Emory University, 1988.

- - - . *What Nature Suffers to Groe: Life, Labor, and Landscape on the Georgia Coast, 1860- 1920*. Wormsloe Foundation Publications, Athens, GA: University of Georgia Press, [reprint], 2003.

Stine, Linda F. Martha Zierden, Lesley M. Drucker, and Christopher Judge, eds. *Carolina's Historical Landscapes: Archaeological Perspectives*. Knoxville, TN: University of Tennessee Press, 1997.

Stoddard, Albert H. *Animal Tales Told in the Gullah Dialect*. Folklore of the United States Series, Archive of Folk Song Recordings (Three volumes on three disks, Serial Numbers: AAFS L44, AAFS L45, AAFS L46) Washington, DC: The Library of Congress Division of Music Recording Laboratory, 1949.

- - - . "Origin, Dialect, Beliefs, and Characteristics of the Negroes of the South Carolina and Georgia Coasts." *Georgia Historical Quarterly*. 28:1 (1944) 186- 195.

Stone, James. "Black Leadership in the Old South: The Slave Drivers of the Rice Kingdom." Ph.D. dissertation, Florida State University, 1976.

Stoney, P. K. "The Incidence of the Sickle Cell Trait in the Negroes from the Sea Island Area of South Carolina. *Southern Medical Journal* 43:1 (1950): 48- 53.

Story, Rosalyn A. "Porgy and Bess at Sixty: Hope Clark, the First African American to Direct Gershwin's Masterpiece Casts the Work in a New Light for Houston Grand Opera." *Opera News* 59 (1995): 12- 18.

Stowe, Stephen M. *Intimacy and Power in the Old South: Ritual in the Lives of the Planters*. Baltimore: Johns Hopkins University Press, 1987.

- - - . "Obstetrics and the Work of Doctoring in the Mid- Nineteenth Century American South." *Bulletin of the History of Medicine* 64 (1990):540- 66.

Stowell, David W., Gary R. Mormino, and Eugene D. Genovese. *Balancing Evils Judiciously: The Proslavery Writings of Zephaniah Kingsley*. Gainesville, FL: University Press of Florida, 2000.

Straight, Susan. *I Been in Sorrow's Kitchen and Licked out All the Pots*. New York: Doubleday, 1992.

Strangstad, Lynette. *Preservation of Historic Burial Grounds*. National Trust for Historic Preservation Information Series 76. Washington: National Park Service, 1993.

"The Strength of Arms: Black Labor, White Rice." Durham, NC: North Carolina State Public Video, 1987.

Strickland, John Scott. "'No More Mud Work': The Struggle for the Control of Labor and Production in Low Country South Carolina, 1863- 1880." In Walter J. Fraser, Jr. and Winfred B. Moore, Jr., eds. *The Southern Enigma: Essays on Race, Class, and Folk Culture*. Westport, CT: Greenwood Press, 1983. 43- 62.

- - - . "Traditional Culture and Moral Economy: Social and Economic Change in the South Carolina Lowcountry, 1865- 1910." In Steven Hahn and Jonathon Prude, eds. *The Countryside in the Age of Capitalist Transformation*. Chapel Hill, NC: University of North Carolina Press, 1985, 141- 78.

Strudwick Family Papers, 1701- 1826, New Hanover and Orange Counties, North Carolina. Collection housed in Southern Historical Collection, Manuscripts Department, Academic Affairs Library of the University of North Carolina, Chapel Hill, NC.

Stuckey, Sterling. *Slave Culture: Nationalist Theory and Foundations of Black America*. New York: Oxford University Press, 1987.

- - - . "Through the Prism of Folklore: The Black Ethos of Slavery." *Massachusetts Review* 9:3 (Summer 1968): 417- 37.

Stumpf, Stuart O., "Implications of King George's War for the Charleston Mercantile Community." *South Carolina Historical Magazine* 77 (July 1976): 131- 132.

Sullivan, Buddy, ed. *All Under Bank: Roswell King, Jr. and Plantation Management in Tidewater Georgia, 1819- 1854*. Darien, GA: Darien Printing and Graphics, 2003.

- - - . *Darien and McIntosh County*. Charleston, SC: Arcadia Publishing Co., 2000.

- - - . *The Darien Journal of John Girardeau Legare, Ricegrower, 1877- 1932*. Self published, 1977.

- - - . *Early Days on the Georgia Tidewater: The Story of McIntosh County and Sapelo*. Darien, GA: McIntosh County Board of Commissioners, 1990.

- - - . *Georgia: A State History*. Charleston, SC: Arcadia Publishing, 2003.

- - - . *Sapelo Island*. Charleston, SC: Arcadia Publishing, 2002.

- - - . *Tabby: A Historical Perspective of an Antebellum Building Material in McIntosh County, Georgia*. Darien, GA: self published, 1998.

Sully, Susan. "Dream Weaver: Artist, Teacher, and Activist Mary Jackson Has Helped Revitalize South Carolina's Sweetgrass Basketmaking Tradition." *Southern Accents* (September/October 2002): 102- 6.

Summer- Smith. "Interpretation of Slavery in Southern Historic House Museums." M.A. thesis, Baylor University, 2003.

Sumpter, Althea. "Navigating the Gullah Coast Using Multimedia Technology." Ph.D. dissertation, Clark Atlanta University, 1999.

Sutch, R. "The Care and Feeding of Slaves." In P. A. David, *et al.,* eds. *Reckoning with Slavery: A Critical Study of the Quantitative History of American Negro Slaves*. New York: Oxford University Press, 1976.

Sutherland, Donald E. "A Special Kind of Problem: The Response of Household Slaves and Their Masters to Freedom." *Southern Studies* 80 (Summer 1981).

Suttles, William C., Jr. "African Religious Survivals as Factors in American Slave Revolts." *Journal of Negro History* 56 (1971): 97- 104.

Swados, Felice. "Negro Health on the Ante Bellum Plantations." *Bulletin of the History of Medicine* 10 (1941): 460- 72.

Swan, Dale Evans. "The Structure and Profitability of the Antebellum Rice Industry, 1859." Ph.D. dissertation, University of North Carolina, 1972.

Sweat, Edward Forrest. "The Free Negro in Antebellum Georgia." Ph.D. dissertation, Indiana University, 1957.

Sweig, Donald M. "Reassessing the Human Dimension of the Interstate Slave Trade." *Prologue* 12 (Spring 1980): 5- 21.

Swinton, William, Jr. "Developing Strategies for Political Involvement at Friendship African Methodist Episcopal Church." D. Min. dissertation, Drew University, 1994.

Swope, Brad. "Let the Mainlands Hear the Word: Coastal Carolina Educators Work to Preserve Gullah Culture." *Teaching Tolerance* (Spring 2004): 69- 72.

Szwed, John F. "Africa Lies Just Off Georgia." *Africa Report* 15:7 (1970): 29- 31.

Tadman, Michael. "The Hidden History of Slave Trading in Antebellum South Carolina: John Springs III and Other 'Gentlemen Dealing in Slaves.'" *South Carolina Historical Magazine* 97 (January 1996): 6- 29.

- - - . *Speculators and Slaves: Masters, Traders, and Slaves in the Old South*. Madison, WI: University of Wisconsin Press, 1989.

Takaki, Ronald T. "The Movement to Reopen the African Slave Trade in South Carolina." *South Carolina Historical Magazine* 66:1 (January 1965):38- 54.

- - - . *A Proslavery Crusade: The Agitation to Reopen the African Slave Trade*. New York: Free Press, 1971.

Tanner, Laura E. "Self- Conscious Representation in the Slave Narrative." *BALF* 21 (Winter 1987): 415- 424.

Taylor, Alrutheus Ambush. *The Negro in South Carolina during the Reconstruction*. St. Paul, MN: Reprint Services Corporation, [1924] 1991.

Taylor, Mark and Dan T. Ouzts. "Gullah: A Study of Language." *Reading Improvement* 39:2 (Summer 2002): 55- 68.

Taylor, Mark T. "Seiners and Tongers: North Carolina Fisheries in the Old and New South." *North Carolina Historical Review* 69 (January 1992): 4- 10.

Taylor, Marsha Natalie. "'Shoutin'': The Dance of the Black Church." Ph.D. dissertation, Case Western Reserve University, 1997.

Taylor, Rosser Howard. *Antebellum South Carolina: A Social and Cultural History*. Chapel Hill, NC: University of North Carolina Press, 1942.

- - - . "Feeding Slaves." *Journal of Negro History* 9 (1924): 139- 43.

- - - . "Slave Conspiracies in North Carolina." *North Carolina Historical Review* 5 (January 1928): 20- 34.

Taylor, Susie King. *A Black Woman's Civil War Memoirs: Reminiscences of My Life in Camp with the 33rd United States Colored Troops, Late 1st S. C. Volunteers*. New York: Arno Press reprint ed. [1902], 1968.

Taylor, Teresa. "The African Connection: Africans Shaped Southern Cooking with Foods, Skills." [Charleston, SC] *Post and Courier* (June 5, 1998): A15.

Teasdale, Annette. "Robert Smalls: Gullah Greatness Personified." [Beaufort, SC] *Beaufort Gazette* (March 1, 2004).

"Ted Turner Drops Suit Donates Land." *Los Angeles Times* (August 16, 2002): A30.

Thayer, Theodore, ed. "Nathaniel Pendleton's 'Short Account of the Sea Coast of Georgia in Respect to Agriculture, Ship Building, Navigation, and the Timber Trade.'" *Georgia Historical Quarterly* 57:1 (March 1957): 70- 81.

Thomas, Emory M. "The South and the Sea: Some Thoughts on the Southern Maritime Tradition." *Georgia Historical Quarterly* 68 (Summer 1983): 159- 67.

Thomas, Hugh. *Slave Trade: The Story of the Atlantic Slave Trade, 1440- 1870*. New York: Touchstone- Simon and Schuster, 1997.

Thomas, John Polk Jr. "The Barbadians in Early South Carolina." *South Carolina Historical and Genealogical Magazine* 31:1 (April 1930): 75- 92.

Thomas, Jim. "Using Computer Graphics in Interpretation: New Uses for Those Old Photographs." *Legacy* 6:1 (1995): 32- 33.

Thomas, June Sheralyn Manning. "Blacks on the South Carolina Sea Islands: Planning for Tourist and Land Development." Ph.D. dissertation, University of Michigan, 1977.

Thomas, Russell D. "Slave Auctions on the Courthouse Steps: Court Sales of Slaves in Antebellum South Carolina." In Paul Finkelman, ed. *Slavery and the Law*. Madison, WI: Madison House, 1999, 329- 64

Thomas, Velma Maia. *Freedom's Children: The Passage from Emancipation to the Great Migration*. New York: Crown Publishers, Inc., 2000.

- - - . *Lest We Forget: The Passage from Africa to Slavery and Emancipation*. New York: Crown Publishers, Inc. 1997.

- - - . *No Man Can Hinder Me: The Journey from Slavery to Emancipation Through Song*. New York: Crown Publishers, Inc, 1998.

Thomas- Watkins, June Esther. "Strategies of Social Control in an Isolated Community: The Case of the Gullah of St. Helena's Island, South Carolina." Ph.D. dissertation, Indiana University of Pennsylvania, 1993.

- - - . "Cannibals, Witches, and Slave Traders in the Atlantic World." *William and Mary Quarterly* 3rd series 60:2 (April 2002).

Thornwell, J. H. *The Rights and Duties of Masters: A Sermon Preached at the Dedication of a Church Erected in Charleston, S. C., for the Benefit and Instruction of the Colored Population.* Charleston, SC: Steam- Power Press, 1850.

Thornton, John K. *Africa and Africans in the Making of the Atlantic World, 1400- 1800*. New York: Cambridge University Press, 1992.

- - - . "African Dimensions of the Stono Rebellion." *American Historical Review* 96 (October 1991): 1101- 13.

Thrasher, Paula Crouch. "Celebrating Gullah Heritage: Distinctive Lowcountry Cooking, Crafts and Music Highlight February Festival." *Atlanta Journal Constitution*, 19 Jan 2003, K 14. <http://www.gullahcelebration.com>

- - - . "Comyah to Gullah: SC Island Culture Embraces History Rooted in West Africa." *Atlanta Journal Constitution* (May 21, 2004): A2.

- - - . "The Rich Rhythms of Southern Culture." *Atlanta Journal Constitution* (May 16, 2004): K14.

Thrower, Sarah Selina. "The Spiritual of the Gullah Negro in South Carolina." MM thesis, Cincinnati College Conservatory of Music, 1954.

Thurber, Cheryl. "Development of the Mammy Image and Mythology." In Virginia Bernhard, *et al*., eds. *Southern Women: Histories and Identities*. Columbia, MO: University of Missouri Press, 1992.

Thurmond, Michael. *Freedom: Georgia's Antislavery Heritage 1733- 1865*. Atlanta, GA: Longstreet Press, 2003.

Tibbets, John H. "Africa- on- the- South- Carolina- Coast: An African- influenced Language and Culture Fights for its Life." *Utne Reader*: 107:3 (2001): 30.

- - - . "The Bird Chase." *Coastal Heritage* 15:4 (Spring 2001): 1- 12.

- - - . "Early Europeans in America: Hurricanes Steer the Course of History." *Coastal Heritage* 13:1 (Summer 1998): 1- 16.

- - - . "Gullah's Radiant Light." *Coastal Heritage* 19:3 (Winter 2004- 05): 1- 12.

- - - . "Rise and Fall and Rise: South Carolina's Maritime History." *Coastal Heritage* 17:2 (Winter 2004- 05): 1- 12.

- - - . "Would You Notice if South Carolina's Commercial Fishermen Disappeared?" *Coastal Heritage* 15:3 (Winter 2000): 1- 12.

Tindall, George Brown. "Beyond the Mainstream: The Ethnic Southerners." *Journal of Southern History* 40 (1974): 3- 18.

- - - . "The Campaign for the Disfranchisement of Negroes in South Carolina." *Journal of Southern History* 15:2 (May 1949): 212- 234.

- - - . *South Carolina Negroes: 1877- 1900*. Columbia, SC: University of South Carolina Press, 1952.

Toohey, Marty. "Community Forges Ahead to Preserve its Island Legacy." [Hilton Head Island, SC] *Island Packet* (July 11, 2004).

- - - . "Culture Weaves Past into Present, Future: Time Leaves its Mark on Islanders." [Hilton Head Island, SC] *Island Packet* (July 11, 2004).

- - - . "Good Thing Ends: Driessens Close Family Business." [Hilton Head Island, SC] *Island Packet* (May 2, 2004).

- - - . "Gullah's Story Worth Telling." [Hilton Head Island, SC] *Island Packet* (July 12, 2004).

Tournier, Nan. "Sea Island Black Quilters." In Laurel Horton and Lynn Robertson Myers, eds. *Social Fabric: South Carolina's Traditional Quilts*. Columbia: McKissick Museum, University of South Carolina, 1984, 41- 46.

Towne, Laura H. "Pioneer Work on the Sea Islands." *Southern Workman* 30 (1902).

Townsend, Jan, John H. Sprinkle, Jr., and John Knoerl. *Guidelines for Evaluating and Registering Historical Archaeological Sites and Districts*. National Register Bulletin 36. Washington: National Park Service, 1993.

Trinkley, Michael, ed. *Archaeological and Historical Examinations of Three Eighteenth and Nineteenth Century Rice Plantations on the Waccamaw Neck*. Columbia, SC: Chicora Foundation, 1993.

- - - . "Tabby Structures on Spring Island." In *The Second Phase of Archaeological Survey on Spring Island, Beaufort County, South Carolina: Investigations on an Isolated Sea Island*. Research Series 20, Columbia, SC: Chicora Foundation, 1990.

- - - . *An Archaeological Reconnaissance of Hobcaw Plantation, Charleston County, South Carolina* (Research Series/Chicora Foundation, 10). Columbia, SC: Chicora Foundation, 1998.

- - - . *Archaeological Studies Associated with the Nineteenth- Century Owens Thomas Carriage House, Savannah, Georgia*. Columbia, SC: Chicora Foundation, 1993.

- - - . *Indian and Freedmen Occupation at the Fish Haul Site, Beaufort County, S.C.* Columbia, SC: Chicora Foundation, 1986.

Trinkley, Michael, *et al*. *Archaeological and Historical Investigations of Jehossee Island, Charleston County, South Carolina*. Columbia, SC: Chicora Foundation, 2002.

- - - . *Archaeology at an Eighteenth Century Slave Settlement in Goose Creek, South Carolina*. (Research Series/Chicora Foundation, 57). Columbia, SC: Chicora Foundation, 2003.

- - - . *Excavations at a Portion of the Secessionville Archaeological Site (38Ch1456), James Island, Charleston County, South Carolina* (Research Series/Chicora Foundation 52). Columbia, SC: Chicora Foundation, 1998.

- - - . *Liberty Hall* [Berkeley County, SC]. Columbia, SC: Chicora Foundation, 2003.

- - - . *The Plantation Landscape: Slaves and Freedmen at Seabrook Plantation, Hilton Head Island, S.C.* (Research Series/Chicora Foundation, 34). Columbia, SC: Chicora Foundation, 1998.

Trinkley, Michael, and Debi Hacker. *Archaeological Investigations of Indians and Slaves at the Moses Whitesides Plantations, Christ Church Parish, Charleston County, South Carolina* (Research Series/Chicora Foundation, 60). Columbia, SC: Chicora Foundation, 1998.

- - - . *An Investigation of the St. Queuntens Plantation House, Beaufort County, South Carolina*. Columbia, SC: Chicora Foundation, 1998.

- - - . *Roupelmond* [Beaufort County, SC]. Columbia, SC: Chicora Foundation, 1999.

Trinkley, Michael, and Sarah Fick. *Rice Cultivation, Processing, and Marketing in the Eighteenth Century*. (Liberty Hall Research Series 62). Columbia, SC: Chicora Foundation, 2003. Available on the Internet at <http://www.chicora.org/Rice%20Context.pdf>

Trott, Wendy Carmen. "An Afrocentric Analysis of the Transition and Transformation of African Medicine (Root Medicine) as Spiritual Practice among Gullah People of Lowcountry South Carolina." Ph.D. dissertation, Temple University, 2003.

Trotter, Joe, Earl Lewis, and Tera Hunter, eds. *The African American Urban Experience: Perspectives from the Colonial Period to the Present*. New York: Palgrave McMillan, 2004.

Troxleer, Carole Watterson. "The Migration of Carolina and Georgia Loyalists to Nova Scotia and New Brunswick." Ph.D. dissertation, University of North Carolina, 1974.

Tupper, Virginia G. "Plantation Echoes." *Etude* 55 (1937):153- 54.

Turnage, Sheila. "Stealing a Ship to Freedom." *American Legacy Magazine of African- American History and Culture* 8:1 (2002): 10- 3, 75- 6.

"Turner, Gullah Descendants Settle Dispute: Media Mogul Gives 68 Acres to Group." [Hilton Head Island, SC] *Island Packet* (August 16, 2002).

Turner, Lorenzo D. "African Survivals in the New World with Emphasis on the Arts." In *Africa as Seen by American Negroes*. Paris: Presence Africaine, 1958, 101- 118.

- - - . "Linguistic Research and African Survivals." *American Council of Learned Societies*. vol. 32 (1941) 68- 89.

- - - ."Notes on Sounds & Vocabulary of Gullah." *Publications of the American Dialect Society*. 3 (1945):13- 28.

- - - . "Problems Confronting the Investigator of Gullah." *Publications of the American Dialect Society* 9 (November 1947): 48- 49.

Tuten, James Henry. "Time and Cultural Changes and Continuities among the Rice Plantations of the Low Country, 1860- 1930." Ph.D. dissertation, Emory University, 2003.

Twining, Mary A. "An Examination of African Retention in the Folk Culture of the South Carolina and Georgia Sea Islands." Ph.D. dissertation, Indiana University, 1977.

- - - . "Black American Quilts: An Artist Craft." *Jamaica Journal* 16:7 (1983): 66- 77.

- - - . "Harvesting and Heritage: A Comparison of Afro- American and African Basketry." *Southern Folklore Quarterly*. 42:1 (1978): 159- 174.

- - - . "Heaven Bound or the Devil Play: A Note on Dichotomous Predicates." *College Language Association Journal* 19:3 (March 1976): 347- 351.

- - - . "'I'm Going to Sing and Shout While I have the Chance': Music, Movement, and Dance on the Sea Islands." *Black Music Research Journal* 15:1 (Spring 1995): 1- 15.

- - - . "Movement and Dance on the Sea Islands." *Journal of Black Studies* 15:3 (1985): 463- 79.

- - - . “Sea Island Basketry: Reaffirmations of West Africa.” In David C. Driskell, ed. *The First National African- American Crafts Conference: Selected Writings*. Memphis, TN: Shelby State Community College, 1980, 35- 39.

- - - . “Sources in the Folklore and Folklife of the Sea Islands.” *Southern Folklore Quarterly* 39 (1975): 135- 50.

Twining, Mary A., and Keith E. Baird. “Introduction to Sea Island Folklife.” *Journal of Black Studies* 10 (June 1980) 387- 416.

- - - . “The Significance of Sea Island Culture.” *Journal of Black Studies* 10: (4): 379- 386.

Twining, Mary A., and William Saunders. “One of These Days: The Function of Two Singers in the Sea Island Community.” *Studies in the Literary Imagination* 3 (1970) 65- 75.

“Updated Guides Focus on Rich Heritage of Blacks.” *Seattle- Intelligencer* (February 15, 1996): n.p.

“USC Looks to Preserve Southern Black Music Forms.” *Black Issues in Higher Education* 19:19 (November 7, 2002): 23.

Valdiviez, Forrest. “Daily Life a Cultural Blend.” [Hilton Head Island, SC] *Island Packet* (February 16, 2004).

Van Deburg, William L. *The Slave Drivers: Black Agricultural Labor Supervisors in the Antebellum South*. Westport, CT: Greenwood Press, 1979.

Van Sertima, Iran. “My Gullah Brother and I: Exploration into a Community’s Language and Myth through Its Oral Tradition.” In Deborah Sears Harrison and Tom Trabasso, eds. *Black English: A Seminar*. Hillsdale, NJ: Lawrence Erlbaum Associates, 1976, 123- 46.

Van Sickle, Meta, Olaiya Aina and Mary Blake. “A Case Study of the Sociopolitical Dilemmas of Gullah- Speaking Students: Educational Policy and Practices.” *Language, Culture and Curriculum* 15:1 (2002): 75- 88.

Vansina, Jan. *Oral Tradition as History*. Madison, WI: University of Wisconsin Press, 1985.

Vanstory, Burnette. *Georgia’s Land of the Golden Isles*. Athens, GA: University of Georgia Press, 1956.

Van Voorhies, Christine. *Grave Intentions: A Comprehensive Guide to Preserving Historic Cemeteries in Georgia*. LaGrange, GA: Historic Chattahoochee Commission, 2003.

Vari, Jeff. “Gullah Culture Designated on Most Endangered List.” [Mt. Pleasant, SC] *Moultrie News* (June 2, 2004): 1.

- - - . “Phillips Community Has Storied Past and Hopes for Quiet Future.” [Mt. Pleasant, SC] *Moultrie News* (February 11, 2004): 1.

Vaughn, Steve. “Making Jesus Black: The Historiographical Debate on the Roots of African-American Christianity.” *Journal of Negro History* 82:1 (Winter 1997): 25- 41.

- - - . “Interactive Series Focuses on Gullah.” [Hilton Head Island, SC] *Island Packet* (August 25, 2003).

- - - . “Islander Shares Stories of Gullah Life.” [Hilton Head Island, SC] *Island Packet* (November 14, 2002).

Vaz, Valerie “Georgia on my Mind: A Visit to Historic Sapelo Island Provides Roots Rejuvenation.” *Essence* (March 1993): n.p.

Verdelle, A. J., Karen Sutton, David Blight, Alex Bontemps, Shane White, and Graham White. “Representing Slavery: A Roundtable Discussion.” *Common- Place* 1:4 (July 2001) : <http://www.historycooperative.org/journals/cp/vol- 01/no- 04/slavery/>

Verel, Patrick. “Gullah Cooking Steeped in Rich Island Heritage.” [Augusta, GA] *Augusta Chronicle* (January 20, 2004): D1.

Verney, Kevin J. “Trespassers in the Land of their Birth: Blacks and Land Ownership in South Carolina and Mississippi during the Civil War and Reconstruction, 1861- 1877. *Slavery and Abolition* (May 1983): 64- 78.

Vernon, Amelia Wallace. *African Americans at Mars Bluff Plantation*. Baton Rouge: Louisiana State University Press, 1993.

Ver Steeg, Clarence L. *The Formative Years: 1607- 1763*. New York: Hill and Wang, 1964.

- - - . *Origins of a Southern Mosaic*. Athens, GA: University of Georgia Press, [1975] 1984.

Vest, Jay Hansford C. “From Bobtail to Brer Rabbit: Native American Influences on Uncle Remus.” *American Indian Quarterly* (January 2000).

Veverka, John. “Marketing Basics for Interpretive Sites and Attractions: It’s All about Visitors.” *Legacy* 12:2 (2001): 34- 37.

Vincent, Susan Hart. *Charles Pinckney National Historic Site Cultural Landscape Report*. Atlanta, GA: National Park Service, 1998.

“Visitors from Africa Feel at Home on St. Helena.” [Hilton Head Island, SC] *Island Packet* (February 22, 2004).

Vlach, John Michael. *The Afro- American Tradition in Decorative Arts*. Cleveland, OH: Cleveland Museum of Art, 1978.

- - - . “Arrival and Survival: The Maintenance of an Afro- American Tradition of Folk Art and Craft.” In Ian M. G. Quimby and Scott T. Swank, eds. *Perspectives on American Folk Art*. New York: W. W. Norton and Company, 1980, 177- 217.

- - - . *Back of the Big House: The Cultural Landscape of the Plantation*. Chapel Hill, NC: University of North Carolina Press, 1993.

- - - . *By the Work of Their Hands: Studies in African American Folklife*. Charlottesville, VA: University of Virginia Press, 1991.

- - - . *Charleston Blacksmith: The Work of Philip Simmons*. Athens, GA: University of Georgia Press, 1981.

- - - . “The Craftsman and the Communal Image: Philip Simmons, Charleston Blacksmith.” *Family Heritage*. 2: 2 (1979): 14- 19.

- - - . Graveyards and Afro- American Art. *Southern Exposure* 5:1 (1977): 161- 165.

- - - . “Not Mansions . . . But Good Enough: Slave Quarters as Bi- cultural Expression.”In Ted Ownby, ed. *Black and White Cultural Integration in the Antebellum South*. Jackson, MS: University of Mississippi Press, 1993.

- - - . “The Shotgun House: An African Architectural Legacy.” *Pioneer America* 8 (July 1976): 57- 78.

- - - . "Tracing the 'hidden heritage' of Afro- American Architecture." *Preservation News*. February, 1987.

- - - . “Sources of the Shotgun House: African and Caribbean Antecedents to Afro- American Architecture.”

Ph.D. dissertation, Indiana University, 1975.

Voeks, Robert. “African Medicine and Magic in the Americas.” *Geographical Review* 83 (1993): 66- 78.

Vogel, Peggy MacLeod. “Biculturalism and Identity in Contemporary Gullah Families.” Ph.D. dissertation, Virginia Polytechnic Institute and State University, 2000.

“Voices of the Gullah Culture: The Hallelujah Singers.” Columbia, SC: SC- ETV, 1993.

Vorenberg, Michael. *Final Freedom: The Civil War, the Abolition of Slavery, and the Thirteenth Amendment*. New York: Cambridge University Press, 2001.

Wade, Richard C. "The Vesey Plot: A Reconsideration." *Journal of Southern History* 30 (May 1964): 143- 61.

- - - . "Lorenzo Dow Turner: Pioneer African- American Linguist." *Black Scholar* 21:4 (Fall 1991): 10- 24.

Wagner, Mark. "The Introduction and Early Use of African Plants in the New World." *Tennessee Anthropologist* 6:2 (1981): 112- 123.

Wagnon, Mark. "Tourism Opportunities in Our Own Backyard" South Carolina Heritage Corridor Part III. *Palmetto Farm Credit Leader* (Autumn 2002): 4- 9.

Wahlman, Maude Southwell. *Signs and Symbols: African Images in African American Quilts*. Atlanta, GA: Tinwood Books, [2nd ed.] 2001.

Walker, Clarence E. *A Rock in a Weary Land: The African Methodist Episcopal Church during the Civil War and Reconstruction*. Baton Rouge, LA: Louisiana State University Press, 1982.

Walker, Lois A., and Susan R. Silverman. *Documented History of Gullah Jack Pritchard and the Denmark Vesey Slave Insurrection of 1822*. (Studies in American History Series). New York: Edwin Mellen Press, 2000.

Wallenstein, Peter. *From Slave South to New South: Public Policy in Nineteenth- Century Georgia*. Chapel Hill, NC: University of North Carolina Press, 1987.

Walters, Wendy W. "'One of Dese Mornings, Bright and Fair, Take My Wings and Cleave De Air': The Legend of the Flying Africans and Diasporic Consciousness." *Melus 22* (Fall 1997): 3- 29.

Wardi, Anissa J. "Inscriptions in the Dust: A Gathering of Old Men and Beloved as Ancestral Requiems." *African American Review* (March 2002): n.p.

Waring, Joseph I. "Colonial Medicine in Georgia and South Carolina." *Georgia Historical Quarterly* 59 (Supplement 1975): 141- 59.

Waring, Mary A. "Mortuary Customs and Beliefs of South Carolina Negroes." *Journal of American Folklore*, 7 (1894): 318- 319.

- - - . "Negro Superstitions from South Carolina." *Journal of American Folklore* 8 (1895): 251- 252.

Washington, Delo E. "Education of Freedmen and the Role of Self- Help in a Sea Island Setting, 1862- 1982" *Agricultural History* 58 (July 1984): 442- 55.

Waterhouse, Richard. "Economic Growth and Changing Patterns of Wealth Distribution in Colonial Lowcountry South Carolina." *South Carolina Historical Magazine* 89 (1988): 203- 217.

- - - . "England, the Caribbean, and the Founding of South Carolina," *Journal of American Studies* 9 (December 1975): 259- 281.

Waters, Andrew, ed. *On Jordan's Stormy Banks: Personal Accounts of Slavery in Georgia*. Winston-Salem, NC: John F. Blair, Publisher, 2000.

Watson, Alan D. "Impulse toward Independence: Resistance and Rebellion among North Carolina Slaves, 1750- 1775." *Journal of Negro History* 63:4 (October 1978): 317- 28.

Watson, Larry Darnell. "The Quest for Order: Enforcing Slave Codes in Revolutionary South Carolina, 1760- 1800. Ph.D. dissertation, University of South Carolina, 1980.

Watson, Laura Smart. "Negro Folk- Lore of the Carolina Coast." M.A. thesis, Stetson University, 1937.

Watters, Fannie C. *Plantation Memories of the Cape Fear Country*. Asheville, NC: Stephens Press, 1961.

Wax, Darold D. “Negro Resistance to the Early American Slave Trade.” *Journal of Negro History* 51 (January 1966): 1- 15.

- - - . “‘New Negroes Are Always in Demand’: The Slave Trade in Eighteenth Century Georgia.” *Georgia Historical Quarterly* 68:2 (1984): 192- 220.

- - - . “Preferences for Slaves in Colonial America.” *Journal of Negro History* 58:4 (1973): 371- 401.

Wayne, Lucy Bowles. “Burning Brick: A Study of a Lowcountry Industry.” Ph.D. dissertation, University of Florida, 1992.

Weatherford, Carole Boston. “Water Torture.” *North American Review* (November 2001).

Weatherford, W. D. *The Negro from Africa to America*. New York: Negro Universities Press, [reprint] 1969.

Webb, Ann Margaret. “Incorporating African Americans into the Public Identity of the South via Museum Exhibits.” Ph.D. dissertation, UNC- Wilmington, 1997.

Webber, Thomas L. *Deep like the Rivers: Education in the Slave Quarter Communities, 1831- 1865*. New York: W. W. Norton, 1978.

Weiner, Marli Frances. *Mistresses and Slaves: Plantation Women in South Carolina, 1830- 80*. Chicago, IL: University of Illinois Press, 1997.

- - - .“Plantation Mistresses and Female Slaves: Gender, Race, and South Carolina Women, 1830- 1880.” Ph.D. dissertation, University of Rochester, 1986.

Weldon, Michele. “Saga of Sea Island Women Continues.” *Chicago Tribune* (November 23, 1997): A3.

Weldon, Tracey L. “Reflections on the Ebonics Controversy.” *American Speech* 75:3 (Fall 2000): 339- 343.

- - - . “Revisiting the Creolist Hypothesis: Copula Variability in Gullah and Southern Rural AAVE.” *American Speech* 78:2 (Summer 2003): 171- 191.

Wells, John Henderson. *The Slave Ship Wanderer*. Athens, GA: University of Georgia Press, 1968.

Wells- Bowie, Laverne. *Bin- yuh, Come- yuh*. Washington, DC: NPS/NPF, 2001.

Wesley, C. H. *Negro Labor in the United States 1850- 1925: A Study in American Economic History*. (Chapter 4: The Negro and the Civil War). New York: Russell & Russell, 1927.

West, Emily. *Chains of Love: Slave Couples in Antebellum South Carolina*. Champaign, IL: University of Illinois Press, 2004.

- - - . “The Debate on the Strength of Slave Families: South Carolina and the Importance of Cross- Plantation Marriages.” *Journal of American Studies* 33:2 (1999): 221- 41.

- - - . “Masters and Marriages, Profits and Paternalism: Slave Owners’ Perspectives on Cross- Plantation Unions in Antebellum South Carolina.” *Slavery and Abolition* 21:1 (2000): 56- 72.

- - - . “Surviving Separation: Cross- Plantation Marriages and the Slave Trade in Antebellum South Carolina.” *Journal of Family History* 24 (Summer 1999): 212- 31.

Westlake, Leslie. “The Guardians of Gullah: A Festival, a Culture, a Gift too Great to Lose.” *South Carolina Smiles* (2002): 88- 9.

Westmacott, Richard. *African- American Gardens and Yards in the Rural South*. Knoxville: University of Tennessee Press, 1992.

Westwood, Howard C. “Sherman Marched and Proclaimed Land for the Landless.” *South Carolina Historical Magazine* 85:1 (January 1984): 33- 50.

Wexler, Mark. “Sweet Tradition: African Americans’ Tradition of Basket Weaving from Sweetgrass.” *National Wildlife* 31 (April/May 1993): 38- 41.

Whaley, Marcellus S. *The Old Types Pass, Gullah Sketches of the Carolina Sea Islands.* Boston: Christopher Publishing House, 1925.

Whaley, Thomas E. “The Slave Tradition of Singing among the Gullah of Johns Island, South Carolina.” Ph.D. dissertation, University of Maryland, 1993.

Wheaton, T.R., Jr., Amy Friedlander, and Patrick H. Garrow. *Yaughan and Curriboo Plantations: Studies in Afro- American Archaeology*. Report prepared for the U.S. Army Corps of Engineers, Charleston District by Soil Systems, Inc., Marietta, Georgia, 1983.

When Rice Was King. South Carolina Educational Television Network, Columbia, SC, n.d.

Whitten, David O. “The Medical Care of Slaves on South Carolina Rice Plantations,” Ph.D. dissertation, University of South Carolina, 1963.

White, Deborah Gray. *Ar’n’t I a Woman: Female Slaves in the Plantation South*. New York: W. W. Norton, 1985.

White, John. “Veiled Testimony: Negro Spirituals and the Slave Experience.” *Journal of American Studies* 17 (August 1983): 251- 263.

Whitten, David. “American Rice Cultivation, 1680- 1980: A Tercentenary Critique.” *Southern Studies* 21 (1982): 5- 26.

Whitten, Norman E. “Contemporary Patterns of Malign Occultism among Negroes of North Carolina.” *American Folklore* 75:2 (1962): 311- 25.

Wikramanayake, Marina. *A World in Shadow: The Free Black in Antebellum South Carolina*. Columbia, SC: University of South Carolina Press, 1973.

Wilkie, Laurie A. “Considering the Future of African American Archaeology.” *Historical Archaeology* 38:1 (Spring 2004).

- - - . “Magic and Empowerment on the Plantation: An Archaeological Consideration of African-American World View.” *Southeastern Archaeology* 14:2 (Winter 1995).

Wilkins, Thomas Hart. “An Economic Interpretation of the Founding of the Colony of Georgia.” M.A. thesis, University of Georgia, 2002.

Will, Thomas E. “Weddings on Contested Grounds: Slave Marriage in the Antebellum South.” *The Historian* 62 (1999).

Williams, Darnell. “An Investigation of Possible Gullah Survivals in Speech and Cultural Patterns of Black Mississippians.” Ph. D. dissertation, Ohio State University, 1973.

Williams, Eric. *Capitalism and Slavery*. Chapel Hill, NC: University of North Carolina Press, 1944.

Williams, Heather Andrea. “‘Clothing Themselves in Intelligence’: The Freedpeople, Schooling, and Northern Teachers, 1861- 1871.” *Journal of African American History* 87:4 (Fall 2002): 372- 89.

Williams, John G. *De Ole Plantation*. Charleston: Walker, Evans & Cogswell, 1895.

- - - . “Marriage on the Combahee.” [Charleston, SC] *Sunday News* (December 16, 1894).

- - - . “Is Gullah a Corruption of Angola?” [Charleston, SC] *Saturday News* (February 10, 1895).

- - - . “A Study in Gullah English.” [Charleston, SC] *Sunday News* (February 10, 1895).

Williams, Juan. *This Far by Faith: Stories from the African American Religious Experience*. New York: Amistad Press, 2004.

Williams, Paige. "Gullah: A Vanishing Culture." [Charlotte, NC] *Charlotte Observer* (February 7, 1993): A1.

Williamson, Joel. *After Slavery: The Negro in South Carolina During Reconstruction*. Chapel Hill, NC: University of North Carolina Press, 1969.

Wilms, Douglas C. "The Development of Rice Culture in 18th Century Georgia." *Southeastern Geographer* 12 (May 1972): 45- 57.

Wilson, Gold R. *"The Religion of the American Negro Slave: His Attitude toward Life and Death." Journal of Negro History* 8:1 (January 1923): 41- 71.

Wilson, Henrietta S., ed. *Coastal Development: Past, Present, and Future. Proceedings of a South Carolina Sea Grant Consortium Conference*. Charleston, SC: Sea Grant Consortium, 1982.

Windley, Lathan Algerna. *A Profile of Runaway Slaves in Virginia and South Carolina from 1730 through 1787*. New York: Garland Publishing, 1995.

Wolfe, Michael Charles. "The Abundant Life Prevails: Religious Traditions of Saint Helena Island." Ph.D. dissertation, University of Michigan, 1997.

Wolff, Hans, Morris F. Goodman, and Ian F. Hancock. "English Derived Atlantic Creoles: A Comparison." *African Language Review* 8 (1969).

Wolfram, Walt. "African Americans by the Sea." *The Mullet Wrapper* 5(2): 6- 7.

- - - . "The Relationship of White Southern Speech to Vernacular Black English." In Walter Edwards and Donald Winford, eds. *Verb Phrase Patterns in Black English and Creole*. Detroit, MI: Wayne State University Press, 1991.

- - - ."Language Change in Conservative Dialects: The Case of Past Tense Be in Southern Enclave Communities." *American Speech* 78:2 (Summer 2003): 209- 228.

- - - . "Language Variation in the American South: An Introduction." *American Speech* 78:2 (Summer 2003): 123- 129.

- - - . "Re- examining the Development of African American English: Evidence from Isolated Communities." *Language* 79:2 (June 2003): 282- 316.

Wolfram, Walt. Erik R. Thomas, and Elaine W. Green. "The Regional Context of Earlier African-American Speech: Evidence for Reconstructing the Development of AAVE." *Language in Society* 29 (2000).

Wood, Betty C. *Slavery in Colonial Georgia*. Athens, GA: University of Georgia Press, 1984.

- - - . "Some Aspects of Female Slave Resistance to Chattel Slavery in Low Country Georgia." *Georgia Historical Journal* 30:3 (1987).

- - - . "'Taking Care of Business' in Colonial South Carolina: Republicanism and the Slave Society." In Jeffrey J. Crow and Larry E. Tise, eds. *The Southern Experience in the American Revolution*, 268-93. Chapel Hill, NC: University of North Carolina Press, 1978.

- - - . *The Origins of American Slavery: Freedom and Bondage in the English Colonies*. New York: Hill and Wang, 1997.

- - - . "'Until You Are Dead, Dead, Dead': The Judicial Treatment of Slaves in Eighteenth- Century Georgia." Paper presented at the annual meeting of the Georgia Association of Historians, Milledgeville, GA, April 1987.

- - - . *Women's Work, Men's Work: The Informal Slave Economies of Lowcountry Georgia*. Athens, GA: University of Georgia Press, 1995.

Wood, Betty C., and Thomas Stephens. "The Introduction of Black Slavery in Georgia. *Georgia Historical Quarterly* 58 (Spring 1974): 24- 40."

Wood, Bradford J. "'A Constant Attendance on God's Altar': Death, Disease and the Anglican Church in Colonial South Carolina, 1706- 1750." *South Carolina Historical Magazine* 100:3 (July 1999): 204- 220.

- - - . "The Formation of a Region in Colonial North Carolina: The Lower Cape Fear." Ph.D. Dissertation, Johns Hopkins University, 2000.

- - - . "Politics and Authority in Colonial North Carolina: A Regional Perspective." *North Carolina Historical Review* 81:1 (January 2004): 1- 37.

Wood, Peter H. "The Changing Population of the American Colonial South: An Overview by Race and Region." In Peter H. Wood, Gregory A. Waselkov, and M. Thomas Hatley, eds. *Powhatan's Mantle*. Lincoln, NE: University of Nebraska Press, 1989.

- - - . "'I Did the Best I Could for My Day': The Study of Early Black History during the Second Reconstruction, 1960- 1976." *William and Mary Quarterly*, 3rd ser., 35 (1978): 150- 225.

- - - . "Impatient Oppression: Black Freedom Struggles on the Eve of White Independence." *Southern Exposure* 12:6 (1984).

- - - . "'It Was a Negro Taught Them': A New Look at African Labor in Early South Carolina." *Journal of Asian and African Studies* 9, 10 (July and October 1974).

- - - . "Jesus Christ Has Got Thee at Last." *Center for the Study of Southern Culture and Religion Bulletin* 3:3 (November 1979): 2- 5.

- - - . "More Like a Negro Country: Demographic Patterns in Colonial South Carolina, 1700- 1749." In Stanley L. Engerman and Eugene D. Genovese, eds. *Race and Slavery in the Western Hemisphere: Quantitative Studies*. Princeton, NJ: Princeton University Press, 1975.

- - - . Race and Slavery in the Western Hemisphere: Quantitative Studies. Princeton, NJ: Princeton University Press, 1975.

- - - . "People's Medicine in the Early South." *Southern Exposure* 6 (1978): 50- 53.

- - - . "Strange New Land: Africans in Colonial America, 1516- 1776." In *The Young Oxford History of African Americans, v 2*. New York: Oxford University Press Children's Books, 1996.

- - - . "Whetting, Setting, and Laying Timbers: Black Builders in the Early South." *Southern Exposure* 8 (Spring 1980): 3- 8.

Woodfork, Joshua C. "Teaching Slavery: Overcoming Artificial Barriers to Past, Present." *Black Issues in Higher Education* (May 24, 2001).

Woodman, Harold D. "The Profitability of Slavery: A Historical Perennial." *Journal of Southern History* 29:3 (August 1963): 303- 325.

- - - , ed. *Slavery and the Southern Economy: Sources and Readings*. New York: Harcourt, Brace & World, 1966.

Woodson, Carter G. *The Mind of the Negro as Reflected in Letters Written during the Crisis, 1800- 1860*. New York: Russell & Russell, 1969.

- - - . *The Education of the Negro Prior to 1861*. New York: Arno Press, 1968.

- - - . *The History of the Negro Church*. Washington, DC: Associated Publishers, 1921.

Woodward, C. Vann. *The Strange Career of Jim Crow*. New York: Oxford University Press, 1974.

- - - , ed. *Mary Chesnut's Civil War*. New Haven, CT: Yale University Press, 1986.

Woofter, Thomas J. Jr. *Black Yeomanry: Life on St. Helena Island*. New York: Henry Holt and Co., 1930.

Work, Monroe. "Some Geechee Folklore." *Southern Workman* 35:4 (1905): 633- 35.

Wren, J. Thomas. "A Two- Fold Character: The Slave as Person and Property." *Southern Studies* 24 (Winter 1985): 417- 31.

Wright, Donald R. *African Americans in the Colonial Era: From African Origins through the American Revolution*. New York: Harlan Davidson, 1990.

Wright, J. Leitch Jr. "Blacks in British East Florida." *Florida Historical Quarterly*, Bicentennial Issue 54 (April 1776): 425- 42.

Wright- Hughes, Roberta. *An Annotated Bibliography: Books of the South Carolina and Georgia Sea Islands*. Penn Center of the Sea Islands Michigan Support Group. Southfield, MI: Charro Book Co., 1993.

Wright- Hughes, Roberta and Wilbur B. Hughes. *Lay Down Body: Living History in African- American Cemeteries*. Detroit, MI: Visible Ink Press, 1996.

Wyatt- Brown, Bertram. "The Mask of Obedience: Male Slave Psychology in the Old South." *American Historical Review* 93:5 (December 1988): 1228- 52.

Yates, Sandra Grady and LaVerne Davis Whitted. "Black- owned Land Still Target of Southern Whites: Has the Land Inherited from Rev. Grady Been Stolen by Unscrupulous Means?" [Wilmington, NC] *Wilmington Journal* (February 13, 2004).

Yetman, Norman R. "The Background of the Slave Narrative Collection." *American Quarterly* 19:3 (Fall 1967): 534- 53.

- - - , ed. *Voices from Slavery*. New York: Oxford University Press, 1970.

Young, Jason Randolf. "Rituals of Resistance: The Making of an African- Atlantic Religious Complex in Kongo and Along the Sea Islands of the Slave South." Ph.D. dissertation, University of California Riverside, 2002.

Young, Jeffrey Robert. *Domesticating Slavery: The Master Class in Georgia and South Carolina, 1670-1837*. Chapel Hill, NC: University of North Carolina Press, 1999.

- - - . "Ideology and Death on a Savannah River Rice Plantation, 1833- 1867: Paternalism amidst 'a Good Supply of Disease and Pain.'" *Journal of Southern History* 59 (November 1993): 673- 706.

Young, Kate Porter. "Notes on Sisterhood, Kinship, and Marriage in an African- American Sea Island Community." Working Paper 6. Memphis, TN: Center for Research on Women, 1992.

Zachary, Steve. "Each One Teach One: A Model for Heritage Protection and Ecotourism." *Legacy* 11:3 (2000): 24- 28.

Zembola, Zamba. *The Life and Adventures of Zamba, an African Negro King, and His Experience of Slavery in South Carolina, Written by Himself*. London, 1847.

Zielenbach, Alison. "Property Owners in Sandfly Practice Good Neighborliness." *Savannah Morning News* (October 5, 2004): A1

Zierden, Martha A. *Aiken- Rhett House: Archaeological Research*. Archeological Contributions 31, Charleston Museum. Report prepared for Historic Charleston Foundation, 2003.

Zierden, Martha A., L M. Drucker, and J. Calhoun. *Home Upriver: Rural Life on Daniels Island, Berkeley County, South Carolina*. Report prepared for the South Carolina Department of Highways and Public Transportation by Charleston Museum, Charleston, SC, 1986.

Zurel, Richard L. "Archeology, History, and Human Ecology: Applied Anthropology for Public Use Areas." *Southeastern Archaeological Conference Bulletin* 18 (1975): 123- 131

7 Low Country Gullah SRS Information

Acknowledgements

Gullah/Geechee SRS team members wish to thank the many Gullah/Geechee people we encountered along the way who welcomed us into their communities to share their histories and a part of their lives with us. The team particularly appreciates the patience, tolerance, and good humor which allowed it to build relationships based on mutual respect and concern about the preservation of Gullah/Geechee history and culture.

Cornelia Bailey
Ma Vynee Betsch
Walter Brown
Emory Campbell
Anice G. Carr
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Ernestine and Wilson Moran
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Vermelle and Andrew Rodrigues
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And many, many more.

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Content Reviewers

Many thanks to all of you—both in Gullah/Geechee communities and in academic institutions—who took the time to review this document at various stages along the way. Thank you for your comments, your corrections, and your continued support.

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John Beck
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Photographs

A very special thank you to the following persons and organizations who generously shared pertinent photographs for publication in this document (see photo credits). All other photography is by Cynthia H. Porcher, lead researcher.

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Bob Frigo, SCAD
Diedre Laird, SC Desk, *Charlotte Observer*
Carlin Timmons, NPS Interpretive Ranger
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Granger Collection, New York, NY
Duke University Digital Photo Archive
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McIntosh County Shouters
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Avery Research Center for African American History and Culture
South Carolina Educational Television Commission

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Low Country Gullah Culture
Special Resource Study and Final Environmental Impact Statement

Appendices

Appendix A: Authorization for Low Country Gullah Culture Special Resource Study A1

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Appendix A: Authorization for Low Country Gullah Culture Special Resource Study

To authorize the Secretary of the Interior to conduct studies of specific areas for potential inclusion in the National Park System and for other purposes.

H.R. 3423, Interior Appropriations, incorporated by cross- reference in Conference Report H. Rep. 106- 479; became Public Law No. 106- 113, 11/29/1999.

SEC. 326.

(a) **SHORT TITLE -** This section may be cited as the `National Park Service Studies Act of 1999.'

(b) **AUTHORIZATION OF STUDIES -**

(1) **IN GENERAL -** The Secretary of the Interior (`the Secretary') shall conduct studies of the geographical areas and historic and cultural themes described in subsection (b)(3) to determine the appropriateness of including such areas or themes in the National Park System.

(2) **CRITERIA -** In conducting the studies authorized by this Act, the Secretary shall use the criteria for the study of areas for potential inclusion in the National Park System in accordance with section 8 of Public Law 91- 383, as amended by section 303 of the National Parks Omnibus Management Act (Public Law 105- 391; 112 Stat. 3501).

(3) **STUDY AREAS -** The Secretary shall conduct studies of the following:

(A) Anderson Cottage, Washington, District of Columbia.
(B) Bioluminescent Bay, Puerto Rico.
(C) Civil Rights Sites, multi- State.
(D) Crossroads of the American Revolution, Central New Jersey.
(E) Fort Hunter Liggett, California.
(F) Fort King, Florida.
(G) Gaviota Coast Seashore, California.
(H) Kate Mullany House, New York.
(I) Loess Hills, Iowa.
(J) Low Country Gullah Culture, multi- state.
(K) Nan Madol, State of Ponape, Federated States of Micronesia (upon the request of the Government of the Federated States of Micronesia).
(L) Walden Pond and Woods, Massachusetts.
(M) World War II Sites, Commonwealth of the Northern Marianas.
(N) World War II Sites, Republic of Palau (upon the request of the Government of the Republic of Palau).

(c) **REPORTS -** The Secretary shall submit to the Committee on Energy and Natural Resources of the Senate and the Committee on Resources of the House of Representatives a report on the findings, conclusions, and recommendations of each study under subsection (b) within three fiscal years following the date on which funds are first made available for each study.

Appendix B Fieldwork Itinerary, Community Contacts, and Activities

Introduction

The following is an abbreviated inventory and description of the field research conducted as part of the Gullah/Geechee SRS. This record follows Many of the design features as a Rapid Ethnographic Assessment (REAP), which is driven by a need for information in advance of actions that may affect a group or community's resources and thus its traditions. The assessment, which helps satisfy the requirements of the National Environmental Policy Act, serves the need to consider the views of various stakeholders. A REAP can yield new ways to manage places deemed important by group members, as well as information they wish to share with the public − knowledge of sacred sites and the like must remain confidential. The assessment is brief and narrow in scope; field methods include focus groups, interviews during site walks, and mapping.

The number of visits, the depth of community involvement, the extended length of time in the field, and the detailed information obtained through this study extend well beyond an ordinary REAP. There was repeated contact with community hosts and numerous visits to each community in order to build trusting relationships. For the sake of brevity, the following communities/areas will be considered here:

- St. Simons Island, Georgia
- Freedmen's Communities in or near Mt. Pleasant, South Carolina

The following cities, towns, and communities were also visited during the course of this study, which included more than 200 days in the field.

Florida
American Beach
Fernandina Beach
Fort George Island
Jacksonville
St. Augustine

Georgia
Brunswick
Cumberland Island
Darien
Eulonia
Fort Stewart
Harris Neck
Harrington
Hinesville
Jewtown
Meridian
Midway
Richmond Hill
Sandfly
Savannah
St. Mary's
St. Simons Island
South End
Thunderbolt
Townsend
Tybee Island

North Carolina
Wilmington

South Carolina
Atlantic Beach
Awendaw
Beaufort
Charleston
Daufuskie Island
Edisto Island
Georgetown
Hilton Head Island
Hollywood
Huger
James Island
Johns Island
Little River
McClellanville
Mt. Pleasant
Pawley's Island
Phillips
Ridgeland
St. Helena Island
Sandy Island
Scanlonville
Six Mile
Seven Mile
Sullivan's Island
Ten Mile
Wadmalaw Island

St. Simons Island, Georgia

Note: *Trips to St. Simons Island often included trips to other sites in the area such Darien, Sapelo Island, Harris Neck, Brunswick. For the sake of brevity, these notes will be limited to St. Simons Island visits. All field trips included photographic documentation of sites in the area.*

June 8, 2000
Community Host: Lighthouse Museum
Fieldworkers: Gullah/Geechee Special Resource Team, Vera Manigault
Sites Visited: Harrington School, Lighthouse Museum
Events attended: Community Meeting re SRS

September 19, 2000
Community Host: First African Baptist Church
Fieldworkers: Michael Allen, Cynthia Porcher, Vera Manigault
Events Attended: Community meeting to answer questions about project and generate interest. The audience was very interested in the project and began to discuss forming their own local organization for preservation of Gullah/Geechee culture. From this meeting the St. Simons African American Coalition (SSAAC) was born.
Events Attended: About 30 people gathered to discuss the project and what they might be able to do for themselves. Many goals expressed.

February 15, 2001
Community Host: Community meeting at Emanuel AME Church
Fieldworker: Cynthia Porcher
Events attended: Porcher made presentation on listing eligibility for National Trust for Historic Preservation. Spoke briefly about project.

July 17, 2001
Community Hosts: Amy Roberts, Karen Brown
Fieldworkers: Cynthia Porcher, Allyssa Lee, Jonna Hauser
Tours taken: Automobile tour of the 5 remaining African American neighborhoods on the island
Sites visited: Harrington School, Retreat Cemetery, Union Cemetery, First African Baptist Church, Savannah Ditch, Ibo Landing, Wing family home.
Events attended: Daycare programs for both elders and children at First African Baptist Church

July 18, 2001
Community Hosts: Amy Roberts, Karen Brown
Fieldworkers: Porcher, Lee, Hauser
Tours taken: Automobile tour of former African- American Neighborhoods
Sites visited: Union Cemetery, Hamilton Plantation Slave Cabins at Gascoigne Bluff, St. Ignatius Episcopal Church, 1950s- era daycare center on Demere Rd. in South End, Retreat Plantation slave cabin (now a gift shop), King family cemetery and Retreat Plantation ruins at Sea Island Golf Club (King family cemetery is surrounded by golf course), Emanuel Baptist Church, Willis Proctor's Store, barber shop, other abandoned African American businesses, site of Edgewood School.
Events attended: Vacation Bible School programs at Emanuel Baptist Church (Fieldworkers were invited to introduce themselves and tell congregation about the project.) There were about 100 people of all ages in attendance.

October 20, 2001
Community Hosts: St. Simons African- American Heritage Coalition (SSAAHC), Amy Roberts, Shirley Roberts, Karen Brown
Fieldworker: Cynthia Porcher
Events Attended: First Anniversary Celebration SSAAHC, First African Baptist Church (2 hours)
Casual Conversations: 12

October 21, 2001
Community Host: Amy Roberts
Fieldworkers: Cynthia Porcher, Vera Manigault
Tours taken: Met Amy Roberts early Sunday morning for tour of Harrington School site and to view effects of sewer coming to the neighborhood. Also visited baptismal sites (3 hours)
Other pertinent information: Porcher photographed schoolhouse extensively from many angles, also photographed the coming of sewer to neighborhood. All photographs made available to community for their preservation work.

April 10, 2002
Community Hosts: SSAAHC
Fieldworker: Cynthia Porcher
Events attended: General Meeting of SSAAHC – Porcher gave update on progress of study and made suggestions for community fundraising projects. At this meeting Porcher presented the preliminary alternatives to the group. Also attended meeting at First African Baptist Church to discuss preliminary alternatives and get input from community.
Other pertinent information: Porcher showed Power Point presentation of sites in and around St. Simons Island. Gave copy of presentation to SSAAHC.

June 12, 2002
Community Hosts: Emanuel Baptist Church, SSAAHC, Amy Roberts, Shirley Roberts
Fieldworkers: Cynthia Porcher and Jeannette Lee
Events Attended: Porcher showed Power Point presentation at a community meeting at the church (2 hours)
Tours: Porcher took Jeannette Lee to see important sites on the island and took more photographs (3 hours)

August 17- 18, 2002
Community Hosts: Georgia Sea Island Festival sponsored by SSAAHC to promote Gullah/Geechee culture and promote heritage tourism
Fieldworkers: Cynthia Porcher (Jeanne Cyriaque of GA DNR also present)
Formal Interviews: 4 females mid 50s basket makers, 1 male mid 40s photographer, 1 female about 40 producer of indigo dye, McIntosh County Shouters
Casual Conversations: 18
Events attended: Festival, native food preparation for sale, dancing (9 hours over 2 days)

October 21, 2002
Community Hosts: Emanuel Baptist Church, SSAAHC
Fieldworkers: Cynthia Porcher, Richard Sussman, John Barrett, Tony Paredes, Michael Allen, Vera Manigault
Events Attended: Community forum presentation of alternatives. Approximately 60 people attended this meeting. They came from Darien, Brunswick, Sapelo, Harris Neck, etc.

Freedmen's Communities near Mt. Pleasant, South Carolina

Note: *These communities are neighborhoods and/or extended family compounds. Many of the residents are kin to one another; many can trace their ancestry to those who started the community. Some of the communities are also connected to one another by family ties.*

September 10, 2001, Phillips Community
Community Hosts: Phillips Neighborhood Association, Goodwill AME Church
Fieldworkers: Porcher, Adrienne Otto of Mt. Pleasant Docents also attended meeting
Events attended: Meeting of Phillips Neighborhood Association to discuss their options for saving the neighborhood from a road widening project. (2 hours)
Formal Interviews: Richard Habersham
Casual Conversations: 10
Other pertinent information: Porcher discussed methods of putting together documentation for Historic Neighborhood status. Group had already gathered maps and genealogical information and seemed ready and eager for its fight. Porcher agreed to meet with R Habersham to tour and photograph neighborhood and to make photographs available for use of Neighborhood Association

October 3, 2001, Phillips Community
Community Host: Richard Habersham, president of Phillips Neighborhood Association
Fieldworker: Porcher
Tours Taken: Automobile and walking tour of Phillips Community (3 to 4 hours)
Sites visited: Site of neighborhood schoolhouse, Parker Island Bridge, home of Elijah Ford, home of Rev. Henry Parker, tour of wooded site where praise house once stood
Formal Interviews: 1 male elder farmer and preacher, 1 male elder retired but making baskets, female elder retired who is mother of a U.S. Army General. All interviews lasted 20- 30 minutes.
Casual Conversations: 6
Other pertinent information: Porcher photographed important sites in community and interviewees

October 4, 2001, Phillips Community
Community Host: Richard Habersham
Fieldworker: Porcher
Tours Taken: Continued automobile and walking tour of the neighborhood (3 hours)
Sites visited: Brick wells, hand water pump, homes of several elders in the community, John Rutledge tomb
Other pertinent information: Porcher continued photographic inventory of community

October 17, 2001, Phillips Community
Community Host: Richard Habersham
Fieldworker: Porcher
Tours Taken: Auto and walking tour of former Phillips cemetery in Riverside Country Club. (3 hours)
Sites visited: Parker Island (now Riverside Country Club). Located cemetery with Confederate graves, noted that many gravestones were missing, Parker Island side of bridge from Phillips where base of bridge has been bulldozed
Other pertinent information: Porcher continued photographic inventory of community. Some photographs will be used by neighborhood association to document contamination of Horlbeck Creek by golf course run- off.

November 12, 2001, Phillips Community
Community Host: Phillips Neighborhood Association
Fieldworkers: Porcher, Alta Mae Marvin of SC Heritage Corridor also attended meeting
Events Attended: Meeting of Phillips Neighborhood Association, discussed possibility of agri-tourism and other heritage tourism options. (2 hours)
Casual conversations: 12

February 21, 2002, Six Mile and Hamlin Communities
Community Host: Jeannette Lee
Fieldworker: Porcher
Formal Interviews: 1 elder female basket maker, her daughter who also makes baskets
Casual conversations: 4
Tours Taken: Automobile and foot tour, approximately 3 hours
Other pertinent information: Porcher photographed Six Mile and Hamlin communities including cemetery on site of Hamlin plantation which contains both Hamlin family graves and slave graves

April 19, 2002, Six Mile, Ten Mile, Phillips Communities
Community Host: Goodwill AME Church, Sweetgrass Makers Association
Fieldworker: Porcher
Casual Conversations: 16
Formal Interview: Elder woman, basket maker
Other pertinent information: Porcher showed Power Point presentation and moderated discussion of project

May 2, 2002, Ten Mile Community
Community Host: Vera Manigault
Fieldworker: Porcher
Tours Taken: 2 hour automobile tour area of area
Formal Interviews: woman, mid 50s, retired welder now basket maker
Other pertinent information: photographed neighborhood
Sites: churches, houses, site of former praise house, school

June 7, 2002, Scanlonville Community
Community Host: Ed Lee
Formal Interview: Male, approx. 40, architect, active in neighborhood association
Tour: Automobile and foot tour of neighbor hood (2 hours)
Other pertinent information: Porcher photographed sites in neighborhood; Ed Lee provided copy of archeological report prepared by Chicora Foundation in attempt to qualify for Historic Neighborhood status. (Group was unsuccessful).
Sites: Churches, vernacular homes, upscale gated communities, site of Riverside Beach (now public boat landing), location of former juke joint called White's Paradise, cemetery

Appendix C Comments from Community Forums (Fall 2002)

(These figures are based on written comments from the second round of meetings and do not include letters, telephone calls and email messages received by members of the team. Responses were written on large easel pads and have been transcribed verbatim. For that reason, there are some incomplete thoughts and misspelled words.)

Alternative A
- 17 positive (25.3%)
- 5 negative (7.5%)
- 4 neutral (neither positive nor negative) (6%)

Alternative B
- 2 positive (3%)
- 3 negative (4.4%)
- 6 neutral (9%)

Alternative C
- 8 positive (12%)
- 3 negative (4.4%)
- 10 neutral (15.4%)

Combination A + B
- 4 positive (6%)

Combination A+ C
- 1 positive (1.5%)

Combination A+B+C
- 4 positive (6%)

TOTAL = 101.5% (Discrepancy due to rounding off figures)
(Note that respondents were not given the option of combination comments, but did so of their own accord. Combination comments (e. g., A+B) may have been higher had that option been made available.)

St. Simons Island, GA

Alternative A
1. I believe that one positive aspect of this proposal is that existing lands would be used.
2. Having the 3rd site in McIntosh County would be in tying in important Gullah Heritage sites in this area. (The Moran family, Sapelo Island, Plantations (Butler Island and Hofwyl- Broadfield, Historic African- American Communities (Jewtown, Harrington), Historic Sites (slave cabins, remains of slave hospital, Neptune Park), and the traditions that have been preserved (net-making, basket weaving, and storytelling) that are currently at risk of being lost forever.
3. Would this alternative include grants to acquire and preserve local sites such as the Harrington School? The school is very important to the community.
4. Plan A could bring jobs for local Geechee people. It would work good with C and B.

Alternative B
1. I would be very concerned that sites which have not traditionally been inclusive would be willing to change their interpretation, *i.e.* rice plantations.
2. I would like to know how the Gullah/Geechee people feel about these proposals.

Alternative C

1. Most flexible, able to include structures such as Harrington Schoolhouse
2. How will we ensure that the "heritage area" will become self- sufficient? (I would hate for the program to get off the ground with start- up funding, and then not have money to ensure this program's longevity.

Charleston, SC

Alternative A

1. Affirmative effort to assist the preservation of heirs' property (financial and educational resources)
2. Emphasis on creating new beaurocracy makes this the least attractive alternative, but many specific elements of Alternative A are desirable. Personally, I prefer a mix of the 3 alternatives with emphasis on grassroots initiative of a heritage area.
3. Not only the aforementioned crafts were performed but the multitude of skills it takes to build a nation as blacksmithing, building technology, medical and midwifery to name a few. Where are the institutions that taught the Gullah as such? Or did they come from Africa knowing how to build and maintain the culture since those are only a few elders left doing the crafts and so forth. These institutions need to be established in the Gullah Geechee connection. – Elder Halim, Gullah Geechee Nation
4. A needed complement to A & B, if either is selected would be to make sure info is available for students and non- students on the process to move into various employment positions, i.e. park manager, archeologist, naturalist, internships, scholarships, curator, conservation, etc.
5. "Living" interpretive centers would be important to expose/present Gully storytellers, craftspeople, musicians, etc. from within the grassroots community. The support of these "griots" as living historians would make the centers embody the very people who preserve the Gullah Culture in their own way – in this way, an institutional connection – complete with resources (e. g. human and fiscal) would serve as an economic development and cultural model for the region.

Alternative B

1. Is there a site further north of McClellanville that could be considered? Either in the Grand Strand or Little River or even Wilmington since it's still fuzzy to many that the G/G community begins in southern NC.
2. This alternative includes sites that are not traditionally associated with the Gullah Geechee story.
3. Geographically Gullah culture may be said to extend from Cape Hatteras, NC south to St Augustine, FL. Efforts should include Florida Gullah communities and sites. I favor a mix of the 3 alternatives presented, with emphasis on Alternative C and the establishment of a National Heritage Area.
4. I like the idea of using established facilities: B, but also think renovations need to occur on such historical facilities as in A and perhaps having those "link up" to create a broader range with each having a special addition to the G/G Culture.
5. The aspect of storytelling should include the Gullah wars from 1739- 1848 along the Black Border. – Elder Halim Gullah Bemi, Gullah Geechee nation
6. The first principle of community- building is to solve problems and create solutions for maximum impact. In the same way rice is "hard" to grow in the city of Charleston (environmental issues), so too is it difficult to reach large numbers of interested visitors/tourists/groups in rural areas. Cities are hubs – major concern/rethink. Should identify the 4th most visited city in the US with over 2 million visitors as a site. Compare these numbers to arriving visitors elsewhere (Rantowles, Awendaw, etc) Where do we "site" for greatest impact. Fish in a full pond.
7. B and A make a good choice together.

Alternative C

1. A grassroots endeavor could lead to a viable and productive 501- C3. For those wanting minimal federal involvement, this could work.
2. Make sure local community get involved in helping promote and preserve the culture by using local artist and organization. Empowering the people through the Culture.
3. Requirements for state legislation may be onerous, particularly for a grassroots coalition.
4. What would be the process for a start- up foundation/organization to receive assistance from the NPS or the State?
5. Alternative C involves the group's responsibility to interpret its own existence. The preferred Alternative C can be melded with elements of Alternatives A and B.
6. A national Gullah/Geechee corridor is extremely important because that area was the economic foundation of the states that will make up the corridor. These states until after the Civil War had an agricultural economy. Open land cattle raising, rice and indigo were the basis of that agricultural economy. The knowledge and the people responsible for the success of that economy were enslaved Africans, and the seed rice that that introduced the rice culture was the seed from Africa, unlike the myths created by A. S. Salley, Jr. and Duncan Haywood. It was not the alleged "seed from Madagascar." That knowledge was what made South Carolina the second wealthiest colony prior to the Revolutionary War.
7. How does the plan address the URBAN Gullah/Geechee experience? The planter/plantation model overlooks and makes it hard to include the experiences of Gullah/Geechee people who ere urban – sellers of vegetables and fish, cooks, housekeepers, nurses, craftsmen, blacksmiths, drivers, gardeners, stablemen, sail makers. How do Robert Smalls and Mary (the Pringle cook at 27 King St) fit into this model?
   How is this diversification, transition, and modification of Gullah Culture addressed?
   How do cities – like the one this forum is in – help organize and preserve this legacy of culture?
8. Could A and C work together? A could help anchor C.

Georgetown, SC

Alternative A

Atlantic Beach (pop. 400, rural, low income) historic black- owned and operated resort town. First Missionary Baptist Church – Gullah music
Gullah speech patterns, food
Fishing economy in 1930's
Tourist Attractions during segregation
- - Sherry A Suttles, President Atlantic Beach Historical Society 843.272.7444

Alternative B

No Comments

Alternative C

No Comments

Savannah, GA

Alternative A

1. This plan seems to meet the needs of all involved. – L R Morris
2. Seems to have the greatest public benefit. – John Jameson
3. Centers are well spaced and see to offer a diverse experience at sites. Please look (still) at local interpretive efforts in an attempt to complement stories, etc.

4. Consider adding exhibit of industry with living history or other interpretive styles. If people knew what it entailed (painful process of picking), they could develop a personal connection to the people, lifestyle, and hardships.
5. The idea of letting well- qualified individuals from the Gullah/Geechee community [get involved?] is a great idea. Involvement of the Gullah community will allow everyone to make an impact.
6. Gullah Geechee people are not in a position to determine the direction, definition, etc. of their culture under Alternative A. The NPS will have a larger role in dictating the preservation of our culture. We deal with academics who misrepresent our culture on a daily basis (see Dale Rosengarten "sea grass baskets" comments as one example of misrepresentation of the culture. - - A Jamal Toure, Council of Elders, Gullah/Geechee Nation
7. I like the idea of multiple partners and parks interpreting the cultural [*sic*] in their area. Each group of people are particular to the area they live in. Will give a complete picture/focus of the entire Gullah/Geechee cultural [sic].
8. Cultural site preservation efforts (private and state) should be somehow considered into [*sic*]

Alternative B

1. Alternative B is the second best choice in this process. Alternative B allows some room for Gullah Geechee people to have a say in their story and culture. Alternative A is sorely lacking in this respect. This Alternative B provides us with a means to be the caretakers of the culture.
2. Alternative C is the best plan for the Gullah Geechee people to tell their story and preserve their culture. –A Jamal Toure, Council of Elders, Gullah/Geechee Nation.

Alternative C

1. Alternative C is the best plan with regards to Gullah/Geechee people determining and defining their history and culture. We will play a significant role in the preservation of our culture. We will not be on the outside. – A Jamal Toure, Council of Elders, Gullah/Geechee Nation
2. Consider First African Baptist as a potential partner for Alternative C
3. If "African Americans" is on paper, then in person at site should be a person who as lived it and can speak Ogeechee.
4. Alternative C seems more in line with a culturally- specific community such as the Gullah-Geechee Nation

St. Helena Island, SC

Alternative A

1. Georgetown County is an important part of the Gullah/Geechee Culture, yet it has not been considered in any of those alternatives. Don't, I repeat, don't forget Georgetown County and its Gullah/Geechee Community and people. There are partners available. Hobcaw Barony has an enslaved African Village and a rice field.
2. This is a living culture, spread over three states. To put centers in certain areas does not assist Gullah People in preserving and benefiting from their own culture. We are not museum pieces.
3. This alternative seems fine, however, my concern lies with the ownership of cultural assets – be it the interpretation of the history itself or the physical assets such as buildings, etc.
4. I believe this Alternative A is good because of its potential to utilize local experts who will tell and demonstrate the "true story." The fear I have is that NPS will flex its muscle and try to control and direct the entire program.
5. This plan A supports the concept of clusters among Gullah communities which makes the effort of preservation more manageable.
6. Plan A is the best of all alternatives. It allows total involvement of existing organizations and will allow operation for at least 100 years and allow the artifacts to come back to Penn for research and the education of the young generations.
7. Penn Center is a great resource and needs National Park Service Funding.

8. Put Atlantic Beach on the map, please!
9. Alternative A appears to offer a future for expression of our culture and creativity through perpetuity, putting this special study on par with Mt Rushmore and Grand Canyon.
10. Alternative A of all the potentials appears to be the best of all presented. It is all inclusive of the areas; it will not require land purchase, it allows operation of the facility in perpetuity in all the locations. It allows involvement of the community, the existing organizations, and the National Park Service.
11. I think all 3 are good.

Alternative B

1. This alternative does not enhance the culture, but gives the incentive to others to tell a story of people they have not recognized before.
2. This would give to those who have ignored the culture the ability to control a culture that they have tried to destroy. The best way to preserve and enhance our culture is to leave it to Gullah's to interpret and preserve.
3. The parks [in Alternative B] may not reach as many people as the cultural sites [Alternative A], and the sites in Alternative C.
4. Atlantic Beach needs to be on the map.
5. Need grants on the local level for 501 C- 3's community- based organizations

Alternative C

1. Gullah Festival of SC, Inc should be in the list of potential partners, PO Box 83, Beaufort, SC 20901.
2. Sandy Island and Little River
3. Don't include Chambers of Commerce
4. Include Atlantic Beach – only remaining black- owned and erected incorporated town. Beach resort created in 1930's to house maids from Myrtle Beach. Later medical professionals and entrepreneurs bought in. Since integration and 2 hurricanes (Hazel '54 and Hugo '89), town is deteriorating rapidly. Musical giants like Ray Charles, Marvin Gaye, Chubby Checker stayed/played here. Tourists from AV to FL came. Now draws 400,000 from as far away as NYC for Memorial Day Weekend Bike Fest, BUT they stay in Myrtle Beach, North Myrtle Beach, etc. while our town is dying. We need your help drawing attention, funding Visitor Center, oral history, motel preservation, acquisition, etc. – Mary A Suttle, Pres. Atlantic Beach Historical Society
5. I am not particularly interested in the Park Service creating interpretive centers where the Gullah Culture is involved, however, if it must happen, I would prefer Alternative C.
   Gullah is a living, breathing culture, not made for museums. We as a people need assistance holding on to our land. The land is tied to the culture. If we lose our land, we lose our culture. Give people the chance to preserve their own culture. –E A Santagati
6. There was a comment that the proposed heritage corridor was too large or unwieldy. That will not be the case if local people in each micro- area of the proposed corridor are made an integral part of the future planning. If that is done, there will be cohesion among the various groups, which will ensure the success of the corridor.
7. Plan C – Best option to chain together existing cultural places without artificial form of Plan A. Each place gets to define own special aspects. Can be developed to support those special things of each community without changing the character of the site.
8. Need grants for local community projects.

Jacksonville, FL

There were no written comments from this meeting. Only 2 people other than the project team attended the meeting.

Letters and Email Messages

The team received supportive letters from a number of potential partners throughout the study area (i.e. state and county governments, non- profit organizations, federal agencies, preservation organizations). There was also a lengthy document from Marquetta L. Goodwine, founder of the Gullah/Geechee Sea Island Coalition (GGSIC). Goodwine expressed opposition to all alternatives, but found Alternative C to be least objectionable. She also indicated that she wished to speak at any congressional hearings that may be held with regard to the alternatives. About 12 members of the GGSIC sent form letter responses indicating their agreement with Goodwine's comments and her right to speak.

Appendix D: *The Gullah People and Their African Heritage* by William S. Pollitzer

Note: *The late Dr. William S. Pollitzer, at the request of the Gullah/Geechee Special Resource Study Team, prepared a synopsis of his book. The text to follow, included in this report with permission of University of Georgia Press, provides the reader with an overview of Pollitzer's work. This portion of the report may not be duplicated without written permission from the University of Georgia Press.*

Preface

I was born in Charleston, South Carolina, where my grandfather had been a cotton factor and my aunts continued to live. After my father, a pediatrician, had moved to the Up Country, it was always a joy to return to the Low Country and this unique, historic city. But I knew little of the "darker side" of life there, the black folks. Much later, my studies in anthropology and genetics at Columbia University raised questions about the people called the "Gullah Negroes," who had lived for almost three centuries along the coast of South Carolina and Georgia. Where did they come from, how closely were they related to their ancestors, and how had they developed their unique speech and culture?

My visits to Salvador in Bahia, Brazil, for lectures and research revealed the rich heritage of those of African descent, mixed with Indians and whites, who had kept alive the language and practices from specific areas of Africa. This stimulated me to learn more about the origins, history, and distinctive characteristics of the Gullah people who had been isolated in the Tidewater region. My inquiry revealed their African heritage, the relative proportion of different ethnic groups there, and their influence on genetics, health, language, social structure, and many arts and crafts. Plants and parasites from Africa also came with the slave trade to the Low Country, with profound effects.

This report is based upon my book, *The Gullah People and Their African Heritage*, University of Georgia Press, 1999, which also contains more tables and maps, as well as figures, pictures, a chronology, citations, notes, and bibliography. In brief, it illustrates why the Tidewater region, from Georgetown, S. C., through Georgia and into Florida, is worthy of special designation, and the culture of African Americans who live there worthy of preservation, protection, and interpretation to the public.

William S. Pollitzer
October, 2001

Chapter 1 Flesh and Blood

"His name's not really Sunday. We just call him that 'cause he's born on Sunday."

So said the black men to this author about the driver of the truck as we drove over Hilton Head Island one summer day in 1954. This typical African naming practice had survived among the Gullah people on this sea island near Savannah off the coast of Georgia. The men pointed sadly to the soil and beach where they and their ancestors had farmed and fished for generations. Whites were then beginning to buy up their land, soon to be covered by golf courses and condominiums. The retention of the old had met the challenge of the new. Although the marsh and dikes of the old rice plantations still persist, the Carolina coast is vastly different today from what it was a century ago. Changes in the last half- century especially threaten the Gullah people and their way of life. As Emory Campbell, Director of Penn Center on St. Helena Island expressed it: "We are the endangered species."

The homeland of the Gullah stretches 250 miles along the Tidewater from Georgetown in South Carolina, through Georgia and into Florida, where the people developed in relative isolation. Not only their distinctive speech and many cultural traits indicate their close affinity to African ancestors, but also biologically the sea island blacks, a mixture of many strains, are chiefly African, with some white and Native American genes.

Faces and Genes from Africa.

Physical anthropologists once divided mankind into distinct races; today they recognize gradients or clines in all biological traits instead. Single- gene traits like blood factors prove to be a better measure of migration and admixture of populations than do measures of morphology.

In the 1920s Herskovits measured twenty- six physical features of adult black males, most of them in Howard University and Harlem, and found them intermediate between Africans and Europeans. Eighty percent of them reported mixed ancestry, usually with whites, but 30 percent with Indians. Similarly, an analysis of thirty- six features of male crania, made in 1974, suggested that American blacks are three- fourths African and one- fourth European in ancestry. This contrasts sharply with the Gullah people.

Among inherited blood types, Group B is twice as common in Africans as in Europeans. Whites are 85 percent *Rh* positive, blacks are 92 percent. Most populations below the Sahara average 60 percent of the *Rho* subtype found in only 2 percent of whites. Absence of the Duffy blood factor (*Fy*) in blacks, common in other people, is responsible for their immunity to vivax malaria.

The frequency of these and other genetic markers, such as red blood cell factors *M, S, Jk*, and *K*, and certain inherited proteins in blood plasma, show, as the physical traits did, that African Americans in northern cities have about one- fourth white ancestry. Compare this with admixture based on inherited blood factors of 479 women and 57 men observed by this author in the clinics of the Medical College in Charleston in the 1950s. One- third were born in the city of Charleston, over two- thirds in Charleston County, and 95 percent in the coastal tier of counties. Of their parents, 60 percent were natives of the county and 85 percent were from the coastal strip; in half the cases father, mother, and subject came from the same location. The people studied were thus undoubtedly descendants of those brought to the region centuries before, although some migration among them was present even then. Only about 6 percent of their genes came from non- African ancestry, far less than that elsewhere in the country.

Apolipoproteins are inherited proteins attached to fat molecules in blood plasma. Many genetically controlled variants of them, identified by size, density, and electric charge, have been identified. Like blood types, the genes for them vary in frequency in different populations, some present only in whites and others only in blacks. Analysis of apolipoproteins of Nigerians and African Americans

show significantly more white admixture in blacks of Pittsburgh than in blacks of four coastal Carolina counties − Charleston, Berkeley, Dorchester, and Colleton. The genes found only in whites are rarer in Carolina than in Pittsburgh; most of those found only in blacks are more frequent in Carolina. White admixture of blacks of coastal South Carolina and Georgia, determined from blood factors, contrasts sharply with that of African Americans in cities of the north and west.

Physical features are in agreement with the findings from genetics: measurement of skin pigment, stature, sitting height, nose width, face width, lip thickness, and prognathism show that the black coastal Carolinians more closely resemble sub- Saharan Africans than other African Americans do. The sea island blacks thus contrast greatly with those studied by Herskovits. In both morphology and inherited blood factors the Gullah are closer to western Africa and further removed from whites than are other African Americans.

That Sick as Hell Anemia

Abnormal hemoglobins in the coastal blacks tell an even more striking story of their African kinship. In a youngster with sickle cell anemia, jagged red blood cells course through capillaries causing severe pain and early death. No wonder it is known in Charleston as that "sick as hell anemia." Caused by abnormal genes inherited from both parents (SS), it contrasts with normal hemoglobin (AA) and with the benign trait in carriers (AS), who inherit an abnormal gene from only one parent. Hemoglobin C follows the same genetic laws and similar processes but causes a milder disease. The hemoglobin molecule, responsible for carrying oxygen to the tissues, consists of home surrounded by alpha and beta globing chains. Both sickle cell and hemoglobin C disease result from abnormal beta chains. In contrast, thalassemia is an inherited disease that results from a decrease of production of normal hemoglobin chains; of two varieties, that affecting beta globin chains causes a more serious illness than that affecting alpha chains.

Sickle cell hemoglobin occurs in a wide belt through equatorial Africa. The trait (AS) varies from 12 percent in Senegambia through 15 percent in Ghana to more than 20 percent in Nigeria and Central Africa. Hemoglobin C trait (AC) reaches a high of 13 percent in Ghana and neighboring Benin, falls off sharply in adjacent regions, and is virtually absent in Central Africa. Beta thalassemia trait is about 8 percent in Liberia and rarer in other areas. The sickle cell trait is present in about 8 percent of African Americans, Hemoglobin C trait in 2 percent, and beta thalassemia in less than one percent.

Over half a century ago Paul Switzer, then an intern at the Roper Hospital in Charleston, found 14 percent sickle cell trait in red blood cells of sea island blacks. Many subsequent surveys found an even higher incidence in Charleston County, similar to that in Africa and twice as high as in African Americans generally. Three percent Hemoglobin C and one percent beta thalassemia demonstrate the role of West Africa in the ancestry of the Gullah people.

In the presence of deadly *falciparum* malaria, those with such abnormal hemoglobins are protected from the parasite causing it. Carriers, with one normal and one abnormal gene (AS), live longer than both those with the anemia (SS) and those with normal hemoglobin (AA); when they reproduce they keep the sickle cell gene in the population. The importance of this selective advantage of abnormal hemoglobin is dramatically illustrated by the history of blacks in the Low Country from 1684 into the 1940s.

Variations along the Coast

Abnormal hemoglobins reflect differences among populations of coastal blacks. Those of Georgia counties average 9 percent sickle cell trait, with a high of 14 percent on Sapelo Island. Those of South Carolina counties have 12 percent, but Charleston County averages 15 percent, far greater than elsewhere in the United States. This probably reflects both their relatively unmixed African ancestry and the selective pressure from malaria that maintained the high frequency of this genetic trait. Gene

frequencies of abnormal hemoglobins of Charleston blacks are similar to those of many African countries and much greater than those of other African Americans. However, variations in frequency of inherited blood factors do occur among the counties of the South Carolina and Georgia Low Country and even within Charleston County.

The Charleston Heart Study, begun in the 1960s, determined many medical and biological variables, including skin color, ABO and *Rho* blood types, and hemoglobin variants, among people of the county, subdivided by race and by residence in city, suburbs, and rural areas. The findings are important for the African origins and later distribution of people on the coast.

The rural men and women are darker than the city dwellers. Although this could be influenced by their greater exposure to sunlight, the higher frequency of *Rho* and *Hb. AS* suggests less white admixture, as expected from their history. The people on the sea islands southwest of the city are darkest of all and have 69 percent *Rho*, 20 percent Group B, 24 percent *Hb. AS*, and one percent *Hb. AC*, all suggestive of close African affinity.

Biological variables should be helpful in the search for origins of the sea island people, but physical features are too blended, genetic markers too intermediate, and data from Africa too sparse to connect them directly with some specific region of that continent. Similar blood types and Hb. S frequencies are found in many areas from Senegal to Angola; Hb. C frequency, however, does suggest a genetic contribution from the area around Ghana. If many inhabitants of the Sea Islands south of Charleston came from African regions where people had dark skin color, high Rho, modest Group B, high sickle cell trait, and some Hb. C, and remained relatively isolated and unmixed, it could account for the traits observed. Nigeria, which has been linked with Wadmalaw Island by language and customs, is one possibility. Only further surveys of genetic markers and historical research on both sides of the Atlantic could solve this mystery.

New techniques of molecular biology hold out hope for unraveling the genetic history of the Gullah. Four haplotypes, or clusters of genes, are known for sickle cell hemoglobin in African populations: Senegal, Benin, Cameroon, and Bantu (or CAR for Central African Republic), named for the region where first found and most abundant. Among southeastern American blacks the Benin type is most common (56 percent), followed by Bantu (19 percent) and Senegal (15 percent). For comparing the coastal Carolina population with African ancestors such haplotype frequencies, not yet fully known, would be enormously valuable.

A survey of black families on James Island just outside the city of Charleston confirmed earlier findings, except that the people were found to be slightly more admixed with whites. That study also gave new insights into the inheritance of thalassemia and provided data on the structure and genetics of the teeth of the Gullah people that further reflect their African heritage.

Teeth Make an Impression

Teeth fascinate anthropologists. With highly heritable variations in shape and size, and preservation long after other traces of the body have disintegrated, teeth are useful in describing populations living and dead. Fine details of structure also reveal information on diet and health.

As part of a large study of the genetic basis of adult dentition, Menegaz- Bock measured teeth in 391 people in seventy- six black families on James Island. The pattern of their dentition differs from that of Seminole Indians and other Native American populations, but resembles that of Africans and other African Americans. The teeth of blacks, both in Africa and in America, are larger than those of whites. In length (mesio- distal dimension) the front teeth, incisors and canines, are smaller, but the back teeth, premolars and molars, are larger. In width (bucco- lingual dimension) the reverse is true; the front teeth are thicker but the back ones are thinner than in whites.

The data from Africa, unfortunately mostly from areas outside the slave trade region, reveal teeth somewhat smaller than those of the sea islanders. One crude measure of size is the sum of the length of the teeth. At 119 mm. the Gullah teeth are exceeded in overall size only by those of one group of Bantu; they are bigger than the dentition of other Africans and African Americans. Tooth width shows a similar sequence. In their pattern, the Gullah teeth are similar to those of five other American black populations analyzed, but larger; some features of their molars and premolars show their resemblance to Africans.

Size alone does not tell the whole story. One notable and highly heritable feature, common in Asiatics and American Indians, present in some Africans, but rare in whites, is a scooped out or shovel shape to the back of the incisors. Its average depth in the central incisors of Seminole Indians is 1.00 mm; in the blacks on James Island it is 0.63 mm. a finding consistent with their African ancestry with some white and Indian admixture.

Thus, morphology, red cell blood types, plasma proteins, hemoglobin variants, and dentition of the sea island blacks present a consistent picture of a predominantly African people with minimal white and Indian admixture, and with indications of genetic contributions from the western bulge of the continent. To solve the puzzle of the formation of the Gullah people on the coast of Carolina and Georgia, and to give them pride in their heritage, it is necessary to turn back to Africa and the rich diversity of its geography, people, history, culture, and language.

Chapter 2 Exodus: The In-Human Trade

"You've come home!"

With that friendly welcome the natives of Sierra Leone greeted the visitors from the Carolina Sea Islands, who soon joyously recognized speech, basketry, songs, musical instruments, and the manner of tossing fishing nets so familiar to them. But when this Gullah delegation visited Bance Island off the shore, where ocean- going ships had loaded their slave ancestors, their voices fell silent and their faces showed grief. Buildings still stand along the African coast as grim reminders of the transoceanic slave trade.

To appreciate the magnitude and variation of that mass forced migration to the New World, it is necessary to understand the incredible size of Africa that Europeans called the Dark Continent. The United States could fit into it three times. In topography, climate, vegetation and people, Africa is a picture of diversity, with a tropical zone embraced by two temperate ones. Below the Sahara desert lies the Sudan of grassland and woodland; further south the Guinea Coast and the Congo River basin form the tropical rainforest. These West and Central African regions were the homeland of the ancestors of the Gullah people who differed in physique, language, and culture.

In the savannah of the western Sudan herding is combined with agriculture, manufacturing is highly specialized, markets and trade flourish, musical instruments are varied, Islam is influential, and linguistic chaos abounds. On the Guinea Coast, agriculture is intensive, crops from Malaysia and America fueled a population explosion, markets and craft guilds are well developed, art reached its zenith; and languages are varied. The Congo culture area, following the expansion of the Bantu into Central Africa, is supported by shifting agriculture, bark cloth, ceremonial drums, religion stressing death, sculpture, and the paramount importance of kinship. Here, and in some of the Guinea Coast, dense and hostile vegetation separates villages; disease has had its greatest impact in this unhealthy and forbidding environment.

More than 750 languages of Africa, classified by Greenberg, make a Babel of tongues, but a knowledge of the areas where they are spoken is necessary for appreciation of the Gullah language. Prominent along the western coast are Wolof, Susu, Temne, Mende, Kpelle, and Vai; further interior are Malinke

and Bambara; and Fulani is spread over West Africa. Along the Guinea Coast are Twi, Ga, Fante (Fanti), Ewe, Fon, Yoruba, Igbo (Ibo), Ibibio, Bini and Efik. Twi and the related Fante are called Akan languages. In the large Bantu group of Central Africa are Kongo, Kikongo, Bobangi, Luba (Tshiluba), Kimbundu, and Umbundu. The vocabulary and grammar of these languages influenced the development of Gullah.

Of some 12 million Africans shipped from Africa to the New World from the fifteenth into the nineteenth century, about 11 million arrived, a grim reminder of the death rate in the "Middle Passage." While the majority went to Latin America, almost 2 million went to the British islands in the Caribbean, especially Jamaica and Barbados. Eight coastal regions are recognized in the eighteenth century English slave trade. The first, Senegambia, includes Senegal and Gambia of today. A second, from the Casamance in the north to Cape Mount in the south, labeled Sierra Leone, includes not only that nation but also modern Guinea and Guinea- Bissau plus small parts of Senegal and Liberia. The third, the Windward Coast, stretching from Cape Mount to Assini at the western edge of Ghana, includes Liberia and the Ivory Coast, but the usage of the term varied over time. To the eighteenth-century British it meant anything westward of the Gold Coast.

The coast of Liberia, originally the Malagueta or Pepper Coast from malagueta pepper, was also known as the Grain Coast or Rice Coast. The fourth region is the Gold Coast, roughly the same as Ghana of today. Further east, beyond the Volta River, lies the fifth region, the Bight of Benin, or the Slave Coast of present- day Togo and Benin and part of Nigeria. The Bight of Biafra, including the Niger Delta plus the mouths of the Cross River and Duala River to the east in Cameroon, is the sixth region of the slave trade, bounded by the Benin River to the west and Cape Lopez in Gabon to the south. Angola in its broadest sense, including not only that nation but also Zaire, Congo- Brazzaville, part of Gabon to the north, and part of Namibia to the south, comprises a seventh region also called Central Africa. The eighth region is the southern coast, reaching up to Mozambique on the east coast of Africa and including the island of Madagascar across from it, from which few slaves probably came.

The Traffic to Charleston

Records from 200 years ago written in the careful script of the day recreate the busy times at the port of Charleston which had grown from its modest beginnings in 1670 to one of the most active ports in North America by the time of the Revolution. *The Book of Manifests* from 1784 through 1787, in the *Records of the States*, lists not only the date, entry number, ship, captain, and port of origin for vessels in the harbor, but also the merchandise, the merchant buying the goods, and the duty. Here and there listed among the other imports is the human cargo, small shipments from Bermuda or St. Thomas or other states in the newly created United States, as well as larger shipments of slaves from Angola or Gambia or the Gold Coast. Often just "Africa" appears in neat Gothic script, obscuring the specific homeland of those taken across the sea.

One can visualize the scene in the crowded harbor from the wide variety of vessels and their names: The Schooner *Grecian Lady*, the Sloop *May*, the Brigantine *Neptune*, the Ship *Fortitude*, the Cutter *Ferril*, the Bark *Molly*, and the Snow *Jean Baptista*. The names of the ships engaged in the slave trade often belie their doleful mission: *Happy Couple*, *Charming Polly*, *Delight*, *Olive- Branch*, *Relief*, *Hope*, *Providence*, *Content,* and *Friendship*. The best known names in the city of Charleston are often listed as the recipients of the slaves, such as Nathaniel Russell, whose home is a major tourist attraction today.

From the earliest days of the settlement of Carolina, black bondsmen accompanied their masters, usually from the West Indies. At least sixty- five of them entered Charles Town in its very first decade, and more soon followed. For those early years the exact count and source are difficult to determine; most ships from Barbados and neighboring islands had a few on board, their African provenience unknown.

As early as 1674 the Proprietors instructed one Andrew Percival who controlled a plantation south of the Ashley River to begin a trade with the Spaniards for "Negroes." Trade was laid open by an act of 1698, and by the end of the century direct commerce between Africa and Carolina was underway. Significantly in that same year an act encouraged white servants, because the great number of blacks imported was perceived as endangering the safety of the colony- - a note of caution heard again in succeeding years.

From the founding of Charles Town the importation grew astronomically. The total for 1706 was only 24, for 1707, 22, but by 1724 it was 604; it rose sharply in the 1740s with demands for labor for rice and indigo cultivation, and peaked in the nineteenth century.

Planters and dealers alike recognized different attributes in slaves from the various regions of Africa and expressed decided preferences. The many letters of Henry Laurens, engaged in the trade for decades in the eighteenth century until the American Revolution, reflect these perceptions and preferences.

The order of choice among South Carolina planters appears to have been Gold Coast, Gambia, Windward Coast, and Angola; Ibo from Calabar or Bonny in the Bight of Biafra were considered worst. The reasons were chiefly size, strength, or health, although temperament also counted. Real or imagined traits of behavior sometimes reinforced preferences based upon physique; alleged attributes might influence a dealer or a buyer as much as actual ones.

Coramantees from the Gold Coast were described as having extraordinary strength and symmetry, distinguished appearance, and proud bearing. They were blacker, taller, and handsomer than their fellow slaves, vigorous, muscular, hardy, and agile, intelligent, fierce, stubborn, unwilling to forgive a wrong, but loyal if their devotion were captured. Gambians were similarly tall, strong, and very dark. Senegalese were considered most intelligent and esteemed for domestic service. Mandingoes were gentle in demeanor, but sinking under fatigue. Whydahs and Pawpaws were said to be lusty, industrious, cheerful, submissive, even tempered, complacent, and obedient. Those from Congo and Angola were slender and slight, mild and honest, stupid, docile, comely, and inclined to run away. The Eboes (Ibos) were called jaundiced, sickly, unattractive, superstitious, lazy, despondent, and prone to suicide.

The profits from some voyages of the slave trade into the port at Charles Town must have been enormous to offset the losses caused by the various hazards, including disease, wars, storms, pirates, and mutinies. Graphic accounts of mutinies especially illustrate the ethnocentric viewpoint of white men and belie the conventional picture of docile black ones.

> To be SOLD Wednesday the 24th Instant September, a Parcel of choice Negroes, imported in the *Happy Couple* - - - Hill Master directly from the Coast of Guiney, by Jos. Wragg and Comp. N.B. Extraordinary Encouragement will be given for present Pay, and Payment this Crop."

This advertisement, accompanied by a small black figure, appeared in the *South Carolina Gazette*, Number 85, for September 6- 13, 1735. Hundreds of such ads printed in the Charleston newspapers from 1733- 1807, provide one excellent source of data on the number and provenience of slaves imported into Carolina.

The British Naval Office, responsible for the loading and unloading of vessels in the ports of the colonies in the eighteenth century, is another valuable source of information. Stationed at Charles Town, Georgetown and Port Royal, their record, in the elegant penmanship of the day, provides a unique insight into the commerce to and from the increasingly important colony of South Carolina. While many ships brought a few blacks from the West Indies, the record shows increasing shipments from "Africa" in large numbers.

The Records of the Public Treasurers of South Carolina list the duty on blacks imported from 1735-1774 plus the captain of the ship, the agency or importer, the source of the shipment, and the number of slaves; and the manifests in the Records of the States contains similar information from 1784- 1787.

No one source is complete, but through the use of all of them, with attention to dates, ships, captains, and origins, a fairly accurate picture can be constructed of the number of enslaved persons legally transported from eight coastal regions of Africa to Charles Town in three time periods. Early is from 1716- 1744, Middle from 1749- 1787, and Final from 1804- 1807.

In the Early Period Angola contributed half of the 22,117 slaves imported, or three- fourths of those of known African origin. The numbers from Senegambia and from the Bight of Biafra are small, and those from other areas are negligible. In the Middle Period, however, when 63,210 people were imported into Charles Town from Africa, Senegambia was responsible for one- third of the slave trade of known origin. The Windward Coast made a substantial contribution at this time followed closely by Angola and then the Gold Coast. While the total trade tripled in this second half of the eighteenth century, the actual number from Angola decreased. The people from Senegambia increased ten fold as rice and indigo cultivation began to flourish in Carolina. The number from the Gold Coast, although half that from Senegambia, saw a thirteen- fold increase over the Early Period.

In the four feverish years of the Final Period, the total number of Africans imported - - 29,461 - - far exceeded all those brought in the twenty- eight years of the Early Period, and is almost half the amount in the thirty- nine years of the Middle Period. Angola accounted for over half of the trade, followed by the Windward Coast and then by the Gold Coast, with lesser contributions from other regions.

By summing the data of the three time periods, a picture of the total African slave trade to South Carolina alone appears (see “Map 5”). When 23,000, 20 percent of the total, who cannot be assigned to a particular coastal region are omitted, some 39 percent came from Angola which includes Congo, 20 percent from Senegambia, 17 percent from the Windward Coast, and 13 percent from the Gold Coast. The contribution from Sierra Leone is only 6 percent and that from the two Bights and from Madagascar and Mozambique even less. It is of interest to see if this distribution of people imported, 60 percent from West Africa and 40 percent from Central Africa, is reflected in the speech and behavior of the sea islanders.

Role of the West Indies

One third of the known slave trade between the Caribbean islands and Charles Town took place in the Early Period, two thirds in the flourishing Middle Period, and virtually none in the Final Period. Barbados sent the greatest number, followed by St. Kitts, Antigua, Jamaica, and a dozen other Caribbean islands.

Slaves brought from the British West Indies are important for their impact on the Sea Islands because of their ethnic origins. Although these migrants were already somewhat adapted to the dominant whites by "seasoning" for a few years in the islands, they nonetheless retained the language and customs of their African homeland. Of two million Africans brought to the British Caribbean, Jamaica and Barbados received the bulk; in the eighteenth century they re- exported one- fourth to the mainland. The ethnic composition of Africans imported into Jamaica and Barbados from 1662- 1713 shows emphasis upon the role of the Gold Coast and Benin; as the century progressed, Biafra had a greater share of the trade. Of the known British slave trade from 1700 through 1807, the Bight of Biafra contributed 37 percent and the Gold Coast 13 percent, together just half of the total.

While direct importations from the Gold Coast are surprisingly modest in light of the known preference for these people in Carolina, they were thus greatly supplemented by those who came via the West Indies. To an even greater degree bondsmen from the Bights of Benin and Biafra, rare in the

direct trade, contributed indirectly via the Caribbean islands. The preponderance of the Bantu-speaking people from Congo and Angola in the Early Period, reinforced by vast numbers in later time, accounts for their influence in Carolina. But Senegambians, preferred by planters and dealers, came in sufficient numbers, especially in the Middle Period, 1749- 1787, to have a lasting effect. People from the Windward Coast also contributed appreciably in that Period as well as in the Final Period from 1804- 1807.

The ban on the slave trade to Georgia, imposed with its settlement in 1732, was lifted in 1750, but far fewer Africans entered that colony than neighboring South Carolina. Until 1766 imports to Georgia were from the West Indies and other colonies, especially South Carolina. Of an estimated 6,539 from 1755 to 1798, 2,038, one- third, came from the Caribbean. Of 3,680 from a known region of Africa, 43 percent came from Gambia and 44 percent from Sierra Leone or the Windward Coast.

There is much evidence that slaves were smuggled into Georgia illegally, especially from Congo and Angola, but also Ibos from the Bight of Biafra. At the time of Charles Lyell's visit to Georgia in the 1840s, one- fourth of the black population were said to have come directly from Africa. Even in 1858 the ship Wanderer landed 400 Africans from the Congo, mostly boys between 13 and 18, on Jekyll Island. Many of them and their descendants remained in the area, but 120 were shipped up the Savannah River to Augusta, Georgia. Some, interviewed in 1908, displayed their filed teeth and their houses built of straw, and recalled the crops grown and the slavery and polygamy practiced in Africa. African Americans on the Georgia coast in the 1930s recalled people brought from Africa with "Golla" in their names.

Slaves also entered Georgia by a semi- legal route, for Florida remained under the Spanish until ceded to the United States in 1819, and became a state only in 1845. It was thus possible for Africans, transported legally into Spanish Florida, to be brought over the border well after the slave trade officially ended in 1808. Memories of Africa, including recollections of the Moslem religion, survived in Georgia into the twentieth century. African retentions may have been strongest on the Georgia coast because of later reinforcements both directly and indirectly via Florida.

The slave trade brought not only people, but also parasites: deadly malignant tertian (falciparum) malaria, yellow fever, smallpox, and a host of worms. Blacks are relatively immune to the more common benign tertian (vivax) malaria. The mosquito- ridden Low Country allowed them to survive and work while whites fled to higher ground from May to October. Their isolation on the Sea Islands permitted development of their unique culture. But blacks suffered from white man’s illnesses, and some still do. Respiratory ailments, like pneumonia, hit them hardest, and whooping cough, diphtheria, and measles also took a deadly toll. Nutritional deficiencies compounded their health problems.

Members of a homogeneous group who came to an area first and in large numbers had an opportunity to establish their common speech and culture; those who followed in the same area, especially if they came in modest numbers over time, were compelled to adjust to the earlier ethnic group, as well as to whites. Although planters recognized different tribes, they blended them to make a homogeneous work force and obscure these distinctions.

Africans who arrived in Carolina and Georgia brought with them attributes of biology, culture, and language that reflected their homeland. What was retained into modern times was dependent not only on the genes, physique, customs, and speech of the areas of Africa from which they came, but also upon the numbers from different tribes, their time of arrival, whom they encountered along the way, and those they met on American shores. Moreover, the prevalence, strength, and utility of different attributes affected their survival. Beliefs, practices, skills, crafts, and speech of the Gullah, like the human body, are more than retention of those traits in Africa, but rather an adaptation over time that led through creolization to a distinctive society on the Sea Islands.

The black population grew astronomically. By 1740 it was almost 40,000 while the white population was 20,000, a ratio of two to one, fed both by natural increase and the ever- growing slave trade. By the 1770s half of the black population lived on big plantations where they vastly outnumbered whites, further promoting their isolation. In 1790, South Carolina's 107,094 slaves were 43 percent of its population, but Beaufort and Charleston Districts had 76 percent and some parishes reached 90 percent, as large plantations grew. From that year to the Civil War, the slave population of the state almost quadrupled to 402,400. The increase in the number of Africans, their concentration in rural area, the severity of slave codes, and the social alienation from whites produced an isolation and bond of brotherhood among the Gullah people. Yet miscegenation did occur, proven by history and by the census data on mulattoes.

The rise of "free persons of color," usually mulattoes, made an important contribution to Low Country society. In 1790 there were 1,801; by 1820 they had quadrupled to 6,826, most within the city of Charleston. They made a distinctive minority, talented craftsmen essential to the business of the community.

The Civil War brought change to the Sea Islands. After federal forces took over Beaufort and the neighboring islands, white planters fled and slaves came under the military. Newly emancipated blacks expressed an intense desire to remain in places of their former servitude; many purchased land to which they became emotionally and economically attached. Missionaries and teachers who flocked to the area to help, also reported to a wider world the music, folklore, customs, arts, crafts, beliefs, and language of the Gullah. Their efforts at education proved successful, helped to preserve their culture, and left a continuing legacy. The sea island people continued their isolation and way of life well into the twentieth century.

For all of its tragedy, the slave trade did bring with it benefits: useful plants and healing herbs that fed the economy and aided health.

Chapter 3 Trans Plants and the Economy

"Thank Him who placed us here beneath so kind a sky."
- Henry Timrod, *Ethnogenesis*, 1861.

Charleston's eminent nineteenth century poet said it well, but for those who were forced to toil in all kinds of weather, in summer's humid heat or winter's rainy cold, the sky was not always so kind. The story of agriculture and economics in coastal South Carolina is the story of black labor. Exploration of crops grown and their origin provides one further clue to the source of specific people from Africa, where they went in Carolina, and why. It also dramatically illustrates the adaptation of their work patterns to a different environment, a re- creation of something new that arose in America from the interaction of African and English culture, called creolization, a term borrowed from linguistics. Already acclimated to the heat, humidity, and luxuriant vegetation of subtropical Carolina, blacks were better equipped than whites to face the rigors of the frontier. They used their talents well in fields and streams; one man with gun and net could bring in as much food as five families could eat.

From earliest days one natural product was available in abundance to convert into profits, the forest itself. Wood was used for the construction of houses, the building of ships, and the making of barrel staves. The needs of the British navy were also fulfilled in naval stores derived from the plentiful pine trees: tar, pitch, resin, and turpentine. Blacks in these operations utilized what they had learned in their homeland. With the clearing of the forests more land was available for another major industry, cattle raising. The mild climate, combined with abundant foliage, caused the multiplication of the animals at a remarkable rate. Soon the leather from cowhides supplemented the skins from deer and other wild animals as valuable exports from the young colony.

Here especially the skills of blacks proved vital to the economy, for they were employed in the herding of live stock. Many Africans, especially the Fulani from Gambia, had had experience in tending cattle in their homeland. The term "cow- boy" first came to be used in coastal Carolina at the beginning of the eighteenth century for one who tends cows, just as "house- boy" was used for one who keeps the house. The Africans taught the Englishmen open grazing in contrast to their custom of raising small herds confined to small pastures, although Spanish to the south also influenced the practices of the Carolina settlers.

People from specific areas of Africa were preferred for particular occupations, often on the basis of their native skills. Thus, Wolofs and other Senegambians were favored as house servants, along with Yoruba and Dahomeans. Bambara and Malinke from the western bulge and Pawpaws and Coramantees from the Gold Coast area were sought as artisans. Senegambians, thought to have Arabic admixture, were valued as blacksmiths, skilled in the working of both metal and wood. Mande people worked as rowers, transporting supplies and crops along the waterways of Carolina as they had done for ages along the rivers of Senegal and Gambia. These coastal West Africans also imported the art of netcasting which became an established tradition in the tidal shallows of Carolina, and the women served as cooks, maids, and nurses in the white man's home. The Bantu- speaking Angolans, along with the Ibo and related people of Calabar, were more often employed as field hands. Three crops that thrived in the sandy soil of the Low Country required ever more African laborers and enriched their white masters.

Riches from Rice

The crop that became the crown jewel in the crown colony of South Carolina and dominated its economy into the mid- nineteenth century is a legendary pearly white grain barely a quarter of an inch long – rice.

When Captain John Thurber brought seed to Dr. Henry Woodward on a ship from Madagascar about 1685, Carolina Gold Rice, a new grain adaptable to wet cultivation, began. By 1700 more rice was produced in the colony than there were ships to transport it. Later, Carolina White Rice, introduced by Robert Rowan, was even more popular. The days of its greatest economic importance in Charleston's foreign trade lay before the Revolution, but it continued to be an important export crop down to the Civil War. "Charleston's colonial merchants grew as fat on rice profits as the swarms of bobolinks, known as rice birds, fattened themselves during the annual visits to the South Carolina rice fields on the eve of the fall harvest," according to Thomas Tobias.

In 1850, 257 plantations along ten rivers of the state produced an astounding 159,930,613 pounds or nearly 80,000 tons of rice. At its peak 150,000 acres of swamp and tidal marshes were under cultivation. In 1860, nine of the fourteen slaveholders in the United States owning more than 500 slaves were rice planters.

In the early years of the colony, rice was grown on inland swamps, a hazardous procedure because the valuable crop could be lost by either too much water or too little. Then planters learned to utilize the timbered swamps that bordered fresh- water tidal rivers such as the Waccamaw, Pee Dee, Santee, Cooper, Edisto, and Combahee, where tides were utilized in the cultivation of the grain. During the first half of the eighteenth century, three to four acres of rice per hand were produced by the older method; after tidal culture became the norm one man could handle up to seven acres.

Duncan Clinch Heyward, who grew rice himself along the Combahee River just as his great grandfather had done, wrote of the cultivation of the grain in *Seed from Madagascar*. He speculated that the manner of cultivation came from China, based on pictures he had seen of rice production there: the plowing of the fields with black water buffalo, the sowing of seed broadcast on the water, and the transplanting of rice by hand in the fields.

Ironically these very Chinese techniques were not those used in Carolina. David Doar, the last of four generations to plant rice along the Santee, marveled at the intricacies of the elaborate irrigation system necessary for the production of the crop - - from the white man's traditional point of view.

"As one views this vast hydraulic work, he is amazed to learn that all of this was accomplished in the face of seemingly insuperable difficulties by every- day planters who had as tools only the axe, the spade, and the hoe, in the hands of intractable Negro [*sic*] men and women, but lately brought from the jungles of Africa."

Yet rice growing in coastal Carolina is a dramatic case of African influence in America only recently appreciated. Many slaves, especially those from Senegal and the coast to the south of it, evidently knew more about planting this important food crop than their masters did. Blacks from those regions were deliberately brought to Carolina because of their experience and skill in these techniques. West Africans were actually selling rice to traders by the fifteenth century; Portuguese noted its cultivation in Senegambia by 1453 and purchased it by 1480. The grain was sold to slave traders in the seventeenth century, and was well known in the eighteenth.

