



117 Putnam Drive, Suite A ♦ Eatonton, GA 31024

Agenda

Friday, November 03, 2017 ♦ 9:00 AM

Putnam County Administration Building – Room 203

Opening

1. Welcome - Call to Order
2. Invocation
3. Pledge of Allegiance
4. Special Presentation - EMS and Fire/Rescue

Regular Business Meeting

5. Public Comments
6. Approval of Agenda
7. Consent Agenda
 - a. Approval of Minutes - October 17, 2017 (staff-CC)
 - b. Authorization for Chairman to sign Agreement for Transit Operating and Capital Assistance between GDOT and Putnam County (staff-Transit)
8. Authorization for Chairman to sign Resolution Adopting the Pre-Disaster Hazard Mitigation Plan 2017 Update (PCSO)
9. Approval of 2017 Budget Amendment #2 (staff-FD)
10. Authorization for Chairman to sign letter to GDOT requesting a traffic study at Imperial Mill Road and Highway 441 Bypass (KI)
11. Awarding of Solicitation 17-42001-001 LMIG Off-System Safety Projects and Authorization for Chairman to sign Construction Agreement (staff-CM)
12. Authorization for staff to schedule a Public Hearing on proposed changes to the Putnam County Code of Ordinances - Appendix D-Short Term Vacation Rental (AF)

Reports/Announcements

13. County Manager Report
14. County Attorney Report
15. Commissioner Announcements

Closing

16. Adjournment

Backup material for agenda item:

7. Consent Agenda

- a. Approval of Minutes - October 17, 2017 (staff-CC)
- b. Authorization for Chairman to sign Agreement for Transit Operating and Capital Assistance between GDOT and Putnam County (staff-Transit)

PUTNAM COUNTY BOARD OF COMMISSIONERS



117 Putnam Drive, Suite A ♦ Eatonton, GA 31024

Minutes

Tuesday, October 17, 2017 ♦ 6:30 PM

Putnam County Administration Building – Room 203

The Putnam County Board of Commissioners met on October 17, 2017 at approximately 6:30 PM in the Putnam County Administration Building, 117 Putnam Drive, Room 203, Eatonton, Georgia

PRESENT

- Chairman Stephen Hersey
- Commissioner Kelvin Irvin
- Commissioner Daniel Brown
- Commissioner Alan Foster
- Commissioner Trevor Addison

STAFF PRESENT

- County Attorney Barry Fleming
- County Manager Paul Van Haute
- County Clerk Lynn Butterworth

Opening

1. Welcome - Call to Order

Chairman Hersey called the meeting to order at approximately 6:31 p.m. (Copy of agenda made a part of the minutes on minute book page _____.)

2. Invocation

The invocation was given by Pastor James Smith, Wesley Chapel United Methodist Church.

3. Pledge of Allegiance

The Pledge of Allegiance was led by Chairman Hersey.

Zoning Public Hearing

4. Request by Jarrell Jackson Colter, Jr. & Dan Turner Tomlin to rezone 36.710 acres at 104 Napier Road from AG-1 to AG-2 [Map 057, Parcel 003] (staff-P&D)

Mr. Jarrell J. Colter spoke in support of this request and answered questions. He also distributed copies of a plat showing the proposed individual lots. No one signed in to speak against this item. Planning & Development staff recommendation was for approval.

Motion made by Commissioner Addison, seconded by Commissioner Irvin, to approve the request by Jarrell Jackson Colter, Jr. and Dan Turner Tomlin to rezone 36.710 acres at 104 Napier Road from AG-1 to AG-2 [Map 057, Parcel 003]. Motion carried with Commissioners Irvin, Brown, Foster, and Addison and Chairman Hersey voting yes.

5. Request by Jarrell Jackson Colter, Jr. & Dan Turner Tomlin to rezone 120.582 acres at 114 Napier Road from AG-1 to AG-2 [Map 057, Parcel 005] (staff-P&D)
Mr. Jarrell J. Colter spoke in support of this request and answered questions. He also distributed copies of a plat showing the proposed individual lots. Mr. Dan Tomlin also spoke in support of this request. No one signed in to speak against this item. Planning & Development staff recommendation was for approval.

Motion made by Commissioner Addison, seconded by Commissioner Irvin, to approve the request by Jarrell Jackson Colter, Jr. and Dan Turner Tomlin to rezone 120.582 acres at 114 Napier Road from AG-1 to AG-2 [Map 057, Parcel 005]. Motion carried with Commissioners Irvin, Brown, Foster, and Addison and Chairman Hersey voting yes.

Regular Business Meeting

6. Public Comments

Don Cottrell thanked the Board of Commissioners and County Manager Van Haute for supporting the candidate for Chief Appraiser – Charles Anglin retired and his son, Chuck Anglin, was hired. He also quizzed the board with a question – who was the last BOC chairman, prior to Chairman Hersey, who voted on every issue? Answer: Ralph Perdomo

7. Approval of Agenda

Chairman Hersey advised that an emergency action item needed to be added to the agenda: Authorization for Chairman to sign Resolution adopting the Joint Comprehensive Plan Update.

Motion made by Commissioner Foster, seconded by Commissioner Addison, to approve the agenda with the addition of "Authorization for Chairman to sign Resolution adopting the Joint Comprehensive Plan Update." Motion carried with Commissioners Irvin, Brown, Foster, and Addison and Chairman Hersey voting yes.

8. Consent Agenda

- a. Approval of Minutes - October 5, 2017 Called Meeting (staff-CC)
- b. Approval of Minutes - October 6, 2017 Regular Meeting (staff-CC)
- c. Approval of Minutes - October 6, 2017 Executive Session (staff-CC)

Motion made by Commissioner Addison, seconded by Commissioner Foster, to approve the Consent Agenda. Motion carried with Commissioners Irvin, Brown, Foster, and Addison and Chairman Hersey voting yes.

9. Authorization for Chairman to sign Tax Levy Resolution in connection with the Board of Education's issuance of \$8 million of general obligation bonds (staff-CA)

Mr. Cory Kirby, Attorney for the Board of Education, explained the resolution and answered questions. School Superintendent Eric Arena also answered questions.

Motion made by Commissioner Foster, seconded by Commissioner Addison, to authorize the Chairman to sign the Tax Levy Resolution in connection with the Board of Education's issuance of \$8 million of general obligation bonds. Motion carried with Commissioners Irvin, Brown, Foster, and Addison and Chairman Hersey voting yes. (Copy of resolution made a part of the minutes on minute book pages _____ to _____.)

Meeting recessed at approximately 7:24 p.m.

Meeting reconvened at approximately 7:36 p.m.

10. Authorization for Chairman to sign Intergovernmental Agreement for Zoning Services (tabled at last meeting)

There was a motion on the table from the last meeting, October 6, 2017: **Motion made by Commissioner Addison, seconded by Commissioner Irvin, to authorize the Chairman to sign the Intergovernmental Agreement for Zoning Services between the City of Eatonton and Putnam County.**

Amended motion made by Commissioner Addison, seconded by Commissioner Foster, to change the fee from \$300 to \$1000 per month. Amendment carried with Commissioners Irvin, Brown, Foster, and Addison and Chairman Hersey voting yes.

Motion made by Commissioner Addison, seconded by Commissioner Foster, to approve the Intergovernmental Agreement for Zoning Services between the City of Eatonton and Putnam County as amended. Motion carried with Commissioners Irvin, Brown, Foster, and Addison and Chairman Hersey voting yes. (Copy of agreement made a part of the minutes on minute book pages _____ to _____.)

11. Discussion and possible action regarding Service Delivery Strategy (staff-CM)

Motion made by Commissioner Addison, seconded by Commissioner Foster, to approve the Service Delivery Strategy with the previously approved Intergovernmental Agreement for Zoning Services. Motion carried with Commissioners Irvin, Brown, Foster, and Addison and Chairman Hersey voting yes. (Copy of SDS made a part of the minutes on minute book pages _____ to _____.)

12. Approval of additional Floating Docks at Oconee Springs Park (staff-CM)

County Manager Van Haute advised that these new docks will replace the ones at the gas pumps.

Motion made by Commissioner Addison, seconded by Commissioner Irvin, to approve additional floating docks at Oconee Springs Park using Wahoo Docks at a cost of \$40,625.72. Motion carried with Commissioners Irvin, Brown, Foster, and Addison and Chairman Hersey voting yes.

13. Discussion and possible action regarding a contract with the Carl Vinson Institute for a study of Unification (SH)

Motion by Commissioner Foster, seconded by Chairman Hersey, to authorize the Chairman to enter into contract, upon agreement by the City of Eatonton, with the Carl Vinson Institute to perform a study of governmental unification as described in the Institute's proposal, to sign same and negotiate cost sharing of the study with the City of Eatonton. Motion carried with Commissioners Irvin, Brown, and Foster and Chairman Hersey voting yes and Commissioner Addison voting no. (Copy of proposal made a part of the minutes on minute book pages _____ to _____.)

13.5 Authorization for Chairman to sign Resolution adopting the Joint Comprehensive Plan Update

Motion made by Commissioner Foster, seconded by Commissioner Addison, to authorize the Chairman to sign the Resolution adopting the Joint Comprehensive Plan Update. Motion carried with Commissioners Irvin, Brown, Foster and Addison voting yes and Chairman Hersey voting no. (Copy of resolution made a part of the minutes on minute book page _____.)

Reports/Announcements

14. County Manager Report

County Manager Van Haute reported that five internal candidates had been interviewed for the EMS Director position and he will make an announcement in a few days.

15. County Attorney Report

No report.

16. Commissioner Announcements

Commissioner Irvin: none

Commissioner Brown: none

Commissioner Foster: wished everyone a Happy Halloween

Commissioner Addison: none

Chairman Hersey: reminded everyone that early voting has started and the county wide ballot has an extremely important issue.

Closing

17. Adjournment

Motion made by Commissioner Foster, seconded by Commissioner Addison, to adjourn the meeting. Motion carried with Commissioners Irvin, Brown, Foster, and Addison and Chairman Hersey voting yes.

Meeting adjourned at approximately 8:25 p.m.

ATTEST:

Lynn Butterworth
County Clerk

Stephen J. Hersey
Chairman

Russell R. McMurry, P.E., Commissioner



GEORGIA DEPARTMENT OF TRANSPORTATION 8

One Georgia Center, 600 West Peachtree Street, NW
Atlanta, Georgia 30308
Telephone: (404) 631-1000

October 5, 2017

The Honorable Stephen J. Hersey, Chairman
Putnam County Board of Commissioners
117 Putnam Drive, Suite A
Eatonton, GA 31024

In Re: FTA 5311 – FY18 Transit Operating Assistance
Project Number – T006194
Contract Amount - \$93,851.60

Dear Chairman Hersey:

Enclosed for execution by Putnam County is an electronic contract for the FTA FY18 5311 Transit Operating/Capital Program. This project contains 50% operating federal funds in the amount of \$91,292.00. There is a local match of 50% operating in the amount of \$91,292.00. The contract contains capital funds of 80% federal funds in the amount of \$2,275.20, 10% state funds of \$284.40 and 10% local funds of \$284.40.


We are transitioning to electronic contract execution and appreciate the County's assistance. This is a new process, so please call us immediately if you have any questions. All pages needing signatures have been flagged with the individual's name to sign.

- The Department will send via email the electronic contract to Ms. Dianne Pounds for review. Once Ms. Pounds has reviewed, the contract will automatically forward to the Chairman's office for signature & county seal. Once the Chairman's signature & seal has been loaded onto the pages, the system will prompt to select "**adopt and sign**" then "**finish**". The system will automatically send the contract to the County Clerk, Ms. Lynn Butterworth.
- Ms. Butterworth will upload her signature as the witness along with the county seal. Then it will go to the notary Stephanie McMullens to upload her signature and notary seal to complete the agreement. The signature and seal will have to be on a single line. **To save the signature and seal, one needs to take a white sheet of paper, sign and affix the seal adjacent to the signature. Then scan signature and seal to desktop or take a picture of the signature and seal using a cell phone camera and send to email to save on desktop. The County "Seal" is required on this document.** The system will give an option to "**upload**" the signature and the county "Seal." The signature and county seal have to be uploaded together, as one document, and will need to be in a .jpeg or .bmp format. **A .pdf is not acceptable.** Once the signature and seal have been uploaded successfully, the system will prompt to select "**adopt and sign**" then "**finish**." There is also an instructional video on how to upload the County's Seal. Please use this link: <http://www.dot.ga.gov/PS/Training/ElectronicSignature>
- Once the signatures and seals have been successfully uploaded, the contract will be electronically returned to the Department to complete the execution process. **If there are any questions or clarification needed, please call our office before selecting "Adopt and Sign."** There is a "Cancel" button to select that will allow the contract to be saved for later. **Selecting "Adopt and Sign" before the signature and seal is attached will result in the contract being "rejected."**

Once the contract has been fully executed, you will receive notification electronically stating the contract process is complete along with a copy of the contract. However, this contract is not valid on the project until a written "Notice to Proceed" is received from our office via email. If you have further questions, please do not hesitate to contact Toshiro Butler, Intermodal Contracts Manager, at (404) 631-1245 or Tonya Fair, Contracts Specialist, at (404) 347-0536.

If you have any questions, please contact Kristy "Mellie" Pettit, Public Transportation Coordinator, at (478) 553-3410.

Sincerely,


Nancy C. Cobb, Asst. Division Director
Division of Intermodal

NCC:tkb
Enclosures

AGREEMENT
FOR
TRANSIT OPERATING AND CAPITAL ASSISTANCE
BETWEEN
DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA
AND
PUTNAM COUNTY

PROJECT ID NUMBER: T006194

THIS AGREEMENT made and entered into this ____ day of _____, ____ by and between the DEPARTMENT OF TRANSPORTATION, an agency of the State of Georgia, hereinafter called the "DEPARTMENT", and PUTNAM COUNTY, hereinafter called the "SPONSOR".

WHEREAS, 49 U.S.C. Section 5311, provides for transit operating and capital assistance for public transportation services to non-urbanized areas; and

WHEREAS, in a letter to the Federal Transit Administration ("FTA"), and the Federal Highway Administration, ("FHWA"), dated January 24, 1979, the Governor designated the DEPARTMENT as the recipient agency for Section 5311 funding; and

WHEREAS, the SPONSOR has stated that transit financial assistance is needed for transportation services in its non-urbanized area, and it would, therefore, perform certain of the duties and provide resources in order to receive said Section 5311 Funds of the Federal Transit Act; and

WHEREAS, in reliance on said SPONSOR, the DEPARTMENT has applied to FTA for said Section 5311 funds, and in so doing states that the required duties would be discharged pursuant to a written contract between the parties; and

WHEREAS, under Sections 32-9-1 and 32-9-2 of the Official Code of Georgia Annotated, the DEPARTMENT is authorized to participate in such an undertaking;

NOW THEREFORE, for and in consideration of the mutual promises and covenants made, it is agreed by and between the DEPARTMENT and the SPONSOR that:

ARTICLE I
SCOPE AND PROCEDURE

Grants made under this agreement are for the purpose of (A) Operating Assistance and/or (B) Capital Projects as specified in the SPONSOR's Section 5311 Application, herein referred to as PROJECT APPLICATION, on file at the DEPARTMENT and incorporated by reference as if fully set out herein.

A. Operating Assistance

This Agreement covers the obligations of the DEPARTMENT and the SPONSOR in connection with the FTA'S granting Section 5311 funds to the DEPARTMENT for operating assistance for public transportation in the Putnam County area, the terms and conditions of said funding as agreed to in the PROJECT APPLICATION.

- (a) The SPONSOR agrees to comply with all the terms and conditions required by FTA under the PROJECT APPLICATION.
- (b) The SPONSOR shall use the funds provided by the DEPARTMENT to operate a public transportation service in the Putnam County area and the SPONSOR agrees to provide from local funding sources, excluding all available federal funds, funds to pay its local matching share of the cost of operating a public transportation service for the period of this Agreement. However, the SPONSOR may provide in-kind services for any or all of its share of the operating costs.
- (c) The SPONSOR agrees that it, or any operator of public transportation on its behalf, will not engage in school bus operations, exclusively for the transportation of students or school personnel, in competition with private school bus operators, except as provided under Section 3(g) of the Federal Transit Act, and published in FTA regulations on school bus operations.
- (d) The SPONSOR agrees that it, or any operator of public transportation acting on its behalf, will not engage in charter bus operations outside the area within which it provides regularly scheduled public transportation services, except as provided under Section 3(f) of the Federal Transit Act, and published in FTA regulations on charter bus operations.

- (e) The SPONSOR and any mass transportation operator under it will conform to the reporting system in FEDERAL ACQUISITION REGULATIONS, SUBPART 31.6.
- (f) The SPONSOR will make all purchases under this Agreement through competitive bidding in accordance with the DEPARTMENT's established procedure.
- (g) The SPONSOR shall prohibit its employees from using their positions for a purpose that is or gives the appearance of being motivated by a desire for private gain, for themselves or others, particularly, those with whom they have family, business, or other ties.
- (h) The SPONSOR shall comply with all relevant Federal and State laws and regulations relating to the Section 5311 Program, as well as those regulations and requirements included in the Federal Office of Management and Budget Uniform Grant Guidance, 2 CFR Part 200, and any applicable provisions of the Hatch Act.
- (i) The SPONSOR shall keep accurate records in a manner approved by the DEPARTMENT, and shall submit to the DEPARTMENT, upon request, such information as is required in order to assure compliance.

B. Capital Acquisitions

(a) Acquisition of Vehicles and Equipment

1. Pursuant to the terms of this Agreement, the DEPARTMENT shall acquire through its procurement process the following item(s):

N/A

2. Upon acquisition of the equipment listed in paragraph (a) (1) above; the DEPARTMENT shall transfer title ownership in said equipment to the SPONSOR. The DEPARTMENT shall place a lien and hold physical possession of all vehicle titles.
3. The DEPARTMENT shall participate in the purchase by the SPONSOR of:

THREE (3) BUS TABLETS;

Prior to the purchase of this equipment, the SPONSOR shall obtain the approval of the DEPARTMENT for the amount and items purchased.

- (b) The SPONSOR shall accept and retain title to or purchase said PROJECT equipment and shall provide from local funding sources excluding all available federal funds, funds to pay its share of the PROJECT cost. The SPONSOR shall show the DEPARTMENT as first lienholder on the Title Certificate for the duration of the life of the equipment.
- (c) During the period of contract performance, the SPONSOR shall use the PROJECT equipment for the provisions of mass transportation service in the SPONSOR area. The mass transportation system under the terms of this Agreement shall be operated by the SPONSOR and shall serve area-wide transportation needs. The SPONSOR shall have full responsibility for the day-to-day

management and operation of the system. To effectively fulfill this responsibility, the SPONSOR will designate an individual to be general manager of the system and shall notify the DEPARTMENT in writing of this designation. The SPONSOR agrees to be responsible for all operating costs of the system.

- (d) During the period of contract performance, the SPONSOR shall keep accurate records, in a manner approved by the DEPARTMENT, with regard to the use of the PROJECT equipment; and shall submit to the DEPARTMENT, upon request, such information as is required in order to assure compliance with this Article; and shall immediately notify the DEPARTMENT in all cases where PROJECT equipment is used in a manner or for a purpose other than mass transportation.
- (e) During the period of contract performance, the SPONSOR shall maintain the PROJECT equipment at a level of cleanliness, safety and mechanical soundness as determined by the SPONSOR and approved by the DEPARTMENT. The DEPARTMENT and the FTA shall have the right to conduct periodic inspections for the purpose of confirming proper maintenance pursuant to this Article.
- (f) The SPONSOR shall maintain, in amount and form approved by the DEPARTMENT, such comprehensive and collision insurance or self-insurance as will be adequate to replace or repair PROJECT equipment throughout the PROJECT equipment's useful life.
- (g) During the period of contract performance, the SPONSOR agrees to provide each project vehicle with liability insurance in an amount not less than \$500,000 bodily injury per person, \$700,000 all bodily injuries, and \$50,000 property damage.
- (h) If at any time during the duration of the PROJECT equipment's useful life, it is determined by the DEPARTMENT that said PROJECT equipment is not being used or maintained in accordance with the terms of this Agreement or the SPONSOR is not keeping records as specified in paragraph (d) of this Article, then the DEPARTMENT, at its discretion, shall require the SPONSOR to either remit ownership of the equipment to the DEPARTMENT or shall remit to the DEPARTMENT ninety percent (90%) of the fair market value, if any, of such property. For the purpose of this Article, the fair market value shall be deemed to be the value of the property as determined by an appraisal, approved by the DEPARTMENT, conducted as soon after such misuse or withdrawal occurs or the actual proceeds from the public sale of such property, whichever is approved by the DEPARTMENT and FTA. The DEPARTMENT reserves the right to transfer ownership of the surrendered PROJECT equipment to another transportation service provider. Upon disposition of said property or properties by transfer, sale, or as otherwise directed by the DEPARTMENT in accordance with the procedures of the DEPARTMENT, the SPONSOR forfeits any invested interest in lieu of the costs of such disposition. Under no circumstances will the property be disposed of without the specific written consent of the DEPARTMENT.
- (i) The SPONSOR shall not permit the use of the PROJECT equipment for partisan political purposes.

- (j) The SPONSOR shall not alter, modify or remove from the PROJECT equipment any part, component, or accessory without written consent from the DEPARTMENT.

ARTICLE II COVENANT AGAINST CONTINGENT FEES

The SPONSOR shall comply with all relevant Federal, State, and Local laws. The SPONSOR warrants it has not employed or retained any company or person, other than a bona fide employee working solely for the SPONSOR to solicit or secure this Contract, and it has not paid or agreed to pay any company or person, other than a bona fide employee working solely for the SPONSOR, any fee, commission, percentage, brokerage fee, gifts, or any other consideration, contingent upon or resulting from the award or making of this Contract. For breach or violation of this warranty, the DEPARTMENT shall have the right to annul this Contract without liability or at its discretion to deduct from the Contract price or consideration, or otherwise recover, the full amount of such fee, commission, percentage, brokerage fee, gift or contingent fee.

ARTICLE III EMPLOYMENT OF DEPARTMENT'S PERSONNEL

The SPONSOR shall not employ any person or persons in the employ of the DEPARTMENT for any work required by the terms of this Contract, without the written permission of the DEPARTMENT except as may otherwise be provided for herein.

ARTICLE IV
PROHIBITED INTEREST

No member, officer, or employee of the SPONSOR during his tenure or one year thereafter shall have any interest, direct or indirect in this Agreement or the proceeds thereof.

ARTICLE V
REVIEW OF WORK

A. Inspection of Vehicles and Equipment

Authorized representatives of the DEPARTMENT, the Comptroller General of the United States, and the Secretary of Transportation may at all reasonable times inspect all vehicles and equipment purchased by the SPONSOR as part of the PROJECT, all transportation services rendered by the SPONSOR by the use of such vehicles, and all relevant PROJECT data and records.

B. Inspection of Books, Records, and Accounts

The SPONSOR shall also permit the authorized representatives to audit the books, records, and accounts of the SPONSOR pertaining to the PROJECT.

ARTICLE VI
AUTHORIZATION AND APPROVAL

It is understood and agreed by the parties to this Agreement, the SPONSOR shall satisfy the terms of this Agreement for Operating Assistance commencing upon the beginning of the operating period, and continuing until the end of the operating period as denoted on the Exhibit A 1-3, Budget. The Capital Improvements and the purchase of improvements provided under the terms of this Agreement shall be completed as defined in the EXHIBIT A 1-3 Budget. The work shall be carried on expeditiously and in general accordance with the scope and procedure with recognition that unforeseen events may make necessary some minor variations. It is understood and agreed this Agreement is contingent upon FTA approval of the funding assistance and distribution as described in EXHIBIT A 1-3 for this project and that any payment to the SPONSOR by the DEPARTMENT will be made subject provisions set forth in ARTICLE VIII.

ARTICLE VII
RESPONSIBILITY FOR CLAIMS AND LIABILITY

To the extent provided by law, the SPONSOR and its sub-recipients shall be responsible for any and all damages to property or persons and shall save harmless the DEPARTMENT, its officers, agents, and employees, from all suits, claims, actions, or damages of any nature whatsoever resulting from the negligence of the SPONSOR and its sub-recipients in the performance of work under this Agreement. Further, the SPONSOR and its sub-recipient agrees to hold harmless the DEPARTMENT from suits, claims, actions, or damages of any nature whatsoever by any person, firm, corporation, or governmental body resulting from any defective equipment or material purchased by the SPONSOR and its sub-recipients under this Agreement or from the installation and operation thereof or from operation of equipment and materials already owned by the SPONSOR and its sub-recipients.

In Process
ARTICLE VIII
COMPENSATION

A. Operating Assistance

- (1) It is understood and agreed that the total estimated eligible net Operating Assistance is the difference between eligible operating expenses and eligible revenues, as defined in FTA Circular 9040.IE, for the provision of operating assistance by the DEPARTMENT as shown, if any, in EXHIBIT A1, as attached hereto and made a part of this Agreement as if fully set out herein, is ONE HUNDRED EIGHTY-TWO THOUSAND FIVE HUNDRED EIGHTY-FOUR 00/100 DOLLARS (\$182,584.00). For the purposes of the DEPARTMENT'S participation in the costs by the SPONSOR, it is agreed that the DEPARTMENT'S maximum obligation for the SPONSOR'S operating assistance program shall be NINETY-ONE THOUSAND TWO HUNDRED NINETY-TWO 00/100 DOLLARS (\$91,292.00), which includes the administrative and operating costs, as established in EXHIBIT A1.
- (2) If the total estimated eligible net project cost of the SPONSOR'S public transportation service for the operating period beginning July 1, 2017 to June 30, 2018, as reflected in the final audit, is less than ONE HUNDRED EIGHTY-TWO THOUSAND FIVE HUNDRED

EIGHTY-FOUR 00/100 DOLLARS (\$182,584.00), then the DEPARTMENT shall be required to pay only fifty percent (50%) of the total incurred direct administrative and operating costs.

- (3) It is further understood and agreed that any line item budget estimate shown in PROJECT APPLICATION may be increased or decreased without the execution of a Supplemental Agreement, provided that the DEPARTMENT'S total maximum obligation under this agreement is not changed, if said change is requested in writing by the SPONSOR and approved in writing by the DEPARTMENT.

B. Capital Acquisitions

- (1) It is understood and agreed that the total estimated eligible net Capital project cost is TWO THOUSAND EIGHT HUNDRED FORTY-FOUR 00/100 DOLLARS (\$2,844.00), as shown, if any, in EXHIBIT A2, Budget, which is attached and incorporated as if fully set out herein. The SPONSOR shall pay to the DEPARTMENT, prior to the purchase of said equipment, TWO HUNDRED EIGHTY-FOUR 40/100 Dollars (\$284.40), which shall constitute the local share in acquiring the said improvements. The DEPARTMENT'S participation in the acquisition cost of said improvements shall be TWO THOUSAND FIVE HUNDRED FIFTY-NINE 60/100 dollars (\$2,559.60), which includes the funding provided by FTA which is eighty percent (80%) of the total estimated cost of the PROJECT and funding provided directly by the DEPARTMENT, which is ten percent (10%). The DEPARTMENT shall be responsible for the purchase of or participate in the purchase of said improvements.
- (2) It is further agreed that the DEPARTMENT'S obligation for the purchase of the aforementioned improvement shall not exceed the sum of TWO THOUSAND FIVE HUNDRED FIFTY-NINE 60/100 dollars (\$2,559.60). However, if the sum total of the actual cost in acquiring the improvements shall be less than TWO THOUSAND EIGHT HUNDRED FORTY-FOUR 00/100 DOLLARS (\$2,844.00), the DEPARTMENT shall be obligated to pay ninety percent (90%) of the actual cost.

C. Departmental Obligations

The DEPARTMENT'S maximum obligation, \$93,851.60, as set forth above is funded by the FTA. No entity of the State of Georgia other than the DEPARTMENT has any obligations to the SPONSOR related to this project. This agreement does not obligate the DEPARTMENT to make any payment to the SPONSOR from any funds other than those made available to the DEPARTMENT from the FTA. The obligation of the DEPARTMENT to pay or reimburse the SPONSOR is expressly limited to the amount of funds remitted to the DEPARTMENT by the FTA. Payments of invoices will be contingent upon the receipt of funds from the FTA, and therefore the DEPARTMENT does not make any commitment to the SPONSOR as to the timing of when payment to the SPONSOR will be made. In the event the funds made available to the DEPARTMENT by the FTA are insufficient for the project, the DEPARTMENT's payment obligations shall not exceed the availability of such FTA funds, and the DEPARTMENT shall have the right at its sole discretion to terminate this agreement immediately upon notice to the SPONSOR without further obligation of the DEPARTMENT.

ARTICLE IX SUBSTANTIAL CHANGES

If, prior to the satisfactory completion of the PROJECT under this Agreement, the DEPARTMENT materially alters the scope, character, complexity or duration of the PROJECT from those required under the Agreement, a Supplemental Agreement may be executed between the parties. Minor changes in the work which do not involve increased compensation, extensions of time or changes in the goals and objectives of the work may be made by written notification of such change by either the DEPARTMENT or the SPONSOR with written approval by the other party.

ARTICLE X

The SPONSOR agrees it will not engage, subcontract or otherwise pass through funding authorized by this Agreement to any operator of public transportation services without the specific written consent of the DEPARTMENT. Such Agreement shall be a written Contract between the SPONSOR and the operator and be approved as to form and content by the DEPARTMENT.

ARTICLE XI
PAYMENTS

A. PARTIAL PAYMENT:

1. The SPONSOR shall submit to the DEPARTMENT monthly statements of the Operating and Capital costs applicable to this agreement incurred during the period of this Agreement and submit to the DEPARTMENT itemized vouchers stating, in reasonable detail, the actual expenses incurred by the SPONSOR on the PROJECT for the voucher period as well as a specific designation and certification of receipt of the item or items purchased as listed in ARTICLE I. Upon the basis of its review and approval of such vouchers, the DEPARTMENT will, at the request of the SPONSOR, make payment to the SPONSOR pursuant to this ARTICLE as the PROJECT progresses but not more than once a month. Payments will be made by the DEPARTMENT for expenses incurred by the SPONSOR, less any previous partial payments, for any item and for each item specified in the voucher and which is specifically set for in ARTICLE I. It is agreed that under no circumstances will the DEPARTMENT be responsible or obligated to pay to the SPONSOR more than the amounts specified in Article VIII, Compensation, covered under this Agreement.

2. The SPONSOR further expressly agrees that the DEPARTMENT may set-off against the partial payment provided hereunder, an amount equal to that amount which has been identified by either state or federal audit as an unallowable expenditure in any contract between the SPONSOR and the DEPARTMENT on which payments have been made, subject to final audit.

B. FINAL PAYMENT AND PROJECT CLOSEOUT:

1. If a final monthly invoice is not received by the DEPARTMENT within ninety (90) days after the contract expiration date, the DEPARTMENT may at its discretion consider the last invoice submitted by the SPONSOR as the final invoice and may proceed with final close out proceedings. In completing the final close out, the DEPARTMENT may set-off against

any remaining balance in any contract between the DEPARTMENT and SPONSOR an amount equal to the unallowable expenditure as provided for herein, under Partial Payment. If any costs covered under the terms of this Agreement are disallowed by either the DEPARTMENT or FTA, the SPONSOR, and not the DEPARTMENT or FTA shall be responsible for such disallowed costs. Upon approval of the final statement by the DEPARTMENT, the DEPARTMENT will pay any remaining balance of compensation it owes the SPONSOR, not to exceed the DEPARTMENT'S maximum obligation set out in Article VII. The SPONSOR agrees that the acceptance of this final payment shall be in full settlement of all terms stated under this Agreement and shall release the DEPARTMENT from any and all other claims of whatever nature whether known or unknown, for and on account of said Agreement.

2. IT IS FURTHER AGREED that the SPONSOR shall submit to the DEPARTMENT, if applicable, an audited financial statement reflecting all eligible costs incurred for the SPONSOR'S public transportation services. The audit shall be performed by an independent auditor or audit firm and shall conform to the Federal Office of Management and Budget Uniform Grant Guidance, 2 CFR Part 200. The DEPARTMENT, at its discretion, may accept the independent audit or conduct its own audit.

ARTICLE XII MAINTENANCE OF CONTRACT COST RECORDS

The SPONSOR shall maintain all books, documents, papers, accounting records and other evidence pertaining to costs incurred by the SPONSOR in operating the SPONSOR'S Public Transportation Services and acquisition of Capital items for the period July 1, 2017 to June 30, 2018 and acquisition of Capital items shall make such material available at all reasonable times during the period of this Agreement, and for three (3) years from the date of the final payment under this Agreement, for the inspection by the DEPARTMENT and FTA, and copies shall be furnished if requested.

**ARTICLE XIII
SUBCONTRACTING AND ASSIGNMENT**

A. SUBCONTRACTING OF SERVICE

The SPONSOR agrees it will not engage, sub-contract or otherwise pass through funding authorized by this Agreement to any operator of public transportation services without the specific written consent of the DEPARTMENT. Such Agreement shall be a written Contract between the SPONSOR and the operator and be approved as to form and content by the DEPARTMENT.

B. ASSIGNMENT AND THIRD PARTY AGREEMENTS

Unless otherwise authorized in writing by the DEPARTMENT, the SPONSOR shall not assign any portion of the work to be performed under this Agreement, or execute any Contract, amendment or change order thereto, or obligate itself in any manner with any third party with respect to its rights and responsibilities under this Agreement without the prior written concurrence of the DEPARTMENT.

C. APPROVAL OF SUBCONTRACTS

The DEPARTMENT reserves the right to review all subcontracts prepared in connection with the Agreement, and the SPONSOR agrees that it shall submit to the DEPARTMENT prepared estimates for the DEPARTMENT'S review and written concurrence in advance of their execution. All Contracts shall provide that subcontracts exceeding \$10,000.00 in cost shall contain all the required provisions of the prime Contract.

D. PAYMENT OF SUBCONTRACTORS

The SPONSOR agrees to pay each subcontractor (and extends to any second-tier contract) under this FTA Funded Agreement for satisfactory performance of its subcontract no later than thirty (30) days from receipt of each payment the SPONSOR receives from the DEPARTMENT'S FTA funded transit program ("GDOT TRANSIT PROGRAM"). Any disputes that arise regarding payment to any subcontractor after the satisfactory completion of work may be brought to the attention of the GDOT TRANSIT PROGRAM, who will make a determination whether there was good cause. Any delay of payment from the above-referenced time frame may occur only for good cause following written approval from the GDOT TRANSIT PROGRAM. This clause applies to both DBE and non-DBE subcontractors. Failure by the SPONSOR to carry out the requirements of prompt payment without just cause, is a material breach of this Agreement with the Georgia Department of Transportation and may result in the GDOT TRANSIT PROGRAM withholding payment from the SPONSOR until all

delinquent payments have been made (no interest will be paid for the period that payment was withheld, when applicable), termination of this Agreement, or other such remedy as the GDOT TRANSIT PROGRAM deems appropriate. Additionally, the SPONSOR is discouraged from withholding retainage from subcontractors, but if done, any retainage payments should be made within 30 days of satisfactory completion.