As early as 1700 ships from Carolina were in the Gambia River where rice was grown along the river banks. Many advertisements in the Charles Town newspaper attest to the demand for slaves from rice- growing regions of Africa, and the "Rice Coast," a portion of the Windward Coast roughly equal to Liberia, is mentioned repeatedly. The *South Carolina Gazette* for May 30, 1785, advertised 152 slaves from Gambia to be sold on June 7: "The Negroes from this part of the coast of Africa are well acquainted with the cultivation of rice and are naturally industrious." An ad of August 25 of that same year for slaves from the Windward and Gold Coasts stresses the point that they are accustomed to the planting of both rice and corn.

Hardly by chance 61 percent of the slaves brought into Charleston between 1749 and 1787 were from rich rice- growing areas of Africa: Senegambia, Sierra Leone, and the Windward Coast. (See Table “6.”) As many of these people had been slaves in their native land, they were often prepared both in attitude and in training for rice cultivation along the Carolina coast. "Carolinians may well have gone to Gambia as students and brought back Africans as teachers."

The history of rice binds together Asia, Africa, and America. *Oryza glaberrima*, with erect, compact flower clusters and red grains, was grown as early as 1500 B. C. along the Casamance River in Senegambia and the inland delta where the Niger River flows northeast toward Timbuktu. Much later, when the more adaptable Asian species, *O. sativa*, with leaning clusters and white grains and greater yield, was introduced into the western Sudan, it tended to replace the earlier species as well as hybridize with it, and variants of it are widely grown throughout western Africa even today.

Such tribes as the Bambara, Fula, Malinke, and Songhai had long experience in growing this rich grain along the Niger River, while others, such as the Serer, Mende, Temne, Kissi, Papel, and Baga utilized their own special techniques of rice production from Senegal to the Ivory Coast. From Cape Verde to Sierra Leone the extraordinary topography, numerous silt- laden rivers, high tides that periodically covered the terrain, and mangrove roots that hold the alluvium produce the richest soil in West Africa, ideally suited for rice production. Knowledge of terrains and tides, sluice gates and soil types, rivers and rice, the slaves from West Africa brought to the fields of South Carolina. April brought the sowing when slaves dropped the rice seed into trenches and covered them by the foot. Then sluice gates, opened at high tide, flooded the fields until the seeds sprouted. After draining and hoeing, came the "long water" that submerged the fields for three weeks to destroy insects and grass, followed by another three weeks of the excruciating work of hoeing. Toward mid July the harvest flood began when heavy heads of ripening rice were supported by water. September brought final draining, harvesting with rice hooks, drying, tying in sheaves, stacking, and the difficult task of flailing off the heads of the grain, then winnowing to separate the grain from the chaff by fanning in the wind.

When a New World slave plants rice by pressing a hole with his heel and covering the seeds with his foot, his motion is just like that found in parts of West Africa. When blacks sow rice with a gourd or hoe in unison to work songs, the cultivation and the singing too are echoes of traits learned long ago from African ancestors. The term "trunk" for a sluice gate is from West African usage, where a hollow log plugged at one end acts as a valve. Even the mortar and pestle so efficient for removing husks from rice grains are derived from similar instruments of their homeland. Finally, when threshed grain is fanned in the wind, those wide, flat winnowing baskets used are like the ones known for centuries in Africa. In rice production blacks adapted their basic skills and work patterns to a different labor system, a process of cultural creolization. Although the task system treated them as individuals, the strong helped the weak as they worked in groups, much as they had done in their homeland.

To the Charlestonian it is not a meal without rice. In a ritual practiced in Sierra Leone and in the Sea Islands, one first picks out any dirt or dark grains, and then washes the rice vigorously between the hands. The method of cooking it in South Carolina, described as early as 1756 by Eliza Lucas Pinckney, producing separate fluffy grains, is derived from Africa in contrast to the way in China. An imaginative use of spices by slave cooks was also in part inherited from Africa, and influenced whites.

Many blacks who live today where rice once held sway are descended from those who prepared the soil and grew and cooked the glistening grain beside the rolling tides of their West African homeland ages before.

A Dyeing Art: Indigo

The development of the dye indigo in South Carolina is, quite literally, a colorful story. Color, intimately woven into the fabric of our lives, has always fascinated mankind. Dyes predate history, add variety to clothes and homes, and signal social status, like the purple long known as the color of royalty.

Indigo, derived from a species of *Indigofera*, has been used for more than 4000 years. The shrubby legume, with pinnate leaves and dull reddish purple flowers, was known to the ancients of Asia, Egypt, Greece, and Rome. While *I. tinctoria*, the best known species, a native of India, has been found in Senegal, *I. arrecta* is the more common variety indigenous to Africa.

Before European contact indigo was known to the Kanuri dyers of the Cameroun who carried it from Bornu to the region of Lake Chad. Fulani were also responsible for its spread in West Africa. An official at Cape Coast Castle on the Gold Coast reported in 1766 that, "There is a Sort of Indigo grows wild here that the Natives make use of and is of a very lasting dye."

Lieutenant- Colonel George Lucas, stationed in Antigua, brought his sick wife to Charles Town for her health in 1738. When he returned to the West Indies, he put his 16- year- old daughter Eliza in charge of his plantation on the Wappoo, a salt creek connecting the Ashley with the Stono River. Eliza was an unusually bright, energetic, strong- minded, young lady who began immediately experimenting with crops that would grow best in the sandy, fertile soil of coastal Carolina. Arising at five each morning, she found time not only for agriculture but also for extensive reading, music, needlework, and writing, including those letters that record her work and thoughts.

By July, 1739, she mentioned in a letter to her father "the pains I had taken to bring Indigo, Ginger, Cotton, and Lucerne (an alfalfa) and Casada (cassava?) to perfection, and had greater hopes from the Indigo – if I could have the seed earlier the next year from the West India's – than any of ye rest of ye things I had tryd."

The actual process of making dye from the leaves of the plants is tricky and requires patient work. The leaves must be soaked in water until they ferment, froth, and give up their coloring matter, a process that can take several days, when the head man or "Indigo Maker" must watch day and night. The

liquid is then drained off into a second vat clear of leaves where it is beaten with paddles until it begins to thicken. After it is led into a third vat and allowed to settle, the sediment is formed into lumps or cakes and dried. Dissatisfied with the product turned out by a white overseer, Eliza soon found where the fault lay and reported greater success when Governor Lucas sent her a black man from one of the French islands.

Eliza devoted virtually the whole crop of indigo of 1744 to making seed which she gave to planters. By 1747 enough indigo was produced to export it for sale to England. Aided by a bounty paid by the British to exclude the competing French, planters could double their capital every three to four years.

Indigo flourished as one major staple of the colony for some thirty years. Combined with walnut, it was the chief plant for dyeing cloth. Just before the American Revolution the annual export was an incredible 1,107,660 pounds. The loss of the British bounty after the Revolution, the cheaper labor in the Indies, and the easier cultivation of cotton led to its demise by the end of the century. While there is no proof that Africans were deliberately imported for their knowledge of indigo, many were clearly experienced in the production and use of the dye in their homeland.

How rice and indigo culture complemented each other and compounded the labor of the black worker is indicated by this comment by Governor Glen in 1761. "But I cannot leave this subject without observing how conveniently and profitable, as to the charge of Labour, both Indigo and Rice may be managed by the same Persons, for the Labour attending Indigo being over in the Summer Months, those who were employed in it may afterwards manufacture Rice in the ensuing Part of the Year, when it becomes most laborious; and after doing all this, they will have some Time to spare for sawing Lumber and making Hogsheads, and other Staves to supply the Sugar Colonies."

The productivity of the colony and the richness and diversity of its goods is illustrated by the dozen most lucrative commodities exported from the Port of Charles Town from November, 1747, to November, 1748 (see table “12”). Only the skin of the ubiquitous deer could compete with rice and indigo in worth. Many other items of field and forest were also exported, including "Pease," Oranges, Butter, a little silk, and even cotton that would in time dominate the economy of the whole South.

Magic Thread: Cotton

That ball of shiny white fiber that supplies three- fourths of the clothing of the world has been known for millennia. The domestication of Old World tree cotton (*Gossypium arboreum*) probably began in East Africa before 2500 B. C. Shrub cotton (*G. herbaceum*) was first cultivated in West Africa; textiles made from it were woven there by the end of the first millennium A. D. Kano in Nigeria has been a cotton market since the ninth century, and cotton cloth was brought from the Guinea coast to England in the sixteenth century.

Of the two best known commercial species of modern times, Upland cotton (G. *hirsutum*), first domesticated in Mesoamerica, has short, coarse fibers that cling to its green seeds so that hand separation is impractical. Sea- island cotton (*G. barbadense*), first cultivated in South America, has long, thin, lustrous, silky fibers, readily separated from its black seeds, that make the finest fabrics. Both species, disseminated by the Spanish into Spain and by the Portuguese into Africa, soon replaced Old World cotton. The sea islands of Carolina and Georgia, with 280 frost- free days a year, has the ideal sandy soil, temperature, rainfall, and labor necessary for the growth of long- staple cotton, so much in demand.

Just exactly when and how an annual long- staple cotton, able to grow on long summer days, came to the Sea Islands is open to debate. In the most appealing account, Frank Levett in Georgia received bags of cotton seeds from Pernambuco, Brazil, in 1786. Desiring the bags more than the seeds, he dumped them out on a dunghill, found plants growing there the following spring, continued their cultivation, and was pleased to find instant popularity of the product in London. Yet Alexander Bisset

is said to have grown the first crop of long- staple cotton on a sea island of Georgia from seed from Bahama as early as 1778. The first attempt to grow the product in South Carolina was made on Burden's Island in 1788; the first successful crop was grown by William Elliott on Hilton Head in 1790.

Cotton cultivation was labor intensive, requiring back- breaking work year around. A visitor to Cannon's Point plantation on St. Simons Island, Georgia, in 1828 described the process. In January and February, workers had to manure the fields; in March, they planted the seed. After the clusters of plants sprouted, the slaves thinned them with hoes, and in the hot summer months they weeded the surviving plants six to eight times. After "topping" the cotton to limit the upward growth in August, slaves began picking the ripe bolls through October, often 100 pounds a day. Beginning in November and continuing into the next year, the seeds were removed from the lint by hand; after picking out trash, the laborers hand packed the cotton lint into bags.

The demand for sea- island cotton is illustrated by the record of its export from South Carolina in the last decade of the eighteenth century. In 1790, 9,840 pounds were sent forth from the newly created state; by 1801, the export rose to 8,301,907 pounds. It continued to be a powerful economic force for many years, reaching its height of production in 1819. As the value of indigo declined, sea- island cotton took its place alongside rice as a major crop for export. Into the twentieth century, cotton factors (including this writer's paternal grandfather and great grandfather) were busy shipping the valuable cargo to northern states and to England from the wharves of Charleston, Beaufort, and Savannah.

Despite its fine qualities, long- staple cotton declined in production as the short staple variety increased. Eli Whitney's invention of the cotton gin in 1793 made the upland plant profitable almost anywhere. Sea- island required more labor, cost twice as much, and was more vulnerable to the ravages of the boll weevil. By the 1860s one hundred times as much upland as sea- island cotton was produced throughout the country.

"King Cotton" came to dominate the economy and the politics of the whole south as black labor picked white bolls from the Atlantic shore to the vast and rich soil of Texas. While there is no proof that native Africans were deliberately imported for their knowledge of cotton growing, both upland and sea- island species were grown in Africa during the slave trade. Economic pressure drove blacks of the Low Country to labor to produce plants their ancestors had known and enjoyed in their homeland.

Under the task system on the Sea Islands each slave was given a specific assignment, such as picking three acres of cotton a day. During the peak of a harvest season the "work day" could last into the night, but when the task was light one had free time in the afternoon to hunt, fish, or garden. This time off, rather than the work day alone, shaped and preserved the culture of the Gullah- speaking people.

While rice, indigo, and sea- island cotton were the big three of the economy of coastal South Carolina for more than a century, they do not exhaust the long list of crops cultivated by black labor, some of them imported from Africa. Ships were provisioned on both sides of the Atlantic; cultigens from each side, brought to the other, were often deliberately grown there. African plants enriched the soil of Carolina as bondsmen provided a botanical bond between two continents.

Trans Plants as Food

Africa is home to many life- sustaining crops, including nine cereals, half a dozen root crops, five oil-producing plants, a dozen forage crops, a dozen vegetables, three fruits and nuts, coffee, sesame, and the ancient and ubiquitous bottle gourd or calabash useful as a drinking cup, float for fishnet, or sound box for music. West Africa alone is the locus of origin of cereals such as Guinea millet, *fonio*, African rice, pearl millet, and sorghum (Guinea corn); cowpeas; okra; some species of yam; oil palm, and the akee apple, as well as some varieties of Old World cotton.

Valuable plants were also imported into Africa from other continents. When Spanish and Portuguese galleons sailed between the Old World and the New, they carried more than people and treasure; they engaged in the greatest transport of plants and animals the globe has ever known.

Among nineteen species from Central and South America transplanted to Africa, none is more important for feeding humanity and has a more colorful history than corn or maize (*Zea mays*). Known from Mexico by 5000 B. C., it extended from Canada to southern Argentina at the time of European contact with the Americas. As colonists learned from the Indians how to cultivate this major food crop, it became the bridge by which European civilization gained a foothold in the New World. Brought by the Portuguese and Dutch from Guiana and Brazil, it was known on the coast of West Africa perhaps as early as 1502 and clearly by 1525. Names for maize in local languages correlate with its entrance through trading centers like Port Harcourt in Nigeria. By the seventeenth century, it was an important foodstuff from Liberia to the Niger Delta, especially on the Gold Coast and Dahomey; established as a valuable crop in the Congo Basin and Angola; and significant for provisioning slave ships. Tobacco, peanuts, cacao, and beans, first grown in Latin America, also spread to Africa. Africans brought to South Carolina were thus familiar with cultivation of many useful crops.

Descriptions and illustrations of naturalists of the time, such as Catesby (1771), Barton (1798), and Elliott (1821), identify species known to African Americans. Of at least nineteen plants introduced by Africans into the Americas, most flourished in the West Indies, including some varieties of yams, the akee apple, the Angola or pigeon pea, broad beans, maroon cucumber, senna, bichy nut, and oil palm. At least six more were also brought into Carolina.

Best known from West Africa is that tasty mucilaginous vegetable, okra or gumbo (*Abelmoschus esculentus*). First domesticated in tropical Africa, it spread widely along the Guinea coast and into the Cameroons by the time of the slave trade and was brought to the Americas in the 1600s. Words for it are found in many African languages. Since "okra" is from *nkruman* in the language of the Gold Coast and "gumbo" is from *tshingombo* in Bantu languages, the popularity of this plant is evident. Benne seed, from a word in Bambara and Wolof, is also called sesame (*Sesamum indicum*). Probably first domesticated in East Africa, it was widespread on the continent at the time of the slave trade as a valuable source of oil. In 1730 Thomas Lowndes of South Carolina sent samples of oil made from "sesamum" to the Lords of the Treasury. Best known today on cookies or in candies, it was brought with blacks to Carolina where it was also used in soups and puddings.

The black- eyed or cow pea (*Vigna unguiculata*) is an import from West and Central Africa that found its way to the West Indies and the Low Country. First domesticated at the margin of the forest and savannah in tropical West Africa, its seeds are known from Kintampo in central Ghana as early as 1800 B. C. and at Zimbabwe in southeast Africa by 1000 A. D.; it flourishes especially in Ghana, Benin, and Nigeria today, and names for it are also found in many African languages. Introduced into the New World tropics by the Spanish no later than the seventeenth century to supply towns and missions, it was known in the southern United States by the early eighteenth century.

The circular route of the peanut (*Arachis hypogaea*) is unique. Taken from Brazil to Africa around 1500 by the Portuguese, it established a secondary center in the Congo; was cultivated in Senegambia in the 1560s, and was widespread in West Africa by 1600. Fed to slaves on ships to Virginia, peanuts spread to South Carolina. Eggplant (*Solanum melongena*) originally cultivated in India, was brought by Arabs into Spain and by Persians into Africa before the arrival of Europeans. Widespread from Senegal to Cameroun, it is known not only as a food but also as a medicine and as a symbol of fertility.

Watermelon (*Citrullus lanatus*), a native of the dry savannah of east and south Africa, was grown in the Nile valley by 2000 B. C. Brought by Spanish colonists to Florida in 1576, it was enthusiastically accepted by the Indians who passed seeds from tribe to tribe like smoke signals; by 1600 it was known

all the way to the Pueblos of the southwest. Abundant in the British colonies by 1650, it was grown in Carolina by 1671.

Guinea corn or sorghum, first domesticated in the Central Sudan and distributed to West Africa probably before 1000 B. C., was cultivated in South Carolina by blacks at one time, according to the eighteenth century botanist Catesby: "*Milium indicum*, bunched guinea corn...But little of this grain is propagated, and that chiefly by the Negroes, who make bread of it, and boil it in like manner of furmety. Its chief use is for feeding fowls, for which the smallness of the grain adapts it... *Panicum indicum*, spiked Indian corn, smaller grains than the precedent, used for feeding fowl. These two grains are rarely seen but in plantations of Negroes who brought it from Guinea, their native country."

The fate of yams, so important in a religious festival on the Guinea coast, is a special problem. Several species, including *Dioscorea alata*, the winged or bacara yam from Asia, as well as native African yams, were introduced into the West Indies through the provisioning of ships. But at least one kind, a white yam, *D. rotundata*, also grew on the mainland colony; Catesby reported that "Carolina is the farthest North I have seen them grow and more for curiosity than advantage ...few think them worth propagating."

Africans brought to South Carolina were thus familiar with the cultivation of at least fifteen crops, almost half of which had been domesticated in their homeland (see table "13"). To pinpoint one place of origin in Africa of plants imported with the slave trade into Charleston is virtually impossible, for they grew over too wide a territory. The evidence points to a major role of West Africa from Gambia through Nigeria, but does not exclude some influence from Central Africa as well. These plants also illustrate the role of the West Indies in connecting Africa to the Sea Islands.

More significant than any particular plants actually brought from Africa into the colony is the combination of the natives' familiarity with techniques of cultivation of similar vegetation in the Old World and the opportunity to try them on plants in the New. Yes, most of their labor was forced, directed toward producing for the master. But in the garden, permitted by the task system, and in exploration of field and forest, the experience and the innovation of African Americans made a contribution to horticulture and agriculture. Again, they adapted and modified Old World crops and techniques in a process of creolization, and spread valuable knowledge to whites as well. Nowhere did the heritage of Africa and the creativity of its people in their new environment show more than in their use of plants in treating their ailments.

Healing Herbs

Do you have a cold and cough with congestion and fever? Pick the annual herb "life everlasting," boil its leaves, stem, and yellow flowers, add another plant like pine tops or mullein or sea myrtle, to make one of the most popular cold remedies in South Carolina. Some say it will also relieve cramps, diseases of the bowels, and pulmonary complaints, and promote general well being. The dried plant is smoked for asthma, the leaves and flowers are chewed for quinsy, the crumbled leaves relieve toothache, and a bath of it eases foot pains. Some people today buy it in the City Market in Charleston and take it to friends in New York.

Life everlasting (*Gnaphalium polycephalum)* is only one of about 100 plants used by the citizens of the Low Country for centuries for healing aches and pains, the use of many of them derived from ancient traditions of the Old World. Left to themselves to cope with illness, blacks of Tidewater Carolina of necessity combined the lore of Africa with the plants of their new habitat, often drawing upon the craft of the Indians as well. The cures they devised were similar to medicines of white settlers of the times, but usually with this difference: the blacks, like the Native Americans, generally made decoctions from one, or at most two, living plants, while the whites relied more on a mixture of chemical substances derived from five or six plants. Yet there was cross fertilization; both blacks and

whites built upon the experience of the Indian. The popular use of wild black cherry for coughs by European Americans and blackberry for diarrhea among African Americans are well known examples of such borrowing.

The cause of illness was perceived by the blacks of the Sea Islands as natural, occult due to conjuring, or spiritual due to one's sins. The remedy must fit the cause, but it was not always easy to distinguish among them. The conjuror's hex could produce physical ailments and behavioral problems, while the wages of sin and the power of the devil could best be mitigated by the preacher. Fortunately the root doctor was the herbalist as well and assisted in alleviating both natural and occult disease. He knew what plant to gather, when and where, what part to use, and how to prepare the concoction. No wonder he wielded great influence among the sea islanders, for his powers generated dependency and fear. Many women also learned the art of collecting medicinal plants and preparing cures from them, and passed on their skill to their own daughters as well as to whites.

Most drugs were plant products, and the botanist was also pharmacist. As early as 1806 John Shecut published in *Charleston Flora Carolinaensis* with the "medical virtues" as well as full descriptions and illustrations of many species of the state. In 1847 Dr. Francis Peyre Porcher in his *Resources of the Southern Fields and Forests* recorded some 600 species of botanical resources available for healing in the South (1863), and in 1869 he enlarged his findings. Two recent botanists, Faith Mitchell and Julia Morton, drawing upon such early volumes as well as their own first-hand observations and interviews, produced books on the plant remedies still in use on the Sea Islands.

Several different herbs were employed to combat one illness and many different complaints were treated with the same plant. Tannin-rich astringents, like the leaves of sweet gum, myrtle and blackberry, were invaluable in treating the all-too-common profuse diarrhea and dysentery; bitterness was prized in searching for a cure for ever-present malaria. More than a dozen plants were used to treat colds, a dozen more for fever; a half dozen were applied to sores and as many again were taken as tonics, considered especially beneficial when whiskey was added. Galax was recommended for high blood pressure; sweet gum relieved stomach pains; kidney weed was a diuretic; and swamp grass made an excellent poultice.

As snakebite was common, several plants were recommended as an antidote including the leaves of American aloe and the root bark of the Angelica tree, both known to blacks as "rattlesnake master." In the 1700s a slave named Caesar was given his freedom and 100 pounds per annum for life by the General Assembly as a reward for discovering a cure for those who were bitten by a rattlesnake or who had swallowed poison. This knowledge was a two-edged sword, for blacks could use plant poison against their masters, and some did.

No plant was so popular as sassafras whose roots were used to make tea as a tonic. Whites adopted it for treating rheumatism and high blood pressure; blacks said that a tea from white sassafras roots would cure blindness. Early in American history it was exported to England for colic, venereal disease, and general pain. Combined with mare's milk, it was used as an eye wash.

Both male and female problems are said to be helped by herbs. Horse nettle (*Solanum carolinense*) has long had a great reputation as an aphrodisiac; both stinging nettle (*Cnidoscolus stimulosus*) and ironweed (*Sida rhombifolia*) give a man "courage," *i.e.*, sexual potency. Cotton root was the most widely used abortifacient among slave women, and many other parts of the plant were used as medicines.

A surprising number of food plants, especially fruits, also yielded products used to treat disease. Fig, peach, pomegranate, persimmon, along with basil, okra, and pumpkin, found their way into the pharmacological lore of the Sea Islands. No line can be drawn between folk medicine and the scientific medicine of the time; of fifty species listed by Mitchell, a dozen were in the *US*

Pharmacopeia or *National Formulary* or both from 1820 into the present century, including mint, blackberry, wild black cherry, elderberry, galax, jimson weed, pine tar, poker root, and sassafras.

Relating medicinal plants of South Carolina to those of Africa is difficult, as similar but not identical species are often found, and some were used by Indians long before the arrival of blacks. Medicine and religion are so intertwined that it is hard to draw a line between plants with a sound scientific basis for their action, and those that drive out an evil spirit. Of the vast number of herbs and shrubs long tried in Africa for healing, hundreds have a proven action, and some have found their way into western medicine.

By trial and error African natives learned which plants were useful for a wide range of ailments from cramps and coughs to wounds and worms. Medicine men applied emollients, purgatives, antihelmintics, diuretics, anodynes, sedatives, and narcotics; they also used a wide range of poisons for deadly arrow tips and for trial by ordeal. African willow (*Salix capensis*), a source of salicylic acid, is used throughout the continent to treat rheumatism. The scientific name of the tree musenna, *Albizia antihelmintica*, suggests its efficacy in treating tapeworms. Some plants are deliberately cultivated for their medicinal use, like sweet flag (*Acorus calamus*) as a topical ointment, the castor bean (*Ricinus communis*) as a purgative, and the chinaberry (*Melia azedarach*) as a vermifuge. Many are actually major exports like gum arabic (*Acacia* sp.) and aloes, the two most important drug plants in Africa.

The fig (*Ficus carica*) is a classic example of a plant used in Africa as both food and medicine. The fruit serves as a cathartic and a dressing for skin lesions, the leaves are used for indigestion, and the tannin-rich bark relieves diarrhea and expels worms. Some well-known spices also have medicinal properties, like Kola as a tonic, Guinea cloves for dysentery, Cayenne pepper as a carminative, and Grains of Paradise as a vermifuge.

Catalogues of medicinal plants of Africa, with focus on the Guinea Coast, along with their pharmacology, provide the basis of comparison with those of the Low Country. At least fourteen plants, said to have some healing properties, are in use in South Carolina and in West Africa. Although most of the items are employed to treat more than one condition, the same plant is often used in the same way on both sides of the Atlantic. Thus, wormseed and the chinaberry tree are taken as a vermifuge, especially against *Necator americanus* or hookworm. The crushed flowers of okra are applied to snakebites, and cotton is used for abortion or uterine contraction in the Old World and in the New. Nightshade, taken for fever in the Low Country and in Africa, has known antibacterial action. Jimson weed, used as a vermifuge, cold medicine, and salve in Carolina, is taken as a narcotic in West Africa; it spurs Fulani youth on to bold deeds of conquest and ordeal. Over a century ago Porcher recognized its narcotic and antispasmotic effects and reported "maniacs frequently restored to perfect saneness of mind, which they never afterward lost, by the continuous use of the extract."

Basil, taken for colds and other ailments, and pomegranate, used to stop diarrhea, in South Carolina, are best known as antihelmintics in West Africa; pumpkin, taken for dropsy as a diuretic, is also used to treat worms there. Porcher says of sedge: "In Guinea this is considered one of the remedies for worms;" but he mentions no application of the plant in his own state. The frequency of antihelmintics and vermifuges underscores the abundance of worms on both sides of the Atlantic, both culprit and cure the offspring of the slave trade.

More important than the same species in linking Africa to the Sea Islands is the similar way in which these plants are regarded in the art of healing, and the beliefs surrounding them. The traditional and ancient Doctrine of Signatures holds that nature provides a plant remedy for every disease and indicates an obvious sign for its use. The liver-shaped leaves of Hepatica should be valuable in treating disease of the liver; a plant with heart-shaped leaves should be useful in treating cardiac problems. Plants with big fruits aid fertilization, plants with latex increase milk production, and those whose stems have swollen joints and bend like a knee are good for sprained knees. In South Carolina

the spots on the leaves of the trumpet root (*Sarracenia minor*) are regarded as a sign that the plant is a good remedy for skin troubles.

Medicinal plants with common use on both sides of the Atlantic; along with that deep- seated and long- continued habit of picking certain herbs to make a concoction when accident and illness strike, make the connection between Africa and Carolina undeniable. The many ailments and the limited medical treatment available made such therapy a necessity. Modified in an ongoing process of adaptation, home remedies made from plants continued among the Gullah people because of both their practical and psychological value.

The continuity, re- creation, and adaptation of Africans to the Low Country are nowhere more vividly expressed than in their speech. The Gullah language reveals more about their specific origins than any trait considered thus far. The people must be heard in their own words for both the source of their speech and its creolization over time to be fully appreciated.

Chapter 4 The Gullah Language

"Uh yeddy um but uh ain sheum."

An outsider would be understandably bewildered if he heard a native of the Sea Islands say this- - and surprised to learn that it meant "I have heard of him but I haven't seen him." Many words and phrases equally obscure to the visitor have been the everyday speech of the black people of the region as long as anyone can remember. It is not all one- sided; a coastal black on hearing the English of the northern visitor said: "Dey use dem mout' so funny."

Isolated since the early eighteenth century, slaves and their descendants developed their own language marked as much by its rhythm, tempo, and stress as by its vocabulary and grammar. The uninflected verb shows no tense; the pronouns show no gender; and reduplication of words intensifies meaning and expresses magnitude and excitement. The word “Gullah” is probably derived from Angola, although some cite the Gola tribe of Liberia.

The earliest students considered it a survival of the simplified English in which white owners addressed their black servants, and almost nothing African remained. The discovery of the extent of the African heritage in Gullah had to await the work of a scholar of unique attributes - - training, knowledge, patience, and pigmentation.

Africanisms in the Gullah Dialect

Lorenzo Dow Turner was a black linguist whose skin color gave him entree to the Gullah speakers on the sea islands of South Carolina and Georgia. For several years, beginning in 1932, he lived among them, listening, recording, and writing their speech in the phonetic alphabet, and then comparing it with that of the people of West Africa, a study spanning fifteen years in all. In addition to his own knowledge, dictionaries, and grammars, he relied upon twenty- seven informants who knew together at least sixteen African languages.

The result of his labor, *Africanisms in the Gullah Dialect* (1949), changed thinking not only about the speech of that coastal people but also about the linguistic heritage of African Americans in general. He listed 3595 personal names with their similarities to terms in African languages, 251 other words used in conversation, and some 92 expressions heard only in stories, songs, and prayers. He described the syntax, morphological features, word formation, sounds, and intonations that characterize Gullah.

Finally Gullah texts were printed both in phonetics and in the English equivalent. White scholars had evidently failed to recognize African antecedents in Gullah partly because the vast majority of

Turner's words are personal names used only in the privacy of the family and partly because they knew little or nothing of African languages. (To avoid the complex symbols of the International Phonetic Alphabet that Turner uses, a rough equivalent in the English alphabet is substituted in the subsequent discussion.)

To follow Turner's Africanisms it is necessary to turn back to the languages of Africa. Of thirty- two languages of West and Central Africa classified by Greenberg and by Guthrie (see table “15”), all except five are considered by Turner as influencing Gullah; at least seventeen are spoken by more than one million people today. All except Songhai in Mali, Djerma in Niger, and Hausa in northern Nigeria are in the great Niger- Congo group.

What's in a Name?

African languages come alive in the Sea Islands in names and naming practices. Most Gullah- speaking people have two kinds of given name; one used in school and among strangers is English, the other is the basket name or nickname, "nearly always a word of African origin... In many instances both the given- name and surname are African words.” To the African the power to name is the power to control. Even when the Gullah name is English it follows African naming practices, like those of the Twi, Dahomeans, Mandingo, Yoruba, Ibo, tribes of northern Nigeria, and the Ovimbundu of Angola.

Almost universally in Africa a child has at least two given names, bestowed by an intriguing array of circumstances. Widespread is the practice of naming the baby for the day of the week; the month, or season of its birth, birth order, or one of a pair of twins. Conditions at birth such as feet foremost, head presentation, born of a prolonged pregnancy, or with the cord or caul about the neck, are well known sources of names among the Dahomeans especially. The first child born after twins, or after one with a caul, combines two concepts in one name.

In addition to individual names, the Mandingo, among others, stress clan names, the descendants of a real or mythical ancestor, such as a crocodile. Animals, plants, or places inspire a cognomen, especially among the Twi and tribes of northern Nigeria. Among several groups a new, second name is given upon a special occasion. Among the Mandingo, the mother gives each child at birth a temporary name determined by its sex and birth order, which a few days later can be replaced by another. This True Name often reflects an attribute of a relative, the name of a divinity, the day of the week, or a circumstance of birth, such as bili, meaning curvature, because the baby's body was bent double. Other special names may be added to this later in life. The Moslem Mandingo often use names from the Koran, a son of the Prophet or of a Caliph, or from the Bible, such as the Arabic for Abraham or Isaac.

The Yoruba frequently give an appellation at birth indicating the circumstances, such as along a wayside or during a festival or with extra digits. In addition the child is given a "christening" name, often with religious or emotional connotation, such as "Ogun (a god) consoles me with this," or "Joy enters our house." The first name given is often considered secret lest some supernatural power knowing it could harm the child. Among the Hausa this name is whispered into the ear of the new-born; only a second name is in daily use.

To read the Gullah personal names listed by Turner is a fascinating entree into the secret life of the sea island black people as well as a convincing argument for African affinity. For each of them are "West African words that are phonetically identical with or strikingly similar to them [with] several meanings the words have in a number of West African languages."

Examples from nineteen African languages in a dozen categories illustrate the colorful and creative usage of words in naming children. Time, date, or season is expressed in many of these Gullah names in the twentieth century as it was in the eighteenth. *Aba* (Fante) indicates a girl born on Thursday, *ajowa* (Ewe) one born on Monday. *Bimbi* (Fula) means early morning, *marece* (Hausa) the late

afternoon, and *klema* (Mandingo) the hot season. *Ali* (Mandingo) is a name given the fifth male child, and *ata* (Twi) is the male of twins. *Olugbodi* (Yoruba) is bestowed upon a child born with extra digits.

Appearance is reflected in many of these basket names. In Yoruba, *adu* refers to one who is very black, *arupe* to dwarf, and *pele* to tribal marks on the face. *Dafa* for fat literally means mouth full in Vai. The body is a common source of names along the coast. *Juso* (Mandinka) is similar to the word for liver; *sisi* (Twi), the lower part of the back; *kowa* (Mende), a large stomach; and *ebeni* (Kongo), the breast. Sex is reflected here as well. In Kongo, *lonzo* means inordinate sexual desire; *yonga,* to copulate; and *wilama*, to be pregnant.

Various diseases are represented in this lexicon. *Kurang* (Mandinka) means to be ill, *kungo* (Bambara) hysteria, *pitsi* (Ewe) leprosy, and *bombo* (Mende) smallpox. Perhaps such illnesses could be cured by *ingkishi* (Kongo), a charm or medicine, or by *wanga* (Umbundu), witchcraft.

As in Africa, animals and plants are represented. *Esa* (Umbundu) is corn and *jaba* (Bambara) onion; *begbe* (Mende) means a frog and *beyi* (Wolof) a goat. Many names reflect actions or feelings; *buri* (Mandinka) means to run; *keniya* (Kongo) to grin; *kambalala* (Kongo) to pass a hill along its base in order to avoid climbing. Emotion shines through the word *ayoka* (Yoruba), one who causes joy everywhere; a bond of affection appears in *fabere* (Mandingo), a generous father; and *sabinya* (Bobangi) is to forgive.

Most impressive are personal names that show an African connection through some place or thing unique to that continent. *Asante* (or *Ashanti*) in Twi means the country, people, and language of the Gold Coast, and *Ga* refers to a tribe of that region. Several cities of Africa are remembered as well: *Loanda* in Angola and *Wida* (Whydah) in Dahomey. *Nago* is the Fon name for the Yoruba language of southern Nigeria. Kings of Dahomey during the slave trade are recalled: Akaba ruled from 1680 to 1708, and Agbaja from 1708 to 1729. *Uzebu* (Bini) refers to the quarters of the chief at Benin City; Totela is the title of the kings of Kongo; and Muzumbu is a foreign minister in Angola. Islamic influence is present in several words: *Aluwa* (Wolof) is a tablet in wood on which one writes verses of the Koran; *Hadijata* (Mandingo) is the first wife of Mohammed. Various African legends enrich Gullah names: *Akiti* is a famous hunter in Mandinka folklore who, by conquering the elephant, became king of the bush. The secret societies characteristic of Sierra Leone link the two worlds: *Poro* for boys and *Sande* for girls (Mende).

Equally impressive bridges are the names of species of plants and animals found only in Africa. *Afo* (Yoruba) is the baobab tree; *akodu* (Ewe) is the banana. *Bambo* or crocodile is the totem of a Mandinka clan; *dile* (Mende) is a boa constrictor. *Boma* is a black python, and *pong*i (both Kongo), for chimpanzee, gave rise to the scientific name of another great ape, the orang.

In some cases a master recorded an African name as he understood it from his own European heritage; thus, *Keta*, a common name in Yoruba, Hausa, and Bambara, became Cato; the Mandingo name *Haga* became Hagar. As slave families grew and blacks chose their own names, the concept of kinship, so central to the African way of life, was reflected in their practices. Frequently a child was named for a grandparent. In Africa, while the relationship of a parent to a child might be a harsh one of superordinate to subordinate, their authority was checked by a gentle grandparent who maintained a more friendly familiarity.

That African names and naming practices still live on is shown by ninety- eight nicknames on Johns Island. Some thirty- one are related to a name found in Turner's list with an African equivalent, but a few are newly found Africanisms. Do- um, suggesting "do it," was earned for assiduous application to an endeavor and audacity in sexual adventures. Cunjie with very broad cheek bones may have come from the Hausa word for cheek. *Yaa* for a girl and *Yao* for a boy, meaning Thursday, keeps alive the Ewe practice for naming a baby for the day of the week on which it was born. Even an English-appearing name like Joe may be an abbreviation of *Cudjo*, a male born on Monday. Similarly, Phoebe

may really be *Fiba*, a girl born on Friday. Gussie may not be from Augustus but from the *Bambara gasi*, meaning misfortune; and Pompey is not necessarily the famed Roman general but the Mende name *kpambi,* meaning a line, course, or red handkerchief. A derogatory term, such as *Boogah*, meaning something frightful in Vai, or Nuttin, for nothing, seems strange until one recalls the African practice of giving an uncomplimentary name to the newborn so that the ancestors might not be jealous and take the child back.

Even an English nickname follows the African practice of noting appearance, personality, or relationship. Thus Blue or Shadda (Shadow) are assigned to those quite dark in skin color. One named Licky- too defeated an antagonist both in verbal and physical combat; Butcher is a big, aggressive man ready to slaughter one who offends him; and Prosper was conferred on one distinguished and successful member of the community. Kinship is cherished through nicknames today. Bubba is the equivalent of the English brother; Betsy Ben indicates that Ben is the son of Betsy; and Minna Bill is the nickname for Minna's grandson Bill. Yes, there is even Do- um Bubba, the younger brother of Do- um.

Counting African Connections

Identification of a word in an African language most similar to a word in Gullah permits an initial estimate of the linguistic influences on the sea island dialect. African languages with the number and frequency of all Gullah personal names that Turner found to resemble each of them is revealing (see table “16”). Yoruba is in first place in personal names, followed closely by Kongo; with Mende and Ewe; these four contribute half of the linguistic similarities of personal names. Added to Bambara, Twi, Vai, Hausa, Fon, Umbundu, Mandinka, and Kimbundu, the twelve account for 87 percent of all Gullah names. Grouped by regions, roughly 44 percent are from people clustered around the Bight of Benin and Gold Coast- - far more than represented by the direct slave import from this area, 26 percent from Congo and Angola, 16 percent from Senegambia, and 14 percent from Sierra Leone and Windward Coast.

But a similar sound does not prove a linguistic derivation; personal names could be fossilized forms remembered when their meaning is lost. The 251 words cited by Turner as used in conversation must also be examined for indications of African affinities. Many of these common words have entered everyday American speech. Benne seed candy or cookie is derived from the word for sesame in Wolof and in Bambara. *Bidibidi* for a small chicken in Kongo is no doubt the source of our word “biddy.” Cooter is about as well known in many parts of the South as turtle or tortoise which it means in Bambara, Malinke, Efik and Tshiluba.

Buckra, long known on the coast for white man, means he who surrounds or governs in Ibo and in Efik. Da, often heard in the Carolina Low Country for an elderly black woman, is mother or eldest sister in Ewe and eldest daughter in Ibo. Gumbo is the well known name for a soup with okra in it; tshingombo in Tshiluba and Umbundu means okra. Goober from nguba in Kimbundu and pinder from mpinda in Kongo are widely recognized as other words for peanut. The yam or sweet potato of America has the same name in Mende and a similar one in other West African tongues.

Could *shindu*, noise made by the feet in Gullah and in Kongo, have given rise to shindig? In Tshiluba *samba* means to jump about; in Bobangi *somba* means to dance the divination dance; and in still other Bantu languages its meaning is related to worship. Voodoo, the religious healing ritual well known in Haiti, with a counterpart of Hoodoo in Gullah, is from *vodoo*, a tutelary deity or demon in Ewe, and a good or bad spirit in Fon. The shout, a religious ring dance performed until exhaustion in some black churches, could be related to the Arabic word *shaut* which means to move around the Kaaba on the pilgrimage to Mecca until exhausted. Arabic, the heritage of Moslem slaves, was an influence in the tabby house along the coast, made of cement and oyster shells with brick often added, for *tabix* means cement, mortar, brick.

In the frequency of conversational words in Gullah, listed by Turner (table “16”), Kongo leads overwhelmingly with ninety- nine words, 25 percent of the total. Far behind, with only 8 percent each, are Mende and Vai from Sierra Leone and Liberia. Wolof with 6 percent, spoken by many interpreters in West Africa, was even more widespread as a second language than as a native tongue. Strikingly, Yoruba, so prominent in personal names, makes a negligible contribution to other words.

The ninety- two words that Turner heard only in stories, songs, and prayers are derived almost exclusively from Mende, 69 percent, and from Vai, 29 percent; only a single exclamation is attributed to Bambara or Mandinka. This overwhelming influence from the Sierra Leone- Windward Coast region is noteworthy. If all words, personal and otherwise, are combined, the greatest similarities of Gullah are to Kongo and Yoruba with 15 percent each (table “16”, last column). Mende, Ewe, Bambara, Twi, Vai, Hausa, Fon, Umbundu, Mandinka, and Kimbundu follow in that order, these dozen languages comprising 86 percent of the total. Since names make up 91 percent of the total vocabulary this similarity to their frequency is not surprising.

Language is made up of more than words. Turner discovered affinities of Gullah to African languages in sounds and intonations, syntax and morphology, and unusual word formations illustrated below. One striking syntactical feature of Gullah is the absence of the passive voice. Instead of "he was beaten," it is "they beat him." Examples of the same practice in several African languages suggest their relationship to the Sea Islands. Two or more verbs for one idea is a second trait common to Gullah and some African languages: "Dat mek dem to save de money." Gullah also has an unfamiliar way of comparing adjectives: "He tall pas me," i.e., "He is tall, surpasses me," replaces "He is taller than I am." Eliding adjective and verb into one is common in Gullah and African tongues: e.g., "He mean tid dat" for "He was mean to do that." "Day clean broad" for "broad daylight," placing an adjective after the noun it modifies, is an example of word order that makes Gullah colorful and distinctive. "A child bad" or "tree high" or "I not see him" are other illustrations with African counterparts.

"Two baskets, what do they come to?" can be heard any day on the streets of Charleston. Opening a sentence with a subject and repeating it with a pronoun is an attribute of Gullah and African syntax. So is the frequent repetition of words or phrases. "I heard the house cracking, you know at the back; heard the house cracking, cracking, and I listened; kept listening."

Morphological features refer to number, tense, case, and gender. The same form in singular and plural is typical, e.g., "five dog." Verbs likewise may take the same form in singular and plural, without inflections; thus, "he go" and "they go." "I go, I went, I shall go," may also be indicated with the same phrase. When the patient tells the doctor, "I bees sick," she connotes both that she is, and has been, sick. For nouns and pronouns, subjective, objective, and possessive are almost the same: "me" or "we" could be used for all three cases. Thus, "We do everything for we- self." Gender can be expressed by the addition of "woman" or "man" to a noun: a "woman child" for a girl, or a "man chicken" for a rooster. When Gullah and African expressions are written side by side in phonetics the similarities are striking.

A- beat- on- iron can be heard in coastal Carolina for mechanic, one example of unusual word formation. Others include sure dead for cemetery; to crack teet' for to speak; and big eye for covetous. Reduplicated forms abound: sure enough sure for very sure; dere dere for exactly there, and bang bang for a loud noise. Among common onomatopoietic expressions is “who who” for owl.

The sounds of Gullah are similar to those of West or Central African languages rather than English. To the trained ear the vowel sounds of Gullah are not identical to those of English, but closer to those in several African languages. Another Gullah trait borrowed from Old World ancestors is adding a vowel or dropping a final consonant to avoid a cluster of consonants; palmetto becomes palimetto.

No characteristic of Gullah speech appears so strange to the outsider as its intonation. Gullah is not a tonal language in which a different tone conveys a different meaning, but its patterns are reminiscent

of African languages that do. The difference in tone and inflection enabled slaves to use ambiguities of Gullah to conceal meanings from white masters but reveal them to their fellows. For example, the adjective bad, pronounced with a slow falling tone like baaad could be an expression of admiration for another slave who had successfully flouted Ole Maussa's rules.

Beyond words and grammar is the retention of whole proverbs from African languages, Hausa, Mandingo, Yoruba, Dahomean, Fante, and Bantu. "Chattering doesn't cook rice" among the Hausa becomes "Promisin' talk don' cook rice" in coastal Carolina. "Empty sack can't stand upright alone" is almost identical to a Mandingo expression. Dahomey "Crooked wood makes crooked ashes" is transformed in Gullah into "Onpossible to get straight wood from crooked timber."

The frequency of Turner's citations of twenty- three African languages for six attributes of sound and grammar of Gullah provides a clue to affinities, even though they are not precise or of equal value. The pattern that emerges bears only modest resemblance to that from vocabulary alone. High on the list are Ewe with 17 percent of the total, chiefly because of its contribution to phonetics, Yoruba with 14 percent, Ibo with 11 percent, and Twi with 8 percent. These four, which show affinities to half of the non- vocabulary features of Gullah, are followed by Efik and Fante. Notably, all six of these languages are spoken in the area from the Gold Coast through Nigeria, while Kongo and other speech of Central Africa play a minimal role in sounds or grammar. Surprisingly, Mende and Vai, which supply so much vocabulary to Gullah, are cited rarely for these other linguistic attributes. The texts in Turner, however, illustrate the relation of Gullah to both languages: Three Mende and two Vai songs, plus Mende expressions in three stories. In fourteen other tales African elements are said to be manifest in syntax, morphology, sounds, intonations, and word formation more than in vocabulary, but specific languages are not cited by Turner.

In summary, Ewe ranks high in its role in personal names, other words, grammar and sounds in Gullah. Yoruba, highest in personal names and high in syntax and sounds, contributes few other words to the sea island vocabulary. Kongo, highest in total vocabulary, appears to have less influence on the other features of language. Twi appears to be moderately influential in all linguistic features. Mende and Vai, with much input into vocabulary and entire stories, appear low in any grammatic or phonetic contribution to Gullah. Efik, high in similarity of intonation especially, makes only a negligible impression on names or other words along the Carolina- Georgia coast. Ibo, with so many tonal and syntactic similarities to Gullah, is negligible in its contribution to its vocabulary.

Any attempt to compare linguistic contributions of African coastal regions with their share of slave imports is fraught with many difficulties, linguistic, geographic, and historical, making conclusions tenuous. As critics point out, the same sounds may not convey the same meanings, and ritual terms in songs and prayers may not carry the same weight as other words. The relative input of total words from most regions bears little resemblance to its total direct slave importation. Words used only in conversation, however, yield a closer fit to importation data in almost every case with exact agreement of 39 percent for Angola.

Comparison of the influence of sounds and syntax with slave trade importations is on weak grounds. However, the contribution of the languages spoken by people around the Bights of Benin and Biafra is far greater than their combined contribution to the direct slave trade, while that of Senegambia, Sierra Leone, the Windward Coast, and Angola is far less.

Scholarship following Turner's pioneer work has brought to light a greater role of the Bantu languages in vocabulary, an explanation for the influence of the Gold Coast and the Bight of Benin on Gullah grammar, the relation of Gullah to other Atlantic Creole languages, and the process of creolization in their formation. The abundance of Angolans in the slave trade, their early arrival, their employment as field hands away from English, and the mutual intelligibility of Bantu languages probably contributed to the presence of Bantu words in Carolina and Georgia and later in American English.

Development of a Creole Language

To unravel the mystery of the source of Gullah, it is necessary to look beyond words, sounds, and syntax to history and the dynamics of language formation over time. Bilingualism arose along the West African coast with trading by the Portuguese as early as the mid fifteenth century and continued in succeeding centuries with the Dutch, French, and English. As far back as the late sixteenth century, English was spoken around

the Gambia River; in time families were established between English men and native women. The need for communication in business as well as in the home led to the rise of a Pidgin English, such as that among grummettoes, the Africans who looked after slaves awaiting shipment. Pidgin has no native speakers; a marginal language, reduced in structure and vocabulary, it arises to fulfill certain restricted needs of communication among people who have no common language. Such restructured English, with words borrowed from other languages like Portuguese, increased dramatically in the eighteenth century, and Pidgin became established in Nigeria and the Cameroons. Creole refers to a Pidgin language which has become the mother- tongue of a speech community as in several ex-colonial parts of the world. The structural and stylistic range of the pidginized language becomes comparable in formal and functional complexity to other languages. Creole has an expanded vocabulary, explicit grammar, and more fixed pronunciation than Pidgin.

With the slave trade, Creoles developed from new social and cultural contacts in the New World. Africans from varying geographic and linguistic origins underwent language change arising from their need to communicate first with each other and secondarily with Europeans. This ongoing process of creolization was influenced by the plurality of African languages, the absence of formal tutoring, the exclusion of most blacks from close contact with the dominant European language, and the development of their own ethnic identity.

Many native West African languages with common features left a substratum in Creole languages; the basic syntactic structure of the Niger- Congo ones was transmitted to and remained in New World African dialects. In addition, many West African languages have common phonology; for example, the syllable typically ends in a vowel. But fluctuations in speech of African Americans in the formative period of a dialect are due primarily to differences in the phonological systems of native languages of Africans in the contact situation. These influences on Gullah are reflected in Turner's analysis.

Gullah is a unique Creole language, richer in linguistic survivals than any inland black speech. The case for a single ancestor of all English- based Creoles is clearly established by a recent analysis of six critical linguistic features common to them all. The special place of Gullah among English Creoles is probably due to differences in the size of plantations, the ratio of Europeans to Africans, the frequency of contacts between them and English- speaking indentured servants, and the degree of continued homogeneous African language influence.

Two major theories were proposed to account for Gullah. Hancock sees the greater influence of a Krio ancestor from Sierra Leone; Cassidy sees the larger role of the Gold Coast and adjacent Nigeria, via Barbados, as well as Angola. The similarities of Gullah to Krio were long noted by linguists in tales, songs, stories, prayers, names, and ritual terms. Cultural links between that region and the coastal islands also support the argument: the banjo, rice growing techniques, quilts, and more. The large number of slaves from Sierra Leone and Senegambia is said to be responsible for the development of Gullah. Dramatic support for this view came when Joseph Momo, President of Sierra Leone, speaking on St. Helena in his native language, was understood by the sea islanders. Even more impressive is the 1997 visit of sea islanders to Sierra Leone where the natives recognized their speech and responded warmly when Mary Moran from Harris Neck, Georgia, sang the same Mende funeral song that her grandmother had sung for Turner sixty years earlier.

But the value of personal names and items in stories, songs, and prayers has been questioned by Cassidy. Kept in memory by tradition rather than active use, are such fossilized forms more likely to be late comers? Only the words in conversation and in texts, largely Nigerian, may be most significant for analysis. Even more important is the similarity Turner noted in the grammar of Gullah and that of languages of Southern Nigeria and the Gold Coast, for these, like the words in the texts, reflect the earlier layer, the underlying Pidgin. Linguistic and historic evidence indicate the transmission of Gold Coast speech, through Barbados especially, into Gullah and other Atlantic Creoles.

For understanding the roots of Gullah the two views are not as far apart as they appear. Probably arising on the Gold Coast in the 1630s, an English- based pidgin soon spread to other regions of Africa from Senegal to the Bight of Biafra. An expanded pidgin diffused to the New World as English and Dutch vessels delivered people from enclaves in Africa to all of the British possessions in the western hemisphere, where Barbados and Jamaica played a crucial role. Caribbean Creoles influenced Gullah from the beginning of the English settlement in South Carolina; linguistic streams from Africa and the West Indies continued to play upon the Sea Islands. Speech in each colony was shaped by African languages, variations in English dialects, the time of arrival of slaves, and the ratio of blacks to whites. African languages, modified, were kept alive in the West Indies and on the American mainland. Words and syntax from the Gold Coast and the Bight of Benin especially persisted in the New World and found their way both directly and indirectly to the shores of Carolina where they formed one early substratum of Gullah. The early influx and later importation of people from Angola brought many words from Bantu, but complexities of its grammar probably prevented its adoption in the Sea Islands. With the tide of other people from Senegambia, Sierra Leone, and on down the coast through the Bight of Biafra, came more words, and even whole stories. The basic lexicon, "deep structure" of grammar, and sounds of Creole were probably established in the early eighteenth century.

Then why did the natives of the Sea Islands understand the Krio of Sierra Leone, and why was the song of Mary Moran recognized there? Not because Gullah is derived directly and exclusively from that area but because their languages have a close common origin. Krio and Gullah are first cousins rather than mother and child. Language is dynamic; the child of history, it interacts continuously with its social setting. Gullah developed over time and also influenced the speech of others. Creole evolved in the Low Country from the need for communication, but it also helped the people to endure the harsh reality of slavery. More than any other attribute, it characterized and molded together the individuals of the sea island community forming an abiding bond of understanding among the slaves. An inflection in the voice, a change in tone, could convey to a fellow black a secret thought hidden from whites. Proverbs also conveyed subtleties and ambiguities that contributed to the survival of the people as they transmuted them into meaningful metaphors in their new environment. Songs, stories, and prayers, even with meanings obscure, kept alive dreams of a dimly remembered past. A basket name known only within the family could survive in the New World, providing a continuing link with the familiar gods, events, places, and traditions of the Old. Naming practices, like names themselves, live on to echo their heritage and often reinforce the uniquely African ties of kinship.

A similar process of continuity and change occurred in all aspects of culture and society. Just as Gullah and Krio are cousins, so the culture of the sea islanders and their African ancestors are related through a common heritage rather than as direct descendants. Subsequent chapters describe particular cultural traits that link the Low Country to Africa, search for their connections to specific regions of that continent, and explore their transformation over time. Consider first how the bonds of kinship, so dear to the African, were re- created and transformed on the Sea Islands.

Chapter 5 Society and Culture

"How many children you got?"
"Five," replied the woman on James Island, surrounded by children on the porch and others in the yard.
"Come on, you've got more than that."
"Oh, you mean in all."
-- Conversation with author, June, 1957.
For research on inherited blood factors in the 1950s, an accurate pedigree was essential, but digging out relationships of individuals was complex and uncertain.

Blood is Thicker Than Water

Family throughout the Sea Islands has been the important but flexible social unit. The extended family of consanguineous relationships rather than the nuclear family of a single conjugal relationship prevails. Pedigrees reaching over several generations reveal an extensive network of kinship of people on one island. Divorce is rare, and marriage relatively stable, but it may be common- law, recognized in the community, rather than formal and legally sanctioned. In this setting illegitimacy is a meaningless term. A girl in her teens may have a baby—without marriage and without stigma. The child is usually given the surname of the girl's mother, cared for by her and other family members, and just as welcomed as a child born in wedlock who takes the father's surname.

Adoption further complicates family relationships; there is no objection to "giving" a child away to close relatives, who are glad to keep the child and bring it up as one of their own. A woman without children is socially handicapped. In these families of coastal Carolina, as in those of so many African Americans, the woman is the central and most stable member of the household. Elderly females or "mammies" function as matriarchs who teach children proprieties and family lore. The web of kinship documented for Johns Island, involving obligatory mutual responsibilities and the sharing of labor and resources, forms a cohesive force in the community and a strong weapon for survival. The extended family rises to the occasion with food and funds for weddings and funerals. Kinship, along with religion, provides social order, ethical direction, economic succor and emotional security. Where one belongs in the web of kinship is generally maintained by oral tradition; a young person's knowledge of his lineage can spell the difference between a warm and a chilly reception.

Kinship plays a role in the ownership of land. Cooperative organizations evolved among blacks in the Sea Islands after emancipation, following kinship lines as relatives purchased land near each other. To what extent are these social patterns an African heritage? Although slavery was said to have destroyed the nuclear family and social organization of American blacks, Herskovits found much evidence of African roots for family structure along with other elements of culture, and more recent observers concur. Throughout Africa polygyny prevails. A child shares his mother only with full brothers and sisters; he shares his father with the children of other women. The attachments between a mother and her child are in the main closer than those between father and children, and upbringing, discipline, and supervision are much more the responsibility of the mother than of the father. The belief that one is more closely related to mother than to father is explained among the Gullah as it is in West Africa: the person is fed on mother's milk. Matriarchy as practiced in the Low Country probably had roots in kinship patterns of African society, but was molded by modern economic pressures into a new pattern that fulfilled the unique needs of the people.

The extended family also has antecedents in Africa with parallels between its functions in the Old World and the New. The extended family on the sea islands of Carolina bears a remarkable resemblance to that among African people in their homeland and in the Caribbean, Central America, South America and elsewhere in North America. Similarly, adoption of children as a means of enlarging a family is widespread in Africa, and no stigma is attached to the man who "gives" a child to

his sister or other relative. A segment of a lineage serves as a core of an extended family, and newlyweds do not establish a new residence but usually join the household of the husband. The politeness and deference to elders noted in the Gullah people can also be observed in Africa. Such practices, of great value to the people, were retained but modified in their new setting. The removal of slaves from the plantation of their birth by sale to a distant master was less likely on the Sea Islands than elsewhere in the south, so the network of kinship dear to the African provided practical and moral support for adults and transmission of culture to children, in the face of the dehumanizing effect of slavery. In recent years young people from the islands, successful in the North, have returned to their parents' homes with new customs and values. Along with tourism, urbanization, industrial development, land sales, education, and civil rights, they are changing old ways. Yet some features of the past, like ties of kinship, matriarchy, and polygyny, deeply rooted in the traditions of Africa, still survive, not as continuity with Africa but rather a synthesis of old and new in a process of social creolization.

No practice is more meaningful in the life of the sea island people, better illustrates how the different streams of influence flow together, and better reflects the synthesis of an ancient heritage with the culture imposed by the masters than religion.

> God and Man: Religion
> God is the bread of Life
> God will feed you when you get hungry

The Rev. Renty Pinckney starts out slowly and softly in his sermon in the New Jerusalem AME Church on Wadmalaw Island. In sympathetic rhythm the audience shout out their response.

> Oh yes! I know he will. All right! Yeah! Amen!
> Look on the mountain
> Beside the hill of Galilee My Lord!
> Watch his disciple
> Riding on the sea Yeah. Uh huh!
> Tossing by the wind and rain Yeah. Come up
> Going over the sea of temptation Uh hum
> Brother, I don't know
> But I begin to think
> In this Christian life Yes
> Sometime you gone be toss Yes, yeah
> By the wind of life Yes, my Lord!
> The wind gonna blow you
> From one side to the other Yes!

In such point- counterpoint with his listeners the Rev. Pinckney proceeds, growing more eloquent, weaving into his sermon allusions to Moses, the wilderness, the consuming fire, and many other graphic passages from the Bible, and ending up with his opening figure of speech.

The minister's creativity is revealed by his ability to join scattered allusions into a cohesive whole. Well versed in the Bible, he uses the rhetorical skills needed to construct, in sermons and prayers, those long and flowing phrases worthy of Cicero. The call- and- response style with its appealing rhythm which arouses and excites the parishioners is the tradition in the sea island churches. Vital to the religious service is music. Voices singing in a joyous manner and the sound of clapping hands fill the church. Swinging, swaying, shaking bodies soon add even more enthusiastic expression to the fervor of song.

To know how much of the religious beliefs and practices of the Gullah are derived from Christianity, how much from the traditional religions of Africa, and how they interact, one must trace the history of the Protestant churches in the area and explore the major tenets and rituals of the people of Africa.

The Society for the Propagation of the Gospel in Foreign Parts (SPG), the right arm of the Anglican Church founded in 1701, sought to bring the Christian faith to the heathen, Indians and blacks, slave and free, but they were largely ineffective. George Whitefield, a controversial Anglican clergyman of twenty- five, laid the groundwork for Methodism on his first visit to Savannah in 1740. Methodist leaders organized white missions to slaves, stressed that Christianity, properly interpreted, could be a safeguard against rebellion, and created a warm and inspiring service of song and prayer. Low Country blacks had strong preferences for evangelicals whose new style of preaching was attractive because its shouting, swaying, and ecstasy reinforced the slaves' traditional patterns of spirituality.

As the once "dissenting" Baptists increased their numbers among the Low Country planters, blacks were in time admitted into balconies of their churches. By the 1830s "black societies" became the nucleus of the socio- religious community, and by the 1840s the Baptist persuasion clearly dominated the life of the Gullah. It had the greatest appeal for the sea island people because of its less formal worship, democratic and autonomous organization with a minimum of white supervision, appeal to the underprivileged, toleration of emotional expression, and emphasis upon baptism by total immersion – for a reason soon to be seen.

Blacks identified with the suffering Jesus, with His crucifixion and resurrection. The picture of the Children of Israel delivered by Moses, of Daniel in the Lion's Den, of David slaying Goliath were powerful images that gave blacks hope of freedom from bondage. Christianity gave an Old World ideology a New World perception as the Gullah people converted it to their African world view. To the African sense of pride and community, love of home and family, Christianity added cohesion needed to develop a homogeneous people. The “Praise House” was an ideal culture medium for transmitting not only Christianity but what had been retained from Africa. To appreciate this heritage one must explore West African Traditional Religion.

In the Beginning God.

Like most religions, those of Africa begin with God and his creation. In West African traditional religions God is seen, as in the Judeo- Christian heritage, as one- - creator, ruler of the universe, and judge, omnipotent, omniscient, immortal, holy, and compassionate. The idea of creation and sinful man, similar to that in Genesis, is found among the Mende, Akan, Edo, and many other African people. But the native African also believes in other divinities seen as God's intermediaries; worship, rituals and sacrifices designed to invoke them; spirits and ancestors; divination, magic, and witchcraft intended to influence people and events.

The supreme religious experience is possession by the god; a person merges his identity in that of the god and loses control of his conscious faculties, against a background of singing, dancing, and drumming. He begins by clapping his hands, nodding his head, and patting his feet to the rhythms of the drums. His motions become more emphatic; his head is thrown from side to side and his arms thresh about him. He dashes to the center of a cleared space, and gives way to the call of the god, running, rolling, falling, jumping, spinning, talking in tongues, and prophesying. His frenzy continues unabated until he falls in a faint.

The roots of the religious services among the Gullah- speaking people of the Sea Islands, with fervent singing, dancing and praying, like one possessed, culminating in the ring shout, now become clear. Spirit possession was reinterpreted in Christian terms. Even the style of preaching with its moving call- and- response can also be observed in Nigeria today.

In Africa priests are respected leaders in the service of a particular deity, often functioning in his worship at a shrine in a sacred locality. Worship of the divinity may take many forms: invocations, libations, offerings, prayers, and songs; sacrifice sought to propitiate a god or ward off a pending disaster.

Prominent in West African religion is the medicine man, with his special knowledge of herbs and healing, for faith and health are intertwined; the diviner, who learns the signs of the unknown, conveys mysteries, settles disputes, and gives guidance in daily affairs. They too have their counterparts along the coast of Carolina. Readily, the black folks in the New World continued the joyous religious celebrations, similar to the Yam Festival of West Africa, often marking seasons of the year, the planting or harvesting of crops. The concept of the body, soul, and spirit of man in African religion is fundamental to an understanding of his nature and destiny. Whether Yoruba, Ashanti, or Bantu, such a tripartite concept is deeply imbedded in the folk culture of the sea islanders. The body is buried, the soul goes home to the Kingdom of God, but the spirit is still on earth.

> "Everybody got two kinds ob speerit. One is der hebben- goin' speerit...Den dere is der trabblin' speerit...De hebben- goin' speerit don't gib you no trouble, but de trabblin' speerit, 'e be de one dat gib you worriment. E come back to de t'ings 'e like. E try fur come right back in de same house."

The major events in the life cycle of the individual, from birth through puberty, marriage, and death, are often marked by rituals that reflect the deepest beliefs of a people. To the BaKongo the stages of life are symbolized in the Four Moments of the Sun. Its rising represents birth or the beginning; its ascendancy, maturity and responsibility; its setting, death and transformation; and midnight, existence in the other world and eventual rebirth.

At puberty, boys and girls are separated from others and indoctrinated through secret societies in the knowledge needed for adult life under the direction of leaders or spiritual parents, called zo, who hide their identity behind masks. Enforcing conformity to mores, such societies flourished in many West and Central African lands, from the Windward Coast through the Ibo and Ibibio to the Leopard Societies of the Congo. Best known and most elaborate are Poro for boys and Sande for girls among the Mende of Sierra Leone.

These ceremonies introduce young people to society and to the divinities whom they may call upon to guide their lives. These rites reinforce tradition and camaraderie. Most important, this death of childhood and birth of the adult is symbolized in both sexes by wearing new clothes and by ritual washing, total immersion in a river or stream. A Sande initiate wears a white head tie and covers her face with white clay. After completing initiation one has "crossed the water. “ The water spirits are among the most powerful of the supernatural world, and many of their priests undoubtedly found their way to America bringing their lore and practices with them.

The bond between the Baptist faith of the Gullah people and their ancestors is evident. The period of transition between the desire to become a Christian and acceptance by the elders was called "seekin'," for the probationer was seeking Jesus. A female seeker wore a white cloth or string around her head and often covered herself with ashes. Independent of the instruction of Christian missionaries, and often to their dismay, the "seeker" would "travel" or "go into de wilderness" and have visions which he or she related to a spiritual teacher or guide. After this and a declaration of faith to the Praise House members, a further examination determined if one was ready for baptism.

On St. Helena in 1863, when 140 were baptized on a Sunday morning, the candidates arrived “dressed for the water.” The pastor immersed the candidates in the water; each emerged to put on shiny new clothes brought for the purpose. Only then were they full members of the community as well as the church. Outwardly a Christian service, the pageantry and meaning were echoes from the centuries-old practices of the Windward Coast, the Gulf of Guinea, and the Congo. The staff built like a cross

that the deacon drove down to the bottom of the river expressed more than the crucifixion; it was also the symbol of the enormous authority of the religious leader, especially among the BaKongo. Moreover, the cross itself stood for the Four Moments of the Sun that mirrors the life cycle of the individual; the horizontal or Kalunga line from west to east, like water, divides this world of the living from the next. In the world below, or *mpende*, the dead may lose the impurities acquired in this life, and reenter this world at dawn as grandchildren, immortal spirits, or natural forms like rocks or streams. Spiritual parents kept alive the African elements in the "invisible institution" of black religion which, begun in the 1700s, continued to thrive beneath the cloak of Christianity along the coast of Carolina and Georgia.

Since death is a transition from this world to another, the funeral is the climax of life among African people; elaborate rites insure their rightful place in the afterworld and their good will toward the living. Since the hereafter is generally viewed as a carbon copy of earthly life, articles of clothing or trinkets may be placed in the coffin, along with money to enable the dead to cross the river of no return – like the coin to give the helmsman who rows across the River Styx.

It is virtually impossible to identify religious belief or practices of the Sea Islands with any particular African ethnic group, as so many were involved, and changes have taken place on both sides of the Atlantic. More important than identifying groups is the historical sequence. The early cultural dominance of Congo- Angola people in the Low Country was followed by the influence of those of Upper Guinea from Senegambia through the Windward Coast who already found there a creolized black culture. Slaves entrenched in a system of rice production reinforced an Old World heritage. The Middle Period of the slave trade also saw the influx of more Africans from the Gold Coast area. The BaKongo influence served as incubator for many cultural patterns, and superceded Akan- Ashanti impact, but did not smother the Upper Guinea contribution. Each major group left its presence whose longevity depended not only on its number but on its adaptability.

The picture that emerges of religion on the Sea Islands parallels that of language. Customs like the puberty rites of secret societies derive from the Windward Coast; the religious ecstasy of one possessed by the god owes more to the traditions of the Guinea Coast. But the Bantu from Central Africa had an early and lasting effect, especially on deeply held beliefs related to death, burial, and the nature of the soul.

The syncretism of Christianity and African religion is understandable. As the African felt that the god of a conquering tribe must be more powerful, and adopted him while retaining his own, so blacks in America accepted the God or Jesus of those who enslaved them while keeping their belief in other gods. The Christian concept of salvation and the hope of heaven were readily grasped by those whose earthly lives knew labor and the lash. The elders who brought to these shores knowledge of diverse divinities and ancient practices taught them to their children; the deacons of the churches of today are their moral descendants. The strength and flexibility of some African spiritual customs facilitated their merger with Christianity. But the folk religion that evolved in the slave quarters along the Sea Islands in the eighteenth and nineteenth centuries was more than a survival, and more than a blend; it was a creolization. The Gullah people adapted African beliefs to their own concept of Christianity in a dynamic and creative synthesis that helped them build a community of strength and solidarity that withstood the hardships of life. Religious faith raised up the slave, gave him hope and moral superiority, and contradicted the dehumanizing experience of slavery.

Syncretism is dramatically illustrated by Maum Hester of South Carolina in the 1920s who believed that each day that passed carried with it deeds and thoughts performed by each person. The sun carried the record to the center of the earth, where the moon and stars, the signs and seasons, all rested until their time to appear. The "Lawd Jedus" presided over the entrance to this region. Her chief concern was that the record which the sun bore to the Lawd Jedus each night might prove acceptable to Him.

Each morning she went through a ritual. When she saw the sun she repeated three times the formula: "Do Lawd Jedus, is I please you dis day?" Each time, she walked around the room in a circle with a peculiar posture, step, and rapt expression characteristic of the ring shout. After the third question her emotional state bordered on hysteria. "But the t'ird time, de sun he 'gin move, I see he shoutin.' Den I happy, by I know den I done please de Lawd Jedus dat day."

Only the figure of Jesus is Christian; all else is BaKongo. No sharp line can be drawn between religion, magic, and healing, especially in Africa and the Sea Islands. The Divine Healer dispenses health, and various incantations may be used to induce the divinities to cure illness. The powerful influence of magic along the Georgia coast illustrates this principle and its African antecedents.

Magic and Mystery

> I dohn know who done it, but all ub a sudden muh leg begin tuh swell an swell. I call a regluh doctuh, but he didn seem tuh do no good; so tree weeks ago I went tuh a root man. He gimme sumpm tuh take an sumpm tuh put in muh bed. In a few days knots come out all obuh muh leg an wuhrums staht tuh crawl out. Only one knot lef. I guess I soon be well.

Martha Major from Yamacraw near Savannah was explaining to the visitors from the Georgia Writers' Project how she had been conjured and the root doctor had relieved her misery. Their book, *Drums and Shadows*, filled with such examples of the practices of sea islanders of the 1930s in their own words, along with African counterparts, did for beliefs what Turner did for language.

Many informants were reluctant to talk of conjuring, so strong was the fear of such magic among the descendants of African slaves. The long history and powerful influence of conjuring is illustrated by an ad in a Savannah newspaper of 1788 for a runaway slave. He was "called Doctor Hercules from his remarkable conjurations of pigs' feet, rattlesnakes' teeth, and from the feet and legs of several sick people, many of whom still believe him in reality to have performed miracles."

While anything may be used to "fix" a person, from roots and powder to hair and nail- clippings, most effective is graveyard dirt, preferably from the grave of one who has been murdered. Serpents, feared in Dahomey and among the Ibibio and other people of southern Nigeria, frequently play a prominent role in conjuring. One Gullah woman said of another, "She wuk a root on me so strong dat she put a big snake in muh bed, and uh could feel tings moobin all tru muh body. I could feel duh snake runnin all tru me."

Root doctors take their name from the various roots and herbs used in healing, for their magic is not all harmful. George Little, who said he had been born with a special knowledge of healing, listed a dozen roots in his pharmacopeia. A self- professed root doctor and fortune teller, James Washington, explained that he could tell the future because he was born with a double caul. He said that some magic can guard you from harm, but evil magic can put you down sick; hair is the most powerful thing an enemy can get hold of because it is so close to the brain. The root doctor thus revealed several beliefs with well known African antecedents. The special power of those born with a caul is recognized in Dahomey; the importance of the diviner or fortune- teller is known to the Ashanti; the place of hair in magic is widespread among many Africans from the Ewe to the Mpongwe; and the role of conjure and charms is universal.

Dr. Ramsay Mallette, former Professor of Psychiatry at the Medical University of South Carolina in Charleston, trained his residents to perform similar magic to reverse the hex laid upon the patient whose fear of death is paralyzing. His video tape of this healing procedure, complete with the instruments of conjure that produced recovery, is a gripping demonstration of the power of belief.

From birth to death, superstitions govern the life of these natives of coastal Georgia. As among the Ibo, being born with teeth is usually considered extremely unlucky. Charms are worn by most people to ward off evil spirits. If that silver dime surrounding the woman's ankle turns black, it is a sure sign that she has been conjured.

A witch or hag, well known in Africa, is the disembodied spirit of an old woman. Leaving her body during sleep, she rides another person, sometimes causing illness, and various charms must be worn to ward off this evil influence. A witch leaves her skin behind when entering one's home. Witches are more feared than ghosts, especially when they get a grudge against someone. The most dramatic thing witches do is fly away. All of these beliefs have their African counterparts.

At the funeral on the Georgia coast, awesome practices prevent the return of the ghost. At the "settin' up" or wake, bread and coffee are usually served to the mourners, as among the Ibo and many Sudanese groups; each of them pours some on the ground for the spirit of the deceased, as done among the Efik, the Ashanti, the Dahomeans, and other West African people.

"Den at duh time fuh buryin, duh drum would beat an all would lay flat on duh groun on dey faces befo duh body wuz placed in duh grave. Den all would rise and dance roun duh grave. Wen duh body wuz buried, duh drum would give signal wen all wuz tuh rise aw fall aw tuh dance aw sing." Such customs are reminiscent of those of the Mandingo and Ashanti. All must bid farewell to the corpse, either speaking a few words or touching it, as done on the Gold Coast. The service isn't over until each one has thrown a handful of dirt in the grave, a custom known in Nigeria and among Bantu nomads of Bechuana.

Adorning the grave is well known to the Georgia blacks, and woe to one who steals anything from it, even a broken mirror, for bad luck will follow him. Departed spirits or ghosts inhabit the world of the living, often taking the form of animals or dwarfs. The rebirth of the spirit as an animal is reported among the Yoruba, and the backward- facing dwarf is commonplace among people of the Gold Coast. In the bestiary of the sea islands are boo- hags, boo- daddies, drolls, conjure- horses, and plat- eye, a hideous and greatly feared one- eyed ghost who takes various shapes and forms when one places the head of a murdered man in a hole with treasure. An original blend of African tradition, self- reliance, and Christianity is illustrated by the defense against plat- eye of a former slave, Maum Addie,. "So I totes my powder en sulfur en I carries mah stick in mah han en puts mah truss in Gawd."

The search for links of Georgia coastal blacks with African groups is on shifting sands, for most of these beliefs and practices are widespread and have changed over time on both continents. The most commonly cited ethnic group in *Drums and Shadows* is Ibo; a black on Sapelo, St. Simons, and St. Mary's told of grandparents or other ancestors of that group. "Ibo's Landing" on St. Simons is named for those freshly brought from Africa who, refusing to be enslaved, marched into the water and were drowned. Their self destruction supports the view of Henry Laurens that slaves from Calabar were liable to commit suicide.

The persistence of Moslem practices on the Georgia coast reported in the 1930s indicates late importation of people from northern Nigeria or the western Sudan. Katie Brown of Sapelo told of the regular ritual prayers of her great grandfather Belali Mohomet on his prayer rug. Slave driver to Thomas Spaulding, Belali had among his many daughters Magret, Bentoo, Chaalut, Medina, Yaruba, Fatima, and Hestuh. Magret's granddaughter Katie Brown recollected:

> "Magret an uh daughtuh Cotto use tuh say dat Belali an he wife Phoebe pray on duh bead. Dey wuz bery puhticluh bout duh time dey pray an dey bery regluh bout duh hour. Wen duh sun come up, wen it straight obuh head an wen it set, das duh time dey pray. Dey bow tuh duh sun an hab lill mat tuh kneel on. Duh beads is on a long string. Belali he pull bead an he say, 'Belambi, Hakabara, Mahamadu.' Phoebe she say, 'Ameen, Ameen.'"

While these are clearly Moslem practices, albeit truncated, the three times a day for prayer also coincide with the Moments of the Sun in the Cosmogram of the BaKongo. Like religious belief, magic prevailed in the new setting because it held such a firm grip upon the mind, helped one cope with the unknown, and provided some sense of protection in a threatening world. More than religion, however, it appealed to baser instincts of fear. More a secret practice than a social one it said, "My will be done," rather than "Thy will be done." One proverb expressed the hope of those struggling to survive in a hostile environment: "Black people rule sickness with magic but white people get sick and die." Inseparable from deeply held beliefs on the sea islands are the joyous sounds of music that also reflect the African connection.

Music Hath Charms

Guy Carawan said that he knew he was in heaven when the singing began at a Christmas Eve Watch in Moving Star Hall on Johns Island. Some woman with a thick, rich low alto started off in the corner and very soon was joined by some deep, resonant male "basers" from another corner. The falsetto wails and moans sailed in to float on high over the lead. By the time the whole group of about sixty worshippers had joined in, each freely improvising in his or her own way, the hall was rocking and swaying to an ecstatic "Savior Do Not Pass Me By."...Song followed song with different people taking turns leading off as the spirit moved them.

After a while different individuals began to pray and give personal testimony while everyone else hummed, wailed, moaned and answered fervently in response. That sound was the strangest and most beautiful of all. . . The total sound was beyond description. As the fervor mounted at the end of each prayer or testimony, the congregation would soar back into song, sparked by the testifier or by someone who felt a particular song at the moment. Carawan continued to capture in words the magic of hands clapping, heads and bodies swaying, and feet tapping in time with the singing, culminating in shouting and dancing. The whole building was rocking in rhythm. A near perfect sense of timing made it a group form of expression.

The world has come to appreciate the unique beauty of the spiritual, with its rich melody, appealing rhythm, and qualities of the human voice that seem to rise directly from the soul. W. E. B. DuBois wrote that "the Negro folk- song - - the rhythmic cry of the slave- - stands to- day not simply as the sole American music, but as the most beautiful expression of human experience born this side the seas."

The teachers and missionaries who flocked to St. Helena in the 1860s were struck by the soulful singing of the blacks. The difficulty of capturing the character of these "negro ballads by mere musical notes and signs" was well recognized by Lucy McKim, who published the first songs of the Port Royal Contrabands. "The wild, sad strains tell, as the sufferers themselves never could, of crushed hopes, keen sorrow, and a dull daily misery which covered them as hopelessly as the fog from the rice- swamps. On the other hand, the words breathe a trusting faith in rest in the future- - in 'Canaan's air and happy land,' to which their eyes seem constantly turned."

Col. Thomas Higginson, who raised the first slave regiment mustered into Union service, interspersed similar sentiments between his published spirituals. In the song, "I Know Moon- Rise," he was especially moved upon hearing the words: "I'll lie in de grave and stretch out my arms." "Never, it seems to me, since man first lived and suffered, was his infinite longing for peace uttered more plaintively than in that line."

The Bible was a gold mine to the slave; he transmuted the Christian tradition into a fresh and vivid lyric poetry to express his concealed hope and his desire for freedom and justice. In the cryptic language of freedom, Cana'an also meant Canada, one terminal of the Underground Railroad, conductors were called Moses, and the chariot was a symbol of escape. "Live Humble" was an exhortation to be patient a little longer, and "Daniel" expressed faith in deliverance.

As the revival movement by the early 1800s brought south many hymns sung in camp meetings attended by blacks and whites, their singing styles influenced each other; and hymns were readily adopted by the slaves. Each line of a hymn read aloud as the audience repeated it; such "lining out," accorded well with call- and- response. Black religious songs, known in the 1820s, were composed by them by the 1840s; the spiritual was fully developed by 1856. Songs of blacks show that their rhythmical and structural elements came from Africa, although the product is native American. What impressed missionaries on St. Helena most was the Ring Shout, a dance of religious ecstasy, half pow-wow, half prayer- meeting, with chants and song, seen as barbaric by most whites who did not appreciate its meaning and origin. Work songs were also common on the Sea Islands, whether in rowing boats or thrashing rice sheaves. Each plantation had its own songs and took pride in singing them. Dance also characterized life on the sea islands, often reflecting work patterns, as in “New Rice an’ Okra,” when scuffing off the outside husks of rice. Rhythm and improvisation, that characterized dance and song, were a group activity and a part of everyday life.

Music fills the life of the African from birth to death, closely associated with the gods, magic, and healing. A wide variety of native instruments are played there, including drums and fiddles, and the bania, the forerunner of the banjo; but the human voice is the crowning instrument. Even on the slave ship; the memory of African music was kept alive, and in America black mothers passed on melodies to their children. The ring shout, songs, spirituals, and instruments of the Sea Islands can be traced to Africa. Sounds born there came to enrich American music.

Music from Africa was retained among the Gullah because it expressed feelings of joy or of grief, promoted physical and spiritual well- being, provided escape from drudgery, molded the young, and fostered a sense of community. Slaves speaking different tongues could communicate feelings in this universal language, and music at funerals united the living with the dead. Sacred songs, echoing religion, evolved from the syncretism of Christianity and African belief, and some also contained a veiled cry for freedom.

One other activity transmitted to the Sea Islands that kept alive memories and raised the morale of the people provides another opportunity to discover both African roots and adaptation in a new environment.

Thereby Hangs a Tale: Folklore

The story of the mock plea of Brother Rabbit who is thrown into the briar patch that he pretends to fear, familiar for more than a century to millions since childhood, is one of the well known animal tales of *Uncle Remus* by Joel Chandler Harris. But it is still alive in a modern story- telling session on Wadmalaw Island. The audience response makes it even more vibrant. When the speaker imitates the whining and whimpering of Ber Rabbit and adds the squinched eyes, wrinkled nose, gestures of face and hands, and bodily movements, his listeners go wild with laughter.

Many cantefables, or "singing tales," abound on the sea islands where they have educated and delighted the inhabitants for generations. The Tar Baby of well- nigh universal distribution is another favorite in coastal Carolina. Why the wide appeal of the short accounts of talking animals, mythical creatures, and heroes of extraordinary powers? Some serve as escape literature; some explain the origin of the cosmos and its creatures; others are instructive; and in some settings they may contain a hidden message. Tracing connections through folktales is virtually impossible. The same stories are spread over many lands; those collected are only a fraction of all known to a people, and they are filtered through alien listeners; two tales with the same theme are not identical in content or style; through improvisation the tale is transformed with each telling; and the setting, gestures, intonations, acting, and even audience response are just as important as the story itself.

Missionaries and travelers were aware of the rich vein of tales that natives of Africa told, intertwined with their history and mythology. Stories from Sierra Leone, told in dialect, usually at night around a

campfire, display the dramatic power of the storyteller and the musical quality of the chants accompanied by the clapping of hands. The trickster animal is widely known and loved; physically insignificant, seemingly helpless, and yet endowed with extraordinary mental acumen, his triumphs are an approved outlet for difficulties experienced by oppressed people. Tales of the small animal who outwits bigger ones are widespread throughout Africa, frequently the rabbit in Sierra Leone and Nnabe, the turtle, on the Slave Coast. “Anansi,” the spider, featured in tales of the Temne and Limba of Sierra Leone, is even better known in Ghana and the Gold Coast. Shrewd and designing, selfish, deceitful, and sometimes cruel, the spider appears in half of the folk tales of West Africa. This wily creature is well known in the West Indies too, where his scheming nature reflects the subtlety necessary for survival, and connects Africa, the Caribbean, and Carolina. In the sea islands, the name readily became "Aunt Nancy."

Soon after Northerners arrived on St. Helena, they became aware of the rich treasure of stories known to the people of the region. The most complete collection of sea island tales was made by the folklorist Elsie Clews Parsons. Her densely packed volume (1923) contains 178 tales, many of them with several variants, plus riddles, proverbs, toasts, verses, songs, folkways, and notions, told in dialect. Her ninety informants were primarily from St. Helena and Port Royal, with the remainder from the neighboring islands.

Here one finds animals well known to southerners- - dog, fox, wolf, rat, cat, bullfrog, alligator, turtle, squirrel, raccoon, partridge, rooster, crane, chicken, duck, and rattlesnake. But also mentioned are the tiger and imaginary people with magic powers unlike anything in the environment. Some tales point a moral, often the small and smart outwit the large and stupid; others explain an origin as in the Just So Stories. An African provenience is cited for too few tales to be meaningful, but Sierra Leone is most common in West Africa. Similarities of the sea island stories to those of the West Indies, especially the Bahamas, reflect the common origins of the people. The three Gullah stories containing Mende expressions recognized by Turner show imagination as well as further affinity to Sierra Leone:

The dean of folklore, William R. Bascom, collected several hundred tales, and grouped them into fourteen themes; some 267 tales are from Africa, sixty from South Carolina, and thirty from Georgia. The relative contribution from regions of West and Central Africa to the sea islands roughly resembles their slave importations, with two important exceptions: Nigeria contributes 25 percent while Angola yields only 18 percent. Of greater interest, themes most frequent in South Carolina and Georgia are also common in Ghana and Nigeria. Most often mentioned tribes in West Africa are Yoruba, Hausa, Ashanti, Mossi, and Temne. Some common ideology binds together the sea islands and West Africans.

With all the difficulties of defining particular tales, and their transformations over time to fit the new conditions of life on the sea islands, it is impossible to pinpoint their African origins; all regions contributed. As with grammar, the Guinea coast people probably gave more folklore than their direct slave import to Carolina, in part because of the passage of many people from this region through the West Indies.

More than one story, however, relates the Yoruba to Johns Island. In both areas the tortoise as trickster represents the little man getting through the difficulties of life with license to act outside the rules of society. Common to Yoruba and Johns Island are not only the well- known Tar Baby story but a striking explanation of an eclipse as the result of an argument between the sun and the moon.

Several folktales and the style of telling them are common to Wadmalaw Island and the Ibo of Nigeria. The closest parallel is in a classic morality tale in which the remains of a murdered person indict the one who committed the foul crime. In the Wadmalaw version the mother kills her daughter for stealing three pears, and buries her in a field where onions grow in the spring. The effort by Brother, Daddy and finally Mama herself to pull up the presumed onions produces this refrain from the victim:

Mama, Mama, Mama
Don't you pull me hair
You know you kill me
Bout the three li pear.

In the parallel Ibo version, an older son kills his younger brother for a flower; one of his bones later sings out:

Mama, Mama, Mama
The bone you are looking at
Is that of him who went
To the bush with his brother
His brother killed him
For the sake of his flower.

Folk tales from Sierra Leone, like songs and prayers, probably entered the Sea Islands with the rice cultivation in the eighteenth century, and blended with those from other regions. Folklore was retained along the coast as a heart- warming remembrance of the homeland, instruction for the young, and comic relief from daily drudgery. When folklore was told by a gifted raconteur to a responsive audience, a sustaining social bond was forged among the people. Whites would have no incentive to discourage this apparently harmless pastime that kept alive the African heritage. The trickster permitted a satirical picture of the society in which the slave lived; blacks learned the advantage of role playing and adapting to the value system of a clever animal like Ber Rabbit. Some subtle connecting links of Africa to the Sea Islands are expressed with body language rather than with speech.

Gestures and Motions

As the discussion of the two Gullah- speaking black men grows more heated, one of them crosses his arms before his chest to signal the end of the conversation. He is not arguing, but in this somewhat combative situation he is communicating that he definitely does not like what is being laid on him. This gesture, called *tuluwa lwa luumbu* among the Kongo, symbolizes self- encirclement in silence, more powerful than words.

How should such a stance be interpreted in the quest for African retentions? Like dance, a motion of head, body or limb, and the message it conveys, can be transported overseas and over time. While a spontaneous smile is a reflex that transmits a universal meaning, the most simple movement of the head to signal "yes" or "no" varies in meaning among mankind and thus reflects learned behavior. The many gestures of the latter variety that survive among African- derived people in the New World often appear to have Kongo origins.

The Gullah child, rebuked for wrong- doing by her mother, turns her head to one side to avert her gaze and purses her lips in denial and rejection. The Kongo gesture of *nunsa*, with head averted and lips pursed, is well known in Africa both among the living and in sculpture. The related *kebuka* pose of the conga drum player, with head turned to one side while concentrating on his music and shutting out all distractions, can beobserved on both sides of the Atlantic.

Arms akimbo and both hands on the hips, a pose called *pakalala* in Kongo, proclaims that one is ready to accept the challenge of the situation. Used especially among Low Country women, this combative posture expresses contempt. Some gestures of the Kongo, most clearly expressed in Haiti, have made their way into the United States. The pose of *pakalala*, called in Haiti *deu men sou kote*, combining challenge with grace and humor, is used by women while dancing with men.

Placing the left hand on the hip and thrusting the right hand forward, called *biika mambu* or *telama lwinbanganga* by the Kongo, is common in Haiti where it is known as *pose Kongo*. Holding both hands above the head with fingers wide apart, called *booka,* expresses crying out for help, weeping, or proclaiming. Such gestures are also reproduced in sculpture on stone or terra cotta of funeral columns of the BaKongo. Evidently Central Africa had an early and persistent influence on body language as on spoken language in coastal Carolina and the West Indies. Some gestures may come from other regions, but they have not as yet been so well identified. Certain group activities among the Gullah-speakers are derived from other peoples of West Africa.

Sixty years ago Bascom recognized the similarity of certain cooperative work patterns of the Gullah to African ones. On Sapelo Island and Hilton Head, elderly blacks recalled how groups of thirty to fifty people went hoeing side by side while singing in unison to make the work more pleasant and rapid. Such group activity closely resembles the *dokpwe* of Dahomey and the awe, or working bee, of the Yoruba; they also illustrate creolization that arose on the sea islands in an adaptation of labor to a new environment.

In other actions training is needed but inherent capacity may also be involved. Higginson reported:

> I have seen a woman with a brimming water- pail balanced on her head, or perhaps a cup, saucer and spoon, stop suddenly, turn around, stop to pick up the missile, rise again, fling it, light a pipe, and go through many evolutions with either hand or both, without spilling a drop.

Just such a complex sense of balance and motor coordination can be seen widely in Africa.

Not so much the substance itself but rather its usage expresses a cultural affinity and an adaptation. Blacks of coastal Carolina wrap each little strand of hair with white twine and wear a bandana or headkerchief much as their ancestors did in Africa. Hairstyling there is a great art form; a variety of intricate styles are known, such as braiding, wrapping hair to resemble sticks, threading strands to form crowns, and adding colored beads to hair strands. Material culture, no less than beliefs and customs, reflect an African heritage recreated with modifications in the New World. Many crafts of the Sea Islands proclaim this connection, and tangible evidence actually lies buried in the very soil of coastal Carolina and Georgia.

Chapter 6 What the Hand Wrought

"Dave belongs to Mr. Miles
Where the oven bakes and the pot biles"

This verse, imprinted on the side of a large jar made by a slave in the 1840s in South Carolina, illustrates originality, practicality, and African tradition. Whether working in clay or cloth, wood or iron, the African Americans of Carolina and Georgia reflect their Old World artistic heritage adapted to New World needs. Material culture provides further clues to specific links to Africa and their transformation on the Sea Islands.

African Art Reborn

The vibrant color and animation of the rock paintings made 3000 to 4000 B.C. at the Tassili Massif in the middle of the Sahara desert attest to the ability of the artist to capture the image of wildlife that flourished there in the past. Striking terra- cotta heads are known at Nok in present- day Nigeria from before 500 B.C. By the twelfth century A.D at Ife, southwest of Nok, bronze casting by the *cire- perdue* or lost- wax method produced remarkable naturalistic life- like figures. The world- renowned art of Benin, in wood carving and bronze casting, begun by 1280 A.D., flourished there from the fifteenth to

the eighteenth century. Masks associated with secret societies in the western bulge of Africa, stylized to represent animals, are noted for their skillful carving. In the making of boats and drums, masks and musical instruments, wooden stools and figurines to honor ancestors, statues and ceramics, the African displayed a feel for texture, a sense of beauty, and individuality, foreshadowing the hand work on the coast of Carolina. Color was used to enliven arts and crafts, to brighten the walls of a house, ornament a mask or headdress, dye textiles, and decorate pottery, often with symbolic meaning that went beyond esthetics. Everyone, man, woman, or child, learning the traditions of the tribe, took pride in skills required for the household arts, but items for the god or the king were produced by specially designated craftsmen.

With enslavement in the New World, the social fabric, the bonds of kinship, the artifacts made for king or god, and the rituals associated with them, were swept away from the African. Yet the ideas which motivate the creation of an object, along with the innate skill, endured. Many of the raw materials of tidewater Carolina were similar to those in Western and Central Africa, and it was advantageous to white masters to utilize the talents of black bondsmen.

From earliest days Charles Town needed craftsmen of many kinds; white artisans used both white and black apprentices who learned from each other. By the 1760s slave artisans were hired out by the day to clients, and some set up their own shops, paying a percentage of their earnings to their masters. Advertisements for runaway slaves in the eighteenth century attest to their many talents. In time the so- called "Bozal Negro" (or "salt man") fresh from Africa was apprenticed to one born in this country who acted as interpreter and trainer, utilizing skill the newcomer had in his homeland. A blacksmith who knew how to make spears or anklets or iron money in Africa could use the same techniques in making wrought iron gates or mule bits in America. Pride in craftsmanship, as well as talent, carried over into new occupations. Crafts came to be the special province of Free Persons of Color, often passed on from father to son for generations. On the large plantations of the Low Country, the sound of the saw of the carpenter and the anvil of the blacksmith rang out. Each plantation was efficiently run like a small town, supplying most of its own needs and finished products, often with the help of capable artisans. Crafts, such as basketry, sewing, weaving, and net making, were taught by adults to children as they were in Africa.

Thus, an interaction of European and African traditions arose in colonial South Carolina and Georgia that influenced the artifacts of slaves, as it did their language, beliefs, and practices. The style as much as the content revealed the African heritage; improvisation and changing needs helped to reshape the old into the new.

Tales from the Good Earth

If most of us dug into the ground where people had lived in past centuries, the fragments of pottery, bits of animal bones, pieces of metal, and assorted scraps uncovered would mean little. But to the trained archeologist the people and their culture come to life again from small things forgotten.

In antebellum plantation sites excavated, slave quarters are distinct from the master's house. A kitchen leaves different remains than a bedroom; thimbles and spools tell of sewing. In conjunction with the historical record, archaeology sheds light on the African American people and opens one more window in the search for connection to their homeland and transformation in America. African techniques are reflected in many items recovered from the soil of South Carolina from the earliest days of Charles Town into the nineteenth century. They were gradually transformed by European concepts into something new, and they also influenced the styles of the white masters.

Tahro, born in the Central Congo, transported in the slave ship Wanderer to Georgia in 1858, and later brought to Edgefield, South Carolina, constructed a one- room, seven by ten foot, rectangular dwelling with timber frame, lath walls held in place by twine netting, and straw- thatched roof. He said it was like the one he had built in Africa. Col. Higginson noted the African- style huts built by the

newly freed slaves on St. Helena in 1863. Tabby walls and palmetto fronds for roofing are still known in coastal Georgia as well as coastal Guinea, and thatched roofs could be found on the houses of the sea islands even into the twentieth century.

In tracing the story of dwellings in South Carolina, archaeology supplements history; sites excavated along the South Atlantic coast reflect an African heritage. Houses of slaves were more like African ones than those in any other place in the Southeast. Slave quarters of different periods show transition in their construction. The influence of Africa on white architecture is more subtle. When blacks first added a small porch to a cabin it reflected both utility and memory. The "piazza" of the typical Charleston house, which catches the breeze during the heat of the summer, had antecedents in the West Indies and developed slowly. Notably, side porches or piazzas did not become common in that city until refugees arrived from Haiti after 1790. Thus, directly and indirectly via the West Indies, the architectural ideas of Africa crept into South Carolina and Georgia, with a lasting influence on buildings of blacks and whites.

Yard and garden around the home also show African influence. In many societies, notably the Ibo, Idama, and Yoruba of Nigeria, immense value is placed on protecting the sacred soil. The paling fences enclosing small yards on old coastal plantations are strikingly similar to palm rib fences between the dwellings in southwestern Nigeria. The custom of sweeping the yard with a straw broom and using bottles to edge flowerbeds or walkways probably also owes its origin to West Africa, and has retained its utility in America.

Colono Ware

The African heritage and its transformation is dramatically illustrated by pottery found in the soil of Carolina. Archeologist Leland Ferguson found that hand- built, unglazed, clay pots from colonial sites, attributed to Native Americans and called "Colono- Indian," were also made by African Americans. Such pottery was far more frequent than all other types combined, more common in rural than urban settings, and abundant wherever slaves had lived. They made up 87 percent of ceramics at the slave quarters at Yaughan, near Georgetown, but only 16 percent at the planter's house at Drayton Hall, near Charleston. Evidently fired at a low temperature and unglazed, their shape, coarse, thick walls, loop handles, and round bottoms indicated their manufacture by blacks. "Wasters," or pieces fractured during firing, clumps of unfired clay, and even finger marks indicate that the vessels had been made by slaves for their own use.

Some pottery, christened "Colono Ware," bore striking similarity to some African forms. It predominated in the early eighteenth century and declined rapidly with the end of the slave trade in the nineteenth, as more glazed, European- style pottery appeared. Colono Ware died out about the same time that African- style buildings yielded to European- style ones on plantations, an example of cultural adaptation. Blacks in the West Indies made similar pottery, and still do today. Bowls for cooking and eating found at an eighteenth century slave site at Drax Hall, Jamaica, are called "jabba" after a Twi word meaning earthenware vessel or dish; a contemporary pot from Nevis near Barbados shows the same traits as those from Carolina.

Pottery- making has a long and impressive history in Africa. Appearing in a Nigerian rock shelter soon after 4000 B. C., it reached an outstanding technical level by the beginning of the first millennium A. D. It is also known from megalithic sites in Senegambia and Mali by the second half of that millennium, reaching a climax in the artistic creations in terra- cotta at Nok. Cooking jars and serving bowls are known from the Fulani to the Kongo- - and the potsherds left behind are similar to those found in colonial Carolina. Using the same techniques, the eighteenth- century black Carolinian potters transmitted the heritage of their ancestors. A surprising discovery associates people of Central Africa with some vessels.

Strange marks were centered on the bottom of a few Colono Ware bowls. A cross frequently occurred inside a ringed base, but never on cooking jars or pots of any clearly European ware. Most remarkable, of seventeen such pieces, thirteen were from underwater sites, five at Pimlico and eight at Mepkin Plantation, both along the Cooper River, although terrestrial sites are far more common. With its quadrants and circle, was this the famous Cosmogram of the BaKongo people that traces the cycle of life? As their *minkisi* or sacred medicine was prepared by the progenitor of their kingdom himself in an earthenware pot, what could be a better container for healing magic than a clay bowl? One can imagine an African slave, seeking a cure for a dying child, stealing away in the dead of night to the river bank and hurling the bowl with its magic symbol into the water, so that its message might travel to that other world, reverse an evil spell, and save a loved one. The beliefs of Central Africa literally sank deep into the soil of Carolina. Clay jugs with faces of bulging white eyes and large clenched teeth made by African Americans in the early 1860s near Edgefield in Aiken County suggest a grotesque ferocity. Did they convey the emotions of resentment, anger, or satire of these slaves closely akin to the sea islanders? Most of the Africans landed on Jekyll Island, Georgia, by the slave ship *Wanderer,* who ended up near Edgefield were Kikongo speakers.

Style and usage indicate an African inspiration for these Carolina ceramics as well as connections to the West Indies. The terra- cotta traditions at Nok and Ife still live among Africans who fashion clay figures today. Inspiration for the sculpture of the nineteenth- century black Carolinians probably had several sources, from Sierra Leone through Ghana to the Bantu of Central Africa. Half- remembered forms, available material, originality, and the opportunity to express in clay feelings of resistance or ridicule of masters combined with demand to produce aflorescence of unique sculpture, a further example of creolization.

Food for Thought

What we eat and how we eat it, products of culture, are reflected in the deposits left behind in the dust as archaeology again supplements history. Of some dozen sites on the coast of South Carolina and Georgia that have yielded secrets of the past life of African Americans, especially rich are those from Couper's plantation at Cannon's Point on St. Simons Island from 1794 through 1860. Archaeology of Barbados and Jamaica also provide important links between Africa, the West Indies, and the Low Country.

The careful analysis of animal remains from the slave quarters of Tidewater plantations shows that blacks supplemented their rations of corn, meal, rice, vegetables, and a little pork with whatever they could catch in the woods or the waterways, for the bones of wild animals and fish outnumber those of domestic animals two to one. Lead shot, gunflints, and fishhooks in slave cabins give further evidence of this dietary supplement. Remains in the earth show that the manner of partaking of food in the New World continued the habits of the Old. In West and Central Africa the starchy main dish of millet or rice or maize (after 1500) is usually boiled in a large jar; a vegetable relish with a little meat or fish added is cooked in a smaller one. The main dish is then served in a large bowl, the relish in smaller ones. Sitting upon the ground in a group, native Africans take a ball of the starchy main dish in their hands and dip it into the relish. That this custom is widespread in space and time is borne out by travelers' accounts from Mali in 1352, the Gambia River in 1623, Sierra Leone in 1803, and Angola in 1865, down to the present- day Mossi and the Dukkawa of Nigeria.

The communal African style of cooking, eating, and drinking, learned by children from their parents, survived in America. Such techniques may have furnished antecedents for the stewed hominy, potages, pileaus, and "Hoppin' John" that sea island slaves cooked in iron pots and served in ceramic bowls. The spade of the archeologist confirms the memory of ex- slaves of Tidewater Georgia in the late 1930s who recalled how the old folks fresh from Africa sat on the ground and ate with their fingers out of a bowl. African foodways also influenced whites. Many insist that okra soup doesn't taste right

unless it is cooked slowly in an earthenware vessel. A good black cook created more than a satisfying meal; she also perpetuated an African- derived culture.

Men of Iron

From the early years of the colony men of African origin labored as blacksmiths in the manufacture of iron goods. In the rural areas their skill was needed in the making of nails, hinges, screws, bolts, rakes, tubs, weights, and all other metal goods. In the town the ironmaster became a specialist in great demand as able black workers labored together developing their own craft traditions. Skill in the foundry was a two- edged sword - - literally; slave blacksmiths supplied the Denmark Vesey insurrection of 1822 with daggers, bayonets, pikes, and swords.

Charleston, like New Orleans, became famous for its delicate nineteenth century wrought iron work. Black and white craftsmen were employed in the production of such ornamental masterpieces as the gates of St. Philips Church, Hibernian Hall, and the famous Sword Gate. "Uncle Toby" Richardson, a top rank artist in iron, was the leader of five African American workmen who carried out his plans.

The tradition still lived in the twentieth century in Philip Simmons, a modern ornamental ironworker of Charleston who learned his trade from Peter Simmons (no kin), an ex- slave, who in turn learned from his father Guy Simmons. Philip's tremendous vision is the first step in the creative process; he trains his eyes and hands to reproduce the image in his mind, sketches it on paper, then draws it in chalk. Yet as the metal parts are forged, his mental picture is modified. The struggle in his mind to make his vision clear lends vitality to his creations, such as his repeated efforts to get the eye of the snake to look alive. Just as he recognizes that no two leaves in nature are identical, he produces individual leaves in the ironwork of a screen partition. As he works and views the product of his labor he says repeatedly:

"That's got it; that's the one; that's the one." It is tempting to derive specific forms in colonial ironwork from African ancestors. One eighteenth century wrought- iron statue found in slave quarters in Alexandria, Virginia, with linear body and limbs expressing the essence of the human form, bears a striking resemblance to the sculpture of the Bamana of Mali. The copper rice tester, plunged into the depth of a full barrel to determine its quality, is similar to the ceremonial Po spoon or rice scoop of Liberia handed down through generations as an honorific emblem of the chief's mother or wife. But the few links in the chain of metal work of the Gullah people and their African ancestors are nebulous and modified by time and necessity.The designs of the Carolina craftsmen are essentially Euro- American dictated by the needs and tastes of whites. The African heritage and ability, guided by improvisation, combined with them to create a unique symphony in iron.

Wood Carving

Cooper of Yamacraw near Savannah well deserved his nickname "Stick Daddy" for his carving of slender walking sticks with reptilian designs. Lifelike snakes, lizards, or alligators appear to crawl up these canes, made more realistic by low relief and a stain that distinguishes them from the background wood. William Rogers of Darien carved a heavy cane topped by a man's head with small, high- set ears, broad mouth, and eyes of blue beads held in by minute steel nailheads as short little arms and four- fingered hands clutch the sides of the bust. Below is a carefully executed alligator stretched vertically against the shaft, as though climbing on the man's trunk. Its limbs grasping the sides, a grid of incisions to replicate scales on its back, and beads for eyes, enhance the graphic yet stylized portrait of the animal.

Equally impressive is a wooden frog carved by Rogers which looks as if it is about to catch an insect. Its powerful shoulders lift the massive, rounded body above the base; eyes of beads, secured by minute brass nails for pupils, set in the triangular head, give a realistic feel to the sculpture. Craftsmen also made utilitarian objects, such as a wooden spoon with a sculpted head on the top.

Wood carving and bead- work are well known throughout Africa; natives mix a main medium such as wood with a minor one such as beads. The human and animal figures from the Georgia coast are reminiscent of the mixed media found in the statuary of the Songye and BaKongo of Central Africa and tribes of the Cameroons and Nigeria. Although similar decorated canes come from Holland and from American Indians, the abundance and arrangement of reptiles in carvings from coastal Georgia strongly suggest their likely connection to the ceremonial staffs sculptured throughout Africa. Among the BaKongo, lusumu, special sharp- pointed staffs with idiographic symbols in low relief, combine the function of a walking stick and a stylus. As *suma* means to dig with a pointed stick or to discover, the double meaning is revealed as elders dig with a stick to bring to light hidden issues of the past.

The human figure carved on the Georgia coast is treated in a manner similar to that found all over Africa. Polished surfaces, symmetrical postures, geometrical incisions, and serpentine flutings proclaim the trans- Atlantic continuity. One Savannah- made cane that displays a mask form with long spiraling horns and eyes set on sharp raking angles is strongly reminiscent of an Ogoni mask from Nigeria. The face on another is similar to the Poro masks of the Dan people of Liberia and the Ivory Coast. Painting in only one color and carefully smoothed and luminous surfaces are typical of finishing on both sides of the Atlantic.

Beyond all of the content and art style is the mystique behind the wooden figures. Like the snakes that coil around the walking sticks, magic and religion coil around every facet of life of the sea islanders; canes with entwined serpents are called "conjure sticks." Since magic and healing are also interwoven here as in Africa, reptiles may well be employed to ward off the harm of evil spirits, illness, and death. Societies along the Congo River believe that enemies appear in the form of crocodiles and snakes; traditional African American healers cure their patients by presenting them with the cause of their illness in tangible reptilian form. Allen Parker near Savannah, both a sculptor and a conjuror, illustrated this synthesis of art and magic.

The inspiration, skill, style, and symbolism underlying the wood figures of the Tidewater are evidently derived from West and Central Africa. The techniques and many of the forms owe much to the western bulge of the continent, but the deepest meaning stems largely from the Congo- Angola region.

One black wood carver said that the inspiration for his work came as a personal vision. This mystical element, improvisation, and sensitivity for texture combined to produce artistic wooden sculpture on both sides of the Atlantic; practical demands shaped this sculpture in the New World.

Boats and Fishing

The myriad waterways that wind around the sea islands made travel by boat a necessity from the earliest days of settlement, and the teeming fish provided sustenance as well. Blacks have served on these waters as guides, oarsmen, and fishermen for three centuries.

The dugout canoe, usually attributed to the Indians, was also shaped by Europeans and by Africans. The Native Americans used a single log, dug or burned out the center, and left it blunt at both ends; the Euro- Americans modified it, pointing one or both ends. Such double- ended dugouts are also well known in Africa from Senegal to Angola where skilled seamen have used them for ages.

The Carib Indians of the West Indies made a multiple log boat from several hewn pieces of wood. The French word "pirogue" for this Carib vessel became the piragua, periagua, or pettiauger familiar on the Carolina coast. Made from giant cypress trees, it was described at least as early as 1709 by John Lawson. Sometimes in both Africa and America a sail was added. The bateau or batoe, a flat-bottomed boat with a square stern made of boards that curve upward at the ends and sides to make a bow, may have evolved from the dugout on the sea islands where it was common into the twentieth

century. From earliest days blacks not only navigated these boats but also built them, calling upon skills taught in their homeland as well as techniques of Indians and Europeans.

Many Africans, near the coast or lakes, were also experienced fishermen; they readily transferred their talents to the catching of seafood on the Carolina shores where "Fishing Negroes" emerged early in the eighteenth century. Some of them even followed the West African practice of damming a stream, adding a toxin to the waters, and then catching the fish, stunned but nonetheless edible.

Men of the Gold Coast and the Carolina coast are equally adept at the ancient art of catching shrimp or fish with a net. In one clever technique, fishermen of the sea islands rap on the side of a boat or on a drum with increasing rhythm, attracting porpoises who circle the boat and scare fish into their nets. Natives of West Africa off Cape Mirik use a similar acoustic signal, slapping the water to get porpoises to herd mullet into their nets. Significantly, on the Sea Islands in the winter, when men knit new nets and repair old ones, they use a needle of palmetto wood, much as they do in Nigeria.

Quilts as Cryptic Chronicles

Necessity is the mother of invention. Textiles, initially imported into the colony of Carolina, were soon made from local materials. Although silk cultivation was attempted as early as 1699, and wool and flax were woven, cotton would become the major fabric for clothing and for the household. On the plantations skillful slaves became adept at spinning and weaving, embroidering, knitting and dressmaking, using the materials and techniques presented by the white masters. Yet the African heritage was expressed nowhere more clearly than in quilts, all the more surprising since these padded bed covers came to America from chilly England and Holland, known there since the Middle Ages. However, winters in Carolina could be cold, so the need for warmth, the presence of fabric, and the nimble fingers of Africans made bedfellows - - literally.

Created from any available scraps of cloth of assorted shapes, sizes, and colors, quilts represent the ultimate in the blend of economy, practicality, and esthetics; the very placement of the scraps of varied design and color have a dramatic effect. Most characteristic of the Sea Islands is the "strip quilt," pieced work in which the rectangular bits of cloth are first sewn into a long strip. The back is cut from lightweight material; batting is placed between the layers as the quilt is stretched on wooden frames. The colors in a quilt convey a deeper meaning than meets the eye, connected to the beliefs and values of the sea island people, as they are in Africa. Red indicates danger, conflict, passion; blue repels bad spirits; white suggests innocence and purity.

Symbolism in design is equally significant. The cross in quilts in the Americas and the Caribbean is not necessarily a Christian symbol. In one quilt made on Johns Island a cross with large, pink arms, contrasting with a dark blue off- center middle section, was seen by residents there as representing danger, evil, and bad feelings. Crosses, reminiscent of the Four Moments of the Sun, could well have found their way into coastal Carolina from Congo and Angola; slave quilters of the past found ways to disguise an African cosmology in their patterns. In contrast to the centrality and symmetry of the squared off designs of European American quilts, the patterns of the African American ones are more undulating or curvilinear. A staggered strip formation conveys spontaneity; what appears random expresses a freedom of improvisation. The symphony woven into cloth is comparable to the syncopation woven into music. On a more subtle and unconscious level undulating lines correspond to that oblique or indirect manner in personal contacts and modes of speech often found in African American interactions. The illustrations in the book by Fry aptly named *Stitched from the Soul* show that slaves could sew regular, conventional patterns as well as spontaneous ones.

In the Sea Islands quilts communicate affection and celebrate family history – a marriage, birth, or departure for school. When one accompanies a departing family member, it is a reminder of the powerful ties of kinship. "Members of a family can identify the patches and can tell whose clothing, drapes, or household cloths they were before they did final duty in the quilt tops...The quilts are

cryptic chronicles, readable only by those who are initiated into the lexicon and context of the familial documents involved. They are an historical record, a primary source, coming directly out of the life of the family – only understood by them and possibly treasured all the more because of it."

Putting together a quilt is more than a craft. A quilting bee is a traditional social event with food and drink, gossip and song, that brings together families and neighbors and strengthens the feeling of communality. In the past, quilting also provided an outlet for the slaves, establishing a kind of emotional stability and independence, a means of gaining perspective and control.

The link with Africa becomes apparent when the philosophy as well as the fabrics of that continent are examined. With natural fibers so abundant, cotton, wool, and silk were woven in the great kingdoms of the Western Sudan in the Middle Ages. Not only the looms and the colors in the cloth are similar, but also the role of the family in creating the product and improvisation as the guiding spirit in design.

Quilts of the Sea Islands show striking resemblance in their patterns to the fabrics of West Africa, especially those of Ghana and Benin, where men weave cloth into long narrow strips, cut into usable lengths and edge- sewn together. The appliquéd figures in the distinctive cloths of the Fon of Benin (formerly Dahomey) represent events in the history of the people, the African analog to the cryptic chronicle stitched into the quilts of the sea islanders. In the Congo, cloth woven in the past from raffia, a form of palm, became a major export, along with ivory, hides, and slaves, in trade with the Portuguese. Undoubtedly the influence of these ethnic groups survived in the Gullah- speaking people. Just as in folklore, proverbs, intonations in speech, and face vessels, quilts provided slaves with an opportunity to express subtle meanings hidden from their white rulers. Originality against a backdrop of design was molded to practical needs in the textiles created by the sea island people.

Row Upon Row

Nowhere is the re- creation of the skill, the technique, and even the material of an African craft shown more vividly than in the weaving of baskets on the coast of Carolina. Several ladies, like Mary Jane Manigault, weave and sell baskets to tourists along Highway 17 in Mt. Pleasant across the Cooper River from Charleston. Fingers first bend a bundle of grasses into a knot, then coil a thin and flexible binder around it to make a tight bundle. Row upon row, with patience and precision, she twists the grass bundle into an ever widening clockwise circle, turning later coils slightly upward to build the bowl.

The most commonly used foundation today is sweetgrass (*Muhlenbergia filipes*), a long- stemmed plant that grows beside the marshes of coastal Carolina. For variety of color the dark brown needles of the long- leafed pine (*Pinus palustris*) alternate with this golden yellow grass. Binding the coils together in a rhythmic spiral are strips of leaves of palm (*Sabal palmetto*). The tool for punching the hole for the binder, now usually the handle of a filed down spoon, is called a "bone," for it once was an animal bone. What a variety of articles they produce in so many shapes and sizes - - round baskets and oval baskets, sewing baskets, market baskets and clothes baskets, fruit baskets with handles, baskets with lids, and elaborate vases for flowers; open work hampers and cake trays; hats and mats; and baskets with filigrees and secondary coils and endless innovations. The weaving of baskets, like the making of quilts, is often a family affair and a social event. Women generally make them, young boys help, men gather the materials, and some weave too. Oldsters teach youngsters, thus preserving a family tradition.

When rice dominated the economy, baskets were common. Mentioned in a will in 1730, they may have been in use as early as the seventeenth century. Essential for processing the grain was the "fanner," a circular, shallow, dish- like basket nearly two feet across. When the threshed and pounded grain from the fanner is thrown up into the air, the wind blows away the chaff. Like the deeper storage basket of the times, it was generally made of black rush, bound with white oak or saw palmetto.

Baskets were used in those days for harvesting and winnowing corn, for benne seed and sorghum seed, for carrying corn and peas and other produce, for sewing, and even for collecting money in church.

The value of basket- making is proven by the record of the times. The *Charleston Gazette and Advertiser* for February 15, 1791, announced the public auction of "A Negro Man, who is a good jobbin' carpenter and an excellent basket maker." Some slaves created baskets not only for their own plantation but for sale elsewhere; men no longer fit for heavier work could weave baskets. Indians also made baskets, but the style of weaving and their usage were different. Native Americans strapped a basket to the back by a rope across the forehead; sea islanders carried it on the head like their African ancestors. The art of basketry declined with the demise of rice cultivation, but northern teachers who came south trained young people at Penn School in the art and later African

African American women created today's thriving markets along Highway 17 and in Charleston. Across the Atlantic lies one source of this craft. Most of the plant fibers used, palm and grasses, grow widely in Africa; many baskets made there are much like those of the sea islands in the coiling technique, in the manner of stitching, and in their use, if not in their color accents. But coiled rice fanners are unique to Senegal and could be interchanged for those on the Sea Islands. While the concept of the early baskets likely came from Central Africa, the predominant influence probably entered the colony with rice cultivation from Senegambia, Sierra Leone, and the coast south of it, and diffused widely over the rice kingdom. Baskets, like boats, illustrate the complex interweave of African, European, and Native American traditions that enriched the life of the Gullah.

In Memoriam

Of all the artifacts of the Tidewater, those associated with the awesome mystery of death reveal the most profound and moving retention of the meaning of life. Broken bottles and other ornaments in an African American cemetery are expressions of religion and magic; anything from a pitcher or tumbler to a clock or lamp chimney is piled upon the earth. Closer inspection may reveal a small headstone marking an individual grave. In light of the meaning behind this clustered assortment, it seems a sacrilege to call them grave decorations, for they are an integral part of the belief system of the interred and those who buried them -- offerings to the deceased, yes, but much more. Like the ancient pharaohs, these dead must be given whatever they may need in the next world lest the spirit come back.

Antecedents for this funeral practice have a long history throughout West and Central Africa. Bosman observed earthenware images placed on top of the grave at Axim on the coast of modern Ghana in the early 1700s; the Ekoi of southeastern Nigeria buried devotees of the goddess Nimm under a stick framework with the belongings of the deceased suspended beneath. The Akan people of Ghana and the Ivory Coast honor their dead by placing on the grave pottery, wooden cooking vessels, and terra-cotta portraits. The deceased of the Yoruba today are often buried in the floor of the house and the site marked on an adjacent wall by an embedded china plate.

The most impressive use of objects on the grave comes from Central Africa. In 1884 Glave noted in the Congo that "natives mark the final resting place of their friends by ornamenting their graves with crockery, empty bottles, old cooking pots, etc., etc., all of which articles are rendered useless by being cracked or penetrated with holes." The image of death, the end of things within this world, is indicated by piercing the bottom of a porcelain mug to be placed on the grave. Whether in the Congo or in South Carolina, spiritual presence and surveillance can be summoned by placing on the surface of a tomb china figurines, pitchers, and mugs associated with the departed. To incise the lozenge-shaped Cosmogram, the horizontal line of the cross within a circle that divides the world of the living from that of the dead, upon the side of a terra- cotta grave marker cuts through the materiality of the objects treated and links them to their spiritual doubles, completing the circle of the sun within the kingdom of the dead.

Like the fountain which retains its form even as the drops of water change, Kongo art for the dead remains the same even as it incorporates new expressions in cloth, stone, or terra- cotta. Kongo tombs become ritual earthworks, conceptual doors to another universe, an intricate field of mediatory signs, materially simple but conceptually rich. The inverted bottles around a Kongo chief's grave make an enclosure or luumbu, transcending time and space, which shields the dead from outside forces and protects the living from the emanations of his power. Echoes of the concept of the tomb as a courtyard or enclosure are found in Carolina when shells mark the grave.

Shells have special meaning in the metaphysics of the Kongo people; they imply immortality through a pun, for *zinga* means both "spiral- form shell" and "to live long." In old days, they conceived of hiding the soul in shells; pressing them into the earth, they prayed: "When you leave for the sea, take me along, that I may live forever with you." Compare that with the words of a black woman from St. Simons Island, Georgia: "The shells stand for the sea. The sea brought us, the sea shall take us back. So the shells upon our graves stand for water, the means of glory and the land of demise." Moored like a transparent vessel through which the grasses of this Tidewater area penetrate, the circle of shells encloses a single broken axis of further shells and flowers. The inner axis is studded with signs of love (the flowers), stretching in a line to guide the spirit, with respect and honor, into the other world.

Those mirrors and other pieces of glass that glitter on top of the grave convey a similar symbolic meaning. Flashing mirrors and glass play a similar role on the graves of blacks in Africa and America. Taken from the dead man's house they hold the spirit at safe distance from the living. A lamp or fragment of a lamp chimney serves a symbolic purpose, for the Kongo lit bonfires on the grave to lead the souls of the departed into the next world.

The last objects used by the deceased are important because his last strength resides in them. To touch them is to receive powerful messages from the dead communicated in dreams; placing them on the grave grounds their awesome potentiality. As one resident of St. Helena explained, even the last drops of medicine remaining from a sick person should be allowed to drain into the earth above the grave to assure healing in the other world and avoid displacement of the spirit. A pipe for smoking or a water pipe also has a symbolic meaning. The stem of either one, found on graves on both sides of the Atlantic, serves to bridge two worlds, one through smoke and the other through water. In the land of the Kongo a tree planted on the grave is a symbol of immortality, for it continues to live even while its roots, moored to the earth, indicate the kingdom of the dead. In 1850 William Cullen Bryant, visiting South Carolina, noted that "a few trees, tailing with long moss, rise above hundreds of nameless graves" of blacks. Myriad examples exist today along the coast; a pine tree soaring from the middle of a grave equals the immortal spirit of the deceased. From a million graves rises a silent plea for understanding of a people, their burden, and their heritage.

The many currents that played upon the material culture of coastal South Carolina and Georgia for two centuries may never be distinguished. Examples cited here are indications, but certainly not proof, of any direct connection of any specific African region to the Low Country. Unless future research on both sides of the ocean uncovers comparable influences from the western bulge of the continent, it is a safe bet that the Congo- Angola area had an early, pervasive, profound, and lasting effect upon the artifacts of the Tidewater, as it did upon the lexicon and fundamental beliefs of its people.

The material culture of Africa was retained on the coast of Carolina and Georgia because this holdover of memories and talents was useful to blacks and whites alike. Objects with symbolic meaning and emotional impact for blacks, like the cross on quilts or grave- markers, beyond the comprehension of whites, gave added impetus to their survival. Like language and culture, artifacts were re- created in the Sea Islands from African sources, sometimes influenced by Native American crafts, and molded by the customs and economic needs of Europeans into something new and unique.

The events in the latter half of the twentieth century have brought further change to the sea islanders, often threatening their way of life.

Chapter 7 Revelations: From Darkness into Light

***Ain't you got a right to the tree of life?* - - Guy and Candie Carawan**

For generations the same peaceful way of life continued, filled with hard work but self- sufficiency and satisfaction. Fishermen flung their nets into creek and ocean to catch crabs, shrimp, and fish, and gathered oysters and clams. Farmers hoed the sandy soil to grow vegetables and cotton. Winter was the time for sewing clothes and quilts and mending nets. Evenings and weekends were ideal for the telling of folktales, for basket making, for song and dance, and for the expression of that religious faith and hope, which, like the Gullah speech itself, united the people and reflected their African heritage.

From Civil War to Civil Rights

After the upheaval of the Civil War and the changes of the Reconstruction era from 1865 through 1877, the Sea Islands experienced relative stability to the end of the century. Following the demise of rice and cotton cultivation, truck farming and tree farming arose in the area. Despite the migration of African Americans from the fields of the South to the cities of the North, beginning after World War I, the population of the Sea Islands remained rather stable and overwhelmingly black through the first half of the twentieth century. Even in the mid 1950s most natives remained on their local island. In a Charleston clinic where 19 out of 20 black patients interviewed by the author were born in the coastal tier of counties, 85 percent of their parents had also been born there, usually in the same small locality.

Yet the building of bridges and roads, beginning in the 1930s, led in time to commuting and erosion of the isolation that had produced a unique culture. Federal projects created more arable land, improved farming practices, and increased productivity, but pushed residents off the land and introduced a cash- based society. The shift from a barter to a money economy altered the culture and social structure of the Gullah people. More profound change followed the purchase of large tracts of land on Hilton Head Island for their timber in 1950. Entrepreneurs began to consolidate cheap land and "tax land" on the Sea Islands. Through family inheritance everyone had received a small portion of property; relatives who had moved to New York were offered a small cash settlement for their "heir rights." When tax values rose on waterfront property beyond the financial capacity of Gullah farmers, a "friendly corporation" would pay the tax, buy up the land, and force the natives to move. By 1980 whites outnumbered blacks on Hilton Head five to one. But as Beoku- Betts expressed it, "You can't move the culture and traditions from one area and plant it in another. You can't move Papa from here, sit him in the middle of Atlanta, and say, 'Make your cast net.'"

Between 1930 and 1980, even as the number of blacks on the Sea Islands increased, the percentage declined, especially after the 1950s and on the islands closest to the city. In 1930 on St. Helena, the most populous island, twenty- four out of every twenty- five people were black. But by 1980 with little change in the total number only three out of every five people there were black. Johns Island, further away from the city, tells a similar story; although its black population gradually increased, the percentage of the total fell from 87 to 43. On James Island, even though blacks more than doubled their number in that half century, their percentage of the total fell from 79 to 22 as so many white people settled in this area. By 1990, islands nearer Charleston were dramatically different in composition and appearance, although on Edisto and Wadmalaw and the area near McClellanville blacks still outnumbered whites more than two to one.

Where rice fields and shacks once dominated the low and level landscape, exclusive high- rise resorts are now surrounded by imposing walls. "No Trespassing" signs bar natives from the roads they once traveled. Developers threaten the fragile environment and the historic way of life of the black natives

who remain. Blacks who fed table scraps to their hogs or failed to remove junk from their yards have even been fined. The number of those weaving traditional baskets on the islands has declined as the needed sweetgrass has been killed by chemical pollutants, and those practicing folk medicine and speaking Gullah has decreased greatly in recent years.

Yet there is hope as natives have become more aware of their rights and opportunities, and new organizations seek to preserve their way of life. The South Carolina Coastal Conservation League and the Neighborhood Legal Assistance Program offer help on land use planning. The Sea Island Preservation Project, launched by Penn Center, trains residents to balance environmental protection and cultural preservation with responsible development. Saving a culture goes hand in hand with saving an ecology.

Political rights also go hand in hand with social and economic justice. During the twelve years of Reconstruction some blacks had achieved positions of prominence and power. But after Union troops left in 1877, white southerners regained control and established segregation of blacks by Jim Crow laws. Whereas the South Carolina Constitution of 1868 had given African Americans the largest political rights, the Constitution of 1895 was for the express purpose of taking them away. It effectively banned blacks from voting through literacy and property tests, and mandated separate schools. There were two sets of everything from churches and schools to restaurants and drinking fountains based on skin color throughout the state and the South.

Septima Clark, a black woman born in Charleston in 1898, was a major driving force in changing that. When she was fired as a school teacher in 1955 for belonging to the NAACP, she discovered Highlander School in Tennessee that was concerned with African Americans, and soon began training others in passive resistance to racial barricades. In 1957 she and Esau Jenkins began a citizenship education school on Johns Island to involve black people in the political process. With patience and persistence, despite threats and attempted bribes, they promoted literacy and voter registration, making blacks aware of their rights and potential power. The training of school teachers spread throughout the south, a spearhead of the civil rights movement. When the folksinger Guy Carawan came to Johns Island in 1959, he was immediately impressed with the cultural heritage of the sea islanders, especially their music. Spirituals, folk tales, and game songs performed by the Moving Star Hall Singers were spread over the country in person and by recordings. The song "Keep Your Hand on the Plow" evolved into "Keep Your Eyes on the Prize," a spiritual that became one of the great inspirational themes of the civil rights movement of the sixties. As the title of Carawan's book of pictures and quotations from the people of Johns Island expressed it, "*Ain't You Got a Right to the Tree of Life?*"

The Sea Island Comprehensive Health Care Corporation grew out of the Rural Mission and Progressive Club started by Esau Jenkins. Through clinics in the Sea Islands and those at the Medical University of South Carolina in Charleston, African Americans are enjoying better health care today, a major building stone in the quality of life. As more people survive the pestilences of the past that slaughtered so many in their prime, chronic diseases of maturer age take their deadly toll. Not long ago heart disease conjured up a picture of the hard- driving white male, but with changing lifestyles and an aging population, mortality from cardiovascular illness has risen dramatically, especially among blacks and females. The Charleston Heart Study, following 2,283 adults for thirty years, showed no significant difference in death rates between the races; among women only, blacks actually had a somewhat greater mortality and higher systolic blood pressure than whites.

The picture from Africa is revealing. Nigerian women have more “apple- shape” obesity, with big waists, than their African American counterparts, but without the elevated systolic blood pressure of U.S. blacks. Cardiovascular disease there has been rare- - until recently. With changing lifestyles, with greater stress and high fat diets, these diseases are on the increase. They are low in rural areas, where people retain tribal customs, and high in the city, where western ways are adopted. Perhaps

Americans can learn something from Africans. Ongoing research at the Medical University of South Carolina also sheds light on such ethnic diseases such as diabetes and osteoporosis. Greater awareness of life- threatening factors, wider education, better facilities, early intervention, better diet, improved lifestyles, and race relations that minimize stress can increase health and longevity for the sea island people and for all African Americans. Good health requires a sound mind as well as a sound body. Vital ingredients include independence, self esteem, and confidence, with hope for the future and pride in the heritage of the past.

The African Heritage

From countless villages they came, speaking dozens of tongues, from the banks of the Gambia River through the forests of the Congo. Usually young, chained and frightened, they were thrust into the hold of a crowded, stinking slave ship and brought four thousand miles to the shores of Carolina and Georgia, directly or through the West Indies. Over two hundred thousand in all came to labor in the fields, shops, and homes of an alien land. With them came skills and memories, beliefs and practices of their homeland. They learned to adapt to strange ways, preserve yet modify their speech and customs, and shape new materials to their own needs and those of the masters. Isolated on large plantations with little migration, most blacks on the sea islands retained their biological and cultural heritage. Rice, that dominated and characterized South Carolina from the late eighteenth to the mid nineteenth century, was one of many crops that illustrates America's debt to Africans, for slaves were imported for their experience in growing it, especially from Sierra Leone.

The Gullah language, marked by unique intonation and rhythm as well as syntax and lexicon from African languages and English, remains the most characteristic feature of the sea islanders. The African emphasis upon kinship persisted in the New World to provide social and economic strength and the Old World love of communal living. Religion, clothed in Christianity, retained ancient African gods, faith, and practices, to provide the strongest possible spiritual support. Baptism in the river united the initiate with ancestors and nature spirits of the past as well as the society of the present. The funeral must insure that no troubled ghost of the deceased returns to haunt the living. Both the joy and the sorrow of life were celebrated in music. Like their African forebears, the sea island people expressed rhythm in their singing and dancing, often tied to religious ecstasy as in the ring shout. The spiritual, born of the Biblical hope of freedom and salvation, brought out the finest timbre of the African voice and enriched American music. Folklore of the Sea Islands, re- created with gestures before a responsive audience, preserved African memories, relieved the monotony of slavery, and permitted a sly jab at white masters.

The African feel for texture, familiarity with natural materials, pride of workmanship, improvisation, and necessity combined in the Low Country to produce creative crafts: baskets, quilts, ceramics, wrought iron, wood, and boats. Nowhere is African belief better expressed than in those varied objects of broken glass and shells placed upon the grave that shield the deceased and return his spirit to his gods and forebears.

The cultural traits most retained, although modified, in the sea islands were faith and feelings which promoted survival and did not conflict with the demands of white masters; they were best expressed in the bonds of the extended family, in religion and magic, in music and folklore. The language and culture that developed in the Sea Islands were more than retention, more than a mixture, but a creative synthesis borne of memory, necessity, and improvisation in a new environment. With it all, the people preserved an indomitable spirit that was never crushed by labor or lash, by poverty or prejudice. The flame that flickered never died out and lives on today along the coast. Blacks also had a continuing effect on whites on the Sea Islands as they did throughout the South. Along with gene flow went the influence of African Americans on the speech and culture of European Americans. Throughout the years of slavery and beyond, through house servants especially, whites derived some African heritage as blacks derived a European one. White children, brought up by black mammies,

absorbed stories and songs from Africa along with cuisine, affection, discipline, manners, and a deference to elders. Health involves more than the body.

As essential as good genes, nourishing food, and freedom from microbes are, health also rests upon the human spirit. Belief is vital for healing. The wisdom of ancient Africa continues to play a significant role in the lives of the sea islanders. Their courage, grace, and dignity, molded through years of hardship and the vicissitudes of life, give the Gullah people strength.

The sea islanders of today are threatened by the ever- increasing pace of modern life with its economic demands. They are not a museum piece, relics of the past, but rather survivors of enslavement, bondage, discrimination, and white privilege, fellow human beings entitled to work out their own destiny. Hopefully the best of sea island life, language, customs, and values can be preserved, even as the people take advantage of new opportunities and move into mainstream America.

The Gullah people can cherish individual differences and take pride in a unique heritage beneath the umbrella of our common humanity. They will then have the best of both worlds- - and set an example for others. The sea islands will then become more than the "see islands" for tourists; the Tidewater will reach its flood tide; and the Low Country will become the High Country of the African American experience.

Appendix E: *The Gullah of South Carolina: A Bbliography of Materials on the Gullah People* by Roslyn Saunders

"heap see, but few know"
This bibliography is dedicated to the few who know.

Introduction

The histories and cultures of the Gullah people have fascinated non- Gullahs for more than two hundred years. An early reference to Gullah as a description of African Diaspora enslaved people in the colonies was used before 1800. The Gullahs have been studied, restudied, and studied again. Their language, stories, spiritual beliefs, foods, music, and life patterns have been analyzed, criticized, and romanticized. The Gullah people I spoke to in the compiling of this book were amazed at the identifiers used to tell them who they were, are, and will be in the future. They were less than impressed with "those in authority" claiming to understand them, be sympathetic toward them, help them understand their own culture, and dictate how Gullah should be preserved for future Gullah generations.

The Gullah people know their language and culture are unique and yet there are variations from location to location. Each rice and cotton plantation was an isolated island where African words, techniques in cultivation, crafts, and/or daily life had minor differences. The Gullah embrace these differences and do not claim nor do they want anyone else to label them as the same from one region to the next.

The Gullah know that rarely have the benefits gained from studying them returned to their community. They are a people who know where they came from, where they are today, and where their culture is evolving to. I'm not sure if the outside world knows as much as it thinks it knows about these people. The memories of enslavement, the "big gun shot" of the Civil War, the years of threats and intimidation experienced after the Civil War called Reconstruction, as well as today's resort development along the coast have had an impact on them. They see again the use of threats and intimidation to get their land and rearrange their culture to benefit non- Gullah people.

They have "circled their wagons" and are looking inward to preserve their culture and heritage. They are the Gullah stayed in the coastal communities and those who have returned from the cities with college and university degrees to reclaim their identity.

The Gullah have begun to document and tell their own story from their cultural point of view. The Gullah are no longer willing to tolerate being told who they are. They are their own future and they will determine how that future evolves.

Preparation of this bibliography was made possible by the National Park Service.

Acknowledgments

A book is a pestering experience, it is going back and forth to identify, research, document, and verify information. It is necessary to ask numerous questions. Librarians and library assistants are asked to provide their time, attention, knowledge, and assistance to one person who is trying to bring an idea into reality. I asked and was fortunate enough to have been graciously given time, attention, knowledge, and assistance.

I would like to thank James Carolina, Georgetown County Library and Dennis Adams, Beaufort County Library for their help above and beyond what was required of them.

Thank you to Jane Brown at the Waring Historical Library at the Medical University of South Carolina for researching diseases affecting Africans in America, Marquetta Goodwine and Jarcee of the Gullah/Geechee Sea Island Coalition, the staff at the South Carolina Historical Society, the Library Society of Charleston, and Charleston County Library for their help in providing information and resources.

To Tony Paredes, thanks. Tony is, Dr. J. Anthony Paredes, Chief Ethnographer, Southeast Region, National Park Service, Project Director for the book. When Tony asked me to research and compile the information about Gullah people in South Carolina neither of us realized how much had been done. The project which was supposed to take less than six months took a year. It stopped, not because there wasn't more which could have been added to the book, but, because we had to put an ending time on the report.

To all those, not named but remembered, who gave supportive words of encouragement thank you.

How this work came together

The time period for the collection of information for the book is after the Civil War during the 1860s to present day. This timeframe was chosen by Tony Paredes because it represents the most prolific period of information written and collected about the Gullah people. However, there are references listed in the book to Gullah prior to the Civil War. This was done because some of the materials are foundations upon which research that came afterward was based.

Using the Post Civil War timeframe and South Carolina coastal region as my primary parameters I compiled information in as many formats as I could find and from as many sources as I could identify. Public libraries in South Carolina contain vast quantities of materials about the Gullah. The South Carolina state library, and Georgetown, Charleston, and Beaufort county libraries are invaluable resources. Public libraries outside of South Carolina include the Library of Congress and the New York Public Library Schomburg Center for Research in Black Culture are also resources.

I researched repositories which have information about the Gullah. The repositories were good sources for personal papers of people who had personal contact with Gullah people. People who had grown up on plantations where they played with Gullah children and or people who had lived in households where their parents employed Gullah men and women in a variety of jobs. Many of these papers contain stories stated as told by and in Gullah traditions. Stories, plays, poetry, and music containing characters using the Gullah language appear in these papers. All of the material - structure, spelling, format, and creation - are written by non- Gullah people. Sites on the Internet can be accessed via the libraries, as well as keyword searches using - the word Gullah; South Carolina history, lowcountry, and or slavery; rice plantation; or South Carolina Sea Islands.

Books, personal and family papers, articles in periodicals, films, audio and video tapes of events important in the lives of the Gullah people, and the many doctoral and masters papers focusing on various components of the lives of Gullah people are identified.

This collection is not complete. It is a guide to what is out there and should be used as a starting point. I annotated as many of the books as I could locate. In each section at least some of the material is annotated. Many of the books were written years ago and are difficult to locate. I have included them because a researcher can, with time and patience, track down the books. Since the major categories contain books of related content those books not annotated are important because they are a part of the larger reference base.

How to use this bibliography

This book is a resource guide of major categories. It is a road map to books, resources, and places where information about the Gullah people can be found. As a resource it is set up on a major heading concept. For example crafts do not indicate which crafts and if the crafts were building related, or food gathering, or creation of products to be sold along the roadside. The researcher will be required to follow the same procedures used in searching any data base. Beginning with the general heading and moving step by step to the specific reference he or she is looking for.

In the books category I annotated as many of the books as I could. However, the cookbooks were not annotated because I felt they needed to be explored and discovered on their own. Some of the books could have been placed in several categories, such as Margaret Washington Creel's *A Peculiar People*. To lessen the need for multiple listings the category History & Culture was used. Books in this category include components such as early African Diaspora history, economics of enslavement, family, lifestyle, and music; South Carolina history and the interrelationship to African history; and books outside of the general categories listing other books.

Books

Included in books are a range of topics. I have not attempted to cross- reference any of the books. I choose to put them in the first major category listed in the Library of Congress publication and identification listing. The person using this guide will need to either have a working knowledge of what he or she is looking for or be diligent enough to locate several sources in the guide and use them as a starting point. The key word concept used in any research project will be very helpful in using the guide.

The categories contain from one to many books depending on the references found and if they met the guidelines for time and contribution to the knowledge base about the Gullah people.

There have been numerous books of fiction written about the Gullah. I choose not to include the majority to them because they were written about the people not by the people. The books were written in a time when romanticizing about the "happy slave/servant" was necessary to maintain the illusion of everyone being in their "appropriate" place.

The two books I did include, *Brown Jackets* and *Old Mitt Laughs Last* do contribute to the larger understanding and knowledge of the Gullah people living on the coastal islands and their role as they saw it in the larger world.

Anecdotes

Information given by members of a community whose individual and collective memories still include experiences of enslavement are more than likely to be what the person listening wants to be told. The community person sees the arrangement as a matter of survival and truth, whatever it is, is best left discussed within the privacy of the community.

Verdier, Eva L.
1932 "When Gun Shoot": some experiences while taking the census among the low country Negroes of South Carolina. Charleston, SC: No Publisher Listed
Verdier chronicled some of her observations and experiences as she went through the Negro community. She recorded information given her by community people.

Art

Art has always been attributed to the African. However, it was not art that represented western cultural concepts. It was primitive, dangerous, and savage and represented a people and mindset best controlled by those more civilized and more attuned to a higher order.

Jonathan Green has taken his culture and interpreted it to the larger world. He gives that world a larger picture of the Gullah of his community. Robert Thompson puts the African/African American art in a historical and cultural context. These people were who they were and had a strong basis in art as an interpretation of their place in the universe. They had, as did all people, a system of beliefs of how, when, why, and for what purpose the universe was created and arranged and where they fitted in that arrangement.

Green, Jonathan
1996 *Gullah Images: The Art of Jonathan Green*. Columbia, SC: University of South Carolina Press
Green brings to his work the Gullah culture he was born into and grew up with. The themes of his art represent the lives of the people on the islands and along the coast of South Carolina.

Thompson, Robert F.
1983 *Flash of the Spirit: African and Afro- American Art and Philosophy*. New York, NY: Vintage Books
In this book Thompson sets the frame of reference for looking at African art and beliefs from their beginnings in western regions of Africa to their transmigration to the western hemisphere.

Biography

Robert Smalls began as a slave and became a larger than life historical figure. He was a visionary, statesman, educator, and leader. Smalls was probably not the only leader among a people emerging from enslavement; he was the one whose life was told in all its vastness.

Miller, Edward A.
1995 *Gullah Statesman: Robert Smalls from Slavery to Congress, 1839- 1915*. Columbia, SC: University of South Carolina Press
The story of Robert Smalls during and after the Civil War is told; from his commandeering a Confederate ship, “The Planter”, and sailing it out of Charleston harbor to his election to the United States Congress.

Cook Books: Food

Foods are one of the most important parameters for defining a culture. It is also one of the least studied parameters for telling the history and interactions of and across cultural lines. The Africans who survived the Middle Passage came will little but their knowledge of where they came from and on occasion plants and seeds they had grown and eaten.

The planter’s table set the standard. Each planter had his own cook - - enslaved African women who cooked for the planter, his family, friends, and guests - - in addition to other plantation cooks. The planter’s table was so important he measured his standing within the community of planters by the array and elaborateness of the foods and the number of guests at the table. All others within the European/American community - - non- planters, merchants, businessmen, tradesmen, workers - copied as closely as they could the patterns of the planters in each region. The foods included items introduced from the Native people whose land this was and from the foods and traditions of western African peoples.

Southern cooking is the infusion of foods, traditions, and African women unknowingly creating a style that is today identified with the south and yet not credited to the people who brought it to life.

Burn, Billie
1991 *Stirrin' the Pots on Daufuskie*. Spartanburg, SC: The Reprint Company

Carter, Danella
1995 *Down- home Wholesome: 300 Low- fat Recipes from a New Soul Kitchen*. New York, NY: Dutton

Geraty, Virginia M.
1992 *Bittle en' t'ing': Gullah Cooking with Maum Chrish*. Orangeburg, SC: Sandlapper Publishing

Hess, Karen
1992 *The Carolina Rice Kitchen: The African Connection*. Columbia, SC: University of South Carolina

Nesbit, Martha G.
1996 *Savannah Entertains*. Charleston, SC: Wyrick & Company

Rhett, Blanche
1976 *Two Hundred Years of Charleston Cooking*. Columbia, SC: University of South Carolina Press

Smart- Grovenor, Vertamae
1970 *Vibration Cooking*. New York, NY: Ballantine Books

Viola, Herman J. and Carolyn Margolis, ed.
1991 "Savoring Africa in the New World" in *Seeds of Change*. Washington, DC: Smithsonian Institution Press

Crafts

Africans brought a myriad of skills and knowledge to the colonies in the western hemisphere. The recognition given to African contributions to the building of the plantations has been uneven. It has ranged from total denial to limited acknowledgment to some contribution within a European base of acceptance. The belief that all knowledge and cultural information traveled from Europeans to Africans is still very well rooted in the larger society and among some members of academia.

Chase, Judith W.
1971 *Afro- American Art and Craft*. New York: Van Nostrand
Chase presents a detailed accounting of skills of Africans in America and the history of those skills from their African roots.

Day, Greg
1977 *South Carolina Low Country Coil Baskets*. Charleston, SC: The Communication Center, South Carolina Arts Commission

Tobin, Jacqueline L. and Raymond Dobard
1999 *Hidden in Plain View: The Secret Story of Quilts & the Underground Railroad*. New York, NY: Bantam Books
"Hidden in Plain View" is based on a story told to Tobin by Mrs. Ozella Williams. It is one story on the Underground Railroad of how quilts were used to carry messages and information from and to people who were oral in tradition and forced to remain unlearned.

Fleetwood, William C.
1995 *Tidecrafts: The Boats of South Carolina, Georgia, and Northern Florida, 1550- 1950*. Tybee Island, GA: WBG Marine Press
Boats, boat- building, and the cultural influences that determined their construction are presented. Drawings, maps, and reproductions of advertisements are included in the book.

Rosengarten, Dale
1994 *Row Upon Row: Sea Grass Baskets of the South Carolina Lowcountry*. Columbia, SC: University of South Carolina Press.
This exhibition catalog is from a traveling exhibit done on the history of sweet grass baskets made by African American men and women in the lowcountry. Extensive photographs illustrate the variety, beauty, and uniqueness of the American version of an African tradition.

Vlach, John *M.*
1990 The Afro- American Tradition in Decorative Arts. Athens, GA: The University of Georgia Press
An extensive and detailed historic account of the contributions of African Americans to the decorative arts in the United States is presented.

Dictionary

The Gullah language was a living language, as are all languages. It was not and has not remained an unchanging system of communication. The language varied slightly from plantation to plantation and from island region to island region. Gullah spoken in the cities of Brunswick, Charleston, Georgetown, Savannah, and Wilmington varied from the Gullah spoken on the surrounding plantations and among the various cities. Today the language still contains the variations which identify its origin and specific cultural ties.

Geraty, Virginia M.
1997 *Gullah fuh Oonuh: A Gullah English Dictionary*. Orangeburg, SC: Sandlapper Publishing Co.
A dictionary of the Gullah language as heard on Yonges Island, South Carolina. The dictionary gives the word, its pronunciation, a use in a Gullah sentence, and the sentence translated into English.

Education

For the Gullah people their education has been from the perspective of people other than themselves. That is beginning to change. And the change is causing much controversy. The Gullah are beginning to tell the world who they are.

Brown, Thomas J. and Kitty Green
1998 *Lessons Learned From the Gullah Experience: Powerful Forces in Educating African- American Youth*. Columbia, SC: Brown Publishing

South *Carolina Department of Education*
1994 African Americans and the Palmetto State. Columbia, SC: SC Department of Education
This social studies text done for middle schools begins in the Middle Passage and comes into the mid- 1990s focusing on the contributions of African Americans in South Carolina's history.

Fiction

In the original concept of the book fiction was not to be included because fiction was not thought of as relevant to a scholarly collection of materials about the Gullah. Much has been written about the Gullah as I stated earlier without their consent, input, or whether the information was factual to the actual lives of the Gullah.

I chose to include these two books because their stories were germane to the complexity of African American Gullah society in this country and the impact of that complexness on the members of the Gullah community.

Heyward, Janie S.
1923 *Brown Jackets*. Columbia, SC: The State Company

Puckette, Clara C.
n. d. *Old Mitt Laughs Last*. New York, NY: The Bobbs- Merrill Company

Herbals, Medicines, Healing Practices

The use of herbal practices has been used to define the primitive nature and inherent backwardness of the African American. African Americans were required to maintain their own health after the Civil War and into the twentieth century because medical treatment by European American doctors was limited at best and non- existent in most regions throughout the country for them.

Edelstein, Stuart J.
1986 *The Sickled Cell: From Myths to Molecules*. Cambridge, Massachusetts: Harvard University Press

Fields, Mamie
1983 *Lemon Swamp and Other Places*. New York, NY: MacMillian Publishing

Lewis, Roger A.
1970 *Sickle States: Clinical Features in West Africans*. Accara, Ghana: Ghana Universities Press

Mitchell, Faith
1998 *Hoodoo Medicine: Gullah Herbal Remedies*. Summerhouse Press

Pinckney, Roger
1998 *Blue Roots: African American Folk Magic of the Gullah People*. Llewellyn Publications

History and Culture

African American history and culture throughout the sea islands is still being explored. The books listed below date from late Civil War period to the 1990s. The topics include slave songs and music, time as a component of existence, religion, the continuum from Africa to coastal South Carolina and if where and how Africans in South Carolina maintained their Africanisms, women and their roles, and the evolution of the culture of Gullah people.

Adjaye, Joseph K.
1994 *Time in the Black Experience*. Westport, Conn: Greenwood Press

Afrika, Llaila O.
1989 *The Gullah*. Beaufort, S. C.: The Author

Allen, William F. and Charles P. Ware and Lucy Garrison
n. d. *Slave Songs of the United States*. Bedford, MA: Applewood Books
First printed in 1867 as a collection of slave songs sung in the southeastern states and northern seaboard slave states.

American Bible Society
1994 *De Good Nyews Bout Jedus Christ Wa Luke Write*. New York: American Bible Society
The Gospel of Luke is told in Gullah. Beside the Gullah is the King James English text.

Ames, Mary
1992 *"She Came to the Island": A New England Woman's Diary in Dixie in 1865*. Edisto Beach, S. C.: Sea Side Services

Ashe, Jeanne M.
1982 *Daufuskie Island: A Photographic Essay*. Columbia, S. C.: University of South Carolina Press
Using photographs Ashe explores the people and places of Daufuskie Island. The book becomes more important because of the major changes that have and are occurring on what many have called the last of the unspoiled low country sea islands.

Ball, Charles
1969 *Slavery in the United States*. Miami, FL.: Mnemsyne Publishing

Billington, Ray A.
1981 *The Journal of Charlotte L. Forten*. New York: W. W. Norton
Forten's journal begins with her school days in Salem, Massachusetts. She was a free black from Philadelphia who was determined to make an impact on the world of slavery. She traveled to South Carolina to participate in an experiment - teaching newly- freed slaves to read and write.

Black, Gary
1974 *My Friend the Gullah: A Collection of Personal Experiences*. Columbia, S. C.: R. L. Bryan

Boyle, Christopher C. and James A. Fitch
N. D. *Georgetown County Slave Narratives*. Georgetown, S. C.: Rice Museum
These narratives compiled during the 1930s by writers for the Works Project Administration are from elderly freed men and women who had been enslaved. They speak of enslavement from the distance of time and memories.

Breen, Thomas H.
1976 *Shaping Southern Society: The Colonial Experience*. New York: Oxford University Press

Bresee, Clyde
1986 *Sea Island Yankee*. Chapel Hill, NC: Algonquin Books

Burn, Billie
1991 *An Island Named Daufuskie*. Spartanburg, SC: The Reprint Company

Carawan, Guy and Candi Carawan
1989 *Ain't You Got a Right to the Tree of Life? The People of John's Island, South Carolina, Their Faces, Their Words and Their Songs*. Athens, GA: University of Georgia Press
The Carawans explore the people and their music. The importance of the music in the daily lives of the people and how and why these musical forms should be preserved.

Coclanis, Peter A.
1989 *Economic Life & Death in the South Carolina Low Country: 1670-1920*. New York: Oxford University Press

Conroy, Pat
1972 *The Water is Wide*. Boston, MA: Houghton Mifflin

Cooley, Rossa
1926 *Homes of the Free*. New York: New Republic

1970 *An Adventure in Rural Education*. New York: Negro Universities Press

Cornelius, Janet D.
1991 *When I Can Read My Title Clear*. Columbia, SC: University of South Carolina Press
Cornelius provides an in- depth study of African American urge to educate themselves and their children. The importance enslaved and freed people placed on literacy and how they viewed knowing how to read and write impacted religious and political issues.

Creel, Margaret Washington
1988 *"A Peculiar People" Slave Religion and Community- Culture among the Gullahs*. New York: New York University Press
Creel's book begins in Africa where the roots of the Gullah cultures grew, intertwined, and crossed the water with the enslaved people. Creel goes on to bring together the different West African and Western European beliefs on the plantations in the Sea Islands. The struggles among differing philosophies, control and dominance of European over African in Christian beliefs, and the transformation of the religious convictions.

Crum, Mason
1940 *Gullah: Negro Life in the Carolina Sea Islands*. Durham, NC: Duke University Press

1968 *Gullah: Negro Life in the Carolina Sea Islands*. New York: Negro Universities Press

Dabbs, Edith M.
1970 *Face of an Island*. Columbia, SC: R. L. Bryan
1983 *Sea Island Diary: A History of St. Helena Island*. Spartanburg, SC: Reprint Company

Frey, Sylvia R.
1991 *Water From The Rock: Black Resistance in a Revolutionary Age*. Princeton, NJ: Princeton University Press
In detailing Africanisms retained in the south Frey includes housing patterns, music, communal values, marriage forms, patterns of slave resistance, and linguistic derivations among the Gullah people.

Georgia Writers' Project
1940 *Drums and Shadows: Survival Studies Among the Georgia Coastal Negroes.* Athens, GA: University of Georgia Press
"Drums and Shadows" documents Africanisms and Americanized Africanisms of people who lived along the Georgia coasts in the 1930s. As late as 1858 Africans were still being brought into coastal Georgia and sold. With these people came their languages, traditions, and customs that were passed along to their children and grandchildren. *Drums and Shadows* documents existing customs that survived.

Gomez, Michael A.
1998 "Societies and Stools." In *Exchanging Our Country Marks: The Transformation of African Identities in the Colonial and Antebellum South*. 88 - 113. Chapel Hill, NC: University of North Carolina Press
The alteration of African people, their cultures, histories, and customs occurred as they were forced through a transformation instituted by others. Gomez explores the myriad of African people who came to this country and the diversity they brought with them.

Goodwine, Marquetta L.
1995 *Gullah/Geechee: The Survival of Africa's Seed in the Winds of the Diaspora*. Brooklyn, NY: Kinship Publications
This is volume one of story of the Gullah people on St. Helena Island. The cultures and people who had been forced to come together on slave marches and in slave castles in west Africa and the society they formed on this sea island.

1997 *Gawd Dun Smile Pun We: Beaufort Isles*. Brooklyn, NY: Kinship Publications
Goodwine's second volume in a series chronicling the history and culture of the Gullah people of Beaufort and St. Helena Island area of South Carolina.

1999 *Frum Wi Soul Tuh de Soil Cotton, Rice, and Indigo*. Brooklyn, NY: Kinship Publications
The history of cotton, rice and indigo cultivation on the Sea Islands are told in this volume. These three cash crops were the reasons for immense numbers of enslaved Africans being brought to the coastal regions of South Carolina and Georgia. Goodwine's books tell the stories of these people, the enslaved Africans, and how, using their technology and skills brought forth abundant crops which in turn created great wealth for the planters who owned them.

Goodwine, Marquetta L. and Clarity Press Gullah Project, ed.
1998 *The Legacy of Ibo Landing: Gullah Roots of African American Culture*. Atlanta, GA: Clarity Press
A collection of fact and fiction essays: scholarly articles about art, history, folklore, foods, and lives of the Gullah/Geechee people and their traditions on the sea islands.

Graydon, Nell S.
1986 *Tales of Edisto*. Orangeburg, SC: Sandlapper Publishing

Hawks, Esther H.
1984 *A Woman Doctor's Civil War: Esther Hill Hawks' Diary*. Columbia, SC: University of South Carolina

Hayes, James P.
1978 *James and Related Sea Islands.* Charleston, SC: Walker, Evans and Cogswell Company

Holland, Rupert S.
1912 *Letters and Diary of Laura M. Towne*. New York: Negro Universities Press

Holloway, Joseph E.
1991 *Africanisms in American Culture*. Bloomington, IN: Indiana University Press

1993 *The African Heritage of American English*. Bloomington, IN: Indiana University Press

Holmes, Jean E.
1992 *Mornin' Star Risin'*. Boise, ID: Pacific Press

Holmgren, Virginia C.
1986, c1959 *Hilton Head: A Sea Island Chronicle*. Easley, SC: Southern Historical Press

Hudson, Larry E.
1994 *Working Toward Freedom: Slave Society and Domestic Economy in the American South.* Rochester, NY: University of Rochester Press

Jacoway, Elizabeth
1980 *Yankee Missionaries in the South: The Penn School Experiment*. Baton Rouge, LA: Louisiana State Universit

Johnson, Guion G.
1969 *A Social History of the Sea Islands with Special Reference to St. Helena Island, South Carolina*. New York: Negro Universities Press

Johnson, Guy B.
1930 *Folk Culture on St. Helena Island, South Carolina*. Chapel Hill, NC: University of North Carolina Press

Jones, Katharine M.
1960 *Port Royal Under Six Flags*. Indianapolis, IN: Bobbs- Merrill

Jones- Jackson, Patricia
1987 *When Roots Die/Endangered Traditions on the Sea Islands*. Athens, GA: University of GA Press
Social history and organization are discussed through structure, economy, and demography. Jones-Jackson helps the reader to understand the spirit of the Gullah people living along the coast of South Carolina and Georgia. Their identification of who they are can be drawn from the language, stories, food, customs, and connections to the land.

Joyner, Charles
1984 *Down by the Riverside: A South Carolina Slave Community*. Urbana, IL: University of Illinois Press
Joyner uses a plantation in Georgetown County, South Carolina to tell the story of Gullah people on a rice plantation at the height of the rice culture. African rice growing technology, cultural ways, language, and customs give insight into a complex society functioning within a framework of enslavement and desperation.

Kinlaw- Ross, Eleanor
1996 *Dat Gullah and Other Geechie Traditions*. Atlanta, GA: Crick Edge Productions

Leland, Elizabeth
1992 *The Vanishing Coast*. Salem, NC: John F. Blair

Littlefield, Daniel C.
1981 *Rice and Slaves: Ethnicity and the Slave Trade in Colonial South Carolina*. Baton Rouge, LA: Louisiana State University
Littlefield's book is an excellent beginning for those wanting to learn about the enslaved African people who were brought to South Carolina and Georgia. These people were captured and brought for their knowledge of rice growing and also for their skills and knowledge of carpentry, boat building, masonry, seafaring, animal husbandry, and the necessary knowledge to survival in this region.

Martin, Josephine W.
1977 *"Dear Sister"; Letters Written on Hilton Head Island, 1867*. Beaufort, SC: Beaufort Book Company

Nichols, Elaine, ed.
1989 The Last Miles of the Way: African American Homegoing Traditions 1890- Present. Columbia, SC: Dependable Printing Company
The Last Miles of the Way looks at the traditions of death and dying in the sea islands of South Carolina. Honoring the ancestors, mourning, burial practices, and the African concepts of time and eternity are discussed.

Opala, Joseph A.
1987 *The Gullah: Rice, Slavery and the Sierra Leone- American Connection*. Freetown, Sierra Leone: United States Information Service
Opala looks at the Gullah from their African connection. The Krio language spoken in Sierra Leone and the Gullah language along the coast of South Carolina are compared and connected.

Parrish, Lydia A.
1942 Slave Songs of the Georgia Sea Islands. Hatboro, GA: Folklore Associates

Pearson, Elizabeth W., ed.
1969 *Letters From Port Royal 1862- 1868*. New York: Arno Press

Pollitzer, William S.
1999 *The Gullah People and Their African Heritage*. Athens, GA: University of Georgia Press
The Gullah People is a comprehensive study. Pollitzer examined who these people are - their story, their origin, their creations, and their legacies. The history, culture, language, social customs and interchanges of this country were and are part of the Africanisms brought over by enslaved people.

Puckette, Clara C.
1978 *Edisto, A Sea Island Principality*. Cleveland, OH: Seaforth Publications

Robinson, Carline S. & William R. Dortch
1985 *The Blacks in These Sea Islands: Then and Now*. New York, NY: Vantage Press

Rose, Willie Lee
1964 *Rehearsal for Reconstruction: The Port Royal Experiment*. New York: Vintage Books
Rose looks at the events that occurred in the sea islands of South Carolina and north Georgia. About seven months into the Civil War according to Rose the Experiment began. Rose describes its purpose- to provide an organization which would work with the thousands of freed, escaping, and still enslaved African Americans leaving and still on plantations. She also looks at the diversity of cultures of these enslaved people on the various plantations and the African roots of the variations.

Simms, Lois A.
1992 *Profiles of African American Females in the Low Country of South Carolina*. Charleston, SC: College of Charleston

Sterling, Dorothy
1984 *We Are Your Sisters: Black Women in the Nineteenth Century*. New York: W. W. Norton & Co.
Sterling discusses African American women and their roles, functions, and places before, during, and after the Civil War. References to South Carolina Gullah women, stories, sea island history and culture, and historic figures such as the Grimkes are documented.

Stuckey, Sterling
1987 *Slave Culture: Nationalist Theory and the Foundations of Black America*. New York: Oxford University Press

Terry, George D. and Lynn R. Myers
1985 *Carolina Folk: the Cradle of a Southern Tradition*. Columbia, SC: University of South Carolina
An exhibition catalog of crafts- clay, baskets, metalwork, wood, quilts, and furniture in NC and SC.

Thornbough, Margaret
1972 *Black Reconstructionists*. Englewood Cliffs, NJ: Prentice Hall

Tindall George B.
1952 *South Carolina Negroes 1877- 1900*. Columbia, SC: University of South Carolina Press
Tindall details the history of Negro South Carolinians during the period of extreme poverty, racism, lack of educational, political, and economic opportunities. A bleak picture of the conditions under which African Americans lived after the Civil War is described through narratives and direct quotes.

Trinkley, Michael, ed.
1986 *Indian and Freedmen Occupation at the Fish Haul Site, Beaufort County, SC.* Columbia, SC: Chicora Foundation

Turner, Lorenzo D.
1949 *Africanisms in the Gullah Dialect.* Chicago, IL: University of Chicago Press

Twining, Mary A. and Keith E. Baird
1990 *Sea Island Roots: African Presence in the Carolinas and Georgia,* Trenton, NJ: Africa World Press.
A collection of articles from Gullahs and non- Gullahs about folklife and folklore on the sea islands. Childbirth, baskets, growing up naming patterns, Christmas Watch and changing agricultural patterns are some of the life in a variety of ways presented.

Weatherford, W. D.
1969 *The Negro from Africa to America*. New York: Negro Universities Press

Whaley, Marcellus S.
1925 *The Old Types Pass; Gullah Sketches of the Carolina Sea Islands*. Boston, MA: The Christopher Publishing House

Wood, Peter H.
1974 *Black Majority; Negroes in Colonial South Carolina from 1670 through the Stono Rebellion*. New York: Random House
In chapter VI, "Gullah Speech: The Roots of Black English" Wood looks at the important of language and the development of a common language among Africans in America. He discusses African groups as "immigrants" and as having similarities to other groups of "immigrants" coming to this country.

Woofter, Thomas J.
1930 *Black Yeomanry: Life on St. Helena Island*. New York: Holt & Company

Wright, *Roberta H.*
1992 A Tribute to Charlotte Forten 1837- 1914. Detroit, MI: Charro Book Company

Language and Dialect

The depth to which African American language and speech patterns have and are being studied is astounding. Why?

Bailey, Guy, with Natalie Maynor and Patricia Cukor- Avila
1991 *The Emergence of Black English: Text and Commentary*. Philadelphia, PA: J. Benjamin Co.

Bernstein, Cynthia, with Thomas Nunnally and Robin Sabino, ed.
1997 Language Variety in the South Revisited. Tuscaloosa, AL: University of Alabama Press

Cassidy, Federic G.
1986 *Some Similarities Between Gullah and Caribbean Creoles in Language Variety in the South: Perspectives in Black and White*. ed. Michael Montgomery and Guy Bailey. Tuscaloosa, AL: University of Alabama Press

Cunningham, Irma A.
1992 *A Syntactic Analysis of Sea Island Creole*. Tuscaloosa. AL: University of Alabama Press

Dandy, Evelyn
1991 *Black Communications: Breaking Down the Barriers*. Chicago, IL: African American Images

Dillard, J. L.
1972 *Black English: Its History and Usage in the United States*. New York: Random House

Geraty, Virginia M.
n.d. *Gullah for You*. Charleston, SC: Publisher Unknown

Anonymous
n. d. *Gullah*. Milwaukee, WI: University of Wisconsin Press

Holloway Joseph E.
1993 *The African Heritage of American English*. Bloomington, IN: Indiana University Press

Hopkins, Tometro
1994 "Variation in the Use of the Auxiliary Verb da in Contemporary Gullah" in *The Crucible of Carolina: Essays in the Development of Gullah Language & Culture*. Michael Montgomery, ed. Pp. 60-86. University of Georgia Press

LePage, R. B. and Andre Tabouret- Keller
1985 *Acts of Identity: Creole- based Approaches to Language and Ethnicity*. Cambridge, England: Cambridge University Press

Montgomery, Michael, ed.
1994 *The Crucible of Carolina: Essays in the Development of Gullah Language and Culture*. Athens, GA: University of Georgia Press
The origins and development of the Gullah language and culture are examined through religion, basketry, names and naming traditions, and the Caribbean connection in the essays presented.

Morgan, Marcyliena H. ed.
1994 *Language and the Social Construction of Identify in Creole Situations*. Los Angeles, CA: University of California

Mufwene, Salikoko S., ed., with assistance of Nancy Condon
1993 *Africanisms in Afro- American Language Varieties*. Athens, GA: University of Georgia Press
A collection of papers by linguists discussing the inclusion and influences of African languages in African American language structure.

Nodal, Roberto
1972 *A Bibliography on the Creole Languages of the Caribbean, Including a Special Supplement on Gullah*. Milwaukee, WI: University of Wisconsin Press

Reeves, Harold S.
1963 *Gullah: A Breath of the Carolina Low Country*. Published by Author

Smith Reed
1926 *Gullah: Dedicated to the Memory of Ambrose E. Gonzales*. Columbia, SC: USC Press

Smitherman, Geneva
1986 *Talkin and Testifyin: The Language of Black America*. Detroit, MI: Wayne State Press
On pages 14- 15, and 172 Smitherman discusses the Gullah/Geechee "dialect" spoken along the Atlantic coast in Georgia and South Carolina and its African origin.

Turner, Lorenzo Dow
1945 Notes on the Sounds and Vocabulary of Gullah. Tuscaloosa, AL: University of Alabama Press

1949 Africanisms in the Gullah Dialect. Chicago, IL: University of Chicago Press
The first major study of remnants of several African languages still being spoken in the islands off South Carolina by African Americans in the 1940's.

Wolfram, Walt and Nona H. Clarke. ed.
1971 *Black- White Speech Relationships*. Washington, DC: Center for Applied Linguistics

Photography

Photographs are small stories held in a time capsule. The people of the sea islands are telling their stories through the photographs. Moments in their lives are seen in what they are doing. Their history and their culture is shared and preserved for the future.

Dabbs, Edith M.
1970 *Face of an Island*. Columbia, SC: R. L. Bryan

Daise, Ronald
1986 *Reminiscences of Sea Island Heritage*. Orangeburg, SC: Sandlapper Publishing
The story of the sea islands is told in photographs, poems, and short essays using St. Helena Island, South Carolina as the focus. The strong sense of community, of people, of place is seen in the images collected by Ronald Daise.

Ulman, Doris
1918 *Photographs by Doris Ulman: the Gullah people*. New York: New York Public Library/Schomburg Center for Research in Black Culture

Plays

Plays can be interpretations of how non- Gullah romanticize a people and should be understood as looking at a people through filters. Plays by and about a specific group as in Wilkerson's book give a more representational sampling of that group and how they view their place in the universe.

Geraty, Virginia M.
1990 *Porgy. Gullah/Porgy: A Gullah Version from the original play by Dorothy Heyward and DuBose Heyward*. Charleston, SC: Wyrick

Wilkerson, Margaret B., ed.
1986 *9 Plays by Black Women*. New York: New American Library

Poetry

The inclusion of poetry about and by Gullah people is another medium for seeing either how the Gullah are seen by outsiders or how the Gullah see themselves. The structure of poetry as a story teller is not used often but it is very effective.

Colcock, Erroll H. and Patti L. Colcock
1942 *Dusky Land: Gullah Poems and Sketches of Coastal South Carolina*. Clinton, SC: Jacobs Press

Towne, Carlie
1996 *A Cultural Affair: Poetic Collections about Gullah Life in Charleston, SC.* Charleston, SC: Carlie Towne

Townsend, Saida
1975 *Sketches in Sepia: Gullah and Other Poems*. Mt. Pleasant, SC: Continenal Leasing Company

Spiritual Beliefs, Religion, Magic

African American spiritual, religious, and magical beliefs have long been the focus of extensive studies. African American belief systems have been used as identifying markers to connect them to the baseness of Africans, to define their extreme religious fervor, and to prove how they are still backward and in need to civilizing.

Carter, Harold
1976 *The Prayer Tradition of Black People*. Valley Forge, PA: Judson Press

Cornelius, Janet D.
1999 *Slave Missions and the Black Church in the Antebellum South*. Columbia, SC: University of South Carolina Press
Cornelius begins with the slave missions and the evolution into the black church. The processes and procedures of that evolution are detailed by Cornelius and the impacts and clashes traditional African beliefs had with European Christianity and the separation, sometimes by force, of enslaved Africans from European churches.

Creel, Margaret W.
1988 *"A Peculiar People", Slave Religion and Community- Culture Among the Gullahs*. New York, NY: New York University Press
Religion and religious customs, social life and customs, and African religious beliefs surviving within the cultural context of enslavement in the sea islands of South Carolina.

Sea Island Translation and Literacy Team: The Summer Institute of Linguistics and Wycliffe Bible Translators
1994 *De Good Nyews Bout Jedus Christ Wa Luke Write*. New York: American Bible Society
The Book of Luke is told in Gullah with English translations of the King James version in the margin.

Stories, Folklore, Folk Culture, Traditions

The importance of story- telling and the stories themselves are an important part of African American culture. Oral stories told and passed down give a range of impressions about whom and how the African American sees him and herself in the community and in the larger society. Many of the stories have been recorded by non- Gullah people and racial biases can be read into the interpretations. The

interpretations tell as much about the people recording the stories as about the people being recorded and their stories.

Abrahams, Roger D.
1985 *African American Folktales: Stories from Black Traditions in the New World*. New York, NY: Pantheon Books
Abrahams presents stories collected by storytellers and non- storytellers from Zora Neale Hurston to Joel Chandler Harris. The stories Abrahams has included range from the antebellum period to city life and include a range of how to and how not to act, function, think, and be in the larger world.

Christensen, Abigail M.
1971 *Afro- American Folk Lore: Told Round Cabin Fires on the Sea Islands*. Freeport, NY: The Black Heritage Library Collection

Dundes, Alan
1972 *Mother Wit from the Laughing Barrel; Readings in the Interpretation of Afro- American Folklore*. Englewood Cliffs, NJ: Prentice Hall

Geraty, Virginia M.
1998 Gullah Night Before Christmas. Pelican Publishing Company

Gonzales, Ambrose E.
1922 *The Black Border: Gullah Stories of the Carolina Coast*. Columbia, SC: The State Company
Gonzales describes the cannibal savage who was given Christianity and a measure of civilization by European Americans. The "slovenly and careless speech" is interesting and rich, containing quaint and homely similes. About 40 Gullah stories are told, along with a glossary of Gullah terms, and 2 versions of the Tar Baby story.

1924 *With Aesop Along the Black Border*. Columbia, SC: The State Company

Graydon, Nell S.
1986 "The Negroes" in *Tales of Edisto*. Orangeburg, SC: Sandlapper Publishing Company
The chapter entitled "The Negroes" begins with a narrative on the history of the people of African ancestry of Edisto Island, South Carolina. According to tradition many of the enslaved people are descended from a king who was captured, enslaved, and brought to the island.

Hamilton, Virginia
1985 *The People Could Fly: American Black Folktales*. New York, NY: Alfred A. Knopf
This collection of folktales includes animal stories of Bruh Fox, Bruh Deer, Bruh Lizard and Bruh Bear. Escape to freedom, tales of the supernatural, and fanciful tales are illustrated and told.

Harris, Joel Chandler
1883 *Nights With Uncle Remus: Myths and Legends of the Old Plantation*. New York:

Jackson, Bruce, ed.
1967 *The Negro and His Folklore in 19th Century Periodicals*. American Folklore Society, Biographical and Special Series. Austin: University of Texas Pres

Jaquith, Priscilla
1981 *Bo Rabbit Smart for True: Tall Tales From the Gullah*. New York: Philomel Books
The six Gullah tales in the book use Bo Rabbit, Cooter, Rattlesnake, Crane, and Alligator to teach the reader some of the lessons of life. Accompanying each segment is a drawing depicting the action of the text.

Jones, Bessie and Bess Lomax Hawes
1972 *Step it Down: Games, Plays, Songs & Stories from the Afro- American Heritage*. Athens, GA: University of Georgia Press
Jones and Hawes have put in print a collection of games, etc. Jones learned as a girl growing up in a rural community in Georgia. The games, songs, and plays represent, according to Hawes, some of the many songs in Jones' collection.

Johnson, Guy B.
1930 *Folk Culture on St. Helena Island, South Carolina*. Chapel Hill, NC: University of North Carolina Press

Jones, Charles C.
1888 *Negro Myths from the Georgia Coast Told in the Vernacular*. Boston, MA: Riverside Press

Kinlaw- Ross, Eleanor
1996 *Dat Gullah and Other Geechie Traditions*. Atlanta, GA: Crick Edge Productions

Mitchell, Allen
1996 *Wadmalaw Island: Leaving Traditional Roots Behind*. Kearney, NE: Morris Publishing
This book is one man's account of the life and times on a Sea Island along the South Carolina coast. The lives of the residents are told in their words and from their views of living in communities where African ties *can still be seen.*

Parsons, Elsie C.
1923 Folk- lore of the Sea Islands, South Carolina. Cambridge, MA: American Folk Lore Society

Puckett, Newbell N.
1926 *Folk Beliefs of the Southern Negro*. Chapel Hill, NC: University of North Carolina

Stoney, *Samuel G. and Gertrude M. Shelby*
1930 Black Genesis: A Chronicle. New York: The Macmillan Company

Wright Hughes Roberta and Wilbur B. Hughes
1996 L*ay Down Body: Living History in African American Cemeteries*. Detroit, MI: Visible Ink Press
"Lay Down Body" is an expansive exploration of burial practices, stories, African, and Africanisms found throughout the United States in African American burial grounds and cemeteries. From the sea islands of South Carolina and Georgia the reader is taken north and west on a journey of learning and sharing. African American placement in history can be seen in past, present, and future cemeteries from the Atlantic coast to the Pacific Ocean.

Books for Children and Young People

These books were included because they will provide educators resources that can be used to supplement teaching materials about the Gullah people. When resource material is not readily available many times the history and culture of a people is not included in the classroom situation.

Banks, Sara H.
1997 *A Net to Catch Time*. New York, NY: A. A. Knopf

Branch, Muriel M.
1995 *The Water Brought Us: The Story of the Gullah- Speaking People*. New York: Cobblehill Books/Dutton

Clary, Willis
1996 *A Sweet, Sweet Basket*. Orangeburg, SC: Sandlapper Publishing

Daise, Ronald
1989 *De Gullah Storybook*. Beaufort, SC: G.O.G. Enterprises

1997 Little Muddy Waters: A Gullah Folktale. Beaufort, SC: G.O.G. Enterprises

Geraty, Virginia M.
1998 *Gullah Night Before Christmas*. Gretna, LA: Pelican Publishing

Jaquith, *Priscilla*
1981 Bo Rabbit Smart For True: Folktales from the Gullah. New York: Philomel Books

Jones, Hettie
1996 *Spooky Tales From Gullah Gullah Island*. New York, NY: Simon & Schuster

Krull, Kathleen
1995 *Bridges to Change: How Kids Live on a South Carolina Sea Island*. New York: Lodestar Books

Patrick, Denise L.
1996 *Case of the Missing Cookies*. New York, NY: Simon & Schuster

Reed, Kelli M.
1996 *Happy Birthday Daddy*. New York, NY: Simon & Schuster

San Souci, Robert D.
1992 *Sukey and the Mermaid*. New York, NY: Four Winds Press

Seabrooke, Brenda
1992 *The Bridges of Summer*. New York, NY: Cobblehill Books

Siegelson, Kim L.
1996 *The Terrible, Wonderful Tellin' at Hog Hammock*. New York, NY: Harper Collins

Stoddard, Albert H.
1995 *Gullah Animal Tales from Daufuskie Island, South Carolina*. Hilton Head Island, SC: Push Button Publishing

Doctoral Dissertations and Master's Theses

The doctoral dissertations and masters theses are listed in alphabetical order by last name of author. Topics range from the Gullah language to kinship patterns among women. As often as possible I tried to identify the college or university awarding the degree. I found references in the Charleston County Library, South Carolina Historical Society, College of Charleston Library, and Beaufort County Library.

Albanese, Anthony G.
1967 The Plantation as a School: The Sea- Islands of Georgia and South Carolina, A Test Case, 1800-1860. Ph.D. dissertation, Cornell University

Anziano, Satina
1998 Lillie: Copula Usage Study of a Mesolectal Gullah Speaker From Federal Writers Project. Masters thesis, University of South Carolina

Butler, Alfloyd
1975 The Black's Contribution of Elements of African Religion to Christianity in America: A Case Study of the Great Awakening in South Carolina. Ph.D. dissertation, Northwestern University

Coclanis, Peter A.
1984 Economy and Society in the Early Modern South: Charleston and the Evolution of the South Carolina Low Country. Ph.D. dissertation, Columbia University

Cunningham, Irma A.
1970 A Syntactic Analysis of the Sea Island Creole (Gullah). Ph.D. dissertation, University of Michigan

Dargan, Amanda
1978 Family Identity and the Social Use of Folklore: A South Carolina Family Tradition. Masters theses, Memorial University of Newfoundland

Davis, Mella
1998 African Trickster Tales in Diaspora: Resistance in the Creole- Speaking South Carolina Sea Islands and Guadeloupe. Ph.D. dissertation, Northwestern University

Day, Kay Young
1983 My Family Is Me: Women's Kin Networks and Social Power in a Black Sea Island Community. Ph.D. dissertation, Rutgers University

Derby, Doris A.
1980 Black Women Basket Makers: A Story of Domestic Economy in Charleston County, South Carolina. Ph.D. dissertation, University of Michigan

Gadsden, Richard H.
1956 Characterization of the Human Hemoglobins. Ph.D. dissertation, Medical College of SC.

Gibbons, Letitia L.
1986 A Statistical Analysis of Factors Affecting the Morbidity Rate of Sickle Cell Anemia. Masters theses, Medical University of South Carolina

Gritzner, Janet B.
1978 Tabby in the Colonial Southeast: The Culture History of an American Building Material. Ph.D. dissertation, Louisiana State University

Guthrie, Patricia
1977 Catching Sense: The Meaning of Plantation Membership Among Blacks on St. Helena Island, South Carolina. Ph.D. dissertation, University of Michigan

Hart, Edward B.
1993 Gullah Spirituals in Prayer Meetings on Johns Island, South Carolina. Ph.D. dissertation, University of South Carolina

Haskell, Ann S.
1964 The Representation of Gullah- Influenced Dialect in Twentieth Century South Carolina Prose, 1922- 1930. Ph.D. dissertation, University of Pennsylvania

Hawley, Thomas E.
1993 The Slave Tradition of Singing Among the Gullah of John's Island, South Carolina. University of Michigan

Hemingway, Theodore
1976 Beneath the Yoke of Bondage: A History of Black Folks in South Carolina, 1900-1940, Ph.D. dissertation, University of South Carolina

Heyer, Kathryn W.
1982 Rootwork: Psychological Aspects of Malign Magical and Illness Beliefs in a South Carolina Sea Island Community. Ph.D. dissertation, University of Connecticut

Hoit-Thetford, Elizabeth
1987 An Educational History of the Gullahs of Coastal South Carolina From 1700-1900. Ph.D. dissertation, East Tennessee State University

Hopkins, Tometro
1992 Issues in the Study of Afro-Creoles: Afro-Cuban and Gullah. Ph.D. dissertation, Indiana University

Jones Jackson, Patricia A.
1978 The Status of Gullah: An Investigation of Convergent Processes. Ph.D. dissertation, University of Michigan

Jordan, Francis H.
1991 Across the Bridge: Penn School and Penn Center. Masters theses, University of Michigan

Joyner, Charles W.
1977 Slave Folklife on the Waccamaw Neck: Antebellum Black Culture in the South Carolina Lowcountry. Ph.D. dissertation, University of Michigan

Lamuniere, Michelle C.
1994 Roll, Jordan, Roll: The Gullah Photographs of Doris Ulman. Masters theses, University of Oregon

Lawton, Samuel
1939 The Religious Life of Coastal and Sea Island Negroes. Ph.D. dissertation, George Peabody College

Mack, Linda D.
1984 A comparative Analysis of Linguistic Stress Patterns in Gullah (Sea Island Creole) and English Speakers. Masters theses, University of Florida

McGuire, Mary J.
1985 Getting Their Hands on the Land: The Revolution in St. Helena Parish, 1861-1900. Ph.D. dissertation, University of Michigan

Mille, Katherine Wyly
1990 A Historical Analysis of Tense-Mood-Aspect in Gullah Creole: A Case of Stable Variation. Ph.D. dissertation, University of South Carolina

Moerman, Daniel E.
1974 Extended Family and Popular Medicine on St. Helena, SC: Adaptation to Marginality. Ph.D. dissertation, University of Virginia

Moran, Mary
1981 Meeting the Boat: Afro-American Identity on a South Carolina Sea Island. Masters theses, Brown University

Nichols, Patricia C.
1976 Linguistic Change in Gullah: Sex, Age, and Mobility. Ph.D. dissertation, Stanford University

Nixon, Nell M.
1971 Gullah and Backwoods Dialect in Selected Works by William Gilmore Simms. Ph.D. dissertation, University of South Carolina

Normand, Kerry S.
1994 By Industry and Thrift: Landownership Among the Freed People of St. Helena Parish, South Carolina, 1863- 1870. Masters theses, Hampshire College

O'Cain, Raymond K.
1972 A Social Dialect Survey of Charleston, SC. Ph.D. dissertation, University of Chicago

Olendorf, Andra B.
1987 Highlander Folk School and the South Carolina Sea Islands Citizenship Schools: Implications for the Social Studies. Ph.D. dissertation, University of Michigan

Purcell, Katherine C.
1997 Reflections From the Well: Julia Mood Peterkin and the Gullah Community. Ph.D. dissertation, University of North Carolina

Safrit, Gary L.
1964 An Investigation of Folk- Medicine Practices in North and South Carolina. Bachelors theses, Lutheran Theological South Seminary

Salter, Paul
1968 Changing Agricultural Patterns on the South Carolina Sea Islands. Ph.D. dissertation, University of North Carolina

Shriner, Dorothy Sellers
1971 Transect Studies of Salt Marsh Vegetation in Port Royal Sound and North Edisto River Estuaries. Masters' theses, University of South Carolina.

Shurbutt, Thomas R.
1979 Historical Archaeology of the Southeastern Atlantic Coast. Masters' theses, on file at Institute for Archaeology and Anthropology, University of South Carolina

Shuler, C. Osborne
1984 Values of Comprehensive Study of South Carolina Folk Remedies with Modern Science. Senior's theses, University of South Carolina

Slaughter, Sabra
1979 The Old Ones Dying and The Young Ones Leaving. Ph.D. dissertation, University of Michigan

Sledge, Mailande C.
1985 The Representation of the Gullah Dialect in Francis Griswold's "A Sea Island Lady". Ph.D. dissertation, University of Michigan

Smith, Franklin O.
1973 A Cross Generational Study of the Parental Discipline Practices and Beliefs of Gullah Blacks of the Carolina Sea Islands. Ed. D. dissertation, University of Massachusetts

Stark, George L.
1973 Black Music in the Sea Islands of South Carolina. Ph.D. dissertation, Wesleyan University

Stavisky, Leonard P.
1958 The Negro Artisan in the South Atlantic States, 1800- 1860: A Study of Status and Economic Opportunity with Special Reference to Charleston. Ph.D. dissertation, Columbia University

Thomas, June M.
1977 Blacks on the South Carolina Sea Islands: Planning for Tourists and Land Development. Ph.D. dissertation, University of Michigan

Thrower, Sarah S.
1954 The Spiritual of the Gullah Negro in South Carolina. Masters thesis, Cincinnati College of Music

Twining, Mary A.
1977 An Examination of African Retention in the Folk culture of the South Carolina and Georgia Sea Islands. Ph.D. dissertation, Indiana University

Watson, Laura S.
1937 Negro Folk- Lore of the Carolina. Masters theses, Stetson University

Williams, Darnell
1973 An Investigation of Possible Gullah Survivals in the Speech and Cultural Patterns of Black Mississippians. Ph.D. dissertation, Ohio State University

Whaley, Thomas E.
1993 The Slave Tradition of Singing Among the Gullah of Johns Island, South Carolina. Ph.D. dissertation, University of Maryland

Yates, Irene
1939 The Literary Utilization of Folklore in the Works of Contemporary South Carolina Writers. Masters thesis, University of Virginia

Library of Congress

American Life Histories: Manuscripts from the Federal Writers' Project
The life histories below are from Charleston, Murrells Inlet, Edisto Island, and Georgetown. The dates where given are 1936 and 1939. These histories along with others are accessible directly from the Library of Congress via the Internet.

Allan, Madaline told to Muriel A. Mann
1939 Mamie Brown, Librarian
Charleston, SC: Project # 1655
Madaline Allan used the name Mamie Brown in the interview. Ms. Allan was school teacher/librarian. In the interview she tells her life story.

Brown, George told to Chalmers S. Murray
1939 Fish, Hominy and Cotton
Edisto Island, SC: Project # 1655
George Brown was a farmer and day laborer. In the interview he used the name July Geddes. He described the social and cultural structure of daily life in his community.

Chandler, Genevieve W.
1936 Chillun Home
Murrell's Inlet, SC: Project # 1885- 1
A story told in Gullah describing the tasks done by children on plantations.

Chandler, Genevieve W.
1936 Red Fiah Dress told by Lillie Knox
Murrell's Inlet, SC: Project # 1885- 1
Lillie Knox discusses the wearing of a red dress to a funeral. The social implications of what happens when a person goes outside the boundaries of what was considered appropriate behavior are described.

Chandler, Genevieve W.
1936 Pickin Off Peanut told by Lillie Knox
Murrell's Inlet, SC: Project # 1885- 1
A conversation mainly in Gullah about the difficulties of married life.

Jemison, Ophelia told to Cassels R. Tiedeman
n. d. Ophelia Jemison
Charleston, SC: Project # 1655
Ophelia Jemison discusses her opinion of heaven and its relationship to this life.

Jemison, Ophelia told to Cassels R. Tiedeman
n. d. One of Ophelia's Reminiscences
Charleston, SC: Project # 1655
In this interview of the last conversation between Ophelia Jemison and her son, Jake, they discuss Jake's dog and his responsibility for taking care of the dog.

Jemison, Ophelia told to Cassels R. Tiedeman
n. d. "A Christmas Story"
Charleston, SC: Project # 1655
Ophelia Jemison retells her mother's stories about Christmas before slavery ended. The mother describes the smells of various foods cooking, the dancing, the singing, and the lighting of the log which burned for several days.

Jemison, Ophelia told to Cassels R. Tiedeman
n. d. Burning of Mt. Zion A. M. E. Church
Charleston, SC: Project # 1655
Ophelia Jemison is asked about the causes of the fire that burned the church. Her answer in Gullah speaks about coveting material items belonging to someone else and what happens when the devil gets someone to act on their evil thoughts and desires.

Jemison, Ophelia told to Cassels R. Tiedeman
n. d. Bad Spirits
Charleston, SC: Project # 1655
Ophelia Jemison is asked why spirits come back to worry people. Bad spirits come back to worry people they have associated with in life she states in the interview. Ophelia Jemison describes her own experiences with such spirits in the interview.

Jemison, Ophelia told to Cassels R. Tiedeman
n. d. Ophelia do spirits ever follow you?
Charleston, SC Project # 1655
According to Ophelia Jemison only good spirits follow her. Her descriptions in Gullah state how a person should interact with his or her idea of the Divine.

Joint, Martha told to Chalmers S. Murray
1939 Martha Joint, Occasional Servant
Edisto Island, SC
The narrative tells the life story of Martha Joint. The 75 year old woman talks about her growing up, the changes she has seen, storms both personal and natural, and her determination to go on working until she dies.

The Street
1939 The Occupants of the Slave Street at Arundel Plantation, Georgetown, SC
Six stories are told in this narrative. A preacher, 2 cooks, 2 farm hands, and a housewife. Their own names are listed. Fictitious names are used in the text. Arundel Plantation is also given another name, Barondel Plantation. The writer, Margaret Wilkinson, begins the "story" as she turns off the road from Georgetown and onto the road leading to the "street."

Newspaper Articles

Articles from newspapers are listed by last name of reporter. The articles cover stories and events including music, foods, history, culture, social issues, preservation of the culture and history, and life styles among the Gullah in the Charleston, Beaufort, South Carolina and Georgia coastal regions. The articles provide limited background information about the Gullah history and culture and can give the researcher another perspective on who these people were and are.

Abedon, Emily
1998 Georgia Singers Preserve Sea Island Culture. Charleston *Post and Courier*, June 3: A5
Frankie and Doug Quimby, the Georgia Sea Island Singers, are preserving Gullah history of coastal islands in their songs, games, and interactive audience participation performances

Agee, Jenny
1998 Group Works to Secure Gullah Culture's Place in Region's History. Coastal Observer, October 1: P1, P2

Ashley, Dottie
1995 Music Hall to Showcase Lowcountry Traditions. Charleston *Post and Courier*, March 12: D2
In 1995 the Lowcountry Legends Music Hall opened featuring Gullah and Sea Island stories and music.

Bartelme, Tony
1997 Sandstorm. *Charleston Post and Courier,* November 9: A1
A company wants to excavate sand in the middle of St. Helena Island and the community is banding together to resist the creation of a sizable hole, the trucks, and conditions created by this enterprise.

1998 Robert Smalls Sailed Away to Freedom. *Charleston Post and Courier*, February 11: B1
The timeline of the life, deeds, and accomplishments of Robert Smalls, beginning with his use of the Planter, a Confederate gunboat, to escape slavery.

Behre, Robert
1998 Georgia Group Not Afraid to Shout!. Charleston *Post and Courier*, June 6: A9
The McIntosh County Shouters are carrying on the tradition of the "shout", an African American cultural component, dating back more than 250 years.

Blackman, J. K.
1880 The Sea Islands of South Carolina 1865- 1880. Charleston *News & Courier*, April 22:

Brooke, James
1987 Africans See Their Culture Live in United States South. *New York Times*, October 25: P5N, P5L

Burger, Ann
1998 Lowcountry's Love- or- Hate Veggie. *Charleston Post and Courier*, July 15: D1
Okra, brought to this country by enslaved Africans, is a vegetable the eater either loves or hates.

Cook, Mary Ann
1995 Shout Tradition Lives in Exhibit at Avery Center. *Charleston Post and Courier*, May 18: P1
An exhibition at the Avery Center tells the history of the Shout in coastal South Carolina and Georgia African American communities.

Crews, Walter
1954 Negro Craftsmen Ply an Ancient Art by the Side of a Bustling Highway. *Charleston Evening Pos*t, June 27:

Devera, Dora
1997 Tales Preserve Gullah Culture. Charleston *Post and Courier*, April 3: P1
Jametrice Glisson continues the African American storytelling tradition at Cypress Gardens. Glisson collects Gullah stories and uses them to educate, entertain, and preserve the culture.

Dewig, Rob
2000 Digging for the Gullah's Roots. *Carolina Morning News*, January 14: P1

Douglas, Tyees
1995 PBS Films a Gullah 'Porgy'. Charleston *Post and Courier*, August 20: D1
"Porgy: A Gullah Version" featuring Charleston actor and director Michael Nesbitt is filmed at the Garden Theater by the Public Broadcasting System.

1999 Storytellers Share 'Different Things'. Charleston *Post and Courier*, May 13: P1
Don Harrell and Tutu Harrell, his Nigerian born wife, are OrisiRisi African Folklore. The Harrells incorporate Ibo, Yoruba, and Hausa language and culture into their African and African American music, dance, stories, and presentation.

Frazier, Eric
1995 Experts Dispute Accuracy of Gullah Version of Luke. *Charleston Post and Courier*, January 8: C7
The controversy surrounding the translation of the Gospel according to St. Luke has Gullah people and non Gullah European Americans disagreeing on the accuracy of the translation.

Frazier, Herb
1995 Sierra Leone Terrorized. Charleston *Post and Courier*, January 31: A1
The war in Sierra Leone is causing massive destruction in the country.

1995 Sierra Leone's Election in Doubt. Charleston *Post and Courier*, February 17: A1
Sierra Leone's civil war threatens political elections.

1995 Linguists Fear the End May be Near for Gullah. Charleston *Post and Courier*, March 6: A1
The preservation of the Gullah language will be decided by the Gullah people and their passing on the language to their children and grandchildren within the sea island cultural heritage.

1995 Time Blurs Family Ties to Ancient Homeland. Charleston *Post and Courier*, August 7: A11
The lives of 2 women - 1 in Sierra Leone and 1 in Charleston, South Carolina - both basket sellers, are compared by Herb Frazier.

1995 Transatlantic Link Bonds Lowcountry and Africa. Charleston *Post and Courier,* August 7: A11
Mary Moran's grandmother taught Mary's mother a song when she was a small child. The song was passed to Mary. Enslaved Mende women brought the song to this country to the rice plantations of Georgia and South Carolina. The song is a funeral song.

1995 'Gullah Cousin' Kindles Kinship. *Charleston Post and Courier*, November 9: P2
Upon winning the Ethel Payne Fellowship Herb Frazier travels to Sierra Leone to research the connections between the west African country and South Carolina.

1997 Genetic Links of Two Coasts Studies. Charleston *Post and Courier*, March 16: A16
A foundation grant awarded to the Medical University of South Carolina to study the genetic composition of South Carolina and Sierra Leone confirmed the connections between the two groups of African Diaspora people.

1997 Journey for a Song. Charleston *Post and Courier*, March 16: A1
Mary Moran and the song taught her by her mother complete the circle returning to the village in Sierra Leone where the song is still sung. The reception Mrs. Moran and her family received was of family coming home again.

1997 Song Stays Nearly Same Through Ages. Charleston *Post and Courier*, March 16: A16
The Mende funeral song has several variations, but the basic theme sung in Georgia and Sierra Leone is the same song passed down from mother to daughter.

1997 Park Service Wants to Spread Word About Gullah History. Charleston *Post and Courier,* August 30: B3
The National Park Service is reviewing its role in the preservation of the history and culture of the Gullah people at several sites around Charleston, South Carolina.

1998 Local Site to be Centerpiece of National Exhibit on Gullah. Charleston *Post and Courier,* March 11: B01
The Charles Pinckney Historic Site, owned by the National Park Service, is a major component of the Gullah story.

1998 Lowcountry Works on Sierra Leone Ties. Charleston *Post and Courier,* July 14: B6
Penn Center was the site for the Gullah Connection Workshop and the Friends of Sierra Leone meeting.

1999 African Link in National Geographic Spotlight. Charleston *Post and Courier*, February 18: B1
Mary Moran spoke to the National Geographic Society telling the story of the Mende funeral song she learned as a child from her mother in coastal Georgia.

1999 Lobby for Sierra Leone Peace Formed. Charleston *Post and Courier*, March 21: B1
An alliance met a Penn Center to lobby the United States Congress to provide funds to stop the war in Sierra Leone.

1999 Gullahs, Seminoles Share History. *The Sun News*, Reprint: August 30: C3

Frazier, Herbert L.
1972 Basketweaving Traced to Ancient African Craft. Charleston *News and Courier*, September 4:

Furtwangler, Carol
1998 Sea Islanders Keepers of African Tradition. Charleston *Post and Courier*, June 4: D22
The Georgia Sea Island Singers share Gullah history and culture at Spoleto USA celebrating African influence in music and dance.

1998, Shouters; Audience Left Wanting More. Charleston *Post and Courier,* June 7: A17
The McIntosh County Shouters educate and entertain audiences at Spoleto USA 1998 Festival "Echoes of Africa".

Furtwangler, William
1998 Sea Island Group Offers Welcome Look at South Carolina Work. Charleston *Post and Courier*, June 6: A11. In an "Echoes of Africa" performance the Hallelujah Singers from Beaufort, South Carolina present Gullah songs and stories.

Greene, Karen
1975 Gullah Studied as Language. Charleston *News and Courier*, September 28: E4

Grovsner, Verta Mae
1971 What Does South Carolina Lowcountry Mean to Me? Home! *Washington Star*, Washington, D. C., April.

Hofbauer, Lisa
1997 A Sweet Tradition. Charleston *Post and Courier,* July 6: B01
The Sweetgrass Basket Festival began in Jeannette Lee's front yard. The festival honors the traditions of crafts from Boone Hall plantation where Lee's mother and grandmother lived.

1997 Marker validates History of Sweetgrass Weaving. Charleston *Post and Courier*, November 23: B3
The dedication of a marker honoring the sweetgrass basket makers on Highway 17 in Mt. Pleasant, South Carolina was celebrated. The United States Ambassador to Sierra Leone, community and political leaders, the public, and sweetgrass basket makers attended the ceremony.

Howard, Roseanne
1998 Gullah People's History Studied. *The Sun News*, September 26: C1, C10

Jones, Patricia
1995 Gullah Culture Lives in Music Hall. Charleston *Post and Courier*, March 16: P1
Lowcountry Gullah culture, folklore, ghost stories, and spirituals need to be preserved according to Clay Rice of Lowcountry Legends Music Hall.

Kahn, Cynthia
1998 Jewish Group Learns About African Culture. Charleston *Post and Courier*, May 28: P1
Gullah and Jewish cultures were shared by students and adults at Courtenay middle School.

1998 Teens Learn Respect for Others' History. Charleston *Post and Courier*, July 16: P1
Teens from African American and Jewish American communities of Charleston and Washington learn about each other's cultures and the need to address racism, anti- Semitism, and all forms of intolerance.

Killingbeck, Rochelle
1995 New Jersey Group Getting Primer on Gullah. Charleston *Post and Courier*, August 10: A17
The Afriqua Study Group of East Orange, New Jersey visit Charleston to learn about the Gullah culture. The group of adults and youth travel the globe learning about Africa Diaspora history.

Leland, Jack
1949 Basket Weaving African Art Survival? Charleston *News and Courier*, March 27:

1971 Two Local Basket Wavers Demonstrate Art in Canada. Charleston *News and Courier*, July 21:

Lewis, Carol
1983 Low Country Dialect Survives Centuries. *The Sun News*, February 13: C1

Lione, Louise
1986 The Basket Wavers of Charleston. *Charlotte Observer*, June 22:

Locklair, Ernie
1974 Ancient Art on Display. Charleston *News and Courier*, July 21:

Locklair, Margaret
1977 New Program Markets State Handcrafts. *Charleston News and Courier*, May 1:

1977 Handcraft Guild. Charleston Evening Post, May 6:

Lofton, Sally
1962 A Primitive Art Thrives. Charleston *News and Courier,* August 12:

May, Lee
1981 Practice of Voodoo on Increase and Some Scientists Not Scoffing. *Dallas Times Herald*, August 23: A17

McCray, Jack
1998 Camp Meeting Promises Uplifting Experience. Charleston *Post and Courier*, June 5: A15
Alphonso Brown and the Mt. Zion Spiritual Singers perform the Camp Meeting yearly, a celebration of African American spirituals.

McDowell, Elsa
1984 Mary Foreman Jackson Waves Works of Art. Charleston *Post and Courier*, December 9:

1997 Janie Hunter Leaves Legacy for Generations. Charleston *Post and Courier*, June 17: B1
The legacy of Janie Hunter was the Gullah heritage she passed to her children and the generations who come after them. The music and stories she knew and lived were honored by the National Endowment for the Arts, Smithonian, Association of Black Storytellers, and others.

McMillan, George
1986 An Island of Gullah Culture (St. Helena, South Carolina). *New York Times*, February 2: PXX20N, PXX20L

Minis, Wevonneda
1995 Solo Art Show Stars Lowcountry Native. Charleston *Post and Courier*, April 9: B1
A traveling exhibition portraying Gullah life through the experiences of Jonathan Green can be seen in Charleston at the Gibes Museum.

1995 Emory Campbell: Keeping Penn Alive Requires All His Time. Charleston *Post and Courier,* February 18: C1
Emory Campbell is dedicated to Penn Center and the preservation of the history and culture of the Sea Islands.

1997 Rediscovery. Charleston *Post and Courier,* March 2: G1
The move to St. Helena Island and the effects on the island and the 3 people - Arianne King- Comer, Jan Spencer, and Darryl Murphy.

1997 Quilter Finds New Approach to Old Craft. Charleston *Post and Courier*, April 24: C1
Marlene O'Bryant Seabrook is an African American quilter. Her themes include a Gullah series - Philip Simmons, Jonathan Green, Blessed are the Children, and Porgy and Bess.

1998 Folkways in the South: A Lowcountry Primer. Charleston *Post and Courier*, May 24: D1
The unique identifiers that are Charleston are to be learned by visitors. The Charleston accent, Spanish moss (not Spanish and not moss), Palmetto bugs not cockroaches, no- see- ums, sweetened iced tea, okra - fried or in gumbo, and catfish.

1998 Embrace the Music. Charleston Post and Courier, June 5: A13
The Hallelujah Singers perform Gullah songs at the Cathedral of St. Luke and St. Paul for Spoleto Festival USA.

1998 Gullah Culture Preserved in Mixture of Fact, Lore. Charleston *Post and Courier*, August 30: G7
The Legacy of Ibo Landing: Gullah Roots of African- American Culture gives the reader an introduction to sea island history and culture. Edited by Marquetta Goodwine, founder of the Gullah/Geechee Sea Island Coalition, the title honors a group a enslaved Africans who walked into the sea on St. Simons Island, Georgia rather than live as slaves.

Neely, Erik
1999 Gullah History Comes to Life. Charleston *Post and Courier*, February 28: B1
Marquetta Goodwine and Mary Simmons Boyd of St. Helena Island, South Carolina perform at the Black History Month celebration at Charles Pinckney National Historic Site in Mt. Pleasant, South Carolina.

Nichols, Jeff
1997 Turning Points Have Shaped City's History. Charleston *Post and Courier,* April 20: D1
The Denmark Vesey insurrection of 1822 although not successful still had a profound effect on Charleston and the unfolding of history up to the Civil War.

Petersen, Bo
1998 African- American Artists Shine at School Exhibit. *Charleston Post and Courier,* February 18: B4
Students and staff at Harleyville- Ridgeville High School present an exhibition of art focusing on African American themes as part of the Black History Month celebration.

Quick, David
1997 Marker to Recognize Basketmakers. Charleston *Post and Courier*, November 20: P1
The marker honoring the sweetgrass basket makers of Mt. Pleasant, South Carolina will be dedicated. In addition the women who first began selling baskets on Highway 17 will be recognized.

Rindge, Brenda
1995 'Gullah Gullah Island' has Local Connection. Charleston *Post and Courier*, December 3: F2
Ronald and Natalie Daise of St. Helena Island are the creators of 'Gullah Gullah Island". The show focuses on children and is based on the Daises theatrical performances about the African American Gullah culture.

Sanchez, Jonathan
1997 Play Shows Island Life, Rural Days. Charleston *Post and Courier*, October 2: P4
MOJA and The Community Foundation present "Look Where He Brought Me From" a play in Gullah at the Aiken- Rhett House performed by Sea Islanders.

Shumake, Janice
1995 Festival Events Will Share Culture of the Sea Islands. Charleston *Post and Courier*, September 14: P1
The history and culture of the Sea Islands will be performed, told, sung, and eaten at arts and crafts Sea Island Cultural Arts Festival of Charleston County.

1998 Island Tour Blends Tea and Gullah Play. Charleston *Post and Courier*, April 30: P1
The Wadmalaw Gullah Theater and the Charleston Tea Plantation present the Gullah play "Look Where He Brought Me From".

Staff Reports
1995 University of Charleston to Honor Scholar of Gullah. Charleston *Post and Courier*, May 13: A21
The University of Charleston honors Virginia Mixson Geraty for her work to preserve the Gullah language.

1995 Grapevine. Charleston *Post and Courier*, July 31: C1
Charleston, South Carolina is high on the list of places to visit for African Americans looking for historical representations of their history and culture.

1995 Gullah Version of 'Porgy' Filmed in a Joint Venture. Charleston *Post and Courier*, August 20: D5
DuBose Heyward's play "Porgy" is to be filmed by South Carolina Educational Television, The Cabbage Row Company, and the ETV Endowment of South Carolina.

1997 Family Buries Honored Storyteller Janie Hunter. Charleston *Post and Courier*, June 20: B2
Janie Bligen Hunter, a nationally known Gullah storyteller, was honored by the National Endowment for the Arts, the Smithsonian Institution, and the Association of Black Story Tellers.

1997 A Taste of Charleston. Charleston *Post and Courier*, October 8: D1
The Greater Charleston Restaurant Association sponsors the Taste of Charleston with a selection of foods including Gullah specials such shrimp and grits, Gullah rice and okra gumbo.

1998 Haut Gap Middle Celebrates Gullah. Charleston *Post and Courier*, May 12: D5
A theatrical production of Gullah life is told in "Sea Breezes".

1999 Plantation to Honor Black History. Charleston *Post and Courier*, February 11: D3
Hampton Plantation State Park and the Committee for African American History Observances will present "The African American Experience at Hampton Plantation" for Black History Month.

Stockton, Robert
1970 Teachers To Learn Studying English as Second Language. Charleston *News and Courier*, June 1: A10

Thompson, Bill
1997 Biography Searches Julia Peterkin's Life. Charleston *Post and Courier*, September 6: D1
Julia Peterkin as a southern writer who did not follow the norm is seen in her use of African American plantation slaves in fiction of their lives she penned.

Thompson, Woody
1999 A Touch of Gullah. *Georgetown Times*, July 21: P1

Toner, Robin
1987 Bible is being Translated into a Southern Coastal Tongue Born of Slavery. *New York Times*, March 1: P18, P24

Van Drake, Stephen
1999 Gone and Forgotten. Coastal Observer, July 29: Second Front P1

West, Otto D.
1994 Gullah Ways Find Forum at Coastal. *The Sun News*, February 17: C2

Williams, Barbara S.
1972 Johns Island Cooperative Puts Quilting Skills to Use. Charleston *News and Courier*, December

Williams, Charles
1998 Affluence, Genealogical Interest Fuel Influx of Black Tourists. Charleston *Post and Courier*, April 13: D8
African Americans are coming to Charleston to learn the history of enslaved African people and their contributions to the building of the Charleston, the south, and this nation.

Williams, Paige
1993 Gullah Lost. *The Sun News*, February 21: C1, C11

Periodicals and Journals

Periodicals contain a variety of articles about the culture of the Gullah people. I identified as many publications as I could find and followed leads from bibliographies of authors whose articles I read and listed. I have included articles from the Civil War period, Reconstruction, the 1900s, to the most recent dates available. The periodicals give the most comprehensive cultural data about the Gullah people.

Adler, Thomas
1972 The Physical Development of the Banjo. New York *Folklore Quarterly*

Anderson, David G.
1982 The Archaeology of Tenancy in the Southeast: A View from the South Carolina Low Country. *South Carolina Antiquities* 14: 71- 86

Anonymous
1948 Note on Gullah. *South Carolina Historical and Genealogical Magazine* 50: 56- 57
First printed in 1794 in the South Carolina Gazette, the article presents proof of what was considered the inability of Africans to enunciate certain English speech sounds.

Anthony, Carl
1976a The Big House and the Slave Quarter. Landscape 20: 3: 8- 19

1976b The Big House and the Slave Quarter. Landscape 21: 1: 9- 15

Author Unknown
1937 Sea Grass Basket Weavers: Coastal Negroes Produced Artistic Effects in Useful Articles. *Coastal Topics*, Charleston, South Carolina April

Author Unknown
1970 The Basket Weavers of Charleston. *Southern Living* 22- 26

Author Unknown
1992 Senator Hollings Sparks Fund Drive for Historic Penn Center Site in South Carolina. *Jet* 82: 23: 29
The fund raising efforts of Senator Fritz Hollings to aid Penn Center.

Author Unknown
1993 The New Plantations: South Carolina. *The Economist* 329: 7833: A33
Penn School on St. Helena Island, South Carolina has created the Penn School for Preservation. Working with community groups, environmentalists, and cultural preservationists Penn School is helping African American property owners learn how to protect their land, heritage, and culture.

Babson, David W.
1990 The Archaeology of Racism and Ethnicity on Southern Plantations.
Historical Archaeology 24: 4: 20- 28

Bacon, A. M.
1895 Folklore Ethnology: Conjuring and Conjure Doctors. *Southern Workman* 24: 193- 194, 209- 211
Although not Gullah specific this article describes the various spells and remedies used in southern African American communities.

Baird, Keith E.
1980 Guy B. Johnson Revisited: Another Look at Gullah *Journal of Black Studies* 10: 4: 425- 436
Baird speaks of the need to move beyond Guy B. Johnson's views stated in 1930 and reaffirmed in 1967. Baird focuses on linguistic hybridization - - the combination of African languages and English - - as the formation of Gullah.

Baird, Keith E. and Mary A. Twining
1994 Names and Naming in the Sea Islands in *The Crucible of Carolina: Essays in the Development of Gullah Language & Culture*. Michael Montgomery, ed. pp. 23- 37. University of Georgia Press

Baker, Philip
1990 Off Target? *Journal of Pidgin and Creole Languages* 5: 107- 119

Barnwell, Joseph E.
1893 Transactions of the Sea- Island Relief Committee for the Suffers by the Cyclone of 1893. Charleston Yearbook : 293- 296

Bascomb, William R.
1951 Acculturation Among Gullah Negroes. *American Anthropologist* 48: 43- 50
Bascom declares that West African cultural traits among African Americans living along the coastal regions of South Carolina and Georgia are harder to trace to specific West African language and culture groups than African diasporic people living in the Caribbean, Central, and South America.

1941 Gullah Folk Beliefs Concerning Childbirth. Andover, Massachusetts Paper at American Folklore Society

1944 Gullah Superstitions Persist. *El Palacio* 44: 48

Bascomb, William
1981 African Folktales in America. *Research in African Literatures* 12: 203- 213

Bass, Robert D.
1931 Negro Songs From the Peedee Country. *Journal of American Folklore* 44: 418- 436

Bayne, Bijan C.
1997 Gullah Festivities. *American Visions* 12: 45
An overview is given of the Gullah Festival held yearly in Beaufort, SC. Historic information about the Gullah people and the town of Beaufort is also included.

Benjamin, S.
1878 The Sea Islands. *Harpers' Magazine* 57: 839- 861

Bennett, John
1943 Folktales of Old Charleston. *Yale Review* 32: 721- 740

1908 Gullah: A Negro Patois. *South Atlantic Quarterly* 7: 332- 347: 8: 39- 52
Bennett compares what he terms the three dialects spoken by Negroes - French Creole of Louisiana; the "Negro Usage" spoken in Virginia, Kentucky, North Carolina, western South Carolina, and upper Georgia; and Gullah of the Sea Islands.

Bennett, Irma L.
1940 Basket Making in the Low Country. Works Project Administration Federal Writers' Project, South Carolina. Charleston County School Stories

Beoku- Betts, Josephine A.
1995 We Got Our Way of Cooking Things: Women, Food, and Preservation of Cultural Identity Among the Gullah. *Gender and Society* 9: (5): 535- 555
Gullah women, food, culture, community, nature, and passing on the traditions are the components of this study. Through food in its cultural context and especially rice Gullah women of the Sea Islands are preserving traditions.

Berry, Brewton
1935 Silver Spoon. Story 65- 78
Reminiscences of an old Negro man told in the form of a short story.

Billington, Ray Allen
1950 A Social Experiment: The Port Royal Journal of Charlotte L. Forten, 1862- 1863. *Journal of Negro History* 35: 223- 264

Blockson, Charles L. and Karen Kasmauski
1987 Sea Change in the Sea Islands: "Nowhere to Lay Down Weary Head". *National Geographic* 172: (6): 734- 763
The culture of the Gullah people of the Sea Islands from Cumberland Island on the Georgia/Florida border to Pawley's Island along the northern shore of South Carolina is being altered by development, raising taxes, and major changes.

Blok, T. P.
1959 Annotations to Mr. [Lorenzo] Turner's "Africanisms in the Gullah Dialect". *Lingua* 8: 306- 321

Bolton, H. Carrington
1891 Decoration of Negro Graves in South Carolina. *Journal of American Folklore* 4: 2- 4
Bolton states that the Negroes in decorating the graves of family and friends are "following the customs of their savage ancestors". The burial customs in this paper are inland South Carolina but are similar to customs of Gullah people on the low country.

Borowsky, Anton
1961 Two Low Country Tales. *North Carolina Folklore* 9: 46- 48

Boretzky, Norbert
1993 The Concept of Rule, Rule Borrowing, and Substrate Influence in Creole Languages in Africanisms in Afro- American language Varieties. Salikoko S. Mufwene, ed. Pp. 74- 92. Athens: University of Georgia Press

Bradley, Frances W.
1937 Gullah Proverbs. *Southern Folklore Quarterly* 1: 99- 101
The sources for Bradley's Gullah Proverbs are Reed Smith's Gullah and the Charleston Museum Quarterly.

1937 Southern Carolina Proverbs. *Southern Folklore Quarterly* 1: 57- 101

1948- 1951 A Word- list from South Carolina. *American Dialect Society* 9- 16: 10- 73

Bragg, John
1978 A Cantometric Analysis of Folk Music in a Sea Island Community. *North Carolina Folklore* 26: 157- 163

Brewer, J. Mason, ed.
1945 Humorous Folk Tales of the South Carolina Negro. *South Carolina Folklife Guild*

Brown, Charles
1977 Charleston, South Carolina Communications Center. *Southern Exposure* 5: 196- 198

Brown, Kenneth L.
The Impact of the Labor System on the Evolution of African- American Culture. Department of Anthropology, University of Houston, Houston, Texas

Carawan, G.
1960 Spiritual Singing in the South Carolina Sea Islands. Caravan 19- 20: 20- 25

1964 The Living Folk Heritage of the Sea Islands. *Sing Out!* 14: 29- 32
The folk culture of Johns Island, SC is showcased through festivals on the island in 1965. African American history and customs in music and song and their preservation is stressed by Carawan.

Campbell, Emory
1984 Cultural Activities in the Sea Islands in Highlander Reports, *Newsletter of the Highlander Folk Center* 11

Carter, H.
1978 Kongo Survivals in U. S. Gullah: An Examination of Turner's Material. Paper presented at the Second Biennial Conference of the Society of Caribbean Linguistics. University of the West Indies, July 17- 20

Cassidy, Frederick G.
1994 Gullah and the Caribbean Connection in *The Crucible of Carolina: Essays in the Development of Gullah Language & Culture* . Michael Montgomery, ed. Pp. 16- 22. Athens: University of Georgia Press

1986 Some Similarities Between Gullah and Caribbean Creoles in Language Variety in the South: Perspectives in Black and White. Michael Montgomery and Guy Bailey, eds. Pp. 30- 37. University: University of Alabama Press

1983 Sources of the African Element in Gullah in Studies in Caribbean Language. Lawrence Carrington, ed. Pp. 75- 81. St. Augustine, Trinidad: Society for Caribbean Linguistics

1980 The Place of Gullah. *American Speech* 55: 3- 16
Cassidy presents points he wants to reconsider from a paper written by Ian Hancock, "A Provisional Comparison of the English- Derived Atlantic Creoles". When and where did the English pidgin develop and where in the development is Gullah.

Chandler, Genevieve
1977 1930's Federal Writers' Project: Collecting Gullah Folklore. *Southern Exposure* 5: 2- 3, 219- 221

Charleston County School District
1975 The Ethnic History of South Carolina. Charleston: Charleston County School District

Chase, Judith Wragg
1978 American Heritage From Ante- Bellum Black Craftsmen. *Southern Folklore Quarterly* 42: 135- 158
Chase refutes the notion that Africans in America brought only their physical strength. She details the various crafts, skills, guilds, and the place these contributions occupy in American culture from enslaved and free people, Gullah and non- Gullah.

Christensen, Abigail M. H.
1894 Spirituals and Shouts of Southern Negroes. *Journal of American Folklore* 7: 154- 155
Christensen describes shouts or "religious dances" which she said were survivals of dances used in fetish or idol worship in Africa.

Clark, Verney R.
1974 Preserved Africanisms in the New World. Afro- World Religious Research Series 3: 1- 62

Cline, R. I.
1930 The Tar- Baby Story. *American Literature* 2: 72- 78

Coclanis, Peter A. and J. C. Marlow
1998 Inland Rice Production in the South Atlantic States: A Picture in Black and White. *Agricultural History* 72: 197. The focus is on rice production in inland counties from North Carolina to Florida after the Civil War into the 20th century.

Cohen, Henning
1951 Going to See the Window. *Journal of American Folklore* 44: 223

1952 A Negro 'Folk Game' in Colonial South Carolina. *Southern Folklore Quarterly* 16: 183- 185

1957 Caroline Gilman and the Negro Boatman's Songs. *Southern Folklore Quarterly* 21: 116- 117
Cohen gives resources for locating early songs of boatmen. He has examples from Gilman's Recollections of a Southern Matron in which she has recorded words for the songs.

1958 Burial of the Drowned Among the Gullah Negroes. *Southern Folklore Quarterly* 22: 93- 97
Cohen describes how the drowned, snake- bitten, and burned were buried in African societies and the relocation of those customs to the Sea Islands.

Cole, Bernadette
1997 The Language You Cry In'. West Africa 29 April - 4 May:
Cole tells the story of Mary Moran, a Gullah woman from Georgia, and her trip back to her roots in a village in Sierra Leone.

Combes, John D.
1972 Ethnography, Archaeology, and Burial Practices Among Coastal South Carolina Blacks. The Institute of Archeology and Anthropology, University of South Carolina The Conference on Historical Site Archaeology Papers 7: 52- 61
Combes discusses the importance of recognizing African American burial patterns and burial grounds. What may appear to be dump sites may require additional investigation to make sure that what appears to be junk is not in reality an old burial ground.

Cooley, Rossa B.
1908 Aunt Jane and Her People: The Real Negroes of the Sea Islands. *Outlook* 90: 424- 432

Copenhaver, J. R.
1930 Culture of Indigo in the Provinces of South Carolina and Georgia. *Industrial and Engineering Chemistry* 22: 894- 900

Crawford, Dorothy
1950 Gullah Logic. *South Carolina Magazine* 13

Creel, Margaret Washington
1990 Gullah Attitudes Toward Life and Death. In *AFRICANISMS in American Culture*, Joseph Holloway, ed. Pp. 69- 97. Indiana University Press
Creel provides a comprehensive look at where Gullah views originated among West African coastal peoples and the merging of those views into the culture found along the sea islands of South Carolina and Georgia.

Cunningham, Irma A.
1988 Some Innovative Linguistic and Procedural Notions, Relative to Sea Island Creole, in *General: Some Aspects of the Sea Island Creole Verbal Auxiliary in Particular in Methods in Dialectology*. Alan R. Thomas, ed. Pp. 46- 54. Clevedon, England: Multilingual Matters

1992 A Syntactic Analysis of Sea Island Creole. *American Dialect Society* 75. Tuscaloosa: University of Alabama Press

Davis, Gerald L.
1976 African American Coil Basketry in Charleston County, South Carolina: Affective Characteristics of an Artistic Craft in a Social Context. In *American Folklife*. Don Yoder, ed. Pp. 151- 184. Austin: University of Texas Press

Davis, Henry C.
1914 Negro Folk Lore in South Carolina. *Journal of American Folklore* 27: 241- 254
Davis presents a collection of superstitions, stories, and songs from Negro folk traditions. Davis recognizes the difficulties of separating black lore from white lore and tracing Negro folk traditions back to their African origins.

Day, Gregory
1977 South Carolina Low Country Coil Baskets. The Communication Center, South Carolina Arts Commission Columbia, SC

1978 Afro Carolinian Art: Toward the History of a Southern Expressive Tradition. *Contemporary Art/Southwest* 1: (5): 10- 21

Deas- Moore, Vennie
1987 Home Remedies, Herb Doctors, and Granny Midwives. *The World & I* 2: 1: 474- 485
Deas- Moore is part of the culture from which she speaks. Her knowledge of plants and medical treatments of African Americans from enslavement to present day is based on ancestor knowledge passed down through the women in her family.

Dett, Robert N.
1925 St. Helena Island Spiritual. *Southern Workman* 54: 527

DeWolf, Karol K.
1986 Low Country Baskets. *Country Home* 8: 5: 67- 73

Dixon, Melvin
1974 The Teller as Folk Trickster in Chestnut's The Conjure Woman. *CLA Journal* 18: 2: 186- 197
The Conjure Woman written in 1899 by Charles Chestnut was his first novel. It evolved from a collection of short stories first printed in the Atlantic Monthly magazine. Dixon examines Chestnut's use of the trickster, the audience at that time (mainly white), and Chestnut himself as another participant in the story.

Dozier, Richard K.
1974 A Historical Survey: Black Architects and Craftsmen. *Black World* 23: 4- 15

1976 Black Architecture. New York Amsterdam News

Eastman, Jean
1971 Colloquial Names of South Carolina Plants. *Names in South Carolina* 8: 19- 24

Epstein, Dena J.
1963 Slave Music in the United States Before 1860: A Survey of Sources (Part 2). *The Quarterly Journal of the Music Librarians Association* 20: 377- 390
The songs of men as they ferried people and cargo between the sea islands and the mainland are more than the songs of "happy" slaves. Epstein has amassed documents and letters referring to the songs and the singers.

Fauset, Arthur H.
1925 Folklore from St. Helena, South Carolina. *Journal of American Folklore* 38: 217- 238
This collection of animal tales, Uncle Tom stories, morals, and songs offers an interesting gamut of folklore from St. Helena.

1927 "Negro Folk Tales from the South." *Journal of American Folklore* 40: 213- 303

Fenn, Elizabeth A.
1985 "Honoring the Ancestor: Kongo- American Graves in the American South." *Southern Exposure* 28: 42- 57
"Honoring the Ancestor" provides information on burial practices throughout the southern United States, including South Carolina. Religious beliefs in burial customs from the Bakongo people of Gabon to Angola are seen in burial grounds in the south.