ARTICLE XIV CONTRACT DISPUTES

This Agreement shall be deemed to have been executed in Fulton County, Georgia, and all questions of interpretation and construction shall be governed by the Laws of the State of Georgia. The DEPARTMENT reserves the right to terminate the Contract at any time for just cause upon thirty (30) days written notice to the SPONSOR notwithstanding any just claims by the SPONSOR for payment of services rendered prior to the date of termination.

ARTICLE XV TERMINATION

The Department reserves the right to terminate this Agreement at any time upon thirty (30) days written notice to the SPONSOR notwithstanding any just claims by the SPONSOR.

ARTICLE XVI COMPLIANCE WITH APPLICABLE LAWS

- A. The undersigned certify that the provisions of Sections 45-10-20 through 45-10-28 of the Official Code of Georgia Annotated, relating to Conflict of Interest, have been complied with in full.
- B. IT IS FURTHER AGREED that the SPONSOR shall comply and shall require its subcontractors to comply with requirements in GEORGIA DEPARTMENT OF TRANSPORTATION, EXHIBIT B, CERTIFICATION OF SPONSOR, COMPLIANCE WITH STATE AUDIT REQUIREMENT, attached hereto and made a part of this Agreement as if fully set out herein.

- C. IT IS FURTHER CERTIFIED that the provisions of Section 50-24-1 through 50-24-6 of the Official Code of Georgia Annotated, relating to the "DRUG-FREE WORKPLACE Act" have been complied with in full, as stated in EXHIBIT C of this Agreement.
- D. IT IS FURTHER agreed that the SPONSOR shall comply with and require its consultants to comply with the requirements in GEORGIA DEPARTMENT OF TRANSPORTATION, EXHIBIT D, GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT AFFIDAVIT.
- E. IT IS FURTHER AGREED that the SPONSOR shall comply and require its subcontractors to comply with the "SPECIAL PROVISION," requirements in accordance with Executive Order No. 13153, Federal Leadership on Reducing Text Messaging while Driving October 1, 2009, U.S.C.A. 402 note, <http://www.gpo.gov/fdsys/pkg/FR-2009-10-06/html/E9-24203.htm> and [DOT Order 3902.10](http://www.dot.gov/sites/dot.dev/files/doc/FAPL_2010-01.pdf) Text Messaging December 30, 2009 located at http://www.dot.gov/sites/dot.dev/files/doc/FAPL_2010-01.pdf incorporated by reference and made a part of this Agreement as if fully set out herein.
- F. The SPONSOR shall comply and require its subcontractors to comply with the applicable requirements of the Americans with Disabilities Act.
- G. IT IS FURTHER AGREED that the SPONSOR shall comply and shall require its subcontractors to comply with requirements in GEORGIA DEPARTMENT OF TRANSPORTATION, TERMS AND CONDITIONS, United States of America Department of Transportation Federal Transit Administration, Master Agreement, located at www.fta.dot.gov/documents/23Master.pdf, or the most recent version thereof, incorporated by reference and made a part of this Agreement as if fully set out herein.
- H. The SPONSOR shall comply with the provisions of Section 16-10-6 of the Official Code of Georgia Annotated relating to elected officers of a political subdivision who sell any personal property to political subdivisions of there are officers.
- I. The SPONSOR shall comply and require its consultants to comply with the requirements of 49 U.S.C. Section 5333(b), Labor Standards as more specifically referenced in U.S. Department of Labor correspondence dated August 2, 2010, incorporated by reference as if fully set out herein.

- J. Pursuant to O.C.G.A. Sec. 50-5-85, CONTRACTOR hereby certifies that it is not currently engaged in, and agrees that for the duration of this contract, it will not engage in a boycott of Israel.

The covenants herein contained shall except as otherwise provided accrue to the benefit of and be binding upon the successors and assigns of the parties hereto.

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In Process

IN WITNESS WHEREOF, said parties have hereunto set their hands and affixed their seals the day and year above first written.

DEPARTMENT OF TRANSPORTATION BY:

PUTNAM COUNTY:

Commissioner (SEAL)

BY: _____(SEAL)
Title: _____

ATTEST:

Treasurer

IN THE PRESENCE OF:

In Process

Witness

FEDERAL EMPLOYER
IDENTIFICATION NUMBER:

EXHIBIT A1
FY18 FTA 5311 Rural Transit Operating Assistance
Period of Eligible Expenses - July 1, 2017-June 30, 2018
PUTNAM COUNTY
Project ID Number - T006194

Item	Description	SCOPE	FTA ALI CODE	Total Cost	Federal Share (50%)	State Share (0%)	Local Share (50%)
1	Rural Transit Administrative and Operating Cost	300-A1	30.09.01	\$182,584.00	\$91,292.00	\$0.00	\$91,292.00
	Total Cost			\$182,584.00	\$91,292.00	\$0.00	\$91,292.00

Funding Distribution

Federal (50%)

\$91,292.00

State (0%)

\$0.00

Local (50%)

\$91,292.00

Total Estimated Operating Cost**\$182,584.00****Fund Sources**

216FA

n/a

49001

In Process

PID Number - T006194**FTA FAIN Number: GA-2016-006-01****FTA Project: GA-2016-006-01-01****FTA PO: GA-18-X034****CFDA: 20.509****DUNS#010112084****Federal Award Date:8/16/2017**

EXHIBIT A2
FY18 Capital Vehicle Purchases
FTA 5311 Rural Transit Vehicles
Period of Eligible Expenses -July 1, 2017 - June 30, 2018
PUTNAM COUNTY

Item	Description	SCOPE	FTA Activity Line Item Code	Qty	Unit Cost	Total Cost	Federal Share (80%)	State Share (10%)	Local Share (10%)
1	n/a	111-A2	11.12.03	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
0	n/a		X.XX	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
Total Capital Cost						\$0.00	\$0.00	\$0.00	\$0.00

Funding Distribution:		Fund Sources
Federal (80%)	\$0.00	216FA
State (10%)	\$0.00	
Local (10%) Deposited at: GDOT	\$0.00	49001
Total Project Cost	\$0.00	

PID Number - T006194
 FTA FAIN Number: GA-2016-006-01
 FTA Project: GA-2016-006-01-01
 FTA PO: GA-18-X034
 CFDA: 20.509
 DUNS#0101112084
 Federal Award Date: 8/16/2017

In Process

EXHIBIT A3
Capital Purchases Other Than Vehicles
FY18 FTA 5311 Rural Transit Program
July 1, 2017 - June 30, 2018
PUTNAM COUNTY
Project ID Number - T006194

Item	Description	SCOPE	FTA ALI CODE	Qty	Unit Cost	Total Cost	Federal Share (80%)	State Share (10%)	Local Share (10%)
1	Bus Tablets- Hardware	116-A4	11.62.02	3	\$948.00	\$2,844.00	\$2,275.20	\$284.40	\$284.40
	n/a		n/a	0	\$0.00	\$0.00	\$0.00	\$0.00	\$0.00
	Total Other Capital					\$2,844.00	\$2,275.20	\$284.40	\$284.40

Funding Distribution	Fund Sources
Federal (80%)	\$2,275.20 216FA
State (10%)	\$284.40
Local (10%)	\$284.40 49001
Total Project Cost	\$2,844.00

PID Number - T006194
 FTA FAIN Number: GA-2016-006-01
 FTA Project: GA-2016-006-01-01
 FTA PO: GA-18-X034
 CFDA: 20.509
 DUNS#010112084
 Federal Award Date: 8/16/2017

In Process

EXHIBIT B

**CERTIFICATION OF SPONSOR COMPLIANCE WITH
STATE AUDIT REQUIREMENT**

I hereby certify that I am a principal and duly authorized representative of _____ whose address is _____, and it is also certified that:

The provisions of Section 36-81-7 of the Official Code of Georgia Annotated, relating to the "Requirement of Audits" shall be complied with throughout the contract period in full such that:

- (a) Each unit of local government having a population in excess of 1,500 persons or expenditures of \$175,000.00 or more shall provide for and cause to be made an annual audit of the financial affairs and transactions of all funds and activities of the local government for each fiscal year of the local government.
- (b) The governing authority of each local unit of government not included above shall provide for and cause to be made the audit required not less often than once every two fiscal years.
- (c) The governing authority of each local unit of government having expenditures of less than \$175,000.00 in that government's most recently ended fiscal year may elect to provide for and cause to be made, in lieu of the biennial audit, an annual report of agreed upon procedures for that fiscal year.
- (d) A copy of the report and any comments made by the state auditor shall be maintained as a public record for public inspection during the regular working hours at the principal office of the local government. Those units of local government not having a principal office shall provide a notification to the public as to the location of and times during which the public may inspect the report.
- (e) The audits of each local government shall be conducted in accordance with the generally accepted government auditing standards.

Date

Signature

EXHIBIT C

**CERTIFICATION OF SPONSOR
DRUG-FREE WORKPLACE**

I hereby certify that I am a principal and duly authorized representative of _____
whose address is _____, and it is also certified that:

- (1) The provisions of Section 50-24-1 through 50-24-6 of the Official Code of Georgia Annotated, relating to the "Drug-Free Workplace Act" have been complied with in full; and
- (2) A drug-free workplace will be provided for the Sponsor's employees during the performance of the contract; and
- (3) Each subcontractor hired by the Sponsor shall be required to ensure that the subcontractor's employees are provided a drug-free workplace. The Sponsor shall secure from that subcontractor the following written certification: "As part of the subcontracting agreement with the Sponsor, certifies to the Sponsor that a drug-free workplace will be provided for the subcontractor's employees during the performance of this contract pursuant to paragraph (7) of subsection (b) of the Official Code of Georgia Annotated Section 50-24-3"; and
- (4) It is certified that the undersigned will not engage in unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the contract.

Date

Signature

EXHIBIT D

GEORGIA SECURITY AND IMMIGRATION COMPLIANCE ACT AFFIDAVIT

Name of Contracting Entity: PUTNAM COUNTY BOARD OF COMMISSIONERS
Contract No. and Name: T006194 - FY18 - FTA 5311- OPERATING /CAPITAL
JULY 01, 2017 - JUNE 30, 2018

By executing this affidavit, the undersigned person or entity verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm, or entity which is contracting with the Georgia Department of Transportation has registered with, is authorized to participate in, and is participating in the federal work authorization program commonly known as E-Verify, or any subsequent replacement program, in accordance with the applicable provisions and deadlines established in O.C.G.A. § 13-10-91.

The undersigned person or entity further agrees that it will continue to use the federal work authorization program throughout the contract period, and it will contract for the physical performance of services in satisfaction of such contract only with subcontractors who present an affidavit to the undersigned with the information required by O.C.G.A. § 13-10-91(b).

The undersigned person or entity further agrees to maintain records of such compliance and provide a copy of each such verification to the Georgia Department of Transportation within five (5) business days after any subcontractor is retained to perform such service.

E-Verify / Company Identification Number

Signature of Authorized Officer or Agent

Date of Authorization

Printed Name of Authorized Officer or Agent

Title of Authorized Officer or Agent

Date

SUBSCRIBED AND SWORN BEFORE ME ON THIS THE DAY OF , 201

[NOTARY SEAL]

Notary Public

My Commission Expires:

**APPENDIX A
CERTIFICATION OF SPONSOR**

I hereby certify that I am the _____ and duly authorized representative of the firm _____ whose address is _____ . I hereby certify to the best of my knowledge and belief that:

1. No Federal appropriated funds have been paid or will be paid, by or on behalf of the undersigned, to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or any employee of a Member of Congress in connection with the awarding of any Federal contract, the making of any Federal grant, the making of any Federal loan, the entering into of any cooperative agreement, and the extension, continuation, renewal, amendment, or modification of any Federal contract, grant, loan or cooperative agreement.
2. If any funds other than Federal appropriated funds have been paid or will be paid to any person for influencing or attempting to influence an officer or employee of any Federal agency, a Member of Congress, an officer or employee of Congress, or an employee of a Member of Congress in connection with this Federal contract, grant, loan, or cooperative agreement, the undersigned shall complete and submit Standard Form-LLL, 'Disclosure Form to Report Lobbying', in accordance with its instructions.

This certification is a material representation of fact upon which reliance was placed when this transaction was made or entered into. Submission of this certification is a prerequisite for making or entering into this transaction imposed by Section 1352, Title 31, U.S. Code. Any person who fails to file the required certification shall be subject to a civil penalty of not less than \$10,000.00 and not more than \$100,000.00 for each such failure.

The prospective participant also agrees by submitting its bid the participant shall require that the language of this certification will be included in all lower tier subcontracts which exceed \$10,000.00 and that all such sub-recipients shall certify and disclose accordingly.

I also certify that neither I nor the above firm I here represent has:

- (a) employed or retained for a commission, percentage, brokerage contingent fee, or other consideration, any firm or person (other than a bona fide employee working solely for me or the above Sponsor) to solicit or secure this agreement.
- (b) agreed, as an express or implied condition for obtaining this contract, to employ or retain the services of any firm or person in connection with carrying out the Agreement, or
- (c) paid or agreed to pay, to any firm, organization or person (other than a bona fide employee working solely for me or the above Sponsor) any fee, contribution, donation, or consideration of any kind for, or in connection with, procuring or carrying out the agreement; except as here expressly stated (if any):

I acknowledge that this certificate is to be furnished to the Department of Transportation and the Federal Transit Administration, U.S. Department of Transportation, in connection with this Agreement involving participation of Federal-aid Transit funds, and is subject to applicable State and Federal laws, both criminal and civil.

Date

Signature

APPENDIX B

**CERTIFICATION OF DEPARTMENT OF TRANSPORTATION
STATE OF GEORGIA**

I hereby certify that I am the Commissioner of the Department of Transportation of the State of Georgia, and that the above consulting firm, or its representative has not been required, directly or indirectly as an express or implied condition in connection with obtaining or carrying out this Agreement to:

- (a) employ or retain, or agree to employ or retain, any firm or person, or
- (b) pay, or agree to pay, to any firm, person, or organization, any fee, contribution, donation, or consideration of any kind; except as here expressly stated, (if any):

I acknowledge that this certificate is to be furnished to the Federal Transit Administration, U.S. Department of Transportation, in connection with this Agreement involving participation of Federal-aid Transit Funds, and is subject to applicable State and Federal Laws, both criminal and civil.

In Process

Date

Commissioner

APPENDIX C

PRIMARY CONTRACTOR
CERTIFICATION REGARDING DISBARMENT, SUSPENSION,
AND
OTHER RESPONSIBILITY MATTERS

I hereby certify that I am the _____ and duly authorized representative of _____, whose address is _____, and I certify that I have read and understand the attached instructions and that to the best of my knowledge and belief the firm and its representatives:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by the Georgia Department of Transportation and by any Federal department or agency;
- (b) Have not within a three year period preceding this Agreement been convicted of or had a civil judgement rendered against the firm or its representatives for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain or performing a public (Federal, State, or Local) transaction or contract under a public transaction in violation of Federal or State antitrust statutes or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
- (c) Are not presently indicted or otherwise criminally or civilly charged by a governmental entity (Federal, State or Local) with commission of any of the offense enumerated in paragraph (b) of this certification;
- (d) Have not within a three year period preceding this Agreement had one or more public transaction (Federal, State or Local) terminated for cause or default; and
- (e) That the firm will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction" as attached hereto and without motivation, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.

I acknowledge that this certification is provided pursuant to Executive Order 12549 and 49 CFR Part 29 and that this firm agrees to abide by the rules and conditions set forth therein for any misrepresentation that would render this certification erroneous, including termination of this Agreement and other remedies available to the Georgia Department of Transportation and Federal Government.

I further acknowledge that this certificate is to be furnished to the Georgia Department of Transportation, in connection with this Agreement involving participation of Federal-Aid Transit Funds, and is subject to applicable State and Federal laws, both criminal and civil.

Date

Signature (SEAL)

Instructions for Appendix C Certification

Certification Regarding Debarment, Suspension, and Other Responsibility Matters - Primary Covered Transactions (Sponsors)

1. By signing and submitting this contract the Sponsor is providing the certification set out in Appendix C.
2. The inability of the Sponsor to provide the certification required may not necessarily result in denial of participation in this covered transaction. The Sponsor shall then submit an explanation of why it cannot provide the certification. The certification or explanation will be considered in connection with the Department's determination whether to enter into this transaction. However, failure of the Sponsor to furnish a certification or an explanation shall disqualify such person or firm from participation in this transaction.
3. The certification, Appendix C, is a material representation of fact upon which reliance is placed by the Department before entering into this transaction. If it is later determined that the Sponsor knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the Department may terminate this transaction for cause of default.
4. The Sponsor shall provide immediate written notice to the Department if at any time the Sponsor learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
5. The terms "covered transaction", "debarred", "suspended", "ineligible", "lower tier covered transaction", "participant", "person", "primary covered transaction", "principal", "proposal", and "voluntarily excluded", as used in these instructions and the certification, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the Department for assistance in obtaining a copy of those regulations.
6. The Sponsor agrees by submitting this proposal/contract that should the proposed covered transaction be entered into, it shall not knowingly enter into a lower tier covered transaction with a person/firm who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction unless authorized by the Department.
7. The Sponsor further agrees by submitting this proposal/contract that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - Lower Tier Covered Transaction", as provided by the Department without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
8. A Sponsor in a covered transaction may rely upon a certification of a prospective participant in lower tier covered transaction that it is not debarred, suspended, ineligible or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. The Sponsor may decide the method and frequency by which it determines the eligibility of its principals.
9. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by these instructions. The knowledge and information of Sponsor is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
10. Except for transactions authorized under paragraph 6 of these instructions, if the Sponsor in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction in addition to other remedies available to the Federal Government, the Georgia Department of Transportation may terminate this transaction for cause or default.