Fitchett, E. Horace
1936 " Superstitions in South Carolina." *Crisis* 43: 360- 371
Fitchett states that the creation of folksongs, myths, legends, and superstitions are due to the status given to the larger world by societies which have/had "a minimum of contacts with ideas and mechanical devices".

1940 "The Traditions of the Free Negro in Charleston, SC." *Journal of Negro History* 25: 139- 152

Foote, Henry Wilder
1904 "The Penn School on St. Helena Island." Reprint from *Southern Workman*. Hampton, Hampton Institute Press

Forten, Charlotte
1941 [1864] "Life on the Sea Islands." *Atlantic Monthly* 13: 666- 676
Forten describes her experiences as a teacher, a northerner, and a free black woman on the Sea Islands. She gives a detailed picture of the people and their customs.

Foster, H.
1983 "African Patterns in the Afro American Family." *Journal of Black Studies* 14: 201- 232
Foster begins with a detailed discussion of the structure of the African family and patterns of descent, filiation, and marriage coming to colonies with enslaved peoples. African family patterns and their survival can be seen during and after enslavement.

Gellert, Lawrence
1934 "Negro Songs of Protest: North and South Carolina, and Georgia." *Negro Anthology*

Geraty, Virginia
1989 " The Gullah Language." *Charleston Magazine* 3- 4: 12- 13

Gibson, H. E.
1962 "African Legacy: Folk Medicine Among the Gullahs." *Negro Digest* 40: (10): 77- 80
Folk remedies were part of the traditions on the sea islands around Beaufort, South Carolina. By the mid- 1960s the islanders had begun to seek health care from the doctors available. Many islanders combined both forms of health care.

Goines, Leonard
1974 " The Music of Georgia and Carolina Sea Islands." *Allegro* 74: 5

Hair, P. E. H.
1965 "Sierra Leone Idioms in the Gullah Dialect of American English." *Sierra Leone Language Review* 4: 79- 84
Hair questions components of Lorenzo D.Turner's 1940's work of the Gullah language. Hair states that Turner's list of 4,000 Gullah words is overstated and that 3,500 of the 4,000 are personal names.

Haley, Alex
1982 "Sea Islanders, Strong- Willed Survivors, Face Their Uncertain Future Together." *Smithsonian* 13: 88- 96
Alex Haley visited Daufuskie Island, recording his experiences, with his friend Herman Blake. Blake, a sociologist and Provost of Oakes College, University of California at Santa Cruz, had been working with the people of Daufuskie Island for several years.

Hall, Stephanie A.
1986 South Carolina Field Recordings in the Archive of Folk Culture. Library of Congress Folk Archive finding aid No. 4. Washington: Library of Congress

Hancock, Ian F.
1977 *Further Observations on Afro- Seminole Creole*. Society of Caribbean Linguistics 7

1980 *Gullah and Barbadian: Origins and Relationships*. *American Speech* 55: (1): 17- 35
According to Hancock, Gullah evolved from an earlier Guinea Coast Creole English. This form of communication began along the Upper Guinea coast in the Senegambia littoral.

1980 *The Texas Seminoles and Their Language*. Austin: University of Texas African and Afro American Studies and Research Center Monograph Series 2: 1

Harris, Joel Chandler
1894 "The Sea Island hurricanes, the Destruction." *Scribner's Magazine* 15

Haskell, Marion A.
1899 "Negro Spirituals." *Century Magazine* 36

Hawkins, John
1896 "An Old Mauma's Folklore." *Journal of American Folklore* 9: 129- 131
Old Mauma is Hawkins' Maum' Sue. Hawkins gives examples of remedies he grew up with, the traditions of the low country Negroes, and how they helped shape his life.

Hawkins, John
1907 "Magical Medical Practice in South Carolina." *Popular Science Monthly* 70: 165- 174

Herron, Leonora and Alice M. Bacon
1895 "Conjuring and Conjure Doctors." *Southern Workman* 24: 118

Hibbard, A.
1926 "Aesop in Negro Dialect." *American Speech* 2: 495

Higgins, W. Robert
1971 "The Geographical Origins of Negro Slaves in Colonial South Carolina." *South Atlantic Quarterly* 70: 42- 43

Higginson, Thomas W.
1867 "Negro Spirituals." *Atlantic Monthly* 19: 685- 694
Higginson states he is a student of the Scottish ballad and had heard the music called "Negro Spirituals" for many years. Higginson compiled songs he heard in the camps around Beaufort from escaping enslaved men and women from South Carolina, Georgia, and Florida.

Hitchcock, Susan
1995 "Sea Grass Basketry and the Changing South Carolina Landscape." Georgia Landscape School of Environmental Design University of Georgia, Fall Issue
Hitchcock states that the impact of alteration on behalf of change is as important to the landscape designers as it is to the historians and preservationists. Along Highway 17 in Mt. Pleasant, South Carolina the history of Gullah people is being destroyed, she states, by rapid and not well thought out development.

Hollings, Marie F.
1979 *Descriptive Inventory of the City of Charleston Division of Archives and Records*. Charleston: City of Charleston

Holm, John
1983 "On the Relationship of Gullah and Bahamian." *American Speech* 58: 303- 318

Holloway, Joseph
1994 "Time in the African Diaspora: The Gullah Experience." In *Time in the Black Experience*, Joseph K. Adjaye, ed. Pp. 199- 20
Holloway provides a description of African time concepts and their relocation to the plantations on the sea islands. The Gullah and time can be shown to be related to the African ancestors and their oral traditions.

Howe, Mark A.
1930 "The Song of Charleston." *Atlantic Monthly* 146: 108- 111

Hubbell, Jay B.
1954 "Negro Boatman's Song." *Southern Folklore Quarterly* 18: 244- 245
Three examples of songs sung by African American boatsmen are given. The themes vary from a rebuke to honoring a lady to inspiring the oarsmen to pull harder as they row.

Hutchison, Janet
1993 "Better Homes and Gullah." *Agricultural History* 67: 102
In the 1920s the Better Homes in America organization began a series of contest for the best house designs across America. The African American community of St. Helena Island, SC participated in the contests winning throughout the 1920s in the categories for African American designs.

Jackson, Bruce
1976 "The Other Kind of Doctor: Conjure and Magic in Black American Folk Medicine in American Folk Medicine: A Symposium." Wayland D. Hand, ed. Pp. 258- 272. Berkeley: University of California Press
This essay compiles examples of uses of folk medicines and some of the studies of African and African American folk traditions.

Jackson, Juanita, Sabra Slaughter and J. Herman Blake
1974 "The Sea Islands as a Cultural Resource." *Black Scholar* 32- 39
Several issues are addressed in this article: a contemporary study of the Sea Islands done by African American scholars sensitive to the culture; survival patterns, present- day Gullah culture, social and psychological concepts surrounding growing up in an African American majority region and the historical consciousness of blacks and whites in the same regions sharing the same plantation last name.

Johnson, Guy B.
1949 "A Review of Africanisms in Gullah Dialect by Lorenzo Dow Turner." *Social Forces* 28: 458- 59

1967 "Gullah Dialect Revisited: 30 Years Later." American Anthropological Association Annual Meeting, Washington, DC

1980 "The Gullah Dialect Revisited: A Note on Linguistic Acculturation." *Journal of Black Studies* 10: (4): 417- 424

Jones- Jackson, Patricia A.
1977 Alive: African Tradition on the Sea Islands. *Negro Historical Bulletin* 46: (3): 95- 96, 106
Four distinct and interconnected components of Sea Island Gullah culture and structure are explored - the extended family, religious beliefs, burial customs, and group interactions.

1978 Gullah: On the Question of Afro- American Language. *Anthropological Linguistics* 20: (9): 422- 427
Gullah as a language not a dialect is discussed. Its development and perpetuation on the sea islands can be traced to factors such as its beginnings in West Africa.

1981 The Oral Tradition of Prayer in Gullah. *Journal of Religious Thought* 39: 21- 33

1983 Contemporary Gullah Speech; Some Persistent Linguistic Features. *Journal of Black Studies* 13: (3): 289- 303
Jones- Jackson looks at Gullah spoken in the today of 1983 when the article was written examining three features that set Gullah apart from other forms of African American English spoken in the United States.

1983 The Audience in Gullah and Igbo: A Comparison of Oral Traditions. *College Language Association Journal* 27: (2): 197- 209
Jones- Jackson compares and analyzes the similarities between Sea Island storytellers and storytellers among the Igbo, Yoruba, and Ibebia peoples of Western Africa.

1984 On Decreolization and Language Death in Gullah. *Language in Society* 13: 351- 362
Jones- Jackson explores the decreolization process and compares Gullah speakers who have frequent contact with standard English and Gullah speakers on remote predominantly African American sea islands.

1994 Let the Church Say "Amen": The Language of Religious Rituals in Coastal South Carolina in *The Crucible of Carolina: Essays in the Development of Gullah Language & Culture*. Michael Montgomery, ed. Pp. 115- 132. Athens: University of Georgia Press

Kaplan, Bruce
1990 Gullah: The Unique Culture of America's Sea Islands: the African American Language that gave us Uncle Remus Struggles to Survive. *Utne Reader* January- February: 37: 23
Gullah culture is threatened by outside development. The people, the traditions, the folklore may all be lost by the next century.

Kirkland, Edwin C.
1942 South Carolina Folk Tales Compiled by Federal Writers' Project. *Southern Folklore Quarterly* 6: 181- 182

Kloe, Donald R.
1974 Buddy Quow: An Anonymous Poem in Gullah- Jamaican Dialect Written Circa 1800. *Southern Folklore Quarterly* 38: (2): 81- 90

Krio, Leone
1975 Creole Features in the Afro- Seminole Speech of Brackettville, Texas. Society for Caribbean Linguistics Occasional Paper 3

1980a Gullah and Barbadian: Oritgins and Relations. *American Speech* 55: 7- 35

1986b Texas Gullah: The Creole English of the Brackettville Afro- Seminoles in *Perspectives On American English*. J. L. Dillard, ed. Pp. 305- 333. The Hague: Mouton

1988 Componentiality and the Origin of Gullah in Sea and Land: Cultural and Biological Adaptations in the Southern Coastal Plain. James L. Peacock and James C. Sabella, eds. Pp. 13- 24. Athens: University of Georgia Press

Livingstone, F. B.
1958 Anthropological Implications of Sickle Cell Gene Distribution In West Africans. *American Anthropologist* 60: 533- 562
Livingstone details sickle cell disease in West Africans, however, he doesn't provide any information about the disease in the various countries he lists - Greece, India, Turkey, Sicily, Algeria, Yemen, Palestine, Kuwait, or Tunisia - nor does he offer data addressing the relationship of sickle cell in Africa to other countries.

Lumpkin, Ben G.
1976 The Fox and the Goose: Tale Type 62 from South Carolina. *North Carolina Folklore* 18: 90- 94

Mallory, Maria
1994 Is the Mecca of Africanism Not Long for this World? (Gullah People of St. Helena Island). *Business Week*, August 15: 3385: 22B
Mallory reports that St. Helena Island is under intense pressure from developers. The future of the Gullah heritage and culture might not last into the next century.

McDavid, Raven I., Jr.
1951 Africanisms in the Eastern United States. *Modern Language Association*

McDavid, Raven I.
1955 The Positions of the Charleston Dialect. *American Dialect Society* 23: 35- 50

McKim, James M.
1862 Negro Songs. *Dwight's Journal of Music* 29: 148- 149

McKim, Lucy
1862 Songs of Port Royal Contrabands. *Dwight's Journal of Music* 22: 255

McLaughlin, Wayman B.
1963 Symbolism & Mysticism in the Spirituals. *Phylon* 24

Mednick, L. and M. Orans
1956 The Sickle Cell Gene: Migration vs. Selection. *American Anthropologist* 58: 293- 395
Mednick and Orans examine the occurrence of sickle cell in Italy, Greece, India, and other non-African countries. They contend that sickle cell outside the African Diaspora does not support investigations prior to 1945 that sickle cell was strictly an African trait and a racial diagnostic.

Meredith, Mamie
1931 Negro Patois and Its Humor. *American Speech* 6: 317- 321

Mohr, Nancy L.
1989 Treasures on an Island: Preserving the Traditions of South Carolina's Gullah Culture has Long Been the Mission of the Penn School. *American Visions* 4: 5: 29
The history of Penn School is told in this article. From its creation during the Civil War to the involvement in the Civil Rights movement to 1989 present day community involvements.

Montgomery, Michael
1994 Lorenzo Dow Turner's Early Work on Gullah in *The Crucible of Carolina: Essays in the Development of Gullah Language & Culture*. Michael Montgomery, ed. Pp. 158- 174. Athens: University of Georgia Press

Moore, Janice G.
1980 Africanisms Among Blacks of the Sea Islands. *Journal of Black Studies* 10: 467- 480
Moore investigates her heritage and culture on Yonges Island, South Carolina. She compares the folk life and customs she finds with African traditions.

Moore, LeRoy
1971 The Spiritual: Soul of Black Religion. *American Quarterly* 23

Morgan, Philip D.
1982 Work and Culture: The Task System and the World of Lowcountry Blacks, 1700 to 1880. *William and Mary Quarterly* 39: 563- 599
Morgan looks at the evolution of the task system and the domestic economy the system allowed slaves to develop in their "free" time. The task system may have been used first on coffee and pimiento plantations in the Caribbean.

1983 The Ownership of Property by Slaves in the Mid- Nineteenth- Century Low Country. *Journal of Southern History* 49: 399- 420
The structure of the task system on low country plantations in South Carolina and Georgia gave rise to a system of property ownership among slaves - an economy - owned, run, and controlled by slaves, within the larger economy - owned, run, and controlled by the planter.

Morris, J. A.
1947 Gullah in the Stories and Novels of William G. Simms. *American Speech* 22: 46- 53
According to Morris, Simms used a character speaking Gullah in a short story almost 100 years before Ambrose Gonzales. He, Simms had no models to follow in his portrayal of Gullah people. Morris says Gonzales produced a glossary of Gullah words and Reed Smith's laws and analogies produced a framework for the Gullah language.

Author Unknown
1894 Mortuary Customs and Beliefs of South Carolina Negroes. *Journal of American Folklore* 9: 318- 319

Moser, Ada M.
1939 Farm Family Diets in the Lower Coastal Plain of SC. South Carolina Agricultural Experimental Station Bulletin No. 319

Mufwene, Salikoko
1985 The Linguistic Significance of African Proper Names in Gullah. *New West Indian Guide* 59:146- 66

1986 Restrictive Relativization in Gullah. *Journal of Pidgin and Creole Languages* 1:1- 31
This paper analyzes in technical detail the relative pronouns and relative clauses in the Gullah language. Comparisons are identified in other dialects, African languages, English pidgins, and Creoles.

1986 Number Delimitation in Gullah. *American Speech* 61: 33- 60. Mufwene introduces data indicating that in Gullah number delimitation is not controlled by the same rules as those found in English.

1989 Equivocal Structures in Some Gullah Complex Sentences. *American Speech* 64: 304- 326
The subordinate clause used in some Gullah sentences and how that clause is used is the focus of this paper. Mufwene examines clauses beginning with fe or se.

1992 Africanisms in Gullah: *A Re- examination of the Issues in Old English and New: Studies in Language and Linguistics in Honor of Frederic G. Cassidy*. Joan Hall, Nick Doane, and Dick Ringler eds. Pp. 156- 182. New York: Garland

1994 On the Status of Auxiliary Verbs in Gullah. *American Speech* 69: (1): 58
Mufwene asks 2 questions: does the notion of "auxiliary verb apply to Gullah? and is the class of Avs coextensive with that of tense, mood, and aspect markers? These 2 questions prompt the asking of a 3rd question: what is the criterion for an item to be considered an auxiliary verb in Gullah?

1997 The Ecology of Gullah's Survival. *American Speech* 72: 69
The survival of the Gullah language according to Mufwene may depend on ecological and economic factors. With less than half a million Gullah speakers the pressures of the changing landscape endangers the future of the sea islands customs and culture.

Mufwene, Salikoko and Charles Gilman
1987 How African is Gullah and Why? *American Speech* 62:120- 139
Mufwene investigates 2 questions attempting to place Gullah in relationship to Creoles and Atlantic pidgins: (1) why are pidgins and creoles different from the languages to which they are lexically related, and (2) why are they similar to each other

Myers, Betty
1976 Gullah Basketry. *Craft Horizons* 36: 31
Myers expresses concern about the future of the sweetgrass baskets, the livelihood of the women who still sew them, and the lost of an African cultural connection still in existence.

Nash, Jonell
1998 The Gullah Tradition: From the Field to the Pot, Geechees Stir in Spirit. *Essence* 28 : 127
For the Gullah/Geechee people of the Sea Islands food is another measure of who they are. This collection of historical data mixed with recipes and photographs tells how to prepare various dishes indigenous to the islands.

Neuffer, Claude H.
1955 Some Edisto Island Names. *Names in South Carolina* 2: 2: 14

1965 The Bottle Alley Song. *Southern Folklore Quarterly* Fall: 234- 238

Author Unknown
1948 Note on Gullah. *South Carolina Historical Magazine* 49: 56- 57

Odum, Howard W.
1908 Religious Folk- Songs of the Southern Negroes. *American Journal of Religious Psychology and Education* 3: 265- 365

1911 Folk Song and Folk Poetry as Found in the Secular Songs of the Southern Negroes. *Journal of American Folklore* 24: 255- 294

Olson, Tod
1995 Freedom's Wages. *Scholastic Update* 128: 18
Newly freed slaves tell about real- life conditions for them and their families. The experiences are brutal, racist, poverty- based, and mirror the conditions they had been freed from.

Opala, Joseph
1986 The 'Gullah' Connection. *West Africa* 19 May: 1046- 1048
Opala discusses in a series of interview questions the history and connections between planters of South Carolina, the enslavement and transportation to South Carolina of rice farmers of Sierra Leone; what became of the enslaved people, their cultural heritage on the plantations, and where they are today.

1987 The Gullah: Rice, Slavery, and the Sierra Leone- American Connection. Unites States Information Service
"The Gullah" article was written in 1987 and reflects the knowledge at that time about the Gullah and the people of Sierra Leone. Opala provides a connection between the Gullah people of South Carolina and Georgia and the Mende, Vai, and Fula people of Sierra Leone and Guinea regions. He takes the Gullah to Florida and the Seminoles and to Oklahoma bringing the people and their history into present (1987) day.

1990 The Gullahs Come Home West Africa 25 December - 7 January: 2143- 2144
A small group of South Carolina and Georgia Gullah go "home" to Sierra Leone in this .

1990 Double Homecoming. *West Africa* 22- 28 January: 97
Opala relates the trip back to Sierra Leone for 2 Oklahoma Seminole men whose ancestors had escaped the rice plantations of South Carolina and Georgia and fled to Florida. The Seminoles were going home at the invitation of the President of Sierra Leone.

n. d. Momoh Visits the Gullah. *West Africa*
Opala travels with president Momoh on his visit to South Carolina and the re- establishing of connections with the Gullah relatives.

Orser, Charles E.
1984 The Last Ten Years of Plantation Archaeology in the Southeastern United States. *Southeastern Archaeologist* 3: 1- 12

Parler, Mary C.
1951 The Forty- Mile Jumper. *Journal of American Folklore* 54: 422- 423

Parrish, Lydia
1935 Plantation Songs of Our Old Negro Slaves, with Scores. *Country Life* 69: 50- 54, 62- 64, 75- 76

Parsons, Elsie Clews
1923 Folklore of the Sea Islands, South Carolina. *American Folklore Society* 16: 211- 213

Peek, Philip
1978 Afro American Material Culture and the Afro American Craftsman. *Southern Folklore Quarterly* 42: 109- 132

Pendleton, Louis
1890 Notes on Negro Folklore and Witchcraft in the South. Journal of American Folklore 3: 301- 17
Penn National, Industrial, and Agricultural School. 1910- 1951. Annual Reports. South Caroliniana Library, University of South Carolina, Columbia

Perdue, R. E.
1968 African Baskets in South Carolina. *Economic Botany* 22: 289- 292
Perdue stresses that sweetgrass basket making is a craft not to be defined as art. He states that this form of basket making appears to come from Africa and was brought here by slaves.

Pierce, E. L.
1863 The Freedom at Port Royal. *Atlantic Monthly* 12: 291- 315

Pollard, Velma
1985 Cultural Connections in Paule Marshall's Praise Song for the Widow. *World Literature Written in English* 25: 285- 98

Pollitzer, William S.
1931 The Negroes of Charleston: A Study of Hemoglobin, Types, Serology, and Morphology. *American Journal of Physical Anthropology* 16: 241- 263

_____, 1972 The Physical Anthropology and Genetics of Marginal People of the Southeastern United States. *American Anthropologist* 74: 719- 734

_____, 1993 The Relationship of the Gullah- Speaking People of Coastal South Carolina and Georgia to Their African Ancestors. *Historical Methods* 26: 53- 68

Popkin, Z. F.
1931 Heaven Bound: An Authentic Negro Folk Drama out of Old Savannah. *Theatre Guild Magazine*, August 1: 14- 17

Pound, Louise
1929 South Carolina Ballads. *Journal of American Folklore* 42: 76

Powers, Bernard E.
1998 A Founding Father and Gullah Culture. *National Parks* 72: 26
Powers gives the reader a strong and information- filled article about life on one South Carolina low country plantation in Mt. Pleasant, SC owned by Charles Pinckney, a signer of the American Constitution.

Prevetti, C. A.
1998 Gullah: Songs of Hope, Faith and Freedom. *School Library Journal* 44: 86

Reeves, Dick
1970 Gullah. *Sandlapper* 5: 8- 11

Rhame, J. M.
1933 Flaming Youth: A Story in Gullah Dialect. *American Speech* 8: 39- 43

Rice, Elizabeth G.
1901 A Yankee Teacher in the South. An Experience in the Early Days of Reconstruction. *Century Magazine* 5: 151- 154

Rickford, John R.
1990 Number Delimitation in Gullah: A Response to Mufwene. *American Speech* 65: 148- 63
Rickford summarizes his paper and Salikoko Mufwene's 1986 paper on number delimitation.

Roberts, Nancy
1979 Gullah Baskets. *Americana* 7:1: 38- 41

Rosenfeld, Jeff
1993 The Forgotten Hurricane. *Weatherwise* 46: 4: 13
The history of the 1893 hurricane and its effects from Charleston to Hilton Head is chronicled.

Rosengarten, Dale
1985 Field Notes and Interviews, Low Country Basket Project. McKissick Museum, Columbia, SC

1994 Spirits of Our Ancestors: Basket Traditions in the Carolinas in *The Crucible of Carolina: Essays in the Development of Gullah Language & Culture*. Michael Montgomery, ed. Pp. 133- 157. Athens: University of Georgia Press

Rosengarten, Theodore
1987 The Reckless Advance of the Modern World: A Review of 'When Roots Die' by Patricia Jones-Jackson. *Natural History* 9: 66- 71

Ross, Joe
1982 The Light on Land's End Road: A Modern Local Legend. TFBS 48: 19- 27

Rowe, G. C.
1900 The Negroes of the Sea Islands. *Southern Workman* 29: 709- 715

Salter, P.
1968 Changing Agricultural Patterns on the Sea Islands. *Journal of Geography* 67: 223- 228

Saunders, William C.
1980 Sea Islands: Then and Now. *Journal of Black Studies* 10: 481- 492
This very personal account of life in the Sea Islands in the 1930s and 1940s by Mr. Saunders, a native Sea Islander, shares some of the culture and traditions which he feels are quickly being lost.

Scroggins, Elizabeth McRae
1971 Gullah Baskets. ETV Guide, Columbia, South Carolina, April 1

Seabrook, E. B.
1866 The Sea Islands of South Carolina. *Galaxy Magazine*

Sengova, Joko
1994 Recollections of African Language Patterns in an American Speech Variety: An Assessment of Mende Influences in Lorenzo Dow Turner's Gullah Data in *The Crucible of Carolina: Essays in the Development of Gullah Language & Culture*. Michael Montgomery, ed. Pp. 175- 200. Athens: University of Georgia Press

Slave Narratives: A Folk History of Slavery in the United States. South Carolina Narratives, Volume 14. Washington: Library of Congress

Smiley, P.
1919 Folklore from Virginia, South Carolina, Georgia, Alabama, and Florida. *Journal of American Folklore* 32: 363- 370

Smith, John P.
1991 Cultural Preservation of the Sea Island Gullah: A Black Social Movement in the Post- Civil Rights Era. Rural Sociology 56: (2): 284
During the 1970s development threatened to eliminate the Gullah culture. Educated and professional Gullah natives are returning and developing a social preservation movement whose purpose is to empower and retain the culture and the land.

Smith, Reed
1926 Gullah. Bulletin of the University of South Carolina, November 190. U SC Press
Smith looks at the Gullah people, their history, language, customs, folklore, and impact by northerners after the Civil War. He includes many examples of spoken Gullah and cites references done by earlier persons documenting the language.

1916 Word List From South Carolina. *Dialect Notes* 4: 344

Snipe, Tracy D.
1998 Coming Full Circle: A Cultural Renaissance on the Sea Islands. *The Avery Review* 1: 1

Starks, George L.
1980 Singing 'Bout a Good Time': Sea island Religious Music. *Journal of Black Studies* 10: 437- 444
Sacred music plays a very important role in the life of Sea Island people. The connection began during the days of enslaved people when songs evolved from incidents of whippings and other occasions.

1985 Salt and Pepper in Your Shoe: Afro American Song Traditions on the Sea Islands in *More Than Dancing: Essays on Afro American Music and Musicians*. Irene V. Jackson, ed. Westport: Greenwood Press

Stewart, John
1998 Review of Catching Sense: African American Communities on a South Carolina Sea Island by Patricia Guthrie. *African American Review* 32: 343
Stewart reviews "Catching Sense: African American Communities on a South Carolina Sea Island by Patricia Guthrie. What 'catching sense" means and if the process is still going on.

Stewart, Sadie
1919 Seven Folktales from the Sea Islands, South Carolina. *Journal of American Folklore* 32: 394-
This small collection of tales focuses on the "deception will be punished" theme which runs through many African/African American stories.

Stewart, Tom and Jolo Sengova
n. d. On the Origins of "Gullah" and "Geechee" MS

Stoddard, A. H.
1944 Origin, Dialect, Beliefs, and Characteristics of the Negroes of the South Carolina and Georgia Coasts. *Georgia Historical Quarterly* 28: 186- 195
Stoddard provides an explanation for the development of the "Gulla" language, the merging of African beliefs into Christian concepts, and the persona presented to the larger world by Negroes of coastal South Carolina and Georgia.

Stoney, P. K.
1950 The Incidence of the Sickle Cell Trait in the Negroes from the Sea Island Area of South Carolina. *Southern Medical Journal* 43: 48

Suttles, W. C.
1965 A Hymn of Freedom- South Carolina in 1913. *Journal of Negro History* 50:

Swadesh, Morris M.
1951 Review of Africanisms in the Gullah Dialect by Lorenzo Dow Turner. Word 7: 82- 84

Szwed, J. F.
1970 Africa Lies Just Off Georgia. *Africa Report* 15: (4): 29- 31
Szwed declares that the enslaved Africans mainly from Senegambian and Congo- Angolan regions were able to maintain much of their heritage and that heritage and culture evolved into a form of "Pan- African cultural pattern" that has survived till today.

n. d. The Gullah: A Heritage Remembered. *Topic* 18: 9- 11

Talley, Thomas W.
1942 The Origin of Negro Traditions. *Phylon* 3: 371- 376

Taylor, Alrutheus A.
1924 The Negro in South Carolina During Reconstruction. Association for the Study of Negro Life and History

Thomas, June M.
1980 The Impact of Corporate Tourism on Gullah Blacks: Notes on Issues of Employment. *Phylon* 41: (1): 1- 11

Thomas, J. P.
1930 The Barbadians in Early South Carolina. *South Carolina Historical and Genealogical Magazine* 31: 75- 92

Thompson, Robert F.
1969 African Influence on the Art of the U.S. Black Studies in the University: A Symposium. Yale University Press 127, 130- 154

Thornton, John
1993 Central African Names and African- American Naming Patterns. *William and Mary Quarterly* 50: 727
Naming patterns of Central Africa were evident in South Carolina among Africans brought to the low country.

Tobin, Jacqueline
1994 Sweetgrass Basketry: A Cultural Tradition Struggling for Survival. *Piecework* 68- 73

Tournier, Nan
1984 Sea Island Black Quilters. In Social Fabric: South Carolina's Traditional Quilts. McKissick Museum. University of South Carolina

Towne, Laura
1901 Pioneer Work on the Sea Islands. *Southern Workman* 30
Towne wrote the article on the founding of Penn School shortly before her death. In 1862 when the school began she discusses how it was a learning process for the teachers and the newly freed enslaved people.

Tupper, V. G.
1937 Plantation Echoes: A Negro Folk Music Drama, as Given each Year in Charleston, South Carolina. *Etude* 55: 153

Turner, Lorenzo D.
1941 Linguistic Research and African Survivals. American Council of Learned Societies 32: 68- 89

1941 Linguistic Research and African Survivals. American Council of Learned Societies 32

1945 Notes on the Sounds and Vocabulary of Gullah. Publication of the American Dialect Society 74-84

1948 Problems Confronting the Investigator of Gullah. American Dialect Society, Greensboro 74- 84

1958 African Survivals in the New World with Emphasis on the Arts in Africa as Seen by American Negroes. *Presence Africaine*

Twining, Mary A.
1967 Review of Carawan's Ain't You Got A Right to the Tree Of Life. *Ethnomusicology* 2- 3: 421- 422

1973 Field Notes on Reactions to 'Ain't You Got a Right to the Tree of Life'. *Journal of the Folklore Institute* 10: 213- 216

1974 Sources in the Folklore and Folklife of the Sea Islands. *Southern Folklore Quarterly* 39: 135- 150
Twining states that there is a need to develop a comprehensive collection of Sea Island resources for students interested in studying the history and culture of the islands. She states that some of what is available is biased, some material is beyond the reach of students, and other material is dated.

1975 African/Afro American Artistic Community. Journal of African Studies: 569- 578
Twining examines present- day historical data on African cultural components in light of the controversy between E. Franklin Frazier and Melville J. Herskovits.

1978 Harvesting and Heritage: A Comparison of Afro American and African Basketry. *Southern Folklore Quarterly* 42: 257- 270.
Twining's article compares African and African American baskets, discusses the early history of basket selling in the Mt. Pleasant region during the early 20th century, and the architecture of the sheds built and used by the women.

1980 Damas and Two Sea Island Poets: A Brief Comparison in Light of the Philosophy of Negritude. *Journal of Black Studies* 10: 449- 460
Twining looks at Negritude within the context of several poems.

1980 Sea Island Basketry: Reaffirmations of West Africa in The First National African American Crafts Conference: Select Writings. Shelby State Community College 35- 39

1985 Movement and Dance on the Sea Island *Journal of Black Studies* 15: 463- 479
According to Twining movement includes games, dance, songs, religious sermons, and speech patterns in storytelling. For Sea Islanders movement is more - it is the person responding to the storyteller, in the relationship between the preacher and the congregation, as well as between the dancer and the audience watching.

Twining, Mary A. and Keith E. Baird
1980 The Significance of Sea Island Culture. *Journal of Black Studies* 10: (4): 379- 386
The blending of African and European cultures on the sea islands and the resultant folkways, language, folklife, and customs are unique in this country. Research needs to determine African connections so that cultural origination points are identified.

1980 Introduction to Sea Island Folklife. *Journal of Black Studies* 10: 387- 416
Twining and Baird present an overview of the sea islands - their history, location, economics, language, religion, and different people create a region which is found nowhere else in the United States.

Twining, Mary A. and William Saunders
1970 One of These Days: The Function of Two Singers in the Sea Island Community. *Studies in the Literary Imagination* 3: 65- 71

Van Sertima, Ivan
1976 My Gullah Brother and I: Explorations into a Community's Language and Myth through its Oral Tradition in Black English, A Seminar. Deborah S. Harrison and Tom Trabasso eds. Hillsdale, New Jersey: Lawrence Erlbaum Associates

Vlach, John M.
1977 Graveyards and Afro American Art. *Southern Exposure* 5: 161- 165
Vlach provides a cultural and historical framework to explain the African burial practices still being observed among African Americans including the importance of providing the deceased with a proper funeral, the wake or sitting up custom, and the placing on the grave of items used by and of importance to the deceased person.

1980 Arrival and Survival: The Maintenance of an Afro- American Tradition of Folk Art and Craft. In *Perspectives on American Folk* Art, Ian M. Quimby and Scott T. Swank, eds. Pp. 177- 217. New York, New York: W. W. Norton & Company

Wade- Lewis, Margaret
1991 Lorenzo Dow Turner: Pioneer African- American Linguist. *The Black Scholar* 21: 10
A detailed account of the development of "Africanisms in the Gullah Dialect" and its 17 year history collecting material, interviewing Africans in Europe, interviewing Gullah African Americans, and living and working in Africa, Brazil, and England.

Wailoo, Keith
1991 "A Disease SUI GENERIS": The Origins of Sickle Cell Anemia and the Emergence of Modern Clinical Research, 1904- 1924. *Bulletin Historical Medicine* 65: 185- 208
Wailoo details the early history of the identification of sickle cell anemia as a specific disorder. By 1924 the disease had been characterized to be among "Negroes" or "mulattos".

Waring, Mary A.
1894 Mortuary Customs and Beliefs of South Carolina Negroes. *Journal of American Folklore* 7: 318- 319
Described as "grotesque" Waring gives examples of South Carolina Negro burial customs. She provides anecdotes to support her belief that Africans and African Americans are afraid of dead people and this is reflected in their burial customs.

1895 Superstitions from South Carolina. *Journal of American Folklore* 8: 251- 252

Watts, Jill M.
1986 We Do Not Live for Ourselves Only; Seminole Black Perceptions and the Second Seminole War. *UCLA Historical Journal* 7: 5-

Weber, Meryl
1978 Gullah Baskets. *Arts and Activities* 84:4

Weintraub, Boris
1984 Just An Incredible Country We Live In. *Arts Review* 2: 1: 14- 18

Wexler, Mark
1993 Sweet Tradition: African Americans' Tradition of Basket Weaving from Sweetgrass. *National Wildlife* 31: 38- 41
Developers and homeowners building near and over what had been marsh are closing off and eliminating the sweetgrass which is used in basket making forcing the basket makers to go farther away to get the necessary grass.

Whitten, Norman E.
1962 Contemporary Patterns of Malign Occultism Among Negroes of North Carolina. *Journal of American Folklore* 75: 311- 325
Whitten focuses on North Carolina; he also includes research by Melville Herskovits, African sources of occultism among African Americans, and direct references to South Carolina and the use of the occult in South Carolina.

Winkoop, A. P.
1970 The Crafting of Sea Island Baskets. Contemporary Corner of the *National Antiques Review* 28- 31

Woltse, H. M.
1901 In the Field of Southern Folklore: Snake Superstitions. *Journal of American Folklore* 14: 205- 206

Work, Monroe
1905 Some Geechee Folklore. *Southern Workman* 35: 633- 635
These examples of folk beliefs include proverbs, animal beliefs, plant superstitions, and miscellaneous beliefs.

1905 Geechee and Other Proverbs. *Journal of American Folklore* 32: 441- 442, n.d.
Basket Making in the Low Country. Works Project Administration Federal Writers' Project, Charleston, South Carolina. South Caroliniana Library, University of South Carolina

Yates, Irene
1946 Conjures and Cures in the Novels of Julia Peterkin. *Southern Folklore Quarterly* 10: 137- 149

1947 A Collection of Proverbs and Proverbial Sayings from South Carolina Literature. *Southern Folklore Quarterly* 11: 187- 199

Yates, Norris
1951 Four Plantation Songs Noted by William Cullen Bryant. *Southern Folklore Quarterly* 15: 251- 253

Zinsser, W.
1967 The Tree of Life. *Look* 6: 18- 19.

Repositories

The major portion of information about the Gullah people in South Carolina can be found in the libraries, societies, and collections listed below. The information about the Gullah people of St. Helena Island and Penn Center is located at the University of North Carolina not at Penn Center. Avery Research Center houses information about the urban Gullah culture of Charleston.

In addition to papers, books, manuscripts, and audio/visual materials there are collections of artifacts such as baskets, quilts, and other items created by Gullah people. These items are kept as parts of collections of folk traditions representing South Carolina, Africans in America, and testaments to the creativity people existing in extreme circumstances of enslavement created.

Avery Research Center for African American History & Culture, College of Charleston - Charleston, SC

- Books
- Videos
- Audio Tapes
- Manuscripts
- Photographs
- Newspaper Clippings

Beaufort County Library - Beaufort, SC
- Books
- Periodical Sources
- Pamphlets, Brochures, and Booklets
- Unpublished Materials
- Newspaper and Magazine Articles
- Interviews
- Music
- Audio Tapes
- Phonograph Recordings
- Videos
- Films
- Film, 16 mm Format
- Filmstrip with Sound
- Microfilm/Newspapers of the Region

Charleston County Library - Charleston, SC
- Books
- Manuscripts
- Documents
- Ph.D. Dissertations and Masters' Theses
- Personal Papers

Charleston Library Society - Charleston, SC
- Books
- Documents

College of Charleston Library - Charleston, SC
- Books
- Documents
- Major Collections of Charleston African Americans
- Photographs of Antebellum and Postbellum Periods

Georgetown County Library - Georgetown, SC
- Morgan- Trenholm Photography Collection
- Books
- Maps
- Documents

Gullah/Geechee Sea Island Coalition - St. Helena Island, SC
- Books
- Documents
- Newspaper Articles
- Artifacts of Gullah Culture

Library of Congress - Washington, DC
- Works Project Administration Recordings done in 1930s of freed enslaved men and women

McKissick Museum, University of South Carolina - Columbia, SC
- The Folk Arts Center, a bibliographic file of folk life and arts, is located within the Museum.

Schomburg Center for Research in Black Culture, New York Public Library - New York, NY
Books
Manuscripts
Articles

Parris Island Museum, Marine Corps Recruit Depot - Parris Island, SC
Photographs
Manuscripts
Museum exhibits
Owns the site and archaeological collections from Santa Elena, Charlesfort, and San Felipe

Penn Center, St. Helena Island, South Carolina
South Carolina Department of Archives & History - Columbia, SC
Information on plantation data
Census Information

South Carolina Historical Society - Charleston, SC
Family Papers
Bennett, John
1875- 1967
The research notes contain information on black folklore, music, superstitions, Gullah, and slavery in South Carolina. Scrapbooks of musical transcriptions of black spirituals and street cries are also in the collection.
Colcock, Erroll H.
1970 De patch- wu'k quilt
The unpublished fictional tale of plantation life in South Carolina before, during, and after the Civil War. The story is written in Gullah and narrated by an African American woman.
Gadsden Family
1703- ca. 1955 Gadsden family papers
The papers (ca. 1920- 1950) of Jeanne Gadsden include a Gullah story about Brer Wolf and Brer Rabbit.
Heyward, Jane DuBose 1882- 1939
In the Heyward papers are poetry written in the Gullah dialect and Gullah stories. Jane DuBose Heyward gave public readings in Gullah as a "dialect recitalist" and she was the mother of Dubose Heyward who wrote the novel "Porgy".
McTeer, Mary n.d. Sukie Sue's Limit
The photocopy of a manuscript story by McTeer written in Gullah probably in the early 20th century.
Murray, Chalmers S. 1905- 1970
The manuscript of a novel *Here Come Joe Mungin* about African- Americans (Gullahs) on the South Carolina Sea Islands. Additional novels about the Gullah people, sea island life, and other subjects are included. Gullah folklore recorded for a W.P.A. project are in the papers.
Ravenel Family 1746- 1941 Ravenel family papers
Rose P. Ravenel's (ca. 1890- 1940) Gullah stories about Brer Rabbit and Brer Wolf with anecdotes about African Americans are in the Ravenel papers.
Screven, Jane
Gullah tales and stories
Gullah Singing
Music recorded in 1974 on 5 audio cassette tapes from several Lowcountry churches of Gullah devotional music

South Caroliniana Library, University of South Carolina - Columbia, SC

An extensive collection of documents relating to African Americans included in books, manuscripts, guides, maps, newspapers, photographs, dissertations and masters' theses, genealogical collection of the South Carolina State Library, family papers, oral histories

Southern Historical Collection, University of North Carolina - Chapel Hill, NC

Personal and Family Papers

Johnson, Guy B. Papers

Writings by students at Rosenwald, Penn, and Mulberry Hill schools. Field notes and research materials collected in 1928 during a stay on St. Helena Island: versions of folk tales, songs, riddles, superstitions, and spirituals are included.

Penn School Papers

Volumes 1- 4

Waring Historical Library, Medical University of South Carolina - Charleston, SC

Early documentation of sickle cell anemia

Medical treatment of Africans in America pre- and- post slavery

Internet Sites

The list of Internet sites is extensive. It is extremely important to use sites that are connected to libraries, repositories, universities, colleges, governmental agencies, and reputable connectors. There is much information about African Americans and the Gullah that is racist, inflammatory, derogatory, and historically inaccurate.

Appendix F: *Overview and Synthesis of Scholarly Literature* by Melissa D. Hargrove

Preface

Anyone who has recently visited the Sea Islands will realize there is not a minute to spare. There are strip malls where basket stands have stood for half a century or more, which once nourished and sustained the community of Mt. Pleasant. Hilton Head Island is unrecognizable as the agricultural homeland of Gullah people for centuries prior to its devastation. Johns Island has become the red carpet rolled across for tourists on their trek to the gated communities of Kiawah and Seabrook. Gullah residents of Daufuskie Island can hardly even be counted as a community, since their displacement to the periphery of their island home to make way for golf courses and tourism. St. Helena Island, which has held on for dear life under the constant threat of encroachment, is constantly battling construction permits and development schemes that threaten to strip them of their homes, their heritage, and their cultural legacy. With every hotel that is built and every road that is widened we lose a piece of the history and heritage of the Gullah people. As scholars, activists, government agencies, and inhabitants, we must begin to take steps toward the preservation of this cultural legacy before it is too late.

Chapter 1 Introduction to the Sea Islands: History, People, and Current Predicaments

The Sea Islands are a site of intrigue and wonderment. The landscapes are picturesque, with moss covered live oaks draping the ground in every direction, and seascapes nothing less than breathtaking. But what is truly amazing is the story of the people who were brought to these islands in chains, first from the West Indies and later from Africa. These enslaved souls, and those who have descended from them, are referred to as the Gullah and Geechee of the South Carolina and Georgia Sea Islands. Their history reads like a tragedy, while their strength and courage inspire all who have been fortunate enough to interact with them.

The Gullah and Geechee have been objects of academic study for more than a century. Scholars from a variety of academic disciplines have studied every aspect of Gullah culture at different times and using different techniques, but there are overarching themes to the body of literature. Language, religion, verbal arts and folklore, land, health and medicine, arts and crafts, leadership patterns, Gullah worldview and cultural values, and development and change will be utilized as topical categories. Operating from such a framework, it is my sincerest goal to illustrate the significant themes of Gullah scholarship historically and contemporarily.

Much of the historical literature will only be used within this overview when necessary for placing complementary research within a broader contextual framework. Historic documentation is necessary, however, more relevant to the issue at hand is research that has required extensive fieldwork within the various Sea Island communities and interaction with those who live and breathe this culture.

Introduction

The Sea Islands are a string of islands that, geographically, extend from Georgetown, South Carolina to Cumberland Island, Georgia. The adjoining mainland for thirty miles inland is also recognized as part of the Gullah/ Geechee area. The broader discourse of Gullah studies often cites Florida as included within the culture areas; however, there is no significant scholarly data that represent Gullah people occupying Florida Sea Islands.[1] This gap should be considered within any future studies aimed at a comprehensive approach to Sea Island research. As a cultural area, the Sea Islands of South Carolina and Georgia have served as home to the Gullah and Geechee. Geechee is recognized as the term used to refer to Georgia Gullah populations, but the blanket term Gullah can be used to designate all communities descended from Africans who have historically inhabited these Sea Islands.

The South Carolina Sea Islands include the following: Bull Island, Sullivan's Island, Yonge's Island, James Island, Johns Island, Kiawah Island, Seabrook Island, Wadmalaw Island, Edisto Island, Lady's Island, St. Helena Island, Hunting Island, Fripp Island, Parris Island, Hilton Head Island, and Daufuskie Island. The Georgia Sea Islands, also known as the Golden Isles, consist of: Tybee Island, Skidaway Island, Ossabaw Island, St. Catherine's Island, Sapelo Island, St. Simons Island, Jekyll Island, and Cumberland Island. It should be noted that among all those listed here, Wadmalaw Island[2] and St. Helena Island of South Carolina, as well as Sapelo Island of Georgia, can still declare the existence of a recognizable, cohesive, and viable Gullah/Geechee community (Hargrove 2000).

These islands can be classified as low- lying; this area is often referred to as the "Lowcountry," separated from the mainland by small inlets, tidal creeks, and grass- covered marshlands. The islands possess a warm marine environment rich with various types of tropical and subtropical vegetation (Salter 1968). Beneficial to these islands is their extremely long growing season: from 250 to 300 days a year (Salter 1968). The sandy- loam soil of the Sea Islands is well suited to many types of agricultural production, which made them ideal for the plantation economies of rice, indigo and cotton, all of which fed the need for enslaved labor. West Africans seemed the best choice for such a labor force, due to their superior knowledge of rice and indigo cultivation (Schwalm 1997). Those captive

Africans, which we now know as the Gullah, forged a common culture out of their shared misery and will to survive and surmount obstacles.

It is indeed the entire chain of Sea Islands that became home to hundreds of thousands of enslaved Africans, but the islands of South Carolina are believed to have retained the most sizeable population directly descended from enslaved Africans (Creel 1988). Many scholars maintain that the Sea Islands of South Carolina are the most authentic source of African culture history in North America, due to the overwhelming existence of "Africanisms" (Turner 1949; Guthrie 1996; Pollitzer 1999). Extensive study of the existing literature suggests more research has been conducted in South Carolina Sea Island communities than in Georgia Sea Island communities.

Among the earliest English settlers to the Sea Islands were several families from Barbados, already familiar with the system of plantation slavery and the utilization of African labor (Johnson 1930; Schwalm 1997). These first West Indian planters brought close to a thousand laborers with them (Creel 1988). Early settlers who came from England in search of an area to settle landed at St. Helena, but moved on to Charles Town upon hearing of the better soil conditions there (Johnson 1930). Charles Town became the major docking point for incoming African captives who were sold in the slave market, which now serves as a tourist attraction in present- day Charleston, South Carolina. It was not until 1700 that the first birth of a Euro American child was reported (Johnson 1930). This event has come to signify the beginning of the colonization of the Sea Islands.

Within the literature there are ongoing controversies concerning the origins of enslaved Africans who we now recognize as Gullah and Geechee. The most comprehensive study, to date, appears in the recently published work of William S. Pollitzer, The Gullah People and Their African Heritage (1999). As a scholar who has devoted a lifetime of study to Gullah research, Pollitzer reviewed a wealth of data concerning the documented origins of South Carolina's African population. The results can be broken down as follows: 39 percent came from Angola (which includes the Congo), 20 percent from Senegambia, 17 percent from the Windward Coast, 6 percent from Sierra Leone, and 13 percent from the Gold Coast (Pollitzer 1999). However, 23,033 (20 percent of the total number of slaves legally imported into South Carolina) were omitted from these calculations because their specific regional origins were not recorded.

These Africans formed communities out of their shared enslavement. What developed is a syncretic, creolized culture which was constructed out of a remodeling of various cultural traits brought across the sea from many different parts of West Africa (Mintz and Price 1992), with subsequent influences from European and indigenous sources. This process happened throughout the African Diaspora in locations where slavery became the principle economic strategy for colonial expansion (Mintz and Price 1992). Therefore, there are evident and well established linguistic,[3] cultural, and religious connections between the Caribbean and the Gullah and Geechee people of North America.

Establishing the connection between the Caribbean and Gullah/Geechee culture area is an important endeavor, which will "highlight its differences from the rest of the American South" (Montgomery 1994a, 8) as well as expound on "the diversity of Lowcountry culture" (ibid, 14). One of the significant aspects of the Gullah/Geechee- Caribbean connections is the demography of the first Carolina colonies. The first enslaved Africans to work the soil of South Carolina were transplanted there from Barbados and Jamaica (Cassidy 1994). Cassidy, speaking from a linguistic standpoint, suggests that the striking similarities among the Creole languages of the Caribbean and the Sea Islands cannot be accidental (1994, see also Hopkins 1992). Culturally, the Caribbean and the Sea Islands share a number of connections. For example, Beckwith (1924) uncovered the links between them through trickster tales, best illustrated by the presence of Anansi stories in the Caribbean and South Carolina (which ultimately connects both areas, culturally, to West Africa). The folklore collection of Parsons (1923) also reveals similarities between the Caribbean (particularly the Bahamas) and the Gullah area.

Religious connections between the Caribbean area and the Gullah/Geechee area are most easily understood in terms of syncretism. Syncretism, defined as the blending of differing systems of belief, is appropriate in terms of establishing a connection between religious belief and practice in these particular Diasporas. Gullah spiritual beliefs represent the syncretism of Christianity and African religion (Butler 1975; Creel 1988; Hart 1993; Pollitzer 1999). Gullah religion will be further discussed in subsequent chapters; however, it is important to reveal its similarities to syncretic religions of the Caribbean area, such as Voodoo of Haiti (also spelled Vodou and Vodun) and Santeria of Cuba (Jones- Jackson 1994).[4] Voodoo represents a blending of the African beliefs systems, brought to Haiti by enslaved Africans, and the Roman Catholic beliefs of their captors. Santeria was created in Cuba by the earliest Yoruba slaves as it was blended with the Catholic belief system of the Spanish. African religions were amenable to this process of syncretism in several ways. The idea of one God (or higher power) was comparable to African belief systems (Jones- Jackson 1994). Also, the worship of saints in Catholicism had distinct parallels with Orisha worship in Yoruba culture. Spirit possession, documented within Gullah culture ("falling out" Twining 1977), Voodoo, and Santeria is yet another connection between the Gullah and Caribbean syncretic belief systems.

An entire volume could be written on the cultural connections between the Caribbean and the Gullah/Geechee area; however, the scholarly literature documenting such connections lacks synthesis, and should be of consideration in the future. What can be definitely established is the shared experiences of enslaved Africans (Mintz and Price 1992) both in the Caribbean and the Sea Islands. These groups shaped a creolized culture out of traits from Africa, interactions with Europeans, Indigenous peoples, and residents of the established slave populations they joined in the New World. Cultural connections, religious connections, and linguistic connections between the Caribbean and the Gullah/ Geechee community establish the need for increased research in the area referred to as "Africanisms."

Africanisms[5]

Africanisms can be best understood as cultural elements (including linguistic elements) that signify an African origin. There are many such "Africanisms" within the various elements of Gullah culture, including songs, folklore, games, language, musical instruments, basketry, crafts, woodworking, initiation ceremonies, and herbal plant usage for healing purposes. Those who came from the Guinea Coast are credited with contributions in the areas of grammar, magic, secret societies, possession and trance, quilting, ceramics, and skilled metallurgy (Pollitzer 1999). The Central African captives brought many Bantu words and names, as well as values of kinship and their deep religious beliefs concerning death and the afterlife (Creel 1990; Pollitzer 1999). As Pollitzer illustrates through many years of study, "no one sea island can be connected to a specific region in Africa" (1999, 198). What can be alleged with relative certainty, however, is that Gullah culture is an amalgamation of many different cultural elements from West and Central Africa.

Etymology[6] **of "Gullah" and "Geechee"**

There are two dominant hypothetical accounts on the etymology of the word "Gullah." The exact origins, however, as well as the precise historical development of the language, remain unknown (Wood 1975). Most often mentioned within the literature is the belief that it is a shortened version of "Angola," derived from the heavy importation of slaves from that region during South Carolina's early colonial period (Jones- Jackson 1987; Creel 1988; Pollitzer 1999). Another possibility is a derivation of "Gola," sometimes spelled Goulah, which refers to a large group of Africans from Liberia who were heavily imported into the Sea Islands at the height of rice and indigo cultivation (Wood 1975; Creel 1988). Less scholarly work has been conducted on the origin of "Geechee," however a number of scholars suggest the term is derived from the Ogeechee River area of Georgia (Sengova 1994).

Transitions: From Slavery to Freedom

It was November of 1861 when the guns of "big shoot" rang out through Port Royal Sound. "Big Shoot," the term used by Sea Islanders to designate the Civil War, brought change and, subsequently,

freedom to the Sea Islands. As Union armies invaded the areas inland of the island plantations, the white owners fled leaving everything just as it was in the hopes of soon returning. Those who had a chance informed the overseers of the situation, assuring them they would return; those without time left their slaves behind with no warning of what was to come. Upon contact with the slave populations, Union troops discovered they had not been informed of the War. The military enlisted the help of the federal government to take responsibility for these "contraband of war" (as they were at that time designated) who were running out of food and options (Rose 1964; Dabbs 1983;[7] Pollitzer 1999).

Many members of President Lincoln's cabinet became nervous about the situation in the Sea Islands. This was to be one of the largest cotton crops ever, and it had to be taken in. To accomplish the harvest, the US government had to formulate a plan for the supervision of the enslaved work force. Appropriate to the era, the intellectual elite of the North came to their aid. The project was a collaborative effort between philanthropists from New York, Philadelphia, and Boston, who came to be known as the "Port Royal Relief Committee." With funding from the U.S. Treasury, the committee assembled a group of missionaries and sailed them off to the rescue of the desperate, abandoned islanders (Rose 1964).[8]

The volunteers enlisted to help with the federally sponsored Port Royal Experiment, as it has come to be known, were put in charge of one plantation each. They were presented with several duties: management of the slaves as they harvested the crops, distribution of relief supplies, teaching, preaching, and preparing them for citizenship (Dabbs 1983). The objective of the Port Royal Experiment was to uplift- - in every possible sense- - those released from slavery by the war (Dabbs 1983).

In 1862, President Lincoln gave the order that abandoned lands in and around St. Helena be set- aside for the freed population (30 miles inland from the sea). On January 1, 1863, President Lincoln's official Emancipation Proclamation was read aloud to the former slaves of St. Helena Island. Soon after came the actual land sales to the freedmen.[9] Much of the land was sold to missionaries or speculators, but some tracts were sold to the slaves who had worked that particular plantation. The land was partitioned off into plots ranging from ten to twenty acres and sold for $1.25 an acre. Owning land was one of the greatest status symbols ever gained for the freedmen, and many who purchased it demanded that it be on the same land as their home plantation. Most often they even chose to keep the original name (Rose 1964). Other advantageous orders followed the land sales. Special Field Order 15 was issued by Union Army General William Tecumseh Sherman on January 15, 1865:

> At Beaufort, Hilton Head, Savannah, Fernandina, St. Augustine, and Jacksonville, the blacks may remain in their chosen or accustomed vocations, but on the islands and in the settlements hereafter to be established, no white person whatever, unless military officers and soldiers, detailed for duty, will be permitted to reside; and the sole and exclusive management of affairs will be left to the freed people themselves, subject only to the United States military authority and the acts of Congress (adapted from Goodwine 1998b:165).

Further Change: From Self- Sufficiency to Resort Development

Between 1864 and the early 1950s Sea Islanders lived in relative isolation as self- sufficient farmers, while also utilizing nearby waterways to supplement their diet. In the 1950s, however, their isolation ended as connector bridges began being built to the various Sea Islands. This was the first step in the demise of Sea Island communities and the situation worsens with each coming year. One need look no further than Hilton Head Island, which only 50 years ago was home to an African- American farming community. Land is constantly taken out of production and converted to resort development for the industry of tourism. Present day Hilton Head is populated by affluent Euro Americans, residing in communities named after successful plantations of the slavery era. What were once self-

sufficient Gullah communities are now the sites of golf courses, resorts, gated retirement communities, and vacation rentals. The development of these communities has transformed the residents into an "endangered species."[10] Their lifeways and cultural traditions are disappearing at an alarming rate. Jobs are scarce and often limited to low wage jobs associated with the tourism industry, and the future projections of increased tourism and development offer no relief.

It is within this tumultuous context that the need arises for a synthetic overview of the existing literature concerning this living, breathing culture. In the coming years, involvement from policy makers, governmental bodies, and community organizations and activists will be crucial to either the destruction or preservation of this irreplaceable link to the African American past.

Chapter 2 Gullah Language

"The spoken word is the life and heart of Gullah culture" (Twining 1977, 80).

The dialect used by Sea Islanders of South Carolina and Georgia, often referred to as Sea Island Creole, was established as a legitimate language system by Lorenzo Dow Turner.[11] Turner was an African American scholar who conducted fifteen years of research among Sea Island residents with the objective of recording their language, folklore, and songs. The ultimate goal for Turner was to uncover the links between Gullah speech and the African languages they most closely resemble in the methods used to form words. In doing so he would also discredit much of the earlier work on Gullah language, such as A.E. Gonzales (1922), J. Bennett (1908), R. Smith (1926), and Guy B. Johnson (1930), who represented misinterpretations of Gullah speech in ways that are denigrating and racist. He established this in his publication Africanisms in the Gullah Dialect (1949). The invaluable data contained within this study continue to be used as the primary reference guide for the linguistic study of Gullah language, and the exploration of the phonetic, syntactic, and morphological elements of Gullah that represent a definitive link to African language systems. It is important to note that Gullah language is distinct, and should not, therefore, be assigned to a general category of Black dialect (Jones- Jackson 1983).[12]

Turner's contributions to the study of Gullah language are immeasurable. His research consisted of field research in both Africa and the Sea Islands, resulting in twenty- seven informants from various parts of Africa and more than fifty from various Gullah communities in South Carolina and Georgia. Africanisms in the Gullah Dialect (1949) includes a phonetic alphabet, West African words found within Gullah speech from a variety of African language groups,[13] syntactic features, morphological features, and Gullah texts transcribed in phonetic notation. All features within this collection illustrate the undeniable contributions of African languages to that which we refer to as Gullah.

The linguistic study of Gullah represents the largest component within both published and unpublished material concerning Gullah culture. The areas of investigation can be delineated into four distinct categories: linguistic origins and composition as a Creole language system, distinctive linguistic features of Gullah speech, dynamics of language usage and decreolization, and the role of language within Gullah culture. A complete understanding of the linguistic study of Gullah requires an advanced understanding of linguistic terminology. In light of the fact that many do not possess such knowledge, I have included, as endnotes, definitions of relevant terminology when necessary.

Linguistic Origins and Composition as a Creole Language System

The linguistic roots of the Gullah language system have been debated for over half a century. Lorenzo Dow Turner's work suggests Gullah language resulted from a merging of English and West African languages of Yoruba, Igbo, Efik, and Twi (among others). Ian Hancock asserts a strong linguistic relationship between the Krio language of Sierra Leone and Gullah (1994), as well as highlighting the similarities between the Guinea Coast Creole English system and linguistic features of Gullah speech.

One example is the grammatical morphemes[14] such as bin, de, go, and don. Cassidy (1994) suggests that Gullah language is rooted in the Caribbean, while Mufwene asserts a "continuity" model based on suggested connections between Gullah language and the Kwa, Kru, and Mende languages of West Africa (1994). Mende speakers were among the dominant group taken from Sierra Leone, due to their extensive knowledge of rice cultivation (Sengova 1994).[15] The Mende language appears to be the largest contributor of words and expressions to Gullah language (Hair 1965; Hancock 1971). Within all the debates on the origins of Gullah language is the assumption that the similarities between West African language systems and Gullah represent a solid connection; thereby establishing the African substratum. Unfortunately, however, at this juncture there is no definitive data that are accepted by all scholars concerning the origins of Gullah language.

African Substratum of English

Words that found their way into the Gullah language from Africa are numerous, and often recognized in English also. In an attempt to assess the possible linguistic, and therefore cultural, borrowing that may have occurred between Gullah and Whites, Wade- Lewis (1988) suggests the English language may also contain evidence of an African substratum.

Ex: Animal names: zebra, gorilla
Plant names and food items: goober, okra, yam, banana
Musical terms: samba, mambo, banjo, bongo
Religious terms: booger, mojo, voodoo, zombie
Action verbs: boogie, dig, juke, tote

In her analysis of the phonological, syntactical, morphological and semantic aspects of Niger-Kordofanian languages[16] in the New World, Wade- Lewis concludes that the Gullah people maintained linguistic continuity, as well as influencing the English language (1988).[17]

Creole Status of the Gullah Language System

When speaker of different languages come into contact with one another they must establish a strategy of communication. This often results in a pidgin[18] language. Once the pidgin becomes the first language of a particular group, it becomes a Creole. What has been established without question is the status of Gullah as a legitimate Creole[19] language system. Cunningham (1970)[20] was among the first to establish Gullah as a legitimate Creole through analysis of the syntactic system.[21] She compared the lexical[22] and grammatical[23] features of Gullah with established Creoles, such as that of Jamaica and Sierra Leone Krio. Both Cunningham (1970) and Hancock (1971) have illustrated similarities between Gullah and the Krio of Sierra Leone, referred to as "the West African cousin of Gullah" by Sengova (1994, 2000).

Evidence of the Creole status of Gullah can be seen in the existence of African- derived words used by Gullah speakers that are unintelligible to inland Blacks (Jones- Jackson 1983) (e.g. dayclean "dawn", det rain "downpour", pinto "coffin" as documented by Montgomery 1994b) as well as the existence of West African language patterns using a single pronoun to refer to all genders, [referred to within the literature as a "genderless pronominal system of pronoun use"] (Jones- Jackson 1978). Other unique facets of Gullah language include: the absence of past tense use of –ed morphemes [e.g. The weather look bad.], absence of the pronoun "it" and substitution of "we" for "us" [e.g. He come this close to we.], and the absence of possessive pronouns [e.g. She can cook she own.] (Jones- Jackson 1983).

Gullah and the Creole Continuum

The most prominent debate within studies of Gullah language is the status of Gullah, with reference to the Creole continuum. The concept was introduced in the 1970s and is best understood as "a continuous range of variation, found in particular in many Creole- speaking communities, between the basilect (the speech variety with the most Creole features), and the acrolect (the speech variety with the least Creole features, thus most similar to Standard language). Speech varieties that have an equal mixture of both are referred to as mesolect, thus being between the acrolect and the basilect.[24]

As a Creole language moves along the continuum between basilect and acrolect, it is presumed that the Creole is undergoing a process of "decreolization" (a process of assimilation from Creole to standard language). The damage done by such an ideology will become clear upon closer investigation of specific research.

Satina Anziano (1998) conducted an investigation to test the hypothesis of Gullah decreolization using data from the South Carolina Federal Writers Project. The subject, "Lilly Knox" was interviewed between 1936 and 1938 and is taken to represent a mesolect Gullah speaker. The speech of Lilly Knox, 36- year- old Gullah woman, is compared to more recent linguistic data collected from current Gullah speakers, Creole, and AAVE (African American Vernacular English) data, presenting copula[25] usage as the point of comparison. The data selected for study consisted of each instance of the forms of be: am, is, are, was, were, been. Statistical analysis was performed using the SAS (statistical analysis system) program. Comparisons with AAVE indicate a comparable trend toward decreasing copula usage in the present tense more than in the past, and the disfavoring of plural copula. The absence of copula usage within the transcripts of Lillie Knox suggests that it is earlier on the continuum of mesolect designation (lower mesolect speaker). Based on the results of the study, Anziano makes an argument for the value of material from the FWP for further linguistic analysis. Anziano further concludes that such results indicate Gullah is now entering the process of decreolization in much the same manner AAVE did at an earlier period in history.

In direct opposition, Tometro Hopkins (1992)[26] suggests that Gullah language is not following a developmental sequence of decreolization. This study focuses on the use of auxiliary verbs da and bin. Hopkins discusses the development of Gullah language within the context of competing past and present theoretical paradigms concerning the origins, dynamics, and future of Gullah language. Upon comparing Gullah with alternative Creole verbal systems, such as Guyanese Creole English, Hopkins suggests Gullah language is changing, but not in the direction of being replaced by Standard English. Through the conversations used to conduct linguistic analysis Hopkins conveys much about Gullah culture in the realm of social structure, religion, family, and changes brought by development. Much of the same argument appears in a more recent publication based on the same fieldwork data (Hopkins 1994).

In 1990 an alternative hypothesis was proposed. Katherine W. Mille, suggesting that the Creole Continuum (CC) positions Gullah language as moving toward English, proposes that the CC may be too simple and linear to adequately represent what is going on within the Gullah language. Furthermore, she suggests that the two languages are involved in a stable relationship which allows for some overlap between the two; highly dependent on social context. The overall project is to isolate, describe, and quantify those syntactic or morphological features that mark tense mood aspect (TMA) in the verb phrases of Gullah represented by Ambrose Gonzales[27] (even though his work is controversial and labeled racist and demeaning), and compare them with features serving the same function in recent samples of Gullah speech gathered by Jones- Jackson (1978) and Mufwene (n.d.). Tense, mood, and aspect in Gullah are generally distinctive and thus are easy to identify, study, and compare, which is why they are chosen as objects of study within this research.

In terms of the debate over the decreolization of Gullah, Mille breaks new ground. The results suggest no directional change in Gullah over time, no indication that Gullah is converging with English during the time line specified for this study (last 130 years), and therefore no real evidence that Gullah is undergoing decreolization. Mille suggests the results establish Gullah as a stable Creole language system (1990).

Mille is not alone in her belief that Gullah language is alive and well. Salikoko S. Mufwene, a scholar who writes extensively on Creole language systems, disputes the theory that Gullah language is dying out, further suggesting that Gullah has been under no more pressure to change than any other nonstandard variety of English in North America. He cites group identity, geographical and social

isolation, and the ability to code switch[28] successfully, as important factors that have aided in the preservation of Gullah language. In response to the idea that stigmatization will erode Gullah, Mufwene suggests that is only the case if the community's sense of identity has been eroded (Mufwene 1997).

The real threat to Gullah language survival, Mufwene asserts, is the overall reduction of speakers due to development and land loss. As newcomers enter the coastal communities of Georgia and South Carolina the limited economic opportunities within the tourism industry drive the youth to larger cities. It is in such places that the real pressure of assimilation threatens to alter Gullah language. This is in direct contrast to the notion that increased tourism will bring about increased interactions between Gullah speakers and Standard English speakers. To support his hypothesis, Mufwene reminds us that those who settle and vacation in these areas spend the majority of their time at the beaches, and not in contact with the local Gullah community. Therefore, this research suggests there is no evidence of an immediate threat of language loss or decreolization directly resulting from increased development and tourism within Sea Island communities. It is, however, the economic constraints of tourism and development that lead to overall loss of Gullah speakers in these areas.

Gullah Linguistics: Various Points of Interest

There are a variety of studies concerning Gullah language that do not intersect neatly with any mentioned thus far. Linda D. Mack (1984)[29] conducted a comparative analysis of linguistic stress patterns, which attempted to compare the phonological contrast system of Gullah with that of English; more specifically, on an acoustical/temporal analysis of the linguistic stress patterns of Gullah and English speakers. Linguistic stress refers to enhancing some elements of speech so that they become more prominent and noticeable. Subjects who participated in the linguistic study were divided into three categories: Gullah speakers, English speaking Black adults, and Code switchers. Speaking fundamental frequency (SFF) was used as the test variable. The study results indicate that English and Gullah differ most in the area of duration, with fundamental frequency also being a good indicator for linguistic stress patterns, with Gullah speakers exhibiting a lower speaking fundamental frequency than English speakers. Mack's work also includes (in Appendix) a Gullah Feature Index, General American English Index, and a Guide to Code Switching Proficiency (1984).

Language does not operate in a vacuum. It is influenced by many factors within a community of speakers. In 1976, Patricia C. Nichols conducted research within Georgetown, South Carolina, to assess the ways in which age, sex, and mobility affect linguistic change. The data consist of twelve recorded adult conversations and the subsequent analysis of grammatical features undergoing change, such as preposition and pronoun usage. Factors suggested as having an impact are job aspirations that require Standard English speaking ability, varying degrees of connection to island life, and age. This study proposes that Gullah language is undergoing change toward Standard English within the specified speech community, citing various factors of direct impact.

Language as Culture

Language and culture go hand in hand. There are countless cultural elements within Gullah culture that exhibit the importance of language to cultural preservation. Within religious ceremony, sometimes what is said is not as important as how it is said. In a sermon recorded in 1980 on Wadmalaw Island, South Carolina, Patricia Jones-Jackson illustrates the importance of linguistic features within the process of "evocation of the spirit" (115)[30] during a Gullah church service. Throughout the sermon, the minister sprinkles bits of Creole syntax with Standard English. This strategy reinforces to the congregation, both educated and uneducated, that he is indeed part of their shared speech community. The following excerpt illustrates the use of Creole within the sermon:

> *Going over the Sea of Temptation*
> Brother I don't know
> But I begin to think

In this Christian life
Sometime you gone be toss*
By the wind of life.

All the power in he hand*
Got power for we*
When we get hungry
He's able to feed us (Jones- Jackson 1994).
**denotes examples of Creole syntax use*

Gullah Language and Education

Several studies have been conducted concerning the status of Gullah language and possible implications for the education of Gullah children.[31] Virginia D. Benmaman (1975) conducted research among fourth and fifth grade Gullah children on Johns and James Island, South Carolina, to assess their level of linguistic acculturation. Her findings indicated that children prefer materials written in Standard English to material written in their own language. Students responded to seeing the Gullah language in written form with discomfort and ridicule, with many referring to it as "bad language." Upon administering comprehension tests in both, research results produced no significant differences between scores for either Standard English or passages written in Gullah. Benmaman suggests that Gullah children (of the 1970s) had a conditioned preference for Standard English, due to a lack of respect shown by teachers and school staff regarding the legitimacy of the Gullah language system. She also suggests there has been a strong attempt to reject and eradicate Gullah speech throughout schools in Sea Island areas.

More recently there was a similar study conducted by Bernateen W. Cunningham (1989) Attitudes of School Personnel in Charleston, South Carolina Toward the Gullah Dialect. The research was aimed at assessing the attitudes of speech- language pathologists and teachers in the public school systems of Johns and James Island toward children whose language is Gullah. Questionnaires were administered[32] and the results were statistically interpreted. Overwhelmingly, the data suggest that school personnel respond negatively to children's use of Gullah language, prompting Cunningham to suggest there is a definite need for educational and cultural training of teachers working with Gullah-speaking children (1989), in an attempt to foster recognition of the unique linguistic features of this viable language.

Contemporary Gullah research corroborates the need for culturally sensitive teacher training. Within Melissa Hargrove's work (2000)[33] informants and field collaborators discussed the persistent stereotype and stigma attached to Gullah language. The elder generations, many of which were "educated straight out of their culture" (Hargrove 2000), were punished for speaking Gullah as children and young adults. It was made clear that the only way to get a decent job or be respected was to rid yourself of that "bastard English, broken English…bad talk" (Hargrove 2000, 102). Marquetta L. Goodwine, founder of the Gullah/ Geechee Sea Island Coalition, supports this idea:

> This condemnation and pity of Gullah- speaking Sea Islanders had an overwhelming and almost devastating impact. These people were taught that "ef oona tak likka disyah, den ting backwad" and if you wanted to "make something of yourself" then you needed to "correct" the way you spoke (meaning to take on Standard English) (Goodwine 1998d, 9).

Only presently are some communities and school systems coming together to encourage children to learn to "code switch" gracefully between Gullah and English, but it will be many years before the results of such shifts become evident and widespread.

Conclusion

One of the premiere linguistic specialists on Gullah language was Patricia Jones Jackson,[34] author of When Roots Die: Endangered Traditions on the Sea Islands (1987). After extensive years of research on Wadmalaw Island and within various Sea Island communities, she made a profound prediction: the language will remain intact as long as the communities remain intact. In making suggestions, nearly all scholars studying Gullah language realize the need for speakers of Gullah to be educated on the origins of their language. This would go a long way toward encouraging Sea Islanders to take pride in their African heritage. Educators in these areas must be made aware of this important task. It is estimated that the Gullah language is spoken by less than half a million descendants of Africans living in coastal South Carolina and Georgia (Mufwene 1997). Language preservation should be a top priority for all scholars involved with Gullah and Geechee communities, as well as for the growing number of activists leading grassroots movements within them.

Chapter 3 Religion and Ceremony

Religion and religious ceremony have been among the primary research interests within Gullah/ Geechee studies, and with good reason. Religion has played a central role in community life, organization, leadership, and survival within the various Sea Islands of South Carolina and Georgia and continues to be the most powerful force in Gullah communities (Jones- Jackson 1994). Gullah religious belief and practice can be compared to the broader belief systems of African Americans as they pertain to the doctrine of Christianity and worship of God, however, a fair portion of Gullah religiosity remains grounded in African cosmology and worldview. There are many components to this body of research: spiritual beliefs and practices, music and song associated with religion, African cultural retention within Sea Island religiosity, and the role of the church within the community. What is striking about the research concerning religious aspects of Gullah life is how little some aspects have changed over time.

Folk Religion

What might it have been like to witness the evolution of religious ideology within these early slave communities spread along the Sea Islands of South Carolina and Georgia? Much of the research conducted gives us a sketch into the lives of these earliest Africans, and chronicles the ways in which Gullah and Geechee religion came to be what we find today. Afloyd Butler represents this curiosity in his unpublished dissertation, The Blacks Contribution of Elements of African Religion to Christianity in America: A Case Study of the Great Awakening in South Carolina (1975).[35] Butler suggests the African American Christianity we witness presently is a direct result of strong African elements being kept alive within an evolving religious system. Such elements were harbored within what is referred to as "the invisible institution" in which enslaved Africans conserved part of their religious heritage by syncretizing certain elements within a Christian framework (Butler 1975; Raboteau 1978). Such characteristics include shouting, dancing, spirit possession, and foot stomping, which can be witnessed in many of the present day church services of Sea Islands communities.

The most comprehensive and highly recognized study of religion in the Sea Islands was conducted by Margaret Washington Creel, resulting in *A Peculiar People: Slave Religion and Community- Culture Among the Gullahs* (1988). The historical time line of this investigation begins in West Africa with the possible antecedents of Sea Island religion. Creel investigates the various elements of Gullah spiritual life, including social cohesion, group identity, cultural resistance, and adaptability. Using missionary reports, diaries, church minutes, and recorded Gullah spirituals from the St. Helena Island community, Creel established a rough sketch of the origins of slave religion during their earliest years of bondage. Gullah religious beliefs represent a syncretic creation (often referred to as a folk religion) made from the blending of African spirituality and worldview with the Christian acculturation and indoctrination experienced in the New World (Creel 1988).

Church and Community

The importance of the church within Gullah and Geechee community life cannot be over emphasized. The church as community center began with the concept of the Praise House, of which there are several still standing within various Sea Island communities. Praise Houses were located on each plantation and served as a religious meetinghouse for that particular plantation's enslaved population. As time progressed, these small one- room dwellings became the locus of social planning and action, motivation, and community cohesion (Lawton 1939).[36] The Praise House became the official site for legal and social matters, as well as conflict resolution (Guthrie 1977), therefore becoming the judicial, religious, and social center of the community. Patricia Guthrie conducted research within the St. Helena Island community and concluded that Praise Houses were still being used, on occasion, for similar purposes. She suggests that children were only granted membership to particular community Praise Houses once they had completed the social process of "catching sense" (1977).[37] No other scholar has identified this particular concept.[38] It is accurate, however, that the social system of St. Helena Island (as well as other Sea Island communities) is structured by membership in particular Churches and previous plantation boundaries (Guthrie 1996).

Religion as Music and Song

At the heart of Gullah religious beliefs and practices are the songs. The importance of song within these communities began before their arrival in the New World. Enslaved Africans brought with them an African tradition of "call and response" worship, song, and religious dance (Hart 1993), which accounts for the noticeable African rhythms of Sea Island spirituals (Thrower 1953).[39] As they were introduced to Christian hymns through their interactions with plantation owners and missionaries, the early Sea Island populations created the "Negro spiritual," best understood as an adaptation of traditional Christian hymns. Many of the beliefs of Christianity were incorporated into the Gullah spiritual worldview. [40] These songs became a form of self and group expression, as a way to communicate the oppressions and hardships of slavery, as well as a mental release (Thrower 1953). They also represented the spiritual devotion of slave communities to their new spiritual guide, in such songs as Gwine t'res from all my labuh and Somebody een yuh, it mus' be jedus.[41]

Religious songs are still an important component of Sea Island worship, but are commonly referred to as "Gullah spirituals." [42] These songs represent the Negro spiritual of the slavery era as it has adapted and evolved over time. Gullah spirituals are normally sung in unison and without music, accompanied by rhythmic foot stomping, clapping, and tambourine strikes (Hart 1993).[43] Gullah spirituals are unique in that the scales are much more pentatonic than Euro American hymns. They also differ from traditional Negro spirituals in their lack of musical accompaniment. Even with the noticeable changes between the spirituals of enslaved peoples and present day Gullah and Geechee people, the spiritual and its performance represent cultural ties to African tradition and African tribal rituals (Hart 1993).

Extensive research has been devoted to the legacy of the Negro spiritual and its place in twenty first century Sea Island society. Thomas Hawley, Jr. conducted six years of research on Johns Island in the company of an elderly singing group, the "Senior Lites." Members of this group are carrying on an oral tradition that was passed to them from ancestors who were alive during the period of slavery or shortly after (Hawley 1993), but it is in danger of loss. Informants reveal that clapping and shouting are being replaced by drumming, organs are replacing a cappella singing, and meetinghouses are losing their distinct role as spiritual and community centers. What is preserved within this research is important information concerning who passed these spirituals on to those within this singing group, what role the spirituals play in their religious lives, and perceived threats to this religious tradition. Specific factors analyzed within this dissertation include: role of lead singer, type of spiritual, tempo, duration, type of hand clapping, tonal center, number of pitches used, embellishments, word content, name and age of singers, and religious affiliation. Transcribed interviews with all the singers are included in the Appendix, as well as the lyrics and musical scores to two recorded performances of the "Senior Lites."

No discussion of the importance of song within Gullah culture is complete without Guy and Candie Carawan's Ain't You got a right to the tree of life? The People of Johns Island, South Carolina- Their Faces, Their Words, and Their Songs, first published in 1966 (1989). This book is the product of a project initiated by the Highlander Institute, which includes songs and stories of relevance to the residents of Johns Island during the early 1960s. The collection was gathered over a four- year period in which the married Carawan team lived within the River Road Gullah community. The latest edition (1989) includes an introduction by Charles Joyner aimed at the abrupt changes in this area between the first publishing (1966) and 1989. Just as with other Sea Islands, development and tourism have certainly taken their toll on this Gullah community.

Ain't you got a right to the tree of life? contains the lyrics of many important Gullah songs, including We shall overcome, Shoo Turkey Shoo,[44] Jack and Mary and the Devil, Ask the Watchman How Long, Keep your eyes on the prize, and others. Within this book the songs and stories tell of an island that has endured many hardships. It also contributes to our knowledge of Gullah storytelling, Gullah religion, migration to New York, race relations on the island, and the organization of the first citizenship education school by Septima Clark and Esau Jenkins (1966, 1989). The residents of Johns Island made notable contributions to the Civil Rights movement with their strategies for training teachers and organizing at the grassroots level. The words and songs within this collection record an important part of Gullah history straight from the mouths of those who lived it.[45]

Much of the research conducted concerning songs of Gullah culture has been an attempt at "salvage" collection. Among the earliest collections was Slave Songs of the United States collected and compiled by William Francis Allen, Charles Pickard Ware, and Lucy McKim Garrison. The compilation of 136 slave songs, collected on St. Helena Island (among other locations throughout the U.S.) was released in 1867, and reprinted in 1965. From the collection of songs we can reinforce our current assumptions about the unique linguistic patterns of Gullah speech. Allen et al. make note of the omission of auxiliary verbs, the lack of distinction of gender, case, number, tense, or voice, as well as the use of past tense verbs in the present auxiliary (1965). Among the songs collected are rowing songs, spiritual songs, songs associated with the "shout" and songs which represent the daily routines and hardships of Sea Islanders during the 1860s. This collection, when viewed for its historical significance, illustrates the strength and perseverance of song in the lives of the Gullah. Songs have given them hope and happiness, while preserving their rich heritage in word and melody.

Just as continuity is reflected in Gullah songs, we can also see the effects of time and change. George L. Starks[46] offers a glimpse into the world of music within the context of Gullah culture as he examines the role of music within community life. His research was conducted on James, Johns, Yonges, Edisto, St. Helena, and Daufuskie Island between 1972 and 1973. Starks suggests that the religious services he witnessed are not much different that those conducted in these same areas some 90 years ago (1973), with particular songs to accompany certain activities and particularly religious and holiday events. Stark's work is evidence of the integral role of dancing, hand clapping, and movement in the delivery of music and song both historically and within the recent history of Sea Island religious activity. Also, some baptisms are still conducted at the river. Stark's findings propose that Gullah songs, as well as music, represent both continuity and change, and the traditional importance of music lives on in the Sea Islands.

Traditions of Religious Practice: "Ring Shout" and "Call and Response"

There are two traditional practices associated with Sea Island religious services that inadvertently appear in any detailed study: the "ring shout" and "call and response." The ring shout has a long history within Gullah culture. This shuffling, circular dance is accompanied by chanting and hand clapping, and has been associated with the singing of Negro spirituals and Gullah spirituals since slavery (Allen et al. 1965). During Praise House meetings, each new verse of a spiritual was introduced by the song leader to which the chorus responded (call and response), just as it is done in present day churches. The Minister interacts with the audience in a way that illustrates the symbiotic relationship

between minister and congregation. The transcript of a sermon from Wadmalaw Island, June 1980 illustrates the minister's calculated use of language in an attempt to elicit response and involvement from his congregation (Jones- Jackson 1994). By sprinkling Creole syntax throughout the sermon, the minister touches both the educated and uneducated parishioners, establishing that he is part of their speech community. This not only creates personal bonds between the two, but also preserves the long held tradition of "call and response" within religious practice of Sea Island communities.

Role of Church in Community Life

The importance of religion in the lives of Gullah and Geechee people allocates extensive power to the church within the activities of the community. Recent research conducted within the St. Helena Island community illustrates the past and present role of the church within community life (Watkins 1993).[47] Until quite recently the residents of St. Helena Island depended on their religious leaders to maintain social order through a system referred to as "just law." The system originated from the Praise House religious courts used to mediate and settle disputes in a process referred to as "Ward Deacon Process" (Watkins 1993). Minor infractions, such as domestic disturbances and theft, were handled through church law as recently as the mid 1980s. For example, if a community member was accused of getting drunk and creating a disturbance he or she would appear before the church council, thus making him responsible to both his church community and the wider social community. When the church leaders felt he had received the necessary counseling from the Bible, he would be forgiven and allowed to rejoin the church community for services (prior to that decision the person was forced to sit on the back row of the church as a tactic of ostracism). Many residents of St. Helena Island suggested this type of system worked because islanders are very community oriented and very spiritual; the system incorporated two very important cultural aspects into a strategy for social control. Older members of the community suggest the old way was better than "white mans law" (referred to as unjust law), because it promoted social cohesion and minimized criminal activity while being linked to the important concepts of extended family and religion (Watkins 1993).

The maintenance of social control by church leaders has long been a practice of Sea Island communities (Johnson 1996). Research conducted in 1950 in Shrimp Creek Georgia (15 miles south of Savannah) provided similar findings. Deacons of Shrimp Creek were reportedly responsible for handling marital and social conflicts (Ottenberg 1991). Church leaders were chosen by the congregations to serve for life, thereby creating bonds that would last and creating alliances across social boundaries.

Seekin' the Lord: African American Conversion Ritual

The process referred to as "seekin' the lord" has been widely documented in countless studies of Gullah religious practice (Starks 1973; Creel 1988; Pollitzer 1999). This process in one in which a person undergoes a particular ritualistic process in order to be "ushered into the inner circle of the socioreligious worldview of their community" (A. Johnson 1996, 16). The period of time between a professed desire to become Christian and acceptance by the elders was called "seekin" because the seeker was looking for Jesus (Pollitzer 1999). The process became a rite of passage within the Praise Houses of Sea Island slave communities, symbolizing public affirmation of their acceptance of the Lord into their hearts and lives. During the seekin' process it is customary to fast, as well as to wait for a vision from God (A. Johnson 1996). The act of seekin' provided a moral compass by which members of a community were held mutually accountable to one another to live by the laws of God. The folk religious practice of seekin' was the physical manifestation of this spiritual quest. The seeker would go into the woods and wait for a vision, which he or she would then relate to an elder. Next the person would be accepted by the Praise House members and readied for baptism (Pollitzer 1999).

Conclusion

The abundance of research conducted within various Sea Islands concerning Gullah religion is beyond the scope of a mere chapter. What is recognizable from this brief overview is the importance of religion within the lives of the Sea Islanders, as well as the abundance of religious practices, beliefs,

and rituals signifying continuity with an African past. As long as such connections exist, Gullah culture will signify the important role of religion and spirituality from slavery to the present, as well as the adaptive nature of those early African communities who blended African beliefs with Christianity into the syncretic religion being practiced today.

Chapter 4 Verbal Arts and Folklore

Traditional folklore, rooted as it is in the real hungers, needs, and struggles of man, is a means of preserving the community's memorable experiences; of protesting- - humorously, bitterly, or militantly- - the hard life imposed by nature or by the inhumanity of some men towards other men; of making educational comments about manners and morals, the trivial and the transcendental in man's groping for a life of meaning and dignity (Joyner 1971, 2).

For more than one hundred years, African American folklore has been an object of scholarly study. Folklore refers to the traditional beliefs, myths, tales, and practices of a people transmitted orally from generation to generation. Historically, folklore has been collected from missionaries, academics, ministers, and abolitionists, resulting in large collections from various African American populations throughout North America. Gullah folklore, best described as folk knowledge, offers insight into many historical aspects of Gullah life (e.g. tales as education, love, origin myths, tales as hidden messages, socialization, religion (Pollitzer 1999)). Current and future research aimed at folklore collection and documentation of tales still being told offer intriguing possibilities for the study of cultural continuity and change in the Sea Island area.

Slave Narratives of the Federal Writers' Project

The majority of scholarly literature pertaining to folklore simply records the tales, songs, and language with no elaboration of the social context within which the folklore was collected. Hundreds of slave narratives were collected in the 1930s as part of the Federal Writers' Project[48] of the Works Progress Administration (WPA) http://memory.loc.gov/ammem/snhtml/snhome.html.

The narratives document hundreds of interviews conducted in South Carolina and Georgia of particular relevance to any study of Gullah culture. Much of what was recorded among the Geechee of Georgia appears in the publication, Drums and Shadows: Survival Studies Among the Georgia Coastal Negroes (1940). Drums and Shadows is an attempt "to present the customs and beliefs of what is left of a generation closely linked to its native African origin" (1940). Residents of various communities were interviewed by agents of the WPA, including Old Fort, Tin City, Yamacraw, Frogtown and Currytown, Springfield, Brownville, Tatemville, White Bluff, Pin Point, Sandfly, Grimball's Point, Wilmington Island, Sunbury, Harris Neck, Pine Barren near Eulonia, Possum Point, Darien, Sapelo Island, St. Simons Island, and St. Mary's. The collection of folklore and stories are transcribed in Gullah, as much as possible, in order to preserve the rich linguistic heritage. The topics of folklore within this collection include conjure, work, daily routines, religion, traditional arts and crafts, superstition, music, recipes, food ways, death and burial customs, songs, baptisms, graves, fishing, subsistence, architecture, agriculture, industrialization, memories of plantation life, and family stories passed down through the years. The original material is archived at the Library of Congress.

This type of collection represents the overall worldview of the Geechee people inhabiting these islands at a particular moment in time. The Appendix is essential reading, as it draws correlations between this and other research in ways that establish concrete connections between Sea Island culture and various cultures throughout the African Diaspora, as well as West African culture. Close to 150 informants were interviewed for the Drums and Shadows project. The collection also contains excellent photographs of many informants, as well as tools, musical instruments, carvings, and baskets (1940).

Folklore Experts: Charles Joyner and Mary Arnold Twining

Among the most prominent scholars who have conducted folklore studies in South Carolina and Georgia are Charles Joyner and Mary Twining. Joyner's dissertation Slave Folklife on the Waccamaw Neck: Antebellum Black Culture in the South Carolina Lowcountry (1977) is concerned with Afro-American folklife on the rice plantations of Waccamaw Neck during the final decades of slavery. Joyner extends the usability of the term "folklife" to include all aspects of life among the African Americans of the slave community under study. Joyner's work is painstakingly compartmentalized into six chapters: historical overview of the Lowcountry and the Gullah people, work patterns during slavery, use of "off time," Gullah linguistics, animal and human trickster tales, and material culture.

Joyner gathered data from published and unpublished sources: family papers, plantation records, wills, estate inventories, vestry records of the church, minutes of the planters' agricultural society, memoirs, planters writings, writings from visitors, newspapers, and genealogies from the Waccamaw Neck planter class. He also made comparisons between the planter class data and the historical data concerning slavery in the Americas, in order to get a balanced look at life in the Lower Waccamaw Neck region of South Carolina. Folktales selected for study illustrate connections with the African heritage of Gullah people. Within his dissertation there is also a wealth of information concerning life during slavery, including data on food allowances, clothing, architecture, and African influenced crafts. The dissertation was later published as Down By the Riverside: A South Carolina Slave Community (1984).

Mary Twining also conducted research concerning Sea Island folklore and folklife in the communities of Johns, James, Wadmalaw, Yonges, and Edisto Islands in South Carolina, as well as St. Simon Island, Georgia. Her dissertation, An Examination of African Retentions In the Folk Culture of the South Carolina and Georgia Sea Islands (1977), sought to point out the distinctive African survivals in the Sea Islands region. Twining realized the value of folklore, suggesting, "folk stories demonstrate the values in the community" (117). Within the various Sea Island communities the values were numerous. She presented the Sea Islands as "a homogeneous, traditional community that provides a living laboratory for folklorists and other students of human cultural behavior" (1977, 3). The extensive folklore collection of Twining's work is broad in scope, including specific folktales, games and plays, songs, interviews, recorded stories, animal stories, biographical sketches of informants, religious services and prayers, and riddles collected from Johns, James, Wadmalaw, Yonges, and Edisto Islands in South Carolina and St. Simon Island in Georgia.

Twining recorded not only the written forms of folklore and folklife, but also included the expressive behavior of verbal arts, such as storytelling, oral religious lore, and singing songs, as well as the movement and dance associated with important folklife ceremonies. Twining discusses the role of folk craft within everyday life (e.g. baskets, quilts, nets, brooms) as well as the social implications of Gullah songs and stories: " hope for a better world, better treatment and better times pervade the songs and prayers" (Twining 1977, 85). A persistent theme of flying home (or escaping home) to Africa appears in songs and stories. Within the animal stories, Twining recognizes the rage, hostility, and frustration earlier generations of Gullah were faced with in their dealings with Euro Americans. Folklore is not simply the tales of a backward people; it is a powerful representation of history as viewed through the holders of indigenous folk knowledge.

What is easily recognizable through Twining's representation of Gullah folklore and folklife are the connections to a West African heritage. African societal features appear in such activities as games and music, as well as community relationships and child rearing. While playing games and other activities, older children help care for the younger generation of children, much the way their African ancestors did. Members of Gullah communities cast nets the same way West Africans do, and many of the food preparation customs have been passed from generation to generation. Twining's dissertation contains numerous recorded songs, prayers, and games from various Sea Island communities; among them are

Sally Waters (or Walker), Mary Mack, Boba- needle, Whoa, mule, can't get the saddle on, to mention a few.

Adding to our knowledge of the persistence of Africanisms in the Sea Islands, Twining, along with Keith E. Baird, co- edited Sea Island Roots: African Presence in the Carolinas and Georgia (1991). The volume contains articles concerning the many African cultural retentions present within Gullah culture. Within that volume Twining discusses the art and tradition of "basket names." The article "Names and Naming in the Sea Islands" was first presented as a paper at the Ninth Annual Symposium on Language and Culture in South Carolina at the University of South Carolina, April 1985. It also appears in a more recent edited volume, The Crucible of Carolina: Essays in the Development of Gullah Language and Culture (1994) edited by Michael Montgomery.[49]

Basket Names Within Sea Island Culture

It was Lorenzo D. Turner (1949) who first uncovered the African retention we refer to as basket names. The names of Sea Islanders gathered by Turner have been established as originating in countries from Senegal to Angola, while also indicating the early Gullah communities contained speakers of many different languages. Basket names are associated with people; however, it is also important to seek place names which offer evidence of African linguistic retentions. For example, Turner included names for coastal rivers and islands in South Carolina which are presently recognized as place names:

Okatee[50]	okati (Umbunda, Angola)	Middle, interior
Peedee[51]	mpidi (Kongo, Angola)	a species of viper
Wassaw[52]	wasaw (Twi, Gold Coast)	name of district, tribe, dialect

(Above adapted from Turner 1949, 307)

The aforementioned paper by Twining (Names and Naming In the Sea Islands) sought to investigate the persistence of this practice some forty years after Turner recorded the practice of basket names. The findings suggest that such practices still exist (names gathered form Johns Island) and the names are (1) related to specific characteristics of the bearer, or (2) related to some incident or situation in which the named individual was involved. The article contains many examples of names obtained during research within the Johns Island region.

The traditional use of basket names has important social functions within Gullah communities. For example, names form interrelationships between family and community, as well as within the larger network of kinship. Basket names also represent an inner core of cultural integrity, which has shown itself to be remarkably resistant to outside influences (Twining and Baird 1991). It is clear than many of the African cultural retentions have served a function over the decades of their existence, whether it be community cohesion, subtle resistance, or the transmission of cultural knowledge from one generation to the next.

Folklore as Resistance: Trickster Tales

In a recent dissertation by Mella Davis, African Trickster Tales in Diaspora: Resistance in the Creole-Speaking South Carolina Sea Islands and Guadeloupe (1998), the continuation of African oral tradition within Sea Island communities is investigated. Davis examines the "trickster tale" and the hidden political discourse within it, criticizing earlier studies of African trickster tales for the apparent lack of depth concerning sociocultural meaning.[53] Davis illustrates how stories must be supported by community structure; "without a living, speaking, relating body of people, the stories cannot thrive" (16). Davis conducted a portion of her research as an official affiliate of the Penn Center on St. Helena Island, which allowed her greater access to the community's elderly. She was also able to interview several children who had been involved with a program sponsored by the Penn Center, which encouraged young children to record the folktales of their grandparents. Many still remembered them.

Fieldwork was conducted on various Sea Islands by interviewing professional and native storytellers and community leaders. Davis conducted field research on St. Helena, Wassaw, Daufuskie, and Johns Island of South Carolina, as well as Sapelo Island, GA and within the Dale community of South Carolina from May to July of 1994.[54] The community of elders in Dale (10 to 15 miles Inland) shares an identity and spends time together, fostering the preservation of storytelling, trickster tales, and religious stories. The broader analysis of this dissertation compares trickster tales and folktales gathered from the Sea Islands to those of Guadeloupe. Davis suggests that the endurance of such tales as Br'er Rabbit, The Signifying Monkey, and John have persisted because they offered coping mechanisms for African American communities faced with similar circumstances, such as the Sea Islands and Guadeloupe.

Along with trickster tales, there were other mechanisms of resistance practiced within Gullah communities. Janie Hunter, a well known Gullah storyteller, informed Davis that Gullah language allowed slaves to conceal their private lives, thereby undermining the control of Euro Americans (1998, 71). Hunter referred to this language strategy as "cat language," meaning to run the words together so Euro Americans couldn't understand them. Many scholars have suggested this strategy is also rooted in African oral tradition. Unfortunately, as Davis reports, extreme population loss within Sea Island communities has contributed to a loss of oral history, folktales, and storytelling.

In order to legitimize the study of folklore, Davis suggests the brilliance of Zora Neale Hurston as the point of departure for investigating African American folklore: enabling storytelling to be presented as both performance and a tool of communication within the community. Hurston, an official collector for the Federal Writers' Project in Georgia, presented African American culture as performance in everyday life, not merely as stories told for entertainment.[55]

Early Folklore Collections: Synthesis and Critique

Many contemporary scholars of Gullah cite Elsie Clews Parsons for her collection, *Folk- Lore of the Sea Islands* (1923), which illuminates the similarities between West African folk tales and customs and those documented in Sea Island folklore. Parson's work is important in that she divulges her difficulties in obtaining cooperation due to the barriers between white researcher and African American informants. Within this collection we find over two hundred folktales collected during the month of February, 1919, from Gullah residents originating from Dataw, Edisto, Lady's, Parris, Coosaw, Hilton Head, Daufuskie, and St. Helena Island. Her data were obtained from ninety such informants. There are also riddles, proverbs, songs, and games included. Parsons pays only brief attention to folk beliefs in the concluding chapter "Folk Ways and Notions." Here she touches on Gullah ideas about births and babies, initiation to the church, dating and marriage, economy, weather signs and star- lore, dreams, sickness, black magic and curing, and death, burial, and mourning (1923).

It is important to note, however, that others criticize her work as limited and narrow. Twining (1977) and Hargrove (2000) suggest that Parson's work is limited by the lack of details concerning the social position of her informants (e.g. occupation, age, marital status, residence, etc.), and lack of elaboration concerning the methodology of her data collection. She also fails to include the context of how the stories were collected and gives no substantive data concerning her interaction with informants (e.g. where the interviews took place, how much time was spent with informants, interactions aside from interviews, etc.). Also criticized by contemporary scholars is *The Black Border: Gullah Stories of the Carolina Coast*, compiled by Ambrose Gonzales (1922). An excerpt from his introduction, concerning the language of the Gullah, serves well to illustrate the underlying theme of most early folklore collections concerning Gullah communities:

Slovenly and careless of speech, these Gullahs seized upon the peasant English used by some of the early settlers and by the white servants of the wealthier Colonists, wrapped their clumsy tongues about it as well as they could, and, enriched with certain expressive African words, it issued through their flat noses and thick lips as so workable a form of speech that is was gradually adopted by the

other slaves and became in time the accepted Negro speech of the lower districts of South Carolina and Georgia (10).

Gonzales uses a wide range of insulting and derogatory words to describe the subjects of his collection, thereby devaluing the rich cultural heritage he sought to collect, record, and publish.

William Bascom: Dean of Folklore

Folktales are of tremendous importance to the study of Gullah culture. They offer particular insight into slavery, language, worldview, morals, religion, health and medicine, tradition and customs, and social practice. Folklore has been gathered throughout the Sea Islands of Georgia and Florida. One of the most respected early collectors of folklore within the Sea Islands was William Bascom, referred to as the "dean of folklore" by William Pollitzer (1999, 161). Bascom conducted fieldwork on St. Helena, Hilton Head, Daufuskie, Tybee, Sapelo, St. Simons, Wilmington, Skidaway, Ossabaw, and St. Catherine Island, interviewing 114 informants during the summer of 1939. His findings were summarized in a paper, "Gullah Folk Beliefs Concerning Childbirth" read at the annual meeting of the American Folklore Society at Andover Massachusetts on December 29, 1941. The article appears in Twining and Baird's volume *Sea Island Roots: African Presence in the Carolinas and Georgia* (1991). Much of what Bascom collected is still cited by contemporary folklorists.

Informants revealed several beliefs to Bascom concerning how and when a child is born and what that signifies about the child and the future. For example, a child born in a caul[56] signifies luck and wisdom. Such a child will be gifted with the ability to see "ghosses" and "ha'nts" (Bascom 1991). When such a child is born, the caul is dried and used to drive away ghosts. Another belief concerns breech babies, referred to as a "foot foremost child." A child born in this way is destined to be lucky, and will desire to travel. The shape of an infant's head is also significant in Gullah folklore. According to Bascom's field data a child born with a "square head" means the child is smart, while a "short, flat head" signifies a hard worker. It is also thought to bring good luck when a child is born with lots of hair on its head.

Folk beliefs were also collected concerning the widespread practice of midwifery (often referred to as Granny women). Midwives or Grannys were very important people within Sea Island communities. Several residents of St. Helena Island, whose interviews are discussed in Hargrove (2000), recounted the births of their children as being delivered by these "granny women" (Hargrove 2000). Midwives are believed to be able to tell the sex of an unborn child. Bascom's informants suggested that if a midwife were still able to bear children herself she would sometimes take on the pains of childbirth from the woman she was attending (1941). There are also recollections, within the broader collections of folklore, of the act of putting an axe or knife underneath the mattress to cut the pains of childbirth (Parsons 1923). Bascom also collected information about herbal remedies used to cut the pain of childbirth, suggesting tansy (Tanacetum vulgare) as one of the most widely used. Within the collection there are tales of the processing of the umbilical chord, suggesting it was wrapped in newspaper, with the afterbirth, and burned or buried (Bascom 1941). We also learn that weaning was accomplished by rubbing turpentine or pepper on the breast.

Animal Stories

Animal stories have been a part of Gullah storytelling for as long as anyone can remember (Carawan 1989). Janie Hunter, one of the best known "keepers of the culture," reminds us that animal stories were more than just entertainment for children. They were filled with wit and logic meant to teach children important life lessons:

> When we was small, we didn't 'low to go no place, but we have all we fun at home. On weekend when we do all work what told to us and after we finish work at night, we sit down and we all sing different old song, and parents teach us different game and riddles. We go and cut the wood and wrap up the house with green oak and muckle wood, then we all stays by the fire chimbley and listen to stories" (Carawan 1989, 96).

Tales such as "The Rabbit and the Partridge"[57] instill skepticism and caution in children, as well as being quite entertaining.

It is important that folklore not be cast as a remnant of the past. Jones- Jackson recorded a session of storytelling on Wadmalaw Island which illustrates the social aspects of storytelling (1987). The story "Mock Plea of Brother Rabbit" requires the audience to take an active role in the story, voicing the whimpers and whining of Ber Rabbit. The interaction between storyteller and audience makes it much more fun and entertaining, while the story itself illustrates how the Rabbit outsmarts the farmer. These same types of interactions have been taking place for hundreds of years in the Sea Islands of Georgia and South Carolina. Storytelling remains an important part of Sea Island life, serving as a means of passing family and community histories down to future generations of Gullah and Geechee descendants (Bah, personal communication, 2001), as well as creating and maintaining cultural cohesion.

Conclusion

It would be possible to devote an entire book to the study of Gullah and Geechee folklore; the present goal is to offer insight into the range of folklore collected within the Sea Islands with particular attention paid to material frequently cited and recognized by other Gullah scholars. Works chosen for inclusion are presented in a respectful manner, which values folklore as more than ideas of simple folk. Folklore is more than storytelling, although the art of storytelling[58] continues to be an important skill within Gullah communities. Even religious sermons can be viewed within the context of verbal art (Jones- Jackson 1994) and the power of speech within religious ritual. Folklore, and the broader value of verbal art, is one of our best clues for study and increased understanding of the past, particularly in areas where much cultural information was contained in an oral tradition, as was the case in the Sea Islands of South Carolina and Georgia.

Chapter 5 Land, Slavery, Autonomy, and Conflict

"For Gullahs, the land is an extension of themselves" (Goodwine 1998c, 184).

Throughout the history of Gullah and Geechee people, land has played a central role in their everyday lives. All aspects of Gullah and Geechee culture are tied to the land, and it serves as a psychological reminder of their connection with the ancestors and their communal plantation life (Bah, personal communication 2001). In their uses of medicinal plants and herbal remedies, their knowledge of the natural environment is essential. Religious sermons of the past and present emphasize strong cultural ties to the land. The land has supplied these populations with nourishment for their bodies, as well as self- sufficiency, since the days of emancipation; and land ownership after emancipation induced autonomy and pride. The use of land and their ties to it, unfortunately, have been forced to change over the years; however, where possible the Gullah and Geechee people of South Carolina and Georgia remain tied to their land in many ways.

Plantation Agriculture

In order to put land into context one must first consider why South Carolina and Georgia were chosen as sites for plantation agriculture. In the beginning, slavery was transplanted to Charles Town from Barbados and Jamaica in the Caribbean. As agricultural land became scarce on the Caribbean islands, the English planter class found Charles Town, South Carolina, to be an optimal spot for continued sugar cultivation. Within a very short time it occurred to them that the land of the Lowcountry was better suited for another kind of crop cultivation: rice. Coastal areas of the Lowcountry are geographically marked by fresh- water rivers that experience the rise and fall of fresh water tides, making such locations self- irrigating, and therefore ideal for rice cultivation.

A shift from sugar to rice cultivation required several things: first, the planters knew very little about rice cultivation, therefore it was essential to begin hand- selecting Africans who had prior experience and knowledge of rice cultivation. Second, rice cultivation requires work in swampy areas, which were abundant throughout the area, but such areas are conducive to malaria (Cassidy 1994). These two factors had great implications for those who we now recognize as Gullah and Geechee[59] people. Planters began selecting Africans from specific areas, such as present day Liberia and Sierra Leone for their extensive knowledge and biological immunity to malaria (Wood 1975; Holloway 1990; Cassidy 1994).

The relationship between slavery and rice cultivation has been addressed by a variety of scholars (Salter 1968;[60] Wood 1975; Littlefield 1981; Goodwine 1999.) However, the most recent contribution, Black Rice: The African Origins of Rice Cultivation in the Americas (Carney 2001) expands the discussion in ways not previously possible. This study reveals the ways in which indigenous knowledge of rice cultivation and agricultural innovation was brought to the Sea Islands in the minds of enslaved Africans. Furthermore, Carney's in- depth methodology of cross- comparative research between the Sea Islands and West Africa traces the diffusion of water control, winnowing practices, rice milling techniques, cooking techniques, and seed selection to the plantations of South Carolina and Georgia (2001). On the eve of the American Revolution, South Carolina rice plantations were producing sixty million pounds of rice annually for the global market (Carney 2001). This study reveals how African knowledge of rice cultivation established the basis for the Carolina economy (140).

Along with their expertise in rice cultivation, enslaved Africans brought other advantageous technologies.[61] Fanner baskets, for example, played an integral role in the continuation of basketry, due to its utilitarian purpose (Chase 1971). Once the rice was loosened from the husks it was put in these fanner baskets, from which the rice was tossed into the air, falling back to the basket while the chaff blew away. The process of "fanning the rice" was continued until the rice was perfectly clean. Prior to Carney's Black Rice (2001) many scholars suggested enslaved Africans "learned" the technique of fanning rice (Chase 1971). However, in light of her data, the knowledge of all things having to do with rice cultivation and processing can be established as indigenous knowledge brought from Africa and handed down from generation to generation (Carney 2001). Carney supports Dale Rosengarten's assertion of a cultural connection between South Carolina "fanner" baskets, and Senegambian winnowing baskets (Rosengarten 1994; Carney 2001).

Rice, Cotton, and Indigo: Building Blocks of the South Carolina Economy

> The historical relationship between agriculture and economics in the Sea Islands rests on the backs of enslaved Africans (Pollitzer 1999). By taking full advantage of free labor, Sea Island planters were among the richest in North America. Rice cultivation began as soon as the first English colonies were settled, and by 1700 there was more rice being produced that there were ships to transport it (Pollitzer 1999). The need for labor fueled the Transatlantic Slave Trade, while the slave trade fueled the various plantation economies. By 1860, South Carolina was home to as many as 257 rice plantations, which produced nearly 80,000 tons of rice per year. Of the fourteen planters in the country that owned 500 or more slaves, nine were rice planters (Joyner 1984).

Indigo was the next economic fire to be fueled by slave labor, beginning in the latter half of the eighteenth century. It all started with a teenage girl in Antigua. Eliza Lucas, the daughter of a Lieutenant- Colonel stationed in Antigua, began experimenting with seeds on her father's plantation. Cultivating quality indigo was her top priority, and through trial and error she succeeded in cultivated a flourishing seed crop by 1744 (Pollitzer 1999). She shared the seeds with Carolina planters through established trade routes, and by 1747 enough indigo was being produced in Carolina to export to

England (ibid). Indigo flourished as one of the major staples for around thirty years. As the value began to decline in the early 1800s,[62] Sea Island cotton moved in to take its place alongside rice as the major export crop of the Sea Island region (ibid).

The precise time at which cotton came to the Sea Islands is up for debate; however the first successful crop was reported on Hilton Head Island in 1790 (Seabrook 1844). Within a decade cotton cultivation had replaced indigo as the region's premiere staple crop (Johnson 1930). Sea Island cotton reached the height of production in 1819, with exports reaching nearly nine million pounds (Rosengarten 1986). Cotton continued to be grown in the Sea Islands until the early 1900s, when it was badly damaged due to boll weevil infestation, but never at the capacity seen in the 1800s. The combination of rice, cotton, and indigo fed the need for African labor throughout the Sea Islands during 190 years of legal slavery.

The Task System: Unique Characteristics of Sea Island Slavery

Sea Island plantations operated on a task system, vastly different from the gang system widely used throughout the South. The task system is based on an allotted amount of work for each field hand, usually broken down into acreage to be worked per day (Joyner 1977; Pollitzer 1999). As pointed out by G.G. Johnson (1930), from research done on St. Helena Island, the "task" came to signify a quarter of an acre, laid out 105 by 105 feet. A typical allotment for a plowman "was usually four tasks, or an acre a day" (83). Also unique to Sea Island slavery was the opportunity for marriage, health provisions, and even literacy on some plantations (McGuire 1985). The unique nature of the task system, which offered "off time" also fostered the retention of African cultural patterns (Joyner 1977). The current discussion of the task system should not be taken to indicate slavery was more humane in these areas; simply there were opportunities available for Sea Island slaves not typically offered to others in bondage. An excerpt from the South Carolina Federal Writers' Project (1936- 1938) illustrates the daily routine of slaves working under the task system: (Volume XIV South Carolina Narratives p. 271- 276/ Library of Congress)

> Ebery slabe hab tas' (task) to do. Sometime one task (quarter acre), sometime two tas' and sometime t'ree. You haf for wuk 'til tas' t'ru (through). W'en cotton done mek, you hab odder tas'. Haffa cut cord ob mash (marsh) grass maybe. Tas' ob mash been eight feet long and four feet high. Den sometime you haffa roll cord ob mud in cowpen. 'Ooman haffa rake leaf from wood into cowpen (this was used for fertilizer). W'en you knock off wuk, you kin wuk on your land. Maybe you might hab two or t'ree tas' ob land 'round your cabin what Maussa gib you for plant. You kin hab chicken, maybe hawg. You kin sell aig (egg) and chicken to store and Maussa will buy your hawg. In dat way slabe kin hab money for buy t'ing lak fish and w'atebber he want. We don't git much fish in slabery 'cause we nebber hab boat. But sometime you kin t'row out net en ketch shrimp. You kin also ketch 'possum and raccoon wid your dawg (Project #- 1655, Sam Polite, age 93, Born on Fripp Plantation, St. Helena Island, Beaufort County).