APPENDIX D

**LOWER TIER CONTRACTOR CERTIFICATION REGARDING
DISBARMENT, SUSPENSION, AND
OTHER RESPONSIBILITY MATTERS**

I hereby certify that I am the _____ and duly authorized representative of _____, whose address is _____, and I certify that I have read and understand the attached instructions and that to the best of my knowledge and belief the firm and its representatives:

- (a) Are not presently debarred, suspended, proposed for debarment, declared ineligible or voluntarily excluded from covered transactions by the Georgia Department of Transportation and by any Federal department or agency;
- (b) I acknowledge that this certification is provided pursuant to Executive Order 12549 and 49 CFR Part 29 and that this firm agrees to abide by the rules and conditions set forth therein for any misrepresentation that would render this certification erroneous, including termination of this Agreement and other remedies available to the Georgia Department of Transportation and Federal Government.
- (c) I further acknowledge that this certificate is to be furnished to the Georgia Department of Transportation, in connection with the Prime Contractor Agreement involving the participation of Federal-Aid Transit Funds, and is subject to applicable State and Federal laws, both criminal and civil.

Date

Signature (SEAL)

Instructions for Appendix D Certification

Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - - - Lower Tier Covered Transactions

This certification applies to subcontractors, material suppliers, vendors and other lower tier participants.

1. By signing and submitting this proposal, the prospective lower tier participant is providing the certification set out in Appendix D.
2. The certification, Appendix D, is a material representation of fact upon which reliance was placed when this transaction was entered into. If it is later determined that the prospective lower tier participant knowingly rendered an erroneous certification, in addition to other remedies available to the Federal Government, the Department or Agency with which this transaction originated may pursue available remedies, including suspension and/or debarment.
3. The prospective lower tier participant shall provide immediate written notice to the person to which the proposal is submitted if at any time the prospective lower tier participant learns that its certification was erroneous when submitted or has become erroneous by reason of changed circumstances.
4. The terms "covered transaction", "debarred", "suspended", "ineligible", "lower tier covered transaction", "participant", "person", "primary covered transaction", "principal", "proposal", and "voluntarily excluded", as used in these instructions and the certification, have the meanings set out in the Definitions and Coverage sections of the rules implementing Executive Order 12549. You may contact the person to which this proposal is submitted for assistance in obtaining a copy of those regulations.
5. The prospective lower tier participant agrees by submitting this proposal/contract that should the proposed covered transaction be entered into, it shall not knowingly enter into a lower tier covered transaction with a person/firm who is debarred, suspended, declared ineligible, or voluntarily excluded from participation in this covered transaction unless authorized by the Department or agency with which this transaction originated.
6. The prospective lower tier participant further agrees by submitting this proposal/contract that it will include the clause titled "Certification Regarding Debarment, Suspension, Ineligibility and Voluntary Exclusion - - - Lower Tier Covered Transaction", without modification, in all lower tier covered transactions and in all solicitations for lower tier covered transactions.
7. A participant in a covered transaction may rely upon a certification of a prospective participant in lower tier covered transaction that it is not debarred, suspended, ineligible, or voluntarily excluded from the covered transaction, unless it knows that the certification is erroneous. A participant may decide the method and frequency by which it determines the eligibility of its principals. Each participant may, but is not required to, check the Non-procurement List.
8. Nothing contained in the foregoing shall be construed to require establishment of a system of records in order to render in good faith the certification required by this clause. The knowledge and information of a participant is not required to exceed that which is normally possessed by a prudent person in the ordinary course of business dealings.
9. Except for transactions authorized under paragraph 5 of these instructions, if the participant in a covered transaction knowingly enters into a lower tier covered transaction with a person who is suspended, debarred, ineligible, or voluntarily excluded from participation in this transaction in addition to other remedies available to the Federal Government, the department or agency may pursue available remedies, including suspension and/or debarment.

Certificate Of Completion

Envelope Id: 9AE3F08361394A44A7179E0C34FC888B	Status: Sent
Subject: 48400-140-IGOIP1800459/PUTNAM COUNTY	
Source Envelope:	
Document Pages: 29	Signatures: 0
Certificate Pages: 5	Initials: 0
AutoNav: Enabled	Envelope Originator:
Envelopeld Stamping: Enabled	GDOT DocuSign Admin
Time Zone: (UTC-05:00) Eastern Time (US & Canada)	600 W Peachtree St, NW
	Atlanta, GA 30308
	gdot_contracts@dot.ga.gov
	IP Address: 143.100.53.12

Record Tracking

Status: Original	Holder: GDOT DocuSign Admin	Location: DocuSign
10/10/2017	gdot_contracts@dot.ga.gov	

Signer Events

Signature	Timestamp
<p>Stephen J. Hersey shersey@putnamcountyga.us Security Level: Email, Account Authentication (None)</p> <p>Electronic Record and Signature Disclosure: Accepted: 10/26/2017 ID: 72994ef9-e067-4f41-98fe-7b1a588e4ea1</p>	<p>Sent: 10/26/2017 Viewed: 10/26/2017</p>
<p>Lynn Butterworth lbutterworth@putnamcountyga.us Security Level: Email, Account Authentication (None)</p> <p>Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	
<p>Stephanie McMullens smcmullens@putnamcountyga.us Security Level: Email, Account Authentication (None)</p> <p>Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	
<p>Russell R McMurry catscommissioner@dot.ga.gov Security Level: In Session</p> <p>Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	
<p>Angela O. Whitworth catstreasurerattest@dot.ga.gov Security Level: In Session</p> <p>Electronic Record and Signature Disclosure: Not Offered via DocuSign</p>	

In Process

In Person Signer Events	Signature	Timestamp
Editor Delivery Events	Status	Timestamp
Agent Delivery Events	Status	Timestamp
Intermediary Delivery Events	Status	Timestamp

Certified Delivery Events**Status****Timestamp****38**

Dianne Pounds
dpounds@putnamcountyga.us
Security Level: Email, Account Authentication
(None)

VIEWED
Using IP Address: 167.198.94.126

Sent: 10/10/2017
Viewed: 10/26/2017

Electronic Record and Signature Disclosure:

Accepted: 10/26/2017
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Browsers (for SENDERS):	Internet Explorer 6.0? or above
Browsers (for SIGNERS):	Internet Explorer 6.0?, Mozilla FireFox 1.0, NetScape 7.2 (or above)
Email:	Access to a valid email account
Screen Resolution:	800 x 600 minimum
Enabled Security Settings:	<ul style="list-style-type: none"> •Allow per session cookies •Users accessing the internet behind a Proxy Server must enable HTTP 1.1 settings via proxy connection

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Backup material for agenda item:

8. Authorization for Chairman to sign Resolution Adopting the Pre-Disaster Hazard Mitigation Plan 2017 Update (PCSO)

GEORGIA EMERGENCY MANAGEMENT AND HOMELAND SECURITY AGENCY

NATHAN DEAL
GOVERNOR



HOMER BRYSON
DIRECTOR

alb

OCT24 17 10:59AM

October 17, 2017

Honorable Stephen Hersey
Chairman
Putnam County Board of Commissioners
117 Putnam Drive, Suite A
Eatonton, Georgia 31024

Dear Commissioner Hersey:

The Federal Emergency Management Agency (FEMA) has completed its review of the Putnam County Multi-Jurisdictional Hazard Mitigation Plan for compliance with the programmatic requirements of the Federal Hazard Mitigation Planning Standards contained in 44 CFR Section 201.6(b)-(d). FEMA has determined that the Putnam County Hazard Mitigation Plan Update is compliant with Federal standards, subject to formal community adoption.

The county and each municipality must pass individual resolutions adopting the Plan. Please forward the adopted and signed resolutions to Shelby Meyers, Hazard Mitigation Planning Specialist, so that we may submit them to FEMA for inclusion in your plan for formal federal review and approval. Upon submittal of a copy of the participating jurisdictions' adoption documentation as well as documentation of the final public meeting, FEMA will issue formal approval of the Putnam County Multi-jurisdictional Mitigation Plan. Should you have any questions or need additional information, please contact Shelby Meyers, Hazard Mitigation Planning Specialist, at (912) 478-7939.

Sincerely,

Terry K. Lunn
Hazard Mitigation Manager

tkl/slm

cc: Howard Sills, Director
Putnam County Emergency Management Agency
Putnam County Municipalities
Collin Hopf, Area Coordinator
Georgia Emergency Management Agency/Homeland Security

**RESOLUTION
BY PUTNAM COUNTY
ADOPTING THE PRE-DISASTER HAZARD MITIGATION PLAN
2017 UPDATE
FOR
PUTNAM COUNTY AND THE CITY OF EATONTON**

WHEREAS, Putnam County is required to complete a Pre-Disaster Hazard Mitigation Plan by the Disaster Mitigation Act of 2000; and

WHEREAS, under the provisions of the Disaster Mitigation Act of 2000, local governments that complete Pre-Disaster Hazard Mitigation Plans will remain eligible for federal mitigation funding; and

WHEREAS, Putnam County has completed the required five-year update to the Pre-Disaster Hazard Mitigation Plan that fulfills the federal requirements of the Disaster Mitigation Act of 2000; and

WHEREAS, the updated Putnam County Pre-Disaster Hazard Mitigation Plan has been presented for public comment and reviewed by federal, state, and local agencies, and was revised to reflect their concerns; and

NOW, THEREFORE, BE IT RESOLVED that Putnam County formally adopts the Putnam County Pre-Disaster Hazard Mitigation Plan 2017 Update.

RESOLVED THIS ___ DAY OF _____, 2017

BY: _____
Stephen J. Hersey, Chairman

ATTEST: _____
Lynn Butterworth, County Clerk

Putnam County, Georgia

Pre-Disaster Mitigation Plan

Adopted: February 2006

Amended: June 2012

Amended: June 2017

Prepared For:
Putnam County Emergency Management Agency
111 Ridley Drive
Eatonton, Georgia 31024
Phone: (706) 485-3226

Prepared By:
Middle Georgia Regional Commission
175 Emery Highway, Suite C
Macon, Georgia 31217
Phone: (478) 751-6160
Fax: (478) 751-6517

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Hazard Descriptions
 GEMA Worksheet #3a
 Hazard Area Maps
 GMIS Critical Facility Inventory Reports
 Hazard Risk Analyses Supplement

[Appendix B – Growth and Development Trends / Community Information](#)

Putnam County Comprehensive Plan- Introduction and Land Use Element
 Putnam County Demographic Profile
 Putnam County Area Labor Profile

[Appendix C – Relevant Community Planning Documents](#)

Middle Georgia Regionally Important Resources Plan – Introduction
 Putnam County Solid Waste Management Plan – Introduction Middle
 Georgia Regional Plan – Executive Summary
 Putnam County/City of Eatonton Summary of Service Delivery Arrangements for
 Emergency Management (Service Delivery Strategy – Form 2)
 Debris Management Plan

[Appendix D – Worksheets Used in Planning Process](#)

GEMA Worksheet #1: Identify the Hazards
 GEMA Worksheet #1: Hazards Addendum
 GEMA Worksheet #2: Profile Hazard Events
 GEMA Worksheet #4: Evaluate Alternative Mitigation Actions
 Hazard Frequency Table

[Appendix E – Planning Documentation \(presented in chronological order\)](#)

Kick-Off Meeting Sign-In Sheet & Agenda
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 Meeting 4 Sign-In Sheet & Agenda
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 First Public Hearing Notice, Sign-In Sheet, Agenda
 Second Public Hearing Notice, Sign-In Sheet, Agenda
 Neighboring County Plan Review Documentation

Stakeholders

The Putnam County Board of Commissioners, in conjunction with the Putnam County Emergency Management Agency, amended and updated the Putnam County Pre-Disaster Mitigation Plan, through the planning processes described herein. This Pre-Disaster Mitigation planning process was completed in cooperation with Putnam County's sole municipality: Eatonton. Additionally, representatives from various community agencies, authorities, and local businesses participated in the update of this important document. The Middle Georgia Regional Commission facilitated the planning process and documented all significant accomplishments and milestones.

CHAPTER 1: INTRODUCTION

Chapter 1	Updates to the Section
I. Purpose and necessity of the plan, authority.	Updated information related to the 2017 plan update.
II. Participants in the update process, local methodology, and brief description of plan update process.	Updated participant list, methodology, and described 2017 update process.
III. Description of how each section of the original plan was evaluated and analyzed, as well as whether it was revised in the 2017 plan update.	Described updates to the following: critical facilities, hazard identification, profiles of hazard events, the vulnerability assessment, and the estimating losses section.
IV. Organization of the plan.	Updated information relevant to the 2017 plan update.
V. Hazards Identified	Updated natural hazards of concern. Data pulled from 58 years instead of 57.
VI. Government Participation	Updated elderly population data and included more pertinent information.
VII. Updating the plan	No major changes.
VIII. Population and Economic Trends	Updated population and economic data.

I. Plan Purpose

Pursuant to requirements stated in the Disaster Mitigation Act of 2000, counties across the nation were required to create a Pre-Disaster Mitigation Plan to address the community's vulnerability to hazards prior to a disaster event. In 2003, Putnam County recognized the need to initiate work on such a plan in an expeditious manner to ensure that the county would have a plan in place by the deadline imposed in the legislation. In 2006, the county's efforts culminated with the adoption of the Putnam County Pre-Disaster Mitigation Plan. The intent of the Pre-Disaster Mitigation Plan is to help Putnam County reduce risks from natural and technological hazards, and to serve as a roadmap for decision makers as they commit time and resources to reduce the effects of potential hazards.

In 2010, Putnam County initiated efforts to amend and update the Putnam County Pre-Disaster Mitigation Plan. The local Emergency Management Agency once again requested the assistance of the Middle Georgia Regional Commission, a regional planning agency which facilitated the development of the initial Putnam County Pre-Disaster Mitigation Plan in 2003. The plan update—finalized in June 2012—includes a detailed and comprehensive analysis and evaluation of critical community facilities, hazard events, losses, and current plans.

In 2016, Putnam County once again initiated efforts to amend and update the Putnam County Pre-Disaster Mitigation Plan. The Middle Georgia Regional Commission again facilitated the plan update. Community leaders and engaged citizens gathered to update critical facilities, hazard risks, losses, and current plans. An updated, prioritized list of goals, objectives, and action steps, designed to further ensure the safety of Putnam County residents, was developed. The Putnam County Pre-Disaster Mitigation Plan is intended to be a working document where hazard mitigation measures are continually monitored and implemented throughout the community.

II. Participants

The process of updating the Putnam County Pre-Disaster Mitigation Plan began with the selection of community representatives to serve on the Planning Committee. The various departments, organizations, and agencies that participated in the 2012 update process were invited to participate in the 2017 Plan update process via email and follow-up phone calls. Many of these individuals elected to serve on the plan update committee. A unique opportunity arose through the process as the Putnam Center Director of the Central Georgia Technical College system, a member of the committee, offered to reach out to students interested in hazard mitigation about joining the plan committee. As a result, the Regional Commission sent a representative to a Hazard Mitigation course to teach students about the Pre-Disaster Mitigation Plan and to update them on the status of Putnam County's update. All jurisdictions that participated in the development of the original Pre-Disaster Mitigation Plan and subsequent updates (i.e. Putnam County and the City of Eatonton) also participated fully in the update of the plan. Putnam EMA staff and Middle Georgia Regional Commission staff worked together to compile a list of committee members. Individuals identified were then invited to meetings via email.

The full Planning Committee acted as a steering agent for the Pre-Disaster Mitigation Plan update process, ultimately responsible for all new goals, objectives, and action items contained herein. The planning process consisted of facilitation of all meetings by the Middle Georgia Regional Commission. Revisions were made through this planning process to ensure that all components of the plan were as accurate and up-to-date as possible. Specific tasks undertaken in the update of the Putnam County Pre-Disaster Mitigation Plan include, but are not limited to the following:

- **Critical Facilities** – Reviewed critical facilities inventory contained in the 2012 Pre-Disaster Mitigation Plan Update to ensure data is current and accurate; modified/updated as applicable; collected and compiled a detailed inventory of all new, or previously unrecorded critical facilities, and the characteristics of those facilities, located within the county. Data was entered into the Georgia Mitigation Information System (GMIS).
- **Identify/Profile Hazards** – Reviewed hazards data contained in the 2012 Pre-Disaster Mitigation Plan to determine if information is still relevant and applicable; researched various historical records, reviewed existing plans and reports, gathered pertinent data from a variety of internet websites and conducted interviews with experts in the local community to identify any additional natural and technological hazards that might affect the county and city.
- **Vulnerability and Loss Analysis** – Conducted a detailed risk assessment for the county. Reviewed and analyzed hazard event profiles and critical facilities to determine potential losses due to hazard events. Potential losses include life, building, infrastructure, and community assets. Reviewed vulnerability and loss data contained in the 2012 Pre-Disaster Mitigation Plan; updated data as applicable.
- **Developed Mitigation Goals and Strategies** – Identified, analyzed, and prioritized various mitigation goals, objectives, and action steps. Utilized the results of the countywide risk assessment to develop specific hazard mitigation goals, as well as a comprehensive strategy to address the mitigation priorities within the community. Reviewed goals and strategies contained in the 2012 Pre-Disaster Mitigation Plan; updated as applicable.