Land Acquisition and Self- Sufficiency in Isolation

The Civil War, and subsequent emancipation of enslaved Africans, created a class of landed freedmen in the Sea Islands of South Carolina. Special Field Order 15, issued by Sherman in 1864, set aside all abandoned land from Charleston to Florida for the exclusive use and ownership of the freedmen and women of island communities. The Federal Government participated in cooperative land buys in order to sell land to Sea Islanders. It was the only place in the country where the offer of "forty acres and a mule" became partially recognized. The acres were sold at $1.25 per acre. This obligation was often fulfilled by two to three day's work per week for three years as a sharecropper or tenant farmer (Day 1982).[63] This action, referred to as "a multifaceted experiment in democracy" (McGuire 1985, 2)[64] encouraged self- sufficiency and created autonomous, self- governing, communities is such places as St. Helena Island and Hilton Head. Overwhelmingly, freedmen chose to remain on their "home

place," the plantation they had worked as slaves (Normand 1994). In the minds of freedmen and women the ownership of this land was directly tied to their liberty and freedom.[65]

By 1870, Census data suggests the majority of St. Helena residents owned parcels of land, thus making it possible to avoid the hardships of sharecropping and tenant farming (Normand 1994).[66] Within Beaufort County, which offered freed slaves the greatest opportunities for land acquisition, 98% of heads of household were Black, while at least 70% owned their own farms (ibid). At the time of Salter's dissertation work (late 1950s) Hilton Head Island was reported as having 350 small Negro land holdings, between 2 and 50 acres (Salter 1968).

From the beginning of land ownership the use and allocation of this valuable resource has been mediated by the family unit (Moerman 1974), which has remained the most important social unit of Gullah and Geechee culture. Typically, extended families are spread across a family social unit, referred to as a compound. Sea Islanders conceptualize land very differently than most; it is viewed "not as a commodity that is sold, but a right that is transferred to kin as needed" (Day 1982, 16). Land is not sold, but is passed on to all children through a previously unwritten contract known as "heir's land" (Day 1982; Jones- Jackson 1987). Under "heir's land," or "heir's property" land was rarely sold. The entire parcel is owned "in common" by all the family members, therefore no one person has sole rights over it. Only when relatives did not have sufficient land to pass to all children was this rule amended, and the charge to extended family was $1.00, simply to fulfill legal tenants of the state (Guthrie 1996). The problem with such a system, however, is the ways in which real estate developers have capitalized on the absence of a formal written will, in a practice referred to as "partitioning." ("Legal Maneuvers Used to Strip Families of Land: Blacks especially vulnerable to procedure called partitioning," Charleston Gazette, Sunday December 9, 2001 (http://sundaygazettemail.com/section/news/us+&+world/200112095). Sea Islanders have recently began amending this type of ownership in an attempt to hold on to ancestral property. Special courses are being offered by grassroots organizations and Sea Island churches, assisting Sea Islanders with writing wills in the proper fashion and offering to loan them money to pay property taxes (Hargrove 2000).

From Emancipation until quite recently Sea Island communities remained largely self- sufficient, utilizing their agricultural and fishing skills to meet their needs. Many islands remained isolated, with no connector bridges, until the middle of the twentieth century. Even electricity arrived late, coming to the more remote islands only as recently as the 1960s (Jones- Jackson 1987). This century of isolation, beginning with emancipation, brought about many changes in land use patterns. Sea Island freedmen who became landowners proceeded to cultivate the crop already in production, such as rice and cotton, until the boll weevil infestation of the 1920s. This event terminated cotton production for most farmers, aside from the few who converted to the short- staple variety (Salter 1968). Those who could no longer earn a living from cotton entered into truck farming, which remains a viable economic option for the present day farmers of several Sea Island communities, including Johns, Wadmalaw, Edisto, St. Helena, and Lady's Island (Salter 1991). The leading value crops for truck farming continue to be tomato and cucumbers. St. Helena Island is dominated by tomato truck farming, and utilizes migrant farm labor from Mexico during harvest season (Hargrove 2000).

Agricultural Practices

Much of the early work conducted in the Sea Islands was concentrated on farming techniques and agricultural practices. T.J. Woofter conducted research on St. Helena Island as part of a cooperative project between the Institute for Research in Social Science of the University of North Carolina and the Social Science Research Council. The project began in the late 1920s as an effort to investigate the unique African American culture on St. Helena Island (which we now refer to as Gullah). Woofter's data are presented in *Black Yeomanry: Life on St. Helena Island* (1930). This book gives an in- depth look at the agricultural practices of St. Helena Island between 1850 and 1930, covering all aspects from composting to the construction of chicken houses. Guy B. Johnson's *Folk Culture on St. Helena Island*

(1930) and G. G. Johnson's *A Social History of the Sea Islands* (1930) represent the second and third components to this special study.

Forces of Change: Land Use and Land Loss
Other forces, aside from agriculture, have altered land use in more negative ways. Farmland is now the prime target of developers (Carawan 1989), and agricultural lands continue to be rapidly reduced by residential, commercial, and tourism development (Hargrove 2000), not to mention the land taken out of production on islands housing military bases. Statistics obtained from census data suggest an overwhelming amount of land being taken out of food production between 1987 and 1992. Farming acreage in Beaufort County dropped more than 17% between 1987 and 1992. Charleston County also shows a severe reduction in farmlands: nearly 23% during that same five- year period. That amounts to almost 20,000 acres being taken out of farming production within a five- year period. The question becomes, what is it being used for now?

Resort Development in the South Carolina Sea Islands
The present situation of Sea Island communities consists of dramatic changes. One need look no further than Hilton Head Island, which only 50 years ago was home to an African- American farming community. Connector bridges began being built to the islands during the 1950s and "everything change up now" (Ed Brown, resident of Wadmalaw Island, quoted in Jones- Jackson 1987). Land is constantly taken out of production and converted to resort development for the industry of tourism. Present day Hilton Head is populated wealthy Euro Americans, residing in communities named after successful plantations of the slavery era. The tremendous devastation to Sea Island communities will be further discussed in Chapter 9, "Development and Change: Gullah as an Endangered Species."

Chapter 6 Health and Medicine

Sea Islanders possess vast knowledge about the world around them, particularly as it pertains to maximizing health and wellness. Many folk remedies and beliefs concerning health and medicine suggest the earliest enslaved Africans brought diverse plant knowledge, which has been transplanted throughout the Gullah/ Geechee area (Pollitzer 1999). Several studies have been conducted which have added bits and pieces to our knowledge of Gullah folk medicine and perspectives on faith and healing (Joyner 1984; Bascom 1991; Pollitzer 1999[67]). In a general sense, many Sea Islanders recognize herbal remedies as an option, but a precious few have been able to master this physical world. These knowledgeable few are recognized as "root doctors" and/ or "herbalists," who occupy an esteemed position within their communities.[68] Many Sea Islanders readily turn to home remedies as their first line of defense against illness and overall physical and mental maintenance; but some turn to the root specialists who dot the Gullah/ Geechee landscape.

In general, within the wide range of medicinal herbs used by Sea Islanders, there appear to be several that were versatile in their application. Life everlasting (*Gnaphalium polycephalum*) has been used for centuries to relieve cramps, cure a cold, combat diseases of the bowels and pulmonary system, and relieve foot pain (Pollitzer 1999). Dog fennel (*Anthemis cotula L*) and mullein (*Verbascum thapsus*) are suggested as satisfactory for treating colds, stuffy noses, headaches and nervous conditions (Jones-Jackson 1987). Bark from a red oak tree (*Quercus falcata*) was also useful when boiled and drank as a tea; it is said to combat rheumatism (Parsons 1923) as well as dysentery (Joyner 1999).

Gullah Herbal Remedies: Hoodoo Medicine
In the early 1970s, Faith Mitchell[69] began conducted research on traditional folk beliefs and medicine within the Sea Islands, with special emphasis placed on St. Helena Island. Her findings were later published as *Hoodoo Medicine: Sea Island Herbal Remedies* (1978). This collection is extraordinary in several ways. Most important, it contains a directory of all the medicinal roots, herbs, and plants used on the Sea Islands of South Carolina. Its uniqueness, however, is attributed to the more than fifty

detailed drawings included for each botanical of interest. In addition to being an excellent resource concerning plant use, Mitchell sets the historical stage by including a discussion of medicinal plant practices during slavery and the existence of plantation slaves who operated as somewhat "official" medical personnel. These doctors, or "doctresses", were specialists in certain roots and herbs that grew in the Sea Islands; bearers of an oral tradition brought from Africa to America. The similarities of flora and fauna between West Africa and the Carolina coast allowed the plant knowledge to be transferred to their new environment.

Mitchell (1978) suggests there are three distinct types of black folk medicine practice: there are those who practice healing techniques using barks, berries, herbs, leaves and roots to combat natural illness (cold, influenza, and malaria during the plantation era). Second, there are those who deal strictly with spiritual illness, traditionally believed to be punishment for sin, through offerings of verbal blessings or laying on of hands (1978). And third, Mitchell suggests, there are those who specialize in occult illness, believed to be caused by an individual being hexed by "hoodoo" or conjure, cast by supernatural methods. Sea Island people often wear amulets to protect against hoodoo (Mitchell 1978). It is important to clarify that hoodoo is different than "voodoo." Voodoo is a blend of African mystic beliefs and Catholicism more common around New Orleans, whereas hoodoo is a common term used by antebellum blacks to describe methods of natural healing and magic (ibid).

Rootwork: Beliefs and Practices on St. Helena Island

Rootwork: Psychosocial Aspects of Malign Magical and Illness Beliefs in a South Carolina Sea Island Community (Heyer 1981)[70] is an investigation into the beliefs and practices of 'rootwork" within the community of St. Helena Island. Kathryn W. Heyer conducted one year of fieldwork on St. Helena Island between 1977 and 1978. Rootwork, as defined by Heyer, refers to a system of malign magical beliefs used to explain physical and psychological disturbances and to obtain relief by consulting a specialist or "rootworker" who removes the evil spell and thereby brings about a cure. The aim of the dissertation is to provide a detailed description of beliefs in rootwork, as well as the existence of related beliefs in spirits, hags[71], and ghosts, in relation to other aspects of the social and personal lives of the believers.

Heyer's work makes an important contribution to the existing knowledge of rootwork, herbal remedies, and folk medicine.[72] Many scholars suggest such practices are doomed to disappear over time; however Heyer's work documents recent practices in a viable Sea Island community. In an attempt to present an insider's (emic) view of island life and thought concerning health and traditional practices, Heyer interviewed ninety- four residents of St. Helena Island. Information in the dissertation was taken from forty of those informants. She also recorded two life histories, one of which appears in the Appendix (Heyer 1981) and fifty- five hours of taped interviews. It is a detailed look at one particular woman's life regarding the importance of rootwork and beliefs in malign magic.

Heyer documents the existence of four rootworkers in active practice on or near St. Helena Island, blatantly disputing the claim that rootwork is no longer a commonly held belief among the residents of St. Helena Island. One of the rootworkers was a Euro American man, who allegedly inherited his power from his grandmother. Heyer was able to apprentice with him, directly involved in the observation of practice in action. Within this study, Heyer documents the detailed accounts of rootwork being performed through recording fourteen actual case studies (1981).

Along with recording the practice of rootwork, Heyer contributes to our knowledge about the function of rootwork within this particular community, especially as it pertains to non- health related factors. Rootwork, as suggested by Heyer's informants, is an attempt to explain or control events in which scientific explanations and/or manipulations are believed to be ineffective or powerless. Herbal healing is the first line strategy for coping with most illness, and remedies are passed through the generations through oral history. This belief system also serves as a method of social control, working to discourage anti- social and unacceptable behavior (Heyer 1981). This collection records wart

talkers: people who talk warts away, and fire- talkers who are able to heal burns. At present, Heyer's work is very important; it has the potential to improving physician's knowledge and understanding of rootwork and Gullah belief systems concerning health and medicine, thereby fostering a greater understanding and respect for Gullah knowledge and culture.

Health and Medicine: Adapting to Change

Heyer was not the first to conduct research on St. Helena Island with an interest in health and indigenous knowledge. During the early 1970s Daniel E. Moerman resided in the community and conducted extensive ethnographic interviews concerning medicinal plant use and indigenous systems of popular medicine.[73] The research Moerman gathered later produced his dissertation, Extended Family and Popular Medicine on St. Helena Island, S.C: Adaptations to Marginality (1974). What differentiates his research findings from Heyer's later work (1981) is interpretation of the data. Moerman proposes that folk medical practices and belief systems persisted as an adaptive response to inadequate access to health care within Beaufort County at the time of the study (fee- for- services system).

Along with being an excellent resource for the study of health and medicine, Moerman situates his research within a historical and social context, including the population statistics for St. Helena, 4,500 residents, at the time of study (1971). Among those interviewed was the famous, well- respected Dr. York Bailey (the first Black doctor on St. Helena Island). He also gathered extensive genealogies (850 entries entered into a cross- referenced file to facilitate kinship connections) and life histories, in addition to conducting extensive interviews concerning medicinal plant use. Data obtained from interviews is synthesized into what the author refers to as "The St. Helena Popular Pharmacopeia" (168- 208); a detailed presentation of common name, genus and species, use, years of use, and indications for use. Appendix 1 and 2 contain two extensive life histories.

In the early 1970s many Sea Island communities, including St. Helena Island, were being economically and culturally marginalized due to a rapid switch from self- sufficiency to wage labor and a cash economy (Moerman 1974). Within the larger struggle to maintain control over their future, the residents of St. Helena were heavily reliant on one another, with Moerman's data on household composition illustrating the importance of family, extended family, and kinship within this dynamic Sea Island community. Within the context of health and medicine, Moerman includes a discussion of the social services offered, and accepted by, the residents of St. Helena. There is also an excellent discussion within the dissertation outlining the epidemiology of St. Helena Island from the early 1900s up to research period.

One of the major methodological problems with much of the existing data concerning Sea Island communities is misrepresentation. Fieldwork experiences are taken as representative of the whole of Gullah culture, although only witnessed for a small amount of time through the eyes and lives of a small percentage of the community (Moerman 1974). Moerman was not the first to suggest this methodological oversimplification, but he gives concrete reasons for his position. Citing the work by Guy Carawan, Moerman suggests *Ain't You Got a Right to the Tree of Life* is an inaccurate portrayal of the St. John community. This point cannot be over emphasized. Within many Sea Island communities, research of any kind is hard to negotiate (Heyer 1981; Hargrove 2000). Social scientists must work diligently in the future to combat the wrongs of the past in a collaborative and intellectually honest venture between researcher and knowledge holders. It is truly the only way we can continue to learn from the rich cultural heritage of Gullah/ Geechee people.

A Cautionary Note Concerning Future Research

Future research is essential in this area. Many scholars suggest the folk remedies and medicinal plant use patterns are in danger of loss due to encroachment, environmental devastation,[74] and culture change. Recent scholarly work, however, suggests these practices continue as a viable alternative to modern medicine for many ailments. What is not adequately elaborated, unfortunately, is the

personal and sacred nature of such beliefs from the perspective of Sea Island community members. Work pertaining to these folk traditions should be approached in collaboration with community leaders who have access to the elders and bearers of such knowledge. Moving toward a balance between indigenous and scholarly research will record these valued cultural treasures without furthering the rift between academics and Gullah people.

Chapter 7 Arts and Crafts: Syncretisms[75] and Innovations

There are several distinct research areas devoted to Gullah arts and crafts. The craft that has received the most scholarly attention is coiled sweetgrass basketry (Chase 1971; Derby 1980; Rosengarten 1986; Hargrove 2000). There is documentation of basket production by South Carolina slaves as early as 1690 (Vlach 1978). The tradition of sewing baskets was essential to the early years of plantation life due to the utilitarian nature of the craft (Chase 1971, Rosengarten[76] 1994). The agricultural technology of rice production in the Low Country was distinctly African (Rosengarten 1994), therefore the tools of the trade are similar. The “fanner” basket was of principal use during the processing of rice. Once the rice was loosened from the husks it was put in these fanner baskets, from which the rice was tossed into the air, falling back to the basket while the chaff blew away. The process of "fanning the rice" was continued until the rice was perfectly clean. This type of physical motion is a skill learned in Africa and passed on to subsequent generations (Chase 1971; Carney 2001). Baskets have been used for the same purpose in Africa for hundreds of years. Low Country baskets most resemble those of the Congo, Senegambia, and Angola (Twining 1977, Vlach 1978). Through the continuation of cultural arts, the enslaved of South Carolina found ways to preserve their African heritage.

Cultural Continuity: From Africa to the Sea Islands
Baskets are a traditional part of Gullah culture and signify a strong connection between West Africa and the Sea Islands of South Carolina.[77] Those who make baskets prefer to be called "sewers" because that is precisely how baskets are constructed (Rosengarten 1994). The enslaved Africans of South Carolina adapted their knowledge of the African environment to the Lowcountry environment, using black rush (*Juncus roemarianus*) and sweetgrass (*Muhlembergia filipes* and *M. capillaris*) bound with strips of Palmetto (*Sabal palmetto*) (Rosengarten 1994). Modern day baskets differ only slightly from their ancestral counterparts. Most basket sewers now incorporate long leaf pine needles (*Pinus palustris*) for decoration, as well as to make up for the scarcity of sweetgrass resulting from increased development in the Sea Island areas (Marquetta L. Goodwine, personal communication, 2002).

Baskets were a necessity item during the plantation era. The principal use was for processing rice, but they were utilized for a variety of daily activities. Early visitors to South Carolina report seeing Gullah babies being carried in large fanner baskets (Rosengarten 1994). They were also used to take produce, flowers, and herbs to market in Charleston. As Sea Island communities moved from plantation agriculture to subsistence farming, after Emancipation and the Civil War, farmers used baskets to gather crops as well as to transport them to market. Upon recognizing the importance and utility of this African craft, the administrators and teachers at Penn Normal School added it to the curriculum. The baskets were used at Penn during everyday activities, as well as sold through mail orders and craft shops in Charleston, Philadelphia, and Boston (Rosengarten 1994). The excess cash allowed Penn School to assist local farm families in paying land taxes.

The sewers in Mt. Pleasant got their first taste of wholesale marketing in 1916 through Charles W. Legerton, a Charleston merchant and civic leader (Rosengarten 1986). Legerton bought set quantities of baskets from Sam Coakley, who acted as a liaison between Legerton and the sewers of Mt. Pleasant. Legerton sold the baskets through his bookstore on King Street, and later through the Sea Grass Basket Company, started between 1916 and 1917 (ibid). In 1920 the company name was changed to Seagrassco. Legerton capitalized on the industry using print media to advertise Mt. Pleasant baskets until the late 1930s, when basket sewers began directly marketing their wares to tourists on Highway

17. This move would forever change the course of the basket industry in Mt. Pleasant, where one can presently find many stands along the roadsides. Contemporary research, conducted by Melissa Hargrove, cites several Mt. Pleasant basket women who still remember their mothers and grandmothers sewing baskets for Mr. Legerton (2000).

Development and Change: From Utilitarian Craft to Folk Art

The sweetgrass basket tradition of the South Carolina Sea Islands has undergone rapid change due to increased tourism, increased development, and generational differences in ideology. The community that has become famous for the production of sweetgrass basketry is Mt. Pleasant,[78] located just across the Cooper River from Charleston, South Carolina. Presently there are multiple basket stands along the roadsides of Highway 17, many of which have been there for several generations. The tradition of setting up basket stands along the roadsides began in the 1940s (Rosengarten 1986), as a way to take advantage of the increased tourism traffic coming from Charleston. What began as a utilitarian craft has become folk art, thereby creating a specialized economy for those with the skill (Derby 1980).[79] The designation of the baskets as "folk art" has required basket makers to incorporate new styles (Vlach 1978; Rosengarten 1994), while also increasing the price collectors and tourists are willing to pay.

Ethnographic Accounts of Mt. Pleasant Basket Sewers

The basket sewers of Mt. Pleasant have been the focus of two extensive ethnographies, conducted twenty years apart, which reveal the adaptive nature of the sweetgrass basket industry. Doris Derby conducted fieldwork in Mt. Pleasant in 1977 and 1978,[80] resulting in her dissertation, Black Women Basket Makers: A Study of Domestic Economy in Charleston County, South Carolina (1980). The crux of her research was aimed at determining the effects of increased tourism on the economic viability of basket women in the Mt. Pleasant area. Derby concluded that basket sewing has endured many adaptations over time. Basketry served a utilitarian purpose during plantation slavery, it has functioned as an economic development strategy for Mt. Pleasant women since World War I, and it had (at the time of her research) responded well to the stimulus of the tourism industry in and around Charleston (1980). Derby concluded that the basket industry was adaptive, suggesting it would ultimately endure; however a subsequent study indicates the battle had just begun.

Nearly twenty years later, beginning in 1988, Melissa D. Hargrove began ongoing ethnographic research to investigate the affects of tourism and development on Mt. Pleasant basket weavers, resulting in her master's thesis, Marketing Gullah: Identity, Cultural Politics, and Tourism (2000).[81] Hargrove suggests the basket industry is being negatively impacted by development, which literally paves over or digs up the valuable resources necessary for sewing baskets (Hargrove 2000). Materials for basket weaving are no longer available, forcing many weavers to buy their sweetgrass from Florida. More importantly, Hargrove suggests the South Carolina tourism industry is appropriating the craft of sweetgrass baskets for use in tourism literature, as a strategy for increasing tourism revenue (Hargrove 2000). Many basket makers remain scattered along Highway 17 while others have lost their stands to strip malls and gas stations.[82] With tourism in the area continuing to increase, Hargrove suggests officials of Charleston County should acknowledge their role in development agendas that further compromise the future of this legendary art form.

Gullah Artisans as Craftmen of the South

Sweetgrass basketry is not the only craft associated with Gullah culture. Leonard P. Stavisky (1958), through historical document research, revealed the enormous contributions early Gullah artisans made to the Charleston area. These types of contributions are often overlooked in the canonical literature concerning Gullah culture. It is estimated that as much as 80 to 90% of all crafts produced between 1800 and 1890 in and around Charleston were the craftsmanship of Gullah artisans (Stavisky 1958). Charleston became a training center for much of the South Atlantic region. Owners from all over sent their slaves to be trained in a variety of areas: ship carpentry, shoemaking, carpentry, sawing, farming, blacksmithing, wheat stocking, butchery, stone masonry, milling, ironworks, and coopering.

Stavisky suggests enslaved Africans were trained in these crafts as an attempt by slave owners to utilize their free labor in ways that would increase their productivity and marketability. Enslaved Africans who possessed certain skills could be hired out to neighboring plantations for wages. Also, skilled Gullah/ Geechee artisans were worth twice as much as field hands (Stavisky 1958).

These craftsmen and their contributions are also evident in rural areas. The sprawling plantation homes of the Charleston area were erected by slave labor, and trades learned as slaves were often passed down from generation to generation within slave families. Stavinsky reports children were apprenticed to the trades as early as four years old (1958). In these ways, as well as countless others, the Gullah artisans of the Charleston area greatly contributed to the overall economic might of the South. They should also be given due credit for the creation of an enduring legacy of Charleston's historic homes that continue to draw millions of tourists every year.

Quilting in the Sea Islands

Gullah quilting is yet another cultural trait that signifies connections between West Africa and the Sea Islands. Mary Twining (1991) suggests that quilting began out of economic necessity in the Sea Islands, and later came to signify an important role within the Gullah crafts tradition. Gullah quilts are recognized due to their distinct characteristic technique referred to as "strip formation." Rectangular bits of cloth, often scraps of fabric in an assortment of shapes, sizes, and colors, were pieced together to form the quilt top (Pollitzer 1999). They are sewn together in an uneven, curvilinear pattern easily distinguishable from European quilts. Quilt colors also hold special significance: red indicates danger, blue repels bad spirits, and white suggests innocence and purity (Twining 1991b).

Gullah quilts have come to signify important life events within the broader cultural framework.[83] Many can identify the patches on a quilt and determine the quilt's significance and meaning. Rites of passage such as marriage, births of children, young people leaving home to go to school, are often commemorated by the making or completion of a quilt which accompanies the departing family member to their new situation as a reminder of their ties back home (Twining 1991b). These family heirlooms are a valuable celebration of family history, as well as indicating the survival of African patterns (Pollitzer 1999). Gullah "strip quilts" bear striking resemblance to those of Ghana and Benin, where fabric is woven into long narrow strips, cut into usable lengths and sewn together at the edges (Vlach 1978).

Georgia Arts and Crafts

The majority of scholarly work on Gullah art and culture has been focused on South Carolina, however, there are cultural artifacts which can be directly linked to Gullah/Geechee people of Georgia[84] which symbolize their talents as crafters of beauty and art. Cultural material found in archaeological contexts along the Georgia coast include drums (made of hollowed logs with pegged heads) and carved wooden walking sticks depicting reptiles[85] (Vlach 1978). Finds such as this represent Gullah/ Geechee folk art of the Georgia coast, in such places as Yamacraw and Wilmington Island. Gullah/ Geechee artisans have exhibited boat building skills for centuries. The multiple- log canoe is believed to symbolize possible African antecedents of coastal life of West Africa (Vlach 1978). This suggestion is based on the fact that Gullah/ Geechee people remain skilled in navigating boats through shallow streams and marshes, casting nets for subsistence and economic support. In a myriad of ways the daily lives of Gullah/ Geechee people have been influenced by traditions deeply rooted in an African past. All crafts extensively covered within the literature, including sweetgrass baskets, boat building, drums, walking sticks, and quilts should be taken to represent a living symbol of cultural continuity and adaptability.

Chapter 8 Leadership Patterns, Organization, and Cooperation

Many scholars look upon the Sea Island communities as doomed to destruction, but they are far from it. They have lost countless acres of family land, suffered restricted access to traditional livelihoods, such as fishing and farming, and continue to struggle against the swelling tides of development and tourism; however, Gullah people have a strong constitution. Throughout their history Gullah/Geechee communities have proved time and time again that they are great organizers. From the Civil Rights Movement to modern day grassroots struggles, the Sea Islanders have reason to be proud of the accomplishments they have made and the contributions of their descendants.

Guy and Candie Carawan's *Aint You Got a Right to the Tree of Life?* (1989) chronicles the evolution of the citizenship schools on Johns Island and their role in the development of a citizenship and literacy movement. The contributions of Septima Clark and Esau Jenkins had an undeniable impact on the Civil Rights movement as well as Johns Island and surrounding Sea Island communities. Their efforts, in conjunction with the Highlander Folk School, raised literacy and increased the number of registered Black voters. Supported by cultural values and group cohesion the strides made on Johns Island were directly responsible for similar movements and achievements, such as the development of citizenship schools, on both Edisto and Wadmalaw Island (Carawan 1989).

Cooperative work has been a part of Gullah/ Geechee culture since its inception, and reminds us yet again of their African cultural retentions. During the 1930s William R. Bascom investigated the origin of cooperative Sea Island work patterns by conducting fieldwork in both the Sea Islands and West Africa.[86] Bascom found similarities between the Yoruba institution of cooperative work and that of Sea Island communities (1941). On Sapelo Island in Georgia, and Hilton Head Island in South Carolina, Bascom interviewed informants who recalled group work. The practice of working to a drumbeat in Africa was replaced with singing songs in unison in the Sea Islands (1941). Bascom points out that the practice of working together in Hilton Head was only preserved in memory, but informants suggested Sapelo Island was still a place where people would "jump right into the field and help you out" (Bascom 1941, 45). The proposed connection between Sea Island cooperative work and similar practices in West Africa is further corroborated by Dr. Alpha Bah, professor of African History at the College of Charleston: "The idea of cooperation to accomplish a piece of work, such as sewing seeds or harvesting, remains a common practice among most West Africans" (personal communication 2002). It is also common knowledge to any scholar who had conducted research within Sea Island communities.

In 1977, a dissertation was written by June Thomas which illustrates the strong ethic of organization and participation within Sea Island communities: Blacks on the South Carolina Sea Islands: Planning for Tourism and Land Development. This dissertation is a direct result of the author's involvement with the "Socio- Economic Impact Study: Resort Development and the Sea Islands," conducted by The Department of Urban and Metropolitan Studies, Michigan State University, in 1976. The study was aimed at assessing the effects of development on the local Black populations of the South Carolina Sea Islands, as well as making suggestions concerning future action and involvement concerning the proposed development of Kiawah Island.

Thomas, through her involvement with organizations and grassroots groups working against the development of Kiawah Island, came to realize that Sea Islanders have a history of community organization. Thomas studied past and ongoing organizations throughout the Sea Islands in order to propose an example for future action. Citing experiences from Johns Island (the organizational successes of Septima Clark and Esau Jenkins) as well as the Emergency Land Fund in Charleston (which is designed to assist locals with land tax in an effort to retain land rights), Thomas illustrates the historical precedence of community involvement and grassroots action within Sea Island communities.

To illustrate the effects of non- involvement and lack of planning, Thomas presents Hilton Head Island[87] as what is to come if Kiawah is rezoned and developed. At the time of Thomas' study, Black landowners in Hilton Head were few and far between. Informants recalled the days before development when they grew peas, beans, and cotton in the summer and made quilts and children's clothes in the winter, only minutes later to remind themselves that all that was gone. The only options for employment, at the time of this study as well as presently, are menial low wage jobs with the resort and hotel industry.

Thomas, in her final report made the following suggestions:

1. The development of a land issues center to educate Sea Islanders about land loss and titles.
2. The development of a business development center to identify people and resources as well as possible business areas.
3. Sea Islanders should maintain a high level of community involvement, by attending zoning hearings, running for office, and forming and supporting community organizations.

It is as if the residents of St. Helena Island read these suggestions and began acting upon them.

Policy Makers and Community Members Working Together

Recently community activists from St. Helena and Beaufort policy makers got together to initiate sound policies designed to halt future development of St. Helena Island. In 1997 the Beaufort County officials formulated what is referred to as the first draft of the Comprehensive plan, titled "Get a Grip on our Future." Among the many policy recommendations within this plan was the enhancement of "arts and humanities services for visitors in recognition of the importance of cultural heritage tourism to the County's economy" (BCCP[88] 1997:693). Also listed as an important factor was the hope that government officials, private sector businesses and the citizens could communicate with one another successfully and "speak with one voice" (547).

With Hilton Head Island serving as a reminder of what development can become, officials at all levels, joined by local activists, began cultivating development plans that would satisfy the residents of Sea Island communities while permitting controlled economic growth (Hargrove 2000).

In 1999, Beaufort City Council acted on aforementioned policy recommendations and adopted the Beaufort County Zoning and Development Standards Ordinance (BCZDSO).[89] According to the Ordinance, St. Helena "contributes toward the creation of an image of the County that is essential to the sense of place that residents and visitors alike share about the community." In light of this aspect, the Ordinance designated St. Helena as a "Cultural Protection Overlay District" (CPOD) designed to ensure the future of its unique position. The overall purpose of the plan is the effective long- term protection of cultural resources found on St. Helena, while protecting the Gullah community from encroaching development and displacement of residents (Hargrove 2000). The policy is concerned with four distinct aspects of development viewed as detrimental to Gullah preservation: gated communities, resorts, golf courses, and franchise businesses (BCZDSO 1999: APP C- 2). The new policy guidelines assert that these types of development are "incompatible with cultural protection and are therefore prohibited" (BCZDSO 1999: APP C- 2).

The particular success of this policy must be attributed to the countless Sea Island residents who worked with policy officials and governmental agencies to bring about positive change. Chief among the activists involved with this effort was Marquetta L. Goodwine, founder of the Gullah/Geechee Sea Island Coalition.[90] Members of the Coalition work diligently to raise awareness about the current problems facing Sea Island communities. Goodwine plays an active role in the development and implementation of community activities, fundraising efforts, and educational workshops given throughout South Carolina and Georgia concerning ways to preserve her rich cultural heritage. This type of grassroots organization is essential for the survival of Gullah communities.

Sea Island Organizations of Preservation[91]

Currently throughout the Sea Islands there are a number of grassroots organizations which reflect the leadership and organizational skills of Gullah/Geechee communities (Goodwine 1998c). Non- profit research organizations, such as Penn School and Avery Research Center at the College of Charleston, will also be discussed within this category due to the types of preservation efforts being instigated at these sites. The organizations include, but are not limited to, Penn Center, Inc., The Gullah/Geechee Sea Island Coalition, St. Helena Island Corners Area Community Preservation Committee, Penn School for Preservation, South Carolina Coastal Community Development Corporation (SCCCDC), The Gullah Consortium, Avery Research Center for African American History and Culture, Sapelo Island Cultural and Revitalization Society, and St. Simons African- American Heritage Coalition. It is important to note there are a handful of tireless individuals who maintain membership and/or roles within more than one of the following organizations. Also, the possibilities for positive change rise as grassroots groups become interconnected by their mutual agendas of education about, and preservation of, Gullah/ Geechee culture.

The Penn School, now referred to as the Penn Center Inc., is a historic site on the National Register of Historic Places located on St. Helena Island, South Carolina. The Center began as Penn Normal School, the first trade and agricultural school for Sea Island freedmen in 1862. Through the years the Penn Center has worked toward educating others about the rich cultural heritage of the Sea Island Gullah, as well as developing programs to benefit Sea Island communities (e.g. Land Use and Development Fund and the Program for Academic and Cultural Enrichment) (Goodwine 1998c). Presently it serves as a conference center, museum (primarily focused on the days of Penn as Penn Normal School), photo and literary archive, and library. Penn Center has been the site of the "Heritage Days Celebration" for nineteen consecutive years.

The Gullah/Geechee Sea Island Coalition was founded in 1996 by Marquetta L. Goodwine as a grassroots umbrella group for the Sea Islands. The Coalition is comprised of individuals, institutions, and organizations dedicated to preserving Gullah history, culture, land, and language. The Coalition, based at Hunnuh Home on St. Helena Island, possesses the only known archive devoted to Gullah/Geechee culture. The facilities at Hunnuh Home (meaning our home and your home), serve as research cottages for those interested in conducting research within the Sea Islands. The Coalition also maintains an extensive website and list serve, keeping all members aware of the situation within the various Sea Island communities. Many researchers discussed in this synthesis have spent time at Hunnuh Home. Those interested in conducting research in the St. Helena Island/Greater Beaufort Area should contact the Coalition for assistance.

The St. Helena Island Corners Area Community Preservation Committee was commissioned by Beaufort County Council, as a citizens committee, to prepare the guidelines for the community preservation district (as recognized within the Beaufort County Zoning District Standards Ordinance (BCZDSO)). The Committee is chaired by Marquetta L. Goodwine, whose formal title is Queen Quet: Chieftess of the Gullah/ Geechee Nation. Members of this Committee work together to present zoning plans for St. Helena Island aimed at preventing further encroachment from development.

In 1992 the Penn Center launched the 'Sea Island Preservation Project' which sought to bring together community leaders and business owners to create economic strategies that would benefit the Sea Islands without destroying the land, traditions, and culture of the Sea Island Gullah. The goal of the project was the creation of a community vision and the formulation of a strategic plan for St. Helena Island. This brought about the establishment of the "Penn School for Preservation" in 1993, in which 37 community leaders and public officials got together on weekends for six months to discuss such issues as zoning, economic development, growth management, and community economic development. Several of the students of Penn School for Preservation have put the program to work in ways which presently benefit Sea Island communities.

The South Carolina Coastal Community Development Corporation (SCCCDC) is an independent non- profit corporation, directed by Lady's Island native Liz Santagati. In 1997 the SCCCDC was awarded a $1million grant to design and implement economic development activities for Lowcountry residents. This project also provided legal assistance and educational workshops to landowners in order to maintain family land ownership on St. Helena and surrounding islands. Most recent developments include a commercial kitchen/ food processing facility, creation of a small business incubator (designed to empower local residents through self- help business training), and an on- site marketing outlet for local food products and crafts. In 1997, Santagati was awarded the "Community Leadership Award" and recognized by the South Carolina Senate for a life of leadership, dedication, and hard work on behalf of her community.

The Gullah Consortium consists of a group of both Gullah and non- Gullah citizens from various professions, including (but not limited to) educators, activists, curators, government employees, and artists. The group was formed to insure that performances and/or programs relating to Gullah/ Geechee culture were being delivered in an accurate and respectful manner. Currently the group is developing a set of guidelines for performance and interpretation of Gullah culture. Steps like these will aid in the accuracy of information being disseminated about Gullah/ Geechee culture to interested outsiders.

Avery Research Center for African American History and Culture, located at the College of Charleston operates as both an academic and community resource. Along with the task of collecting and preserving materials related to African American history and culture, Avery sponsors public programs aimed at educating both academics and non- academics about the rich cultural heritage of African Americans. The Center serves as a museum, reservoir of historical and material archives concerning African American history and culture (with an extensive collection devoted to Sea Island culture), an educational facility, and community outreach.

Sapelo Island, Georgia remains isolated from the mainland, yet they too are fighting the battle of development and land loss. In retaliation, the small Geechee community known as "Hog Hammock" organized the Sapelo Island Cultural and Revitalization Society. Members of the society offer guided mule tours of the area and a local boarding facility for those who desire to stay a few days (Goodwine 1998c). One of the most active members of this community organization, Cornelia Bailey, recently released her memoir: God, Dr. Buzzard, and the Bolito Man: A Saltwater Geechee Talks About Life on Sapelo Island (2000).

The most recent addition to the list of organizations is the St. Simons African- American Heritage Coalition, which began in January of 2001. The Coalition, directed by native islander Amy Roberts, is comprised of community members determined not to become "another Daufuskie or Hilton Head" (e- mail communication, gullah- geechee@infobro.com, January 4, 2002). Their most recent campaign, "Don't ask- Won't sell," got the attention of the Atlanta Journal- Constitution for their exhibition of noteworthy community leadership and activism. The Coalition handed out signs to community members to place in their yards, as a testament of solidarity against the rising pressure of real estate developers on the island.

The grassroots mobilization that is taking place in the Sea Islands of South Carolina and Georgia is a testament to the strong community bonds of Gullah/ Geechee people. Residents of various island communities are beginning to realize the common thread uniting them is the battle against further cultural, social, economic, and environmental devastation (Hargrove, forthcoming). Marquetta L. Goodwine, native of St. Helena Island, elaborated as follows:

> This type of organization is necessary in order for the Gullah community to have our own self- interest promoted as well as to have our culture preserved. We must tell our own stories and govern our own community as our foreparents did. We know that

'empty sak cyan stan upright lone.' Thus, the community must and is coming together to hold up all ends and to hold pun we culcha (Goodwine 1998c, 197).

Chapter 9 Gullah World View and Cultural Values

Gullah people are complex. They have many characteristics that illustrate the perseverance of African cultural traits[92] which have shaped their worldview and value system. For much of history, Gullah life was lived and governed in accordance with nature, seasons, climate, and the tide, but all that seems to be changing (Twining and Baird 1991). What remain, as the most important aspects of Gullah life, are religion, kinship and family, (both extended and fictive kinship), community, and culture. There are bits and pieces of Gullah worldview scattered across the literature but there is no comprehensive study of the principles that structure Gullah life. There is a desperate need for an in- depth project concerning continuities and change within the Gullah worldview.

Family Systems
Discussion and documentation of family systems and structure are embedded in many studies of Gullah culture, often introduced to illustrate the strong African retentions concerning attitudes toward family and children (Twining and Baird 1991). The extended family is the most important social unit within Gullah culture. Many aspects of life are shared within the larger kinship network, including child rearing, monetary and food resources, labor, and decision- making. Gullah families who have not yet lost their land to development and tourism still live in compounds, within which many generations live in close proximity to one another (Jones- Jackson 1987, Hargrove 2000). This style of organization, as well as the importance of family and kinship in the mediation of all aspects of life, bears striking similarity to West and Central African traditions (Pollitzer 1999).

Studies of family systems are also scattered throughout much of the more recent Gullah research (Day 1986; Jones- Jackson 1987; Demerson 1991; Twining and Baird 1991; Guthrie 1996), but a particular dissertation offers native insight into the traditional family patterns of the Gullah. Franklin O. Smith conducted research among fourteen family units[93] on James, Johns, Wadmalaw, Yonges (St. Paul's), and Edisto Islands. Within this research we learn that elder Sea Islanders take an active role as disciplinarians and child rearing often follows the teachings of the Bible, "aimed at keeping them in the stepping of the Lord" (1973). Smith also introduces the concept of "two for one" discipline; a system that gives all community members the right to discipline a child for misbehaving. They are punished once by the person who catches them, and then again for shedding bad light on the family (1973). The results of Smith's research lend support to claims of African retentions concerning family structure and child rearing (i.e. West African family systems are based on the extended family, as well as the larger community, taking a mutually responsible role in child rearing (Pollitzer 1999)).

Relationships
Within the African traditional worldview, it is believed that each and every member of society has a place (Creel 1990). Friendship is an integral part of Gullah culture. Bascom describes the affection between Sea Island friends as "legendary" (1941, 47) suggesting this trait is rooted in Yoruba culture. The position of a man's best friend in Yoruba (korikosum) is crucial; he is the person to which all secrets are entrusted, and with whom all decisions discussed. There are also folktales which indicate a man's best friend is more trustworthy than even his mother (Bascom 1941).

One of the most important relationships, within a Gullah worldview, is that which exists between human beings and the natural environment (Beoku- Betts 1995). Sea Islanders view their natural surroundings with respect and a sense of interconnectedness. Their relationship with the environment has always emphasized harmony and social exchange that is non- exploitative (Beoku-Betts 1995). In most cases, their values put the well- being of the whole community before the selfish nature of individualism. Goodwine suggests the abandoning of such principles may be a paramount

reason for the problems of our world- "when we begin to look at how everything affects everything else within the universe as our ancestors did, then we will be able to truly begin to start to work toward correcting some of the negative trends that we are faced with" (Goodwine 1998, 11).

Gullah Foodways: Daily Pot of Rice

Josephine A. Beoku- Betts offers the most comprehensive study of Gullah foodways (1995). Gullah food culture is based on rice (Turner 1949; Jones- Jackson 1987; Creel 1990) and continues to be strongly influenced by techniques of food preparation originating in West Africa (Beoku- Betts 1995; Carney 2001). Historically, rice was the staple food of Sea Island communities, and continues to be a central part of main meals. It has also been proposed that the term "Geechee" originates within rice culture, and was used in a stereotypical sense to refer to individuals of African descent who spoke fast or funny and ate lots of rice (Hopkins 1992, 42).

One Sea Islander's words serve to illustrate the importance of rice:

> Rice is security. If you have some rice, you'll never starve. It is a bellyful. You should never find a cupboard without it" (Beoku- Betts 1995).

Traditional foods include red rice, shrimp and rice, okra stew, and Hoppin' John (rice cooked with peas and smoked meat).[94] Gullah food is commonly seasoned with onions, salt, pepper, and fresh or smoked meats (Beoku- Betts 1995). The significance of rice within Gullah culture can be attested to by the existence of folklore surrounding the growing, harvesting, preparation, and eating of rice.

Those who prepare Gullah meals have a strong preference for fresh foods (Beoku- Betts 1995). Produce that is not grown by the family can often be purchased at nearby roadside stands and produce marts. During my fieldwork on St. Helena Island one of my acquaintances would always drop by and leave tomatoes, watermelon, and cucumbers on my doorstep. On weekends, in an effort to earn extra cash, some residents of St. Helena Island cook traditional Gullah food and sell it from various locations to tourists and locals alike (Hargrove 2000).

Gullah Views of Life and Death[95]

Within the Gullah worldview, life and death are viewed much differently than most would suspect. Life is meant to be lived, protected, and enriched to the fullest, but when death comes the fear experienced by many worldly beings is not part of the process. The Gullah view death as a journey into the spirit world, not as a break with life (Creel 1990), therefore the cemetery is not viewed as the final resting- place but as a door between two worlds. This explains many of the customs associated with death and funerals practiced within the Sea Islands. For example, if a mother dies and leaves behind a small child or a baby, it will be passed back and forth over the coffin to prevent "dead moder from hant de baby" (Creel 1990).

It is also believed that when a person dies they may not be able to rest if they are leaving behind something they desire. This explains why Gullah gravesites are often filled with material objects. Among some of the most common items found on graves are food, water, pots, broken pitchers, tobacco, and seashells (Creel 1990). Seashells, placed upon the grave, are of particular importance because they symbolize a very important concept within the Gullah worldview. It is believed that placing seashells on the grave represents the sea.[96] Within the BaKongo belief system this symbolism suggests "the sea brought us, the sea shall take us back" (Creel 1990, 90). Broken mirrors are also symbolic; they reflect the light that represents the spirit, holding it at a safe distance from the living (Pollitzer 1999).

Gullah Women: Activists and "Keepers o de Culcha"

Gullah women are, most often, the keepers of tradition and cultural knowledge. They pass on stories, crafts, foodways, and values to their children. The women of the Sea Islands are self- reliant matriarchs, who value autonomy, family and community. They engage in fund raising and community

activities aimed at preserving their rich cultural heritage. Beoku- Betts (1995) suggests that the collective activities performed by women promote a sense of shared tradition and identity, while also reinforcing the values of community- centered networks.

The enslaved African females of Sea Island plantations did all the same types of work that was expected of the men (Schwalm 1997). On antebellum rice plantations, fieldwork was slave women's work. The preparation of the fields, the planting, cultivation, harvesting, and processing of rice, and the maintenance of the elaborate plantation irrigation systems occupied the daily lives of most plantation women (Schwalm 1997:19).

It was not only in the fields in which these women made their importance known. The freed women of the South Carolina Sea Islands were deeply involved in the final destruction of the system of slavery (Schwalm 1997). Their dedication and involvement pushed the Union to accept emancipation as a war goal. They also openly confronted the institutionalized forms of power: the state, the Union, and the White power structure. The period of Reconstruction was one of defiance for the freed women of the South Carolina Sea Islands (Schwalm 1997). These women actively protested any compromise concerning the autonomy of their freedom with regard to the agricultural system. Gullah women protested even the presence of White planters and, in some cases resorted to physical violence. Therefore, the history of these women gives us clues as to the strong and autonomous nature of Sea Island women.

The current struggle for autonomy and self- determination builds on a history of female activism and leadership with Sea Islands communities. Contemporary Sea Island women are the daughters of many strong female ancestors, who are revered for their participation in the Civil Rights Movement and other events credited with the subsequent restructuring of social freedom for the African Americans of the southern United States. It was on St. Helena Island that Dr. Martin Luther King came to retreat from the rest of the world in order to relax with his family. Within this community, Dr. King found much support from registered female voters; ready to take action against racism to promote social equality. In all capacities, women of the Sea Islands are the foundation upon which culture has been built and sustained. Perhaps they will provide the necessary momentum for cultural, linguistic, and environmental preservation.

Chapter 10 Development and Change: Gullah as an Endangered Species

"***We have given up on trying to protect the shrimp and crab because we, the black native population of these islands, have become the new endangered species*" *(Emory Campbell 1984 in Rosengarten 1994).***

The Sea Islands of South Carolina and Georgia are under siege. Those Gullah and Geechee communities that remain intact are constantly under threat of development and change inflicted by outside interests. The island environments are beautiful and serene and the pace of life is always a breath of fresh air for any visitor from the hectic outside world. Ironically the very things that attract outsiders are the first things to be destroyed by an influx of newcomers who decide to make this paradise home. Much of the existing literature makes reference to the devastating effects of development and tourism (Nichols 1976; Slaughter 1979; Derby 1980; Day 1986; Rosengarten 1986; Jones- Jackson 1987; Carawan 1989; Demerson 1991; Twining and Baird 1991; Baird and Twining 1994; Guthrie 1996; Goodwine 1998; Joyner 1999; Pollitzer 1999) as it has increased at varied rates throughout a number of Sea Island communities. The literature focused on this phenomenon is growing rapidly as more and more scholars become aware of the situation, but much needs to be done within applied social science to put knowledge to use toward Gullah preservation.

Shrimp Creek, Georgia

As early as 1959, social scientists were beginning to document the changes within Gullah society resulting from increased contact with outsiders, particularly Euro Americans. Simon Ottenberg conducted research in the Shrimp Creek community, Georgia, in the summer of 1950.[97] What Ottenberg witnessed was an isolated, religious, traditional fishing community being transformed into a suburban area (Ottenberg 1991). During the 1950s this community was the epitome of Gullah community life and culture. They were self sufficient fishermen and shrimpers who owned their land and had strong bonds created by kinship, friendship, and church participation. They maintained insurance clubs and savings clubs, while church served to regulate the activities and social control within the community. On Tuesdays and Fridays they would travel to Savannah to sell their seafood in the streets. They also supplied seafood to neighboring communities. During the early 1950s, however, White outsiders began large- scale commercial fishing establishments in direct competition with Shrimp Creek residents. Many were forced to take up manual labor jobs in Savannah, and those who could not find a job migrated to New York, Philadelphia and other northern areas (Ottenberg 1991).

Development brought changes that were devastating to the residents of Shrimp Creek. Prior to increased contact, the residents had relied on their own knowledge of medicinal remedies for health; however, increased contact brought about a greater reliance on the medical professionals of the Savannah urban area. Shrimp Creek, along with the sharp decline in their fishing industry, also experienced the consolidation of their school systems, directly resulting in increased competition within the educational system as children began viewing education as a means of social and economic advancement (Ottenberg 1991).

One of the most common problems associated with changes such as these is the schism they create between young and old. As the elder generation struggles to maintain their lifeways, the youth see the "old ways" as backward, causing mass retreat away from home toward the values of mass culture (Beoku- Betts 1995; Goodwine 1998d; Smith 1999; Hargrove 2000). I have documented this phenomenon within my own research in St. Helena, as well as Mt. Pleasant, South Carolina. Overall, this creates profound and lasting effects on community cohesion and mobilization for positive change.

Edisto Island, South Carolina

Recent work conducted by Lauren E. Smith tells a similar story of the devastating consequences of development and encroachment. Smith conducted fieldwork within the Edisto Island community concerning performance events, such as preaching and storytelling, and the interaction between performer and audience. What she documents, however, is a community at risk of losing their cultural heritage (1999). Historically, Edisto was home to the Cusabo Indians (the Edistow tribe) until the plantation system took hold in 1724. The Civil War brought land ownership to Edisto Island's Gullah slaves, just as it did throughout the Sea Islands, and they remained there as self sufficient farmers for generations. However, as of the late 1990s, Smith describes the current community of Gullah residents as "poor and afraid of losing their cultural lifeways" (1999). Smith goes on to suggest that the future of Edisto is unsure, due to the out migration of Gullah youth and the influx of drugs.

Mt. Pleasant, South Carolina: Women and Development

The economic picture for Mt. Pleasant is cut from the same mold as those discussed thus far. The women of this community, however, have carved out an economic niche for themselves by sewing sweetgrass baskets for the tourism market (Derby 1980; Day 1982; Rosengarten 1994; Hargrove 2000). Kay Young Day's extensive research within the Mt. Pleasant community makes an important contribution to the literature concerning collective responses to development and change.[98] Many of the elderly women interviewed spoke of a time when they were economically independent. Some grew produce and sold it at roadside stands or in the Charleston market. But more recently population growths, in- migration of Whites, and changes in the service sector have negatively

affected the women of this community. In response to their economic marginalization women have created networks, through kinship and friendship, which give them greater control over their economic futures.

Day's work is focused on the ways in which women of the Mt. Pleasant community assist one another with child rearing, domestic tasks, and economic ventures, such as sweetgrass basketry. At the time of Day's research over 50% of the women of Mt. Pleasant produced baskets sold from makeshift wooden stands along highway 17 (Day 1982). By creating support networks for one another, these women have created an economic niche market aimed at tourists. This offers an alternative to the wage work brought about by development and tourism (Day 1986).

In addition to the basket industry, the women of Mt. Pleasant have another option. Day documented many cases of women migrating to New York City in search of employment (1982). New York City offers a broad range of job opportunities in the medical profession, most notably in hospitals. When a Mt. Pleasant woman establishes herself in New York, she will often recruit interested kin from home to move up North. This type of network, although it is essential to the economic future of these women, ultimately takes residents from their Sea Island communities. Recent research conducted in Mt. Pleasant suggests this may be one of the primary avenues by which family land is lost (Hargrove 2000). When residents are invested in their work and community in New York, it is hard to devote time, money, and energy to business back home. Developers have learned to take advantage of such predicaments, employing various strategies to acquire valuable family land. Therefore, the limited nature of wage work often associated with tourism and development, which is often cited as the primary reason for migrating to New York, has serious consequences for Native Sea Islanders.

Hilton Head Island, South Carolina: A "Culture of Servitude"[99]

Hilton Head Island serves as a constant reminder of the possibilities of immense development. Lisa V. Faulkenberry, in her recent dissertation (1997) and co- published journal article (2000), urges us to consider the multiple realities of development. Faulkenberry conducted two years of research in Beaufort County, interviewing residents of St. Helena Island, Beaufort, Hilton Head Island, and Daufuskie Island. Within her research paradigm she includes local fishermen and shrimpers, both African American and White residents, business owners, government officials, and retirees,[100] in an attempt to explore the economic and social impacts of tourism on the residents of South Carolina Sea Islands (1997). The results offer new perspectives and create new agendas for the study of Gullah in the twenty first century.

Taking an in- depth look at development, governmental involvement in tourism decision making, land ownership and use, property tax increases, and new businesses and job opportunities, Faulkenberry concludes that tourism threatens to destroy the self- sustainability of Sea Islanders through a process referred to as the "culture of servitude" (1997). The jobs available to Sea Island residents create and perpetuate economic dependence and social inequality, and are limited to minimum wage service jobs such as housekeepers, golf caddies, cooks, maids, maintenance workers, waiters, and waitresses (Joyner 1999). These types of "servitude" sustain a power differential between locals (Gullah, African American) and tourists (Euro American). Furthermore, increased tourism brings increased taxes, higher crime rates, geographic displacement, and family deterioration (Faulkenberry 1997; Faulkenberry et al. 2000).

Changes such as these have taken their toll on the everyday lives of Gullah communities. Farming has disappeared in many areas and property taxes are constantly on the increase. More importantly, there is a distinct nostalgia to the way people speak about their island homes prior to tourism (Faulkenberry 1997). Their homes have lost the small town cohesion built over the past few hundred years and they have nothing to show for it. They are not involved in the decision- making processes that directly affect their communities. They have no opportunities for ownership of tourist businesses (Faulkenberry 1997), only menial positions working in them. The psychological ramifications directly

affect family life, while often leading to social disintegration. In addition, Gullah cultural practices and traditions are being altered by insiders, outsiders, and the state in an attempt to seduce the tourism dollar (Hargrove 2000).

Commoditization of Culture: Gullah Culture for Sale

The most recent work concerning development and change within the Sea Islands of South Carolina concerns the appropriation of Gullah identity within the tourism industries of Mt. Pleasant and St. Helena Island (Hargrove 2000).[101] There are countless entrepreneurs coming to the Sea Islands to profit from the wholesale distribution of Gullah culture. Musical groups, restaurants, tours, and the tourism industry of South Carolina are marketing Gullah imagery and culture in an effort to capitalize on the increasing interest in this nostalgic lifeway (Hargrove 2000). Chief among the images being appropriated is the sweetgrass basket woman, who appears on everything. Postcards, calendars, travel guides, and a wide range of brochures are adorned with images of sweetgrass baskets, basket women, or both.[102] This type of cultural commoditization, or piracy of identity, should not go unnoticed by the administrators of South Carolina as one of the key contributors to rising tourism within the State.

Daufuskie Island: Internal Effects of Development

Development and tourism have devastated countless Gullah communities, but we often overlook the effects that are not readily visible and quantifiable in scientific terms. We can assess economic loss, land loss, and even cultural loss and acculturation to an extent, but it is extremely hard to investigate the psychological ramifications of these sweeping changes. Such an attempt was made, however, by a psychology doctoral student Sabra C. Slaughter. In 1979, his dissertation "The Old Ones Dying and The Young Ones Leaving:" The Effects of Modernization on the Community of Daufuskie Island, South Carolina Slaughter gives us a glimpse of the negative effects of such processes with regard to Daufuskie Island community cohesion and autonomy. Slaughter's interest in this community was sparked during the summers of 1973 and 1974 while working as a student volunteer and later a paid employee, in a program implemented by University of California at Santa Cruz. The aim of the program was to place students on Daufuskie to assist community members with transportation, public health, and educational needs (1979). She later returned as a researcher, collecting extensive oral history of some twenty- six residents of Daufuskie,[103] to assess the effects of modernization on this isolated, rural community.

Within the oral histories and interview data collected by Slaughter, a clear picture emerges of a community devastated by modernization and development. The educational system has been tremendously altered, resulting in bureaucratization and impersonalization, and loss of community control and decision making within the educational system (1979). Most of the decision making power, concerning educational policy, had been transferred to extracommunity government, leaving Daufuskie residents feeling hopelessly out of control of their lives and the lives of their children.

Aside from changes in the educational system, Slaughter goes on to reveal how a cultural tradition was erased in the development process. For many decades Daufuskie Island tourism included "picnic boat" tourism, comprised of local fishermen, shrimpers, and crabbers, transporting small groups of tourists to the island, as well as selling their goods to the tourists and Hilton Head residents. This was their livelihood, as well as a family tradition (1979); however, Hilton Head companies began offering boat tours to the island and displaced the enterprise. The end result was a loss of livelihood and loss of economic earnings. Changes such as these, as well as countless others, have the young residents leaving home in search of better economic opportunities, just as the old ones are dying out. Slaughter presents Daufuskie as a community in danger of loss of autonomy and social cohesion, as well as at risk of losing the very place they call home.

In retrospect, Slaughter's work seems almost prophetic. Daufuskie Island has been all but seized. It is hardly recognizable as a once self- sufficient Gullah community, with only a handful of people left in the midst of the golf courses, villas and condos (Goodwine 1998a). Residents can no longer visit their

descendents buried in Gullah graveyards due to restricted areas set off by gates and guards (Goodwine 1998c). Daufuskie Islanders recently won a lawsuit granting access to previous family burial areas, which seemed like a long awaited success. However, since they are not permitted to drive up to the graveyard, they must resort to carrying bodies long distances in order to continue traditional cultural practices (Marquetta L. Goodwine, personal communication 2002). The small remaining Gullah community appears imprisoned on an edge of the island, wondering how long it will be before developers find a way to get their hands on the small area that remains.

Conclusion

The cases summarized here can be taken as representative of the larger community of Sea Islands. They are all at risk of being destroyed by development and tourism, if they have escaped the wrath thus far. We must begin to look at our work as an opportunity to investigate these issues, as well as become involved in the struggles to stop this "destructionment" (Goodwine's perspective on the truth behind the development of the Sea Islands, 1998a). Governments, agencies, and activists must begin to work toward restricting access to development companies with grand plans of resorts and tourism taking the place of Gullah survival.

Conclusion

Social science is moving in the direction of action- oriented research. Research for the sake of research is no longer acceptable; therefore all future research within the Sea Islands should be approached with an agenda for contributing, in some way, to local communities.[104] We can no longer stand outside and observe communities with the intention of publication or prestige. It is imperative that research be conducted to preserve the oral histories, folktales, traditional herbal remedies, religious practices, and lifeways being destroyed by the current attack of development, but it must be managed in a collective effort with community leaders, activists, and organizations. We have much to learn from the real warriors, those who deal with these problems on a daily basis. They hold the keys to the future of Gullah as a viable lifeway and cultural tradition.

No amount of literary creativity could summarize suggestions for future Gullah research more eloquently than Charles Joyner does in his most recent publication:

> The old talk and the old tales, the old prayers and the old personal expressiveness are more than just quaint cultural artifacts. They have provided the islanders with a sense of continuity with generations gone before, a precious lifeline to courageous ancestors who survived slavery and endured generations of poverty. That heritage is a source of strength that has enabled them to cope with the hail and upheaval of life. As we drift further and further out upon the sea of modernization, that heritage may be as crucial to our sanity and survival as to theirs. The Sea Islanders and their folk culture have something precious to offer us if we do not destroy them first (Joyner 1999, 281).

With this in mind, scholars can contribute to a more equitable and collaborative effort with the remaining Sea Island communities of South Carolina and Georgia. They are, after all, the true "keepers o de culcha."

References Cited

Allen, Francis, Charles Pickard Ware, and Lucy McKim Garrison. *Slave Songs of the United States*. New York: Oak Publications, 1965.

Anziano, Satina. Lillie: Copula Usage Study of a Mesolectal Gullah Speaker From Federal Writers Project. Ph.D. dissertation, University of South Carolina, 1998.

Baird, Keith E. and Mary A. Twining. "Names and Naming in the Sea Islands." In *The Crucible of Carolina: Essays in the Development of Gullah Language and Culture*, edited by Michael Montgomery, 23- 37. Athens: The University of Georgia Press, 1994.

Bascom, William R. "Acculturation among the Gullah." *American Anthropologist* 43 (1941): 43- 50.

Bascom, William R. "Gullah Folk Beliefs Concerning Childbirth." In *Sea Island Roots: African Presence in the Carolinas and Georgia*, edited by Mary A. Twining and Keith E. Baird, 27- 36. Trenton: Africa World Press, 1991.

Beckwith, Martha W. Jamaica Anansi Stories: Memoirs of the American Folk- lore Society, Vol. 17, 1924. Cited in William S. Pollitzer, *The Gullah People and Their African Heritage*. (Athens: The University of Georgia Press, 1999).

Benmaman, Virginia Doubchan. "An Investigation of Reading Comprehension Ability of Black Fourth and Fifth Grade Students Who Are Reading Below Grade Level Utilizing Materials Written in Gullah and Standard English." Ed. D., University of South Carolina, 1975.

Bennett, John. "Gullah: A Negro Patois." *South Atlantic Quarterly* 7 (1908): 332- 47.

- - - . "Gullah: A Negro Patois." *South Atlantic Quarterly* 8 (1909): 39- 52.

Beoku- Betts, Josephine. "We Got Our Way of Cooking Things." *Gender and Society* 9 (1995): 535- 55.

Butler, Afloyd. "The Blacks Contribution of Elements of African Religion to Christianity in America: A Case Study of the Great Awakening in South Carolina." Ph.D. dissertation, Northwestern University, 1975.

Carawan, Guy & Candie. *Ain't You Got a Right to the Tree of Life?: The People of Johns Island, South Carolina—Their Faces, Their Words, and Their Songs*. Athens: University of Georgia Press, 1989.

Carney, Judith Ann. *Black Rice: The African Origins of Rice Cultivation in the Americas*. Harvard University Press, 2001.

Cassidy, Frederic G. "Gullah and the Caribbean Connection." in *The Crucible of Carolina: Essays in the Development of Gullah Language and Culture*, edited by Michael Montgomery, 16- 22. Athens: The University of Georgia Press, 1994.

- - - . Some Similarities Between Gullah and Caribbean Creoles. in *Language Varieties in the South: Perspectives in Black and White*, ed. by Michael Montgomery and Guy Bailey, 30- 37. Tuscaloosa, AL: University of Alabama Press, 1986.

Chase, Judith Wragg. *Afro- American Art and Craft*. New York: Van Nostrand Reinhold Company, 1971.

Creel, Margaret Washington. *A Peculiar People: Slave Religion and Community- Culture Among the Gullahs*. New York: New York University Press, 1988.

- - - . "Gullah Attitudes Toward Life and Death." in *Africanisms in American Culture*, edited by Joseph E. Holloway, 69- 97. Bloomington, IN: Indiana University Press, 1990.

Cunningham, Bernateen. "Attitudes of School Personnel in Charleston, South Carolina Toward the Gullah Dialect." Ph.D. dissertation, University of Tennessee, 1989.

Cunningham, Irma Aloyce Ewing. "A Syntactic Analysis of Sea Island Creole [Gullah]". Ph.D. dissertation, University of Michigan, 1970.

Dabbs, Edith. *Sea Island Diary: A History of St. Helena Island*. Spartanburg, S.C. Reprint Co., 1983.

Davis, Mella. "African Trickster Tales in Diaspora: Resistance in the Creole- Speaking South Carolina Sea Islands and Guadeloupe." Ph.D. dissertation, Northwestern University, 1998.

Day, Kay Young. "Kinship in a Changing Economy: A View From the Sea Islands." In *Holding on to the Land and the Lord*, edited by Hall and Stack. Southern Anthropological Society Proceedings, No. 15. Athens: University of Georgia Press, 1982.

Day, Virginia Kay. "My Family Is Me: Women's Kin Networks and Social Power in a Black Sea Island Community." Ph.D. dissertation, Rutgers University, 1986.

Demerson, Bamidele Agbasegbe. "Family Life on Wadmalaw Island." In *Sea Island Roots: African Presence in the Carolinas and Georgia*, edited by Mary A. Twining and Keith E. Baird, 57- 87. Trenton: Africa World Press, 1991.

Derby, Doris Adelaide. "Black Women Basket Makers: A Story of Domestic Economy in Charleston County, South Carolin*a*." Ph.D. dissertation, University of Illinois at Urbana- Champaign, 1980.

Faulkenberry, Lisa V. "A Culture of Servitude: Economic and Social Impacts of Tourism on the South Carolina Sea Islands." Masters thesis, Clemson University, 1997.

Faulkenberry, Lisa V., John M. Coggeshall, Kenneth Backman and Shelia Backman. "A Culture of Servitude: The Impact of Tourism and Development on South Carolina's Coast." *Human Organization* 59, no. 1 (2000): 86- 95.

Gonzales, Ambrose. The *Black Border: Gullah Stories of the Carolina Coast*. Columbia, S.C.: State Company, 1922.

Goodwine, Marquetta L. "Destructionment: Treddin' Een We Ancestas' Teahs." In *The Legacy of Ibo Landing: Gullah Roots of African American Culture*, edited by Marquetta L. Goodwine, 164- 74. Atlanta: Clarity Press Inc., 1998a.

Goodwine, Marquetta L. "Excavating Gullah Seeds: Guidelines for Conducting Research on the Gullah." in *The Legacy of Ibo Landing: Gullah Roots of African American Culture*, edited by Marquetta L. Goodwine, 198- 203. Atlanta: Clarity Press, Inc., 1998b.

Goodwine, Marquetta L. "Holdin' Pun We Culcha: Sites, Individuals and Organzations Preserving the Gullah and Geechee Heritage." In *The Legacy of Ibo Landing: Gullah Roots of African American Culture*, edited by Marquetta L. Goodwine. Atlanta: Clarity Press, Inc., 1998c.

Goodwine, Marquetta L. "Rebuilding the African American Community by Returning to Traditions." In The *Legacy of Ibo Landing: Gullah Roots of African American Culture*, edited by Marquetta L. Goodwine, 8- 13. Atlanta: Clarity Press, 1998d.

Goodwine, Marquetta L. *Gullah/Geechee: Africa's Seed in the Winds of the Diaspora,* Volume III. Frum Wi Soul Tuh De Soil: Cotton, Rice, and Indigo. New York: Kinship Publications, 1999.

Guthrie, Patricia. "Catching Sense: The Meaning of Plantation Membership Among Blacks on St. Helena Island, South Carolina." Ph.D. dissertation, University of Rochester, 1977.

Guthrie, Patricia. *Catching Sense: African American Community on a South Carolina Sea Island*. Westport, Connecticut: Bergin and Garvey, 1996.

Hair, P.E.H. "Sierra Leone Items in the Gullah Dialect of American English." *African Language Review* 4 (1965): 79- 84.

Hancock, Ian F. "Gullah and Barbadian: Origins and Relationships." *American Speech* 55 (1980): 17- 35.

- - - . "West Africa and the Atlantic Creoles." In *The English Language in West Africa*, edited by John J. Spencer. London: Longman, 1971.

Hancock, Ian F. "Componentiality and the Creole Matrix: The Southwest English Contribution." In *The Crucible of Carolina: Essays in the Development of Gullah Language and Culture*, edited by Michael Montgomery, 95- 114. Athens: The University of Georgia Press, 1994.

Hargrove, Melissa D. "Marketing Gullah: Identity, Cultural Politics, and Tourism." Masters thesis, University of Tennessee, 2000.

Hart, Edward Brantley. "Gullah Spirituals in Prayer Meetings on John's Island, South Carolina." Ph.D. dissertation, University of South Carolina, 1993.

Hawley, Thomas Earl Jr. "The Slave Tradition of Singing Among the Gullah of Johns Island, South Carolina." Ph.D. dissertation, University of Maryland, 1993.

Heyer, Kathryn Wilson. Rootwork: Psychosocial Aspects of Malign Magical and Illness Beliefs in a South Carolina Sea Island Community. Ph.D. dissertation, University of Connecticut, 1981.

Holloway, Joseph E. "The Origins of African- American Culture." In *Africanisms in American Culture*, edited by Joseph E. Holloway, pp. 1- 18. Bloomington: Indiana University Press, 1990.

Hopkins, Tometro. "Issues in the Study of Afro- Creoles: Afro- Cuban and Gullah." Ph.D. dissertation, Indiana University, 1992.

Hopkins, Tometro. "Variation in the Use of the Auxiliary Verb Da in Contemporary Gullah." In *The Crucible of Carolina: Essays in the Development of Gullah Language and Culture*, edited by Michael Montgomery, 60- 86. Athens: The University of Georgia Press, 1994.

Johnson, Alonzo. "'Pray's House Spirit' The Institutional Structure and Spiritual Core of an African American Folk Tradition." In "*Ain't Gonna Lay My 'Ligion Down*" *African American Religion in the South*, edited by Alonzo Johnson and Paul Jersild, 8- 38. Columbia: University of South Carolina Press, 1996.

Johnson, Guion Griffis. *A Social History of the Sea Islands*. New York: Negro Universities Press, 1930.

Johnson, Guy B. *Folk Culture on St. Helena Island, South Carolina*. Chapel Hill: The University of North Carolina Press, 1930.

Jones- Jackson, Patricia Ann. “The Status of Gullah: An Investigation of Convergent Processes.” Ph.D. dissertation, University of Michigan, 1978.

Jones- Jackson, Patricia. "Contemporary Gullah Speech: Some Persistent Linguistic Features." *Journal of Black Studies* 13 (3) (1983): 289- 303.

Jones- Jackson, Patricia. *When Roots Die: Endangered Traditions on the Sea Islands*. Athens: University of Georgia Press, 1987.

Jones- Jackson, Patricia. "Let the Church Say "Amen": The Language of Religious Rituals in Coastal South Carolina." In *The Crucible of Carolina: Essays in the Development of Gullah Language and Culture*, edited by Michael Montgomery, 115- 32. Athens: The University of Georgia Press, 1994.

Joyner, Charles W. *Folk Song in South Carolina*. Columbia: University of South Carolina Press, 1971.

Joyner, Charles. *Slave Folklife on the Waccamaw Neck: Antebellum Black Culture in the South Carolina Lowcountry*. Ph.D. dissertation, University of Pennsylvania, 1977.

Joyner, Charles. *Down by the Riverside: a South Carolina Slave Community*. Urbana: University of Illinois Press, 1984.

Joyner, Charles. *Shared Traditions: Southern History and Folk Culture*. Urbana: University of Illinois Press, 1999.

Lawton, Samuel. *The Religious Life of Coastal and Sea Island Negroes*. Ph.D. dissertation, George Peabody College for Teachers, 1939.

Littlefield, Daniel C. *Rice and Slaves: Ethnicity and the Slave Trade in Colonial South Carolina*. Baton Rouge: Louisiana State University Press, 1981.

Mack, Linda D. “A Comparative Analysis of Linguistic Stress Patterns in Gullah (Sea Island Creole) and English Speakers.” Masters thesis, University of Florida, 1984.

McGuire, Mary J. “Getting Their Hands on the Land: The Revolution in St. Helena Parish, 1861-1900.” Ph.D. dissertation, University of South Carolina, 1985.

McWhorter, John H. “Sisters under the Skin: A Case of Genetic Relationship between the Atlantic English- based Creoles.” *Journal of Pidgin and Creole Languages* 10 (1995): 289- 333.

Mille, Katherine Wyly. "A Historical Analysis of Tense- Mood- Aspect in Gullah Creole: A Case of Stable Variation." Ph.D. dissertation, University of South Carolina, 1990.

Mintz, Sidney W. and Richard Price. *The Birth of African- American Culture: An Anthropological Perspective*. Boston: Beacon Press, 1992.

Mitchell, Faith. *Hoodoo Medicine: Sea Island Herbal Remedies*. Berkeley: Reed, Cannon, and Johnson Co., 1978.

Moerman, Daniel Ellis. “Extended Family and Popular Medicine on St. Helena Island, S.C: Adaptations to Marginality.” Ph.D. dissertation, University of Michigan, 1974.

Montgomery, Michael. “Introduction.” In *The Crucible of Carolina: Essays in the Development of Gullah Language and Culture*, edited by Michael Montgomery, 1- 15. Athens: The University of Georgia Press, 1994a.

Montgomery, Michael. “Lorenzo Dow Turner’s Early Work on Gullah.” In *The Crucible of Carolina: Essays in the Development of Gullah Language and Culture*, edited by Michael Montgomery, 158- 174. Athens: The University of Georgia Press, 1994b.

Mufwene, Salikoko S. "The Ecology of Gullah's Survival." *American Speech* 72 (1) (1997): 69- 77.

- - - . “Gullah’s Development: Myths and Sociohistorical Evidence.” in *Language Variety in the South Revisited*, ed. by Cynthia Bernstein, Robin Sabino, and Tom Nunally, 113- 122. Tuscaloosa: University of Alabama Press.

- - - . "Misinterpreting Linguistic Continuity Charitably." In *The Crucible of Carolina: Essays in the Development of Gullah Language and Culture*, edited by Michael Montgomery, 38- 59. Athens: The University of Georgia Press, 1994.

Nichols, Patricia Causey. “Linguistic Change in Gullah: Sex, Age, and Mobility.” Ph.D. dissertation, Stanford University, 1976.

Normand, Kerry S. “By Industry and Thrift: Landownership Among the Freedpeople of St. Helena Parish, South Carolina, 1863- 1870.” Masters thesis, Hampshire College, 1994.

Ottenberg, Simon. "Leadership Patterns in a Sea Island Community." In *Sea Island Roots: African Presence in the Carolinas and Georgia*, edited by Mary A. Twining and Keith E. Baird, 141- 52. Trenton: Africa World Press, 1991.

Parsons, Elsie C. *Folk- Lore of the Sea Islands, South Carolina*. Cambridge: American Folk- lore Society, 1923.

Pollitzer, William. *The Gullah People and Their African Heritage*. Athens: The University of Georgia Press, 1999.

Raboteau, Albert J. *Slave Religion: The Invisible Institution in the Antebellum South*. New York: Oxford University Press, 1978.

Rose, Willie Lee. *Rehearsal for Reconstruction: The Port Royal Experiment*. Indianapolis: The Bobbs-Merrill Company, Inc., 1964.

Rosengarten, Dale. *Row Upon Row: Sea Grass Baskets of the South Carolina Lowcountry*. Columbia: McKissick Museum, University of South Carolina, 1986.

Rosengarten, Dale. "Spirits of Our Ancestors: Basket Traditions in the Carolinas." In *The Crucible of Carolina: Essays in the Development of Gullah Language and Culture*, edited by Michael Montgomery, 133- 57. Athens: The University of Georgia Press, 1994.

Rosengarten, Theodore. *Tombee, Portrait of a Cotton Planter with the Journal of Thomas B. Chaplin (1822- 1890)*. New York: William Morrow and Co., 1986.

Salter, Paul. “Changing Economic Patterns of the South Carolina Sea Islands.” Ph.D. dissertation, University of North Carolina at Chapel Hill, 1968.

Salter, Paul. “Changing Agricultural Patterns on the South Carolina Sea Islands.” In *Sea Island Roots: African Presence in the Carolinas and Georgia*, edited by Mary Twining and Keith E. Baird, 19- 25. Trenton: Africa World Press, Inc., 1991.

Savannah Unit Georgia Writers' Project Work Projects Administration. *Drums and Shadows: Survival Studies among The Georgia Coastal Negroes*. Athens: University of Georgia Press, 1940.

Schwalm, Leslie A. *A Hard Fight For We: Women's Transition From Slavery to Freedom in South Carolina*. Urbana: University of Illinois Press, 1997.

Seabrook, Whitemarsh B. *A Memoir on the Origin, Cultivation, and Uses of Cotton*. Charleston: Miller and Brown, 1844. Cited in William S. Pollitzer, *The Gullah People and Their African Heritage*. (Athens: The University of Georgia Press, 1999.)

Sengova, Joko. "Recollections of African Language Patterns in an American Speech Variety: An Assessment of Mende Influences in Lorenzo Dow Turner's Gullah Data." in *The Crucible of Carolina: Essays in the Development of Gullah Language and Culture*, edited by Michael Montgomery, 175- 200. Athens: The University of Georgia Press, 1994.

Slaughter, Sabra Conway. "'The Old Ones Dying and the Young Ones Leaving:' The Effects of Modernization on the Community of Daufuskie Island, South Carolina." Ph.D. dissertation, UMI, 1979.

Smith, Franklin O. "A Cross Generational Study of the Parental Discipline Practices and Beliefs of Gullah Blacks of the Carolina Sea Islands." Ed.D., University of Massachusetts, 1973.

Smith, Lauren Elizabeth. "Audience, Performance, and Meaning in the Gullah Sea Islands." Ph.D. dissertation, Columbian School of Arts and Sciences of the George Washington University, 1999.

Smith, Reed. "Gullah." *Bulletin of the University of South Carolina*, No. 190. Columbia, S.C.: Bureau of Publication, 1926.

Starks, George Leroy Jr. "Black Music in the Sea Islands of South Carolina: Its Cultural Context- - Continuity and Change." Ph.D. dissertation, Wesleyan University, 1973.

Stavisky, Leonard P. "The Negro Artisan in the South Atlantic States, 1800- 1860: a Study of Status and Economic Opportunity With Special Reference to Charleston." Ph.D. dissertation, Columbia University, 1958.

Thomas, June Sheralyn Manning. "Blacks on the South Carolina Sea Islands: Planning for Tourist and Land Development." Ph.D. dissertation, University of Michigan, 1977.

Thrower, Sarah Selina. "The Spiritual of the Gullah Negro in South Carolina." MA Music, College of Music of Cincinnatti, 1953.

Turner, Lorenzo Dow. *Africanisms in the Gullah Dialect*. Chicago: The University of Chicago Press, 1949.

Twining, Mary Arnold. "Baskets and Quilts: Women in Sea Island Arts and Crafts." In *Sea Island Roots: African Presence in the Carolinas and Georgia*, edited by Mary A. Twining and Keith E. Baird, 129- 40. Trenton: Africa World Press, Inc., 1991b.

Twining, Mary Arnold. "An Examination of African Retentions in the Folk Culture of the South Carolina and Georgia Sea Islands." Ph.D. dissertation, Indiana University, 1977.

Twining, Mary Arnold and Keith E. Baird. "Sea Island Culture: Matrix of the African American Family." In *Sea Island Roots: African Presence in the Carolinas and Georgia*, edited by Mary Twining and Keith E. Baird, 1- 18. Trenton: Africa World Press, Inc., 1991.

Vlach, John Michael. *The Afro- American Tradition in Decorative Arts*. Cleveland: the Cleveland Museum of Art, 1978.

Wade- Lewis, Margaret. “The African Substratum in American English.” Ph.D. dissertation, New York University, 1988.

- - - . “The Contribution of Lorenzo Dow Turner to African Linguistics Revisited.” Paper presented at Gullah: A Linguistic Legacy of Africans in America – A Conference on the 50th Anniversary of Africanisms in the Gullah Dialect, Washington, DC, 2000.

- - - . “Lorenzo Dow Turner: Pioneer African American Linguist.” *Black Scholar* 21:4 (1991): 10- 24.

Watkins, June T. “Strategies of Social Control in an Isolated Community: the Case of the Gullah of South Carolina's St. Helena Island.” Ph.D. dissertation, Indiana University of Pennsylvania, 1993.

Winford, Donald. “On the Origins of African- American Vernacular English: A Creolist Perspective. Part I: The Sociohistorical Background.” *Diachronica* 14 (1997)305- 344.

- - - . . “On the Origins of African- American Vernacular English: A Creolist Perspective. Part II: Linguistic Features.” Diachronica 15 (1998)99- 154.

Wolfram, Walt. “The Relationship of White Southern Speech to Vernacular Black English.” *Language* 50 (1974): 498- 527.

Wood, Peter. *Black Majority: Negroes in Colonial South Carolina from 1670 through the Stono Rebellion*. New York: Alfred A. Knopf, 1975.

- - - . “The Changing Population of the Colonial South: An Overview by Race and Region.” in *Powhatan’s Mantle: Indians in the Colonial Southeast* ed. by Peter H. Wood, Gregory A. Waselkov, and M. Thomas Hatley, 35- 103. Lincoln, NE: University of Nebraska Press, 1989.

Woofter, T. J. *Black Yeomanry: Life on St. Helena Island*. New York: Henry Holt and Co., 1930.

Additional Sources

Bailey, Cornelia. God, Dr. Buzzard, and the Bolito Man: a saltwater Geechee talks about life on Sapelo Island. New York: Doubleday, 2000.

Coclanis, Peter A. "Economy and Society in the Early Modern South: Charleston and the Evolution of the South Carolina Low Country." Ph.D. dissertation, Columbia University, 1984.

Cornelius, Janet Duitsman. ""When I Can Read My Title Clear": Literacy, Slavery, and Religion in the Antebellum South." Columbia, South Carolina: University of South Carolina Press, 1991.

Crum, Mason. Gullah, *Negro Life in the Carolina Sea Islands*. Durham, NC: Duke University Press, 1940.

Dabbs, Edith M. Face of an Island. New York: Grossman, 1971.

Dozier, Judy Massey. "Conjure Woman: Cultural Performances of African American Women Writers." Ph.D. dissertation, Loyola University Chicago, 2000.

Epps, Edwin C. "Pat Conroy and the Daufuskie Island School." Ed.D., University of South Carolina, 1993.

French, Jana L. "Fantastic Histories: A Dialogic Approach to a Narrative Hybrid." Ph.D. English, University of Wisconsin- Madison, 1996.

Gibbons, Letitia L. "A Statistical Analysis of Factors Affecting the Morbidity Rate of Sickle Cell Anemia." Masters thesis, University of South Carolina, 1986.

Goodwine, Marquetta L. Gullah/Geechee: Seeds in the Winds of the Diaspora, Volume II. Gawd Dun Smile Pun We: Beaufort Isles. New York: Kinship Publications, 1997.

Haskell, Ann Sullivan. "The Representation of Gullah- Influenced Dialect in Twentieth Century South Carolina Prose: 1922- 1930." Ph.D. dissertation, University of Pennsylvania, 1964.

Hemmingway, Theodore. "Beneath the Yoke of Bondage: A History of Black Folks in South Carolina, 1900- 1940." Ph.D. dissertation, University of South Carolina, 1976.

Hoit- Thetford, Elizabeth. "An Educational History of the Gullahs of Coastal South Carolina From 1700 to 1900." Ed.D., East Tennessee State University, 1986.

Holloway, Joseph E. "Time in the African Diaspora: The Gullah Experience." Time in the Black Experience. Editor Joseph K. Adjaye, 199- 211. Westport: Greenwood Press, 1994.

John, Beverly M. "Culture and Social Change: The Values and Behaviors of African- American People in the South Carolina Lowcountry and Georgia Coastal Region in the Antebellum and Postbellum Periods." Ph.D. dissertation, University of California at Berkeley, 1991.

Johnson, Michael P. and James L. Roark eds. "No Chariot Let Down, Charleston's Free People of Color on the Eve of the Civil War." Chapel Hill: University of North Carolina Press, 1984.

Jordan, Francis Harold. "Across the Bridge: Penn School and Penn Center." Ed.D. University of South Carolina, 1991.

Lamuniere, Michelle C. "Roll, Jordan, Roll: The Gullah Photographs of Doris Ulmann." MA/ Art History, University of Oregon, 1994.

Lavely, Marcia Marvin. "A Study of American Literature Which Incorporates the Use of the Gullah Dialect." Ph. D. dissertation, The University of Mississippi, 1991.

Moore, Janice Gailliard. "Africanisms among Blacks of the Sea Islands." Journal of Black Studies 10 (1980): 467- 80.

Nixon, Nell Marie. "Gullah and Backwoods Dialect in Selected Works by William Gilmore Simms." Ph.D. dissertation, University of South Carolina, 1971.

Purcell, Katharine Chapman. "Reflections from the Well: Julia Mood Peterkin and the Gullah Community." Ph. D. dissertation, University of North Carolina at Greensboro, 1997.

Roberts, Peter A. "Flexibility and Creativity in Afro- American English." The Crucible of Carolina: Essays in the Development of Gullah Language and Culture. Editor Michael Montgomery, 87- 94. Athens: The University of Georgia Press, 1994.

Saunders, W. C. "Sea Islands, Then and Now." *Journal of Black Studies* 10:1 (1980): 481- 92.

Shriner, Darothey Sellers. "Transect Studies of Salt Marsh Vegetation in Port Royal Sound and North Edisto River Estuaries, South Carolina." Masters thesis, University of South Carolina, 1971.

Sledge, Mailande Cheney. "The Representation of the Gullah Dialect in Francis Griswold's A Sea Island Lady." Ph.D. dissertation, University of Alabama, 1985.

Thompson, H. Dean Jr. "Minerva Finds a Voice: the Early Career of Julia Peterkin." Ph.D. dissertation, Vanderbilt University, 1987.

Twining, M. A. & W. C. Saunders. "One of These Days: the Function of Two Singers in the Sea Island Community." Studies in the Literary Imagination. Editor J.B. Burrison, 64- 71. Atlanta: Georgia State University, 1970.

Twining, Mary Arnold. "Harvesting and Heritage: A Comparison of Afro- American and African Basketry." Afro- American Folk Art and Crafts. W. Ferris, 259- 71. Boston: G. K. Hall, 1983.

Twining, Mary Arnold. "Movement and Dance on the Sea Islands." Journal of Black Studies 15, no. 4 (1985).

Williams, Darnell. "An Investigation of Possible Gullah Survivals in the Speech and Cultural Patterns of Black Mississippians." Ph.D. dissertation, Ohio State University, 1973.

Endnotes

[1] One of the reviewers of an early draft of this document suggests including Amelia Island, Florida in the Gullah/ Geechee culture area based on a recent book, *American Beach*; written by Russ Rymer and published in 1998. This book should be read and taken into consideration in future projects concerning Gullah/ Geechee people.

[2] One of the reviewers of an early draft of this document suggested including Wadmalaw Island to the list of viable Gullah communities in South Carolina.

[3] Linguistic connections between Gullah and the Caribbean abound within the literature. For further clarification, see *The Crucible of Carolina: Essays in the Development of Gullah Language and Culture*, edited by Michael Montgomery. Athens: The University of Georgia Press, 1994.

[4] Jones- Jackson also discusses connections between Gullah religious ceremony, Jamaican pocomania and Brazilian macumba (1994).

[5] Lorenzo Dow Turner introduced term.

[6] Etymology is defined as "The origin and historical development of a linguistic form as shown by determining its basic elements, earliest known use, and changes in form and meaning, tracing its transmission from one language to another, identifying its cognates in other languages, and reconstructing its ancestral form where possible" *http://www.dictionary.com*.

[7] *Sea Island Diary: A History of St. Helena Island* (1983) represents a historical account of the Penn School and St. Helena Island, compiled primarily from diaries, letters, Penn School archives, and historic records.

[8] *Rehearsal for Reconstruction: The Port Royal Experiment (1964)* is an historic account of the design and implementation of the Port Royal Experiment within the Sea Islands of South Carolina.

[9] One of the reviewers of an early draft of this document has suggested the land sales were to satisfy tax South Carolina owed to the Union.

[10] Emory Campbell, director of the Penn Center on St. Helena Island, referred to Sea Islanders as the real endangered species of the region.

[11] Lorenzo Dow Turner was the first to conduct a scientific investigation of Gullah language, often referred to as Sea Island Creole. Turner interviewed 21 Gullah speakers during his 1932 fieldwork. Twelve were residents of South Carolina Sea Islands (Johns, Wadmalaw, Edisto, and St. Helena) while nine were from Georgia (St. Simons, Sapelo, Harris Neck, and Brewer's Neck).

[12] Patricia Jones- Jackson conducted three years of fieldwork on Wadmalaw Island, South Carolina, in an attempt to determine the status of Gullah language. Her informants consisted of twenty- four native resident speakers.

[13] West African groups represented in the linguistic connection between the Sea Islands and West Africa include the Bambara, Bini, Bobangi ,Djerma, Efik, Ewe, Fante, Fon, Fula, Ga, Gbari, Hausa, Ibo, Ibibio, Kikongo, Kimbundu, Kpelle, Mende, Malinke, Nupe, Susu, Songhai, Twi, Tshiluba, Umbundu, Vai, Wolof, and Yoruba (Turner 1949).

[14] A morpheme is a grammatical unit that is irreducible into smaller units, being realized phonologically by a form that cannot be analyzed in smaller units without losing meaningfulness. Example: "unladylike" consists of three morphemes: 'un' (meaning not), 'lady' (acting as a female adult human), and 'like' (having the characteristics of). Another example, "dogs" has two morphemes: 'dog' (canine animal), and 's' (meaning plural tense of a noun).

[15] Sengova conducted linguistic research in Beaufort and St. Helena Island, South Carolina, during the Fall of 1987.

[16] Linguistic group representing areas from which a majority of African slaves were taken into bondage.

[17] Dissertation research involved no fieldwork, but offers an Appendix in which the various African language families and their geographic location are presented, as well as the linguistic origins of many words found within the Gullah language system.

[18] Pidgin language is a simplified form of speech that is usually a mixture of two or more languages, with rudimentary grammar and vocabulary. Such languages are used for communication between groups speaking different languages, and are not spoken as a first or native language.

[19] Creole, as used here, is defined as a language formed from contact between two other languages, which retains features of both.

[20] Cunningham conducted field research during April and May of 1969 on Johns, Edisto, and Yonges Islands, South Carolina. Primary informants consisted of four elderly native speakers, with little formal education, and three middle aged native informants (who assisted in translation, semantics, and syntactic constructions of Sea Island Creole). This dissertation is presented as the first to analyze the syntactic system of Sea Island Creole as a

language. Main idea is to legitimate the language of Sea Islanders as a Creole language through the analysis of the syntactic system (and the relationships between Sea Island Creole and other Creole languages).

[21] Syntactic systems are arrangements of words in sentences in their necessary relations, according to the established usage rules of a particular language (e.g. In English the relationship between noun and adjective is as follows: The white horse ran; however, in Spanish the grammatical system dictates the adjective follow the noun: El caballo blanco.).

[22] The adjective *lexical* is applied generally to the vocabulary of a language, especially to distinguish content words from function words.

[23] Grammatical system is defined as the formal definition of the syntactic structure of a language.

[24] William A. Stewart is credited with the development of basilect, acrolect, and mesolect terminology.

[25] Copula is defined as a verb that joins a subject to its complement. Example: The book *is* on the shelf. The farmers *are* plowing their fields.

[26] Hopkins conducted fieldwork on Edisto, Hilton Head, Daufuskie, Sapelo, Yonges, Johns, St. Helena, Sandy's, and St. Simon's Islands, as well as in Brunswick and Savannah, Georgia, and Charleston, South Carolina.

[27] Author of *The Black Border: Gullah Stories of the Carolina Coast* (1922).

[28] In the case of Gullah/ Geechee, code switching refers an individual's ability to move comfortably back and forth between Standard English and Gullah language.

[29] Subjects for language analysis were selected from Daufuskie Island, James Island, and Orangeburg, South Carolina, as well as from Gainesville and Ocala, Florida.

[30] Evoking the spirit refers to the process of using words to create an energy, from which God is actually evoked and is thought to become embodied in members of the congregation (Jones- Jackson 1994, 116).

[31] One of the reviewers of an early draft of this document suggested the inclusion of a parallel study, conducted by Dr. Althea Sumpter of St. Helena Island. Within this work Sumpter "speaks of shame and ridicule heaped upon Sea Island young people as they were integrated into mainland schools" (Twining, personal communication, 2002).

[32] All tests administered to various employees within the school system are included in the appendices of the thesis. Eighty- three questionnaires were returned and analyzed.

[33] Hargrove conducted fieldwork within the communities of Mt. Pleasant and St. Helena Island, South Carolina between 1998 and 2000. During each summer, Hargrove interviewed thirteen informants, all of which were incorporated into her master's thesis *Marketing Gullah: Identity, Cultural Politics, and Tourism* (2000).

[34] Jones- Jackson spent a total of nine years researching Gullah and Geechee culture, as well as conducting comparative research in Nigeria, West Africa.

[35] There was no human subjects research conducted for this study. Data were obtained through historical documentation and research within many libraries: Union Theological Seminary, Library of Congress Manuscript Division, University of Virginia Library, S.C. Dept. of Archives and History, S.C. Historical Society, Furman Univ. Library, Missionary Library at Union Theological Seminary, New York Historical Society, and New York Public Library.

[36] Samuel Lawton conducted research on Laurel Springs plantation in Colleton County, Pocotaligo and Combeehee plantations in Beaufort County, and St. Helena, Lady's', Port Royal, Parris, and Coosaw Islands for dissertation in religious education. His overall focus was to gain a broader understanding of their religious lives.

[37] Guthrie conducted ethnographic research on St. Helena Island from July 1975 to July 1976 for dissertation. The results were later published as a book, *Catching Sense: African American Community on a South Carolina Sea Island* (1996).

[38] One of the reviewers of an early draft of this document has suggested that the idea of "catching sense" could be linked to the idea of "seeking."

[39] Sarah Selina Thrower conducted research concerning the musical features of spirituals within South Carolina (limited details concerning research); several musical scores are included in her thesis.

[40] One of the reviewers of an early draft of this document has suggested the concept of "one God" was long held in African religious and spiritual beliefs, thereby making it a familiar concept to incorporate into the Gullah worldview.

[41] Lyrics are recorded in Hart 1993.

[42] In 1999, The State of South Carolina officially declared "Spiritual" the State Music (personal communication Marquetta L. Goodwine, http://www.netstate.com/states/symb/sc_symb.htm).

[43] Edward Brantley Hart conducted research on Johns Island, South Carolina. The dissertation is a "first hand account" of the performance practices of the Gullah spiritual as it was performed at a traditional Gullah prayer

meeting. There were fourteen women and two men in attendance at this particular meeting, with a mean age of 72 years old.

[44] *Shoo Turkey Shoo* is a song associated with children and play (Carawan 1966, 1989).

[45] This is an excellent collection in the fact that the informants are named and their pictures appear. This validates the research, as well as serving as an oral history collection for generations to come.

[46] Starks gives no explicit number of informants, but his work suggests there were multiple informants from the elder generation.

[47] June T. Watkins conducted research on St. Helena Island during July of 1991, in an attempt to assess strategies of social control. Informants consisted of community members, including local ministers and deacons, who had participated in the just law system (between fifteen and twenty informants were interviewed for this dissertation).

[48] Several reviewers of an early draft of this document have suggested the Federal Writers Project represents an inaccurate portrayal of Gullah/ Geechee people, due to the following: the recorders on the project were EuroAmerican, the African Americans interviewed related the types of information they believed these recorders wanted to hear, and the interviewees were careful not to go beyond their perceived social roles.

[49] Six of the ten essays presented in this collection were based on presentations at the Ninth Annual Language and Culture in South Carolina Symposium, held at the University of South Carolina, Columbia, 1985.

[50] Okatie is an area located near Hilton Head Island, South Carolina.

[51] South Carolina Rivers.

[52] Georgia Sea Island.

[53] Davis suggests that the majority of scholarly work on African American folklore has been examined from the perspective of *folklore as entertainment*, thereby minimizing depth and content.

[54] Participant- observation was the methodology for research, as well as archival and library research.

[55] Zora Neale Hurston was an anthropologist who collected folklore for the WPA. After struggling against the grain as an African American female in academia, she wrote fiction stories about real placed she had conducted research. Hurston was among the first, if not the first, to attribute depth and character to the cultures of these isolated locations up and down the Southeastern Coast of the United States. Her work is only currently being appreciated for its value and scholarship.

[56] A part of the amnion, one of the membranes enveloping the fetus, which sometimes is around the head of a child at its birth.

[57] One of the reviewers of an early draft of this document suggested "The Rabbit and the Partridge" story also illustrates features of island life, such as polygamy, which was still being practiced when she lived on Johns Island between 1966 and 1971 (Mary Twining, personal communication 2001).

[58] One of the reviewers of an early draft of this document has suggested that publications written by Gullah and Geechee scholars be taken more seriously, particularly within the study of folklore. Reviewer suggests a recent publication, *God, Dr. Buzzard, and the Bolito Man: a Saltwater Geechee Talks about Life on Sapelo Island* (2000), as just one example of the importance of storytelling within Sea Island life. This book "makes a serious case for the importance of folklore and especially storytelling among the Gullah speaking people of South Carolina and Georgia (Alpha Bah, personal communication, 2001).

[59] The Sea Islands of Georgia were also sites of rice cultivation, but never on the grand scale that took place in the South Carolina Sea Islands. For a detailed study of rice cultivation throughout the Sea Islands see Goodwine 1999.

[60] Paul Salter conducted fieldwork throughout the South Carolina Sea Islands, during which he interviewed county agents, farmers, laborers, elder citizens, state and county officials, real estate developers, and resort owners in order to investigate the changing economic patterns of the island areas. His dissertation also contributes data concerning climate, vegetation, growing seasons, weather, and soil types, as well as cotton and rice production techniques.

[61] Carney establishes technology transfer (from West Africa to Sea Islands) of pestle and mortar use, tool types (such as the hoe), rice cooking techniques.

[62] The loss of British price supports for indigo after the Revolution aided in the demise of indigo cultivation and export (Pollitzer 1999).

[63] Kay Young Day began conducting research within the Mt. Pleasant community of South Carolina in 1971. Her dissertation is primarily concerned with the role of kinship and community within the changing economy of this Sea Island area.

[64] The data for this dissertation were collected from archival materials, family papers, Beaufort County public records, and diaries and memoirs from the Penn School Papers. It also contains the names of prominent planters in the Low Country region, as well as plantation names and numbers of slaves for specific plantations.

[65] One of the reviewers of an early draft of this document suggested Sea Islanders had additional reasons for choosing to stay on the home plantation: "where our families are is where we are connected in mind, body, and soul" (Marquetta L. Goodwine, personal communication 2002).

[66] Normand utilized historic records to assess the impact of land ownership on the St. Helena Parish and the subsequent development of an economically dependent, as well as politically organized and mobilized, class of freedmen.

[67] Pollitzer cites Julia F. Morton (*Folk Remedies of the Low Country*, Miami: E.A.Seemann Publishers, 1974) and Faith Mitchell (1978) as primary sources.

[68] Folk healers are highly revered in Gullah/ Geechee communities for their expertise and knowledge, including healing the physically sick, protecting the body from harm, and the ability to change bad habits and undesirable behavior (Smith 1973).

[69] Faith Mitchell is a medical anthropologist and conducted her research in South Carolina and Georgia during the early 1970s.

[70] Heyer gives extensive account of the difficulty she had in establishing rapport with the residents of St. Helena Island. She suggests Sea Islanders are untrusting of outsiders. She lived within the community for six months before she obtained her first interview.

[71] Hag is believed to be someone close to dying, and is indicated by waking up with a feeling of pressure as if something is sitting on you (Heyer 1981).

[72] One of the reviewers of an early draft of this document has suggested Heyer's work is inaccurate, due to her status as an outsider. Sea Island people are particularly suspecting of researchers (Hargrove 2000), especially when discussing folk remedies and belief systems.

[73] Author spent one year as a resident of St. Helena Island. He makes a point to call attention to the difficulties of conducting research as a white researcher within the community and cites particular difficulty in dealing with the Penn Center.

[74] One of the reviewers of an early draft of this document has suggested that governmental bodies charged with protecting the health and general welfare of Sea Island communities need to examine the damage done by golf courses, tennis courts, and marinas (as well as the chemicals used to clean them).

[75] Syncretism refers to a process by which a group merges the cultural elements of two distinct cultures into one. Here it is used to discuss the syncretic elements of Gullah arts and crafts, as a blending of elements from West African cultures and their lives in the Sea Islands.

[76] Dale Rosengarten participated in the Lowcountry Basket Project of the 1980s, interviewing thirty- four basket makers from South Carolina. The data from this project, along with a basket collection, was organized into a traveling art exhibit between 1988 and 1990, funded by the National Endowment for the Humanities. The exhibit catalog *Row Upon Row: Sea Grass Baskets of the South Carolina Lowcountry* was first published by McKissick Museum, University of South Carolina (1986) as part of their program to document and promote Southern Folk Arts. The catalog contains historical and ethnographic data gathered during the initial project. Rosengarten has published extensively on Gullah basketry.

[77] For the most recent elaboration on the cultural connections between South Carolina and West Africa (with regard to basketry) see Carney 2001.

[78] The vast majority of fieldwork conducted on basketry has taken place in the community of Mt. Pleasant.

[79] Doris Derby conducted ethnographic fieldwork for fifteen months in Mt. Pleasant in 1977 and 1978. Her results appear in her dissertation *Black Women Basket Makers: A Study of Domestic Economy in Charleston County, South Carolina* (1980). She collected life histories and extensive interviews with four principal informants, as well as genealogies.

[80] Doris Derby lived in Charleston County for fifteen months, beginning in 1977. She collected data through participant observation, collection of life histories and genealogies, informal questioning, formal questionnaires, library and archival research. Derby also held a teaching position at the College of Charleston while conducting research for her dissertation. Three females and one male basket makers served as key informants.

[81] Hargrove conducted extensive fieldwork in the Sea Island communities of Mt. Pleasant and St. Helena Island during the summer months of 1998 and 1999. She gathered data from thirteen informants (six of which were Mt. Pleasant basket weavers) during participant observation, interviews, and community involvement. She is currently conducting doctoral research based on similar issues of Gullah/ Geechee culture.

[82] One of the reviewers of an early draft of this document has suggested that development is taking a toll on other traditional Charleston vendors as well. Reviewer states, "Fewer and fewer Gullah artisans and flower ladies can be found vending in Downtown Charleston because increasing commercialization of the area is driving them out. Also, the rent for spaces in the Charleston market continues to rise, making it unaffordable for many vendors."

[83] One of the reviewers of an early draft of this document has suggested that the colors and patterns of Gullah quilts have been embellished by academics. Reviewer suggests quilts represent the fabrics that were available at the time. While reviewer recognizes certain colors were used to symbolize specific occasions in the life cycle, she suggests the complexity attached to this utilitarian craft is highly exaggerated.

[84] See also *Drums and Shadows: Survival Studies among the Georgia Coastal Negroes*, 1940.

[85] Archaeological materials gathered from Yamacraw and Wilmington Island (Vlach 1978).

[86] Bascom conducted fieldwork in Nigeria in 1937 and 1938 and in Georgia and South Carolina in 1939.

[87] Recent scholarly research conducted on Hilton Head Island (Faulkenberry et al. 2000) concerning the economic conditions of Sea Island residents, will be discussed in Chapter 10: Development and Change: Gullah as an Endangered Species.

[88]The abbreviation used to represent the Beaufort County Comprehensive Plan of 1997.

[89] Recently, in a similar move, Charleston County began work on a parallel plan, The Unified Development Ordinance (UDO), to aid in the implementation of the Charleston County Comprehensive Plan.

[90] Marquetta L. Goodwine's official title is Queen Quet: Chieftess of the Gullah/ Geechee Nation.

[91] Information pertaining to Sea Island organizations is data obtained by Melissa D. Hargrove from various Sea Island informants. All data is part of her ongoing dissertation research concerning grassroots mobilization in the South Carolina and Georgia Sea Islands.

[92] Cultural traits that illustrate a connection between the Sea Islands and West Africa are referred to as "Africanisms."

[93] There were eighty- four informants involved in this study. The survey information appears in the Appendix.

[94] One of the reviewers of an early draft of this document conveyed that the same combination is referred to as "okra soup" on Johns Island.

[95] One of the reviewers on an early draft of this document, who is also a Sea Island native, suggests that spiritual beliefs and practices (such as life and death) be recognized as sacred to Gullah/ Geechee people, therefore any and all future research within this area should be done under the direct guidance of community activists.

[96] One of the reviewers of an early draft of this document has suggested "the location of cemeteries at water's edge enabled the spirits to 'cross de wata' easily; we were told this verbally by a Geechee man" (Alyssa Lee, personal communication 2001).

[97] Simon Ottenberg first published the findings of his research in *Phylon* 20 (1) in 1959. The article was slightly edited and included in the recent monograph *Sea Island Roots: African Presence in the Carolinas and Georgia* (1991), edited by Mary A. Twining and Keith E. Baird.

[98] Day's research resulted in a book chapter "Kinship in a Changing Economy: A View From the Sea Islands" (1982) and her anthropology dissertation *My Family Is Me: Women's Kin Networks and Social Power in a Black Sea Island Community*, Rutgers University (1986). She resided in Mt. Pleasant for one and a half years and interviewed many community residents, ranging from children to community elders. She utilized a life history methodology, resulting in several life histories included in her dissertation.

[99] Faulkenberry introduces this term to the literature in an attempt to suggest the extremely limited nature of wage work available to Sea Islanders.

[100] Faulkenberry interviewed forty- five local residents.

[101] Melissa Hargrove conducted extensive fieldwork within the communities of Mt. Pleasant and St. Helena Island over a three- year period. She interviewed thirteen native Gullah residents concerning the current predicament and ramifications of development and tourism. Her thesis, *Marketing Gullah: Identity, Cultural Politics, and Tourism* (2000) contributes to our knowledge of the ways in which identity is being used to promote tourism within the Sea Islands of South Carolina.

[102] Most of the images used in this manner are allegedly taken without proper permission.

[103] Interview guide appears in full as Appendix B. The methodology employed by Slaughter provides an excellent tool for future research concerning community cohesion and native ideas about modernization and development. This dissertation also includes a chronological history of Daufuskie from colonial period to 1980; covering such topics as slavery, agriculture, economics, education, religious, and family systems.

[104] Goodwine 1998b offers "Guidelines for Conducting Research" within Gullah/Geechee communities.

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SOUTHERN WATERSHED AREA



RURAL AREA PRESERVATION PROGRAM

FINAL REPORT

SEPTEMBER 30, 2001

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EXECUTIVE SUMMARY



The Southern Watershed Area

The Southern Watershed Area is located in southeastern Virginia, just north of the North Carolina border. It encompasses a land area of approximately three hundred twenty-five (325) square miles, and contains three (3) sub-watersheds.

Background

The Southern Watershed Area

The Southern Watershed Area ("SWA") is an area of approximately three hundred twenty-five (325) square miles, located in Southeastern Virginia, including the Cities of Chesapeake and Virginia Beach. Within it are some of the most diverse and extensive wetlands in the State of Virginia. It is home to over forty (40) rare or endangered species, Virginia's largest Blue Heron rookery, and a recently discovered virgin forest that contains trees that may be up to eight hundred (800) years old.

The Cities of Chesapeake and Virginia Beach have a combined population of approximately six hundred twenty-four thousand (625,000) people. Roughly two hundred thousand (200,000) live in Chesapeake, and over four hundred twenty-five thousand (425,000) live in Virginia Beach. In both cities, the population is concentrated mostly in the urbanized northern areas. The southern portion of both cities is primarily rural in character — either undeveloped or used for agricultural production. However, that rural character and the resource values it reflects is threatened by increasing pressure for non-agricultural residential development.

Understanding Rural Character

The SWA has a rural character that is highly prized. Yet, the essence of that character, and consequently the keys to its preservation, is generally not well understood. Rural character in the SWA is about more than farming or the aesthetic value of open space. It is a mosaic of resources and values, including natural systems, public expenditures, lifestyle choices, and more esoteric factors as well. Indeed, the rural landscape is a lot like *beauty*, hard to define but "you know it when you see it."

What It Is Is What It Isn't

The rural landscape in the SWA contains natural areas (including riverine, marsh and forest lands), agricultural development, low density exurban residential development, governmental facilities, and occasional industrial uses. Interviews with local officials and interested persons confirm that there is no handy description of the resource value of the rural landscape. When asked to describe the rural landscape in the SWA, most interviewees *mention* forests, fields and narrow roads, but *primarily* speak in terms of what the area is *not*: *not* sprawling suburbs, *not* crowded, and *not* congested.

Unique Management Challenges

Rural landscape preservation entails unique challenges for land managers. First, traditional measures of the compatibility of land uses (use, intensity of use, and bulk) are not necessarily related to rural landscape values. For example, large structures such as barns, windmills, and storage bins are a common element of highly desirable rural landscapes. Similarly, residential structures like farm houses are an intrinsic element of the rural landscape.

The national experience is that it is not the conventional measures of compatibility but, instead, borrowed open space that is key to the rural landscape. Simply put, context is everything. For example, a single family detached dwelling on a 7,500 square foot lot in a typical suburban subdivision has a far different character than the same home on a 7,500 square foot lot adjacent to a 500 acre farm. It is not the architecture or design of the home that creates a rural character, but instead the ambiance and open space borrowed from the adjacent farm.

Second, the future of local agricultural production in the face of globalization and other economic and political factors at the national, state and regional levels is uncertain. While the family farm is widely viewed as a desirable lifestyle, its support depends on some level of economic viability. The uncertainty threatens the rural landscape, since the best way to preserve farmland is to farm it.

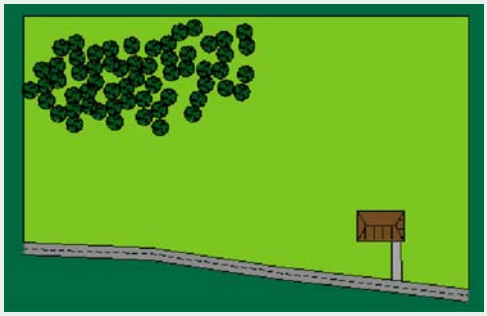
Finally, what constitutes a resource value in the rural landscape changes over time. Unfortunately, like too many resources, the rural landscape is most revered when it has already been compromised or is otherwise under serious threat.

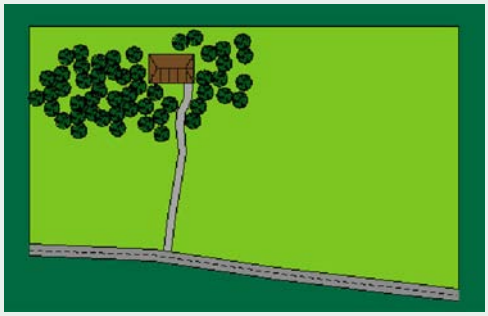
Form and Function

Form and function in the rural landscape are closely related. Accordingly, one way to preserve the form of the landscape in a manner that does not overtax public fiscal resources is to preserve the landscape's function. The functional aspects of the rural landscape over which the local government has control should be identified and managed in a manner that serves the goal of preserving the landscape's form.

For example, in the urban and suburban environment, most traffic is not local but is regional in character. As a result, community character and quality of life are subordinated to traffic movements. By contrast, most roads in the rural landscape (other than expressways and other through routes) are local roads used by local traffic. Accordingly, in the rural landscape, community character predominates. In addition, the character of rural roads (narrow, winding pavement with frequent traffic hazards in the form of mature trees adjacent to the pavement) naturally calms traffic, shifting the emphasis from travel times to travel experience. Indeed, in many cases the road itself is an important contributor to the area's rural character. In these areas, government decisions regarding infrastructure improvements are decisions that affect rural character.