As mentioned previously, numerous participants were involved in the update of this document. Representatives of the public and private sectors were afforded seats at the planning table. The list of Planning Committee participants and their titles are as follows:

Name	Title	Agency
Alford, Darren	Battalion Chief	Putnam County Fire Rescue
Anderson, Jonathan	Firefighter	City of Eatonton
Austin, Derick	Assistant Superintendent, Human Resources and Operations	Putnam County Board of Education
Bales, Charlie	Gas Superintendent	City of Eatonton
Bishop, Annie L.	Community Living Services, Program Administrator	Putnam Jasper Support Services
Blackwell, Roddie Anne	President	Eatonton-Putnam Chamber of Commerce
Blenk, Russell	Chief Deputy, EMA Deputy Director	Putnam County
Butterworth, Lynn	County Clerk	Putnam County
Camp, Chuck	Firefighter	Putnam County Fire Rescue
Camp, Terri P.	4-H Center Director III	University of Georgia
Clack, Tony	Public Works Director	Putnam County
Collins, Clifford K.	Battalion Chief	Putnam County Fire Rescue
Cook, Tommy	Membership Manager	Eatonton-Putnam Chamber of Commerce
Covington, Ariel	Fire and Life Safety Educator	Putnam County Fire Rescue
Dietrich, Carrie	Director	Central Georgia Technical College
Elder Waller, Donna	Public Health RN 3	Putnam County Health Department
Ellison, Reeshemah	Accounts Payable	City of Eatonton
Evans, Dorothy	Permit Technician	Putnam County
Foster, Alan	Commissioner	Putnam County
Frazier, Anthony	Public Works Shop Foreman	Putnam County
Fricks, Jennifer	Accounting Technician	Putnam County
Fuller, Andrea	Public Health RN 3	Putnam County Health Department
Gladden, Jonathon	Clerical	Putnam County
Green, Charlotte	Nurse	Putnam Jasper Support Services
Harris, Mitchell	Custodian	Putnam County
Hawkins, Joe	Public Works Superintendent	City of Eatonton
Hicks-Grable, Kimberly	Instructor	Central Georgia Technical College
Hill, Shane E.	Fire Chief	Putnam County
Hobbs, Jerry	Director of Collections	Putnam County
Ingram, Virginia		Putnam County
Jackson, Lisa	Director of Planning & Development	Putnam County
Lattimore, Marcia	Program Assistant	Central Georgia Technical College
Lawrence, Kent	Chief of Police	City of Eatonton
Lindsey, Lynward	GPC Manager	Georgia Power
Lundy, Marcel	IT Director	Putnam General Hospital
Mason, Nathan	Ambulance Director	Putnam County
McDonel, Felicia	Coordinator	Putnam General Hospital
McElhenney, Gary	Coroner	Putnam County

McMullen, Stephanie	Administrative Assistant	Putnam County
Miller, Cynthia	HR Director	Putnam County
Mitchell, Irene	Nurse	Putnam County Health Department
Moran, Ashley	Animal Control Officer	City of Eatonton
Parham, Kaitlyn	Tourism Coordinator	Eatonton-Putnam Chamber of Commerce
Patterson, T.M.	Paramedic/EMT	Putnam County
Pennamon, Karen	Administrative Assistant	Putnam County
Perry, Roy F.	Paramedic/EMT	Putnam County
Petitt, Peggy	Nurse Manager	Putnam County Health Department
Pickens, Lenwood	Police Investigator	City of Eatonton
Pitocchelli, Theresa	Computer Operator	Putnam County
Pounds, Dianne	Transit Director	Putnam County
Powers, Derick	Firefighter	City of Eatonton
Price, Brandi	Clerical	Putnam County
Rago, Karen	Data Entry Technician	Putnam County
Rainey, Cooper	Volunteer	Eatonton Fire Department
Reaves, Elizabeth	Public Health RN 3	Putnam County Health Department
Reid, Kevin	Building and Grounds	City of Eatonton
Reid, Lesia V.	Appraiser	Putnam County
Ricks, Ray	Transportation Director	Putnam School District
Rocker, Walter	Mayor	City of Eatonton
Rusk, Melissa	HR Director	Putnam County
Sanders, Gary	City Administrator	City of Eatonton
Sills, Howard	Sheriff & EMA Director	Putnam County
Simpson, Andrew	Main Street Director	City of Eatonton
Slade, Teresa	911 Director/ Deputy EMA	Putnam County
Stone, Gabe	EHS	Putnam County Health Department
Swymer, Adam	Family Connection Coordinator	Putnam County
Tillman, Christine	Animal Control Director	City of Eatonton
Todd, Donna	Data Entry Technician	Putnam County
Turner, Marcus	Deputy Coroner	Putnam County
Van Haute, Paul	County Manager	Putnam County
Vargo, Barb	Accounting Technician	Putnam County
Webster, Billy	Volunteer	Putnam County
Welch, Pat	Patrol Officer	City of Eatonton
Whittaker, Torrey	Public Buildings	Putnam County
Williams, Simone D.	Admissions Assistant	Central Georgia Technical College
Wooten, Tom	Road/Shop Superintendent	Putnam County

The students who attended the Hazard Mitigation course focused on Putnam County's Pre-Disaster Mitigation plan are listed below:

Name
Collier, Denise
Curry, Angela
Harris, Calvisha
Hunt, Aaron
Jackson, Marcus
Jaeger, Judy - instructor
Lester, Jeremy
McLemore, Belinda
Smith, Trainisha

Meetings were held monthly from June 2016 to February 2017 to review the previous plan and to solicit input from Committee members regarding necessary changes to plan components. Additional meetings were held in early March 2017 to review and finalize drafts of the plan update. Through the planning process, with the individuals identified above participating, complete records were maintained for all meetings. This documentation includes agendas, sign-in sheets and labor documentation forms verifying the community's in-kind local match. All records and data are maintained and retained by the Middle Georgia Regional Commission for a period no less than three years from the date of GEMA/FEMA approval, should either entity seek to audit for verification purposes.

The plan update was prepared by assembling the ideas, thoughts, and research of the Putnam County Pre-Disaster Mitigation Planning Committee. The Middle Georgia Regional Commission staff completed the assembly of the plan document. The ideas, thoughts, and actions of the Committee were put together into one comprehensive document. A draft was presented to the full Committee for its review and comment.

Two public hearings were conducted during the planning process to solicit public input and participation into the local plan update (see Public Hearing Notices and Agendas in **Appendix E**). The first was held early in the planning process on August 11, 2016, and the second was held near the conclusion on May 22, 2017, affording the public an opportunity to comment on the plan update during the drafting stage. The public hearings were held during the regularly scheduled meetings of the Plan Update Committee and advertised in the *Eatonton Messenger*.

Additionally, the Pre-Disaster Mitigation Plan was distributed to the directors of the Emergency Management Agencies in neighboring counties, asking for input, comments, and suggestions.

III. Evaluation of the Plan

The specific steps and processes taken to update this plan are explained and summarized in each chapter and section of this document. An update to the Hazard Risk and Vulnerability (HRV) assessment was accomplished by compiling and reviewing historical data on the location of specific hazards; the value of existing property in hazard locations; and analyzing the risk to life, property, and the environment that could potentially result from future hazard events. Additionally, an updated Capabilities Assessment was conducted by the Putnam County EMA Director, collaboratively with the Planning Committee, to determine areas of vulnerability, ability, and action. More specifically, the Putnam County Pre-Disaster Mitigation Planning Committee accomplished the HRV assessment/update by conducting the following steps:

Inventory of Critical Facilities	Critical facilities are important to the community in that they provide essential products or services to the public that are necessary to preserve the welfare and quality of life in the county. Additionally, these facilities fulfill important public safety, emergency response, and/or disaster recovery functions. Putnam County critical facilities were reviewed, updated, mapped, and illustrated as found in Appendix A .
Hazard Identification	Maps and historical data sources were reviewed and analyzed to identify the geographic extent, intensity, and probability of occurrence for various hazard events. The Planning Committee verified that the five natural hazards and one technological hazard that typically affect Putnam County and the City of Eatonton, as originally identified in the initial Pre-Disaster Mitigation Plan, were still valid. Considering recent events, the committee added two natural hazards to the list: Earthquakes and Dam Failure for a total of seven natural hazards.
Profiling Hazard Events	The causes and characteristics of each hazard were analyzed to determine how each has affected Putnam County in the past, with emphasis on hazard events occurring since adoption of the original plan. Analysis included examining what part of Putnam County’s population and infrastructure (to include an examination of each individual jurisdiction) has been most vulnerable to each specific hazard. A profile of each natural hazard is provided in Chapter 2, with technological hazards portrayed in Chapter 3.
Vulnerability Assessment	This step was accomplished by comparing each previously identified hazard with the inventory of affected critical facilities and population exposed to each hazard. Updated and revised data and information were utilized in conducting the assessment. Additionally, as part of the update process, the presence of repetitive loss structures was addressed in assessing vulnerability, as well as an analysis of development trends and an attempt to assess each participating jurisdiction’s risks where they may vary from the risks facing the entire county.
Estimating Losses	Utilizing the best available data (as updated), this step involved estimating damage and financial losses likely to be sustained within a given geographic area using a mathematical model. The Planning Committee again elected to utilize the same method of estimating losses used during the original planning process. Structure loss combined with content loss and function loss is examined at intervals of 25 percent, 50 percent, 75 percent, and 100 percent. Describing vulnerability in terms of monetary losses provides the county with a common framework in which to measure the effects of hazards on critical facilities.

Additionally, during the plan update process, the Planning Committee considered the recommendations provided by FEMA as a result of its review of the original Putnam County Pre-Disaster Mitigation Plan. Specifically, the Planning Committee discussed possible future buildings, infrastructure, and critical facilities when assessing vulnerability related to each of the identified hazard events. At the time of this plan update, no known facilities of critical significance are anticipated soon; however, it was agreed that all relevant mitigation practices and principles presented in this plan should be applied to any significant development, infrastructure expansion, or critical facility that occurs over the five-year planning period. Any significant additions of community facilities/infrastructure will necessitate an immediate update of the plan.

FEMA recommendations from the original plan also resulted in greater emphasis being placed on evaluating existing and future development and land use trends for Putnam County and the City of Eatonton, as well as extensive analysis related to identifying differences between the county and the city in terms of risks and vulnerabilities for each of the identified hazard events. Further discussion is found in Chapter 2.

IV. Organization of the Plan

As identified in the Table of Contents, the Putnam County Pre-Disaster Mitigation Plan is organized as follows:

Chapter 1	Introduces the original planning process, as well as actions taken during the update of the plan. It includes the purpose and intent of the plan, the methodology used in developing and updating the plan, a list of those involved in the planning process, and a descriptive narrative of how each section of the plan was reviewed, analyzed, and revised.
Chapter 2	Profiles the various natural hazards that can occur within the community.
Chapter 3	Addresses technological hazards.
Chapter 4	Identifies specific community-based mitigation goals, objectives, and strategies for each of the identified natural hazards.
Chapter 5	Identifies goals, objectives, and strategies to mitigate any technological hazards that may occur within the community.
Chapter 6	Provides for the assignment of various mitigation activities to certain individuals/organizations to ensure that the plan is implemented and carried out. Included is an evaluation and monitoring component, as well as a process for future updates.
Chapter 7	Summary of the plan and identification of all references.

Additionally, the plan contains a series of appendices that incorporate various planning tools and supporting documentation, including the Hazard Risk Analyses Supplement (HAZUS report) located in **Appendix A**. It should be noted that **Appendix E** fully documents the plan update process. This appendix is presented in chronological order showing the sequence of events and actions that occurred. The Planning Committee felt this would be helpful to community officials during future updates.

V. Hazards Identified

Current research confirms that within Putnam County, the most prevalent, significant natural hazard event continues to be *thunderstorm winds* that routinely strike, especially during the spring and summer seasons. Additionally, *hazardous materials spills* are the most prevalent technological hazard and continue to occur at a high rate within Putnam County. This was determined by reviewing 58 years of data—the time for which data is available. Putnam County has also identified and verified six additional natural hazard events which could significantly impact the community in a negative manner. The seven events are **Thunderstorm Winds, Flooding, Winter Storms, Wildland Fires, Tornadoes, Earthquakes, and Dam Failure.**

Hurricanes, extreme heat, and landslides, were considered and discussed but, Hazard, Risk and Vulnerability Analysis determined the frequency of occurrence and degree of impact (e.g., injuries, deaths, property damage) in Putnam County and the City of Eatonton to be minimal or non-existent, thus they are not included in the plan. Additionally, pandemic conditions were discussed during the update process. The committee elected not to include pandemic conditions in the plan.

VI. Government Participation

As set forth by the Putnam County Service Delivery Strategy, resulting from Georgia House Bill 489, the Emergency Management Agency is the overall implementing agency for projects such as Pre-Disaster Mitigation. The City of Eatonton has authorized Putnam EMA to act on its behalf, in a prudent manner. Documentation to this intent from the current approved Service Delivery Strategy can be found in **Appendix C**. The city and the unincorporated county were included in the planning process. Participation from each jurisdiction was solicited and received; and, as a result, a truly multi-jurisdictional plan was created for Putnam County with ideas and viewpoints of all entities included.

Disaster events also have the potential to severely impact certain vulnerable and/or special-needs populations within the county. Per the 2011-2015 American Community Survey, senior citizens (65 years of age and over) living in the county constitute only 20.6 percent of the population. However, the old-age dependency ratio, which measures the number of elderly people as a share of those of working age is a staggering **34.2** percent, well above the 2010 world ratio of 11.7 percent (which is expected to rise to 25.4 percent by 2050)¹. Pre-disaster mitigation planning for vulnerable and special-needs populations should also be taken into consideration as there are four (4) licensed day care facilities in Putnam County, one (1) general hospital, two (2) assisted living facility and a burgeoning Hispanic population (currently estimated to account for 6.6 percent of the total population²), many of whom do not speak, read, or write English.

¹<http://www.economist.com/node/13611235>

² U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

VII. Updating the Plan

The Putnam County Board of Commissioners and the Eatonton City Council formally adopted the updated plan and authorized its submission to GEMA and FEMA for their respective review and approval. Should any changes or alterations of the plan be required by either of these entities, Putnam EMA is instructed to make such changes to ensure that Putnam County has a compliant plan in place. The Putnam EMA Director is also charged with bringing together a committee to periodically review and update the plan. At a minimum, at least one representative from Putnam County and the City of Eatonton will be included on the committee. The committee will review the plan annually and update it accordingly. A full comprehensive plan update (facilitated with an expanded Planning Committee) will be accomplished in five-year increments.

VIII. Population and Economic Trends

Per the U.S. Census Bureau's 2015 ACS 5-Year Estimates, Putnam County has a total population of 21,247. Of these, 6,486 live in the City of Eatonton. These numbers reflect an increase in population in the unincorporated areas of the county and a slight decrease in the city from the previous decennial census. This trend is expected to continue throughout the planning period. Observation of total population trends reveal that Putnam County has and is expected to continue to experience significant growth in terms of increasing population.

Substantial population growth will continue to place increased demands on current infrastructure, require greater levels of community services, and stimulate further changes in land use. As the population grows, new roads are built, homes constructed, businesses opened, and school systems expanded. These activities initiate land-use changes. The fact that much of this increased development is occurring in the areas immediately surrounding Lake Sinclair and Lake Oconee has a determining and transformative effect on the character and nature of the historically rural landscape of the county. Concurrent with this development, a shift in demand related to the provision of critical services such as water, sewer, fire, and police can be anticipated.

The economic base of Putnam County can best be illustrated by evaluating the various sectors or industries that constitute the community's economy in terms of their relative importance and impact. According to the Georgia Department of Labor's 2015 Industry Mix, the service industry is the largest employment sector within Putnam County, as half (50.2%) of the county's jobs are service-oriented in nature. Out of the service sector, retail trade and food services are the largest employers at 13.2 percent and 10.7 percent, respectively. The second largest sector is government employment, comprising 26.9 percent of jobs, with the clear majority of the sector (17.8%) concentrated in local government employment. Manufacturing industries make up the third largest employment sector at 9.1 percent. Trends suggest that these same three economic sectors will continue to provide the bulk of employment in Putnam County in the near future.

CHAPTER 2: NATURAL HAZARD, RISK, AND VULNERABILITY SUMMARY

Chapter 2	Updates to the Section
I. Background	No major changes. A reference to GEMA worksheet #3b was omitted as this is no longer a pertinent worksheet.
II. Flooding	No major changes. Hazard history and frequency data related to flooding were updated. Probability of future occurrences was adjusted accordingly. Maps were created utilizing the Georgia Mitigation Information System (GMIS); the new GMIS maps were used to determine which critical facilities lie in flood prone areas; repetitive loss properties were researched, analyzed, and updated as part of the risk assessment; vulnerability in terms of dollar values and/or percent of damage was updated; a new analysis of land use, development trends, and existing ordinances and regulations was completed; flooding susceptibility for the full county was re-examined via the GMIS online tool; a new USGS flood map was generated. Added historic crests and flood gauge map graphic.
III. Winter Storms	Hazard history and frequency data related to winter storms were updated; probability of future occurrences was adjusted accordingly; changes in land use and development trends were examined for applicability; GMIS online tool was utilized for mapping and analysis. Added winter storms graphic.
IV. Tornadoes	Hazard history and frequency data related to tornados were updated; converted tornado history from Fujita Scale to Enhanced Fujita Scale; probability of future occurrences was adjusted accordingly; changes in land use and development trends were examined for applicability; GMIS online tool was utilized for mapping and analysis.
V. Thunderstorm Winds	Hazard history and frequency data related to thunderstorm winds were updated; probability of future occurrences was adjusted accordingly; changes in land use and development trends were examined for applicability; GMIS online tool was utilized

	for mapping and analysis. Added Average Hazard Wind Score graphic.
VI. Wildland Fires	Hazard history and frequency data related to wildland were updated. Added drought severity index.
VII. Earthquakes	New section.
VIII. Dam Failure	New section.