The relationship between form and function in the rural landscape can also be illustrated with regard to the criteria used to evaluate the rural landscape. Analysis of the SWA reveals that these criteria are: (1) context, (2) building mass, (3) visibility, (4) function (use), and (5) fiscal integrity.





The Importance of Context

The figures at left demonstrate the importance of context in the rural landscape. The first illustration is a suburban-styled house located adjacent to the rural road. In this context, the house "sticks out like a sore thumb," especially when viewed from the street.

The second illustration is the same house, moved behind a natural stand of trees. In that context, the house virtually disappears, and therefore has little effect on the rural character of the area.

Context

Land use compatibility in the context of the SWA's rural landscape is primarily about functional and visual relationships. Functional compatibility is an often overlooked ingredient of the rural landscape. There, agricultural operations that involve movement of heavy equipment and materials from farm to farm by way of the local road network during weekday morning hours are functionally incompatible with high volumes of commuter traffic. Indeed, such conflicts interfere with the otherwise tranquil landscape.

Visually, rural landscapes reflect a sense of natural harmony. The visual character of the rural landscape may be diminished by the shape or color of a structure which appears to be "out of place." A traditional suburban home sitting in the middle of a former farm field sticks out like the proverbial "sore thumb," while the same home tucked into a stand of trees at the edge of a field is practically invisible and has no adverse impact on the character of the area.

Building Mass

The perception of mass of improvements in the landscape is different from mass in the urban setting. Mass in the rural landscape relates to the amount of improvements per unit of land. Since relatively few buildings are generally visible from any one vantage point, most rural landscapes have a natural rhythm that is defined by the character or the use of land itself.

At some point in the process of suburbanization, the mass of improvements in the rural landscape reaches a point where the defining character of the landscape shifts from the land to improvements. In other words, the buildings go from being subordinate to the land to appearing to dominate the landscape. The metamorphosis away from rural character occurs at a point where the amount of land devoted to non-rural improvements is still relatively small. In this context, the effect of distance on the perceived size of buildings is key.

Function (Use)

Not all land in the rural landscape is created equally. Such elements as soils, water, topography, natural resources, and public infrastructure all define existing and potential functions of land. An effective rural management system must thus identify and differentiate between the





The Impact of Piano Key Lots on the Character of the Rural Landscape

The image at the upper left is an example of existing piano key style residential development in the SWA. Its pattern of deep, narrow lots along the rural road effectively eliminates the open space character of the area. Here, because of the contours of the land, even relatively low development density imperils rural character.

For comparative purposes, the digitally-altered image at the lower left is a rough approximation of what the area looked like before the homes were constructed.

functional character of the land. Central to the management strategy is potential use.

Visibility

It is self-evident that the visibility of a parcel of land is directly related to the impact that the future use of that land will have on the rural landscape. By way of illustration, a plot of land in the middle of a forested tract (invisible from public roadways) is unlikely to have an individual impact on the rural landscape of which it is a part. Thus, the likelihood that the character of improvements on that parcel will be incompatible with the natural harmony of the landscape is diminished. In contrast, a group of suburban-style homes sitting on deep but narrow lots (known as "piano-key" lots because of how they look from the air) that abut a rural road can have serious negative consequences for the area's rural character.

Fiscal Integrity

In the rural landscape, non-agricultural development and the public services it demands affect the fiscal integrity of local governments. This is so because many of the public services traditionally provided to urban and suburban residents at high levels have associated costs that are a function of distance from a central location.

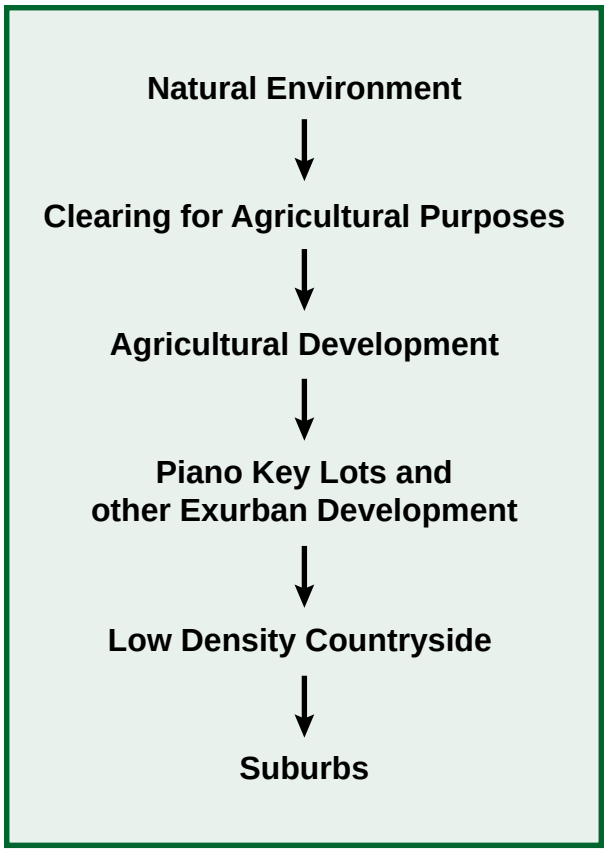
The impacts of demand from non-agricultural development is particularly severe for roadways (which also entail distance dependent costs). Generally, rural roads are narrower than their city counterparts, and have only rudimentary drainage improvements and limited shoulders. On these roads, long distances, narrow pavement and driver impatience are an ever-present and volatile mix that further diminishes capacity to support significant volumes of traffic.

Moreover, rural road "improvements" themselves often negatively impact the rural landscape because the road is the armature of the traditional pattern of development. Still, some parcels of land in the rural landscape are more sensitive that others in this regard. For example, the development of a non-agricultural residential unit located within a mile of an interchange with a limited access highway has substantially less impact on the rural landscape than the same home located miles from the nearest element of the regional road network. Trips from the latter home are often as many as five times as long as the average trip in a metropolitan region, and thus impose a disproportionate strain on a road network that is already ill-equipped to handle them.

The bottom line is that the nature of transportation demand in the rural setting has serious implications for the bottom line. The combination of service inefficiency (due to extended trip distances) and low tax base (due to low development densities), means that local governments often experience fiscal distress as a result of non-agricultural development in the rural landscape. That fiscal distress often creates a feedback loop that results in ever-increasing property tax rates to cover the cost of serving development that is inappropriately designed and located.

The Pattern of Successive Change in the Rural Landscape

All of the lands in the existing rural landscape are in a state of transition from one successional stage to another, as shown at right. In the current condition, some lands are in an arrested state of succession, such as those used for agricultural production. The key to managing future land use in the SWA's rural landscape is to develop programs that will maintain areas in arrested states of succession, and to erect barriers to further successional stages unless the rural landscape criteria indicate that succession is desirable. That means that a management plan must be able to identify the successional stage of all lands within the SWA and discern whether the existing condition or some future successional stage is appropriate.



The Rural Area Preservation Plan

Protecting Rural Character

Rural character in the SWA has historically been preserved by the economic value of the land for agricultural use, large public holdings (including parks and military bases), and large wetland areas that are not suitable for development. However, the current interplay between a growing population, diminishing agricultural profits, and the attractiveness of the rural landscape in its current state is creating strong pressures for non-agricultural development in the rural SWA. Ultimately, protection of rural character means "limiting what's out there." Yet, the amount of development the landscape can accommodate while still maintaining its character is directly related to the development's location, design, and use.

What the RAPP Does

The Rural Area Preservation Program is not a critique of existing programs. To the contrary, it is designed in recognition that to address future challenges to the integrity of the rural landscape, the local governments of the SWA will likely wish to employ additional planning and regulatory tools to augment existing programs. Put another way, it is certain that time will bring new changes and pressures to the rural landscape, which is currently relatively intact.

The Program helps to anticipate what the new challenges will be, in part by providing a definition of the characteristics of the rural landscape as a vocabulary for rural land management,

in part by reporting on experiences from around the country, and in part by providing insight into a full range of interests and tensions that often become sharpened as a result of rural landscape preservation efforts.

The Rural Area Preservation Program provides a "toolbox" of regulatory and non-regulatory techniques for preserving rural character. The Program recognizes that the balance of resources and values that comprise the rural character of the SWA shifts as one travels across the landscape. Since each of the techniques presented serves a different balance of values, the Program provides also guidance as to what combinations of techniques will be most effective in various areas of the SWA. Put simply, the Program is designed to provide resources on a number of levels, designed toassist policy makers as they address present and future challenges to the rural landscape.

Rural Land Management Units

Analysis of the interplay between functional and resource values of the rural landscape in the SWA revealed that the mix of these values across the landscape fell into five generalized categories, which form appropriate rural land management units:

1. Agricultural Lands ("AL") – Lands with prime agricultural soils and associated land units which are used for or could be used for productive agriculture.

2. Environmentally Sensitive Lands ("ESL") – Areas that contain some lands with prime agricultural soils and lands which are environmentally sensitive or areas associated with watercourses.

3. Scenic Resources Lands ("SRL") – Areas that contain or constitute scenic resources important to the community character of the SWA.

4. Rural Infill Lands ("RIL") – Land areas that are already developed with non-agricultural residences and can accommodate additional residential development without additional negative impacts on adjacent undeveloped land or a change in local community character.

5. Rural Development Lands ("RDL") – Lands that are the most suitable for future urban development.

These rural land management units inform the selection of various land management tools by highlighting the values that the local government is seeking to protect.

Tools for Managing Rural Form

The tools for managing rural form address principally the "how" and "where" of non-agricultural development in the rural landscape. These tools serve primarily aesthetic values, though they also may aid in preserving agricultural operations. The three tools for managing rural form are Very Low Residential Density, the Cluster Development Option, and Rural Landscape Design Standards.

Very Low Residential Density

Very low residential density is also generally known as "large-lot zoning." It allows certain non-agricultural uses in rural areas, but at densities significantly lower than suburban areas, thus, ideally, preserving farm land and open space. Yet, it is a tool that should be applied cautiously for several reasons, including the pattern of sprawl it may create and its impacts on landowner equity.

Within the rural SWA, a very low residential density program should set residential density at a level of approximately one unit per 40 acres in areas where farm land and open space preservation are the highest values. First, 40 acres is approximately the size of the smallest functional agricultural unit. Second, 40 acre lots discourage large scale large lot development.

Cluster Development Option

Clustering is a method for flexibly allocating the development potential of an entire site to specific areas in order to serve particular

preservation goals. For example, the development capacity of a 600 acre parcel that is zoned for one unit per 15 acres is 40 units (600 ÷ 15 = 40). Under 15 acre per unit zoning, those 40 units would be spread across the landscape, harming its open space value. However, if the 40 units are clustered on 3/4 acre lots on a portion of the site, the development area will be reduced to 30 acres, leaving 570 acres (95% of the site) as protected agricultural land or open space. Location and design standards can further minimize the impact of the clustered development on the rural landscape.

Cluster development allows for great variety in site design and housing types. It also typically reduces the cost of installing and maintaining infrastructure within the development. For the individual lot owner in a clustered development, property maintenance is a less onerous chore than it is for owners of large lots. Moreover, study has shown that mixing smaller lots with common areas and open vistas adds value to clustered developments when compared to large lot developments with similar homes.

Rural Landscape Design Standards

In the rural landscape, *context is everything*. Rural landscape design standards preserve the context of the rural environment by de-emphasizing structures in areas where open space aesthetics are desired, by creating well-defined edges to developed areas, and by encouraging (or requiring) development within rural areas to reinforce long-standing notions of rural scale, community, and pedestrian-orientation. Design standards may be used to promote different values in different situations. Accordingly, design standards should be intended to increase the effectiveness of other recommended land use controls, and in some cases, should be incorporated directly into those controls.

While design standards such as building setbacks and spacing perhaps have the most significant impact on the visual character of areas of predominately open space, more specific standards are used to protect (or create) character in the built environment. As such, in some areas design standards should control the details of the streetscape and buildings, the placement of utilities, and the selection and placement of landscaping. Around the country, such standards are becoming popular.

Experience teaches that design standards should be no stricter than the community is willing to enforce. Additionally, they should impose no greater burden than is necessary to accomplish their desired result.

Tools for Managing Rural Function

The tools for managing rural function are Rural Road Carrying Capacity Analysis, Infrastructure Cost Forecasting, Villages and Hamlets, Cross Roads Communities, Planned Communities of Place, and Purchase of Agricultural Conservation Easements. Each addresses a slightly different aspect of the fiscal and functional management of rural lands.

Rural Road Carrying Capacity Analysis

Rural road carrying capacity analysis approaches the problem of serving the transportation needs of new development by considering the capacity of existing and planned infrastructure. It ties development densities to existing road capacities, which serves two interests: (1) increasing the efficiency of public infrastructure expenditures, and (2) discouraging suburbanization of rural lands.

Even relatively modest amounts of development along a rural road can have significant impacts on its level of service. When new development in rural areas is permitted without regard to road capacity, delays, inconvenience, and public safety concerns arise rather quickly — creating demand for improvements to the roadways. These improvements typically change the scale and character of the area, undermining the environment that attracted its new residents in the first place. Moreover, these improvements are costly and typically involve continuing losses to the governmental entity that provides them.

Rural road carrying capacity analysis helps preserve the character of the area in which it is applied if that character is largely dependent upon the form of the road. But more importantly, regardless of its impacts on community character, rural road carrying capacity analysis promotes fiscal and functional responsibility. Yet, because rural road carrying capacity analysis does not directly address aesthetic or open space concerns, it should be combined with other landscape management tools in the overall regulatory scheme.

Infrastructure Cost Forecasting

Like rural road carrying capacity analysis, infrastructure cost forecasting is a way to control new development based on its infrastructure requirements. The cost forecasting model allows local government to avert the fiscal hemorrhaging that can occur when exurban development occurs.

In the cost forecasting model, alternative patterns of new development are evaluated to determine their relative fiscal impacts, in terms of the relationship between between their impact on public infrastructure, including (and particularly) the road network, and the tax and fee increment that they are expected to generate. Thus, unlike rural road carrying capacity analysis, cost forecasting analysis does not pre-allocate units to particular areas, nor is it concerned with existing road conditions until an application for development approval is submitted. Instead, it merely provides information to policy makers who wish to consider the fiscal impacts of alternative development patterns that their land use regulations are likely to promote.

The cost forecasting models are not recommended for direct regulatory application, but instead to predict and monitor the fiscal impacts of land use policy decisions. Accordingly, cost forecasting should be used to provide information that helps the local governments decide which regulatory tools to implement in particular areas. By exposing the relative fiscal impacts of various policy choices in advance of adoption or implementation, cost forecasting helps to sharpen issues for decision making.

Cost forecasting models do not supplant value-based decision making. To the contrary, they simply help to inform decision makers regarding how much particular value choices are likely to cost the community over time. Thus, land uses and development patterns that carry negative impacts from a fiscal perspective could still be promoted if the community values those uses and patterns enough to supply the fiscal subsidy they will require.

Villages and Hamlets

Villages and Hamlets are relatively small areas of planned mixed use development that is strategically placed to minimize impacts on agricultural areas, natural systems, transportation systems, and public views of open space. These developments reflect the principles of clustered development, and add to it: (1) locational criteria to reduce strains on public infrastructure, agricultural operations, and environmentally sensitive areas, and (2) a balanced mix of uses to reduce vehicular trips and travel distances. Therefore a villages and hamlets program should address four general areas: size, design, location, and use.

As to size, Villages and Hamlets should be compact to encourage pedestrian travel. This in mind, the RAPP recommends a twenty-five (25) acre limit for hamlets, and a fifty (50) acre limit for villages. As to design, villages and hamlets should reflect traditional town planning principles: human scale, high quality architecture, pedestrian-orientation, defined edges, and arrangement around a town common. Design standards for villages and hamlets should promote and reinforce these characteristics.

The locations of villages and hamlets should be selected based upon the availability of public infrastructure and the suitability of the land itself. Villages and hamlets should be located near roads designed to accommodate the increased traffic they

will generate. They should also contain a balanced mix of residential and commercial uses (retail and office) to reduce the number and distance of vehicular trips, promote pedestrian travel, and provide a center of activity and "sense of place."

Cross Roads Communities

Unlike villages and hamlets, which are intended to be located according to infrastructure availability and may be developed on vacant land, cross roads communities essentially represent opportunities for infill development in areas that are already developed with exurban housing. The boundaries of cross roads communities are not dictated by regulatory acreage limitations, but instead primarily by the existing pattern of exurban development. Because their size is related to the existing development pattern, there is no set size limitation on cross roads communities.

Because the boundaries of cross roads communities are fixed and established in advance of development, a cross roads communities program is principally implemented through a comprehensive planning, rather than a specific regulatory approach (though design standards for new development are well-advised to maintain a sense of community character). Since the determination of where "open space" begins is made easier when development has a sense of "edge" created by a definite boundary, natural features, waterways, and roadways can be used as community boundaries.

In some cases, it may be appropriate to draw boundaries slightly outside of the existing pattern of development, to allow for future growth and to create an "edge" where it would otherwise be difficult to discern one. However, local governments should use caution when extending the boundaries of cross roads communities, and should ensure that adequate public facilities are in place to serve the new residents. A variation of cost forecasting analysis may be employed to verify the continued availability of services.

Planned Communities of Place

The Planned Communities of Place management tool recognizes that the pressure for non-agricultural development in rural areas is not likely to subside. Thus, the tool does not aim to stop such development, but instead direct the development to designated areas that are appropriate for large-scale development of non-agricultural uses. By designating appropriate areas for this new large-scale development, the Planned Communities of Place management tool also helps to ensure that new development maintains the rural character of its environs, that it does not overtax the rural infrastructure, and that it does not interfere with surrounding agricultural operations.

Planned communities of place are like cross roads communities in the sense that they are areas of the rural landscape that are specifically designated for new non-agricultural uses. Moreover, both management tools allow the landscape within their boundaries to be largely converted from agricultural and open space uses. However, planned communities of place also differ in many respects from cross roads communities.

First, a greater intensity of use is anticipated in planned communities of place — at least six (6) units per gross acre. This level of intensity will provide a broader base of consumers and employees for the retail, service and manufacturing facilities that are also located in the community. Second, because of their larger size (up to one thousand (1,000) acres), more intense character, and larger set of urban amenities, planned communities of place offer a different lifestyle than cross roads communities.

Third, planned communities of place are expected to develop with significant commercial and industrial uses, and often function as regional employment centers. Yet, a balanced mix of residential and commercial uses within the development will reduce the transportation "bottleneck" that commuters from cross roads communities gener-

ally experience as they travel from their homes to work in more urban locations. The reduction is a result of the development's ability to "capture" a large portion of its own vehicular trips.

Finally, by relating residential and non-residential development in a spatially strategic manner, planned communities of place have the potential to reduce reliance upon the automobile. The pedestrian-orientation of planned communities of place is generated by short distances between uses, an attractive, human-scaled streetscape, and a development pattern that creates a sense of enclosure and security for the pedestrian.

Purchase of Agricultural Conservation Easements

Purchase of agricultural conservation easement (PACE) programs give property owners economic use of their property by allowing them to sell their development rights to the public. The public purchases the development rights, usually through local government, for the purpose of extinguishing them. This is usually accomplished by recording a permanent conservation easement over the land sought to be preserved. After the easement is recorded, the farmer retains the title to the land, and is permitted to do such things as farm it, sell it, give it away, and restrict public access to it. Yet, the land may no longer be used for non-agricultural development.

The principle advantages of PACE programs are: (1) they can be a very effective way to preserve open space (if there are enough willing sellers and enough money to purchase the easements); and (2) they allow rural landowners to recover some of their equity without resorting to residential subdivision. The principal challenges of PACE program implementation are: (1) funding; (2) administration; and (3) enforcement.

Observations and Recommendations

Observations

The SWA's rural landscape represents a mosaic of resources and values. Therefore, managing the landscape to preserve its rural character will require a mix of planning, regulatory, and acquisition approaches that are sensitive to the balance of resources and values in particular geographic areas. The Rural Area Preservation Plan has identified five "management units" to facilitate this spatially specific approach.

The Rural Area Preservation Plan also recognizes that public decisions regarding the use and development of the rural landscape (both public and private) have serious ramifications for long-term public fiscal integrity. For example, a landscape that is covered with homes on five acre lots with few places to work or shop will create intense demands on public roadways. Those demands can be reduced by creating centers of development with a balanced mix of uses, and flexibly allocating density to preserve open spaces and bring non-agricultural uses closer together.

Recommendations

The Rural Area Preservation Plan recommends that the following steps be taken in order to preserve the rural character of the SWA and the fiscal integrity of its local governments:

1. The municipalities of the SWA should create opportunities in rural areas that do not involve "business as usual."
2. The municipalities should build on existing programs and promote new solutions.
3. The amount of development permitted in the rural areas of the SWA should be limited, however, a substantial region-wide downzoning is not recommended.
4. Instead, multiple, location-specific planning and regulatory techniques should be implemented to preserve the form and function of the rural landscape.
5. The location-specific techniques should be applied across five rural land management units in which distinct values and re-



Development & Rural Character

Because rural character is closely tied to open space, it is largely a function of what is *not* present in the landscape, rather than what is present. The photos at left illustrate how the addition of buildings to the landscape changes the visual character of the area.

In the top two pictures, most people principally notice the character of the land. One or two houses near the horizon does not significantly change the character of the area.

However, somewhere in the middle set of pictures, the predominant visual element shifts from open space to the interruptions in the landscape. Here, the rural character of the area is on the decline.

In the bottom set of pictures, the buildings are the principal visual elements of the landscape. Significantly, there are only seven (7) more houses in the photograph at the bottom right than in the photograph at the top left. Further, most of the homes are generously set back from the public road. Yet, the highly-valued open space character of the area has largely vanished.

Since the open space character is not at all likely to return, only pre-development intervention could have preserved the character of the landscape.

sources have been identified as priorities for planning and regulatory protection: (1) agricultural lands, (2) environmentally sensitive lands, (3) scenic resources lands, (4) rural infill lands, and (5) rural development lands.

6. Development should be strictly limited in environmentally sensitive areas.

7. To protect their fiscal integrity, the municipalities of the SWA should create incentives to encourage desirable development and development patterns, and disincentives that.discourage development and development patterns that use land and infrastructure in an inefficient manner.

8. Land uses and patterns should be selected to minimize traffic impacts on rural roads and visual impacts on valued viewsheds (see, for example, above figure).

The Rural Area Preservation Program is only a “toolbox” and a source of common vocabulary for rural landscape management, and therefore does not include specific implementation strategies or particular area plans. Yet, since history suggests that inaction is not an ally of rural lands, the Program’s final, (and in many ways, principal) recommendation is that immediate steps be taken to employ the vocabulary the Program provides in order to reach consensus regarding the future of the SWA’s rural landscape, and that area-specific programs be put in place in a timely manner to implement that consensus.

INTRODUCTION

to the

SOUTHERN

WATERSHED

AREA



The Southern Watershed Area

The Southern Watershed Area is located in southeastern Virginia, just north of the North Carolina border. It encompasses a land area of approximately three hundred twenty-five (325) square miles, and contains three (3) sub-watersheds.

The word "watershed" is defined as a land area that drains into a particular waterbody. Within a watershed, the use of land and the quality of water are closely related. For this reason, watersheds are an appropriate macro-unit for environmental management.

Southern Watershed Area Geography and Natural Resources

The Southern Watershed Area ("SWA") is an area of approximately three hundred twenty-five (325) square miles, located in Southeastern Virginia, in the Cities of Chesapeake and Virginia Beach. Within it are some of the most diverse and extensive wetlands in the State of Virginia. The SWA is home to over forty (40) rare or endangered species, the largest Blue Heron rookery in Virginia, and a recently discovered virgin forest that contains trees that may be up to eight hundred (800) years old.

The SWA's Three Sub-Watersheds

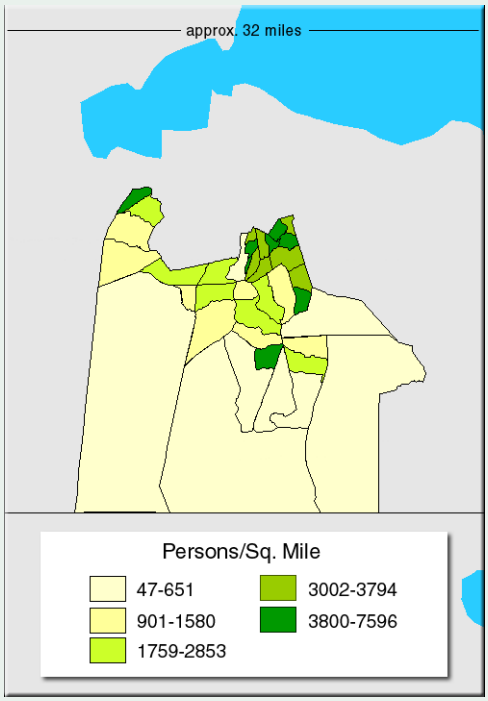
The SWA is divided into three sub-watersheds that range between sixty-six thousand and seventy-five thousand acres in size. The sub-watersheds drain into Back Bay, the North Landing River, and the Northwest River.

Back Bay

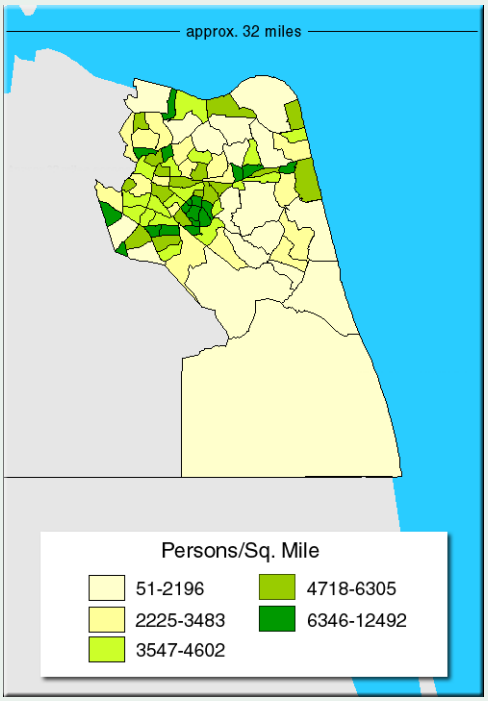
The Back Bay sub-watershed is roughly sixty-seven thousand (67,000) acres. The Northern portion of the Back Bay sub-watershed contains a growing urban area. The Southern portion contains agricultural uses, rural residential development, and extensive natural areas, including two national wildlife refuges, a State Park, and two State Waterfowl Management Areas.

North Landing River

The North Landing River sub-watershed covers an area of approximately seventy-five thou-



Chesapeake



Virginia Beach

Population Distributions in the SWA

The maps above show year 2000 population densities in persons per square mile, arranged by census tract. Both Chesapeake and Virginia Beach concentrate urban development, and thus population, in their Northern regions. Maps by U.S. Census Bureau.

sand (75,000) acres. As such, it is the largest of the three sub-watersheds in the SWA. Like the Back Bay area, it is characterized by growing urban areas in the North, and agriculture, natural areas, and some rural residential in the South.

Northwest River

The Northwest River Watershed covers an area of approximately sixty-six thousand four hundred (66,400) acres. It is the southernmost of the three sub-watershed areas, and has not been extensively developed for urban uses. Accordingly, the area is predominantly rural in character, with farms, forests, open spaces, and limited rural residential development as the primary land uses.

The Northwest River is the primary source of drinking water for the City of Chesapeake. Thus, preservation of its water quality and quantity is a matter of critical concern.

Demographics and Housing in the SWA

The land area of the SWA is shared between the Cities of Chesapeake and Virginia Beach. The two cities have a combined population of approximately six hundred twenty-five thousand (625,000) people – roughly two hundred thousand (200,000) in Chesapeake, and over four hundred twenty-five thousand (425,000) in Virginia Beach. In both cities, the population is concentrated mostly in the urbanized northern areas.

Housing

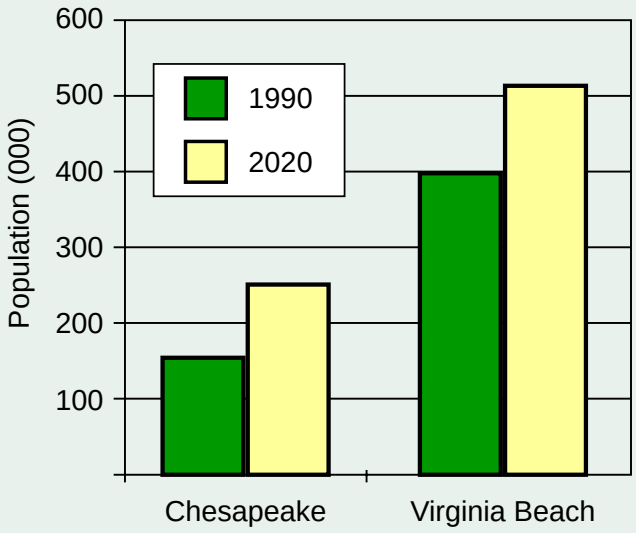
In 1990, there were fifty-five thousand seven hundred forty-two (55,742) housing units in Chesapeake, of which forty-three thousand four hundred eighty-five (43,485) were single family homes. Virginia Beach had one hundred forty-seven thousand thirty-seven (147,037) units, of which one hundred seven thousand three hundred twenty-five (107,325) were single family

Projected Population Growth

The Hampton Roads Planning District Commission ("HRPDC") estimates that the population in Chesapeake and Virginia Beach will reach over seven hundred fifty thousand (750,000) by the year 2020. The graph at right shows the expected distribution of that population between Chesapeake and Virginia Beach.

The influx of new residents will bring increased demands for housing, transportation, education, public services, and recreational opportunities.

Graph data provided by HRPDC.



homes. In 1999, Chesapeake issued building permits for one thousand six hundred thirty-five (1,635) additional housing units. Virginia Beach issued two thousand two hundred five (2,205) such permits. Census data suggests that similar numbers of building permits were likely issued by each municipality each year since 1990.

Pressure to Accommodate New Growth

According to the United States Census Bureau, Chesapeake's population grew by approximately forty-seven thousand two hundred fifty (47,250) people from 1990 to 2000 – an increase of approximately thirty-one percent (31%). Over the same time period, Virginia Beach grew by approximately thirty-two thousand two hundred thirty (32,230) people, or eight and two-tenths percent (8.2%). Virginia's statewide growth rate was fourteen and four-tenths percent (14.4%).

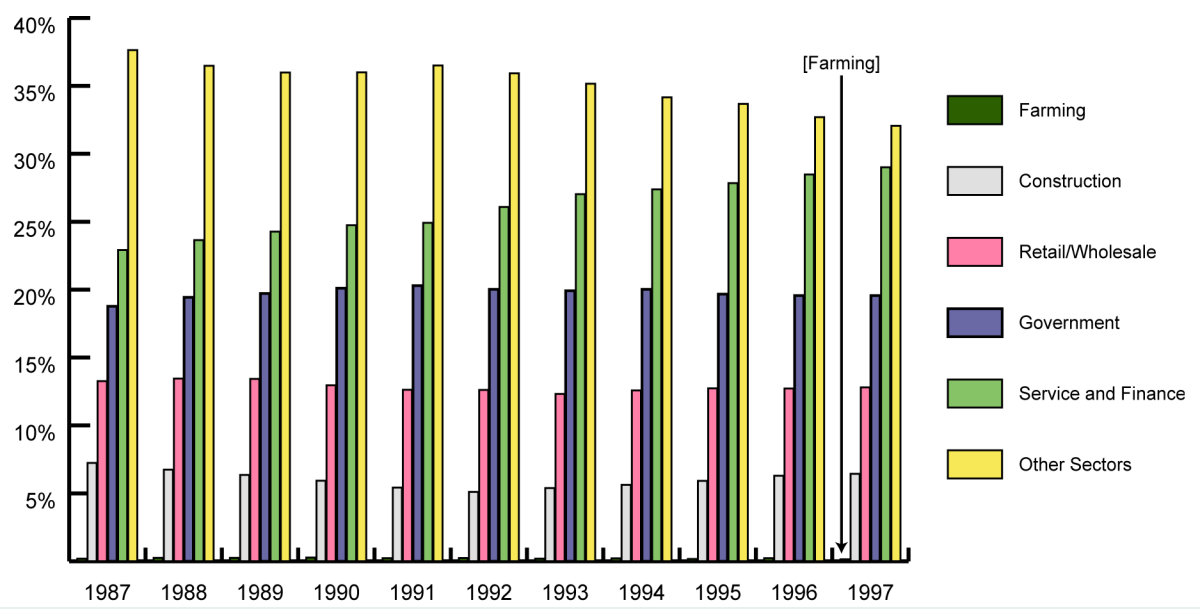
With the introduction of almost eighty thousand (80,000) new residents over ten (10) years (and no evidence that the trend is slowing), pressure to develop the rural areas of the SWA for non-agricultural uses is certainly rising. Similarly, ever-increasing demand is being placed on public infrastructure at a time when demand levels have already been characterized by one transportation official as "staggering." Thus, the implementation of well-considered, fiscally responsible plans for accommodating the region's anticipated growth will have a profound effect upon the region's long-term success.

Land Use Controls

Land use in the SWA is controlled primarily by the comprehensive plans and zoning codes of the Cities of Chesapeake and Virginia Beach. Generally speaking, both municipalities have implemented planning and zoning measures to protect the rural land areas in their Southern regions. For example, Chesapeake controls development through land use overlays that restrict density, and through public infrastructure availability. Virginia Beach took a slightly different approach, setting a "green line" that divides urban and suburban uses (to the North) from agricultural and natural areas (to the South). The "green line" is essentially a growth boundary that sets the spatial limits of urban levels of public infrastructure.

Generally speaking, both systems of land use control rely principally on large-lot zoning. In

Percent of Total Earnings by Selected Economic Sector: 1987 to 1997



Economics of the SWA

The graph above depicts the percentage of total earnings per selected economic sector in the Hampton Roads Metropolitan Statistical Area ("MSA") from 1987 to 1997. Farms produced less than one percent of the region's total earnings in the 1987 to 1997 time period. Still, farms are highly prized for their contribution to regional aesthetics and quality of life. Data provided by the HRPDC.

Virginia Beach, development south of the "Green Line" is permitted as densities of fifteen (15), ten (10) and five (5) acres per unit, depending upon the soil qualities of the site and the willingness of the property owner to invoke the City's conditional use process. In Chesapeake, development in the southern portion of the City is permitted at a density of three (3) acres per unit.

Trends and Build-Out Scenarios

In the agricultural area south of the "Green Line" in Virginia Beach, the current as-of-right development potential is approximately two thousand one hundred (2,100) units. Just north of the line, in the "transition area," potential exists for another several hundred units. The current regulatory framework would likely permit these units to be spread roughly evenly throughout the southern portion of the City. Similarly, in Chesapeake (which has no "Green Line" equivalent), current land use regulations would permit roughly five thousand (5,000) units to be widely distributed in the southern portion of the City.

At three to four persons per household, "buildout" translates to an additional twenty-two thousand five hundred (22,500) to thirty thousand (30,000) people in the area of the SWA that is currently predominately characterized by operational farms, open space, and natural areas. If the roughly seven thousand five hundred (7,500) units in which those individuals will live are widely distributed across the landscape, the adverse impact on agricultural operations, open space, natural areas, public infrastructure, and public financial resources will be tremendous.

I

INTRODUCTION

to the

RURAL AREA PRESERVATION PROGRAM

Mission Statement

Natural resources, sensitive lands, and water supplies of the Southern Watersheds of Virginia Beach and Chesapeake should be protected and enhanced.

Goals

Goal 1: Water quality should be protected and enhanced for water supplies and natural resources and conservation

Goal 2: Preserve open lands to help protect and enhance water quality.

Goal 3: Ensure compatibility of recreational activities and commerce with natural resource protection.

Goal 4: The character of the Southern Watershed should remain rural while providing for rural residential development.

Goal 5: Agricultural and forestal activities in the Southern Watershed should be sustained and encouraged.

RURAL AREA PRESERVATION PROGRAM

The Rural Area Preservation Program (RAPP) for Chesapeake will focus on maintaining the rural character in Southern Chesapeake in the face of continued development pressure.

* * *

The Proposed Rural Area Preservation Program will develop a specific plan of action to preserve the rural areas of the Southern Watershed Area. It will take into consideration a wide variety of issues including emerging development patterns, socioeconomic factors, and the presence of critical natural resources. The Program will attempt to create a sensible strategy for development that is compatible with agricultural uses and does not adversely impact critical natural resources.

There are four circumstances where a rural landscape endures:

1. where the landscape is so hostile to human occupation, *e.g.* very steep slopes or submerged lands, that preservation is the only option;
2. where the land is owned for conservation purposes by a public or private entity;
3. where the economics of the rural landscape, *e.g.* agriculture or mineral extraction, are economically sufficient to sustain the *status quo*; or
4. where government intervenes to protect and maintain a particular condition through its regulatory powers.

Within the Southern Watershed Area ("SWA"), there are significant governmental land holdings that contribute to the area's existing rural character. Many of the conservation areas in the SWA are publicly held. Additionally, the current military mission provides a significant measure of protection. Extensive riverine lands that are not suitable for development preserve additional open space.

Historically, the rural character of the balance of the watershed has been secured by the economic value of the land for agricultural use, which has sustained the rural, open space character of the SWA, notwithstanding the lands' intrinsic suitability for non-agricultural development. If the economic value of agriculture were to decline to a point where agricultural use values are insufficient to counteract the economics of development pressure, then only two things will stand between the rural landscape and suburban sprawl. The first is public action to control the character, location and magnitude of non-agricultural development. The second is public acquisition of fee or less than fee interests in lands that are threatened by development which is incompatible with the character of the rural landscape.

This Rural Area Preservation Program ("RAPP") is intended to provide the municipalities within the SWA with programs which could be deployed to ensure that the future land use of the watershed is consistent with the form, function, and long-term integrity of the rural landscape.

There are three broad categories of action which could effectively define the future character of the SWA and the quality of life in its constituent municipalities: (1) public actions which ensure that non-agricultural development in the rural landscape is aesthetically compatible (through appropriate design); (2) actions which realign development expectations and practices to limit, control, or guide future non-agricultural development in the rural landscape; and (3) acquisition of fee and less-than-fee interests. The RAPP includes strategies that address each of these actions as a "tool box" of techniques and programs which could be invoked to determine future land use and quality of life in the region.

II

THE HOW

of

DEVELOPMENT

in the

RURAL

LANDSCAPE

Ignorant men don't know what good they hold in their hands until they've flung it away.

— *Sophocles*

Beauty as we feel it is something indescribable; what it is or what it means can never be said.

— *George Santayana*

THE HOW OF DEVELOPMENT IN THE RURAL LANDSCAPE

II-A



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The defining characteristics of a rural land scape are not easy to describe. Yet, the central issue in the management of a rural landscape is identification of the resource to be protected. In many rural areas the principal resource value of a rural landscape is agricultural productivity. In others, environmental values — such as habitat for threatened and endangered species — are supreme. For some, aesthetic considerations and lifestyle choices are the essential ingredient of the rural landscape. In some communities, the primary value of the rural landscape is the fiscal benefit of not having to extend municipal services to areas where capital and operating costs are inefficient.

In most cases, the value of a rural landscape is a mosaic of these values. In reality, the rural landscape is a lot like *beauty*, hard to define but "you know it when you see it."

The question of values and resource management is further complicated by the reality that traditional measures of the compatibility of land uses (use, intensity of use, and bulk) are not necessarily related to rural landscape values. For example, large and/or tall structures such as barns, windmills, and storage bins are a common element of highly desirable rural landscapes. Similarly, residential structures, *e.g.* farm houses, are an intrinsic element of the rural landscape. Likewise, many rural landscapes are unnatural and are in part the result of extensive human perturbations which have modified the natural environment. The horse country in central Kentucky is a classic example of a rural landscape where the natural environment has been dramatically altered, yet the resulting landscape is highly prized.

Experience from around the country shows that borrowed open space is the key element of the rural landscape — context is everything. Consider, for example, a single family detached dwelling on a 7,500 square foot lot in a typical suburban subdivision, and compare that same dwelling on a 7,500 square foot lot adjacent to a 500 acre farm. It is not the character or design of the home that creates a rural lifestyle, but instead the borrowed open space and/or ambiance of the adjacent farm.

The *nature* of the resource value of the rural landscape is further complicated by the fact that most rural landscape preservation initiatives are the product of what would otherwise be "strange bedfellows." Environmentalists and the agricultural industry are more often than not on the opposite sides of issues like wetlands preservation and fertilizer and pesticide use. Yet, when it comes to preservation of a rural landscape, environmentalists and the agricultural industry are allies (at least to some extent). An even more remarkable coupling occurs when the development industry and the growth management activist align to support restrictive regulations in the rural landscape — no growth advocates in order to

stop sprawl, and developers to encourage increased density and higher land values in the built-up portions of the community.

Another variable in the resource value mix is the future of agricultural production in the face of globalization and other economic and political factors at the national, state and regional levels. While the *family farm* is widely recognized as a desirable lifestyle, its support is dependent on some level of economic viability.

Finally what constitutes a resource value in the rural landscape changes over time. Like too many resources, the rural landscape is most revered when it has already been compromised or is under serious threat.

The Rural Landscape in the SWA

The rural landscape in the SWA is a mosaic of values. It contains natural areas (including riverine, marsh and forest lands), agricultural development, low density exurban residential development, governmental facilities, and occasional industrial uses. Interviews with local officials and interested persons confirm that there is no handy description of the resource value of the rural landscape. Indeed, when asked to describe the rural landscape in the SWA, most persons in the area *mention* forests, fields and narrow roads, but *primarily* speak in terms of what the area is *not*: *not* sprawling suburbs, *not* crowded, and *not* congested.

Specific Resource Values

Agricultural Productivity

The remarkable productivity of the lands in the SWA and the historical success of the agricultural industry in the area are instinctively understood by the public as an important resource value in the region. That understanding, however, is not grounded in any particular understanding of the contribution of the agricultural industry to the regional economy or the forces and factors which control the future of agriculture in the area. A detailed survey of public opinion in regard to the agricultural industry in the region was conducted by the Department of Conservation and Recreation. Among the study's findings was that people in the area value agriculture more for its aesthetic and "quality-of-life" impacts than its economic impacts.

A related resource value of community importance is the wealth of agricultural landowners and the importance of preserving the value of that equity. During the last 30 or 40 years, conversion of farms into subdivisions has been the climax condition for agricultural lands in metropolitan areas in this country. In many parts of the country, rural preservation programs have been attacked because while they preserve certain values, they may negatively impact the agricultural land owner's equity.

Environmental Values

The SWA contains substantial environmental resources and is tributary to environmental resources of regional, state, interstate and national importance. A detailed inventory of environmental resources was prepared by the Virginia Division of Conservation and Recreation ("DCR"). *See* SANDRA Y. ERDLE, CONSERVATION PLAN FOR THE SOUTHERN WATERSHED AREA (2000). The study highlights the environmental values in the SWA.

The general geophysical character of SWA is defined by topography and hydrology. The key physical features are two large riverine corridors – the Northwest River and North Landing River, which are tributary to coastal marshes and bays, including Back Bay and Currituck Sound. These corridors are generally characterized by hydric soils and forested and non-forested wetlands. They contain nineteen (19) catalogued rare natural communities, sixty-seven (67) rare plant species, and twenty-two (22) rare animal species.

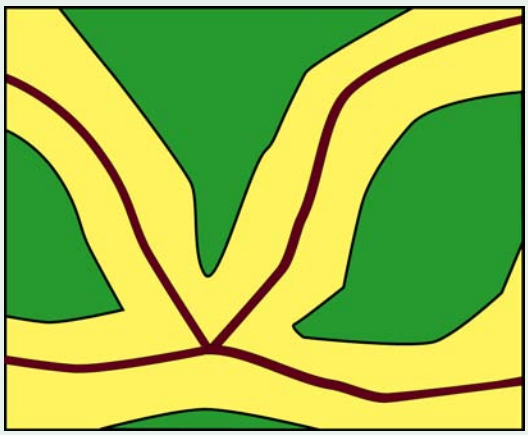
Between these corridors and small watercourses which are tributary to the major river-

II-B

The Wedges and Corridors Plan

The Wedges and Corridors Plan sought to preserve agricultural land by permitting suburban development only along designated roadway corridors, and preserving the land area between the corridors for agricultural production. The Plan preserved agricultural land, but in manner that make it virtually invisible from the road. Therefore, its potential contribution to community character was lost.

The graphic at right illustrates the concept. The yellow areas represent urban development along expressway corridors. The green areas are preserved for agriculture and open space.



ine systems are ridges where soil conditions are suitable for agriculture and development.

Water quality is a key ingredient of the environmental character of the SWA and the natural systems to which the SWA is tributary. The presence of large scale agricultural activity in the SWA and the quality of receiving waters represents a balance of yet unspecified delicacy which is of local, regional and interstate significance.

Anecdotal evidence, observations and experience in other areas indicates that these natural systems represent the principal environmental resources of the area and that these areas can be managed as surrogates for wildlife and habitat values.

Aesthetics

As indicated above, the visual character of a rural landscape – how it looks, particularly from public roads – is generally of significant value to residents and the community at large and is obviously important in the SWA. A preliminary assessment of visual preference in the SWA, however, reveals that the rural landscape in the SWA is not easily defined in objective terms. Indeed, it appears likely that visual preference in the region is highly contextual, not just in terms of what is visible from a particular vantage point, but in terms of collective experience during a particular period of time.

In plain terms, visual preference in the SWA appears to be more of *how much* that *what*. Like most rural landscapes, what are called "piano key lots" along public roads is an evident phenomenon. This development pattern is driven by land development regulations (requirements for public facilities including road frontage and a concession to agricultural interests in the form of exceptions from nominal subdivisions requirements) and practical economics (utility extensions and subdivision roads are expensive). To an outside observer, particularly one with experience in other areas where the progression of the pattern is far more advanced, the situation is an obvious threat to the visual character of the area. Even when the utility of farm land behind the piano key lots is not directly compromised by the presence of exurban residences, the borrowed open space that farm fields represent is obscured or compromised by the practice.

Presumably, the residents of these lots see themselves as a part of the rural landscape and not as a threat to the landscape. However, unless visual character and lifestyle are unimportant, continued development of these lots is likely to have a dramatic impact on the visual character of the SWA. A striking example of this impact exists in Montgomery County, Maryland, where the land use plan contains a series of "wedges" of rural landscape between suburban "corridors." *See* Figure II-B. There, agricultural

II-C





It's a Matter of Distance and Perspective

The pictures above illustrate the perceived reduction in the size of a structure as a function of distance. The picture at left is a house constructed with a typical exurban front setback of approximately forty (40) feet. The center picture is the same house, set back five hundred (500) feet. The picture at right is again the same house, set back one thousand (1,000) feet. The building appears ninety percent (90%) smaller than the one adjacent to the roadway.

lands have indeed been preserved. However, their existence, and with them the existence of the remains of a rural landscape, is a well-kept secret. This is so because these agricultural lands are not readily apparent from the public roads, which are generally confined to the corridors.

An important factor in this regard is the proximity to improvements to the public roads from which most citizens view the rural landscape. A house which is located immediately adjacent to the road has a far more significant impact on the rural character of the landscape than a house set back 500 feet from the road. The concept of perspective is in fact an important element in the management of the appearance of a rural landscape, because the apparent size of a structure is diminished by ninety percent (90%) at a distance of 1,000 feet. *See* Figure II-C.

Community Character

Understanding the resource value of any landscape transcends particular resource values and requires an understanding of the cumulative effect of a variety of interests and contexts. Some refer to this composite as quality of life. Others invoke the concept of community character. Whatever the label, the focal point of management needs to be on a balance of competing interests – community character.

The rural landscape implicates community character in two ways: (1) the landscape is a distinct community character in its own right which is cherished by owners, residents and users; and (2) the landscape is a resource that contributes to overall quality of life throughout the region providing a diversity of lifestyles to the community at large and offering all citizens a place of respite from strains of urbanity.

Community character involves other tangible and less tangible elements. Almost by definition, most roads in the rural landscape (other than expressways and other through routes) are local roads used by local traffic. In the built environment, most traffic is not local but is regional in character – passing through communities with little or no connection to the community other than impatience to get somewhere else. As a result, community character and quality of life are subordinated to traffic movements. In contrast, in the rural landscape, community character predominates and it is not uncommon to see the movement of agricultural implements from one field to another to predominate over other traffic. In addition, the character of rural roads – narrow, winding pavement with frequent traffic hazards in the form of mature trees adjacent to the pavement – naturally calms traffic shifting the emphasis from travel times to travel experience.

Rural Character Evaluation Criteria

In order to provide a discrete and reliable means of describing and managing the rural landscape, it is necessary to describe the landscape in terms of specific criteria. Based on the resource values which have been described, the following criteria allow for the identification of resource values in logical management units.

Context

Land use compatibility in the context of the rural landscape in the SWA involves two principle considerations – functional and visual relationships. A key element of the rural landscape is functional compatibility. For example, high volumes of traffic are inconsistent with agricultural operations where heavy equipment and materials are moved from farm to farm by way of the local road network. Another example of functional compatibility relates to incompatibilities in terms of hours of operation, *e.g.* early morning work with farm equipment conflicts with non-agricultural residents' sleep.

In terms of visual relationship, rural landscapes reflect a sense of natural, visual harmony. For example, the visual character of the rural character may be diminished by the shape or color of a structure which appears to be "out of place." A traditional suburban home sitting in the middle of a former farm field sticks out like the proverbial "sore thumb," while the same home tucked into a stand of trees at the edge of a field is practically invisible and has no adverse impact on the character of the area. In some parts of the country, housing needs have been satisfied by clusters of buildings which from a distance appear as if they are a cluster of traditional farm buildings while in reality they are in fact nothing more than an exurban residential estate.

Building Mass

The perception of mass of improvements in the landscape is different from mass in the urban setting. Mass in the rural landscape relates to amount of improvements per unit of land. Most rural landscapes have a natural rhythm which is defined by the character of the land or the use of land. For example, in most agricultural landscapes, farm houses and other buildings are an integral part of the landscape. However, because of the nature of the buildings and their use, relative few buildings are visible from any single vantage point. As a result, the landscape is defined by the character of the land and vegetation.

At some point in the process of suburbanization, the mass of improvements in the rural landscape reaches a point where the defining character of the landscape shifts from the land to improvements, that is the buildings go from being subordinate to the land to appearing to dominate the landscape. In other words, there is no clear bright line where community character changes from rural to suburban, however, Figure II-D makes clear that at some point the number of improvements that are visible from the road affects the perceived character of the area, even when the amount of land devoted to non-rural improvements remains relatively small. In this context, the effect of distance on the perceived size of an object is an important factor. In other words, five houses which are one thousand (1,000) feet from a rural road have a far less impact on the rural landscape than do five houses in a row immediately adjacent to the road.

Function

Not all land in the rural landscape is created equal. Some land is unsuitable for agricultural purposes, while other lands are suitable for agriculture and for development. Some lands are proximate to watercourses and some are not. Some land is forested and some is open fields. Each of these factors defines existing and potential functions and an effective rural management system must identify and differentiate between the functional character of the lands. A key aspect of management is future potential use, that is, land that is suitable for agriculture but is not currently used

II-D



The Point of No Return

Because rural character is closely tied to open space, it is largely a function of what is *not* present in the landscape, rather than what is present. The photos at left illustrate how the addition of buildings to the landscape changes the visual character of the area.

In the top two pictures, most people principally notice the character of the land. One or two houses near the horizon does not significantly change the character of the area.

However, somewhere in the middle set of pictures, the predominant visual element shifts from open space to the interruptions in the landscape. Here, the rural character of the area is on the decline.

In the bottom set of pictures, the buildings are the principal visual elements of the landscape. Significantly, there are only seven (7) more houses in the photograph at the bottom right than in the photograph at the top left. Further, most of the homes are generously set back from the public road. Yet, the open space character of the area has largely vanished and is not likely to return.

for agricultural purposes may be equally valuable to the community at large.

Visibility

It is self-evident that the visibility of land has a lot to do with the impact the future use of the land may have on the rural landscape. For example, a plot of land in the middle of a forested tract, assuming environmental considerations are addressed, is unlikely to have an individual impact on the rural landscape of which it is a part. And, the likelihood that the character of the improvements will be incompatible with the natural harmony of the landscape is diminished. In contrast, a piano key lot on the public road can have a serious adverse impact on the character of an area. A large agricultural field that is visible through the side yards of a row of piano key lot houses has substantially less value as community character defining borrowed open space than an open field that directly abuts the public way.

Fiscal Integrity

The demand for public services varies according to the location and character of individual parcels of land in the rural landscape. Housing for families in the rural landscape, for example, often involves increased costs for schooling because of the relative remoteness of places of residence and the school yard. Similarly, law enforcement and life safety services are relatively ineffi-

cient to supply in the rural landscape, particularly in a metropolitan area where service expectations for new exurbanites is usually high.

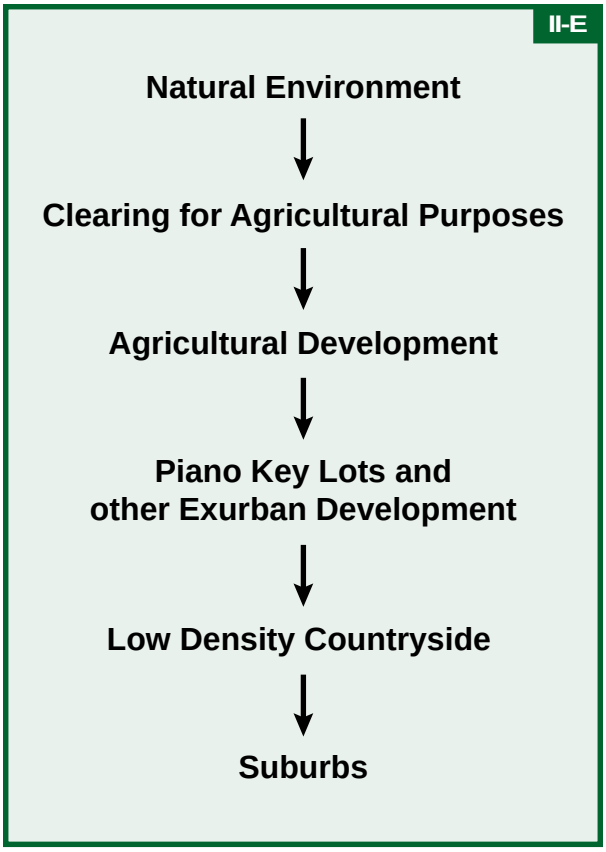
The impacts of future demand on public facilities is particularly problematic in regard to road capacity. Rural roads have relatively less capacity than the same amount of pavement in the suburban or urban portions of a community. Rural roads are usually narrower than their city cousins with only rudimentary drainage improvements and limited shoulders. The combination of long distances, narrow roads and driver impatience creates a volatile mix which has very limited capacity to support significant volumes of traffic.

Moreover, improvements to rural roads often have a negative impact on the rural landscape because the road is the armature of the traditional pattern of rural development. However, not all parcels of land in the rural landscape are equal in this regard. The development of an exurban residential unit on a parcel within a mile of an interchange with a limited access highway has far less impact on the rural landscape as the same home located miles from the nearest element of the regional road network. Trips from the latter home are often as many as five times as long as the average trip in a metropolitan region.

Further complicating matters, the combination of service inefficiency and low tax base, given the relatively low intensity of exurban development, means that local governments often experience fiscal distress as a result of the development of the rural landscape.

The Pattern of Successive Change in the Rural Landscape

Application of these criteria to the existing rural landscape reveals that the rural landscape changes in a fashion which is akin to the succession of natural lands with the suburb as the nominal climax condition. In other words, all of the lands in the existing rural landscape are in a state of transition from one successional stage to another. The stages of succession of the SWA rural landscape are illustrated in Figure II-E.



In the current condition, some lands are in an arrested state of succession, *e.g.* lands which are actively used for agricultural production. It should be noted that in many parts of the country, succession has jumped straight from the natural environment; however, in areas of agricultural production, most lands suitable for development have already been cleared for agricultural use.

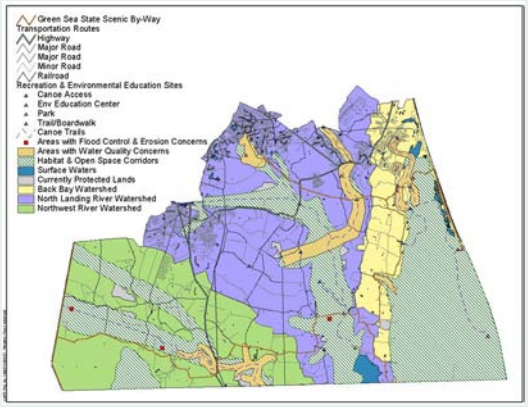
The key to managing future land use in the SWA rural landscape is to develop programs that will maintain areas in arrested states of succession and to erect barriers to further successional stages unless the rural landscape criteria indicate that succession is desirable. That means that a management plan must be able to identify the successional stage of all lands within the SWA and discern whether the existing condition or some future successional stage is appropriate.

III

RURAL LAND MANAGEMENT UNITS

RURAL LAND MANAGEMENT UNITS

III-A



Establishing Rural Land Management Units

The boundaries of rural land management units should be established by the local governments of the SWA to reflect the values of the community. Much data has been collected to inform the decision making process. Recommended boundaries are provided as a starting point for discussion in a separate volume.

In order to develop a meaningful management program for the rural landscape in the SWA, it is necessary to spatially organize the significant identified resources into *management units*. Those management units are lands with similar characteristics and values that have common management needs. For example, lands that are particularly suited for farming (above other uses) have similar *characteristics* (soil, water, infrastructure, and relative location, to name a few). Protecting agricultural production is a community *value* that is served by applying particular management tools to those lands. Thus, the RAPP specifically addresses these lands through the Agricultural Lands ("AL") management unit.

The lands within the SWA have been analyzed in terms of their relative importance, from the most environmentally sensitive and most productive agricultural lands at one end of a scale to those lands of relatively little environmental or agricultural significance which can be reasonably developed on a fiscally-responsible, cost-effective basis. The results of this analysis is a series of management units that provide a framework for protection of the resources of the rural landscape in the SWA.

The first step in the land capability analysis was the identification of basic conditions in the rural landscape — topography, roads, land use, vegetation, soils, ownership patterns, and existing zoning. These data sets were compiled in a geographic information system ("GIS") format. The second step in the land capability analysis was the analysis of the land according to a series of values which were derived from the comprehensive plans of the cities of Virginia Beach and Chesapeake, interviews with key public officials, property owners and interested citizens and several types of interactive workshops with citizens, staff and appointed and elected officials from the two cities.

These two analyses were then employed to identify the resource values of the rural landscape in the SWA and to categorize those values into useful management units. For example, land areas which are not environmentally sensitive, are currently used for agricultural purposes and are amenable to exurban residential development in terms of septic tank suitability, were then analyzed in regard to certain factors such as adjacent land uses, zoning and accessibility and specific rural landscape criteria – context, building mass, function, visibility and fiscal integrity.

The land capability analysis exposed the physical and land use interrelationships between various land categories. For example, the analy-

sis reveals a strong correlation and association between prime soils, agriculture and development pressure. That is so because those lands are most likely to be suitable for septic tanks and because of the economic realities of agriculture and the "value" of piano key development in terms of the opportunity to recapitalize an agricultural enterprise.

This evaluation shows that there are a series of discrete land management units which could be used as a basis for land management of the rural landscape of the SWA. The management units range from agricultural preservation to future urban service areas and represent a range of resources and values.

AGRICULTURAL LANDS

➲ *Principal Values — protection of agricultural resources*

➲ *Key Criteria — fertile soil; available water; "critical mass" of operating farms; non-agricultural development would be fiscally irresponsible; not environmentally sensitive*

The management units and their principal characteristics are:

1. Agricultural Lands ("AL") – Lands with prime agricultural soils and associated land units which are used for or could be used for productive agriculture.
2. Environmentally Sensitive Lands ("ESL") – Areas that contain some lands with prime agricultural soils and lands which are environmentally sensitive or areas associated with watercourses.
3. Scenic Resources Lands ("SRL") – Areas that contain or constitute scenic resources important to the community character of the SWA.
4. Rural Infill Lands ("RIL") – Land areas that are already developed with non-agricultural residences and can accommodate additional residential development without additional negative impacts on adjacent undeveloped land or a change in local community character.
5. Rural Development Lands ("RDL") – Lands that are the most suitable for future urban development.

Agricultural Lands

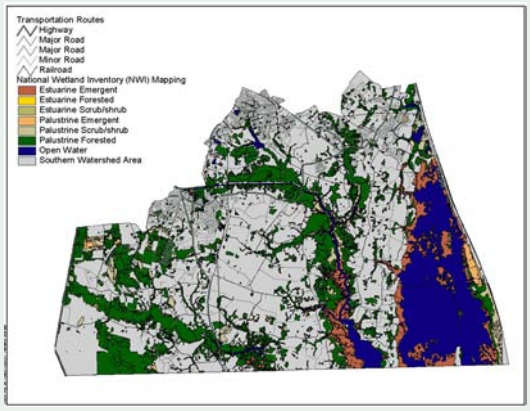
The AL management unit is primarily intended to protect functioning agricultural operations from encroachment by non-agricultural development, and in so doing, it also serves a secondary function of protecting open space and community character. The AL areas are characterized by:

1. fertile soils;
2. available water supply;
3. a "critical mass" and continuity of operating farms and farm support operations;
4. low existing *and planned* public infrastructure and service capacities; and
5. location away from urban or suburban fringe.

Environmentally Sensitive Lands

The ESL management unit is intended to protect environmentally sensitive areas, including but not limited to water resources, wildlife habitat, and unique or fragile ecosystems. There are many actual and potential threats to the ecosystems of the SWA, including increased water withdrawal for municipal water supplies, depletion of associated groundwater aquifers, agricultural and urban nonpoint pollution, fragmentation of large forest blocks, conversion of forest land to non-forest uses, poor forest harvesting practices, suppression of natural fire regimes in fire-dependent community types, exotic and invasive species, and recreational overuse. Accordingly, specific management goals for the ESL areas include protecting hydrology, preventing soil erosion and sedimentation, restoring and preserving the connectivity and

III-B



Environmentally Sensitive Lands Identification

There are many readily available data sources for environmentally sensitive lands identification. The question of how much land to designate as environmentally sensitive is one that is not easily answered. Various strategies for preservation of environmentally sensitive lands have been presented in a separate component of the Southern Watershed Area Management Program.

continuity of natural systems, and preventing the loss of environmentally significant resources.

During the Study, environmentally sensitive lands have been identified in several different ways and for several different purposes. For example, the DCR analysis identifies five (5) potential levels of protection ranging from very aggressive to a minimum conservation strategy. Ultimately the choice of what lands are environmentally sensitive will be a matter of local policy based on the information generated by the RAPP. The ESL management unit is designed to be applied to those environmentally sensitive lands that are determined as a matter of public policy to merit protection.

ENVIRONMENTALLY SENSITIVE LANDS

➲ *Principal Values — protection of environmental resources*

➲ *Key Criteria — unique or fragile ecosystems or habitat; water bodies or wetlands; sensitive aquifer recharge areas; endangered species habitat*

ESL management units should be identified using data from:

1. The Hampton Roads Planning District Commission (base maps, existing mitigation bank sites, Back Bay National Wildlife Refuge, hydric soils, National Wetland Inventory, surface waters);
2. The Department of Conservation and Recreation (rare and protected species, DCR conservation sites, DCR and Nature Conservancy-owned sites);
3. the *Multiple Benefits Conservation Plan* Technical Advisory Committee (areas with flood control and erosion concerns, areas with water quality concerns, canoe trails, Green Sea State Scenic By-way, habitat corridors, recreational and environmental education facilities and sites, False Cape State Park, Mackay Island National Wildlife Refuge, Princess Anne Wildlife Management Area, wetlands within the 100 year floodplain).

DCR-DNH has previously identified *conservation sites*, which are areas of land that support occurrences of rare species of plants and animals plus exemplary natural communities. Rare species and their habitats are defined as *natural heritage resources*. Conservation sites are specifically designed for protecting natural heritage resources, which are often highly sensitive to disturbance caused by human land use. Site boundaries are drawn primarily to reflect habitat requirements and ecological needs, not political or property boundaries. Thus, conservation sites are effective indicators of relatively intact and functional natural ecosystems, serving as proxies or *whole habitats* for the range

of natural resources, frequently supporting a broad diversity of wildlife, plants, communities, and physical features – common as well as rare. They represent a rough minimum area necessary to protect existing natural biodiversity.

While some conservation sites in the SWA are disjunct fragments, most form distinct and continuous corridors in the Northwest River, North Landing River, and Back Bay watersheds. Some conservation sites are publicly owned; however, most are in private ownership, with many in agricultural use. Such areas could ultimately provide locations for mitigation banks and habitat restoration projects. These projects could provide landowners with opportunities that are both environmentally and financially desirable.

DCR has also identified *conservation corridors*, which are linear green-belts or open space that, ideally, connect large undeveloped areas of natural vegetation. Conservation corridors provide connectivity for wildlife (and people) between primary natural habitats that otherwise become isolated by unplanned land development patterns. DCR-DNH has proposed a set of options for landscape-level conservation corridor placement in the SWA. *See* ERDLE, *supra*.

SCENIC RESOURCES LANDS

➲ *Principal Values — protection of rural landscape aesthetics and community character*

➲ *Key Criteria — landscape is particularly scenic; significant contributor to community character*

"Public perception of community character is based largely on what can be seen from an automobile . . . . 'The view from the road' is more than a phrase – for most of us it comprises virtually everything we know about the natural and human-made features of our towns."

-Randall Arendt,
Rural by Design (1994)

Scenic Resources Lands

The SRL management unit is comprised of lands that have special value as scenic places. In these areas, the aesthetic value of the land is more significant than its use. In most cases, the scenic value of the area will be rooted in its open space character (either open fields or forested land). This is especially true between transportation nodes (intersections), where the existence of an open, rural landscape creates character and adds value. In a more limited number of cases, scenic values stem from the historic, cultural, or architectural character of the area.

Where scenic values are rooted in open spaces, scenery can generally coexist with non-agricultural development. However, the coexistence must be in the context of strict design and locational standards for the development, or the development will usually quickly overpower the scenic resource.

Since open space character is largely dependent upon the distance of development from the public right-of-way, SRL exist primarily where: (1) there was little development within one thousand (1,000) feet from the right-of-way, (2) the design and location of new development could feasibly be regulated to preserve the open space value of the landscape, and (3) the land was not already designated ESL. Because scenic values depend upon visual access, SRL lands are exclusively located in a one thousand (1,000) foot wide band along certain public roadways.

Rural Infill Lands

Rural Infill Lands are areas where new exurban development is appropriately located. Generally, RIL areas are those that have existing

exurban development to such a degree that the balance of the community character has already tipped from rural to something more akin to "quasi-rural." For example, in some areas of the SWA, there are rural roads that are bordered by piano-key lots along as much as forty percent (40%) of their length. In such locations, additional exurban development will not negatively impact adjacent areas or change the character of the area.

Because of the pattern of large-lot development in RIL areas, their current value for agricultural productivity, environmental preservation, and scenery that is visible from public areas is relatively low. By permitting exurban development to proceed in these areas, RIL lands provide a lifestyle alternative to home buyers while protecting other areas from patterns of development that will interfere with their resource values.

RURAL INFILL LANDS

➲ *Principal Values — fiscal integrity; protection of rural landscape aesthetics and community character*

➲ *Key Criteria — existing exurban development at levels that subordinate open space character; available infrastructure to serve new development; not in RDL management units*

Rural Development Lands

Rural development lands are those areas that are designated for future urban development as new towns or "planned communities of place." These are areas near major interchanges that have adequate current or planned infrastructure to serve new development on a large scale.

RURAL DEVELOPMENT LANDS

➲ *Principal Values — fiscal integrity; protection of community character*

➲ *Key Criteria — adequate existing or planned infrastructure capacity to serve new large-scale development; relatively low agricultural, scenic, or environmental value*

The City of Chesapeake had previously identified approximately fifteen thousand three hundred (15,300) acres along the Route 168 and Route 104 corridors as areas suitable for large-scale economic development. The two corridors are scheduled for major functional improvements in the near future. The City recognizes that these improvements will serve as a catalyst for new development, and will increase the visibility of the land that surrounds the corridors.

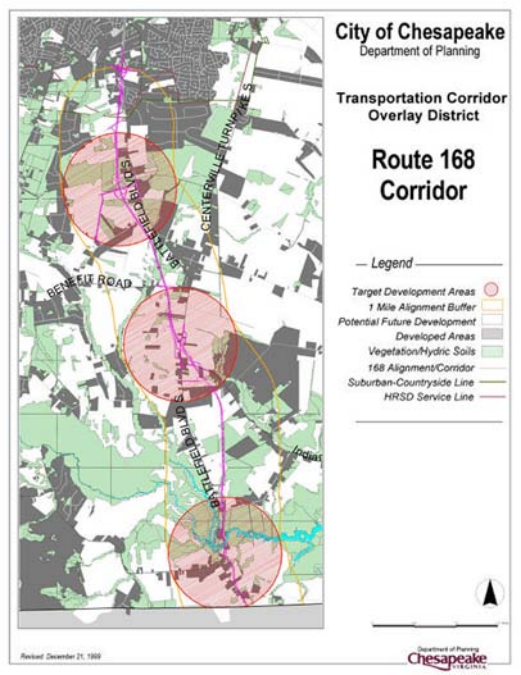
The areas the City of Chesapeake identified for economic development activity are known as Transportation Corridor Overlay Districts ("TCOD"). They include three (3) nodes on Route 168 that extend one mile from major intersections, and all of the land within one mile of a six and seven tenths (6.7) mile segment of Route 104.

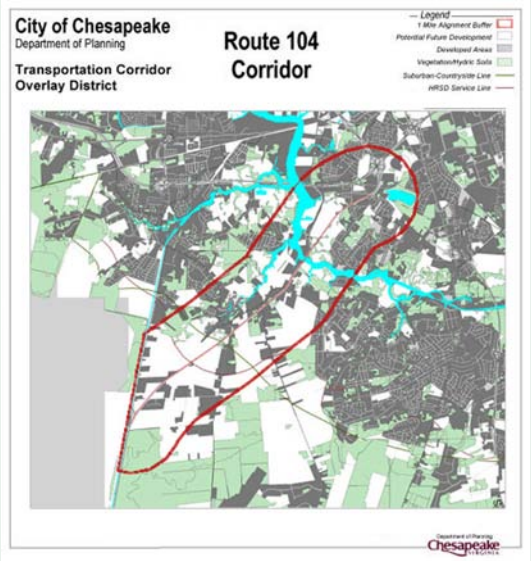
Under the RAPP's suggested framework, the TCOD areas are appropriately designated RDL management units. First, these areas are slated for infrastructure improvements that will accommodate large-scale development. Second, the community has already determined that intensification and conversion of land uses in these areas is appropriate.

The TCOD plan suggests that the areas along the corridors be developed principally in commercial and industrial uses, because research shows that those uses demand less public revenues than they generate. The RAPP recognizes that the City of Chesapeake made a positive policy decision to designate land for future development. However, the RAPP does not endorse the idea of limiting future development in the TCOD areas to commercial uses.

A study commissioned by the Virginia Department of Transportation in 1991 observed:

III-C





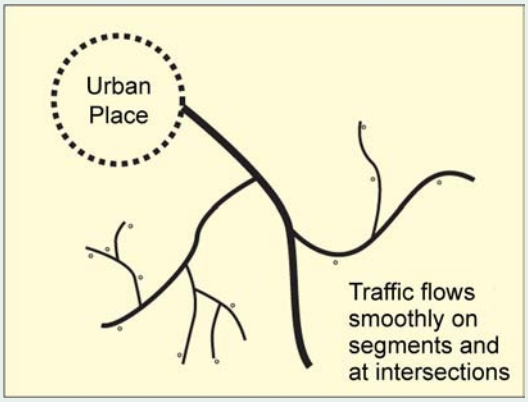
The TCOD plan identifies areas along Routes 168 and 104 as suitable for large-scale "economic development" projects.

> For many, the answer [to balancing the tension between making road improvements and controlling the growth of transportation demand] seems to have been to encourage or allow only business and commercial development, which enriches public coffers, while discouraging or banning residential development, which inevitably requires costly services. This "solution" for each locality, which might be called the beggar-thy-neighbor approach, has only exacerbated the regional problem since workers and shoppers have been forced into longer trips over more congested roads to reach their destinations.

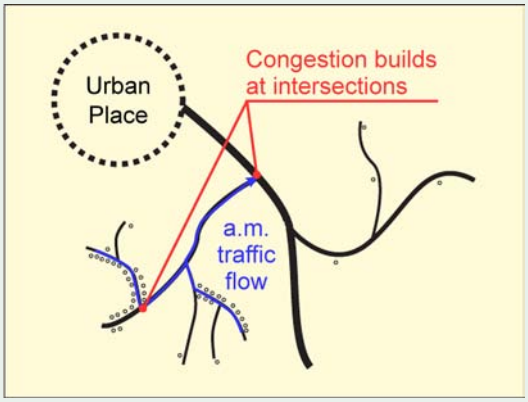
ROBERT D. VANDER LUGT AND SALIL VIRKAR. COORDINATION OF TRANSPORTATION PLANNING AND LAND USE CONTROL: A CHALLENGE FOR VIRGINIA IN THE 21ST CENTURY vii (1991).

Indeed, research consistently shows that geographic isolation of uses increases trip length and roadway congestion, placing significant and unnecessary demands on public infrastructure. Moreover, in most cases these demands are not adequately addressed by cost/revenue analysis. Over time, the intensification of geographically isolated uses leads to serious mobility problems for commuters.

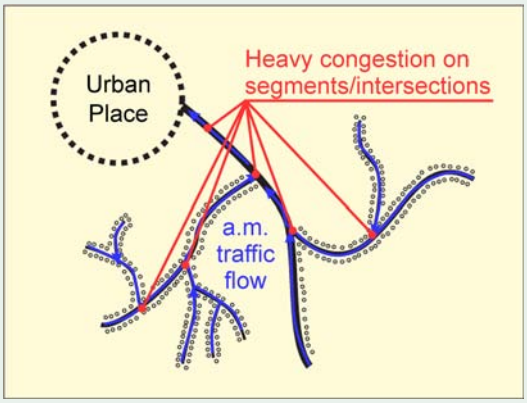
Alan Pisarski, a nationally recognized transportation analyst, observed that "transportation is the collision of demography with geography." Pisarski, Alan. "Recognizing, Creating & Marketing Survey Quality," presented at *Transport Surveys: Raising the Standard*, Grainau, Germany, May 1997. The collision has a number of significant impacts. First, the growing distance between residents, employment, schools, and shopping areas has an exponential impact upon total vehicle miles travelled. If even a few of these uses were located closer together, the aggregate reduction in vehicle miles travelled would be quite substantial. The reduction is even more significant if the uses are located within walking distance, and related to each other in a manner that makes pedestrian travel a feasible and desirable alternative for the individual.



Stage 1



Stage 2



Stage 3

"We Have Met the Enemy, And He is Us!" – Pogo

In almost every case, exurban development marks the beginning of a pattern of wide geographic separation of land uses. Since the uses are initially developed at low intensities, trips from the residential area to the commercial/employment area are fairly long, but do not overwhelm the roadway (stage 1). However, as residential development intensifies, the demand for commercial/employment uses increases. The increased intensity of use places more cars on the roadway (stage 2).

At some point, the roadway is expanded to accommodate the increase in traffic. Naturally, the number of lane-miles needed (and thus, the cost and impact of the expansion) is directly related to the distance between the isolated uses. But the expansion relieves the congestion only for so long as the same number of cars are using the roadway.

The period of time in which the trips to capacity ratio is favorable is relatively short. This is so because the nature of increases in road capacity is that they eventually lead to intensification of development – again generating high levels of congestion (stage 3). If uses remain geographically isolated, the feedback loop will continue until physical or economic constraints prevent further road expansion.

Introducing mixed-use development into the equation relieves traffic congestion by capturing some of the trips within a smaller geographic area, and, in many cases, encouraging non-automobile modes of travel. Accordingly, at a minimum, the number of total vehicle miles traveled in the region drops, and, correspondingly, so does the level of congestion on the roadways.

Second, because the road network is a system of collectors and arterials, its capacity to handle traffic throughput is only as strong as its weakest link. In other words, assuming that most residents in the rural SWA who do not work on farms travel to the urban/suburban areas to work, the arterials that lead into the those areas must accommodate trips initiated from all over the rural area. This creates transportation system "bottlenecks."

The bottlenecks generate pressure on the local governments to widen roads. Yet, when the roads are widened to accommodate the traffic from sprawled development patterns, the liveability of the area surrounding the roads is compromised. In search of a better quality of life, the residents of those areas often move to more outlying areas, pushing the system into a self-destructive feedback loop.

Third, the longer cars are on the road, the more road is needed to accommodate them. Put another way, as geographically isolated uses intensify, the roads that connect them inevitably must accommodate more trips. Put simply, In order to alleviate the congestion, the public will demand road improvements, which will most often involve widening. Thus, as trip distance increases, so does the corresponding demand for lane miles – which translates to additional stress on the public revenue stream.

There are numerous examples where these feedback loops have already advanced to what can generously be described as epic proportions: Northern Virginia-Washington D.C.; Los Angeles, California; Chicago, Illinois; and Miami-Dade County, Florida are but a few. Moreover, since the isolation of uses virtually requires travel by automobile, it prevents those who do not have cars (because they cannot afford them or are otherwise unable to drive) from enjoying the benefits of the economic development.

As such, the RAPP recommends that mixed-use development, including residential, commercial, and industrial uses, be encouraged within lands designated RDL/TCOD. Development that contains a balanced mix of uses will capture many of its own "trips," and accordingly reduce vehicle miles of travel, a key element of travel demand. Additionally, a balanced mix of uses will reduce individual travel costs and improve the area's overall quality of life. The suggested development patterns for RDL management units are considered in more detail in Chapter V.

Virginia Beach has a designated urban growth boundary, outside of which new towns will not be permitted. Virginia Beach's strategy for growth is to focus new development and redevelopment in areas within its urban growth boundary. Therefore, Virginia Beach has no land placed in RDL management units.

IV

RURAL LANDSCAPE MANAGEMENT: FORM

RURAL LANDSCAPE MANAGEMENT FOR AESTHETIC VALUES

IV-A





The future land use of the rural landscape in the SWA is a matter of concern for several reasons:

1. physical and fiscal implications of existing development patterns in the rural landscape, and
2. development pressure resulting from capital facilities improvement decisions like regional road improvements.

It is generally understood that there is a need to provide more certainty in regard to the future use or lands in the SWA in order to:

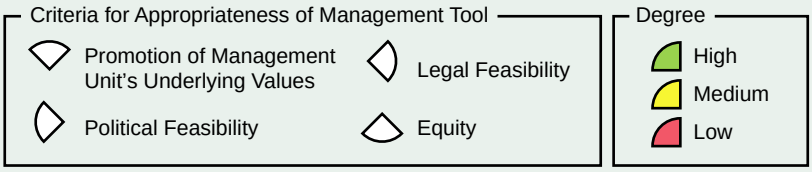
1. implement programs of preservation and conservation for those portions of the rural landscape which are most important in terms of the environmental, economic and cultural integrity of the SWA and the region,
2. better control the character, location and magnitude of development in the SWA, and
3. guide future development which is incompatible with the rural landscape to areas which are most appropriate for suburban and urban development.

The attributes of a rural landscape are inherently subjective, the province of the beholder. That is, the intrinsic value of a rural landscape is a thing that one Supreme Court Justice once described, in a slightly different context, as *"we know it when we see it."* In contrast to a wetland, which has certain definable qualities of value to the community at large, the rural landscape is an appreciated condition which is cherished intrinsically, without reduction to quantitative analysis.

In this context, rural area preservation means controlling the "how" and "where" of non-agricultural development to minimize, if not avoid, the adverse impacts of non-agricultural development on the rural landscape. In other words, controlling the "how" and "where" of exurban development means controlling the location and character of non-agricultural development to minimize its impacts on the rural landscape. For example, cluster ordinances give a developer a measure of flexibility in terms of lot size and layout, in contrast to subdivisions with uniform lot sizes. Cluster design allows for the preservation of resources that define the rural landscape, like mature woodlands, and open vistas.

IV-B

Management Tool	PAL	ESL	SRL	RIL	RDL
Very Low Residential Density					
Cluster Development					
Rural Landscape Design Standards					



Very Low Residential Density

General Description

Very low residential densities ("VLRD") are commonly used by local governments in an attempt to preserve rural open space. VLRD is typically implemented through large-lot zoning ordinances. These ordinances include a preference for agricultural uses, but allow residential uses as-of-right at densities that range between one unit per 10 acres to as little as one unit per 160 acres. SAMUEL N. STOKES, ET AL., SAVING AMERICA'S COUNTRYSIDE: A GUIDE TO RURAL CONSERVATION 135 (1989). Some ordinances also permit limited non-agricultural commercial and recreational uses.

VERY LOW RESIDENTIAL DENSITY

➲ *Purpose — to protect the aesthetic character of open spaces and preserve agricultural operations*

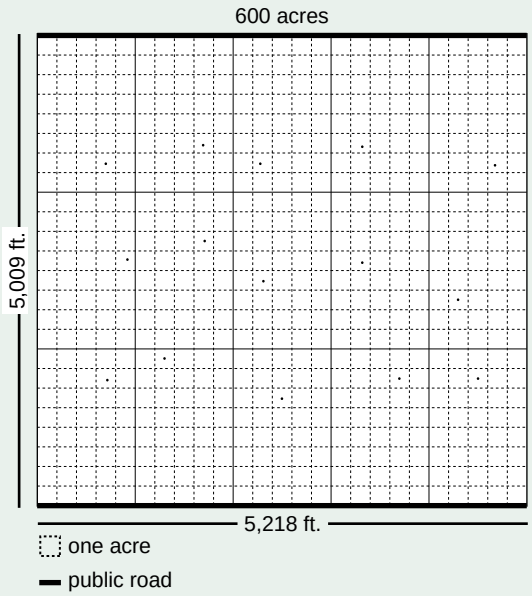
➲ *Application — AL, ESL and SRL management units, normally in conjunction with other rural land management tools*

One of the disadvantages to large lot zoning relates to access, in particular where access to an improved road is required. The economics of improved roads means that "piano-key" lots are the only viable means of providing access to improved roads. The all-to-familiar "piano-key" style subdivision is an inefficient and unsightly development pattern that is harmful to both the rural landscape and the rural road network.

Another disadvantage to large-lot zoning is that non-agricultural residential uses are terrible neighbors for agricultural operations. One of the many examples of the incompatibility of the uses is their competition for use of the roadway in the morning. Specifically, exurban residents generally travel to work at the same time farmers are using the roadway to bring their tractors into the fields. The generally narrow widths of rural roads, combined with the large size and slow movement of agricultural equipment creates serious traffic conflicts.

Even densities less than one unit per 15 acres can harm the rural landscape when non-agricul-

IV-C



VLRD, Setbacks, and Rural Character

The figure at left is a simplified illustration of fifteen (15) homes constructed on forty (40) acre lots with significant front setback requirements. The combination of large-lot zoning, significant setback requirements, and rural landscape design standards operates to preserve the open space character of the area. In the illustration, buildings are set back at least one thousand (1,000) feet from public roads, diminishing their perceived mass by at least ninety percent (90%).



Adjacent to Roadway | 500 ft. from Roadway | 1,000 ft. from Roadway

tural development fragments farmland to the point where agriculture is no longer viable. In areas where wheat, corn, and soybeans are the primary crops, fragmentation can be particularly harmful, as farm size is directly correlated to profitability. In the political realm, densities significantly lower than one unit per 15 acres can lead to vigorous opposition from landowners, especially if no measures are taken to help them reclaim the equity they may lose as a result of the restrictive zoning.

Still, VLRD can be an effective interim control to preserve open space when permitted densities are calibrated to the size of viable farms. For example, in McHenry County, Illinois, another major producer of corn and soybeans, a county board member estimated the minimum size for a viable farm at 160 acres, an area ultimately adopted as the minimum lot size in the A-1 agricultural zoning district. STOKES, *supra* at 139.

VLRD can also be effective when low densities are combined with strict development review standards. VLRD should be used cautiously and in conjunction with other land management strategies, because experience shows that, over the long-term, VLRD probably does little to prevent suburbanization of the rural landscape, because development pressures and changing political winds can quickly lead to rezonings and subdivisions to permit development at higher densities. Further, before such subdivision occurs, VLRD may lead to land consumption rates that significantly outpace population growth, as large lot subdivisions sprawl across the countryside. *Id.* at 135-37; RANDALL ARENDT, RURAL BY DESIGN 19 (1994).

Program Elements

An effective VLRD program for the SWA will balance its agricultural and aesthetic preservation goals against the economic realities facing rural landowners. In other words, uses and densities should be set that preserve the rural landscape and economies of scale of agricultural operations, but that simultaneously allow landowners to recapture some of their equity through non-agricultural development.

The elements of a program that accomplish these goals are:

1. Identify AL, ESL and SRL management units.
2. Develop an understanding of what the le-

gitimate development expectations of the landowners in the identified areas are.

3. Set the as-of-right non-agricultural residential density in the identified areas at forty (40) acres per unit.

4. Allow other non-agricultural uses that either complement or have a neutral impact on the rural landscape, subject to enumerated performance standards.

5. Where the uses that remain after the regulatory changes frustrate *legitimate development expectations*, purchase conservation easements over affected properties can be utilized to compensate owners for their lost equity.

6. All new development should be subject to design standards that preserve the open space character of the area.

These elements are incorporated into the Model Very Low Residential Density Ordinance presented in the appendix to this chapter.

Practicality Analysis

Large lot zoning has a place in the conservation framework for the Hampton Roads area. A density cap of one unit per forty (40) acres, combined with appropriate design guidelines (*see infra* at IV-13), will help to ensure that the visual character of the landscape remains rural. At this density, *land* – not structures – is perceived as the dominant component of the landscape. Moreover, changing farm economics in the Hampton Roads area suggests that several agricultural crops (including vegetables and ornamentals) are economically viable on forty (40) acre parcels. Thus, unlike five (5) and ten (10) acre parcels elsewhere, the forty (40) acre parcels are not "too small to farm and too large to mow."

A maximum density of one unit per forty (40) acres also discourages large-scale settlement in rural areas. Faced with purchasing forty (40), rather than two (2) to five (5) acres, prospective home buyers are more likely to stop and think about the disadvantages of living in a rural area, such as the time, effort and expense of land upkeep and travel. When weighed against the cost of a home on a forty (40) acre lot, many prospective purchasers will be more likely to choose urban or suburban housing. Additionally, those that ultimately choose to live in the rural areas are likely to have made a more informed decision.

From a political perspective, forty (40) acre per unit density is likely to face opposition from a group of landowners who have expectations for development at higher densities, even if those expectations are not reasonable. On the other hand, the measure will likely be supported by other citizens, who can easily draw a connection between large lot zoning and agriculture or open space preservation. Large lot zoning is also popular among local officials because it is easy to enact and enforce.

In the abstract, large lot zoning is legally permissible and has been upheld by a number of courts. However, the validity of particular large lot zoning ordinances is highly dependent upon their context. Challenges to large lot zoning ordinances may come from many directions – claims of public "taking" of private property without just compensation, denial of due process of law, and denial of equal protection of the law are the most common. These claims are rooted in the Fifth and Fourteenth Amendments to the United States Constitution.

The "guarantee in the Fifth Amendment [that private property will not be taken without just compensation] was designed to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole." *Armstrong v. United States*, 364 U.S. 40, 49 (1960). Though they have no affect on land ownership, zoning regulations can become takings if they go "too far." *Pennsylvania Coal Co. v. Mahon*,

260 U.S. 393 (1922). Regulations go "too far" if they frustrate legitimate investment-backed development expectations. *Penn Central Transp. Co. v. City of New York*, 438 U.S. 104 (1978).

In the context of the SWA, there are some areas where property owners are likely to have legitimate investment-backed development expectations for densities above one unit per forty (40) acres. This is particularly true in areas where infrastructure is available and development is already underway at densities above one unit per forty (40) acres. If a VLRD program is appropriate in such areas, it should be implemented in a manner that provides some compensation to the landowners for their loss of development value. The compensation can take the form of a cash purchase of development rights (*see* Chapter V, *infra)*, and/or an alternative development option (such as clustered development) that permits a greater return on investment than one unit per forty (40) acre zoning.

Due process arguments are generally advanced against zoning decisions when they appear "arbitrary and capricious" (without any rational basis) or when the procedural requirements of state law or local ordinance have not been met. Therefore, to withstand due process challenge, a VLRD program (as, indeed, *any* land use control) should be implemented only after considered analysis. Moreover, procedural requirements for amending the local zoning code should be carefully observed. Neither of these issues should be a problem in the SWA.

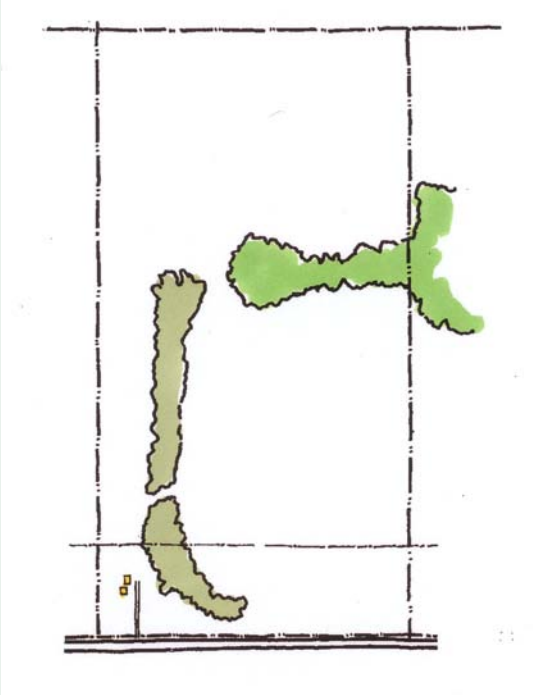
Equal protection arguments typically arise in two situations. The first is where it appears that the zoning classification is intended to be discriminatory or exclusionary. For example, the Equal Protection Clause would probably be implicated if a city were to zone all of its land for one unit per five (5) acres, with a minimum building footprint of five thousand (5,000) square feet. By contrast, in the SWA, VLRD is suggested as a tool for protecting viable farms and environmentally sensitive land in designated areas. Since there is ample land in other classifications for affordable housing, and since several of the other land management tools suggested by the RAPP actually promote housing affordability, exclusionary zoning should not be an issue.

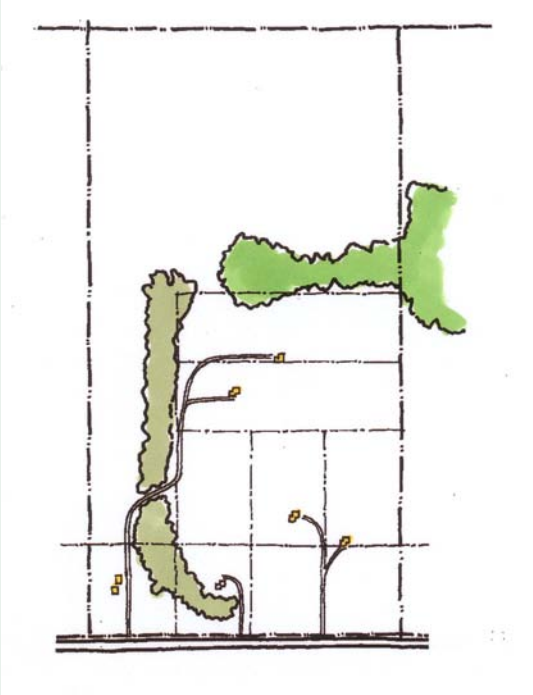
The second situation where equal protection claims arise is where it appears that similarly situated landowners are being treated differently. For example, if two neighboring property owners are subject to different zoning requirements, there should be some rational basis for the difference. If such a basis exists, the regulation will generally withstand the challenge.

From the standpoint of equity, VLRD is fair and appropriate in AL and ESL management units. In the former, where operational farms are the norm, VLRD simply preserves the status quo. In the latter, where development expectations at higher densities are not rational (given site constraints and environmental permitting requirements), VLRD gives landowners a right to make reasonable use of their property. Moreover, where, in either management unit, a legitimate investment-backed development expectation exists, the operation of other land management tools suggested by the RAPP (such as cluster development in AL units or purchase of conservation easements in ESL units) should provide the landowner with a reasonable return.

Within SRL management units, VLRD can be combined with design standards (*see* IV-13, *infra*) to preserve scenic resources. However, if so used, VLRD should be combined with other management tools (such as cluster development and purchase of development rights) to avoid placing a disproportionate share of the burden of preserving scenic resources on those who own them. VLRD is inappropriate within RIL and RDL management units because they are areas designated for intensification of development.

IV-D





VLRD Applied

The above left illustration is a five hundred (500) acre farm with a farm house located approximately six hundred (600) feet from the public right-of-way. To the right is the same farm, platted with five (5) forty-acre lots. The homes constructed on these lots are not particularly rural in character. However, since they are either set back from the road by at least one thousand (1,000) feet, or screened from view by mature trees, the visual impact on the area is not a significant concern.

Sample Application

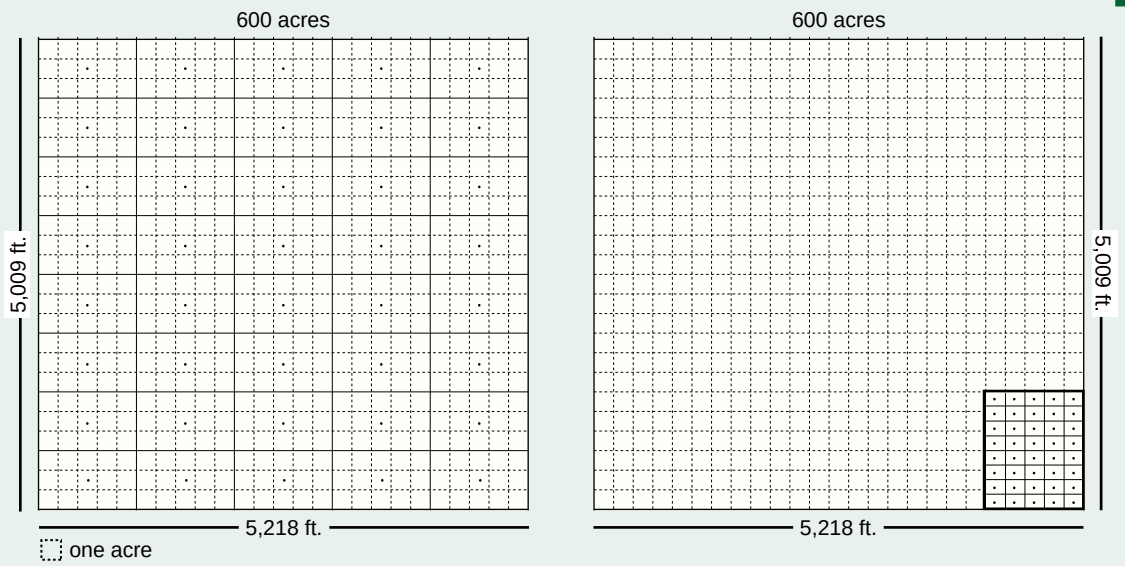
A landowner owns five hundred (500) acres in an area designated Scenic Resources Lands. Thirty (30) acres of the property is mature upland forest, and twenty (20) acres are forested wetlands. The property is located ten (10) miles from the suburban fringe. Accordingly, the landowner has little in the way of development expectations.

Still, the landowner wishes to recover some of the equity in his land by converting a portion of it to residential use. The land is zoned one unit per forty (40) acres per the VLRD district in which it is located. Accordingly, the landowner may subdivide into up to twelve (12) lots for residential development.

The landowner wants to modestly scale back his farming operation, and opts to plat five (5) forty-acre lots along the existing rural road and construct five (5) luxury single-family homes, one on each lot, and keep the remaining three hundred (300) acres in active agricultural production.

At one unit per forty acres, the development of the five single-family homes has little impact on the scenic value of the area, even though the homes are situated relatively close to the road. Still, to increase the value of the homes by preserving the character of the road that serves them, the landowner decreases the impact further by setting three of the homes behind mature trees, and designing all of the homes in a traditional architectural style.

IV-E



Preserving Farmland and Open Space through Clustered Development

The figure at left is a simplified illustration of forty (40) homes on fifteen (15) acre lots. It demonstrates that large lot zoning can lead to wasteful consumption of land and destruction of the character of open spaces. The figure at right is a simplified illustration of the same forty (40) homes on three quarter (3/4) acre lots, in a cluster development that leaves ninety five percent (95%) of the six hundred (600) acre parcel in open space. Additional value is added to the clustered development when the lots are arranged in such a way as to maximize the "borrowed open space" available to each lot.

Cluster Development Option

General Description

Clustering is a method for allocating the development potential of a site to specific areas in order to serve particular preservation goals. For example, the development capacity of a 600 acre parcel that is zoned for one unit per 15 acres is 40 units (600 ÷ 15 = 40). If the parcel is developed under standard 15 acres per unit zoning, the landscape will be dotted with homes. However, if the 40 units are placed on 3/4 acre lots on a portion of the site, the development area will be only 30 acres, leaving 570 acres (95% of the site) as protected agricultural land or open space. *See* Figure IV-E. Adding location and design standards to the mix, the impact of the clustered development on the rural landscape is further minimized.

CLUSTER DEVELOPMENT OPTION

➲ *Purpose — to preserve the aesthetic character of open spaces and more efficiently utilize land and infrastructure resources*

➲ *Application — AL, SRL, and RIL management units, normally in conjunction with other rural land management tools*

Cluster development allows for great variety in site design and housing types. It also typically reduces the cost of installing and maintaining infrastructure within the development. For the individual lot owner in a clustered development, property maintenance is a less onerous chore than it is for owners of large lots. Perhaps these factors help explain why study has shown that mixing smaller lots with common areas and open vistas adds value to clustered developments compared to large lot developments with comparable homes. ARENDT, *supra* at 237.

IV-F





The Impact of Piano Key Lots on the Character of the Rural Landscape

The image at the upper left is an example of existing piano key style residential development in the SWA. Its pattern of deep, narrow lots along the rural road effectively eliminates the open space character of the area. For comparative purposes, the digitally-altered image at the lower left is a rough approximation of what the area looked like before the homes were constructed.

Rural clustering is a subject of much debate throughout the country. On one hand, advocates point to the preservation of the land from which development rights are clustered as a "benefit" of rural clustering. On the other hand, opponents argue that rural clustering accelerates the pace of development in the rural landscape because large lot development is not really "economically feasible." However, experience shows that in the Hampton Roads District, large lot piano key subdivisions *are* economically feasible, and in fact, being developed at a rapid pace.

Clustered development has been applied in many places around the country as an agricultural land and open space protection tool. In the New Jersey Pinelands, non-agricultural residential development within Agricultural Protection Districts is limited to one unit per forty (40) acres. However, the residences must be clustered on one acre lots, and the remaining thirty-nine (39) acres must be permanently dedicated to agricultural use by recorded deed restriction. The cluster requirement, including the deed restriction provision, was upheld against a takings challenge by the New Jersey Supreme Court in the case of *Mary Gardner v. New Jersey Pinelands Commission*, 593 A.2d 251 (N.J. 1991).

Program Elements

The principal values of clustering are to preserve the aesthetic character of open spaces and to more efficiently utilize land and infrastructure resources. As such, the keys to an effective clustering ordinance are:

1. Mandatory preservation in perpetuity of the area from which the density for the clustered units is allocated.
2. Standards ensuring that the cluster subdivision is significantly buffered from agricultural activities.
3. Standards which ensure that the cluster subdivision is located so that the visual impact of development is minimized and that the cluster subdivision is not visible from public roads.
4. Design standards controlling the location and character of structures to ensure visual compatibility with the rural landscape.
5. Access standards to ensure that vehicular traffic does not conflict with agricultural vehicles and that access to the rural road network does not unnecessarily impact the capacity of the network.

From a procedural standpoint, cluster development should be available as an option for development in AL, SRL, and RIL management units. Applications for cluster development approval should include a survey of the parcel from which density is to be allocated, a designation of the site within the parcel upon which development is to occur, a bubble diagram showing the approximate location and mix of uses, and a graphic representation of any existing and proposed landscape buffers between the proposed development and public rights of way. The initial application will save resources by identifying potential issues before the developer proceeds to more specific site plan development.

Following administrative review of the initial application, site plans for cluster development should be presented to a planning board for a more specific evaluation of compliance with design standards. The decision of the planning board could be appealable to the municipality's governing body.

Practicality Analysis

It has been observed that:

> The benefits of clustering are well-documented: Clustering can preserve land without severely limiting development rights, and it encourages innovative, environmentally sensitive design. There are disadvantages, however, most notably that sophisticated planning staffs are required to assess site layouts, and potential political opposition may emerge from landowners who do not want cluster developments as neighbors. Further, encouraging cluster development as a panacea to poor site design can actually promote development in areas where none should occur at all.

CHRISTOPHER DUERKSEN AND MATTHEW GOEBEL, AESTHETICS, COMMUNITY CHARACTER, AND THE LAW 58 (1999).

The Cluster Development Option helps to protect agricultural land and open space character. Moreover, it promotes more efficient use of public infrastructure. As such, it is appropriate for use in AL, SRL, and the outskirts of RIL management units. Clustered development is functionally inappropriate in ESL management units, where development should be strictly limited to protect natural resources, and RDL management units, which are designated for future large-scale development.

From a legal standpoint, variations of the cluster development option have been consistently upheld by courts. Moreover, while the Virginia legislature has been hostile to the idea of authorizing structured programs for transferring development rights among different parcels of land, it has not taken such a position with regard to transferring development density from one part of a single parcel to another part of the same parcel. Indeed, the cities of the SWA need no additional authority in order to enact zoning provisions that operate to allocate density within parcels proposed for development.

When cluster development option ordinances meet political difficulties, it is usually due to a lack of effective information dissemination with regard to the purpose and effect of the ordinance. Often, landowners and developers have become accustomed to the routine of developing large-lot subdivisions, including the relatively simple design and permitting process. Therefore, they sometimes view the cluster development option as presenting an unwelcome change that involves additional complexity, procedural steps, and related expense that will stand between them and development approval.

On the other side of the equation, there have been abuses of prior cluster development ordinances in the SWA, resulting in developments that did not promote the conservation values that the cluster development option is intended to serve. Thus, the SWA's local governments might be reluctant to try the tool again.

A practical cluster development option ordinance for the SWA, however, can address the concerns of both the regulated and the regulator. As to the former, it should provide an *optional* (rather than required) development pattern for land in AL, SRL, and RIL management units, to give additional flexibility to landowners or developers. To increase the use of cluster development, the local governments may also wish to consider granting limited density bonuses for proposed developments that satisfy certain performance criteria.

To address the concerns of the regulators, the cluster development option should be adopted as a conditional use. Under the conditional use framework, projects that opt for a cluster development pattern will undergo additional review, both at the staff level and before appropriate boards. Thus, the local government will have enhanced control over the design and approval of the developments that proceed under this option.

Since in many cases the cluster development option contributes to the value of the resulting development, it presents little problem from an equity standpoint. Even small landowners can enjoy the benefits of the cluster development option in several ways. First, they can enter into joint venture agreements to combine their parcels with others and then share in the profits of the development. Second, they can purchase conservation easements from adjacent properties to meet the preservation requirements of the ordinance. Third, they can sell conservation easements over their land to adjacent landowners to add units to the adjacent landowners' development.

Sample Application

A farmer owns six hundred (600) acres of land that is currently used for growing soybeans, and, fairly recently, ornamental plants. The land is located in an Agricultural Lands management unit, and is zoned one unit per forty (40) acres. As the land was previously used for corn and soybean production, there are few mature trees on the parcel. Most of the mature trees that are on the parcel are located along a stream that winds along the parcel's northern boundary. The parcel is served by two (2) two-lane rural roads.

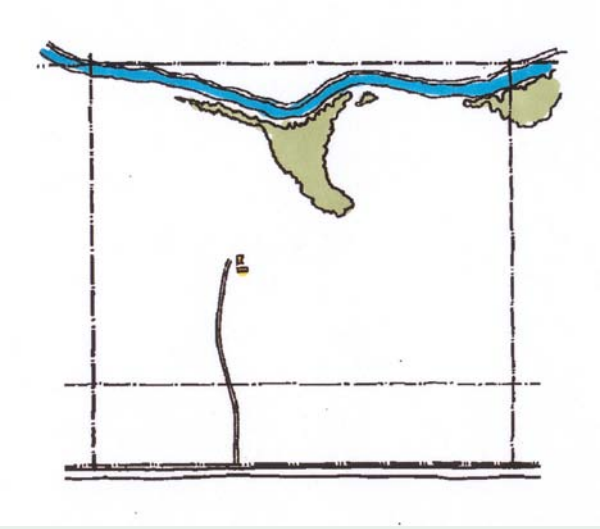
Last year, the farmer did extremely well in the ornamental plants business. Since ornamentals require less land than traditional food crops, the farmer would like to capture some of his land equity by developing a small area of the farm as estate homes. The landowner is willing to be creative and would like to allocate all of his development rights to a limited area.

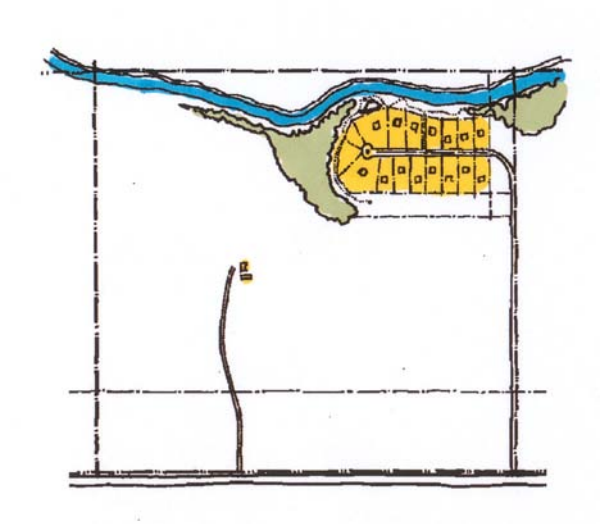
The local government's cluster development ordinance permits development of clustered single-family homes provided certain conditions are met. Namely, (1) the parcel from which the units will be drawn must be at least two hundred (200) acres, from which units may be allocated at a rate of one dwelling unit per forty (40) acres; (2) the density of clustered development cannot exceed one unit per acre; (3) adequate public facilities must be available to serve the development; (4) the development must be located at least one-thousand feet from the roadway, or be screened from view from all public vantage points by a natural feature; (5) the land to be developed must be contiguous; (6) the development must be buffered from the agricultural use by at least three hundred (300) feet; and (7) the land proposed for development cannot be environmentally sensitive.

The farmer can easily satisfy requirements (1), (2), and (7), and has been assured that capacity exists in the local schools to accommodate students from fifteen (15) new homes. The site is suitable for wells and septic tanks. Thus, the remaining criteria will drive the location and design of the clustered development.

Since the land does not have sufficient natural features to screen the development from view, the landowner opts to locate the development one thousand (1,000) feet from the pub-

IV-G





Applying the Cluster Development Option

The above left illustration is a six hundred (600) acre farm with a farm house located over two thousand (2,000) feet from the public right-of-way. A large stream winds along the northern boundary of the farm. Along the stream towards the center of the parcel is a stand of mature trees.

The farmer's land is zoned VLRD, which allows a density of one non-agricultural unit per forty (40) acres. Thus, his property may contain up to fifteen (15) residential units. The farmer opts to locate the fifteen units in a cluster subdivision along the northeastern boundary of the property.

The lots are set back approximately three thousand (3,000) feet from the public road, so no screening is required. A three hundred (300) foot buffer is drawn around the outside of the development parcel, containing land that will be landscaped, but neither developed nor farmed. Conveniently, the stream and woodlands are included in the buffer on the north and west sides of the project. The three hundred (300) foot setback from the adjacent farms to the north and east prevent encroachment upon the agricultural uses of those properties.

lic roads. He chooses to develop a location near the northern boundary of the property, adjacent to the stream.

If the farmer had chosen to develop fifteen (15) forty-acre lots, all six hundred (600) acres of his farm would have been converted to residential use. Moreover, because residential uses are bad neighbors for agriculture (hence, the three hundred (300) foot buffer requirement in the cluster development option ordinance), it is unlikely that the farmer could lease any of the residential property back for agricultural use for any sustained period.

However, under the cluster development option, the farmer was able to build a desirable, high-return residential product on just over (40) acres (including the three hundred (300) foot nonagricultural buffer area). Accordingly, the farmer was able to keep most of his land for agricultural production.

Rural Landscape Design Standards.

General Description

In the rural landscape, *context is everything*. The principal defining elements of rural landscape are the land and its vegetation, not man-made structures. Even the developed areas are largely defined by their edges. Indeed (when there is a clear distinction between development and open space), the edge of a clustered development is the first place where a traveler may experience a "sense of place."

Rural landscape design standards preserve the context of the rural environment by de-emphasizing structures in areas where open space aesthetics are desired, by creating well-defined edges to developed areas, and by encouraging (or requiring) development within rural areas to reinforce long-standing notions of rural scale, community, and pedestrian-orientation. Put simply, design standards may be used to promote different values in different situations. Accordingly, design standards should be developed that increase the effectiveness of other recommended land use controls, and in some cases, should be incorporated directly into those controls.

RURAL LANDSCAPE DESIGN STANDARDS

➲ *Purpose — to preserve the aesthetic character of open spaces and more efficiently utilize land and infrastructure resources*

➲ *Application — all management units, normally in conjunction with other rural land management tools*

Many jurisdictions around the country have implemented rural design standards. In New Jersey, the Pinelands Commission, a regional body charged with creating a plan for land management in the Pinelands, recognized that the region's definable visual character "contributes substantially to the attractiveness of the area and therefore is an important element of the area's economy." NEW JERSEY PINELANDS COMPREHENSIVE MANAGEMENT PLAN 423 (1980). Among the basic design standards the Comprehensive Management Plan uses to protect the Pinelands' visual character are building setbacks of two hundred (200) to one thousand (1,000) feet from the center line of scenic corridors.

While building setbacks and spacing perhaps have the most significant impact on the visual character of areas of predominately open space, more specific standards are used to protect (or create) character in the built environment. As such, in some areas design standards should control the details of the streetscape and buildings, the placement of utilities, and the selection and placement of landscaping. STOKES, *supra* at 156-62. Around the country, such standards are growing in popularity.

The increased regulation of the design of development has not been free of hard lessons. One such lesson is that even a top-notch program of design standards will be ineffective unless there is political will to sustain it. In Allegheny County, Pennsylvania, a multijurisdictional program of strict design standards was implemented through an eighteen (18) month collaborative effort among the county and seven (7) of its cities. The purpose of the effort was to protect and enhance the scenic qualities of the Three Rivers Parkway. The program was popular, and received a national award for its approach.