I. Background

During the plan update process, the Putnam County Pre-Disaster Mitigation Planning Committee utilized the natural hazards identified in the original plan as a baseline for discussion and analysis. The Planning Committee then reviewed, discussed, and considered other natural hazards that could potentially affect Putnam County. They ultimately concurred with the original plan's findings that flooding, winter storms, tornadoes, thunderstorm winds, and wildland fires are all natural hazards pose a direct, measurable threat to the community. However, due to recent events and concerns, the committee felt it vital to add earthquakes and dam failure to the list of potential natural hazards, bringing the final list of natural hazards to seven (see GEMA worksheet #1 – **Appendix D**). They reaffirmed that of these, the entire county is exposed to four of the seven natural hazards: **tornados, thunderstorm winds, earthquakes, and winter storms**. Risk of flooding, dam failure, and wildland fires, on the other hand, are isolated to select areas of the county that are within the floodplain and/or hazard area. Each of these potential hazards is addressed individually, with data to support the committee's findings and recommendations. Additionally, a summary of changes resulting from the plan update has been provided.

After identifying the natural hazards which pose a significant threat to the community, the planning committee proceeded to “profile” each hazard event in order to help answer the question: how bad can it get? This process consisted of examining hazard frequency data, assessing existing maps (i.e. road maps, topographic maps, aerial photography, etc.) and technology (e.g. Geographic Information System (GIS) and digital mapping) that may already exist at the local level, and inventorying assets and facilities exposed to each hazard event. GEMA Worksheet #2 (see **Appendix D**) and GEMA Worksheet #3a (see **Appendix A**) were helpful planning tools utilized by the planning committee during this process. Also, new and/or projected developments, to include buildings and infrastructure, was researched, discussed, and considered.

II. Flooding (See **Appendix A** for hazard area map and related data.)

Many different variables must be considered when determining if an area is susceptible to flooding. Topography, ground saturation, soil permeability, rainfall intensity and duration, drainage, and vegetative cover, to only name a few, contribute to the determination of whether an area will flood. Large amounts of rainfall over a short amount of time can result in flash floods, which routinely do minimal damage. Should the soil become saturated or super-saturated, even a small amount of rainfall can cause flooding issues. As more land is developed, the presence of impermeable surfaces, roads, driveways, and parking lots cause an increase in the likelihood of flooding within an area.

Flooding has caused significant damage on several occasions throughout the county. In 1994, Tropical Storm Alberto hit Middle Georgia, resulting in 14 inches of rain within a few hours. This caused dramatic flooding throughout Putnam County which lingered throughout the county for days. As a result, GEMA/FEMA paid a total of \$5,596,064 in damages. Despite the damage documented as a result of this 1994 flood, flooding within Putnam County is an infrequent event. Although a culvert or dry stream bed may take on excessive water during heavy rainstorms, flooding to the extent that it causes significant damage has historically been rare.

The Putnam County Pre-Disaster Mitigation Planning Committee re-examined historical data from the original plan, as well as more recent data made available through the National Climatic Data Center (NCDC), for effects of flooding on the community. The areas most susceptible to flooding are illustrated in the Flood Hazard Area Map found in **Appendix A**, with all other areas primarily spared from flooding. Available data is not suitable or sufficient to make a reliable determination regarding frequency of occurrence, or future probability of flooding, for each jurisdiction within Putnam County.

Five flash floods and one flood resulting in a total of \$50,000 in reported property damages have occurred since local adoption of the original Pre-Disaster Mitigation Plan in 2006 (see Hazard Frequency Table in **Appendix D**). According to relevant data collected for the past 58 years, a flood event has a 22.41 percent chance of occurring each year. Per the National Weather Service, the historical high crest for the Little River near Eatonton is 30.80 feet on February 9, 1948—this should be considered the greatest magnitude for mitigation planning purposes. Two floods have occurred since the last plan update in 2012.

As accomplished during development of the original plan, during the update process, assets (particularly critical facilities) were examined using risk-based analysis to determine the most vulnerable locations within the county (see GEMA worksheet #3a and GMIS Critical Facility Inventory Reports in **Appendix A**). Because not all facilities are located within a flood hazard area, some facilities can be assumed to be safe should flooding within the community occur. Economic losses may be experienced in the form of displacement and/or temporary functional downtime due to cleanup of debris or damaged carpet, drywall, etc. resulting from floodwaters inside a commercial space.

Putnam County and the City of Eatonton both participate in the National Flood Insurance Program (NFIP)—a status that has not changed since adoption of the original PDM Plan. As part of the plan update process, the Planning Committee conducted research to determine if any repetitive loss structures exist within the county or city. A repetitive loss structure is defined as one of the following:

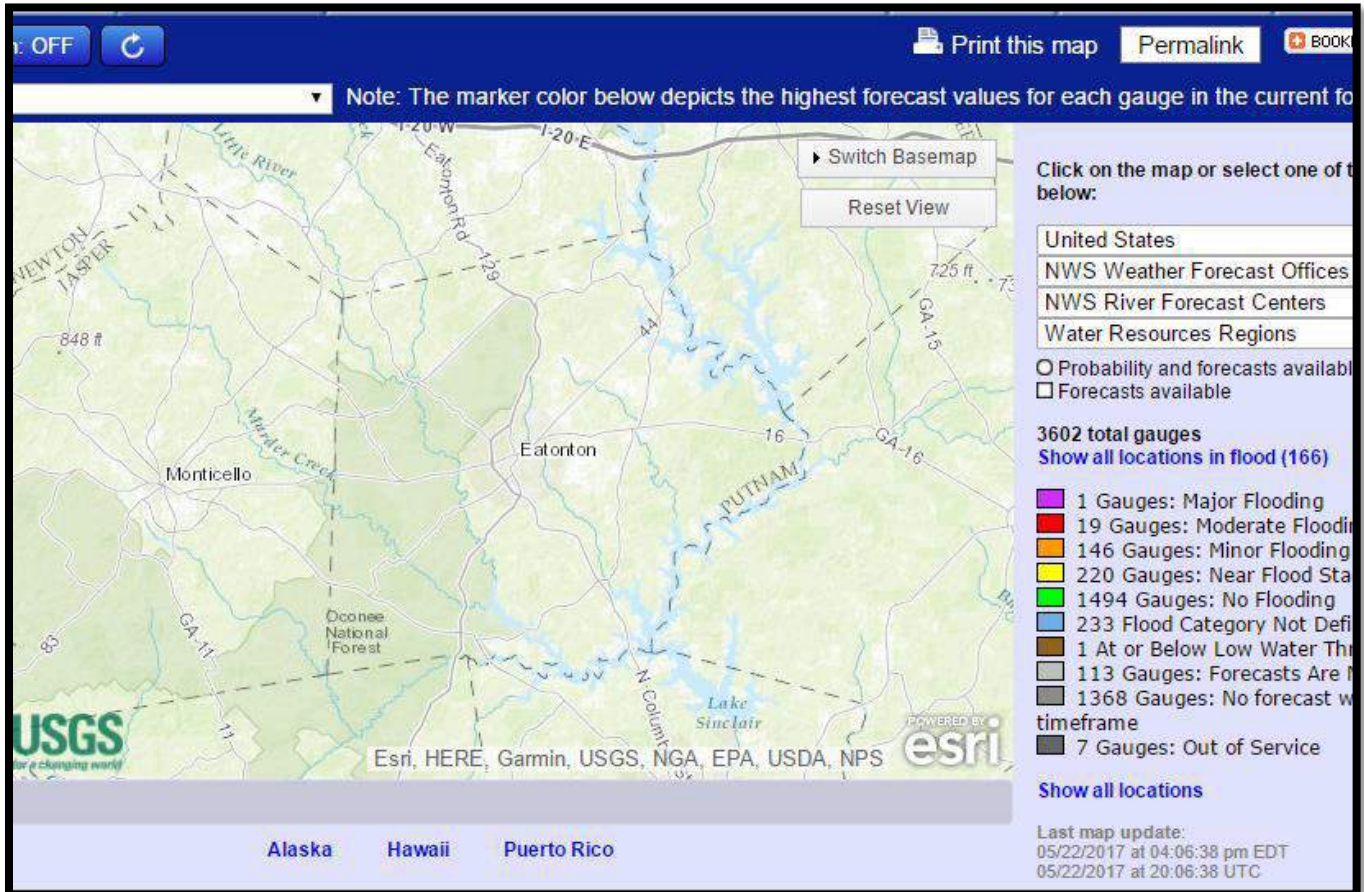
- 1) Structures with four or more claims paid under the National Flood Insurance Program of at least \$1,000 per occurrence
- 2) Structures with two or more claims in ten years' cumulative damages exceeding the value of the property; or
- 3) Structures with three or more claims with the cumulative damages exceeding the value of their property.

Flood Categories (in feet)	
Major Flood Stage:	30
Moderate Flood Stage:	24
Flood Stage:	20
Action Stage:	14
Low Stage (in feet):	0
Historic Crests	
(1)	30.80 ft on 02/09/1948
(2)	28.78 ft on 03/18/1990
(3)	26.31 ft on 03/09/1998
(4)	25.71 ft on 02/24/1979
(5)	24.98 ft on 02/12/1995
Show More Historic Crests	
(P): Preliminary values subject to further review.	
Recent Crests	
(1)	23.73 ft on 01/01/2016
(2)	20.09 ft on 12/24/2015
(3)	20.75 ft on 12/22/2015
(4)	22.59 ft on 11/11/2009
(5)	24.70 ft on 09/22/2009
Show More Recent Crests	
(P): Preliminary values subject to further review.	
Low Water Records	
(1)	2.51 ft on 08/27/2007

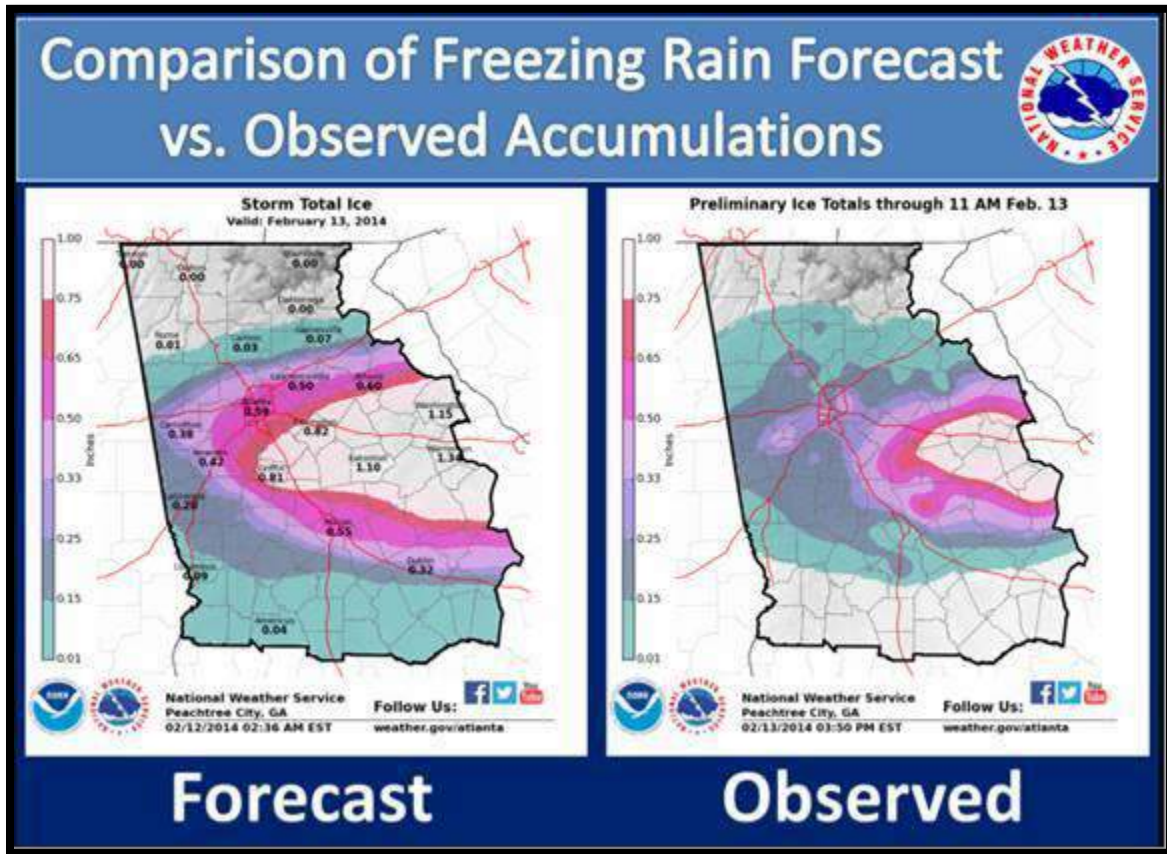
Severe Repetitive Loss Structure is either a structure with four or more claims of at least \$5,000 per occurrence, or a structure with two or more claims within ten years with the cumulative damages of the claims exceeding the market value of the structure. The committee did not identify any repetitive loss structures at this time.

During the update of the Putnam County Pre-Disaster Mitigation Plan, the Planning Committee felt it would be beneficial to examine land use and development trends as they relate to mitigation planning for flood hazard events. To facilitate this examination, existing land-use maps from the 2007-2030 Joint Comprehensive Plan were reviewed for potential conflict with identified hazard areas. An emphasis was placed on examining residential and commercial uses because of the high degree of vulnerability to life and property associated with these uses. Many areas of Putnam County, particularly the areas around Lakes Sinclair and Oconee, have experienced rapid suburban development over the past 15 years and are expected to continue to grow. However, these development trends do not appear to conflict with areas of high potential flooding. Only one facility was identified as part of the planning process—the Rock Eagle Science and Technology Park— however, it is not located in a flood hazard area and is, therefore, not expected to be adversely affected by floodevents.

Land use and development trends provide a basis for making decisions on the type of mitigation approaches to consider and the locations where these approaches can be implemented. Specific goals, objectives, and strategies related to flooding vulnerability resulting from land use and development in Putnam County, and the City of Eatonton, are found in Chapter 4.



III. Winter Storms (See Appendix A for hazard area map and related data.)



The Putnam County Pre-Disaster Mitigation Planning Committee researched historical data from the NCDRC, local newspapers, and local knowledge to identify winter storm events as a crucial part of the plan. In addition to snow, winter storms can be accompanied by the threat of freezing rain and ice storms. A heavy accumulation of ice is especially dangerous when compounded by high winds. Heavy ice can devastate trees and damage power lines, leaving many without access to power. When ice forms on sidewalks, streets, roads, or highways, each becomes extremely hazardous to pedestrians and motorists. There are no significant differences between the county and the city in terms of the risks and vulnerabilities associated with winter storms; therefore, all structures and critical facilities are potentially vulnerable to roof collapse or damage from trees that are brought down by the weight of accumulated snow and ice. Data is simply not suitable or sufficient to make an accurate assessment regarding frequency of occurrence, or future probability for each individual jurisdiction within Putnam County.

Putnam County, like much of Middle Georgia, does not have equipment necessary to keep the community functional in the event of a massive winter storm. When these types of storms occur, the community is crippled in many cases. NCDRC and local newspapers indicate 10 winter storm incidents in the past 58 years (see Hazard Frequency Table in **Appendix D**). There is a 17.24 percent chance of snow and ice occurring each year in Putnam County, a significant increase from the 10 percent chance cited in the 2006 plan update. No incidents have occurred since the last plan update.

Unlike most natural hazards that typically threaten both people and property, winter storms often pose the greatest risk to people. GEMA worksheet #3a in **Appendix A** depicts the total number of structures, the value of those structures and the population exposed to the winter storm hazard (encompasses the entire planning area; not available by individual jurisdiction). While damage to buildings resulting from winter storms is minimal, it is important to note that the numbers of people who either reside, work in, or visit these structures on a daily basis are vulnerable to the effects of winter storms. Similarly, the Critical Facility Inventory Report, obtained from the Georgia Mitigation Information System (see **Appendix A**), reflect data on the value of the community's critical facilities, content value, as well as occupancy estimates. The county's 21,218 residents and innumerable seasonal visitors are potentially exposed to the hazards of winter storms.

In February of 2011, the county was largely shut down due to approximately **six** inches of snow that fell overnight. For planning purposes, based on the Committee's insights, this event should be considered the greatest potential magnitude of a winter storm event. Events like this one are infrequent, and therefore, it is impractical for Putnam County to procure and maintain the necessary equipment to address such weather conditions. Additionally, land use and development trends were analyzed but were determined to be not applicable to mitigation planning due to the nature of winter storms (encompasses the entire planning area) and their infrequent occurrence.

The extent to which the community is vulnerable to this hazard is evident when examining snow and ice accumulations from previous storms. As stated, this is an infrequent hazard event; however, accumulations have averaged between two and four inches. This is exceptionally high for the Middle Georgia region, and the problem is exasperated due to the lack of snow and ice removal equipment. As little as one-half inch of accumulation can wreak havoc on the community.

Damage to facilities is caused primarily by downed trees and power lines crashing into or falling onto facilities. Consequently, gaping holes are created in the structure or fires are ignited because of the severe weather. Also, during times of snow and ice, generally associated with very cold temperatures, persons with inadequate heat tend to try warming their homes at all costs, which frequently results in structure fires as the heat source ignites flammable materials. Winter storms are typically short, and the damage associated with them is often minimal (particularly to critical facilities); however, the potentially crippling affect this hazard poses, necessitates mitigation measures being undertaken to lessen its impact.

Both the county and city have undertaken efforts to mitigate potential damage due to winter storms. As noted through the action items below, much has been done to cut down trees and limbs near power lines and within the existing right of way in the city as well the tearing down of dilapidated buildings.