However, the program unraveled after Wal-Mart proposed to construct a mega-store along the Parkway in one of the cities. Faced with the decision between short-term enhancement of its tax base and a longer-term investment in protection of its scenic resources, the city's government chose the former. It granted the development dozens of variances, effectively unraveling its design review program. Other jurisdictions soon followed suit. There are now several more big box retail developments along the Parkway.

The Alleghany County experience demonstrates that not only is political will essential,

but also – as a corollary – that design standards should be no stricter than what the community is willing to enforce.

Experience also teaches that design standards should impose no greater burden than is necessary to accomplish the desired result. For example, areas where pedestrian-orientation is the principal value, design standards properly reach details such as architecture and landscaping, and even (in some cases) building colors and street furniture. By contrast, in areas where open space is the principal value, design standards should be far less detailed, reaching primarily building setbacks, the placement of utilities, and landscaping, depending on the setback. Simply put, the architectural detail of a building that is set back one thousand (1,000) feet from a public roadway is generally not of significant public concern.

Program Elements

There are many ways to implement a program of rural landscape design standards. Basic standards, such as building mass, setbacks and use, are generally included in municipal zoning codes. More detailed standards should be addressed during later stages of development approval, such as subdivision or site plan review. Such standards may be incorporated into the zoning code or subdivision regulations and be supplemented with a handbook that is incorporated into the regulations by reference. The handbook should include illustrations and photographs of examples of favored design techniques.

The design review process should be simple, and should result in fair and consistent application of the design standards. As a threshold matter, this means that the standards themselves should be readily available and presented in a manner that is easily understood. Additionally, developers should be able to schedule at least one informal pre-application meeting with the planning staff for early identification of design issues. This early step will help the developer reduce costs by alerting it to the local government's concerns *before* it has spent significant sums on project design.

Soon after the pre-application meeting, the developer submits its application for development approval, beginning formal review. The submitted application is reviewed by the planning staff, and, if necessary, technical consultants. The staff and/or consultants prepares a written analysis for use by the decision-making body. The analysis should be prepared in a standard format to promote fair and consistent application of the design standards. To this end, templates and checklists are particularly helpful.

Ultimately, the application for development approval, at least for larger developments, will come before the decision-making body at a duly noticed public meeting. There, it is key that the decision-makers represent a broad cross-section of the community, and that they have adequate training to undertake the careful (and occasionally complex) analysis that design review requires.

It is also important that the public be given an opportunity to meaningfully participate in the review process. To that end, public notice should take many forms, including not only the traditional newspaper advertisements, but also letters to surrounding property owners, signs posted on the subject property, and notices on the local government's web sites. Additionally, staff reports should be made publicly available at least three business days before the public meeting.

At the hearing, the decision-making body should be empowered to approve, approve with conditions, or deny the application presented to it. If one of the latter two options is chosen, and if the developer believes the outcome to be unreasonable, the developer should have the option of appealing the decision to the local government's governing body. The local government should be given broad authority to review

the board's decision, including the ability to hear new evidence.

The design review process does not end at the close of the public meeting. To be effective, design review must also include adequate enforcement. Thus, local governments should be prepared to commit resources toward ensuring that projects are actually constructed pursuant to their approved designs. This includes making trained staff available for site visits and inspections.

Practicality Analysis

Design standards – from building setbacks and placement to architectural and streetscape requirements – are appropriate and practical in all parts of the SWA. The principle values of each management unit can be reinforced by guiding new development using appropriate design standards. For example, within RDL management units, where large-scale new development is anticipated, design standards should be implemented to ensure high-quality, mutually supportive development with a "sense of place." Such standards would reach streetscapes and architectural details. On the other hand, within ESL management units, the focus of design standards should be to mitigate the impacts of human activity on natural systems. In other words, they should reach beyond issues of aesthetics and character to issues of science and engineering.

> "Jurisdictions contemplating an expansive form of [design] review need to commit to staff having design education and experience."
>
> -Mark L. Hinshaw, *Design Review* (1995)

At the adoption stage, the political viability of design standards will vary depending upon how they are implemented. If the process of design review entails significant new procedural or cost burdens for developers, they are very likely to oppose them. However, if the review process is relatively simple and the standards contain sufficient detail to put developers on notice as to what is expected of them, opposition is likely to subside. Thus, the RAPP recommends a program of specific design standards with a review process that does not place significant burdens on applicants.

From a legal standpoint, design standards have been consistently upheld by the courts, provided they contain sufficient specificity to satisfy the due process requirements of the Fourteenth Amendment. This means that the standards must, as a general rule: (1) operate to constrain the discretion of the decision making body, and (2) inform the developer (and the public) as to what is expected of it. Outside of the due process arena, courts generally recognize that regulation of the design of development is within the traditional municipal "police powers," and is a rational way to serve a legitimate public purpose.

Properly implemented, design standards are also fair. Design regulation ensures that new development will exhibit certain minimum standards of quality and compatibility with its environment. As a result, the improved product brings a greater economic value, often accompanied by a positive "spillover" effect on surrounding properties.

Sample Application

A community becomes alarmed at the changing character of its agricultural landscape. Its formerly expansive fields of corn and wheat are under heavy pressure to change into fields of large single family homes. Though they are set in the rural landscape, the homes that are constructed are generally designed in a typical suburban "ranch style." The combination of the large numbers of ranch homes with the near total lack of mature vegetation threatens to transform the rural landscape from a pleasant green open space into a bleak mass of stucco, concrete, and asphalt.

IV-H

Applying Design Standards to Preserve Community Character

The pictures at top left and bottom right, below, are typical rural subdivisions, constructed with little attention to design and little concern for their impact on the community's character. By contrast, the homes pictured at top right and bottom left are traditional homes, constructed with attention to detail and to preservation of existing mature vegetation. By its design, the house pictured at top right promotes pedestrian travel because of its proximity to the street, wide, shaded sidewalk, human-scaled front porch, and attractive architecture. The homes pictured at top left have sidewalks that will in all probability remain unused. They have no shade, no front porches overlooking them, and no interesting views. Design standards that set short front setbacks, require garages to be placed at the rear of the house, promote front porches, and require meaningful landscaping and preservation of mature trees would go a long way toward creating an attractive, functional rural landscape characterized by homes that look more like the one at top right than the ones at top left.

In areas that will be developed with large lots, mature landscaping and architectural design standards for homes that are close enough to the street to be readily visible can have a significant impact on community character. Contrast the picture at bottom left with the one at bottom right. Though none of these homes promote pedestrian travel, the one at bottom left fits nicely into the rural landscape.









The community responds by developing a set of design and landscaping standards for new development. The standards address tree preservation, streetscape design, pedestrian circulation and amenities, architectural style, and landscaping. They are presented in a user-friendly handbook format for ease of use and administration.

At the one thousand (1,000) foot distance, the visual impact of a single-family home's architecture is negligible. Therefore, the ordinance language used to adopt the design standards provides that where a development's structures are all located at least one thousand (1,000) feet from a public road, the development is exempt from most of the standards (though they are still encouraged). Thus, a developer who wishes to construct suburban "ranch style" homes in the rural landscape may still do so, provided that all of the homes in the development are located more than one thousand (1,000) feet from the public roadway.

VERY LOW RESIDENTIAL DENSITY MODEL ORDINANCE

1. Findings and Purpose.

(a) The *Governing Body* finds that productive agricultural enterprise is a key component of the economics, aesthetics and culture of the City of _____, and that protecting the City's agricultural resources promotes the health, safety, and welfare of the City's citizens.

(b) The *Governing Body* finds that certain patterns of non-agricultural development within lands included in Prime Agricultural Lands management units threatens the long-term viability of productive agriculture.

(c) The *Governing Body* finds that similar development patterns also threaten the scenic value of lands included in Scenic Resources Lands management units.

(d) The *Governing Body* finds that similar development patterns also threaten the environmental value of lands included in Environmentally Sensitive Lands management units.

(d) The *Governing Body* finds that certain non-agricultural uses can be developed within each of these districts without significantly affecting their agricultural, aesthetic, or environmental resources, and that those uses can add economic value to the properties within those districts.

(e) The purpose of this Ordinance is to protect and enhance the functional and visual character of rural landscapes within the City of _____ and to promote appropriate development and use of rural, scenic and environmental landscapes.

2. Definitions.

The following terms shall have the meanings set out herein for the purposes of this Ordinance.

(a) "Agricultural residence" means a residential dwelling unit which is restricted to use by persons who own or are gainfully employed in agricultural production on lands which are located within five (5) miles of the place of residence.

(b) "Agricultural employee housing" means residential units that are located on the premises of an agricultural production operation and are restricted to the use of employees of the operation.

The RAPP recommends non-exclusive agricultural zoning in AL and SRL districts. Non-exclusive zoning allows some non-agricultural uses, which gives landowners options for recovering their equity. The Ordinance presented accomplishes the goal of preserving agricultural operations and open space, but does not go further than necessary to do so.

Villages and Hamlets are small areas of mixed-use development in the rural landscape that are permitted according to specific regulations. For more information on Villages and Hamlets, see Chapter V.

Some non-agricultural uses, when properly designed and located, actually complement the scenic resources of the rural environment. These uses include small inns, restaurants, and resource-dependent recreation. The RAPP recommends that these types of development be permitted as conditional uses. The conditional use process will help to ensure proper design and location.

(c) "Parcel proposed for development" means any land which is capable of precise description which is designated for development, including noncontiguous parcels of land which are included in a cluster development permitted by special permit, provided that a deed restriction is recorded on any properties which are not contiguous to the land on which the clustered residential development is proposed, recording the fact that the land has been included in the parcel proposed for development for purposes of obtaining the maximum permitted number of dwelling units.

(d) "Agricultural production" means the commercial production of crops, ornamental plants, or livestock.

(e) "Agricultural support" means commercial uses that are primarily related to providing goods or services used in agricultural production.

(f) "Hamlet" means a development undertaken according to section _____ of this Code.

(g) "Village" means a development undertaken according to section _____ of this Code.

3. Permitted Uses.

(a) The following uses shall be permitted as of right in AL and SRL districts:

1. Non-agricultural single family detached dwellings on parcels of land of at least forty (40) acres in area.
2. Agricultural residence on a parcel of land of one (1) acre or more.
3. Agricultural employee housing.
4. Agricultural production.
5. Agricultural support.

(b) Development within each district shall be subject to area-specific regulations.

4. Conditional Uses.

(a) The following uses shall be permitted by conditional use in AL and SRL districts:

1. Establishments offering overnight accommodations not located in a Hamlet, Village, or planned development, provided that:

a. The parcel of land proposed for development is at least five (5) acres in land area;

b. The number of rooms available for overnight guests does not exceed ten (10);

c. Food service facilities do not occupy more than twenty-five percent (25%) of the total floor area of the establishment;

d. The parcel proposed for development is located at least one thousand (1,000) feet from a public road, is screened from view from all non-local public streets by a year-round natural feature; or all structures associated with the development are designed and constructed in an architectural style which reflects a rustic and/or rural character which is compatible with the surrounding rural landscape;

e. The parcel proposed for development is not located within one thousand (1,000) feet of more than one other establishment providing overnight accommodations;

f. The parcel proposed for development is not designated as environmentally sensitive, or is designed and constructed in a manner which ensures that the use will not have a material adverse impact on the form or function of a natural system in which the development is to be located;

g. Adequate provision by acceptable and appropriate means is made for the provision of potable water, wastewater treatment facilities; and

h. No land which is used for agricultural production purposes is located within three hundred (300) feet of the parcel proposed for development.

2. Restaurants not located in a hamlet, village, or planned development, provided that:

a. The area of the parcel proposed for development is at least ten (10) times the floor area of the restaurant;

b. Any off-street parking area is screened so that headlamps will not shine into the windows of any nearby residential uses;

c. All structures associated with the restaurant are designed and constructed in an architectural style which reflects a rustic and/or rural character which is compatible with the surrounding rural landscape;

d. No restaurant which is located within five hundred feet of a non-local road shall be located within one thousand (1,000) feet of another restaurant measured along the road from which the restaurant takes its primary access;

e. Adequate provision by acceptable and appropriate means is made for the provision of potable water, wastewater treatment facilities;

f. No land which is used for agricultural production purposes or contains prime agricultural soils is located within three hundred (300) feet of the parcel proposed for development.

3. Resource dependent commercial recreational uses, provided that:

a. The parcel proposed for development does not exceed five (5) acres;

b. The total square footage of all buildings does not exceed five thousand (5,000) square feet;

c. The parcel proposed for development is not located within three hundred (300) feet of any land used for residential or agricultural purposes;

d. The parcel proposed for development is not designated as environmentally sensitive unless the resource on which the recreational use is based is itself a part of a system of which the environmentally sensitive land is a part and is designed and constructed in a manner which ensures that the use will not have a material adverse impact on the form or function of natural system in which the development is to be located;

e. Adequate provision by acceptable and appropriate means is made for the provision of potable water, wastewater treatment facilities.

(b) Development within each district shall be subject to area-specific regulations.

5. Liberal Construction.

This Ordinance, being necessary for the welfare of the municipality of _____ and its inhabitants, shall be construed liberally to effect the purposes thereof.

6. Repealer.

All ordinances or parts of ordinances in conflict herewith be, and the same, are hereby repealed.

7. Severability.

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this Ordinance shall be judged invalid by a court of competent jurisdiction, such order or judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this Ordinance and, to this end, the provisions of each article, section, subsection, paragraph, subdivision or clause of this Ordinance are hereby declared to be severable.

8. Effective Date.

This Ordinance shall become effective _____. This Ordinance shall become part of the official code of _____.

PASSED AND DULY ADOPTED THIS ____ DAY OF _____, _____.

[MUNICIPALITY]

BY: _____

CLUSTER DEVELOPMENT MODEL ORDINANCE

1. Findings and Purpose.

   (a) The *Governing Body* finds that preservation of the agricultural and scenic resources of the City of _____ promotes the general health and welfare of the community.

   (b) The *Governing Body* finds that limited non-agricultural development can coexist with agricultural and scenic resources in such a way as to either maintain or enhance those resources.

   (c) The *Governing Body* finds that, as an alternative to low density zoning, flexible site design and development regulations can serve to maintain or enhance agricultural and scenic values.

   (d) The *Governing Body* finds that clustered development patterns promote increased efficiency in the use of natural resources.

   (e) The *Governing Body* finds that the public health and welfare is promoted by locating development within a parcel to the areas most suited to accommodate it, and by placing the remainder of the parcel under permanent agricultural or conservation easement.

   (f) The *Governing Body* finds that the conditional use process is the appropriate means to implement the enhanced flexibility provided by the regulations herein.

   (g) The purpose of this Ordinance is to permit, as a conditional use, the flexible allocation of density within a proposed development site to achieve increased efficiency, improved aesthetics, and preservation of agricultural and scenic resources.

2. Definitions.

   (a) "Parcel of land proposed for development" means a contiguous parcel of land that is capable of precise description from which development rights will be aggregated and applied toward a clustered development according to the standards and procedures set forth herein. The parcel of land upon which the proposed development will take place need not be owned by a single person or entity, provided that all owners agree in writing in a form acceptable to the *Governing Body* to be bound by the

terms of this Ordinance and any orders promulgated thereunder. Noncontiguous parcels of land may be included in calculating density for a clustered development, provided that a deed restriction is recorded on any properties that are not contiguous to the land on which the clustered residential development is proposed. The deed restriction must record the fact that the land has been included in the parcel proposed for development for purposes of obtaining a higher number of permitted dwelling units, and must limit the use of the restricted land to agriculture, open space, or development at a gross density equal to the number of units permitted by the zoning category in effect at the time of transfer minus the number of units transferred to the clustered development.

Whether to require the conservation easement over continguous property, property within the same management unit, or any rural property is a question of policy for the local government.

(b) "Applicable site design standards" means standards set forth in the City of _____'s zoning code and subdivision regulations that control the placement and design of streets, structures, parking, utilities, and landscaping. For the purpose of this Ordinance, the provisions of subsections 6(a) and (b) shall control side and front setbacks, respectively, notwithstanding any contrary provisions of any other section of this Code.

The density of the developed portion of the parcel should relate to the method of wastewater treatment. Where septic systems are used, adequate land should be provided for septic tank operation. Where sanitary sewer systems are used, densities may be increased.

3. Conditional Use.

The following development shall be permitted as a conditional use in AL, SRL, and RIL management units:

(a) Clustered dwellings on parcels of land of no more than forty (40) acres, provided that:

1. The parcel of land proposed for development is at least two hundred (200) acres in land area;

2. The gross density of non-agricultural residential dwellings does not exceed one (1) unit per forty (40) acres;

3. No more than forty (40) acres of land are proposed for non-agricultural development;

4. All land proposed for non-agricultural development shall be contiguous;

5. The land proposed for non-agricultural development is located at least one thousand (1,000) feet from a public road or is screened from view from all non-local public streets by a year-round natural feature;

6. The land proposed for non-agricultural development is not designated as environmentally sensitive;

7. Adequate provision by acceptable and appropriate means is made for the provision of potable water, wastewater treatment and educational facilities to serve the proposed development;

8. The gross density of the land proposed for non-agricultural development does not exceed one (1) dwelling unit per acre; and

9. No non-agricultural development is located within three hundred (300) feet of any land which is used for agricultural production purposes.

4. Authority to Modify Site Design Requirements.

The Model Ordinance incorporates specific limitations on the ability to modify site design requirements in Section 6.

When an application for development approval invokes the conditional use provisions of this Ordinance, the *Planning Board* is authorized, if requested, to alter otherwise applicable site design standards, including but not limited to those governing spacing, lot widths, setbacks, bulk, height, roads, and sidewalks, pursuant to section 6 of this Ordinance, provided that compliance with the conditional use requirements of Section 3 Ordinance is demonstrated.

5. Plan Review.

(a) The applicant shall bear the burden of proving that its application satisfies the conditions and standards set forth in this Ordinance. To that end, the applicant shall submit with its application drawings, models, or plans for consideration by the *Planning Board*. The drawings, models, or plans must be to scale, and contain sufficient detail to support a reasoned evaluation of the proposal's compliance with the standards set forth in this Ordinance.

(b) The planning staff shall review each application submitted under this section for its sufficiency within seven (7) business days from the date of a complete submittal.

(c) If the application does not meet the requirements of this section, the staff shall return it with a brief statement identifying the missing components. The applicant may thereafter supplement the application and resubmit it, subject to the same review procedures as any original application.

(d) If the application contains all of the information required by this section, and requests or otherwise requires an

alteration of applicable site design standards, the staff shall deliver:

1. the application, and

2. a written recommendation as to whether the application supports the approval sought, and, if not, suggested conditions that would support approval,

to the *Planning Board* no later than three days prior to the meeting of the *Planning Board* at which the application will be considered.

(e) If the analysis meets the requirements of this section, and does not require an alteration of applicable site design standards, the staff shall approve the application administratively. No public hearing shall be required.

(f) All other procedural aspects of the review process shall be in accordance with the *Local Government*'s conditional use process.

(g) The *Planning Board* may require the applicant to post a bond to ensure compliance with its decision, including conditions of approval.

Variations in building sizes can help prevent monotonous "cookie cutter" subdivisions of identical homes. However, to accomplish this aesthetic objective, the variations in building size must be visible from public vantage points. In other words, a development containing six cul-de-sacs that are visually isolated from each other would not meet this requirement unless each cul-de-sac contained a variety of building sizes.

6. Cluster Development Design Standards.

(a) Building Spacing and Lot Width. Residential structures shall be spaced and oriented to maximize the privacy, light, and air available to their occupants. Building spacing and lot width requirements may be reduced when:

1. an adequate buffer exists between the structures to block views from one structure into another; or

2. window openings are oriented in such a manner as to prevent views from one structure into another; and

3. structures are designed and oriented in a manner that provides ample natural light and air circulation to their occupants when their windows are opened.

In no event shall side setbacks be reduced such that the distance between two buildings is less than forty percent (40%) of the highest point of building on the face adjacent to the side yard.

(b) Front Setback. Front setbacks shall be no less than twenty (20) feet from the public right-of-way. Front setbacks may be reduced below twenty (20) feet when:

1. the site plan mitigates the corresponding loss of privacy by:

    a. reducing traffic flow in front of the structure through interrupted street patterns (*e.g.* cul-de-sacs);

    b. facing structures toward pedestrian ways or open spaces;

    c. providing screening or planting to buffer the view from the street into the structure; or

    d. the structure or arranging its rooms in such a manner as to provide privacy to its residents; or

2. the structure subject to the reduced setback requirement mitigates for the corresponding loss of privacy by:

    a. an architectural design that minimizes the visual access into the structure from the street; or

    b. a room layout that provides adequate privacy for the structure's residents.

(c) Building Size. Floor area requirements may be adjusted (raised or lowered) by up to thirty percent (30%) of the minimum permissible floor area if such modification results in the provision of a variety of building sizes, and the buildings are arranged in a manner that permits the variations to be observed from public areas.

(d) Height. Building height requirements may be increased by up to thirty percent (30%) of the maximum permissible building height if:

1. the increase in height does not compromise the privacy of neighboring property owners;

2. the increase in height does not impair the light and air available to neighboring property owners; and

3. the increase in height does not cause an unreasonable risk of loss in case of fire..

(f) Roads and Right-of-Ways.

1. Road widths may be reduced if the reduction does not adversely affect public safety, considered in terms of:

    a. the ability of the road to accommodate the level of demand (both vehicular and non-vehicular) placed upon it by the proposed development; and

b. the ability of the road to accommodate emergency vehicles; and

2. Right-of-way widths may be reduced if:

a. the site plan provides for adequate pedestrian facilities outside of the right-of-way;

b. the site plan provides for the location of utilities outside of the right-of-way; or

c. residential structures do not front on the right-of-way.

3. If the soils and topography of a site are suitable for natural drainage, streets shall be designed in such a manner as to promote natural drainage. In such cases, curbs shall not be required.

(g) Sidewalks. Sidewalks shall be of a width no less than six (6) feet, shall be continuous, and shall provide pedestrian access throughout the developed portion of the site.

(h) Architecture. Buildings shall be constructed in a traditional rural Virginia architectural vernacular, examples of which are on file at the City of _____ Planning Department.

7. Liberal Construction.

This Ordinance, being necessary for the welfare of the City of _____ and its inhabitants, shall be construed liberally to effect the purposes thereof.

8. Repealer.

All ordinances or parts of ordinances in conflict herewith be, and the same, are hereby repealed.

9. Severability.

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this Ordinance shall be judged invalid by a court of competent jurisdiction, such order or judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this Ordinance and, to this end, the provisions of each article, section, subsection, paragraph, subdivision or clause of this Ordinance are hereby declared to be severable.

10. Effective Date.

This Ordinance shall become effective _____. This Ordinance shall become part of the official code of _____.

PASSED AND DULY ADOPTED THIS ____ DAY OF _____, _____.

[MUNICIPALITY]

BY: _____

RURAL LANDSCAPE DESIGN STANDARDS MODEL ORDINANCE

Design standards may be applied to achieve a variety of objectives, such as preserving scenic vistas, creating pedestrian-friendly environments, and protecting natural resources. The standards set forth in this model are examples of those that may be used to preserve a community character that is rooted in agricultural uses and open space.

The definition of "non-local road" may be modified to include specific roads that the community has determined contribute to the scenic or rural character of the landscape.

A front setback of 1,000 feet is suggested because it reduces the perception of mass from the public street by ninety percent (90%), helping to preserve the open space character of the landscape.

1. Findings and Purpose.

   (a) The *Governing Body* finds that preservation of the agricultural and scenic resources of the City of _____ promotes the general health and welfare of the community.

   (b) The *Governing Body* finds that properly designed non-agricultural development can coexist with agricultural and scenic resources in such a way as to either maintain or enhance those resources.

   (c) The *Governing Body* finds that design standards for non-agricultural development in rural areas can serve to maintain or enhance agricultural and scenic values.

   (d) The *Governing Body* finds that when non-agricultural development is improperly designed and located, it compromises the aesthetics and function of the rural landscape.

   (e) The *Governing Body* finds that design standards for non-agricultural development are necessary to ensure that new development in the rural landscape is visually compatible with existing structures, agricultural uses, and open spaces that are characteristic of the rural landscape.

   (f) The purpose of this Ordinance is to ensure that development in the rural landscape proceeds in an orderly manner that results in a high-quality product that is aesthetically compatible to existing agricultural and scenic resources.

2. Definitions.

   (a) "Non-Local Road" means a roadway used for regional travel, with at least two travel lanes, that has the capacity to convey at least _____ daily trips.

   (b) "Non-Agricultural Development" means development that is not directly related to farming, forestry, or housing of agricultural employees. For the purpose of this Ordinance, agricultural support businesses, such as feed and seed stores, tractor repair shops, and the like, shall not be considered "non-agricultural development."

3. Design Standards for Non-Agricultural Development.

   (a) Front Setback. Residential buildings shall be set back at least one thousand (1,000) feet from any non-local road, or shall

In the rural landscape, the arrangement of buildings is often more important to community character than the height of the buildings. For example, a clustered arrangement of a farmhouse, a barn, and a silo is a desired part of the rural landscape, though the latter two can reach heights of over thirty feet. Thus, from the perspective of aesthetics, if a development looks like a typical farm, it should logically be permitted.

The alternative conditions for modifying the height limitation apply when the structure will not be highly visible from public roads or adjacent parcels of land.

The visibility limitations address the impacts of multiple structures on the perception of open space. The number of buildings that are permitted within a particular view-shed may be adjusted to achieve the level of open space character desired. See Figure II-D (page II-7, supra).

Where development is permitted to proceed within view of the public road, the architecture of the development may be regulated to create or preserve desired aspects of community character. The regulation ensures that development will take traditional architectural forms from the late nineteenth and early twentieth centuries.

be completely shielded from view from the non-local road by either vegetation (at all times during the year), the natural contours of the landscape, or both.

(b) Height. Buildings shall not exceed thirty (30) feet in height. The height limit may be increased by the *Appropriate Board* when any of the following three (3) conditions are satisfied:

1. The building proposed at an increased height resembles an agricultural building, in that:

   a. it is part of a group of buildings that appears to be a farmstead from the adjacent non-local road, and

   b. it resembles an agricultural building that is typically constructed at a height greater than thirty (30) feet (for example, a barn or grain silo).

   No non-agricultural building constructed under this provision may be taller than the tallest example within the City of _____ of the type of agricultural building imitated.

2. The building is completely screened from view from public roads and adjacent parcels of land by either vegetation (at all times during the year), the natural contours of the landscape, or both.

3. The building is set back from adjacent public roads and parcels of land at a distance that results in a visual impact equal to that of a thirty (30) foot tall building at a distance of one thousand (1,000) feet.

(c) Visibility. Buildings shall be located in such a manner that no more than four (4) are visible from a single vantage point on a non-local road. The *Appropriate Board* may modify this requirement to accommodate the development of a cluster of up to six buildings that are designed and located in a manner that resembles a traditional farmstead. For the purposes of this subsection:

1. the cluster developed hereunder shall be considered one building; and

2. agricultural buildings that are located in a manner that resembles a traditional farmstead shall be considered one building.

Including design review as an integral part of site plan review allows for a more efficient and comprehensive approach to development review. However, compliance with design standards may also be evaluated by a separate design review board.

(d) Color. Colors must be consistent with the colors of traditional agricultural buildings of the Southern Watershed Area during the late nineteenth and early twentieth centuries.

(e) Architecture. Buildings must be constructed in traditional southern rural styles. Roof pitch shall be 8/12 or 12/12, and roof eaves shall project outward over all exterior walls to an extent consistent with late nineteenth century/early twentieth century rural Virginia architectural styles. Windows shall reflect traditional sizes, proportions (generally a height-to-width ratio of approximately 1.8 to 1), and types (double-hung and casement windows are preferred). Windows shall be surrounded by casing boards and ordered to create visual balance across the face of the building.

(f) Materials and Finishes. Exterior materials and finishes shall reflect local building traditions from the late nineteenth and early twentieth centuries. Plywood siding, textured siding with fake wood grain, randomly cut shakes, "used" brick, and artificial brick (*i.e.*, textured stucco or concrete) are prohibited.

(g) Parking. Parking areas for non-agricultural, non-residential development shall be screened from view from any non-local road.

(h) Topographical Changes. Development shall proceed in a manner that results in minimal changes to the natural topography and tree cover of the landscape. Natural drainage areas shall not be disturbed.

3. Design Review.

Review for compliance with the standards set forth in subsection 2 of this Ordinance shall be a component of site plan review under section _____ of this Code.

4. Liberal Construction.

This Ordinance, being necessary for the welfare of the City of _____ and its inhabitants, shall be construed liberally to effect the purposes thereof.

5. Repealer.

All ordinances or parts of ordinances in conflict herewith be, and the same, are hereby repealed.

6. Severability.

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this Ordinance shall be judged invalid by a court of competent jurisdiction, such order or judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this Ordinance and, to this end, the provisions of each article, section, subsection, paragraph, subdivision or clause of this Ordinance are hereby declared to be severable.

10. Effective Date.

This Ordinance shall become effective _____. This Ordinance shall become part of the official code of _____.

PASSED AND DULY ADOPTED THIS ____ DAY OF _____, _____.

[MUNICIALITY]

BY: _____

V

RURAL LANDSCAPE MANAGEMENT *for* FUNCTIONAL *and* FISCAL INTEGRITY

"Without planning and coordination of government services attuned to the special challenges of exurban development, the result may be exurban sprawl that could make suburban sprawl seem a highly desirable alternative."

— Judy S. Davis, et al., "The New 'Burbs: The Exurbs and Their Implications for Planning Policy," *Journal of the American Planning Association* (Winter 1994), 45.

THE FUNCTIONAL DYNAMICS OF EXURBAN DEVELOPMENT

A team from Virginia Tech surveyed Chesapeake officials and farmers, and found that "agriculture is valued more highly for its aesthetic, cultural and quality of life attributes than its economic impact." Heatwole, Conrad, et al., A Strategic Plan for Agriculture in Chesapeake and Virginia Beach 85 (Jan. 17, 2001). Attributes of that rural "quality of life" include the perception of tranquility, seclusion, connection to the natural world, safety, self-sufficiency, stability, spirituality, and community. The human-scaled built environment and the vast expanses of open space in the rural areas enhance that "quality of life."

By definition, development involves changing the landscape. Of course, any change has consequences for the landscape's form and function. Therefore, if the existing form and function of the landscape is valued, then ideally the nature of the change should enhance or support what is valued about the landscape. When there are conflicts between the nature of the change and the values associated with the landscape, the local government should endeavor to minimize the harmful impacts of the new development. To accomplish this goal, the local government should have in place a regulatory framework that guides the location and design of new development to minimize its adverse impacts on the rural landscape.

It is axiomatic that agricultural production must be an economically viable enterprise or its aesthetic, cultural, and quality of life attributes will be short-lived.

A survey of SWA residents revealed that agriculture's *economic* impact is not a top community priority. However, it is axiomatic that agricultural production must be an economically viable enterprise or its aesthetic, cultural, and quality of life attributes will be short-lived. Therefore, to preserve the characteristics of agriculture that the community values most, the characteristics of the landscape that serve as the foundation for agricultural production should be specifically identified and supported. Those characteristics include good soil, proper water quality and quantity, low land values, easy access to agriculture-related goods and services, roads that support movement of agricultural equipment, and profitable markets for farm products.

Soil and Water

Fertile soils and readily available supplies of clean water are key to agricultural production. Indeed, it is these factors that originally attracted farmers to the SWA, and that have supported agriculture here ever since. However, soil and water are threatened by uncontrolled non-agricultural exurban development.

First, residential development creates competing demands for water supply, which are especially pronounced in times of drought. In this context, the larger the lawn, the greater the demand for water. Second, non-agricultural development can bring large-scale increases in impervious surfaces, such as rooftops, driveways, larger roads, and parking lots, as wells as areas where soils are compacted (and therefore less permeable than they used to be), such as golf courses. These changes in soil permeability, combined with increases in automobile traffic and automobile related uses, can reduce aquifer recharge, increase erosion and sedimentation, and add polluted, urban-style stormwater runoff to surface waters. *See* PATRICK A. STEWART, ET AL., STORMFLOW AND LAND USE CHANGE: LOW DENSITY DEVELOPMENT IN THE FERSON-OTTER CREEK WATERSHED, 1960-1996 (1999).

Cost of Land

Low land values are also important to the continued viability of farming for several reasons.

First, they discourage farmers from "cashing out" to residential developers, because the profits from farm land sales are insufficient to outweigh the profits from agricultural production. Second, low land values enable farmers to purchase land for expanding their operations, or for new farmers to (no pun intended) "enter the field." This is especially important in Chesapeake and those areas of Virginia Beach where corn, soybeans, and wheat are grown. This is so because in these contexts, study has revealed that farm profitability is proportional to farm size. *See* HEATWOLE, *supra*, at 21. Third, though the estate tax does not affect many farmers in the region, low land values could help some individual owners of large farms to minimize their heirs' estate tax burden, which may consequently reduce their incentive to sell the farmstead for residential development.

Access to Agricultural Goods and Services

Easy access to farm-related goods and services, like feed and seed stores and tractor-repair shops is important to farm operators. Additionally, for the providers of agricultural goods and services to remain in business, there must be a critical mass of farms within their service areas. Thus, for the rural economy to function properly, farms and farm-related commercial enterprises must be located such that they have meaningful access to each other. A fragmented landscape of farms and subdivisions often spreads the critical mass too thin, causing the interrelated system of agricultural production and agricultural support to break down. When this happens, farms that would otherwise be economically viable may cease operations. This is one reason why many farmland preservation programs are more successful at preserving open space than farmland.

The Functional Impact of Non-agricultural Development in the Rural Landscape

Non-agricultural residential development's impacts on the rural landscape include increased land values, depletion of water quality and quantity, increased vehicular traffic, and ultimately the conversion of businesses that provide agricultural goods and services into typical suburban retail and office uses. Thus, exurban residential development conflicts with the values associated with the agricultural landscape. Moreover, when inappropriately designed or located, exurban residential development creates a "feedback loop" that results in ever-increasing property tax rates, infrastructure deficits, destruction of community character, and loss of agricultural productivity. *See* Figure V-A. Accordingly, the object of any rural lands management strategy should be to interrupt (or at least slow) the feedback loop. *See* Figure V-B. The most efficient (and least painful) means to accomplish this goal is to appropriately design and locate exurban development to minimize the inherent conflicts.

"Peace and Quiet" is Elusive

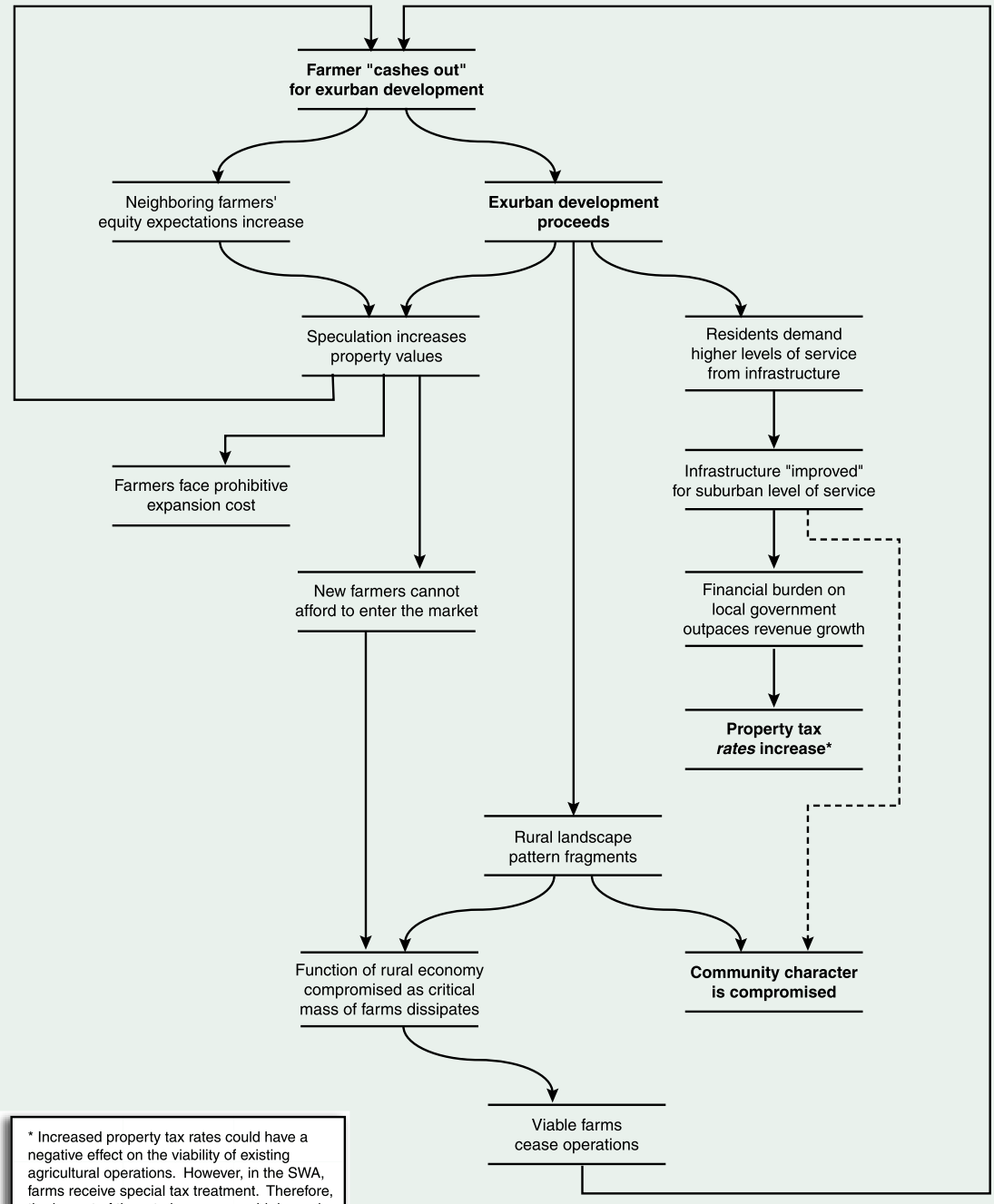
On the private side of the equation, there is no doubt that a market exists for exurban housing. Indeed, just as people fled to the suburbs to avoid the congestion in urban centers, many people now seek the "peace and quiet" that has slipped away from their suburban neighborhoods. They perceive rural areas as providing the elusive "peace and quiet," and see the availability of large, cheap lots as further incentive to move to rural areas.

When they arrive in the exurbs, many people find that their time and money is spent on commuting to work, school, and shopping areas, and few personal or financial resources remain to properly maintain their large lots. In this manner, the unexpected financial stress undermines the aesthetic character of the area, creating an ironic situation in which the tool – large lot zoning – employed to "preserve" the quality of the rural landscape actually compromises it. *See, e.g.*, KATRINA SMITH KORFMACHER AND EMILY ELSOM, VOLUNTARY INCENTIVES FOR FARMLAND PRESERVATION IN CENTRAL OHIO: WHAT DO FARMERS THINK? (1998).

V-A

The Exurban Feedback Cycle

The flowchart below depicts the feedback relationship between exurban development, loss of community character, loss of agricultural productivity, and, ultimately, serious fiscal burdens on the local jurisdiction. Land management tools that focus on fiscal and functional integrity operate to interrupt various aspects of the feedback loop.

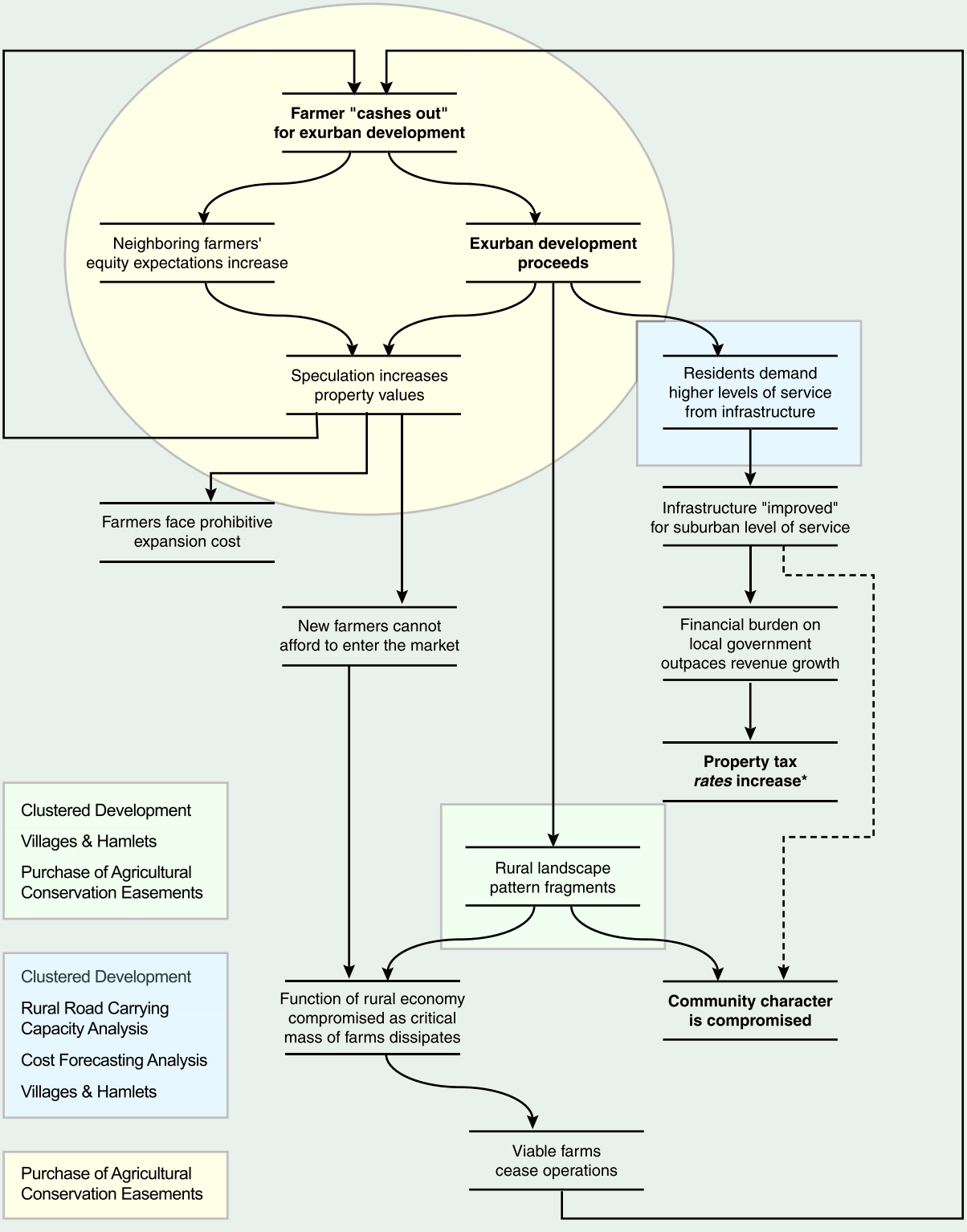


* Increased property tax rates could have a negative effect on the viability of existing agricultural operations. However, in the SWA, farms receive special tax treatment. Therefore, the impact of the rate increase would depend entirely on how that increase was structured.

V-B

Slowing, Breaking, and Avoiding the Exurban Cycle

The flowchart below depicts the areas in which various rural land management tools of the RAPP operate to slow or break the exurban development feedback cycle. Cross Roads Communities and Planned Communities of Place also help to slow the cycle in certain management units by permitting intensification of other areas – in effect offering a "pressure release valve" for new housing demand.



Moreover, long strips of piano-key development along rural roads detract from the visual character of the rural landscape, while simultaneously adding vehicular trips to roads that are often ill-equipped to handle them. As such, there is a threshold level of development that can be accommodated in each area before the "peace and quiet" that attracted the area's residents becomes, once again, elusive. Similarly, because the same factors that compromise "peace and quiet" also threaten the public sector's fiscal integrity, there is a threshold level of exurban development that can be accommodated in a fiscally responsible manner.

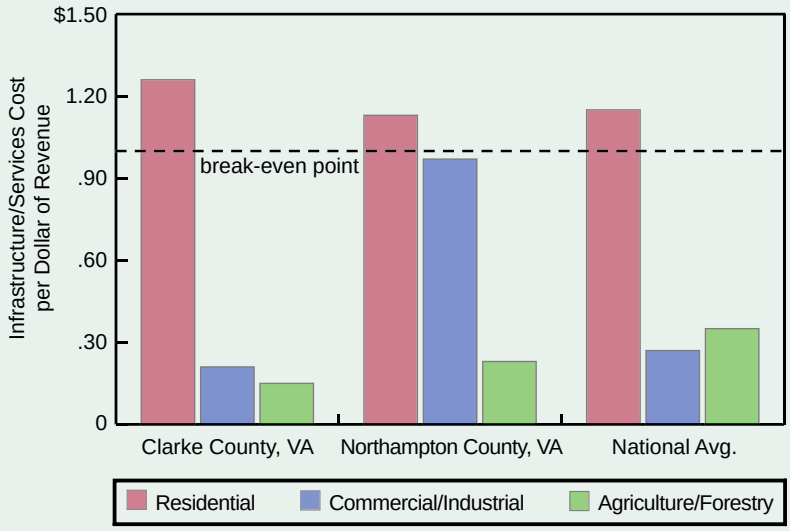
THE FISCAL DYNAMICS OF EXURBAN DEVELOPMENT

V-C

Public Infrastructure Cost Per Dollar of Revenue Generated

The graph at right shows the cost of providing public infrastructure and services to each of three generalized land uses, compared to the amount of public revenue each land use generates. In the two Virginia Counties surveyed, agricultural uses had the least proportionate impact on public expenditures of all land uses.

Data provided by American Farmlands Trust.



Nationally, the fiscal dynamics of large-lot, non-agricultural residential development in rural areas are well-understood. Multiple studies in many parts of the country have reached the same conclusion – that exurban development creates disproportionate fiscal stress for the local government that shoulders the responsibility for providing and maintaining infrastructure and public services. At the same time, multiple studies – including two in the state of Virginia – have concluded that even though property tax revenues from farmland are relatively low when measured per-acre, farmland is "profitable" for local government because it demands far less in public services than it generates in revenue. *See* Figure V-C. In fact, while cost-to-revenue forecasting for farmland consistently shows a net surplus for local government, the same analysis applied to suburban residential development consistently shows a public revenue loss. AMERICAN FARMLAND TRUST-FARMLAND INFORMATION CENTER, FACT SHEET: COST OF COMMUNITY SERVICES STUDIES (April 2000).

Public Infrastructure Cost is Generally a Function of Distance

The fiscal stress generated by exurban residential development is an even worse scenario because the cost of most public utilities and ser-

V-D



The Distance-Dependent Costs of Providing Public Services

Roads, potable water systems, sewers, and some stormwater systems are the most obvious of the distance-dependent public service systems. These services not only have high development costs that are a function of distance, but also continuing maintenance costs related to the size and extent of the systems. And because the exurban service areas almost always produce less revenue than the cost of construction and maintenance, they are generally a net drain on public resources.

vices is proportionately related to the distances over which those services and utilities must travel. For example, installation and maintenance of roads, water lines, and sewer lines entail distance-dependent costs. Additionally, costs for such things as provision of schools (or transportation to existing schools), police and fire protection, and solid waste collection and disposal increase dramatically as population dissipates into large lot residential developments in remote rural areas. While Chesapeake and Virginia Beach have varying degrees of responsibility for providing these services, each can expect that the fiscal implications of extensive development in the currently predominant "piano-key lot" style will be a net negative in terms of cash flow.

Exurban Residents Have High Expectations for Infrastructure and Services

At another level, disproportionate fiscal stress occurs because new residents in rural areas typically have higher incomes and higher public services expectations than existing residents. Both Chesapeake and Virginia Beach contain urban areas and large rural areas within the same political jurisdiction. Thus, their taxpayer-residents can be divided into categories based upon their locational characteristics (urban, suburban, or exurban). Of the categories, the exurban taxpayers contribute the least to the public revenue stream, due in part to the low intensity of exurban development. Because property taxes are based on values (not consumption of services), providing infrastructure and services to exurban residents at the expected near-urban levels fairly dramatically shifts resources from urban and suburban taxpayers to those who choose to reside in exurban areas where residential development patterns are usually inefficient and ill-advised. Adding insult to this injury to the urban and suburban taxpayers, local governments confronted with sprawling exurban development must often raise tax *rates* in order to provide acceptable levels of public services to the entire community.

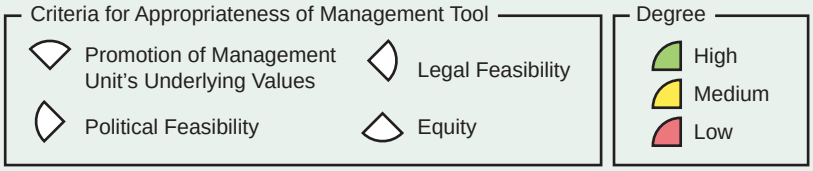
> "Basically, exurban households want a rural lifestyle but with all the advantages of urban opportunities."
>
> —*Davis, et al. at 46.*

The problem is compounded over the long term because of the natural progression of development from rural to exurban to suburban use. As exurban areas ultimately develop at suburban densities, wells and septic tanks become infeasible because of increases in density. Accordingly, potable water and sewer systems must be installed. More than likely, these systems will be retrofitted below existing rights-of-way, at an increased cost for the local government.

THE FUNCTIONAL TOOLBOX

V-E

Management Tool	AL	ESL	SRL	RIL	RDL
Rural Road Carrying Capacity Analysis					
Infrastructure Cost Forecasting					
Villages and Hamlets					
Cross Roads Communities					
Planned Communities of Place					
Purchase of Agricultural Conservation Easements					



People may differ as to where to draw the line between responsible and irresponsible levels of exurban development. Yet, the consensus in the SWA appears to be that the line should not be crossed. At the same time, rural landowners will likely resist any regulatory effort that compromises their equity – which is supported in part by the potential future use of their land for non-agricultural purposes. Ultimately, "the attitude of local elected officials toward land use planning and development is the primary factor in how well farmland protection policies and programs are implemented." JERRY PAULSON, PROTECTING FARMLAND ON THE EDGE: WHAT POLICIES AND PROGRAMS WORK? (1997).

The Rural Area Protection Plan does not attempt to set an overall "carrying capacity," or strict numerical threshold for how much non-agricultural development can be accommodated in the rural areas of the SWA. Instead, it recognizes that not all parcels of land are equal, and that not all non-agricultural development is equal. In other words, the aesthetic, functional and fiscal impacts of one hundred 2,000 square foot homes on one hundred five-acre piano-key lots along a remote two-lane rural road are generally far more destructive than one hundred 2,000 square foot homes on one hundred quarter-acre lots in a planned mixed-use community near an intersection of regional arterials that already cut across the rural landscape. Put simply, the idea is not to encourage existing development patterns to a point just short of "crossing the line," but instead to *move the line*.

Moving the line is possible by implementing a regulatory framework that:

1. maintains or enhances the economic viability of agricultural production;
2. protects the rural landowners' equity;
3. encourages high quality, relatively compact residential development;
4. places that development in appropriate locations;
5. provides a balanced mix of uses to reduce travel distances; and
6. ensures adequate public infrastructure is available to serve developing areas.

> "[O]ther things held constant, the greater the value of agricultural land in an alternative, non-agricultural use, the more likely the land is to be converted to non-agricultural use. In addition, . . . the development value of land can be affected by . . . growth management policies . . . . Thus, . . . a local community can affect the rate of agricultural conversion and the relative price of agricultural land . . . ."
>
> — Michael T. Peddle, *Farmland Protection Policy: The Effects of Growth Management Policies on Agricultural Land Values* (Center for Agriculture in the Environment 1997).

Within the regulatory framework, decision-making should be guided to serve more specific functional objectives, including:

1. create value for the farmer that does not subdivide;
2. preserve environmentally sensitive areas;
3. reduce the impact of new development on rural roads;
4. develop of communities with a balance of land uses;
5. buffer incompatible uses from each other;
6. preserve or enhance the continuity of the agricultural and natural landscape; and
7. maintain or enhance the critical mass of agricultural operation that serves as the basis for the rural economic system.

The tools in the fiscal/functional toolbox serve these specific objectives in different ways and to varying degrees. For example, rural road carrying capacity analysis and cost forecasting analysis focus primarily on reducing the impact of new development on rural roads, but also indirectly serve the objective of balancing land uses (because balanced uses reduce traffic). An effective rural lands management program will apply multiple management tools that are tailored to the particular geographic area, development pattern, and management objective priority.

The fiscal/functional toolbox includes five regulatory tools: (1) Rural Road Carrying Capacity (2) Infrastructure Cost Forecasting, (3) Planned Communities of Place, (4) Hamlets and Crossroads Communities, and (5) Purchase of Agricultural Conservation Easements. The focus of these tools is on the fiscal and functional aspects of non-agricultural rural development, though the tools also serve aesthetic and design objectives.

Rural Road Carrying Capacity Analysis

General Description

By their very nature, rural roads have limited capacity. They generally have two lanes with aging pavement, and are shared between automobiles, slow moving trucks and farm equipment. In the SWA, the capacity limitations are as much fiscal as functional – it is simply uneconomical to improve much of the rural road network to increase traffic throughput. Moreover, even if it were economical to improve the roads, such improvements would in some cases destroy the rural character of the impacted area. Rural road carrying capacity analysis approaches the prob-

lem of serving the transportation needs of new development by considering the capacity of existing and planned infrastructure. It ties development densities to road capacities, serving two interests: (1) increasing the efficiency of public infrastructure expenditures, and (2) discouraging suburbanization of rural lands.

Even relatively modest amounts of development along a rural road can have significant impacts on its level of service. When new development in rural areas is permitted without regard to road capacity, delays, inconvenience, and public safety concerns arise rather quickly, creating demand for improvements to the roadways. These improvements typically change the scale and character of the area, undermining the environment that attracted its new residents in the first place. Moreover, these improvements are costly and typically involve continuing losses to the governmental entity that provides them.

RURAL ROAD CARRYING CAPACITY ANALYSIS

➲ *Purpose — to promote efficient development based upon infrastructure capacity; to protect character of rural road network*

➲ *Application — wherever travel sheds can be identified, but not in RDL zones*

Rural road carrying capacity analysis helps preserve the character of the area in which it is applied if that character is largely dependent upon the form of the road. But more importantly, regardless of its impacts on community character, rural road carrying capacity analysis promotes fiscal and functional responsibility. In a sense, it represents a planning decision that certain roads will not be "improved," but will instead be maintained in their existing condition. Moreover, that existing condition is a constraint on the development capacity of the area the road serves. Yet, because rural road carrying capacity analysis does not directly address aesthetic or open space concerns, it should be combined with other landscape management tools in the overall regulatory scheme.

Rural road carrying capacity analysis has been employed successfully as a planning tool and rural density allocation device in other parts of the country. For example, Williamson County, Tennessee incorporated the concept into its zoning code in 1988. In Williamson County, the tool is used to promote fiscal responsibility by incorporating the cost of road improvements into the private real estate development decision making process.

Williamson County recognized that real estate prices and private real estate investment decisions in its rural areas did not include consideration of the condition of the road network. This was so because after purchasing real estate, consumers became constituents who would then demand improvements in their public services. Accordingly, the developer did not have to concern itself with infrastructure capacity.

To address the problem, Williamson County created a map of its travel sheds, analyzed them for their capacity, and allocated remaining capacity to the acreage of the travel shed. The County then used the trip allocation model to arrive at a density allocation, using Institute of Traffic Engineers ("ITE") trip generation guidelines to calibrate trips by land use category. The density limitation was then applied to the travel shed as an overlay zone.

Under the County program, development could proceed either at the density permitted by the travel shed, or at the density permitted by the underlying zoning – provided that if the latter course was chosen, the developer would remedy the infrastructure deficiency. The process employed by Williamson County is illustrated in Figure V-F.

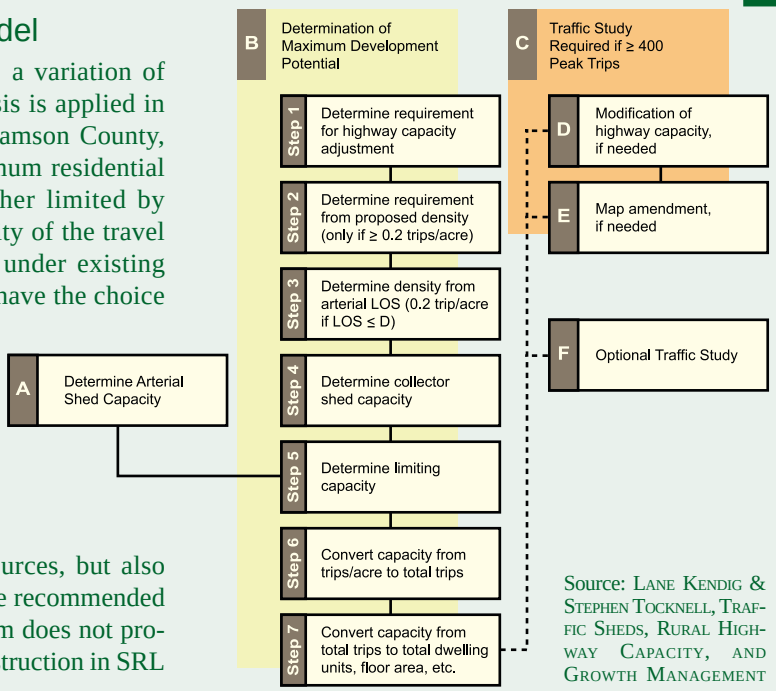
Within the SWA, rural road carrying capacity analysis also promotes fiscal responsibility, but

V-F

The Williamson County Model

In Williamson County, Tennessee, a variation of rural road carrying capacity analysis is applied in the County Zoning Code. In Williamson County, five (5) acres per unit is the minimum residential density. However, density is further limited by overlay zoning, wherein the capacity of the travel shed dictates permissible density under existing road conditions. Thus, developers have the choice of: (1) building at the capacity-dictated density, or (2) improving the road. The flowchart at right is adapted from the Williamson County Ordinance.

In the SWA, rural road carrying capacity analysis is intended to not only protect public fiscal resources, but also community character. Therefore, the recommended rural road carrying capacity program does not provide for developer-funded road construction in SRL and ESL management units.



Source: Lane Kendig & Stephen Tocknell, Traffic Sheds, Rural Highway Capacity, and Growth Management

is also intended as a tool to protect community character in areas where the road network is a defining element of that character. Thus, in those areas, rural road carrying capacity should be implemented in a manner that does not permit road expansion as an as-of-right development option.

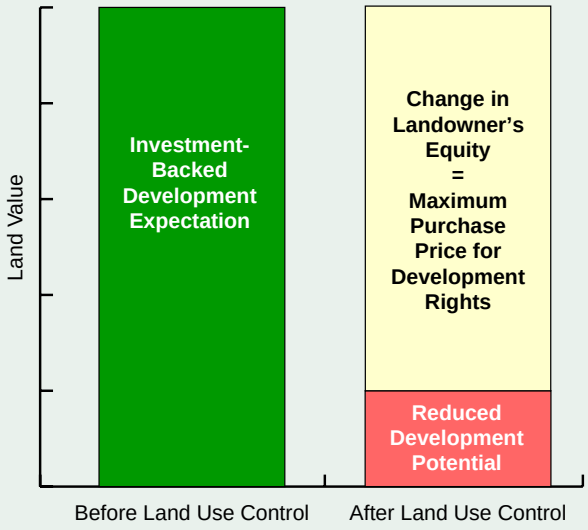
Program Elements

The RAPP recommends that, in the SWA, rural road carrying capacity analysis should essentially be a planning tool that assesses existing conditions and then bases future land use on the availability of infrastructure to serve it. Thus, in order to implement the program, the local government must first engage in a data collection and planning process. Then, the local government must amend its comprehensive plan to identify areas where density will be limited due to road capacity. Finally, the local government must amend its zoning code and/or map to include the development constraints.

The first step in the data collection and analysis step is to identify "travel sheds" (groups of connected roads that feed arterials), and the daily capacity of each road segment within those travel sheds. Next, surplus capacity (if any) is determined by subtracting the existing daily trips on each segment are from the segment's total daily capacity. Then, using ITE trip generation data (or some other reliable measure of traffic impacts), surplus capacity is translated into the number of residential units that can be accommodated by the travel shed's road network in its existing form. Where the travel sheds are interconnected, the density numbers are adjusted to account for the impacts of trips generated in one travel shed on carrying capacities of connected travel sheds. Subsequently, the number of permitted units is distributed to lands within each travel shed on an equitable basis, accounting for the location and character of the land in question. Public hearings are appropriate and useful during the entire process.

Once the data collection and analysis is complete, the density allocations are incorporated into the governing municipality's comprehensive plan and zoning code (both text and

V-G



Regulations and Expectations

The graph at left depicts a situation where implementation of a land use control substantially reduces the landowner's potential return on its investment. If the initial development expectation was reasonable, the landowner should receive some compensation for its lost equity.

The law does not require that the compensation be exactly equal to the entire reduction in value. Indeed, courts expect that some land use regulation will incidentally burden some properties more than others without implicating the owners' Constitutional rights. Still, policymakers should be sensitive to the equity of the regulatory regime, and should compensate owners whose *reasonable* expectations are frustrated.

maps). In areas where the affected properties had reasonable development expectations that substantially exceeded what was ultimately allocated, the local government is wise to consider purchasing the landowners' development rights to avoid a takings challenge. By purchasing the landowners' development rights, the local government provides them with a reasonable economic return on their investment. *See* Figure V-G; *see also* "Purchase of Agricultural Conservation Easements," *infra*.

To encourage innovative development designs, the zoning code should also offer a procedure that awards density bonuses to proposed developments that contain a balanced mix of uses designed to capture internal vehicular trips. The density bonus should be structured to ensure that the development has no greater impact on the road network than it would have had if built to permitted density as an exclusively residential project.

Practicality Analysis

Rural road carrying capacity analysis is most appropriate in Agricultural Lands, Environmentally Sensitive Lands, and Scenic Resources Lands management units, within areas where the rural road network is organized in a pattern that supports it. Supportive road network patterns are characterized by collectors that feed arterials in a cumulative, "closed" system, as shown in Figure V-H. In such situations, the traffic impact of development along a particular segment is relatively easily measured. However, when rural roads connect in a web-like or grid pattern, travelers have many alternative routes, and the impacts of new development are more difficult to evaluate. In such situations, non-agricultural development should undergo cost forecasting analysis to determine whether its marginal impact on public revenues will cover the costs of providing and maintaining the infrastructure it requires. *See* "Cost Forecasting Analysis," *infra*.

Rural road carrying capacity analysis promotes the underlying values of the Agricultural Lands, Scenic Resources Lands, and Environmentally Sensitive Lands management units by protecting agricultural, aesthetic, and environmental resources from the impacts of development at inappropriate intensities. When tied to a planned capital improvements program, it represents a fiscal decision by the local government – a decision well within the

V-H



Rural Road Carrying Capacity Analysis

The roads highlighted in yellow are examples of roads in the SWA that have hierarchical organization, and can easily be arranged into "travel sheds." Since travellers have a limited number of options for routes, the impact of new development on these roads can be predicted at the comprehensive planning stage. Therefore, rural road carrying capacity analysis is an appropriate tool to manage development of the land around these roads.

local government's legal authority. In Agricultural Lands, Scenic Resources Lands, and Environmentally Sensitive Lands management units, there is nothing inherently inequitable about rural road carrying capacity analysis, because, unless road improvements are already scheduled, it is unreasonable for landowners in those areas to expect to be permitted to build at intensities that will overtax the road network. Still, the implementation of a rural road carrying capacity analysis program must conscientiously address issues of equity among the landowners within the travel shed.

Since rural road carrying capacity analysis is an unfamiliar concept to most people, and because it constrains development intensities within travel sheds, it will likely meet some political resistance. Therefore, a successful implementation program should involve the landowners within the travel sheds in a way that: (1) educates them about the purpose and mechanics of the program, and (2) facilitates their participation in the density allocation process.

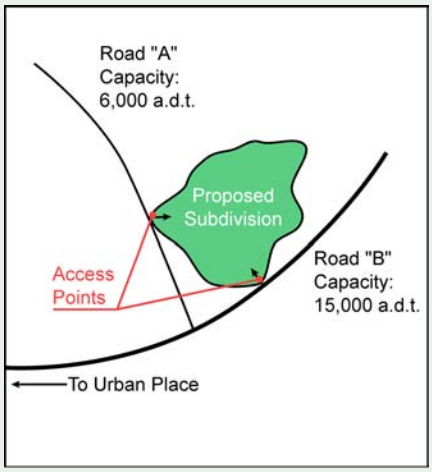
Rural road carrying capacity analysis is not appropriate in Rural Infill Lands and Rural Development Lands management units. Unlike Agricultural Lands, Environmentally Sensitive Lands, and Scenic Resources Lands management units, Rural Infill Lands and Rural Development Lands areas are specifically designated for intensification. Therefore, roads in these areas should not be limited to their existing capacities, but instead should be improved as needed in order to accommodate permitted and anticipated development.

Sample Application

A developer proposes a project called Oakwood Lakes Reserve Estates, a subdivision of one hundred fifty (150) single-family homes on three hundred seventy-five (375) acres of land in an Agricultural Lands management unit. The proposed subdivision is accessible from two local roads, "A" and "B." Road "A" is a two-lane rural road with narrow shoulders. Road "B" is a two-lane road with stripes and normal shoulders.

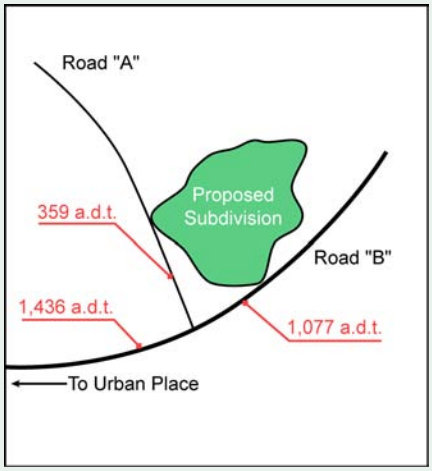
As part of a comprehensive land management program that includes rural road carrying capacity analysis, the capacities of roads "A" and "B" have previously been studied by the local government. Road "A" has a capacity of six thousand (6,000) annualized average daily trips (ADT). Road "B" has a capacity of fifteen thousand (15,000) ADT Neither road is designated for expansion.

V-I



Applying Rural Road Carrying Capacity Analysis

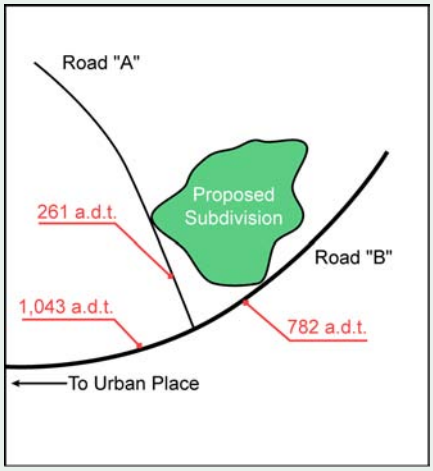
The illustration at left shows the proposed subdivision area, which is served by two rural roads. At one hundred fifty (150) homes, the subdivision generates one thousand four hundred thirty-six (1,436) ADTs, between the intersection with Road "A" and the Urban Place, and one thousand seventy-seven (1,077) ADTs "upstream" from the intersection (see bottom left). Since the capacity of Road "B" that has been allocated to the property is one thousand fifty (1,050) ADTs, it cannot be developed as proposed unless the developer purchases development rights from someone else in the travel shed. Instead, the developer may choose to reduce the unit count to one hundred nine (109), which produces an acceptable traffic load (see bottom right).



Top left: development location, access points, and road capacities.

Bottom left: traffic impacts of the proposed one hundred fifty (150) home subdivision.

Right: traffic impacts after reduction of development to one hundred nine (109) homes.



The local government has also previously engaged in a series of public hearings in which it allocated available capacity to land served by the two roads. As a result of this process, the parcel proposed for development was allocated fifteen percent (15%) of the capacity of road "A" (900 trips) and seven percent (7%) of the capacity of road "B" (1,050 trips).

The traffic study conducted by the developer's consultant and confirmed by the local government shows that the proposed subdivision will generate one thousand four hundred thirty-six (1,436) trips per day (9.57 ADTs per unit x 150 units). Twenty-five percent (25%) of these trips will access Road "A," while all of the trips will ultimately access Road "B." Accordingly, while Oakwood Lakes Reserve Estates satisfies rural road carrying capacity analysis as to Road "A" (and, in fact, could add five hundred forty-one (541) additional trips to the road), it does not satisfy the analysis as to Road "B" (the proposed subdivision's one thousand four hundred thirty-six (1,436) ADT's exceed the road's capacity by three hundred eighty-six (386)).

The developer has a range of options:

1. scale back the project to one hundred nine (109) units (the 1,050 ADT allocated road capacity, divided by 9.57 ADT per unit) (*see* Figure V-I);
2. modify the project so that it includes a balanced mix of uses that creates an internal trip capture rate sufficient to lower its impacts

on Road "B" to an acceptable level;

3. supplement its allocated ADTs with additional trips from other properties served by the roads, either by purchasing the development rights allocated to those properties, or by purchasing the properties outright and transferring their development rights;

4. show that existing or approved uses in the area will produce an areawide mix of uses that is balanced in a manner that reduces the impacts of the development to an acceptable level; or

5. abandon the project.

Cost Forecasting Analysis

General Description

Like rural road carrying capacity analysis, infrastructure cost forecasting is a way to manage new development based on its infrastructure requirements. The cost forecasting model allows local government to avoid the fiscal deficiencies that can occur when exurban development occurs. It does so by simply bringing the fiscal impacts of alternative development patterns to light prior to the approval of new development.

In the cost forecasting model, alternative development patterns are evaluated for the relationship between their impact on public infrastructure, including (and particularly) the road network, and the tax and fee increment that they will be expected to generate. Those patterns that are likely to produce a relative strain on the fiscal integrity of the local government are further evaluated based on community values. For example, a community might wish to provide ample affordable housing opportunities in the rural landscape, and might be willing to increase taxes community-wide in order to pay for it.

COST FORECASTING ANALYSIS

➲ *Purpose — to promote efficient development based upon infrastructure capacity; protect local government financial resources*

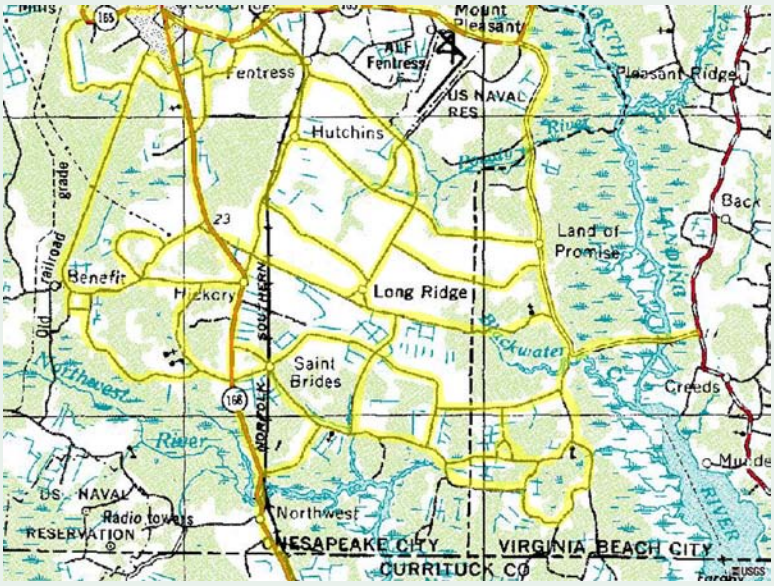
➲ *Application — all management units*

As such, the cost forecasting analysis model provides information for informed value-based decisionmaking. A community that wishes to limit development in the rural landscape to patterns that are fiscally self-sustaining at current tax rates can roughly identify those patterns that are likely to "break even" from a fiscal standpoint. After modeling the projected costs and revenues of various development patterns in the rural landscape and reaching some value-based conclusions about a desired pattern (or patterns) of development, the local government should adopt zoning classifications and land development regulations that promote the most preferred alternatives.

Also, cost forecasting analysis may have an impact on community character if the resulting policy outcomes limit development and promote patterns that minimize aesthetic impacts on the rural landscape. However, it does not necessarily have a direct effect on community character. Indeed, except insofar as there is a practical economic limit to rural road improvements, the cost forecasting tool does not necessarily limit roads to their existing conditions. Instead, it allows public infrastructure improvements if they are desired by the community and they can be supported by the projected new development (or, if the local government so determines, by the projected new development and subsidy from existing development).

Therefore, in areas where the character of the public infrastructure itself (particularly the roads) represents a significant value, other tools should be used in combination with cost forecasting to protect that character. Such tools may include very low residential density, cluster development, hamlets and crossroads communities, and design standards. Similarly, cost-forecasting (like rural road carrying capacity analysis),

V-J



Cost Forecasting Analysis

The roads highlighted in yellow are examples of roads in the SWA that are interconnected in a pattern that loosely resembles a "grid." Since they provide travellers with many alternative routes, it is impractical to attempt to determine the impact of particular new developments on these roads in advance. Cost forecasting allows local governments to determine in advance what the impacts of various development patterns will be on the maintenance and capital improvements of these roads and other facilities.

does not directly address either aesthetic or open space concerns. Its principle use is to provide information that promotes the reasoned development of fiscally responsible land use regulations from an areawide perspective.

Program Elements

The basic steps for establishing a cost forecasting analysis are:

1. Select a methodology to determine which costs will be considered and how they will be measured and allocated;
2. Evaluate the fiscal future of the region under the existing zoning classifications;
3. Evaluate the fiscal future of the region under alternative development patterns;
4. Reach a consensus as to which alternative development pattern provides the most desirable outcome in terms of fiscal responsibility and community values; and
5. Implement zoning and land development regulations that promote the desired land uses and development patterns.

The RAPP recommends that the local governments of the SWA implement a general cost forecasting and monitoring strategy in all rural land management units. There are a number of published, generally accepted methodologies for determining the fiscal impacts of new development, including the Cost Revenue Impact Model ("CRIM") method, already employed by the City of Chesapeake to evaluate development in its southern region. The choice of methodology should be based on several factors: (1) the methodology's "track record" in other areas and acceptance in the professional literature; (2) its ease of administration, application, and review; and (3) the availability and cost of data required for the analysis. The decision should be reviewed on a periodic basis to ensure that the methodology remains rooted in the best available research.

Practicality Analysis

Cost forecasting analysis is appropriate in all rural land management units (*see* Figure V-J), and may be applied in conjunction with rural road carrying capacity analysis and other management tools. It may be applied regionally and sub-re-

gionally to develop solid cost-management insight regarding the land management regime.

Since cost forecasting is already required for new development in the City of Chesapeake, its legal and political support have already been successfully tested in the SWA. Moreover, from an equitable standpoint, infrastructure cost forecasting is fair because it occurs at the state of policy development and merely informs that process, which also includes articulation of community values.

Since Rural Infill Lands and Rural Development Lands management areas are already designated for intensification, the local governments may be more willing to accept negative fiscal consequences (provided they are not overwhelming) to support certain types of development such as affordable housing or public institutional uses. This is especially true for Rural Development Lands management units, which are intended to become new communities that contain a broad range of land uses.

This is not to say that the municipalities of the SWA should not consider the fiscal impact of new development within the Rural Infill Lands and Rural Development Lands management units. To the contrary, the local governments should consider the overall fiscal picture in all areas, based upon the cumulative impact of their anticipated land uses, patterns, and intensities. Evaluation of the fiscal impacts of development should be performed as part of the development of a rural land management strategy, and subsequently as part of a system of continuous monitoring of the local government's fiscal resources — perhaps during the budgeting process. In this way, the local government will be in a better position to manage change in the rural landscape.

VILLAGES AND HAMLETS

➲ *Purpose — to protect agricultural land from excessive fragmentation; promote compact development in areas most suitable to accommodate it; provide a lifestyle alternative to suburban housing; preserve open space*

➲ *Application — AL and SRL management units*

Sample Applications

Cost forecasting analysis is not intended for application to specific development projects, but instead as part of a more comprehensive strategy for implementation and continuing development of a rural land management program. Actual evaluation of the fiscal implications of various development patterns in the rural landscape is encouraged, but is beyond the scope of this Program.

Villages and Hamlets

General Description

Villages and Hamlets are relatively small areas of planned mixed use development (up to 50 and 25 acres, respectively), strategically placed to minimize impacts on agricultural areas, natural systems, transportation systems, and public views of open space. These developments reflect the principles of clustered development (detailed in Chapter IV), and add to it: (1) locational criteria to reduce strains on public infrastructure, agricultural operations, and environmentally sensitive areas, and (2) a balanced mix of uses to reduce vehicular trips and travel distances. Therefore a villages and hamlets program should address four general areas: size, design, location, and use.

As to size, Villages and Hamlets should be compact to encourage pedestrian travel. Generally, people are more likely to walk to their destinations if: (1) the walking experience is positive, and (2) the distance is less than one-quarter mile. The first factor can be addressed by quality design. The second can be addressed by placing restrictions on the size of the development. The RAPP recommends a twenty-five (25) acre limit for hamlets, and a fifty (50) acre limit for villages. Both size limits will keep

the vast majority of uses within walking distance from each other.

As to design, Villages and Hamlets should reflect traditional town planning principles. In *Rural By Design*, Randall Arendt recounts the characteristics of small towns that generate character and a "sense of place." They include:

1. arrangement of institutional and commercial uses around a town common,
2. one and one half (1 1/2) to two and one half (2 1/2) story human-scaled buildings,
3. buildings that reflect high quality architecture that is harmonious (though not identical) with other buildings in the town,
4. light vehicular traffic,
5. limited commercial uses with limited front setbacks,
6. an uncluttered, tree-lined streetscape scaled to provide a sense of enclosure,
7. special amenities, such as fountains, street furniture and monuments, and
8. a clearly defined outer edge.

Design standards for villages and hamlets should promote and reinforce these characteristics.

The locations of Villages and Hamlets should be selected based upon the availability of public infrastructure and the suitability of the land itself. Since Villages and Hamlets are expected to contain up to three hundred fifty (350) and one hundred fifty (150) homes, respectively, they will be a significant source of vehicular trips. Therefore, they should be located near roads designed to accommodate the increased demand. More specifically, Villages should be located within one thousand (1,000) feet of an intersection of two roads with at least four (4) lanes. Hamlets, because of their smaller size and lesser infrastructure needs, should be within one thousand (1,000) feet of an intersection that contains at least one road with at least four (4) lanes.

Villages and Hamlets should contain a balanced mix of residential and commercial uses (retail and office) to reduce the number and distance of vehicular trips, promote pedestrian travel, and provide a center of activity and "sense of place." Included in the balance should be "live-work" spaces for artisans and professionals and institutional uses of community-wide significance.

Variations on the Villages and Hamlets model have been implemented in many areas around the country. One example is New York's Adirondack Park region, which is principally rural in character, containing scenic, open space, and agricultural values of statewide significance. The state sets the land use controls for the area through the Adirondack Park Agency Act ("APAA"). The APAA specifically designates areas for hamlet development.

The APAA includes hamlets of varying sizes, from "large, varied communities that contain a sizeable permanent, seasonal and transient population[] with a great diversity of residential, tourist and industrial development and a high level of public services and facilities, to smaller, less varied communities with a lesser degree and diversity of development and a generally lower level of public services and facilities." APAA at § 805(3)(c)(1) (1998). In the context of the Adirondack Park, the hamlet areas are intended to accommodate a large portion of the region's development needs, and by doing so, discourage "haphazard location and dispersion of intense building development in the park's open space areas." Id. at § 805(3)(c)(2).

Program Elements

Villages and Hamlets require a mix of planning and regulatory approaches. On the planning side, sites suitable for such development should be identified and incorporated into the local government's zoning code. Since these sites are

dictated in part by the availability of public infrastructure and the characteristics of the road network, the areas where such development is permitted should be updated from time to time as development pressures increase and as planned infrastructure improvements come on line.

Once appropriate sites are designated for Village and Hamlet development, proposals for such development should meet certain standards for mix of uses, street layout, pedestrian-orientation, and landscaping. Like the Clustered Development Option presented in Chapter IV, *supra*, Villages and Hamlets should be implemented as conditional uses to ensure high-quality development.

Practicality Analysis

Villages and Hamlets serve values related to fiscal responsibility, agricultural and open space preservation, community aesthetics, and quality of life. Therefore, they are well-suited for Agricultural Lands and Scenic Resources Lands management units, where those values need the greatest degree of protection. On the other hand, they are not particularly well-suited for Environmentally Sensitive Lands management units, where intense development is not appropriate. Nor are they well-suited for Rural Infill Lands and Rural Development Lands management units, where large-scale preservation of open space and agricultural production are not desired outcomes.

From a legal perspective, there is no bar to creation of a Villages and Hamlets program. However, in almost all cases, land development regulations must be updated to permit the mix of uses and densities that characterizes Villages and Hamlets. Where Villages and Hamlets are permitted as conditional uses, the success or failure of the program will in large part depend upon the certainty of the standards and the efficiency of the review process.

From a political perspective, Village and Hamlet development may be opposed by neighboring landowners who see the development form as merely an intensification of use. Thus, it is important to educate the neighbors about the community-wide benefits provided by Villages and Hamlets, and to get them involved at the early stages of program adoption.

Sites for Villages and Hamlets are identified after review of the availability of public infrastructure, and the suitability of the landscape for Village and Hamlet development. The locations of these developments, chosen to minimize non-agricultural vehicular trips on local roads that are shared by farmers, help to fairly allocate the capacity of appropriate roads to non-agricultural users. Moreover, it provides a development alternative for land that is reasonably well-served by public infrastructure. Accordingly, a program of Villages and Hamlets is fair to the residents of the rural landscape.

Sample Applications

A local developer, feeling inspired after a recent trip to Florida, where he saw the development pattern and property values of the community of Seaside, secured an option on fifty acres of land in the countryside. The land is located in an Agricultural Lands management unit, and is served by two (2) improved rural roads. The roads connect to a major arterial three (3) miles to the north, and five (5) miles to the west.

Existing development within a one-mile radius of the site consists of a handful of large-lot exurban homes, several active farms, and couple of small-scale commercial establishments. There are no previously approved "Village," "Hamlet," of "Planned Community of Place" developments within the one-mile radius.

To maximize the absorption rate of his development, the developer wants to construct a variety of housing types, including single-family estate homes, zero-lot line homes, townhomes, residential-above-retail, and live-work spaces. Because of the abundant silviculture activities

V-K



Artisan Square Village

The illustration above is a concept plan for Artisan Square Village. The Village is developed around six existing homes and an existing farm house (existing uses are identified by diagonal lines). The village includes: twenty-five (25) single-family homes at four (4) units per acre (six are existing homes); two hundred (200) single-family zero-lot line homes at fourteen (14) units per acre; eighty (80) townhomes at six (6) units per acre; twenty-five (25) "live-work" units at six (6) units per acre (indicated in orange); twenty (20) apartments, located above retail uses; twenty-five thousand (25,000) square feet of retail uses (indicated in red); five thousand (5,000) square feet of office space (indicated in red); and forty thousand (40,000) square feet of manufacturing space (indicated in purple).

in the area, the developer envisions that the community will include a small facility for creating specialty value-added wood products.

The developer proposes "Artisan Square," a development that includes:

1. twenty-five (25) single-family homes at four (4) units per acre (six are existing homes);
2. two hundred (200) single-family zero-lot line homes at fourteen (14) units per acre;
3. eighty (80) townhomes at six (6) units per acre;
4. twenty-five (25) "live-work" units at six (6) units per acre;
5. twenty (20) apartments, located above retail uses;
6. twenty-five thousand (25,000) square feet of retail uses;
7. five thousand (5,000) square feet of office space; and
8. forty thousand (40,000) square feet of manufacturing space.

The traffic study for the project (summarized on the following page) shows that its mix of uses will create an internal trip capture rate of forty percent (40%).

The developer files an application for a special permit to develop Artisan Square under the Village section of the local government's Villages and Hamlets Ordinance. The application package consists of a general application form, a conceptual site plan (showing the layout of the development, unit counts, and total acreage for each use), and a traffic study.

The local government's planning staff performs a preliminary review of the application package and finds that:

1. The development site is not more than fifty (50) acres in size;
2. The development site is within one thousand (1,000) feet of an intersection of nonlocal roads;
3. The development site is within three (3) travel miles from a major arterial;
4. No other Village or Planned Community of Place exists or has been approved within a one mile radius of the development site;
5. There are fewer than three hundred dwelling units in the proposed development;
6. Retail and office uses are limited to less than fifty thousand (50,000) square feet;
7. Manufacturing and fabricating businesses are limited to less than fifty thousand (50,000) square feet;
8. The area put to institutional uses is less than twenty (20) acres (there are no institutional uses on the site);
9. Potable water will be provided by several wells on the site, and wastewater will be treated with a combination of individual and shared septic tanks located along the perimeter of the site;
10. The village reflects traditional town planning principles; and
11. The developer's traffic study is acceptable.

Accordingly, staff recommends approval of the project to the appropriate approval body.

Cross Roads Communities

General Description

Cross Roads Communities are located in areas of existing exurban development, and essentially represent opportunities for infill development in those areas. The boundaries of Cross Roads Communities are dictated primarily by the existing pattern of exurban development, but also may be influenced by the natural features of the land, waterways, and/or other appropriate bor-

ders, such as roadways. Because their size is related to the existing development pattern, there is no size limitation on Cross Roads Communities.

The New Jersey Pinelands Comprehensive Management Plan ("CMP") includes a similar management tool that recognizes that areas of existing development may appropriately be permitted to intensify within specified geographic limits. In the Pinelands, the boundaries for this type of infill development were set by negotiations between affected local governments and the regional Pinelands Commission, subject to certain rules. The negotiations often proved to be long and difficult. *See* COLLINS, *supra* at 156. However, the establishment of geographic limits for non-agricultural development within the Pinelands, is a significant contributor to the fact that the implementation of the CMP is expected to result in a considerable decrease in the conversion of agricultural land when compared to the alternative historical pattern of development in the area. *See* BLOUSTEIN, THE COSTS AND BENEFITS OF ALTERNATIVE GROWTH PATTERNS 129 (2000).

CROSS ROADS COMMUNITIES

➲ *Purpose — to protect agricultural land from excessive fragmentation; promote exurban infill development in areas most suitable to accommodate it; provide a lifestyle alternative to suburban housing; reduce public infrastructure strains*

➲ *Application — RIL management units*

Program Elements

The key to implementing a Cross Roads Communities program is to identify those areas where exurban development has already proceeded to a point where the character of the area is no longer agricultural or "open space," and then to draw a boundary around the area inside of which additional exurban development will be permitted. As such, the program is principally implemented through a comprehensive planning, rather than a specific regulatory approach (though design standards for new development are well-advised to maintain a sense of community character).

The appropriate boundaries for Cross Roads Communities are not always readily apparent from the pattern of existing development. As demonstrated in Figure II-D (page II-7, *supra*), the precise point where open space character is lost is not easily measured. However, the determination of where "open space" begins is made easier when development has a sense of "edge" created by a definite boundary. Natural features, waterways, and roadways can be used to set the "edge."

In some cases, it may be appropriate to draw boundaries slightly outside of the existing pattern of development, to allow for future growth and to create an "edge" where it would otherwise be difficult to discern one. However, local governments should use caution when extending the boundaries of Cross Roads Communities, and should ensure that adequate public facilities are in place to serve the new residents. A variation of Cost Forecasting Analysis may be employed to verify the continued availability of services.

Practicality Analysis

Cross Roads Communities are the most appropriate tool for use in Rural Infill Lands management units, because they are, in effect, exurban infill. Thus, they serve exactly the same values as the Rural Infill Lands management unit itself. By the same token, the management tool's unique fit with the Rural Infill Lands management unit makes it inappropriate for use elsewhere in the SWA. This is so because exurban infill development conflicts with values that the other management units are intended to protect.

For example, in Agricultural Lands, Scenic Resources Lands, and Environmentally Sensitive Lands management units, agricultural, scenic, and

V-L

Rural Infill Opportunities

The illustration at left depicts a small area near an intersection in a hypothetical rural landscape. In this example, assume that a similar pattern of development exists in the general area, and that some additional units have already been approved for construction.

To an observer at street level, the original open space character of the area to the west of the intersection has already been destroyed by the development pattern of relatively narrowly spaced single family homes and auto-oriented uses located near the roadway. The open space located behind the homes is not seen from the public roads, and could therefore accommodate some additional development. Moreover, the undeveloped lots along the road could be developed in a manner that retains the same visual rhythm as the balance of the area.

Around the intersection, commercial and retail uses could be added that serve the cross roads community residents and others who live in the vicinity. Intensification of use near the intersection provides more customers to support businesses, which themselves reduce the trip length and auto-dependence of the area's residents by capturing trips that would otherwise be destined for urban centers.



environmental values are, respectively, paramount. Accordingly, a pattern of exurban infill development in those areas would do more harm than good. Yet, implementation of a Cross Roads Communities program in Rural Infill Lands management units will help to alleviate some of the pressure on Agricultural Lands, Scenic Resources Lands, and Environmentally Sensitive Lands lands by creating a designated area where the exurban lifestyle and pattern of development is promoted.

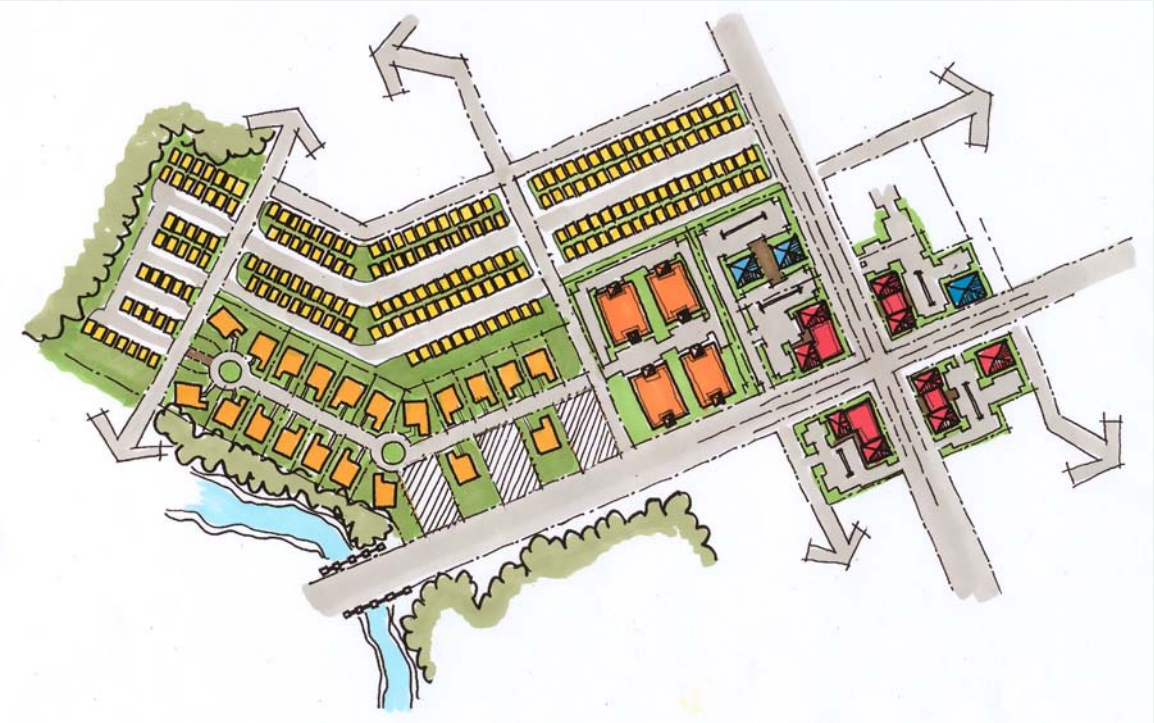
From a legal standpoint, there is no bar to creating a Cross Roads Communities program. At their most simplistic level, Cross Roads Communities could proceed simply by leaving existing zoning in place in the designated area, and by allowing development within that area to proceed according to that zoning. However, to relieve traffic congestion and to enhance the local quality of life, the RAPP recommends establishing a regulatory framework that permits a mix of uses in the Cross Roads Community. Moreover, regulations and public investments that promote a development pattern that includes pedestrian amenities and a centralized plaza or square surrounded by commercial and institutional uses will further reduce roadway congestion, improve property values, and improve the area's overall quality of life.

Because Cross Roads Communities represent at their most basic form a continuation of the *status quo* in a particular area, and in their optimal form a way to improve property values, reduce congestion, reduce development pressures elsewhere, and improve the community's quality of life, they are a highly equitable rural land management tool.

Sample Applications

After designating an area as Rural Infill Land, the local government enacted a cross roads com-

V-M



The Development of a Cross Roads Community

The illustration provides an example of how a cross roads community might develop around existing uses. In this illustration of the western part of the community, three large-lot homes existed prior to the infill development. Their locations are marked with diagonal lines.

The increased density permitted by the ordinance allowed the large-lot homeowners to sell the rear portion of their land for development. Moreover, it permitted development of over two hundred zero lot line homes and several apartment buildings in this area, which will provide significant affordable housing opportunities for the community.

Commercial uses in the cross roads community are centered around the intersection of existing roads. In the commercial area, structures are located adjacent to the street in order to promote pedestrian circulation and provide a sense of enclosure and "place." Parking is located behind the buildings and is well landscaped.

The boundaries of the cross roads community are set by the development and natural features that exist at the time of the designation. In this example, the western edge of the community is defined by the river.

munity zoning ordinance for the area, based on the model provided on page V-41 of thie Program. However, by increasing density (and decreasing permitted lot sizes), the Ordinance allowed large lot owners to subdivide their parcels. The local government then decided to promote commercial development at the crossroads by investing in ten (10) foot sidewalks and one hundred (100) street trees to be placed between the sidewalk and the road on twenty (20) foot centers for a distance of five hundred (500) feet from the intersection along both roads.

The local government decided that its zoning and investment in landscaping and sidewalks were sufficient to generate the development pattern it desired for the area. Accordingly, the cross roads

community was left to develop on its own, over time, through a series of private development projects. Figure V-M shows a concept plan for development of a part of a hypothetical cross roads community.

Planned Communities of Place

General Description

One development plan characterized the "Planned Community of Place" as a:

> dynamic, diverse, compact, and efficient Center that has evolved and been maintained at a human scale, with an easily accessible central core of commercial and community services, residential units, and recognizable natural and built landmarks and boundaries the provide a sense of place and orientation.

NEW JERSEY STATE PLANNING COMM'N, COMMUNITIES OF PLACE 160 (1992). The Planned Communities of Place management tool recognizes that the pressure for non-agricultural development in rural areas is not likely to subside. Thus, the tool does not aim to stop such development, but instead direct the development to designated areas that are appropriate for large-scale development of non-agricultural uses. By designating appropriate areas for this new large-scale development, the Planned Communities of Place management tool also helps to ensure that new development maintains the rural character of its environs, that it does not overtax the rural infrastructure, and that it does not interfere with surrounding agricultural operations.

PLANNED COMMUNITIES OF PLACE

➲ *Purpose — to protect agricultural land from excessive fragmentation; promote large-scale new development in areas most suitable to accommodate it; provide a lifestyle alternative to suburban housing; preserve open space*

➲ *Application — RDL management units*

Planned Communities of Place are like Cross Roads Communities in the sense that they are areas of the rural landscape that are specifically designated for new non-agricultural uses. Moreover, both management tools allow the landscape within their boundaries to be largely converted from agricultural and open space uses. However, Planned Communities of Place also differ in many respects from Cross Roads Communities.

First, a greater intensity of use is anticipated in Planned Communities of Place. Unlike Cross Roads Communities, where the existing appearance of low-density development is largely maintained, Planned Communities of Place are expected to develop at urban/suburban intensities of *at least* six (6) units per gross acre. This density will provide a broader base of consumers and employees for retail, service and manufacturing facilities that are also located in the Community.

Second, because of their larger size (up to two thousand one hundred (2,100) acres), more intense character, and larger set of urban amenities, Planned Communities of Place offer a different lifestyle than Cross Roads Communities.

Third, while, ideally, Cross Roads Communities will provide a mix of uses to serve their residents, it is not likely that they will capture a large portion of work-related vehicular trips. Indeed, research shows that most exurban residents commute to a central location to work. Without a large local employment draw, residents of Cross Roads Communities will crowd the roads that lead to places of employment during peak hours.

On the other hand, Planned Communities of Place are expected to develop with significant commercial and industrial uses, and often function as regional employment centers. Yet, a balanced mix

of residential and commercial uses within the development will reduce the transportation "bottleneck" that commuters from Cross Roads Communities generally experience. The reduction is a result of the development's ability to "capture" a large portion of its own vehicular trips.

Additionally, by relating residential and non-residential development in a spatially strategic manner, Planned Communities of Place have the potential to reduce reliance upon the automobile, further reducing congestion. The pedestrian-orientation of Planned Communities of Place is generated by short distances between uses (bringing most uses within the range of "a five-minute walk"), an attractive, human-scaled streetscape, and a development pattern that creates a sense of enclosure and security for the pedestrian.

Program Elements

Like Cross Roads Communities, Planned Communities of Place involve a mix of planning and regulatory approaches. Areas suitable for development at the geographic scale and intensity of use contemplated by the management tool should be identified as part of a comprehensive planning process. Suitable areas should be served by relatively high levels of urban infrastructure, or a capital improvements plan for development of such infrastructure should be in place.

Within the designated development areas, Planned Communities of Place should be designed with a balanced mix of residential, commercial, and industrial uses. The balanced mix of uses should be one that creates an internal vehicular trip capture rate of at least thirty percent (30%).

The design of the community should also create a sense of "edge" at the community's borders. The "edge" should be a fast transition from the community's relatively intense development pattern to the open space and agricultural uses that surround the community. In this way, the community residents benefit from the "borrowed" open space of the adjacent land uses. Moreover, the well-defined community boundaries create a sense of arrival for the approaching traveller.

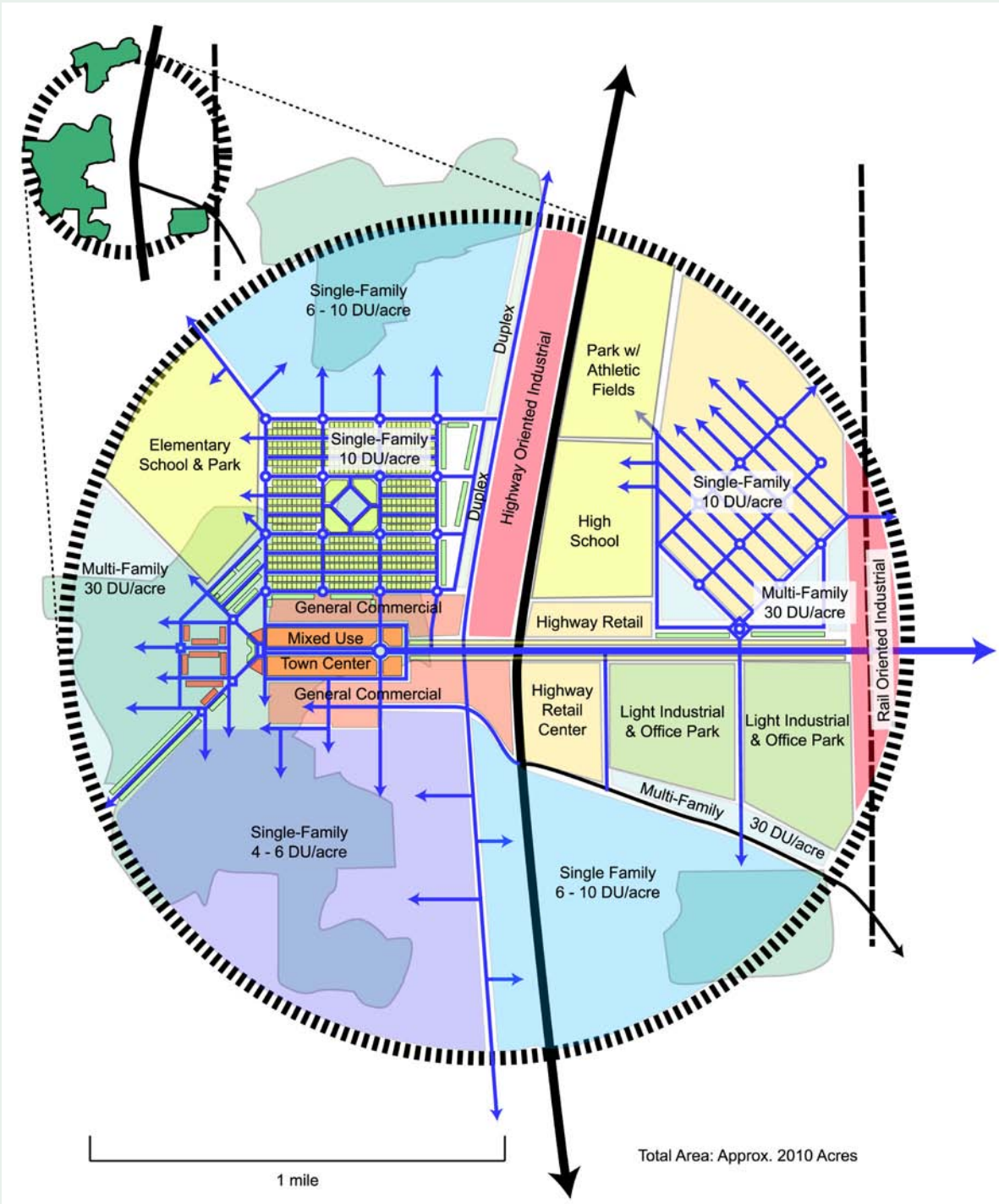
Within the community, buildings should be designed and arranged in the style of "new urbanism," which reflects traditional development patterns that respect the pedestrian.

Practicality Analysis

Within the rural areas of the SWA, Planned Communities of Place are only appropriate in Rural Development Lands management units, where the development of entire new communities is anticipated. The Rural Development Lands management units represent key opportunity areas for large-scale, well-planned, well-designed non-agricultural development that provides for economic development and efficient use of public infrastructure. Within these areas, there is little in the way of legal, political or equitable obstacles to development of Planned Communities of Place. In fact, the City of Chesapeake has already undertaken a Transportation Corridor Overlay District study that recommends large-scale, regional economic development centers in a series of three "nodes" in the Route 168 corridor in the SWA.

Outside of Rural Development Lands management units, Planned Communities of Place are not appropriate. In Agricultural Lands, Environmentally Sensitive Lands, and Scenic Resources Lands areas, development of parcels approaching two thousand one hundred (2,100) acres in size at gross densities of at least six (6) units per acre would compromise the agricultural, environmental, and scenic values that led to the areas' respective designations. Similarly, while Rural Infill Lands management units are expected to result in exurban-styled infill development, they are not intended to accommodate (nor are they suited to accommodate) development on the scale and intensity of a Planned Community of Place.

V-N



A Planned Community of Place

The illuustration provides a conceptual view of the uses and locations of uses in a planned community of place. The area is approximately two thousand forty (2,040) acres in size, defined by a one-mile radius around the interchange with a limited access highway. The plan shows a mix of uses that minimize travel distances and impacts on the limited access highway. It contains a broad mix of housing types, but to ensure efficient land use, does not contain residential development at a density less than four (4) units per acre. Its estimated internal trip capture rate is thirty-five percent (35%).

Sample Applications

After designating a Rural Development Lands management unit, the local government adopted a planned community of place zoning ordinance for those lands and developed a special area plan for one of the designated areas. The special area plan sought to provide an attractive site for new industries to locate within the City and to locate a balanced mix of land uses in the area to reduce transportation impacts on the surrounding arterial network.

The special area plan helped the development community understand how the zoning ordinance served the City's goals, so that the private sector could provide a variety of development products in appropriate locations. A bubble diagram showing potential uses, locations, and illustrative road networks is presented in Figure V-N (previous page).

Purchase of Agricultural Conservation Easements

General Description

In the legal arena, the rights of a property owner are often compared to a "bundle of sticks." Each stick in the bundle represents an individual property right, such as the right to mine for minerals underneath the surface of the land, the right to develop the surface subject to reasonable restrictions, and the right to exclude others. Significantly, the "bundle of sticks" may be divided and sold to different owners. For example, an owner of a wooded parcel that contains a coal deposit may sell the timber rights to one company and the mineral rights to another.

PURCHASE OF AGRICULTURAL CONSERVATION EASEMENTS (PACE)

➲ *Purpose — protect agricultural landowners' equity; preserve open space*

➲ *Application — all areas, especially those highly threatened by inappropriate development*

Since it is well accepted that the right to develop is subject to reasonable governmental regulation, a property owner does not have the right to develop without limits. However, one of the sticks in the "bundle" of property rights is the right to make some economic use of one's property. Purchase of agricultural conservation easement (PACE) programs give property owners economic use of their property by allowing them to sell their development rights "stick" to the public. The public purchases the development rights, usually through local government, for the purpose of extinguishing them. This is usually accomplished by recording a permanent conservation easement over the land sought to be preserved. After the easement is recorded, the farmer retains the title to the land, and is permitted to do such things as farm it, sell it, give it away, and restrict public access to it. Yet, the land may not be used for non-agricultural development.

The principle advantages of PACE programs are: (1) they can be a very effective way to preserve open space (if there are enough willing sellers and enough money to purchase the easements); and (2) they allow rural landowners to recover some of their equity without resorting to residential subdivision. The principal challenges of PACE programs are: (1) funding; (2) administration; and (3) enforcement.

The City of Virginia Beach enacted an Agriculture Reserve Program ("ARP") in 1995. It funds the program primarily with property tax and cellular phone tax revenues. According to a survey by the American Farmland Trust, as of February 2000, Virginia Beach had purchased 29 conservation easements, placing 4,193 acres of farmland under a permanent conservation easement. AMERICAN FARMLAND TRUST - FARMLAND INFORMATION CENTER, FACT SHEET: STATUS OF SELECTED LOCAL PACE PROGRAMS (2000). At the time of the survey, eighteen (18) more applications were pending. *Id.*

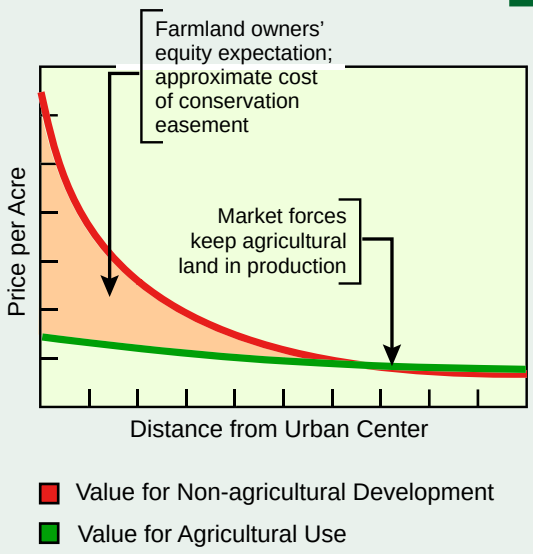
V-O

Conservation Easement Valuation

Generally, the value of land for non-agricultural development increases as the distance from the parcel to the urban center decreases. This is due to the presence of urban infrastructure, services and convenience. Yet, since agricultural uses have little need for urban infrastructure and services, the value of land for agricultural purposes remains relatively constant when evaluated as a function of distance from an urban center.

The graph at left shows that, for parcels near the urban center, the gap in value between agricultural and non-agricultural development represents the landowners' equity expectation. That expectation will be the approximate price the landowners' development rights.

To the right of the point where the lines cross, the value of land for agricultural use is higher than its value for development. Thus, land will likely stay in agricultural production due to market forces.



Program Elements

Generally speaking, PACE programs are voluntary on the part of the landowner. Therefore, successful PACE programs not only make the sale of the conservation easement attractive from a market standpoint, but also include a significant public outreach component to educate the landowners about the benefits of the program. The critical components of a voluntary PACE program are:

1. a public commitment and dedicated funding source;
2. a public outreach program;
3. a program for setting acquisition priorities;
4. a program for evaluating applications;
5. a public or nonprofit entity to negotiate and enforce the terms of the easement;
6. available staff or funding for surveying, legal drafting and recording; and
7. available staff and infrastructure for record keeping.

Practicality Analysis

PACE programs are a valuable tool for protecting prime farmland and open space vistas from future subdivision and development. To compete with residential subdividers for the farmer's attention, PACE programs must provide a sufficient economic incentive to the farmer to forego future profits from non-agricultural development. The relationship between agricultural and non-agricultural land values as a function of distance from an urban center is illustrated in Figure V-O.

Generally speaking, the closer the parcel of land to the urban center, the more valuable it is for non-agricultural development. This is so for many reasons, including the availability of public infrastructure and services, visibility, and the proximity of urban and suburban amenities. By contrast, the value of land for agriculture is largely dependent upon factors that have little to do with the location of the nearest urban center, such as soil quality, water supply, and parcel size. Thus, agricultural land values remain relatively constant as a function of distance from an urban core.

The sizable gap between agricultural and non-agricultural land values in areas near urban centers means that farmers who sell their land for subdivision have much to gain. Thus, these areas are under strong pressure for conversion of land from agricultural to non-agricultural use. Yet, in more remote areas, there is little gap between the values, and therefore little to be gained by conversion to non-agricultural uses. Because the value of development rights is proportional to the development pressure, farmers in visible areas near urban centers will likely demand high prices for future development rights.

Yet it is these visible areas near urban centers that often have the greatest value as preserved open space, due to their aesthetics and accessibility. Thus, in the context of the SWA, PACE programs should focus on those areas most immediately threatened by inappropriate non-agricultural development, even though prices will inevitably be high. Still, PACE programs should be used only as a "last resort" – where other rural landscape management tools will be ineffective in preserving the desired open space quality of the property in question.

Because PACE programs should focus on areas where development rights have already become relatively expensive, the principal obstacle to their implementation is almost always lack of funding. Where funds are scarce, political will may not be sufficient to expend large sums to preserve open space and agricultural land. However, as a legal matter, acquisition of less-than-fee interests (including conservation easements) in property is a relatively routine practice.

Sample Applications

The following three (3) examples are illustrated in Figure V-P on page V-31.

1. *Using PACE to Establish a "Greenbelt."*

In this example, a City has designated three "nodes" along a regional arterial as "growth areas." These "nodes," as well as the land between them, currently contain agricultural and forestry uses with both economic and scenic values. To give each of the "nodes" an individual identity and to prevent them from ultimately merging into one long strip of development, the City wishes to establish scenic corridors between them. Because the development pressure on these areas will increase as the areas build out, the City may wish to purchase conservation easements between the nodes to establish a "greenbelt" buffer.