IV. Tornadoes (See **Appendix A** for hazard area map and related data.)

Extensive discussion took place among Planning Committee members to address FEMA's recommendation (Local Hazard Mitigation Plan Review – January 2004) to more clearly define or identify differences between the county and the city in terms of risks and vulnerabilities. However, statistical analysis is unable to identify any clear differences. Since there are many more residences and commercial businesses located in unincorporated Putnam County than there are in the City of Eatonton, one could make the argument that Putnam

County is more vulnerable and at risk than the City of Eatonton. However, Eatonton’s population is much greater in density than that of the county, suggesting greater risk and vulnerability to the city.

The many variables involved (i.e. unpredictable nature of tornados, degrees of severity, infrequency of occurrence, differences in population density, differences in land area, number of structures/infrastructure, location of facilities, etc.) make it statistically impossible to infer any distinct statistical differences between the county and the city. This same consideration holds true for the other natural hazards (excluding floods) addressed in this plan; however, vulnerable critical facilities and infrastructure, as defined by their value and importance to the community, are discussed under each hazard, as well as depicted in the Critical Facility Inventory Reports found in **Appendix A**.

During update of the plan, the committee reviewed historical data from the NCDC, the Georgia Tornado Database, and the Tornado History Project to determine the past effects of tornados. A tornado is a violently rotating column of air extending from a thunderstorm cloud to the ground. The most violent tornados are capable of tremendous destruction, in some cases extreme devastation, with wind speeds that can exceed 250 miles per hour. Damage paths can be of varying widths up to and exceeding one mile with the length of the path up to 50 miles long. Tornados are the most unpredictable and destructive of all weather phenomena that affect Putnam County. Tornado season in Georgia typically runs from March through August; however, tornados can strike at any time of year if the deadly atmospheric conditions are present.

As no one can predict when or where a tornado might touch down, all of Putnam County is vulnerable to the threat of a tornado. There are no significant differences between the county and the city in terms of the risks associated with tornados. Because of the infrequency in which tornados touch down, data is not sufficient to make a reliable determination regarding frequency of occurrence, or future probability of occurrence, for each individual jurisdiction within Putnam County. Putnam County has experienced five tornados within the last ten years (one within the past five years), resulting in one injury, no deaths, and a total of \$1,420,000 in property damage. Although infrequent, the potential devastation associated with a tornado dictates appropriate mitigation measures.

Six tornados have touched down in Putnam County over the past 58 years (see *Hazard Frequency Table* in **Appendix D**). This historical record is the best available information for determining future probability and, upon analysis, the Committee concluded that Putnam County should be prepared for a tornado touchdown every 9.67 years. This equates to a **10.34** percent chance of a tornado touching down every year in the county. The potential damage caused by a tornado event is extremely high. In 1992, an F4 tornado touched down and travelled 20 miles, killing 4, injuring 55, and causing \$25 million in property damage. This event was the most powerful tornado on record in Putnam County and, for planning purposes, is considered the greatest potential magnitude that can be reasonably expected.

The Enhanced Fujita Scale is typically used to rate the intensity of a tornado by examining the damage caused by the tornado after it has passed over manmade structures. The scale ranges from EF0 to EF5 with an EF0 tornado having wind speeds of 65-85 mph and damage typically minor (e.g. damage to chimneys, tree branches broken, shallow-rooted trees pushed over, and damage to signs). The other end of the scale is represented by an EF5 tornado, with wind speeds greater than 200 mph and capable of lifting automobiles into the air and destroying buildings.

Historical data indicates that Putnam County has experienced three EF0, two EF1 tornadoes, and one F4 tornado since 1952. Putnam County can reasonably expect the extent of damage resulting from most tornados to be characterized primarily by roof and tree damage and downed utility lines.

Since 1970, Putnam County has more than doubled in population and become a popular vacation and seasonal destination. Because of this rapid growth and the population fluctuation, tornados continue to pose a substantial threat to Putnam County, its citizens, and guests.

It can be assumed that all facilities within Putnam County could be damaged by a tornado, as such weather events are indiscriminate as to when or where they strike. Utilizing a straight-lined method for estimating losses, it can be assumed that structures with the greatest replacement value could potentially sustain the most monetary damage.

Operating on the assumption that a facility would sustain 75 percent damage in the event of a tornado, some of the other facilities that have extremely high vulnerabilities include many of the area schools, particularly the high school, as well as the Putnam County Courthouse, Putnam County Sheriff's Department, Putnam County Public Works, and Putnam General Hospital. GEMA Worksheet #3a in **Appendix A** reflects totals for types of assets, their values, and local populations exposed to tornados. The GMIS-generated Critical Facility Inventory Report found in **Appendix A** reflects this same data for the county's critical facilities.

All of Putnam County has the same design wind speed as indicated by *FEMA How-to Guide #2: Understanding Your Risks* and the Georgia Mitigation Information System (GMIS). Additionally, the entire county has the potential to be affected by a tornado. As a result, any steps taken to lessen the effect of a tornado should be undertaken at a county-wide level to ensure that the most stringent regulations are in place for protecting vital facilities and infrastructure within the community. Putnam County is in Wind Zone III, which is associated with 200 mph wind speeds.

Land use and development trends were examined and discussed but were determined to be not overly relevant to mitigation planning for tornados. This is due to a tornado's propensity to strike anywhere within the county and with varying degrees of severity. Developing around or away from a tornado is not feasible. Putnam County currently has building codes, but the language in these codes does not mandate that structures be built to the design wind speed of approximately 200 miles per hour; however, construction must adhere to the Georgia State Minimum Standard Codes. The minimum standards established by these codes provide reasonable protection to persons and property within structures that comply with the regulations for most natural hazards. Additionally, ordinances currently exist within Putnam County to allow local officials to implement curfews to close off certain portions of the County in the event of a tornado. However, there have been no changes in development in the hazard prone area (the entire county) to cause an increase or decrease in the area's overall vulnerability.

Overall, Putnam County has high exposure to potential damage from tornados. Should a tornado hit certain portions of the County that are highly concentrated with homes or critical facilities, significant structural damage could occur, including, but not limited to, roof damage or total structural loss, depending on the strength and duration of the event. As the location of

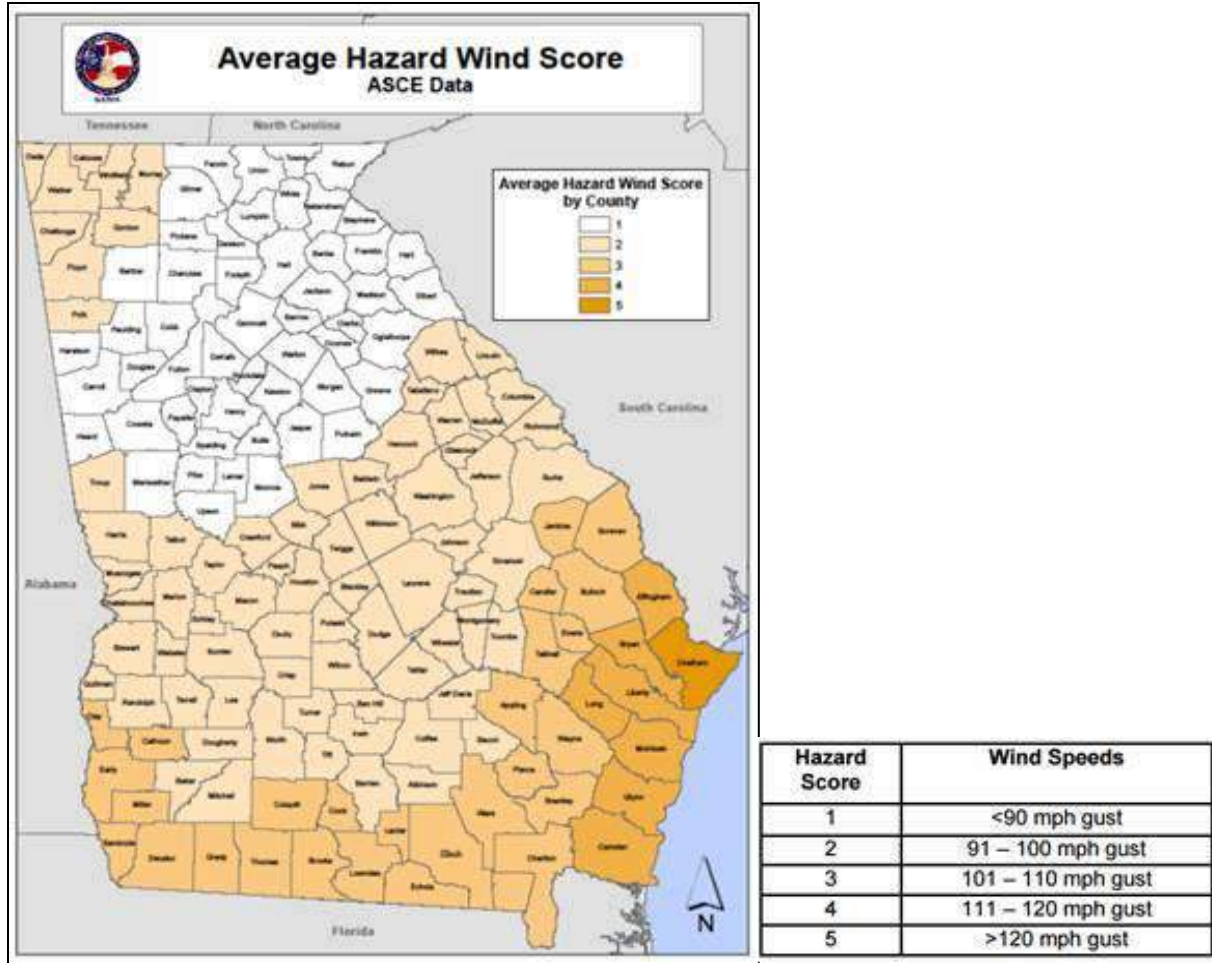
tornados are indiscriminate, no one can predict what facilities, if any, will be damaged in such an event. Additionally, the Planning Committee determined that due to the indiscriminate nature of tornados, mitigation activities should be applicable to the entire planning area and should be applied to future facilities. Any mitigation measures that can be taken by local officials to make the community safer in the event of tornado activity are encouraged.

V. Thunderstorm Winds (See **Appendix A** for hazard area map and related data.)

The Putnam County Pre-Disaster Mitigation Planning Committee again utilized NCDC data to research the historical impact of thunderstorm winds within the county during the update process. Thunderstorm winds are generally short in duration involving straight- line winds and/or gusts in excess of 50 miles per hour. Thunderstorm winds tend to affect areas of the county with significant tree stands, areas with exposed property and infrastructure, and aboveground utilities. Thunderstorm winds can cause power outages, cause transportation and economic disruptions, significant property damage, and pose a high risk for injuries or loss of life. There are no significant differences between the county and the city in terms of risks and vulnerabilities associated with thunderstorm winds. Existing data is not suitable or sufficient to make a reliable determination regarding frequency of occurrence, or future probability of thunderstorm winds for each individual jurisdiction within Putnam County.

Available data does, however, substantiate the fact that the most prevalent hazard events occurring in Putnam County are thunderstorm winds. During spring and summer seasons, the county typically experiences countless thunderstorms, some packing significant winds. As a result of these winds, properties are damaged, whether from roofs blowing off, trees being downed or loose debris.

As illustrated in the wind hazard map below, the entire county, including the City of Eatonton, has the same Wind Hazard Score. With a Wind Hazard Score of 1, Putnam County residents can typically expect less than 90 mile-per-hour winds during thunderstorm events, and for planning purposes, this should be considered the greatest potential magnitude that can be reasonably expected. The Wind Hazard Score is reflective of the 2000 International Building Code.



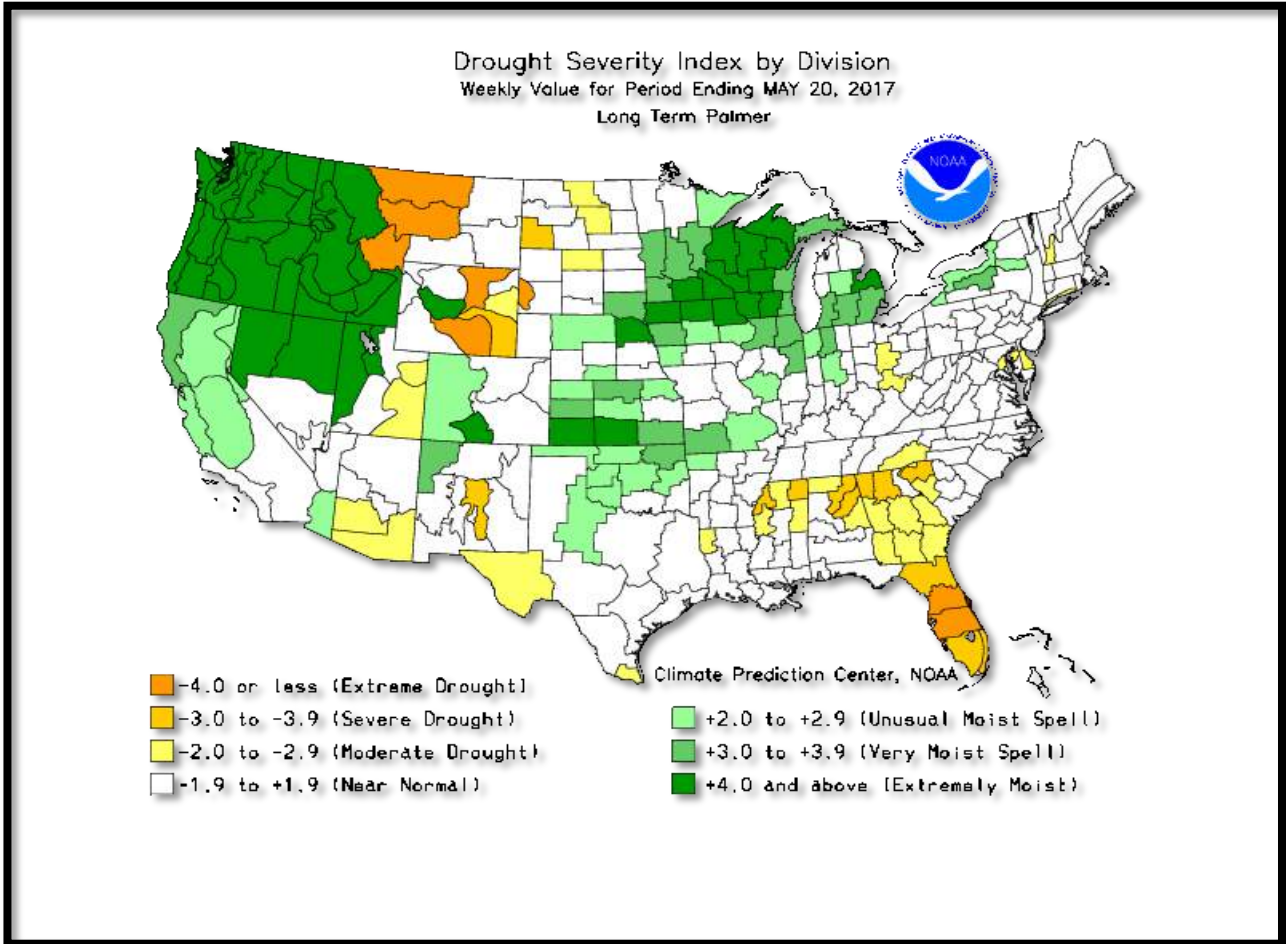
Since 1959, seventy-three thunderstorm events have been recorded in Putnam County (see Hazard Frequency Table in **Appendix D**). As of May 2017, eight thunderstorm events have occurred since the last update of the plan in June 2012. As previously indicated, severe thunderstorm winds occur more frequently than any other natural hazard event within Putnam County. When considering the probability of future occurrence, historical NCDC data, which is the best available data for determining future probability, indicates that Putnam County has a **125.86** percent chance of at least one thunderstorm occurring each year (up from 119.23 percent in 2006).

In evaluating assets that are susceptible to thunderstorm winds, the committee concurred with the findings documented in the original plan that all critical facilities, as well as all public, private, and commercial property, are susceptible to damage from thunderstorm winds causing damage to roofs and siding as well as broken windows due to wind-borne missiles (see **Appendix A**, GEMA worksheet #3a). However, there have been no changes in development in the hazard prone area (the entire county) to cause an increase or decrease in the area’s overall vulnerability.

Overall, thunderstorm winds pose one of the greatest threats to the livelihood of citizens in Putnam County. As thunderstorms tend to “pop-up” anytime and anywhere, this hazard poses a serious threat to both lives and property and impacts the entire planning area. As with tornados, the planning committee determined that limiting land use and development was not useful in preparation for thunderstorm winds, but because it is the most frequent hazard

that affects Putnam County, it is recommended that specific attention be given to ensure that structures within Putnam County are built to appropriate code standards, including future buildings locating in the Industrial Parks such as Rock Eagle Science and Technology Park. Presently, local codes require that all mobile homes within the county be “tied-down” to prevent damage during strong thunderstorm winds. Additional mitigation measures of this type are encouraged.

VI. Wildland Fires (See **Appendix A** for hazard area map and related data.)



Wildfires are uncontrolled fires spreading through vegetative fuels, exposing and possibly consuming structures. They often begin in small scale, but can quickly escalate into catastrophic events. These are routinely dependent upon fuels available, weather conditions, and wind speed and direction.

During the update of the Putnam County Pre-Disaster Mitigation Plan, the planning committee concurred with the findings of the original plan: when coupled with prolonged drought, wildfires pose a significant threat to Putnam County. Putnam County's agricultural and forestry lands make it highly vulnerable to uncontrolled wildfire. As a result, nearby structures (residences and businesses) and major facilities have the potential to incur significant damage including, but not limited to, catastrophic crop or structure loss.