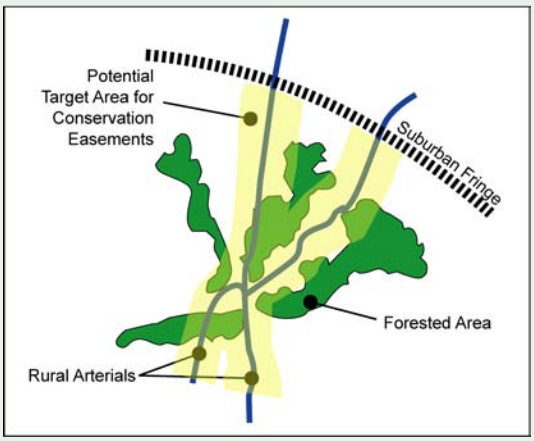
2. *Using PACE to Establish Scenic Corridors Near Urban Areas.*

Near the urban and suburban fringes of Chesapeake and Virginia Beach, there are still areas that are either in active agricultural production, or in an otherwise undeveloped, open space, state. These areas are particularly valuable in terms of their accessibility, visibility, and aesthetic contribution to the community. Because of their location, these areas are also the most vulnerable to suburban and exurban development.

In these areas, which are served by suburban roadways (rather than rural roads), rural road carrying capacity analysis and cost forecasting analysis are not particularly appropriate tools for limiting development to an extent that would consequently preserve open space character. Moreover, while design guidelines, cluster development, and other creative site planning tools may mitigate the impact of new development on the aesthetics of these areas, the community may prefer to keep them free of development in order to preserve significant vistas. Accordingly, the community may wish to offer the property owners the value of their development rights in order to preserve the open space in perpetuity.

3. *Private Transfer of Development Rights*

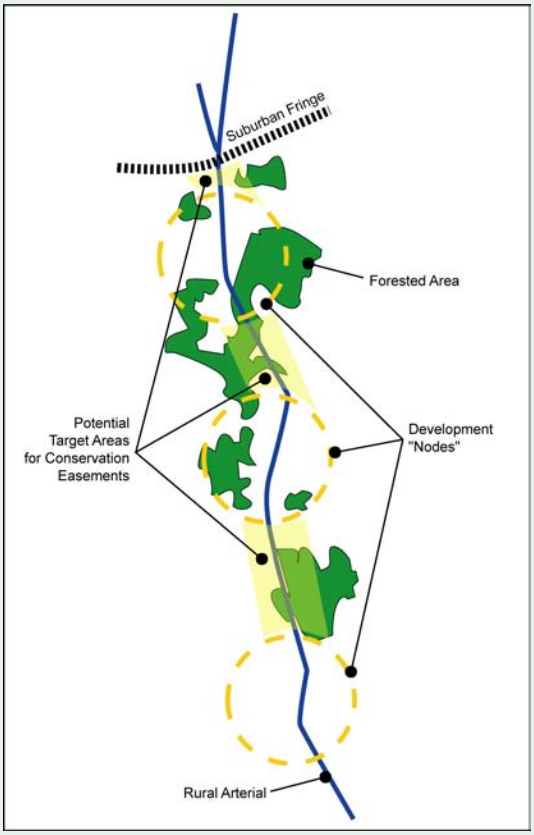
Conservation easements may be used as an implementation strategy for other land manage-

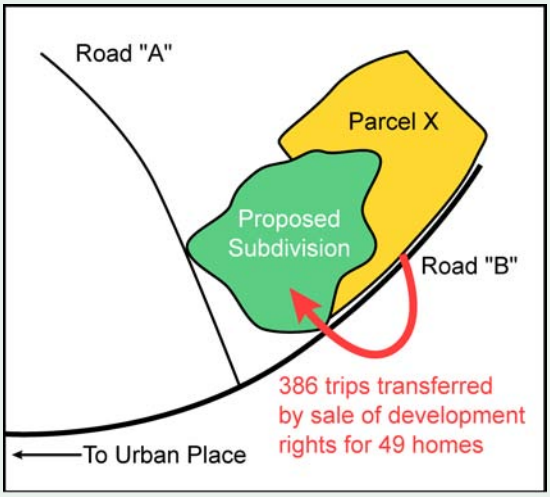


Conventional PACE Applications

The illustration at right shows how a Purchase of Conservation Easements program could be used to establish a "greenbelt" between designated development nodes. Conservation easements that extend at least one thousand (1,000) feet from both sides of the road in the area between the nodes will help to create a "sense of place" for the nodes by adding definition to their borders. The easements will also contribute scenic value to people traveling to and between the nodes.

The illustration above shows how conservation easements should be used to protect land with significant scenic value from conversion to uses that destroy that scenic value. Land located close to the suburban fringe should be given top priority because it is at the most immediate risk of conversion.





Transferring Development Rights Using Conservation Easements

The illustration at left shows one way a developer might overcome a rural road carrying capacity limitation on the number of homes it is permitted to construct on a particular parcel of land. Here, the developer approached the owner of Parcel X, which had been previously been allocated a portion of the capacity of Road "B." Since the owner of Parcel X has not used its capacity allocation, it can sell its right to do so to the developer by agreeing to place a conservation easement over the amount of land that would generate the number of trips the developer needs. Thus, at one unit per five acres zoning, the developer would have to purchase a conservation easement over two hundred forty-five (245) acres. The transaction occurs in the free market.

ment tools. For example, the developer of Oakwood Lakes Reserve Estates (see pages V-13 to V-14) could not build its project at its desired unit count because it did not have a sufficient number of trips allocated to its property to accommodate the traffic impacts of the development on Road "B." However, if the developer could purchase some of the trips allocated to other properties served by the impacted segment of Road "B," it could proceed with its original project.

Recall that the one hundred fifty home subdivision generated three hundred eighty-six (386) more trips than permitted by its allocation. Accordingly, the developer must purchase development rights to the number of units that would otherwise place those three hundred eighty-six (386) trips onto the impacted segment of Road "B." Three hundred eighty-six (386) trips corresponds to forty-nine (49) single-family homes.

The land immediately east of the developer's parcel is an operating farm that has been allocated, but has not used, eight percent (8%) of Road "B's" capacity, or one thousand two hundred (1,200) trips. Its current zoning permits development of one unit per five (5) acres. Accordingly, the developer can satisfy the rural road carrying capacity requirement if it can purchase a conservation easement over two hundred forty-five (245) acres of the adjacent property owner's land.

RURAL ROAD CARRYING CAPACITY ANALYSIS MODEL ORDINANCE

Methodology for rural road carrying capacity analysis is discussed in detail on pages V-10 to V-14, supra.

This Model Ordinance creates an overlay zone to set appropriate development densities for land served by rural roads.

1. Findings and Purpose

   (a) The *Governing Body* finds that uncontrolled non-agricultural development in *the municipality's* rural area may result in disproportionate and unsustainable short and long-term demands on municipal and state infrastructure budgets.

   (b) The Governing Body finds that the current state of certain rural roads contribute to the rural character of the areas surrounding them, and that maintaining that character contributes to the welfare of the citizens of the City of _____.

   (c) The City of _____ has undertaken a Comprehensive Planning effort in which it identified rural road "travel sheds," analyzed existing traffic in the travel sheds, and allocated development density based on the capacity of the travel sheds to accommodate additional vehicular trips.

   (d) The purpose of this Ordinance is to implement *the comprehensive plan section regarding rural road carrying capacity analysis.*

2. Road Capacity/Development Density Overlay Zone Established.

A Road Capacity/Development Density Overlay Zone ("Overlay Zone") is hereby established. The boundaries of the Overlay Zone are specified on the Official Zoning Map of the City of _____.

3. Permitted Development Density.

   (a) Within each area indicated on the Official Zoning Map that is subject to the Overlay Zone, development density shall be determined by the capacity of the existing road network. The density permitted in each area shall be indicated on the Official Zoning Map in units per acre.

   (b) The development density set by this Ordinance shall supercede any contrary provisions of this Code.

4. Liberal Construction.

This Ordinance, being necessary for the welfare of the City of _____ and its inhabitants, shall be construed liberally to effect the purposes thereof.

5. Repealer.

All ordinances or parts of ordinances in conflict herewith be, and the same, are hereby repealed.

6. Severability.

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this Ordinance shall be judged invalid by a court of competent jurisdiction, such order or judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this Ordinance and, to this end, the provisions of each article, section, subsection, paragraph, subdivision or clause of this Ordinance are hereby declared to be severable.

7. Effective Date.

This Ordinance shall become effective _____. This Ordinance shall become part of the official code of _____.

PASSED AND DULY ADOPTED THIS ____ DAY OF _____, _____.

[MUNICIPALITY]

BY: _____

INFRASTRUCTURE COST FORECASTING MODEL RESOLUTION

1. Findings and Purpose

   (a) The *Governing Body* finds that non-agricultural development in *the municipality's* rural area may result in unanticipated, disproportionate and unsustainable short and long-term demands on municipal and state infrastructure budgets.

   (b) The Governing Body finds that the fiscal integrity of the City of _____ and the State of Virginia is protected by ensuring that new development in rural areas will either: (1) generate sufficient revenue to pay for the cost of the infrastructure and public services that it will demand, or (2) be of a sort that is desired to an extent that the community and/or the state is willing to subsidize it from other sources.

   (c) The purpose of this Ordinance is to protect the fiscal integrity of the City of _____ and the State of Virginia by adopting a standard methodology for infrastructure cost forecasting, and by requiring periodic analysis of the growth and development patterns of the City in terms of their fiscal impacts.

2. Definitions

   (a) "Comprehensive Plan" means the comprehensive plan for the City of _____, enacted on *date*.

   (b) "Infrastructure Cost Forecasting" means an analysis based on accepted methodology that evaluates the initial and continuing impact of new development on public facilities as a function of the tax increment generated by the new development.

3. Methodology Adopted

A number of infrastructure cost forecasting methodologies have been published. Depending upon whether the municipality or the applicant is assigned the task of performing the analysis, this section of the Ordinance could:

(a) adopt a particular methodology and set it forth;

(b) incorporate a particular methodology by reference;

(c) set forth a list of alternative methodologies;

Infrastructure cost forecasting is intended to be used in conjunction with other rural land management tools.

The municipal planning departments should review the various infrastructure cost forecasting methodologies and recommend those that are most appropriate for the SWA.

The City of Chesapeake already uses the Cost Revenue Impact Model ("CRIM") method for evaluating the fiscal impacts of new development.

(d) set forth a list of alternative methodologies and a procedure for consideration of an alternative outside the list; or

(e) require presentation and justification of the methodology the applicant wishes to utilize.

The methodology section of the Ordinance should also require that the "best available data" be used in performing the analysis.

11. Effective Date.

This Ordinance shall become effective _____. This Ordinance shall become part of the official code of _____.

PASSED AND DULY ADOPTED THIS ____ DAY OF _____, _____.

[MUNICIPALITY]

BY: _____

VILLAGES AND HAMLETS MODEL ORDINANCE

1. Findings and Purpose.

   (a) The *Governing Body* finds that preserving the character of the rural areas within the corporate limits of the City of _____ promotes the health, safety, and welfare of its citizens, and that non-agricultural development in *the municipality's* rural landscape can adversely affect the character of the City's rural areas.

   (b) The *Governing Body* finds that inappropriately located non-agricultural development places disproportionate demands on public infrastructure.

   (c) The *Governing Body* finds that the impact of non-agricultural development on the character and infrastructure of the City's rural areas can be mitigated through appropriate design and locational requirements.

   (d) The *Governing Body* finds that the same design and locational requirements that mitigate the impact of non-agricultural development on the rural landscape often add value to the non-agricultural development.

   (e) The purpose of this Ordinance is to preserve the rural landscape and reduce infrastructure demands within the corporate limits of the City of _____ by permitting the allocation of areawide density to appropriate areas, encouraging a balanced mix of uses, and encouraging quality community design.

2. Definitions.

   (a) "Local Street" means a roadway used primarily for local travel, with one or two travel lanes and the capacity to convey no more than _____ daily trips.

   (b) "Major Arterial" means a roadway used for regional travel, with at least four travel lanes and the capacity to convey at least _____ daily trips.

   (c) "Parcel Proposed for Development" shall mean any land which is capable of precise description which is designated for development.

   (d) "Traditional Town Planning Principles" are planning principles that include within a single development site a pe-

destrian-oriented design; a variety of housing types and densities; a central public space (such as a plaza) surrounded by one to three-story buildings with vertically mixed use (residential above retail or office above retail); and a balance of land uses that provides for an internal trip capture rate of thirty-five percent (35%) or higher.

3. Uses Permitted by Special Permit. The following uses shall be permitted in AL and SRL management units, if an application for development approval and accompanying documentation or evidence demonstrates compliance with performance standards enumerated for each use:

   (a) Hamlets comprised of residential units, commercial retail space and establishments offering overnight accommodations, provided that:

      1. The parcel proposed for development does not exceed twenty-five (25) acres;

      2. The parcel proposed for development is located at or within one thousand (1,000) feet of an intersection between two roads where at least one of the two streets is not a local street;

      3. The parcel proposed for development is not located within one-half (½) mile of another Hamlet, Village, or Planned Community of Place;

      4. The Hamlet contains no more that one hundred and fifty (150) dwelling units;

      5. The Hamlet contains no more than a combined total of twenty-five thousand (25,000) square feet of retail and office floor area;

      6. Institutional uses and required parking for such uses do not occupy more than a total of ten (10) acres within an individual hamlet;

      7. Adequate provision by acceptable and appropriate means is made for the provision of potable water, wastewater treatment and educational facilities; and

      8. The layout of the Hamlet reflects Traditional Town Planning Principles, including a commons-place or other public feature.

   (b) Villages including residential, commercial retail, manufacturing and fabricating businesses and

establishments offering overnight accommodations, provided that:

1. The parcel proposed for development does not exceed fifty (50) acres;
2. The parcel proposed for development is located at or within one thousand (1,000) feet of an intersection between two roads which are not local roads;
3. The parcel proposed for development is located no more than three (3) travel miles from a major arterial;
4. The parcel proposed for development is not located within one (1) mile of a Village or Planned Community of Place;
5. The Village contains no more than three hundred fifty (350) dwelling units;
6. The Village contains no more than a combined total of fifty thousand (50,000) square feet of retail and office floor area;
7. The Village contains no more than a combined total of fifty thousand (50,000) square feet of manufacturing and fabricating business;
8. Institutional uses (including required parking for such uses) do not occupy more than a total of twenty (20) acres within a Village;
9. Adequate provision by acceptable and appropriate means is made for the provision of potable water, wastewater treatment and educational facilities; and
10. The layout of the Village reflects Traditional Town Planning Principles including a central public place surrounded by structures with retail/office on the first floor and residential on the second floor.

4. Liberal Construction.

This Ordinance, being necessary for the welfare of the City of _____ and its inhabitants, shall be construed liberally to effect the purposes thereof.

5. Repealer.

All ordinances or parts of ordinances in conflict herewith be, and the same, are hereby repealed.

6. Severability.

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this Ordinance shall be judged invalid by a court of competent jurisdiction, such order or judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this Ordinance and, to this end, the provisions of each article, section, subsection, paragraph, subdivision or clause of this Ordinance are hereby declared to be severable.

7. Effective Date.

This Ordinance shall become effective _____. This Ordinance shall become part of the official code of _____.

PASSED AND DULY ADOPTED THIS ____ DAY OF _____, _____.

[MUNICIPALITY]

BY: _____

CROSS ROADS COMMUNITIES MODEL ORDINANCE

1. Findings and Purpose.

   (a) The Governing Body finds that the preservation of agricultural operations and open space is important to the continued health and welfare of the citizens of the City of _____.

   (b) The Governing Body finds that non-agricultural development patterns in some rural areas in the City of _____ have proceeded to a point where the area is no longer characterized by open space.

   (c) The Governing Body finds that within these areas, additional development may be accommodated without further compromising community character.

   (d) The Governing Body finds that the welfare of the citizens of the City of _____ is promoted by the provision of an "exurban" housing alternative in specified areas.

   (e) The Governing Body finds that restricting the expansion of the existing "exurban" development pattern will preserve agricultural land and open space.

2. Definitions.

   (a) "Non-Local Road" means a roadway used for regional travel, with at least two travel lanes, that has the capacity to convey at least _____ daily trips.

3. Cross Roads Community Overlay Zone Established.

A Cross Roads Community Overlay Zone is hereby established. Its boundaries are represented on the Official Zoning Map.

4. Permitted Uses and Intensities.

   (a) Uses permitted in the Cross Roads Community Overlay Zone include residential, commercial, retail, and office.

   (b) Residential density should generally be increased above existing conditions in order to more efficiently utilize available land, but should preserve the existing character of the area and not overtax public infrastructure. It is likely that residential density will be set at different levels for different Cross Roads Communities, and even different areas within individual cross roads communities..

All desired existing uses in the Cross Roads Community should be included in the permitted uses section. If there are substantial differences in existing or desired uses among the Cross Roads Communities, separate zones should be established for each.

Generally, the character of RIL management units is defined by deep, narrow "piano key" lots. As such, the homes are spaced relatively closely together. Thus, permitted density may be increased without impacting community character. If there are significant differences in existing character among the designated Cross Roads Communities, separate zones may be established for each.

(c) Commercial, retail, and office uses are permitted:

1. in areas within five hundred (500) feet of an intersection that includes at least one non-local road; and

2. subject to the following design standards:

a. Floor area ratio shall not exceed four-tenths (.4);

b. Parking lots shall be located behind buildings and shall be screened from view from the roadway;

c. Buildings shall be constructed along a build-to line immediately adjacent to a ten (10) foot wide sidewalk;

d. No side setbacks shall be required; and

e. Street trees shall be planted every twenty (20) feet on center.

4. Conditional Uses.

(a) Institutional facilities, storage and transportation facilities, and establishments offering overnight accommodations shall be permitted by conditional use.

5. Liberal Construction.

This Ordinance, being necessary for the welfare of the City of _____ and its inhabitants, shall be construed liberally to effect the purposes thereof.

6. Repealer.

All ordinances or parts of ordinances in conflict herewith be, and the same, are hereby repealed.

7. Severability.

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this Ordinance shall be judged invalid by a court of competent jurisdiction, such order or judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this Ordinance and, to this end, the provisions of each article, section, subsection, paragraph, subdivision or clause of this Ordinance are hereby declared to be severable.

8. Effective Date.

This Ordinance shall become effective _____. This Ordinance shall become part of the official code of _____.

PASSED AND DULY ADOPTED THIS ____ DAY OF _____, _____.

[MUNICIPALITY]

BY: _____

PLANNED COMMUNITIES OF PLACE MODEL ORDINANCE

1. Findings and Purpose.

   (a) The *Governing Body* finds that the urban and suburban areas within the City of _____ are ___ percent built-out, and that continued population growth will create demand for housing and employment beyond that which can be provided in existing urban and suburban areas.

   (b) The Governing Body finds that additional areas of development at urban and suburban densities are needed to accommodate the projected growth of the City of _____.

   (c) The *Governing Body* finds that preserving the character of the rural areas within the corporate limits of the City of _____ promotes the health, safety, and welfare of its citizens, and that non-agricultural development in *the municipality's* rural landscape can adversely affect the character of the City's rural areas.

   (d) The *Governing Body* finds that inappropriately located non-agricultural development places disproportionate demands on public infrastructure.

   (e) The Governing Body finds that the cost of providing public services to areas of new growth can be substantially reduced by promoting a development pattern that is compact, mixed-use, and pedestrian-oriented.

   (f) The Governing Body finds that *certain roads* in the rural landscape have current or planned capacity to support new areas of development at urban or suburban densities.

   (g) The purpose of this Ordinance is to provide locational, use, and design criteria for Planned Communities of Place.

2. General Description.

Planned Communities of Place may include residential, commercial retail, office, manufacturing and fabricating businesses, agricultural processing facilities, institutional facilities, storage and transportation facilities, and establishments offering overnight accommodations.

3. Required Site Parameters.

   (a) The parcel proposed for development may not exceed two thousand one hundred (2,100) acres.

Where the City has already undertaken a planning study to designate areas for new growth, it may choose simply to identify those areas in Section 3.

(b) A boundary of the parcel proposed for development must be located no more than one thousand (1,000) feet of an intersection or interchange with a major arterial with at least four (4) lanes, or the interchange must be otherwise within the boundaries of the parcel proposed for development.

(c) Adequate, acceptable, and appropriate infrastructure for potable water, wastewater treatment, and education must be available to or provided by the development.

(d) The site must be located in a Rural Development Lands ("RDL") district.

3. Required Density and Development Mix.

(a) The community must include at least six (6) dwelling units per gross acre of the parcel proposed for development.

(b) The community must include at least one hundred thousand (100,000) square feet of retail and office floor area.

(c) Institutional uses and their related parking areas may not comprise more than twenty five percent (25%) of the parcel proposed for development.

4. Required Design Principles.

The design principles suggested by the Model Ordinance are intended to provide a basic framework within which to develop a mixed-use, pedestrian-oriented community. The local government may choose to add to or modify these standards, but should be careful to avoid unnecessary standards that may stifle creative designs.

(a) The community must be designed with a use mix and development pattern that captures at least thirty percent (30%) of the average daily trips generated by the community from origins within the community.

(b) The community must reflect "new urbanism" planning principles, including:

1. a central public space, such as a park or plaza, surrounded by two to three story vertically mixed use structures (residential above retail or office);

2. pedestrian-oriented commercial/office streets, characterized by:

a. street trees spaced twenty (20) feet on center;

b. sidewalks that are at least ten (10) feet wide;

c. street level building facade transparency of at least eighty percent (80%);

d. on-street parallel parking;

e. off-street parking positioned behind commercial structures;

f. pedestrian-scale lighting;

g. no side setbacks; and

h. a build-to line along the sidewalk.

3. pedestrian-oriented residential areas, characterized by:

a. a variety of residential lot sizes;

b. residential front setbacks of not more than 20 feet along single family street segments;

c. continuous sidewalks that are at least five (5) feet wide;

d. two and one-half (2½) to three and one-half (3½) foot high fences or hedges located along the sidewalk, to differentiate front yards from public spaces;

e. street trees spaced evenly at intervals of not more than thirty (30) feet on center, located in the space between the sidewalk and the road; and

f. two lane streets with travel lanes that are ten (10) feet wide.

5. Liberal Construction.

This Ordinance, being necessary for the welfare of the City of _____ and its inhabitants, shall be construed liberally to effect the purposes thereof.

6. Repealer.

All ordinances or parts of ordinances in conflict herewith be, and the same, are hereby repealed.

7. Severability.

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this Ordinance shall be judged invalid by a court of competent jurisdiction, such order or judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this Ordinance and, to this end, the provisions of each article, section, subsection, paragraph, subdivision or clause of this Ordinance are hereby declared to be severable.

8. Effective Date.

This Ordinance shall become effective _____. This Ordinance shall become part of the official code of _____.

PASSED AND DULY ADOPTED THIS ____ DAY OF _____, _____.

[MUNICIPALITY]

BY: _____

PURCHASE OF AGRICULTURAL CONSERVATION EASEMENTS MODEL PROGRAM AND ORDINANCE

NOTE: No particular ordinance language is necessary to enable the local government to purchase less-than-fee interests in private land because municipalities are already empowered to purchase property from willing sellers. However, a local government is well-advised to enact and ordinance that establishes a fund for the purchase of development rights. Earmarked funds for such purchases allow the local government to appropriately plan and prioritize acquisitions. Moreover, such a fund increases access to public and private grants and other funding sources.

1. Purpose.

The purpose of this ordinance is to establish a program for the acquisition, maintenance and development of open space lands which will preserve and protect the physical and environmental qualities of the agricultural and open space areas in the SWA, for the benefit of current and future community residents and visitors.

2. Open Space Trust Fund Established.

There is hereby established the [municipality] Open Space Trust Fund for the purpose of ensuring that grants, gifts, bonds, and other funds as authorized and appropriated by the [governing body] are expended to secure the preservation of open space.

3. Expenditure of Funds for Public Open Space.

All funds and interest accrued on such funds which were collected for public open space through grants, gifts, bonds, and other funds as earmarked, or otherwise authorized and appropriated by the [governing body] be used only for the following purposes:

(a) preservation, development, and maintenance of land for active recreational use;

(b) preservation and maintenance of land for passive recreational use, such as hiking, photography or nature studies, and if specifically designated, bicycling, horseback riding, or fishing;

(c) utilization of land for shaping development, limiting urban sprawl, and disciplining growth;

(d) utilization of land to prevent encroachment on floodplains;

(e) preservation of land for its aesthetic value and its contribution to the quality of life of the community;

(f) preservation or restoration of natural areas characterized by or including terrain, geologic formations, flora or fauna that are unusual, spectacular, historically important, scientifically valuable, or unique, or that represent outstanding or rare examples of native species; or

(g) preservation of water resources in their natural or traditional state, scenic areas or vistas, wildlife habitats, or fragile ecosystems.

4. Investment in Interest Bearing Accounts

Any proceeds in the Open Space Trust Fund account, not immediately necessary for expenditure, shall be invested in interest bearing accounts. All income derived from such investment shall be retained in the Open Space Trust Fund account.

5. Annual Recommendation for Expenditure of Funds

Each year, at the time the annual budget is reviewed, the [appropriate board] shall propose appropriations to be spent from the Open Space Trust Fund account to the [governing body] in accordance with the guidelines in section 3.1 hereof. After review of the recommendations, the [governing body] shall either approve, modify, or deny the recommended expenditures of the Open Space Trust Fund. Any amounts not appropriated from the trust accounts together with any interest earnings shall be carried over in the trust account to the following fiscal period.

6. Dedication of Public Open Space

Only land that is either located within an area designated Prime Agricultural Lands (AL), Environmentally Sensitive Lands (ESL), Scenic Resources Lands (SRL), or Rural Infill Lands (RIL), or that meets minimum criteria as set forth below, and is approved by the [appropriate board] to be dedicated to the [municipality] will be accepted as dedicated public open space. Land which is not designated AL, ESL, SRL, or RIL will not be accepted as dedicated public open space unless it meets the requirements of one of the following categories:

(a) Passive Recreational Land. The parcel must be appropriate in size, shape, and natural characteristics to be used for passive recreational use, such as hiking, photography or nature studies, and, if specifically designated, bicycling, horseback riding, or fishing;

(b) Scenic, Historic, and Scientifically Valuable Land. The parcel must be of significant aesthetic value, contain natural areas which are characterized by terrain, geologic formations, flora or fauna that are unusual, spectacular, historically important, scientifically valuable, or unique, or that represent outstanding or rare examples of native species; or

(c) Environmentally sensitive land. The parcel must be located in an environmentally sensitive area containing important wildlife habitats, or fragile ecosystems.

7. Liberal Construction.

This Ordinance, being necessary for the welfare of the municipality of _____ and its inhabitants, shall be construed liberally to effect the purposes thereof.

8. Severability.

If the provisions of any article, section, subsection, paragraph, subdivision or clause of this Ordinance shall be judged invalid by a court of competent jurisdiction, such order or judgment shall not affect or invalidate the remainder of any article, section, subsection, paragraph, subdivision or clause of this Ordinance and, to this end, the provisions of each article, section, subsection, paragraph, subdivision or clause of this Ordinance are hereby declared to be severable.

9. Effective Date.

This Ordinance shall become effective _____. This Ordinance shall become part of the official code of _____.

PASSED AND DULY ADOPTED THIS ____ DAY OF _____, _____.

[MUNICIPALITY]

BY: _____

GLOSSARY

GLOSSARY





Borrowed Open Space

"Borrowed open space" is the open space amenity provided to non-agricultural development in rural settings by adjacent farmlands or undeveloped areas. This open space is "borrowed" because it is not owned by the non-agricultural resident.

The picture at left shows a planned community surrounded by a "greenbelt" of agricultural land. The picture at right shows the same scene, with the "borrowed open space" highlighted in light green.

AQUIFER RECHARGE is the process by which aquifers are replenished with water from the surface. This process occurs naturally as part of the hydrologic cycle as infiltration when rainfall infiltrates the land surface and as percolation of water into underlying aquifers. A number of factors influence the rate of recharge including physical characteristics of the soil, plant cover, slope, water content of surface materials, rainfall intensity, and the presence and depth of confining layers and aquifers.

For additional information, see "How Aquifers are Replenished" at http://www.groundwater.com/groundwater_aquifer.html

BALANCED MIX OF USES refers to a development pattern where residential, employment, shopping, and recreational opportunities are located in close proximity to each other, and in quantities that reduce the distance of most automobile trips, and shift some of those trips to other modes of transportation, such as walking or bicycling.

BORROWED OPEN SPACE is the open space amenity provided to non-agricultural development in rural settings by adjacent farmlands or undeveloped areas. This open space is "borrowed" because it is not owned by the non-agricultural resident.

BUILDOUT refers to a condition where all land within a municipality is developed at the densities and intensities permitted by its zoning code.

CAPITAL FACILITIES are those public facilities that are large in scale and require significant public expenditures. Examples include roads, potable water and sewer systems, stormwater treatment systems, and public buildings.

CAPITAL IMPROVEMENTS PLAN is a proposed schedule for future capital facilities development, ordered by priority, that includes cost projections and anticipated sources of funds for meeting those costs.

CONSERVATION EASEMENT is a recorded, generally perpetual, limitation on the use of property to protect it from development that will compromise its natural, scenic, agricultural, or open space value. Conservation easements may include a variety of terms and conditions to serve various conservation goals.

COST REVENUE IMPACT MODEL ("CRIM") is a model for evaluating the relationship between the costs of new development to the public sector (in terms of provision of services) and the marginal revenue that the new development will produce. The CRIM model factors into consideration the cost of providing all city services, such as police, fire, libraries, schools, as well as anticipating all revenue streams such as property taxes, sales taxes, and business licenses.

EXURBAN DEVELOPMENT is development of non-agricultural structures in the area beyond the city and its suburbs. Exurban development is typically characterized by single family homes on large lots.

EXURBANITE refers to the individual (non-farmer) resident of an area of exurban development.

FEE INCREMENT refers to the difference between the fees collected for public services before and after development or redevelopment.

FEE INTEREST is an ownership interest in a parcel of land that involves all of the rights inherent in land ownership, including possessory rights.

FIFTH AMENDMENT refers to the Fifth Amendment to the United States Constitution, which provides, "No persons shall . . . be deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation."

FOURTEENTH AMENDMENT refers to the Fourteenth Amendment to the United States Constitution, which provides in part: "No State shall . . . deprive any person of life, liberty, or property, without due process of law; nor deny to any person within its jurisdiction the equal protection of the laws."

GEOGRAPHIC INFORMATION SYSTEM refers to a system for electronically catloguing and analyzing data by geographical unit.

HYDRIC SOIL is soil that is wet for a period sufficient to cause anoxic (oxygenless) conditions to develop. Essentially, the water in the soil forces the air out. This type of soil is found in wetlands.

HYDROLOGY refers to the dynamics of the flow of water on and below the surface of the ground, and to the hydrologic cycle of evaporation, precipitation, and runoff.

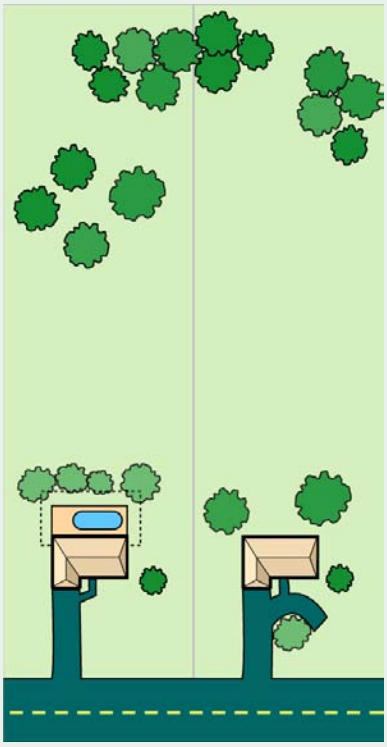
INTERNAL VEHICULAR TRIP CAPTURE RATE is the number of automobile trips with origins and destinations within a specific area of development, divided by the total number of automobile trips originating in the specified area. It is expressed as a percentage.

LARGE LOT ZONING refers to the zoning of land for non-agricultural development at densities less than one unit per acre.

LESS-THAN-FEE INTEREST refers to an interest in land that is something less than complete ownership, such as development or use rights.

MANAGEMENT UNIT refers to a common group of landscape values and resources that are shared in various geographic areas. For example, the Agricultural Lands management unit is characterized by productive soils and agricultural enterprises that the community wishes to protect. There might be several distinct geographic areas with these same characteristics, but all of them are part of the management unit. Management units are used to simplify the task of selecting land management tools for particular areas by identifying resources and values in advance of new development.

MIXED-USE refers to multiple uses of land (residential, retail, office, etc.) in the same development area. Mixed-use development may be either horizontal (*e.g.*, residential and retail uses in separate buildings located nearby each other), or vertical (*e.g.*, residential units located above retail or office uses in the same building), or both.



PIANO-KEY LOT

"Piano Key Lots" refer to a pattern of development of large, deep residential lots that have narrow frontages on public roads. The moniker "piano-key lot" comes from the appearance of these lots when viewed from the air. At left is an illustration of two such lots from the air. Below is a typical piano key subdivision.



Mixed use environments provide opportunities for people to walk (rather than drive) to places of employment, shopping, or entertainment.

PACE PROGRAM refers to a program for purchasing agricultural conservation easements.

PEAK HOURS are the times during the day when roadway usage is at its peak. In most areas, peak hours are from 7:00 a.m. to 9:00 a.m. and 4:00 p.m. to 6:00 p.m., though these hours vary by distance to places of employment and area demographics.

PIANO-KEY LOT refers to a pattern of development of large, deep residential lots that have narrow frontages on public roads. The moniker "piano-key lot" comes from the appearance of these lots when viewed from the air.

PUBLIC INFRASTRUCTURE (*see CAPITAL FACILITIES*)

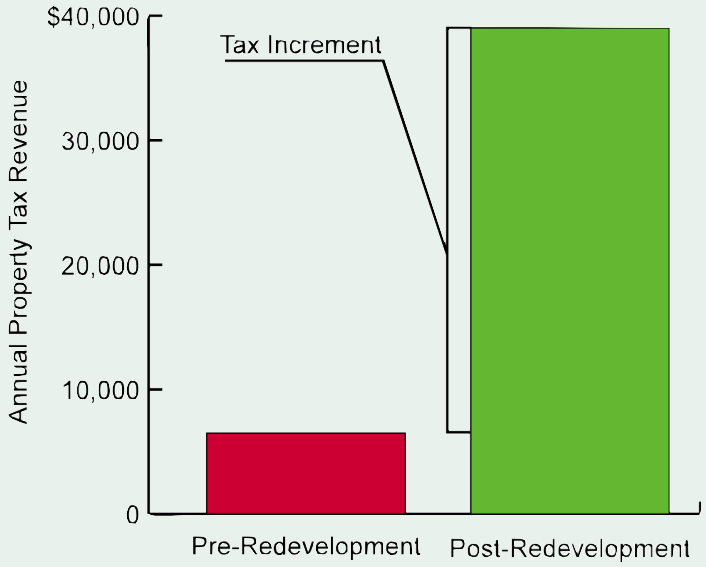
PUBLIC SERVICES refers to services typically provided by a unit of local government, such as police and fire protection, life safety, and education.

RAPP is the acronym for the *Rural Area Preservation Plan*.

REGULATORY REGIME in the context of the *Rural Area Preservation Plan*, refers to the system of land use controls and other regulations (including environmental laws) that influence the pattern and use of development in the rural landscape.

SETBACK refers to the distance between the walls of a structure and the borders of the lot upon which it is developed. Minimum setback requirements are a common component of municipal zoning codes.

SOIL PERMEABILITY refers to the ability of the soil to absorb water, and the rate at which it does so. Permeable soils allow water to quickly percolate to the water table, while impermeable soils



Tax Increment

"Tax Increment" is the difference between the property taxes collected before and after development or redevelopment. For example, a parcel of land worth $500,000, taxed at a rate of thirteen (13) mils, produces $6,500 ($500,000 x .013) per year in revenues to the local government. If that parcel is redeveloped and increases in value to $3,000,000, it will produce $39,000 per year in revenues when taxed at the same rate. The tax increment after redevelopment is thus $39,000 - $6,500, or $32,500. The chart at left illustrates the concept.

contain water or force it to run off to other areas of surface water or permeable soil.

SUBURBANIZATION refers to the succession of the use of land from natural or agricultural areas to suburban development.

SWA is the acronym for the Southern Watershed Area.

SWAMP is the acronym for the Southern Watershed Area Management Program.

TAX INCREMENT refers to the difference between the property taxes collected before and after development or redevelopment. For example, a parcel of land worth $500,000, taxed at a rate of thirteen (13) mils, produces $6,500 ($500,000 x .013) per year in revenues to the local government. If that parcel is redeveloped and increases in value to $3,000,000, it will produce $39,000 per year in revenues when taxed at the same rate. The tax increment after redevelopment is thus $39,000 - $6,500, or $32,500.

TCOD is the acronym for the Transportation Corridor Overlay District, a planning progam of the City of Chesapeake.

TOPOGRAPHY refers to the surface features of the ground, especially its varying elevations.

TOTAL VEHICLE MILES TRAVELLED refers to the aggregate distance driven by residents of a given land area over a given unit of time. As the distance between various land uses (*e.g.*, residences, shops, and places of employment) increases, total vehicle miles traveled increases dramatically because each resident of the area must travel the increased distance.

TRAFFIC THROUGHPUT is the volume of traffic a given segment of road conveys (or, when used in the context of capacity, can convey) in a given period of time.

TRAVEL SHED is a concept used in rural road carrying capacity analysis. A travel shed is an area with a heirarchical arrangement of roads that feed into the regional system in a manner that makes traffic circulation patterns predictable.

BEAUFORT COUNTY COUNCIL
AGENDA ITEM SUMMARY

ITEM TITLE:

RECOMMEND APPROVAL OF AN ORDINANCE TO ACCEPT AND TO APPROPRIATE FUNDS FROM THE SOUTH CAROLINA OPIOID RECOVERY FUND

MEETING NAME AND DATE:

Community Services and Land Use Committee

April 10th, 2023

PRESENTER INFORMATION:

Steve Donaldson, Director, Alcohol and Drug Abuse Department

10 minutes

ITEM BACKGROUND:

Beaufort County is party to a national opioid lawsuit settlement. As the SCORF Board makes opportunities for Beaufort to apply for funds allocated to Beaufort County, Beaufort applies for funds to enhance capacity or new initiatives towards opiate abatement strategies. Beaufort County received notification of funding to create new programming in December of 2022.

PROJECT / ITEM NARRATIVE:

The award would create 3 FTEs to enhance medication assisted treatment, detention center, and emergency room warm hand-off programming. The new programming would be under the management of the Beaufort County Alcohol and Drug Abuse Department (BCADAD). These are award funded positions which will terminate if annual funding is not received from SCORF.

FISCAL IMPACT:

The SCORF Fund Award is $299,376 for one year. No matching funds.

STAFF RECOMMENDATIONS TO COUNCIL:

Recommend to approve an ordinance so capacity expansion at BCADAD can occur to do work related to opiate abatement.

OPTIONS FOR COUNCIL MOTION:

Motion to approve an Ordinance to allocate funds received from the South Carolina Opioid Settlement Funds or motion to deny an Ordinance to allocate funds received from the South Carolina Opioid Settlement Funds.

ORDINANCE 2023/_____

AN ORDINANCE TO ACCEPT AND TO APPROPRIATE FUNDS FROM THE SOUTH CAROLINA OPIOID SETTLEMENT

WHEREAS, there has been made available certain opioid lawsuit settlement funds from the 2022 National Opioid Settlement to be administered by the South Carolina Opioid Recovery Fund Board ("Board"), and to be awarded to Beaufort County ("County") for opiate abatement purposes; and

WHEREAS, in order for the County to obtain settlement funds from the South Carolina Opioid Settlement Fund ("Fund"), the County must first submit an application to the Board explaining the County's intended use of the funds and then provide proof that the intended use complies with South Carolina's Approved Uses for Investing Opioid Settlement Funds requirements; and

WHEREAS, in late 2022 Beaufort County filed its first application with the Board. Beaufort County sought to fund and equip three in-house staff persons to help the County in its efforts to address the ongoing opioid crisis (Exhibit "A"). The Board approved the County's application and awarded the County funds in the amount of $299,376. The award requires the funds to be used as set forth in the application.

NOW, THEREFORE, BE IT ORDAINED, that Beaufort County Council, in a meeting duly assembled, hereby accepts, and appropriates, funds in the amount of $299,376 from the South Carolina Opioid Settlement as set forth in Exhibit "A".

Adopted this ____ day of _____, 2023.

COUNTY COUNCIL OF BEAUFORT COUNTY

BY: _____

Joseph Passiment, Chairman

ATTEST:

_____

Sarah W. Brock, Clerk to Council

EXHIBIT "A"

Beaufort County Opioid Abatement Funding Plans for Beaufort County Alcohol and Drug Abuse Department

The South Carolina Opiate Response Fund Board (SCORF) will soon be opening the SCORF Application process for government entities on October 24th and closing the first request for funding on December 2, 2022. Request is be tied to approved users and strategies tied to opiate abatement. The first amount available to Beaufort County will be up to $410,807.97. The department is requesting $300,000 from the available funds.

Summary of Core Strategy and Approved Uses

The Beaufort Alcohol and Drug Abuse Department (BCADAD) will increase the capacity to engage and provide services in Beaufort County. The addition of three full time employees (*A Medication Assisted Treatment Coordinator, Counselor, and Certified Peer Support Specialist*) will allow for potential patients to receive near on-demand services, as well as engaging them through community-based outreach. That team would work in the detention center, the local emergency department, and in the BCADAD offices. Their primary function would be to work with opiate users, their families, and support systems.

Core Strategies:

(A) Naloxone or Other FDA-Approved Drug to reverse Opioid Overdose
(B)Medication-Assisted Treatment Distribution and Other Opioid related Treatment
(E) Expansion of a Warm Hand-Off Program
(F)Treatment for Incarcerated Population

- **A. Naloxone or Other FDA-Approved Drug to reverse Opioid Overdose**

1. Purchase Naloxone (Narcan) for Beaufort County First Aid Kits (3-year shelf life). Staff to be trained to the signs of an opioid overdose by BCADAD or First Responder Personnel before installation. First Aid Kits will enable Beaufort County staff to appropriately respond to a suspected opiate overdose of a citizen or a staff member Total…… 50@$72= **3,600**

- **B. MOUD and Other Opioid Related Treatment**

1. Expand the availability by:

1.1 Hire a Medication Assisted Treatment Counselor/coordinator $65k, plus fringe of 22,750 = **$87,750**

Key Responsibilities

Coordinate Medication Assisted Treatment Program and other services to opiate use patients by:

- Coordinate SBIRT activities and "Fast-Track" of patients with OUD issues from the ED. Developing "Fast Track" protocols to take patients directly from the local emergency department, already inducted on Suboxone. The MAT Counselor hired will ensure the person is seen within 24 hours, and will assess, refer, and develop and manage a plan of care to include treatment as usual, medications, or both, as preferred by the patient (medications for indigent funded by SC-DAODAS).
- Receiving patients from Beaufort County Emergency Department (ED) within 24 hours of referral, especially those inducted on Buprenorphine
- Conduct group, family, and individual services
- Supervise Peer Recovery Support Staff
- Conduct follow-ups with patients to gather performance data
- Produce and maintain all deliverables for the single state authority or other funding bodies.

Other Supplies, training, and contractual services expenses associated with the capacity expansion are:

> Business Cards/Brochures **$100**
> Lunch and learn for emergency department staff **$250**
>Surface Pro (1) @$900 each or **$900**
>Monitors and Docking Stations @$500 ea. or **$500**

> iPhone ($500) and monthly service @67.50 ($810)	**$1,310**
> Office supplies (paper, pens, staplers, computer bags, etc.)	**$500**
> Electronic Health Record fees @468 ea. annually	**$468**
> Workforce development for all counselors, administrators, and peers working with OUD patients will obtain/maintain credentials and licensure through training ($2,000 annually) and external contracted supervision.	**$28,600**
Urine Drug Screens for all patients to monitor for opiate use and recovery.	**$ 7,000**
Total =	**$127,378**

- **E. Expansion of a Warm Hand-off Program**

A Peer will be hired and embedded in the Beaufort Memorial Hospital Emergency Department. The Peer will be doing SBIRT screenings and referrals, which is an evidenced-based intervention, and supported as an approved use of the opiate settlement. The Peer, supervisor, and hospital staff will need training for smooth protocol use.

Embed a Peer Support Specialist into the Beaufort Memorial Hospital Emergency Department @ $35k + 12,500= **$47,500**

Other Supplies, training, and contractual services expenses associated with the capacity expansion are:

> SBIRT Training for Beaufort County stakeholders at the local hospital, detention center, the alcohol and drug abuse department, training in the SBIRT model, as applicable. Ea. training by Alan Lyme @$5,000 x2	**$10,000**
>Surface Pro (1) @$900 each or	**$900**
> iPhone ($500) and monthly service @67.50 ($810)	**$1,310**
> Office supplies (paper, pens, staplers, computer bags, etc.)	$**500**
Total=	**$60,210**

F. Address the Needs of Criminal Justice Involved Persons

a. Embed a Counselor/Social Worker into the Beaufort County Detention Center @ $52,000 + fringe +17,264 = **$69,264**

Key Responsibilities: would be to coordinate with medical staff to identify new detainees' substance use status, if applicable. Outreach to those in need of opiate or other substance use to screen and assess, as allowable and permitted, and to provide education, transitional coordination, Narcan training, and follow-up to bring about higher engagement in needed wrap-around services.

Other Supplies, training, and contractual services expenses associated with the capacity expansion are:

>Surface Pro (1) @$900 each or	**$900**
> Office supplies (paper, pens, staplers, computer bags, etc.)	$**300**
> Carelogic Service Connection	**$468**
> Furniture	**$3,000**
> Personnel Security	**$20,000**
Total=	**$93,932**

Subtotal:	$285,120
Administrative Cost @ 5%=	$ 14,256
Grand Total=	**$299,376**

Respectfully submitted: swd

Steve Donaldson

Steve Donaldson, Beaufort Alcohol and Drug Abuse Department
Beaufort, County Government

BEAUFORT COUNTY COUNCIL
AGENDA ITEM SUMMARY

ITEM TITLE:

RECOMMEND APPROVAL OF AN ORDINANCE TO ACCEPT AND TO APPROPRIATE FUNDS FROM THE SOUTH CAROLINA OPIOID SETTLEMENT ($612,733)

MEETING NAME AND DATE:

Community Services and Land Use Committee

April 10th, 2023

PRESENTER INFORMATION:

Steve Donaldson, Director, Alcohol and Drug Abuse Department

10 minutes

ITEM BACKGROUND:

Beaufort County is party to a national opioid lawsuit settlement. As the SCORF board makes opportunities for Beaufort to apply for funds allocated to Beaufort County, Beaufort applies for funds to enhance capacity or new initiatives towards opiate abatement strategies. Beaufort County applied in February 2023 and were approved for a second round of funding.

PROJECT / ITEM NARRATIVE:

Beaufort County Council through resolution allowed Beaufort County to extend a notification of funding to Beaufort County Non-Profits to apply for opiate abatement funds as subawards. Five entities are recommended for awards. Those projects met the criteria to do opiate abatement strategies. Therefore, those strategies were included in Beaufort Counties application. Beaufort County also included two other initiatives in the application to create a Prevention/Media Campaign, and to sustain the 3 FTEs from the initial SCORF Board award to Beaufort County.

FISCAL IMPACT:

The SCORF Fund Award is $612,733 for one year. No matching funds.

STAFF RECOMMENDATIONS TO COUNCIL:

Recommend approval of an Ordinance to allocate award funds to awardees and Beaufort County so new Beaufort County opiate abatement programming can be sustained, and so a Prevention and Media campaign can be provided through SCORF funds.

OPTIONS FOR COUNCIL MOTION:

Motion to approve an Ordinance to allocate funds received from the South Carolina Opioid Settlement Funds or motion to deny an Ordinance to allocate funds received from the South Carolina Opioid Settlement Funds.

ORDINANCE 2023/_____

AN ORDINANCE TO ACCEPT AND TO APPROPRIATE FUNDS FROM THE SOUTH CAROLINA OPIOID SETTLEMENT

WHEREAS, there has been made available certain opioid lawsuit settlement funds from the 2022 National Opioid Settlement to be administered by the South Carolina Opioid Recovery Fund Board ("Board"), and to be awarded to Beaufort County ("County") for opiate abatement purposes; and

WHEREAS, in order for the County to obtain settlement funds from the South Carolina Opioid Settlement Fund ("Fund"), the County must first submit an application to the Board explaining the County's intended use of the funds and then provide proof that the intended use complies with South Carolina's Approved Uses for Investing Opioid Settlement Funds requirements; and

WHEREAS, earlier this year Beaufort County filed a second application with the Board to further assist the County in its efforts to address the ongoing opioid crisis. (Exhibit "A"). The Board approved the County's application and awarded the County funds in the amount of $612,733. The award requires the funds to be used as set forth in the application.

NOW, THEREFORE, BE IT ORDAINED, that Beaufort County Council, in a meeting duly assembled, hereby accepts, and appropriates, funds in the amount of $612,733 from the South Carolina Opioid Settlement as set forth in Exhibit "A".

Adopted this ____ day of _____, 2023.

COUNTY COUNCIL OF BEAUFORT COUNTY

BY: _____

Joseph Passiment, Chairman

ATTEST:

_____

Sarah W. Brock, Clerk to Council

EXHIBIT "A

Beaufort County Technical Plan for Opiate Abatement Application

The Beaufort County Government is going to work with a coalition of providers to provide an array of strategies. The coalition members will be working with Beaufort County for two years. Beaufort County will outline the approved opiate abatement strategies to be adopted by the coalition, and ask for one year of funding, consistent with the opiate settlement agreement and South Carolina Opiate Recovery Fund (SCORF) Board. Furthermore, performance measurement goals and reporting will be required for year two funding to be requested from SCORF for project continuation.

Additionally, given the complexity of Beaufort Counties first award having a calendar year cycle, and cycle two likely on the fiscal year, to sustain year one programming created from the year one cycle, Beaufort County also ask for six months of funding to sustain those programs started from the last award through June 30, 2024. Those programs and amounts for program continuation are:

• B5. MOUD and Other Opioid Related Treatment **$68,224** (1/2 yr salary, fringe, 3% cola, training, supervision fees, supplies, and technology & Admin fees).

• E.5 Warm Handoff Program $**32,248** (1/2 yr salary, fringe, 3% cola, training, supervision fees, supplies, and technology &Admin fees).

• F.1 Treatment for Incarcerated Population **$50,310** (1/2 yr salary, fringe, 3% cola, training, supervision fees, supplies, and technology& Admin fees).

Total for continuation projects: $150,782

Finally, Beaufort County will have a third strategy of contracting with a vendor to do a Prevention media campaign. Details and budgets to follow.

The coalition members will include Beaufort Memorial Hospital, the Good Neighbor Free Medical Clinic, Alliance Access Health, and the Beaufort and Port Royal Fire District. Those members have detailed their plans to the county and were vetted to have the capability to do the following:

• **Medications for Opioid Use Disorders (MOUD) Distribution and Other Opioid-Related Treatment:** Provide indigent care to patients in need of medical services, labs, and medications through Beaufort Memorial Hospital Addiction Clinic and to expand the capacity of programming from two days a week to five. Traditional counseling services will be referred to local providers, and both the Alliance Access Health and Beaufort Memorial Hospital will do such case management to ensure evidence-based practices are being followed. The measure to be prescribed by Beaufort County to this coalition member would be:

Performance Measures:

a. All recipients of indigent care or services provided by personnel funded through SCORF Funding will be referred to a certified or licensed addiction counselor to be assessed for service needs beyond medication.

b. 28 patients will be provided indigent care in year 1.

$125,000 (Salary, fringe, medication, SBIRT training for involved personnel, and 4% Administration Cost).

• **Expansion of Warm Hand-off Programs:**

The Good Neighbor Medical Clinic (GNMC) will train staff in SBIRT and provide case management to patients with opiate misuse issues. The health care providers will be properly trained to conduct screening through evidence-based tools (i.e., DAST) and Motivation Interviewing and know how to appropriately counsel, treat, and if appropriate, refer for opiate use disorder treatment.

Performance Measures:

a. Six (6) Nurses to be provided with SBIRT training.

b. 100% of new will be provided with SBIRT Services.

c. 50% of established patients to receive SBIRT screening during year one.

$61,951 (Salary, fringe, SBIRT training to be expanded to increase such capacity, and modification of electronic health record to monitor program compliance, 4% administrative cost).

• **Naloxone or Other Approved Drug to Reduce Opioid Overdoses by providing Medications for Opioid for Opioid Use Disorders (MOUD) education and awareness to first responders and citizens/Provide targeted Naloxone distribution.** - The Beaufort and Port Royal Fire Districts, through collaboration with Beaufort County, will enhance capacity of personnel to provide. Specific goals of this collaboration are to:

a. Hire a Medical Training Officer (New position) to develop training and programming within the Beaufort and Port Royal Fire District on opiate abatement interventions, like the COPE Team model used by neighboring first responders;

b. Train 12 other fire district educators to be opioid abatement specialist within the first three months.

c. Conduct post opiate overdose follow ups and refer to treatment, if applicable and willing.

d. Conduct Narcan and Anti-Stigma training to up to 2,000 citizens annually.

Performance Measures:

a. The fire districts will provide information dissemination to up to 2,000 citizens annually.

b. The department will successfully engage 10 opioid overdosing citizens into treatment services annually.

$100,000 (Personnel and Fringe) The fire districts will provide in-kind contributions, including uniforms, Naloxone for distribution, training, and travel.

• **Expansion of Warm Hand-off or Recovery Programs-** The Mercy Me, a recovery house undergoing SCARR Accreditation, the first to embrace the endeavor in Beaufort County will provide access to housing for people with OUD. Currently, there are four beds in Beaufort County, in a Mercy Me Residence, which allow residents to reside in recovery housing if on MOUD. Recognizing such a gap in housing for those in need of safe sober housing, Mercy Me will identify a house for rent for men within

three months of receiving funding and make safe sober housing available for men engaged in medication assisted treatment and recovery.

Performance Measures:

a. Become SCARR Accredited in year one.

b. Provide recovery housing to a minimum of 6 residents for a minimum of 3 months each during year one.

$25,000 (House deposit, Rent, household set-up items)

Prevention: This strategy will take shape using the opiate abatement monies to fund media campaigns to prevent and abate opioid use is a community prevention, education, and awareness strategy. Beaufort county intends to provide funding to consultants and associated expenses to conduct media campaign, such that the SC- Department of Alcohol and Other Drug Abuse Services provides. Beaufort County is a "border" county and the SC-DAODAS campaigns reach here is minimal. Beaufort County will adopt some of SC-DAODAS strategies and ensure Beaufort County gets full benefit of them. Additionally, creating some of our own public service announcements, in the school system, billboards, eblasts, mailings, and other social media posts. An essential element to the media campaign is prevention, anti-stigma messaging, and to alert citizens where help can be found.

Performance Measures:

a. Analytics will indicate information dissemination has reached 100,000 citizens through multimedia campaigns.

$ 150,000 (Consultant fees, print ads, billboards, production cost for PSAs

Collectively from the coalitions built, the media campaigns, and the sustaining funds for the first opiate abatement strategies when funding for year one ends, Beaufort County seeks **$ 612,733.**

SCEIS #: 700017466

Respectfully submitted: Steve Donaldson

BEAUFORT COUNTY COUNCIL
AGENDA ITEM SUMMARY

ITEM TITLE:

Recommendation to Award IFB #011223E Beaufort County Dirt Road Paving Contract #54 to J.H. Hiers ($5,291,646.80)

MEETING NAME AND DATE:

Public Facilities and Safety Committee – 4/24/2023

PRESENTER INFORMATION:

Jared Fralix, PE – Assistant County Administrator, Infrastructure Division
Eric Claussen, PE, PTOE – Director of Engineering, Alternate
(5 mins)

ITEM BACKGROUND:

J.H. Hiers was the sole bidder for IFB #011223E Beaufort County Dirt Road Paving Contract #54. This project is unique in that it requires substantial coordination, mobilization, and material delivery to Daufuskie Island. This project follows the County Resolution 2019/24 & subsequent amendment Resolution 2021/1, which established a 5-Year Dirt Road paving program. Year 4 of this program included the rocking of roads on Daufuskie Island.

PROJECT / ITEM NARRATIVE:

This project will consist of the rocking of several existing dirt roads on Daufuskie Island including Frances Jones Road, School Road, and Church Road. This improvement follows the County's 5-Year Dirt Road Paving Program and provides improved access for residents, emergency vehicles, and visitors on the island especially during inclement weather conditions. This project has the support of the Daufuskie Island Council.

FISCAL IMPACT:

The contract fee is for the construction in the amount of $4,601,432.00. Staff recommends a 15% contingency of $690,214.80, bringing the total project cost to $5,291,646.80.

The funding for this project is Local Accommodations Tax -Road Improvements account #20100011-54500 with a current balance of $2,300,000.00 and the Road Use Fee – Road Improvements account #2342001T-54500 with a balance of $5,646,441.68.

STAFF RECOMMENDATIONS TO COUNCIL:

Staff recommends approval to award IFB #011223E Beaufort County Dirt Road Paving Contract #54 to J.H. Hiers.

OPTIONS FOR COUNCIL MOTION:

Motion to approve/deny recommendation to award J.H. Hiers for IFB #021423 Year 6 Pavement Preservation.

Next Step: Move forward to County Council to award J.H. Hiers for IFB #021423 Year 6 Pavement Preservation.

THIS IS NOT AN ORDER *VENDOR ORIGINAL ☐ *VENDOR COPY ☐

Dates Advertised: **December 12, 2022**

BEAUFORT COUNTY SOUTH CAROLINA 1769	**IFB# 011223E**	FORMAL SEALED BID (X) REQUEST FOR QUOTE ( ) We require bids to be electronically submitted through our Vendor Registry Program. Please go to www.BeaufortCountySC.gov and sign up to submit your bid.
BIDS WILL BE RECEIVED UNTIL 3:00 P.M. LOCAL TIME ON: **January 12, 2023, 3:00 p.m.**		Bid No. IFB #011223E
BID TITLE: **Beaufort County Dirt Road Resurfacing Contract #54**		
PREBID CONFERENCE: **Mandatory Pre-Bid** conference will be held on December 28, 2022, at 2:00 p.m., virtually via Webex Meeting. All interested bidders can attend the meeting via WebEx. Contact victoria.moyer@bcgov.net to sign up.		
David L. Thomas, CPPO Purchasing Director	Mailing Date	SUBMIT QUESTIONS TO: Vendor Registry
VENDOR NAME J.H. Hiers Construction LLC		REASON FOR NO BID
VENDOR MAILING ADDRESS 509 Carteret Street		Amend Number(s) Received: #1 & #2
CITY-STATE-ZIP-CODE Beaufort SC 29902		S.C. TAX NO. 254663911
Telephone Number (843) 379-3262 Toll-Free Number ( ) Fax Number (843) 379-3260		FEDERAL I.D. OR SOCIAL SECURITY NO. 20-1541350
I certify that this bid is made without prior understanding, agreement, or connection with any corporation, firm or any corporation, firm, or person submitting a bid for the same materials, supplies, or equipment, and is in all respects fair and without collusion or fraud. I agree to abide by all conditions of this bid and certify that I am authorized to sign this bid for the bidder.		AUTHORIZED SIGNATURE(MANUAL) Jefferson Hiers AUTHORIZED SIGNATURE (TYPE/TITLE Jefferson Hiers President
Bid Security is attached (if required) in the amount of 5% of Bid if over $30,000.00.		

BID ACCEPTANCE AND DELIVERY (Prices bid must be firm for a minimum of 90 days). In compliance with the Invitation, and subject to all conditions thereof, the above signed offers and agrees, if this bid is accepted within __ days from date of opening, to furnish any or all items quoted on at prices as set forth after the item and to make delivery within days after receipt of order with transportation cost included and prepaid. Unless otherwise stated and accepted herein, I agree to complete this proposed contract in less than 330 days after issue date of purchase order.

IMPORTANT
IF YOU CONSIDER THESE SPECIFICATIONS AS RESTRICTIVE, SEE GENERALPROVISIONS, PARAGRAPH #20, DISCREPANCIES.

* Bids received after the time specified for opening cannot be considered.

EXHIBIT 1
Required Documents

IFB # 011223E

BID FORM

THIS BID SUBMITTED TO: Beaufort County Engineering Department

TITLE OF WORK: Beaufort County Dirt Road Resurfacing Contract #54

LOCATION OF WORK: Beaufort, South Carolina

1. **BIDDER** has examined all Contract Documents including Addenda.

2. **BIDDER** understands and accepts the terms and conditions of the Invitation to Bid, Instructions to Bidders, and all other Contract Documents.

3. **BIDDER** having examined the plans and specifications with related documents and the site of the proposed work, and being familiar with all of the conditions surrounding the construction of the proposed project including the availability of materials and supplies to construct the project in accordance with the contract documents, within the time set forth herein, and at the process stated below, proposed to enter into a contract with the County to provide the necessary machinery, tools, apparatus, all materials and labor, and other means of construction necessary to complete the Work. The undersigned proposes to furnish and construct the items listed in the attached Schedule of Items for the unit prices stated.

4. **BIDDER** agrees that the cost of any work performed, materials furnished, services provided or expenses incurred, which are not specifically delineated in the Contract Documents, but which are incidental to the scope, intent, and completion of the Contract, shall be deemed to have been included in the prices bid for the various items scheduled.

Start and Completion of Work

The Bidder further proposes and agrees hereby to promptly commence the Work **with adequate force and equipment within ten (10)** calendar days from receipt of Notice to Proceed, or as may be specified by Special Provision. **Contractor shall complete all work not later than 330 calendar days following the date of the Notice to Proceed or IAW any Special Provision by the Owner.**

Bidder acknowledges receipt of the following addenda:

Addition 1 : Posted 12/16/2022

Addition 2: Addendum #1 Posted 1/5/2023

Addition 3: Addendum #2 Posted 1/9/2023

5. ***BIDDER acknowledges that, in accordance with the Agreement, Liquidated Damages are set at $1,200 per calendar day.***

6. In accordance with Paragraph 5.1 of the Agreement, progress payments will be made less retainage in an amount equal to ten percent **(10%)**. If the Contractor is **50% complete** with the project and **on schedule,** the retainage may be reduced to five percent **(5%)**.

7. The Work shall be completed in accordance with the Schedule of Prices set forth by **BIDDERS** in Bid Form - Schedule of Prices which is attached hereto and made a part hereof.

8. **BIDDER** will, if this Bid is accepted by Owner, enter into the Agreement included in the Contract Documents to perform and furnish all Work as specified or indicated in the Contract Documents.

9. **BIDDER** has completed the following additional documents, which are attached hereto and made a part hereof:

(a) NON-COLLUSION AFFIDAVIT
(b) CONSENT OF SURETY
(c) BID BOND
(d) CERTIFICATION BY CONTRACTOR

10. **BIDDER** has included with this Bid Form a Bid security in an amount and under the terms and conditions indicated in the Instructions to Bidders.

11. **BIDDER** is organized under the laws of the State of South Carolina as a LLC (indicate proprietorship, partnership, or corporation) as follows:

Name (of business): J.H. Hiers Construction, LLC

Address: 509 Carteret Street, Beaufort, SC 29902

Telephone: (843) 379-3262 FAX: (843) 379-3260

South Carolina Bidder's License No.: G-111528

Licensing Authority: SCLLR

12. Communications concerning this Bid should be addressed to the **BIDDER**'s company, to the attention of:

Name: Steve DiBlasi

Address: 509 Carteret Street, Beaufort, SC 29902

Email: steved@jhhiers.com

Telephone: (843) 379-3262 Email: steved@jhhiers.com

SIGNED BY:

Signature

Jefferson H. Hiers
Name Printed

Title: President Date: January 18th, 2023

I, the above signed, certify that this Bid does not violate any Federal or State Antitrust Laws.
(Initial)

IFB #011223E

BID BOND
(Five Percent [5%] of Bid)

KNOW ALL MEN BY THESE PRESENTS, that we, the undersigned:
J.H. Hiers Construction, LLC, 509 Carteret St. Beaufort, SC 29902, as Principal, and
Great Midwest Insurance Company, 800 Gessner Rd, Ste 600, Houston, TX 77024

_____, as Surety, are hereby held and firmly bound unto Beaufort County, South Carolina as County in the penal sum of Five Percent of the Total Bid
_____Dollars
($ 5%) for the payment of which, well and truly to be made, we hereby jointly and severally bid ourselves, our heirs, executors, administrators, successors, and assigns. Signed this
18th day of January, 20 23.

The condition of the above obligation is such that whereas the principal has submitted to Beaufort County, South Carolina a certain bid attached hereto and hereby made a part hereof to enter into a contract in writing for the construction of:

NOW, THEREFORE,

C. If said bid shall be rejected or in the alternate.
D. If said bid shall be accepted and the Principal shall execute and deliver a Contract in the Form of Contract attached hereto (properly complete in accordance with said bid) and shall furnish a bond for his faithful performance of said Contract and for the payment of all persons performing labor and furnishing material in connection therewith, and shall in all other respects perform the agreement created by the acceptance of said bid, then this obligation shall be void, otherwise the same shall remain in force and effect, it being expressly understood and agreed that the liability of the surety for any and all claims hereunder shall, in no event, exceed the penal amount of this obligation as here instated.

The Surety, for value received, hereby stipulates and agrees that the obligations of said Surety and its bond shall be in no way impaired or affected by any extension of the time within which the County may accept such bids and said Surety does hereby waive notice of any such extension.

IN WITNESS WHEREOF, the Principal and the Surety have hereunto set their hands and seals, and such of them as are corporations have caused their corporate seals to be hereto affixed and these presents to be signed by their proper officers, the day and year first set forth above.

J.H. Hiers Construction, LLC (SEAL)
Principal
By: _____
JEFF HIERS (SEAL)
Surety: Great Midwest Insurance Company
By: Martha Sue Brooks
South Carolina Representative

IFB # #011223E

CONSENT OF SURETY

OWNER: Beaufort County Engineering Department

TITLE OF WORK: Beaufort County Dirt Road Resurfacing Contract #54

(Complete above exactly as given in Invitation to Bid)

In consideration of the premises and of One Dollar **($1.00)**, lawful money of the United States, it is in hand paid by the Contractor, the receipt whereof, is hereby acknowledged, the undersigned surety consents and agrees that if the contract, for which the preceding Bid is made, be awarded to the person or persons submitting the same as contracted, it will become boundas surety and guarantor for its faithful performance in an amount equal to one hundred percent **(100%)** of the Contract Price, and will execute as surety thereto when required to do so by the Owner, and if the said Contractor shall omit or refuse to execute such contract, if so awarded, it will pay without proof of notice and on demand to the Owner any increase between the sum of which the said Contractor would have been entitled upon the completion of the said Contract and the sum which the said Owner may be obligated to pay to another contractor to whom the contract may be afterwards awarded, the amount in such case to be determined by the bids plus the cost, if any, of re-advertising for bids for this work, less the amount of any certified check or bid bond payable and received.

In witness whereof, said surety has caused these presents to be signed and attested by a duly authorized officer and its corporate seal to be heretoaffixed this 18th day of January, 2023.

(A corporate acknowledgment and statement of authority to be here attached by the surety company).

Great Midwest Insurance Company

(Surety Company)

BY: Martha Sue Brooks

(Surety Company, Attorney-In-Fact)

Attest: Jessica Powell

POWER OF ATTORNEY

Great Midwest Insurance Company

KNOW ALL MEN BY THESE PRESENTS, that **GREAT MIDWEST INSURANCE COMPANY**, a Texas Corporation, with its principal office in Houston, TX, does hereby constitute and appoint:

Martha Sue Brooks, Matthew Moore, Robert E. Motley Jr, Larissa Sourlis, Christine Hayes, Kim Mathers

its true and lawful Attorney(s)-In-Fact to make, execute, seal and deliver for, and on its behalf as surety, any and all bonds, undertakings or other writings obligatory in nature of a bond.

This authority is made under and by the authority of a resolution which was passed by the Board of Directors of **GREAT MIDWEST INSURANCE COMPANY**, on the 1st day of October, 2018 as follows:

Resolved, that the President, or any officer, be and hereby is, authorized to appoint and empower any representative of the Company or other person or persons as Attorney-In-Fact to execute on behalf of the Company any bonds, undertakings, policies, contracts of indemnity or other writings obligatory in nature of a bond not to exceed Ten Million dollars ($10,000,000.00), which the Company might execute through its duly elected officers, and affix the seal of the Company thereto. Any said execution of such documents by an Attorney-In-Fact shall be as binding upon the Company as if they had been duly executed and acknowledged by the regularly elected officers of the Company. Any Attorney-In-Fact, so appointed, may be removed in the Company's sole discretion and the authority so granted may be revoked as specified in the Power of Attorney.

Resolved, that the signature of the President and the seal of the Company may be affixed by facsimile on any power of attorney granted, and the signature of the Secretary, and the seal of the Company may be affixed by facsimile to any certificate of any such power and any such power or certificate bearing such facsimile signature and seal shall be valid and binding on the Company. Any such power so executed and sealed and certificate so executed and sealed shall, with respect to any bond of undertaking to which it is attached, continue to be valid and binding on the Company.

IN WITNESS THEREOF, **GREAT MIDWEST INSURANCE COMPANY**, has caused this instrument to be signed by its President, and its Corporate Seal to be affixed this 11th day of February, 2021.

GREAT MIDWEST INSURANCE COMPANY — CORPORATE SEAL — TEXAS CORPORATION

GREAT MIDWEST INSURANCE COMPANY

BY _____
Mark W. Haushill
President

ACKNOWLEDGEMENT

On this 11th day of February, 2021, before me, personally came Mark W. Haushill to me known, who being duly sworn, did depose and say that he is the President of **GREAT MIDWEST INSURANCE COMPANY**, the corporation described in and which executed the above instrument; that he executed said instrument on behalf of the corporation by authority of his office under the By-laws of said corporation.

CHRISTINA BISHOP
Notary Public, State of Texas
Comm. Expires 04-14-2025
Notary ID 131090488

BY _____
Christina Bishop
Notary Public

CERTIFICATE

I, the undersigned, Secretary of **GREAT MIDWEST INSURANCE COMPANY**, A Texas Insurance Company, DO HEREBY CERTIFY that the original Power of Attorney of which the foregoing is a true and correct copy, is in full force and effect and has not been revoked and the resolutions as set forth are now in force.

Signed and Sealed at Houston, TX this 18th Day of January, 2023.

GREAT MIDWEST INSURANCE COMPANY — CORPORATE SEAL — TEXAS CORPORATION

BY _____
Leslie K. Shaunty
Secretary

"WARNING: Any person who knowingly and with intent to defraud any insurance company or other person, files and application for insurance of claim containing any materially false information, or conceals for the purpose of misleading, information concerning any fact material thereto, commits a fraudulent insurance act, which is a crime and subjects such person to criminal and civil penalties.

IFB # 011223E

CERTIFICATION BY CONTRACTOR

Regarding

NON-SEGREGATED FACILITIES

The Bidder certifies that he does not, and will not, provide and maintain segregated facilities for his employees at his establishments and, further that he does not, and will not, permit his employees to perform their services at those locations, under his control, where segregated facilities are provided and maintained. Segregated fountains, transportation, parking, entertainment, recreation, ad housing facilities; waiting, rest, wash, dressing, and locker room, and time clock, work, storage, restaurant, and other eating areas which are set apart in fact, or by explicit directive, habit, local custom, or otherwise, on the basis of color, creed, national origin, and race. The Bidder agrees that, except where he has obtained identical certifications from proposed subcontractors for specific time periods, he will obtain identical certifications from proposed subcontractors prior to the award of subcontractors exceeding **$10,000.00** which are not exempt from the provisions of the Equal Opportunity clause, and that he will retain such certifications in his files.

The Bidder agrees that a breach of this certification is a violation of the Equal Opportunity clause in this Contract. The penalty for making false statements is prescribed in 18 U.S.C.1001.

Contractor (Signature)

Jefferson H. Hiers / President

Name and Title of Signer

January 18th, 2023

Date

IFB # 011223E

NON-COLLUSION AFFIDAVIT OF PRIMEBIDDER

State of South Carolina)

) ss.

County of Beaufort)

Jefferson H. Hiers Being first duly sworn, deposes and says that:

He is Owner/President (Owner, Partner, Officer, Representative, or Agent) of the Bidder that has submitted the attached Bid.

13 He is fully informed respecting the preparation and contents of the attached Bid and of all pertinent circumstances respecting such Bid.

14 Such Bid is genuine and is not a collusive or sham Bid.

15 Neither the said Bidder nor any of its officers, partners, owners, agents, representatives, employees, or parties in interest, including this affiant, has in any way colluded, conspired, connived, or agreed, directly or indirectly, with any other Bidder, firm or person to submit a collusive or sham Bid in connection with the Contract for which the attached Bid has been submitted to or refrain from bidding in connection with such Contract, or has in any collusion or communication or conference with any other Bidder, firm or person to fix the price or prices in the attached Bid or of another Bidder, or to fix any overhead, profit or cost element of the bid price or the Bid of any other Bidder, or to secure through any collusion, conspiracy, connivance or unlawful agreement any advantage against Beaufort County or any person interested in the proposed Contract; and,

16 The price or prices quoted in the attached Bid are fair and proper and are not tainted by any collusion, conspiracy, connivance, or unlawful agreement on the part of the Bidder or any of its agents, representative, owners, employees, or parties in interest, including this affiant.

Name

PRESIDENT

Title

Subscribed and sworn to before me this

18TH Day of JANUARY 20 23.

(SEAL)

CONTROLLER

Title

My commission expires: 06/21/2031

MARY GAIL STYNCHCOMB
NOTARY PUBLIC, STATE OF SOUTH CAROLINA
My Commission Expires 06/21/2031

IFB # 011223E

CONTRACTOR'S QUALIFICATION STATEMENT

CERTIFICATION: The following is a statement of fact.

Jefferson H. Hiers / President — January 18th, 2023

Signature — *Typed Name and Title* — *Date*

A. GENERAL

A.1 Submit to: Beaufort County Engineering Department

A.2 Name of Project (if applicable): [Project Title] Beaufort County Dirt Road Resurfacing Contract #54

[Project Location] Beaufort County, South Carolina

A.3 Contractor: J.H. Hiers Construction, LLC

A.4 Name: Jefferson H. Hiers

Mailing Address: 509 Carteret Street, Beaufort, SC 29902

Street Address: 509 Carteret Street, Beaufort, SC 29902

Telephone Number (including area code): (843) 379-3262

Facsimile Number (including area code): (843) 379-3260

Contact Person: Jefferson H. Hiers

Contact Person's Telephone Number: (843) 379-3262

South Carolina Contractor's License Number: G-111528

B. BUSINESS ORGANIZATION

B.1 Check type of business organization:

Corporation_____ Individual_____ Partnership_____

(Name of Partners)_____

Joint Venture_____ Other L.L.C.

B.2 If a corporation: N/A

State of Incorporation:_____

If not incorporated in South Carolina, State Corporation Commission Registration Number:_____

Date of Incorporation:_____

Federal I.D. Number: _____

Officers:

Name	Address	Phone No.	Position	Yrs in

President: Jefferson H. Hiers 509 Carteret Street, Beaufort, SC 29902 (843) 379 - 3262 19 yrs

Vice President(s):

Secretary:

Treasurer:

Are you a Subchapter S Corporation: Yes_____ No X

Name Address Phone No.

Subchapter S Shareholders:

B.3 If a partnership:

Date of Organization: N/A

Type of partnership:

List of General Partners:

Name Address & Phone No.

Years as GP

B.4 If individually owned:

Name, address, and phone number of sole-proprietor:

Years in business:

B.5 Have you ever operated under another name? Yes_____ No X

If yes,

All other business names and addresses of principal placed of business for each business.

Number of years in business under each name:

Contractor's license number in each state in which a business was operated.

C. BONDING

C.1 Bonding Agent: Insurance of America

Name: Matthew Moore

Address: 1221 Bower Parkway, Ste 101, Columbia, SC 29212

Telephone Number (including area code): (803) 996-2305

Contact Person: Matthew Moore

C.2 Bonding Company: Great Midwest Insurance Company

Name: Mark Haushill

Address: 800 Gessner Rd, Ste 600, Houston, Texas 77024-4538

Telephone Number (including area code): (713) 935-4800

Contact Person: Mark Haushill

Best's Key Rating of bonding company: A

C.3 Number of years this bonding company has acted as surety for you: 6

C.4 Bonding Capacity: Maximum single job size: $25,000,000.00

Total bonding limit: $50,000,000.00

C.5 Do you intend to use any alternative form of security? No

If so, indicate the form of security you intend to use and the name, address, point of contact, and telephone number of the banks, savings and loan, or surety you intend to use. (NOTE: Prequalification will not assure acceptance of any form of security.)

Form of Security:

Bank or Savings & Loan:

Contact:

Address & Phone No.:

C.6 Have any Performance or Payment Bond claims ever been paid by any surety on behalf of your

organization?

Yes_____No X

If yes, state the name of the project(s); the date; the name, address, telephone number, and contact person for the claimant; the surety satisfying the claim; the size of the claim; and the circumstances giving rise to the claim. (Provide attachments if necessary.)

C.7 Have you ever arbitrated or litigated a claim with an Owner, Architect, or Engineer in the last five years?

Yes_____No X

If yes, state the name of the project(s); the date; the name, address, telephone number, and contact person for the claimant; the surety satisfying the claim; the size of the claim; and the circumstances giving rise to the claim. (Provide attachments if necessary.)

C.8 If you answer yes to the following, provide the name, address, telephone number, contact person, and circumstances relating to the question on a separate attachment.

Have you or any officer, partner, or owner of your organization, in any state or territory of the United States, or with respect to any agency of the Federal government:

a) In the last in the last five years, received any fines or citations for building code violations which were unrelated to design? Y____N X

b) Ever been found to be guilty of charges relating to conflicts of interest: Y____N X

c) Ever been convicted on charges related to any criminal activity relating to construction means, methods, or techniques; bidding or bid rigging; or bribery? Y____N X

d) In the last five years, been found guilty of any minority contracting law violations? Y____N X

e) In the last five years, pleaded no contest in any criminal proceeding related to contracting? Y____N X

f) Ever been disbarred from doing Federal, state, or local government work for any reason? Y____N X

g) Ever been terminated on a contract due to your default? Y____N X

h) In the last five years, paid liquidated damages for being late on a project? Y____N X

i) In the last five years, been subject to tax collection

proceedings? Y____N_X_

j) In the last seven years, filed for bankruptcy? Y____N_X_

If the answer to j) was yes, under what chapter of bankruptcy did you file?

_____

If you filed under Chapter 11 Reorganization, how long did you operate under this status?_____

Are you operating under Chapter 11 status now? Y____N_X_

D. SAFETY

D.1 Have you, in the last three years, been cited for willful violations for failure to abate, or for repeated violations, by the United States Occupational Safety and Health Administration or by the South Carolina Occupational Safety and Health Administration or by any other governmental body? Y____N X

If yes, state date, name, address, telephone number, and contact person for agency issuing citation and the nature of the violation. Also, advise the amount of fines paid, if any. Provide attachments if necessary.

_____

_____

D.2 List your worker's compensation experience modifier for the last three years.

0.82 2022, 0.85 2021, 0.72 2020

E. References

E.1 Provide at least two references from each industry group listed. Provide other references as requested. Provide current names, addresses, telephone numbers, and contacts.

Architects/Engineers: Andrews Engineering Ryan Lyle (843) 379-2223 2712 Bull St, Ste A Beaufort, SC 29902
Thomas & Hutton Nathan Long (912) 721-4181 50 Park of Commerce Way, Savannah, GA 31402

Major Subcontractors: Atlas Surveying, Tim Golde (843) 645-9277
Ashlind Contracting, Ash Barnett (706) 678-1511

Financial Institutions: Enterprise Bank of SC, Jared Polk (843) 549-5544
Caterpillar Financial Services Corp. (800) 651-0567

Certification Regarding Debarment, Suspension, Ineligibility, and Voluntary Exclusion:

Company Name:

The contractor certifies, by submission of this qualification statement or acceptance of a contract, that neither it nor its principals is presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from participation in this transaction by any State, Federal department, or agency. It further agrees by submitting this qualification statement that it will include this clause without modification in all lower tier transactions, solicitations, proposals, contracts, and subcontracts. Where the bidder/contractor or any lower tier participant is unable to certify to this statement, it shall attach an explanation to this solicitation/bid. State whether or not your company has been involved in any litigation within the past five (5) years arising out of your performance.

Circle Yes or (No.)

If you answer yes, explain fully if it has been involved in any litigation involving performance.

Signature _____

LOCAL VENDOR PREFERENCE – PARTICIPATION AFFIDAVIT

SECTION 2.537.1

A competitive procurement made by Beaufort County shall be made from responsive and responsible resident vendors in the County for procurement, if such bid does not exceed the lowest qualified bid from a non-county vendor by more than five (5%) percent or Ten Thousand ($10,000.00) Dollars, whichever is less of the lowest non-county bidder. The resident vendor has the discretion to match the bid submitted by the non-county vendor and receive the contract award.

A vendor shall be deemed to be a "local vendor" if such vendor is an individual, partnership, association or corporation that is authorized to transact business within the state, maintains an office in the Beaufort County, has a business license of Beaufort County or one of the municipalities within Beaufort County, and maintains a representative inventory of commodities within Beaufort County or one of the municipalities on which the bid is submitted and has paid all taxes duly assessed.

If no bids are received, from a Beaufort County Local Vendor a vendor shall be deemed to be a "local vendor" if such vendor is an individual, partnership, association or corporation that is authorized to transact business within the state, maintains an office in Jasper, Hampton, or Colleton Counties (local preference only applies if Jasper, Hampton and Colleton Counties offer reciprocity to Beaufort County). A competitive procurement made by the county shall be made from responsive and responsible resident vendors in the respective counties for procurement, if such bid does not exceed the lowest qualified bid from a non-local vendor by more than five (5%) percent or $10,000.00, whichever is less, local vendor has the discretion to match the bid submitted by the non-local vendor and receive the contract award.

If the procurement is to be made pursuant to state or federal guidelines, which prohibit or restrict a local or state preference, there shall be no local or state preference unless a more restricted variation is allowed under the guidelines. Local/state preference shall not be applied to the procurement of construction services.

The undersigned hereby attests that the criteria of the "RESIDENT VENDOR PREFERENCE, SECTION 2.537.1" are met for the purposes of bid document IFB#011223E, dated January 18th, 2023.

Company Name: J.H. Hiers Construction, LLC Principal Name: Jefferson H. Hiers

Company Address: 509 Carteret Street

Beaufort, SC 29902

Secretary of State Designation: (Corporation, Individual, Partnership, Other) LLC

Beaufort County Business License/Classification: License #5766/Industrial Building Construction

Tax Obligation Current: N/A

Signature of Principal/Date: 01/18/2023

Witness/Date: 01.18.2023

Program Provisions for

Small and Minority Business Participation

bcgov.net

PLEASE REVIEW THIS SECTION CAREFULLY, PAYING PARTICULAR ATTENTION TO "PRE-AWARD DOCUMENTS" DUE WITH THE BID/PROPOSAL, THE "GOOD FAITH EFFORTS CHECKLIST", AND EXHIBITS 1-3.

FAILURE TO FOLLOW THE PROGRAM REQUIREMENTS AND/OR FURNISH THE REQUESTED DOCUMENTS MAY RESULT IN THE REJECTION OF YOUR BID/PROPOSAL.

Small and Minority Business Participation Program Documents Overview*

PRE-AWARD DOCUMENTS		
Item/Form		***Submission Requirements***
1	**Program Overview**	n/a
2	**Self-Performance Affidavit** Indicates intention to perform work and/or provide services with own current workforce.	Due with bid/proposal **only if** self-performing 100%.
3	**Good Faith Efforts Checklist** Indicates the actions undertook to recruit and solicit small and minority businesses for this project.	**Due with bid/proposal.**
4	**Good Faith Agencies Distribution List** Indicates agencies that should receive notice of solicitation to small and minority businesses for this project.	Copy of notice sent to good faith agencies **due with bid/proposal.**
5	**Outreach Written Notice Example** Sample of notice to be sent to small and minority businesses soliciting their participation for this project.	Copy of notice sent to small and minority businesses **due with bid/proposal.**
6	**Non-Discrimination Statement – Exhibit 1** Certification that this project is open to all businesses and persons and that no business or person shall be excluded from participating in the Beaufort County procurement process.	**Due with bid/proposal.**
7	**Outreach Documentation Log – Exhibit 2** Documents solicitation efforts to obtain small and minority business participation for this project.	**Due with bid/proposal.**
8	**Proposed Utilization Plan – Exhibit 3** Listing of the small and minority businesses that will participate on this project and their proposed contract dollar amounts.	**Due with bid/proposal.**
POST-AWARD DOCUMENTS		
Item/Form		***Submission Requirements***
9	**Compliance Efforts** If the successful bidder/proposer, indicates the actions required to earnestly carry out the small and minority business utilization plan and document payments thereof.	n/a
10	**Monthly Compliance Status Report – Exhibit 4** Certifies monthly usage and payments to small and minority businesses.	Due monthly after work commences throughout the life of the contract.

*** NOTE: Projects involving Federal funds may have Disadvantaged Business Enterprise (DBE) participation goals and requirements of 49 CFR Part 26, Regulations of the U.S. Department of Transportation (USDOT), or other Federal requirements prescribed by the U.S. Department of Agriculture (USDA) or U.S. Department of Housing and Urban Development (HUD). Contractors submitting bids on such projects will also have to meet any outlined DBE Program requirements listed in the bid documents and submit items, including but not limited to, the following: (1) Certification of Contractor to Comply with DBE Requirements; (2) DBE Letter of Intent and Affirmation; (3) DBE Contract Totals and Percentage; and (4) Bidder's List Questionnaire. For a current list of South Carolina DBE firms, please visit www.scdot.org and go to "*Doing Business with SCDOT*", then see "*Office of Business Development and Special Programs*" and click on "*DBE Directory*". Likewise, any USDA and/or HUD requirements must be met in addition to Beaufort County's requirements.**

PROGRAM OVERVIEW

Introduction

Beaufort County recognizes that the South Carolina General Assembly, in South Carolina Code of Laws Section 11-35- 5210*, has declared that businesses owned and operated by minority persons have been historically restricted from full participation in our free enterprise system to a degree disproportionate to other businesses; and that it is in the state's best interest to assist minority-owned businesses to develop fully as a part of the state's policies and programs which are designed to promote balanced economic and community growth throughout the state. Therefore, Beaufort County wishes to ensure that those businesses owned and operated by minorities are afforded the opportunity to fully participate in its overall procurement process for goods and services. Further, Beaufort County seeks to ensure that small businesses are likewise afforded the same participation opportunity as minority businesses. Consequently, attention of all bidders and proposers is called to contract conditions contained herein pertaining to Beaufort County's "**Small and Minority Business Participation Program**", as prescribed in the Beaufort County Code of Ordinances Section 2-537.2.

Definitions

Small Business means a for-profit concern, including its affiliates, that is independently owned and operated, not dominant in the field of operation in which it is bidding on government contracts, and qualified as a small business under the criteria and size standards in the Code of Federal Regulations, Title 13, Part 121, as amended. Beaufort County refers to these businesses as ***Small Business Enterprises*** or "**SBE**".

Minority Business means a concern at least fifty-one percent (51%) owned by a person determined to be socially and economically disadvantaged. *Socially disadvantaged* means those persons who have been subject to racial or ethnic prejudice or cultural bias because of their identification as members of a certain group without regard to their individual qualities. Such groups include, but are not limited to, Black Americans, Hispanic Americans, Native Americans (including American Indians, Eskimos, Aleuts and Native Hawaiians), Asian Pacific Americans, women and other minorities to be designated by the Beaufort County Council. *Economically disadvantaged* means those socially disadvantaged persons whose ability to compete in the free enterprise system has been impaired due to diminished capital and credit opportunities as compared to others in the same business area that are not socially disadvantaged. Beaufort County refers to minority businesses as ***Minority Business Enterprises*** or "**MBE**".

Small and Minority Business Enterprises will be abbreviated as "S/MBE".

Provisions

The successful bidder or proposer, hereafter referred to as "Contractor", is required to (1) make specific **Pre-Award "Good Faith Efforts"** to recruit S/MBE and (2) **Post-Award "Compliance Efforts"** of its labors to utilize S/MBE, unless self- performing one hundred percent (100%) of the contract work. Falsification of any pre-award or post-award documents will be considered a serious breach of public trust and funds.

* SOUTH CAROLINA CODE OF LAWS, CHAPTER 35 "SOUTH CAROLINA CONSOLIDATED PROCUREMENT CODE, SUBARTICLE 1 "ASSISTANCE TO MINORITY BUSINESSES"

SELF-PERFORMANCE AFFIDAVIT

If self-performing 100% sign below and return this page with your bid/proposal.

I hereby certify my company's intent to perform one hundred percent (100%) of the work required

for: Project Name: Beaufort County Dirt Road Resurfacing Contract #54

Bid/Proposal Number: IFB#011223E

By signing this affidavit, I further certify that my company has the capability to perform and will perform all elements of the work on the project referenced above with my company's employees.

I further agree to provide additional information or documentation requested by Beaufort County in support of the above statement.

If a need to subcontract all and/or some of my company's work on this project arises, I will notify the Beaufort County Compliance Office in writing within three (3) business days.

J.H. Hiers Construction, LLC
Name of Company

Jefferson H. Hiers
Authorized Representative Name

Signature

President
Title

January 18th, 2023
Date

State of SC County of BEAUFORT

Subscribed and sworn to before me this 18TH day of JANUARY 2023

Notary Public Mary Gail Stynchcomb My Commission Expires: 06/21/2031

MARY GAIL STYNCHCOMB
NOTARY PUBLIC, STATE OF SOUTH CAROLINA
My Commission Expires 06/21/2031

GOOD FAITH EFFORTS CHECKLIST (PRE-AWARD)

Pre-award efforts include the following "good faith efforts" for Contractors intending to use subcontractors, or the bid/proposal may be rejected.

If using subcontractors, return this page (and required supporting documents) with your bid/proposal.

☐ Divide and/or combine scope of work packages into economically feasible units, **if possible**.

☐ Request a list of potential S/MBEs from the Beaufort County Compliance Office by e-mailing a request to dthomas@bcgov.net and reference the project name and number.

☐ Send a written notice **at least ten (10) business days prior** to the bid/response due date of your intent to submit a bid/response, and express interest in receiving quotes thereof to (1) potential S/MBEs **and** (2) "good faith agencies":

The written notice should contain the Contractor's name and contact information; project name; project number; scope of work/bid packages available for subcontracting; information on availability of plans and specifications; and the Contractor's company policy regarding insurance, bonding, and financial requirements, if any.

☐ Submit with the bid/proposal, copies of the written notice sent specifically to S/MBEs, along with the fax transmittal confirmation slips (if sent by fax), copies of the e-mails (if e-mailed), and/or copies of metered or stamped envelopes (if sent by mail).

☐ Submit with the bid/proposal, copies of the written notice sent specifically to the "good faith agencies", along with the fax transmittal confirmation slips (if sent by fax), copies of the e-mails (if e-mailed), and/or copies of metered or stamped envelopes (if sent by mail).

☐ Complete and submit Exhibits 1-3 with **all** requested supporting documentation (where applicable):

Exhibit 1: Non-Discrimination Statement
Exhibit 2: Outreach Documentation Log
Exhibit 3: Proposed Utilization Plan

The undersigned acknowledges making a good faith effort to comply with the above areas checked:

_____
Name of Company

_____
Authorized Representative Name

_____
Signature

_____
Title

_____
Date

GOOD FAITH AGENCIES DISTRIBUTION LIST

Send written notice at least ten (10) business days prior to the bid/response due date to all the agencies listed below and do the following: (1) indicate your company's intent to submit a bid/response and (2) request their assistance in the recruitment of small and minority businesses. You may mail, fax, OR e-mail the notice.

Submit notice copy with the bid/proposal, copies of the written notices sent to these agencies.

☐ **Beaufort County Black Chamber of Commerce**
Attention: Mr. Larry Holman
711 Bladen St.
Beaufort, SC 29901
FAX: (843) 737-9882
☐ EMAIL: president@bcbcc.org

☐ **Beaufort Regional Chamber of Commerce**
Attention: Mr. Ian Scott
Post Office Box 910
Beaufort, SC 29901
FAX: (843) 986-5405
☐ EMAIL: hello@beaufortchamber.org
EMAIL: ian@beaufortchamber.org

☐ **Hilton Head Island-Bluffton Chamber of Commerce**
Attention: Mr. Ray Deal
Post Office Box 5647
Hilton Head Island, SC 29938
☐ FAX: (843) 785-7110
EMAIL: rdeal@hiltonheadisland.org

☐ **SCDOT Disadvantaged Business Enterprise Program**
Attention: Mr. Anthony Cromartie
955 Park Street
Columbia, SC 29202
☐ EMAIL: CromartiAR@scdot.org
You can also look up DBE by clicking the link: https://www.scdot.org/business/bus-development-dbe-sbe-cert.aspx

☐ **Small Business Administration**
Attention: Mr. Carl Faison
1835 Assembly Street, Suite 1425
Columbia, SC 29201
FAX: (803) 765-5962
EMAIL: carl.faison@sba.gov

OUTREACH WRITTEN NOTICE EXAMPLE

Send written notice at least ten (10) business days prior to the bid/response due date to potential small and minority businesses and provide notice of the following: (1) intent to submit a bid/response and (2) interest in receiving quotes from small and minority businesses.

You may mail, fax, OR e-mail the notice.

Submit all notices with the bid/proposal, copies of the written notices sent to these agencies.

No Name Company
Post Office Box 1234
Any Town, US
(123) 555-7777 Telephone
(123) 555-8888 Fax

Example

Date

Subcontractor Company Name Subcontractor Mailing Address Subcontractor City, State, Zip

Dear Subcontractor Company Name:

No Name Company is pursuing work with Beaufort County, South Carolina and intends to submit a bid/proposal for Beaufort County IFB/RFP # 000-00000.

We have the following opportunities for subcontracting on this project:

D. *Describe Bid Package 1*
E. *Describe Bid Package 2*
F. *Describe Bid Package 3*
G. *Etc…*

Plans and specifications are available at our office and at _____ and _____.

It is the police of No Name Company that _____ (*state policy concerning W-4, insurance, credit lines, and assistance in obtaining bonds, etc.*)

The IFB/RFP closing date is _____ at 3:00 pm and therefore, we must receive your quote/proposal into our office no later than _____ pm.

If you have any questions, please contact Mr. /Ms. _____ at our

company. We look forward to hearing from you.

Sincerely,

_____
Title
No Name Company

Sign below and return this page with your bid/proposal.

EXHIBIT 1
Non-Discrimination Statement

The bidder/proposer certifies that:

C. No person shall be excluded from participation in, denied the benefit of, or otherwise discriminated against on the basis of race, color, national origin, or gender in connection with any IFB/RFP submitted to Beaufort County or the performance of any contract resulting thereof.

D. That it is and shall be the policy of this Company to provide equal opportunity to all businesspersons seeking to contract or otherwise interested in contracting with this Company for Beaufort County contracts, including those companies owned and controlled by socio-economic and racial minorities.

E. In connection herewith, we acknowledge and warrant that this Company has been made aware of, understands and agrees to take affirmative action to provide such companies with the maximum practicable opportunities to do business with this Company.

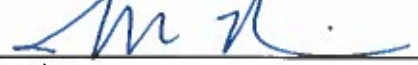
F. That this promise of non-discrimination as made and set forth herein shall be continuing in nature and shall remain in full force and effect without interruption throughout the life of the referenced contract with Beaufort County.

G. That the promises of non-discrimination as made and set forth herein shall be and are hereby deemed to be made a part of and incorporated by reference into any contract or portion thereof which this Company may hereafter obtain and.

H. That the failure of this Company to satisfactorily discharge any off the promises of non-discrimination as made and set forth herein shall constitute a material breach of contract entitling Beaufort County to declare the contract in default and to exercise any and all applicable rights and remedies including, but not limited to cancellation of the contract, termination of the contract, suspension and debarment from future contracting opportunities, and withholding and/or forfeiture of compensation due and owning on a contract.

J.H. Hiers Construction, LLC
Name of Company

Jefferson H. Hiers
Authorized Representative Name


Signature

President
Title

January 18th, 2023
Date

Return this page with your bid/proposal

EXHIBIT 2
Outreach Documentation Log

Bidder/Proposer Name: J.H. Hiers Construction, LLC

IFB/RFP No.: 011223E

IFB/RFP Date: January 18th, 20223

Project Name: Beaufort County Dirt Road Resurfacing Contract #54

LIST INFORMATION FOR THE S/MBEs YOU CONTACTED FOR INTEREST AND POTENTIAL PARTICIPATION
(Use additional sheets if necessary and mark "Exhibit 2 Attachment")

Name of S/MBE	Firm Type	Address	Telephone Number	Trade/Commodity	Letter Sent (Y/N)	Response (No Response / Will Quote / Will Not Quote)	Result (If Submitting Quote)

The undersigned proposes to enter into a formal agreement with the S/MBEs identified herein for work, schedule and value listed in this schedule conditioned upon execution of a contract with Beaufort County.

Name: Steve DiBlasi Signature: _____ Title: Senior Estimator

Return this page with your bid/proposal

EXHIBIT 3
Proposed Utilization Plan

Bidder/Proposer Name: J.H. Hiers Construction, LLC

IFB/RFP No.: 011223E

IFB/RFP Date: January 18th, 20223

Project Name: Beaufort County Dirt Road Resurfacing Contract #54

LIST INFORMATION FOR THE S/MBEs YOU INTEND TO UTILIZE
(Use additional sheets if necessary and mark "Exhibit 3 Attachment")

Name of S/MBE	Firm Type	Address	Telephone Number	Point of Contact	Trade/Commodity	Contract / PO Amount

Total Anticipated Small Business Enterprise Participation Dollar Value: $ 0.00

Total Anticipated Minority Business Enterprise Participation Dollar Value: $ 0.00

The undersigned proposes to enter into a formal agreement with the S/MBEs identified herein for work, schedule and value listed in this schedule conditioned upon execution of a contract with Beaufort County.

Name: Steve DiBlasi Signature: _____ Title: Senior Estimator

Contract #54 IFB#113022E Schedule of Prices – Addendum 1

Construction:	**Total Cost:**
Church Road	$ 1,064,670.00
School Road	$ 2,628,212.00
Frances Jones Road	$ 627,900.00
Other Items:	
Material Procurement, Shipping, and Storage	
Additional GABC (1,300 Tons)	$ 280,650.00
Grand Total:	**$ 4,601,432.00**

Total costs to include complete scope of services to include but not limited to

- Construction inspections
- Material procurement and shipping
- Construction

Contract #54 IFB# 113022E Schedule of Prices -

Unit Prices – Addendum 1

1. **Muck and Fill** ..... $368.95 /CY
   Removal & Disposal of unsuitable material and replacing with structural fill materials compacted as required per specification. Bank CY measure.

2. **Driveway Apron**..... $7,824.15/Apron
   Excavation & backfill for drainage swale, installation of driveway culvert, graded aggregate base.

3. **Geogrid Reinforcement** ..... $ 219.85 /SY
   Removal & disposal of unsuitable material and placement of geogrid reinforcement and structural fill materials compacted as required per specification.

PRELIMINARY BID TABULATION

PURCHASING DEPARTMENT

Project Name:	Beaufort County Dirt Road Paving Contract #54
Project Number:	IFB 011223E
Project Budget:	
Bid Opening Date:	18-Jan-23
Time:	3:00:00 PM
Location:	Beaufort County
Bid Administrator:	Dave Thomas
Bid Recorder:	Victoria Moyer

The following bids were received for the above referenced project:

BIDDER	BID FORM	BID BOND	ALL ADDENDA	SCH OF VALUES	SUB LISTING	SMBE DOCS	Grand Total Price
J.H. Hiers	X	X	X	X	Self Performing	X	**$ 4,601,432.00**

Beaufort County posts PRELIMINARY bid tabulation information within 2 business days of the advertised bid opening. Information on the PRELIMINARY bid tabulation is posted as it was read during the bid opening. Beaufort County makes no guarantees as to the accuracy of any information on the PRELIMINARY tabulation. The bid results indicated here do not necessarily represent the final compliance review by Beaufort County and are subject to change. After the review, the final award will be made by Beaufort County Council and a certified bid tab will be posted online.

Bid Administrator Signature

Victoria Moyer

Bid Recorder

BEAUFORT COUNTY COUNCIL
AGENDA ITEM SUMMARY

ITEM TITLE:

Recommendation to Award the Construction Management and Inspection for the SC 170 Near-Term Improvements to HDR ($673,351.48)

MEETING NAME AND DATE:

Public Facilities and Safety Committee – 4/24/2023

PRESENTER INFORMATION:

Jared Fralix, PE – Assistant County Administrator, Infrastructure Division
Eric Claussen, PE, PTOE – Director of Engineering, Alternate
(5 mins)

ITEM BACKGROUND:

HDR is one of the awarded firms for Beaufort County's On-Call Construction Engineering & Inspection (CEI) Consultants RFQ062222E and asked to provide a scope and fee for construction management and inspection services for the SC 170 Near-Term Improvements, which is ready to bid upon final approval from SCDOT.

PROJECT / ITEM NARRATIVE:

The SC 170 Near-Term project will consist of safety and capacity improvements along SC 170 from Okatie Center South to SC 462. The project includes resurfacing, turn lane and interchange improvements, signal modifications, and guide sign/pavement marking enhancements.

The scope of services will include all work associated with construction management, material testing, and construction inspection of the approved construction contractor.

FISCAL IMPACT:

The contract fee is for the construction management and inspection in the amount of $585,523.03. Staff recommends a 15% contingency of $87,828.45, bringing the total contract amount to $673,351.48.

The funding for this project is Beaufort County Road Impact Fees Bluffton #23020011-54500 with a current balance of $17,995,170.89.

STAFF RECOMMENDATIONS TO COUNCIL:

Staff recommends approval to award HDR for Construction Management and Inspection of the SC 170 Near Term Improvements.

OPTIONS FOR COUNCIL MOTION:

Motion to approve/deny the recommendation to award HDR for Construction Management and Inspection of the SC 170 Near-Term Improvements.

Next Step: Move forward to County Council to award HDR for Construction Management and Inspection of the SC 170 Near-Term Improvements.

Professional Services Agreement-Scope of Work

BEAUFORT COUNTY ON-CALL CONSTRUCTION, ENGINEERING,
AND INSPECTION SERVICES
(SC 170 NEAR TERM IMPROVEMENTS AND US 278 RESURFACING)

The following work is authorized by Beaufort County and will be undertaken by HDR Construction Control Corporation (HDR) in accordance with the following Scope of Services for Construction, Engineering, and Inspection (CE&I) Services for the completion of the project.

DESCRIPTION OF THE PROJECT

The project includes intersection improvements along highway SC 170 at South Okatie Center Boulevard, US 278 Fording Island Road, S-442 Argent Boulevard, and SC 462. This project will also include US 278 Resurfacing and Restriping as outlined in contract Special Provision 02 of the Construction IFB document.

SCOPE OF SERVICES

HDR will provide CE&I Services to Beaufort County for the completion of the SC 170/ US 278 Resurfacing project. Services will include construction management and administration, construction survey verification, material quality acceptance and testing, inspection of concrete, earthwork, drainage, traffic signal, pavement markings, utility relocations, erosion control, and asphalt to verify contractor compliance with contract provisions, plans, and specifications. CE&I services will verify that specified materials are being properly incorporated into the project, that quality of workmanship is utilized on the project, that environmental commitments are being met, and that work is progressing in accordance with the proposed schedule. SCDOT Certified staff will inspect and document project elements per standard SCDOT procedures and standards. Construction management and administration will include bi-weekly progress meetings, meeting agenda/minutes, document control, review as-built drawings, and project record close-out. The following task outline the CE&I services that will be provided for the successful completion of the project.

ASSUMPTIONS/UNDERSTANDINGS

Per the Contractor's IFB contract, Quality Control will be provided by the Contractor. HDR will provide sampling and testing of the contractor's work and incorporated material at a Quality Assurance level.

Project Management and Construction Administration will be provided on a part-time basis due to the size and nature of this project. Field Inspection services will be provided on a full-time basis during the construction contract duration.

Task 1- Project Management and Construction Administration

- Provide a Project Engineer registered in SC over the project. The Project Engineer will be responsible for ensuring an appropriate level of inspection for all phases and aspects of the project through final completion of all work.
- The Project Engineer will be responsible to coordinate all reviews of Shop Drawings, Plan Revisions, and Request for Information during construction.
- Provide administration staff to adequately manage documents for permanent project record.

Task 2 - Contract Management

Review of Contractor pay requests and generation of monthly pay estimates

- Dispute management
- Construction contract change orders
- Prepare and coordinate a Partnering meeting
- Project Documentation
    a. Materials sampling and testing
    b. Project inspection reports
    c. Daily work reports
    d. Aerial Photography (Upon request)
    e. Photo and video gallery
- Project Schedule
    a. Cost-loaded CPM analysis
    b. Schedule approval recommendation
    c. Progress Reports and updates
- Contractor Submittals
    a. Submittal review Coordination and Tracking
    b. Independent analysis & estimate of change orders
    c. Claims Review
    d. Weekly Wage Rate Interview Forms (if necessary)
- Resource Agency Coordination
    a. Environmental permit monitoring
    b. Erosion control inspection and enforcement
    c. Water quality monitoring
    d. Permit requirement/modification tracking
- Right-of-Way Coordination
    a. Special provision adherence
    b. Relocation, Easements, demolition and clearing activities
- Utility Coordination
    a. Utility company facilitation
    b. Specification conformance reviews
    c. Utility relocation diaries
- Project Closeout (completed within 180 days of project Substantial completion)
    a. Final inspection
    b. Completion of punch list items
    c. Final Materials Certification preparation and submittal
    d. Final Quantities and Final Estimate
    e. Review and submit Contractor's As-Built Plans

Task 3 - Inspection and Testing Services (Quality Assurance)

Consultant inspectors will be required to meet SCOOT certifications in the particular area in which they will be inspecting.

- Concrete structure inspection and quality assurance testing
- Earthwork and base inspection and quality assurance
- Asphalt roadway inspection, testing and monitoring of the quality assurance program
- Erosion control inspections as required
- Weekly work zone and traffic control inspections
- Traffic Signal Coordination
- Use AASHTO accredited laboratory for testing of all construction materials.
- Furnish all necessary equipment to fulfill the testing, sampling and inspection responsibilities including cell phones, computers, specialized testing equipment, and vehicles.

Task 4- Verification Survey

- Provide survey crews and equipment to independently confirm layouts and geometry at key locations
- Verify initial project control points are correct and monitor periodically throughout the contract
- Perform verification surveys as necessary

Task 5- Public Relations

- Assist Beaufort County with communication with the general public
- Investigate and help resolve concerns from the general public related to construction activities within the project limits

SERVICE COMPENSATION

This Authorization allows HDR to provide these services on behalf of Beaufort County. Compensation will be provided on a Cost-Plus basis with a not to exceed method, for the duration of the construction and project closeout period for a total anticipated duration of 14 months from the date of the Construction Notice-to-Proceed issued to the Contractor. The Cost-Plus compensation would include all labor, overhead, profit, direct and indirect cost and expenses, to provide the services outlined in the "Scope of Services." Payments would be made monthly based on actual labor, overhead and profit plus the direct expenses reflected in the fee estimate dated January 16, 2023 (Exhibit A).

PROJECT SCHEDULE

The Project Schedule includes the duration of construction and project closeout period for a total duration of 14 months.

If circumstances influencing scope or schedule are encountered during the life of the project that are not the fault of HDR, both parties commit to a good faith effort of negotiating a fair value of work added or subtracted from this Work Authorization.

ACCEPTANCE

Therefore, the parties agree that the above scope, fee (Exhibit A), and other terms are acceptable and are in accordance the County's required service needs for the completion of the SC 170 and US 278 Resurfacing Project.

HDR CONSTRUCTION CONTROL CORPORATION	BEAUFORT COUNTY
By: _____	By: _____
Title: _____	Title: _____
Date: _____	Date: _____
WITNESSES	WITNESSES
_____	_____
_____	_____

CONSTRUCTION ENGINEERING AND INSPECTION SERVICES
CONTRACT ESTIMATE SUMMARY SHEET

Contract Name: Beaufort County CEI On-Call (SC 170 & US 278 Resurfacing)
Prime Consultant for Contract: HDR CCC
Sub-Consultants for Estimate: Cornerstone/SCI
Date Estimate Prepared / Revised: 4/3/2023
Estimate Prepared By: Chris Wood
Construction Time (365Days) 6/1/2023 5/31/2024

Consultant's Costs			
Total Estimated Direct Labor		$	203,114.87
Total Estimated Overhead		$	254,727.08
Direct Raw Labor + Overhead		$	457,841.95
Fixed Fee		$	45,784.20
FCCM		$	573.31
Total Estimated Prime Consultant Direct Expenses		$	58,266.58
Prime Consultant Subtotal		$	562,466.03

Man-Hours
4,440

Subconsultants				
Name	Subconsultant Work %		Fees	Subconsultant Man-Hours
Cornerstone	2.56%	$	15,000.00	0
Soil Consultants	1.38%	$	8,057.00	0
	0.00%	$	-	0
	0.00%	$	-	0
	0.00%	$	-	0
	0.00%	$	-	0
	0.00%	$	-	0
	0.00%	$	-	0
Subconsultant Totals	3.94%	$	23,057.00	0

ESTIMATED CONTRACT COST	$ 585,523.03
ESTIMATED MAN HOURS	4,440

Fee total less Profit $ 539,738.84

	NOTES
1	Cost estimate is based on assumed contract duration of 12 Months (365 days) and an estimated construction cost of $5.5 million.
2	Project Manager will work part time (12hrs/wk) for the 14 month contract duration and closeout.
3	Senior Inspector will work full time 45 hrs/week through the 14 month contract duration and closeout.
4	Mid-Level Inspector will work full time (10 hrs/wk) throughout the 10 month construction duration.
5	Environmental Scientist will work part time to monitor project compliance on a monthly basis (10 hrs/month).
6	Document Control Manager will work part time (12 hrs/wk) through 12 month construction duration.
7	The Survey Verification utilized on an as needed basis.
8	Laboratory Services will be provided at a Quality Assurance level. It is understood that the contractor will be resposible for Quality Control on this project. The project will utilize SCDOT Quality Acceptance Sampling & Testing Guide Figure 106B & 106C of the SCDOT Construction Manual to determine and monitor all Sampling and Testing for the contract.
9	Asphalt laboratory inspection will be performed by SCDOT through LPA agreement.
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