The committee also consulted with the existing Community Wildfire Protection Plan (CWPP) prepared by the Georgia Forestry Commission in 2010 (the latest version is still in progress). Data available through the Georgia Forestry Commission (GFC) reflects all reported fires and does not distinguish between wildfires and small brush fires. The current plan is in the process of being updated.

The consensus of the committee was that while past fire events have been relatively minor and small-scale, each incident has the potential for developing into a wildfire and causing significant damage within the community. Predicting probability of occurrence is also difficult due to the nature of available data. However, it should be noted that there have been no changes in development in the hazard prone area (the entire county) to cause an increase or decrease in the area’s overall vulnerability.

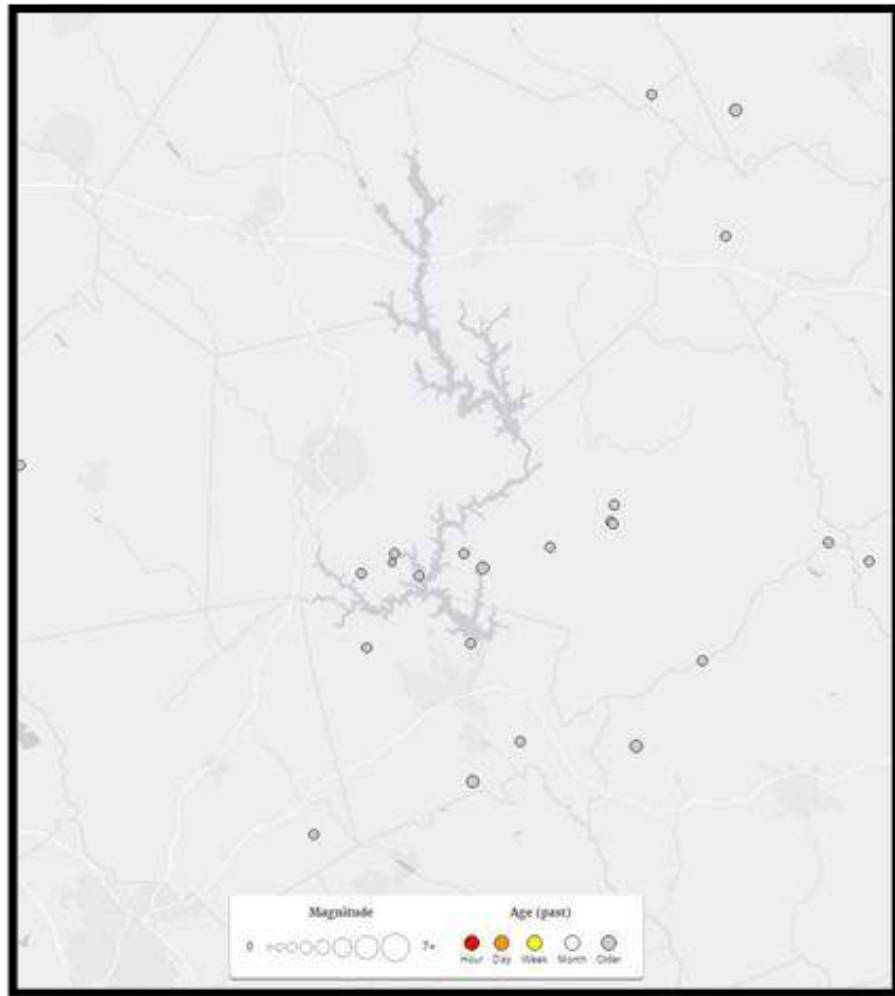
Wildfires can cause varying degrees of damage to critical facilities should one or more be in the destructive path of a wildfire event. The planning committee elected to use the same methodology utilized during the development of the original plan to determine the vulnerability of critical facilities to wildfire. Within Putnam County, the wildfire hazard area has been determined, by the committee, to encompass approximately 60 percent of the unincorporated county and only approximately 10 percent of the incorporated City of Eatonton. Outside of the City of Eatonton’s corporate limits lie almost half of the critical facilities verified and identified by the Pre-Disaster Mitigation Planning Committee during the update of the plan. The Rock Eagle Science and Technology Park is in the unincorporated county, just north of the City of Eatonton on Highway 441 and should be considered in the higher vulnerability area for wildfires.

If a massive wildfire consumed unincorporated Putnam County, facility losses would be in excess of \$1 billion (see GEMA worksheet #3a in **Appendix A**). Although it is highly unlikely that all facilities would be negatively impacted, the potential does exist that wildfire could have catastrophic consequences for the community. Numerous opportunities exist for fires to get out of control and spread, causing considerable damage within the community.

During the update of the Putnam County Pre-Disaster Mitigation Plan, the planning committee felt it would be beneficial to examine land use and development trends as they relate to mitigation planning for wildfire events. An emphasis was placed on examining residential and commercial uses because of the high degree of vulnerability to life and property associated with these uses. Land use and development trends provide a basis for making decisions on the type of mitigation approaches to consider and the locations where these approaches can be implemented. Specific goals, objectives, and strategies related to wildfire vulnerability resulting from inappropriate land use and development is addressed further in Chapter 4.

VII. Earthquakes (See Appendix A for hazard area map and related data.)

The planning committee determined that earthquakes should be added to the list of potential natural hazards to prepare for, as earthquakes can be deadly. Though the probability of destruction due to an earthquake is low in Putnam County, the committee decided it would be best to acknowledge and address the potential effects of earthquakes before one occurs. In fact, three earthquakes have been documented within county lines and approximately 20 have been documented near and around the county in the past 58 years. Magnitude of the three earthquakes documented within county lines is recorded as 2.0, 2.2, and 2.6 md. Thus, these earthquakes are not heavily felt.



Source: earthquake.usgs.gov

Earthquakes are measured by their magnitude (1.0 to 7.0 or higher) and intensity (I to VIII or higher). Below is a comparison chart of magnitude versus intensity and a list of the roman numerals associated with intensity and a short description of earthquakes as they would be categorized.

Magnitude / Intensity Comparison

The following table gives intensities that are typically observed at locations near the epicenter of earthquakes of different magnitudes.

Magnitude	Typical Maximum Modified Mercalli Intensity
1.0 - 3.0	I
3.0 - 3.9	II - III
4.0 - 4.9	IV - V
5.0 - 5.9	VI - VII
6.0 - 6.9	VII - IX
7.0 and higher	VIII or higher

Abbreviated Modified Mercalli Intensity Scale

- I.** Not felt except by a very few under especially favorable conditions.
- II.** Felt only by a few persons at rest, especially on upper floors of buildings.
- III.** Felt quite noticeably by persons indoors, especially on upper floors of buildings. Many people do not recognize it as an earthquake. Standing motor cars may rock slightly. Vibrations similar to the passing of a truck. Duration estimated.
- IV.** Felt indoors by many, outdoors by few during the day. At night, some awakened. Dishes, windows, doors disturbed; walls make cracking sound. Sensation like heavy truck striking building. Standing motor cars rocked noticeably.
- V.** Felt by nearly everyone; many awakened. Some dishes, windows broken. Unstable objects overturned. Pendulum clocks may stop.
- VI.** Felt by all, many frightened. Some heavy furniture moved; a few instances of fallen plaster. Damage slight.
- VII.** Damage negligible in buildings of good design and construction; slight to moderate in well-built ordinary structures; considerable damage in poorly built or badly designed structures; some chimneys broken.
- VIII.** Damage slight in specially designed structures; considerable damage in ordinary substantial buildings with partial collapse. Damage great in poorly built structures. Fall of chimneys, factory stacks, columns, monuments, walls. Heavy furniture overturned.
- IX.** Damage considerable in specially designed structures; well-designed frame structures thrown out of plumb. Damage great in substantial buildings, with partial collapse. Buildings shifted off foundations.
- X.** Some well-built wooden structures destroyed; most masonry and frame structures destroyed with foundations. Rails bent.
- XI.** Few, if any (masonry) structures remain standing. Bridges destroyed. Rails bent greatly.
- XII.** Damage total. Lines of sight and level are distorted. Objects thrown into the air.

From The Severity of an Earthquake.

Source: https://earthquake.usgs.gov/learn/topics/mag_vs_int.php

VIII. Dam Failure (See Appendix A for hazard area map and related data.)

No dam failure has been known to occur in Putnam County in the past 58 years. However, the planning committee believes that dam failure is a real and potentially deadly threat, especially as there are currently 18 dams located in the county. The population vulnerable to this hazard is increasing due to downstream development. Even structures outside of the known 100-year floodplain may prove affected by dam failures because of the water's often sudden release and velocity. Thus, any dam failure has the potential to impact the whole county (Putnam County and the City of Eatonton). Below is a list of dams:

- Ashurst Dam
- Beall Lake Dam
- Beall Pond Dam One
- Beall Pond Dam Two
- Carnes Lake Dam
- Davis Lake Dam
- Dennis Lake Dam
- Dodson Pond Dam
- Experiment Lake Number One Dam
- Georgia Experiment Station Dam
- Kraft Lake Dam
- Reeses Lake Dam
- Rock Eagle Lake Dam
- Rooty Creek Structure Number 21 Dam
- Rooty Creek Structure Number 27 Dam
- Rooty Creek Structure Number Five Dam
- Rossee Lake Dam
- Walker Lake Dam
- Wallace Dam

A dam failure can occur at any time. Throughout the State of Georgia, dam failure has inflicted significant damage to both life and property. In 1977, Kelly Barnes Dam, located in Toccoa Falls, Georgia, killed 39 individuals and caused \$30 million in estimated damages. Lake Lonnie Dam failed at midnight and swept away cars and mobile homes.

CHAPTER 3: TECHNOLOGICAL HAZARD, RISK, AND VULNERABILITY SUMMARY

Chapter 3		Updates to Section
I.	Background	Updated wording and data.
II.	Hazardous Materials Spills	Updated data.

I. Background

Hazardous material spills are a real threat to the county. State, federal, and interstate highways all run through the county and several trucks utilize these roads daily. The planning committee raised concerns regarding the agents these trucks are carrying because they could cause significant damage to the Putnam County community. Much can be done to mitigate the effects of hazardous material spills, irrespective of their origin.

II. Hazardous Materials Spills (See **Appendix A** for hazard area map and related data.)

During the update of the Putnam County Pre-Disaster Mitigation Plan, the planning committee reviewed historical data obtained from the Office of Hazardous Materials Safety's Incident Reports Database and the Georgia Department of Natural Resources Environmental Protection Division in its research involving hazardous materials in the community. Hazardous materials are substances that are harmful to the health and safety of people and property. Facilities that produce, process or store hazardous materials are at risk for spills, as well as facilities that treat or dispose of hazardous waste. Hazardous materials spills generally come from two sources. Transportation-related spills occur on or along roads and rail lines within a jurisdiction as hazardous substances are transported from one location to another. Fixed location spills occur anywhere within the county where the materials are stored, maintained, or handled.

Commercial businesses and private citizens are all potentially responsible for the spilling of hazardous materials within Putnam County. With the diverse mixture of business and industrial sectors operating in Putnam County, the types of hazardous materials that could spill in the community are many and varied. Residents and employees alike must be sure to take precaution when transporting or using hazardous materials to ensure the safety to their property, their neighbor's property, and the well-being of everyone in the vicinity.

Within a 27-year period for which data is available, there were approximately 62 hazardous material spills within the county of varying degrees (see Hazard Frequency Table in **Appendix D**). Surprisingly, of the 62 documented hazardous materials releases, 85.4 percent are fixed location spills. Only 14.6 percent, or 9 spills, are transportation-related.

Data was obtained from the Toxics Release Inventory (1987 – 2005) and the Hazardous Site Response Notification database made available by the Georgia Department of Natural Resources Environmental Protection Division. While the data was analyzed to determine noteworthy differences between the county and the city in terms of the risks and vulnerabilities associated with hazardous material spills, no clear patterns emerged. Existing data is not suitable or sufficient to make a reliable determination regarding frequency of occurrence, or future probability of hazardous materials spills related to each individual authority within Putnam County.

All critical facilities within the county are susceptible to experiencing downtime due to hazardous material spills. Persons occupying certain critical facilities may be forced to evacuate the premises should spills of certain substances occur near the structure, thus creating downtime at the facility. Additionally, some of the facilities have potentially harmful substances stored on site.

Should these materials be spilled, the potential exists for damage to property, as well as evacuations due to the contaminants. There are no specific regulations that can prevent the spill of hazardous materials within the county boundaries. However, mitigation measures can be taken to help ensure that vital natural resources and critical facilities are adequately protected in the event of a hazardous material spill.

There are no discernible differences in the susceptibility of Putnam County facilities when compared to the City of Eatonton regarding hazardous material spills. Each jurisdiction's facilities, as well as private facilities, must maintain proper procedures and precautions for handling hazardous materials. Additionally, each must maintain measures for action in the event of a spill either in the facility or nearby.

The potential extent of this hazard on the planning area is difficult to quantify. Each potential spill would be unique in its magnitude and severity. Past data and information does not allow for an accurate profile of this hazard event; however, the important thing to keep in mind is the potential catastrophic nature of this technological hazard and the need for the community to be prepared and vigilant. GEMA worksheet 3a and the GMIS Critical Facility Inventory Reports located in **Appendix A** help to illustrate the sheer number of buildings, infrastructure and people exposed to this hazard daily (encompasses the entire planning area; not available by individual jurisdiction).

Land use and development trends were examined for possible application related to hazardous materials spills and mitigation measures. With burgeoning residential and commercial development occurring in Putnam County, best management practices should be followed in relation to minimizing the impact of hazardous materials spills on residences, businesses, and environmentally sensitive areas. Examples include: using infrastructure availability to steer certain types of development (those prone to hazardous material spills) away from areas of natural, cultural, historic, and environmentally sensitive resources; using appropriate setbacks to minimize risks to citizens and businesses from transportation-related hazardous materials spills; developing general policies and protection measures for those industries/developments that use, store, or transport hazardous materials.

CHAPTER 4: NATURAL HAZARD MITIGATION GOALS, POLICIES, AND ACTION STEPS

Chapter 4	Updates to Section
I. Background	No major changes.
II. Flooding	Updated Action Item 2 under Objective 2, Goal 1. Removed Action Items 1 and 2 from Objective 1, Goal 5 as they have been completed. Removed Objective 2, Goal 3 as this is no longer something the county and city wants to pursue.
III. Winter Storms	Updated section to reflect the correct number of governments. Removed Objective 2, Goal 3 as this is no longer something the county and city wants to pursue.
IV. Tornadoes	Updated Action Item 1 under Objective 1, Goal 3. Removed Objective 2, Goal 4 as this is no longer something the county and city wants to pursue.
V. Thunderstorm Winds	Updated Action Item 2 under Objective 2, Goal 1, Action Item 1 under Objective 1, Goal 3 and Action Item 2 under Objective 1, Goal 3.
VI. Wildland Fires	Updated Action Item 2 under Objective 2, Goal 1 and Action Item 1 under Objective 1, Goal 3. Added Action Item 3 under Objective 1, Goal 6.
VII. Earthquakes	New section.
VIII. Dam Failure	New section.

I. Background

This chapter identifies a series of community goals and objectives pertaining to each of the natural hazards identified in Chapter 2. As part of the update process, the planning committee performed a comprehensive review of the goals and objectives listed in the original plan. The committee also discussed overall community mitigation goals and values to ensure consistency with those identified for each natural hazard. Existing policies, regulations, ordinances, and land use were examined for applicability; new and/or projected development, to include buildings and infrastructure, was researched and given consideration.

The planning committee also revisited the STAPLEE Criteria (Social, Technical, Administrative, Political, Legal, Economic, and Environmental) in evaluating alternative mitigation actions (see worksheet #4 in **Appendix D**). Finally, adjustments were made as necessary to those goals and objectives that were re-evaluated and determined to still be valid; new goals and objectives were added where applicable. Each hazard is followed by a summary of changes resulting from the plan update initiative.

The planning committee also identified and validated several methods of public education and awareness regarding natural hazard mitigation. All public information efforts are aimed at keeping the citizens of Putnam County fully engaged in the implementation and periodic maintenance of this mitigation plan. Many of these education and awareness tools are multi-hazard in nature and include the following: implementing a county-wide crisis alert or notification system, distribution of informational brochures or pamphlets, public and private-sector briefings, workshops and demonstrations, Public Service Announcements, etc.

The section that follows (as well as corresponding section in Chapter 5) serves as the Putnam County Mitigation Action Plan. Each natural and technological hazard is described along with relevant goals and objectives.

II. **Flooding**

As previously stated (see Chapter 2, Section I), flooding has caused considerable, although infrequent, damage within Putnam County over the past half century, mostly notably during the flood of 1994. The update committee concurred with the original planning document that the presence of Lakes Sinclair and Oconee on the borders of the county, along with the presence of several streams and creeks inside the county, necessitates mitigation goals and objectives, and ultimately action steps, be taken pertaining to flooding.

In previous flooding instances, considerable damage was done to structures within the community. Mitigation measures identified by the planning committee are to lessen the effect of such damage in the future. The mitigation goals and objectives identified for flooding are also consistent with the overall community mitigation goal of making Putnam County and its municipalities less vulnerable to the effects of natural hazards through development of a coordinated mitigation strategy. A part of this coordinated mitigation strategy is the current and continued participation of Putnam County and the City of Eatonton in the National Flood Insurance Program (NFIP).

The planning committee considered a range of mitigation options related to flooding and identified both structural and non-structural mitigation measures to ensure that the community adequately tackles all relevant issues. This may result in alteration to current policies/practices, land-use applications, and building codes if deemed necessary. In regard to facilities that are subject to flooding, there are no historic or special considerations that pose extraordinary challenges for the community. Several of the mitigation goals, objectives, and action steps identified here are a part of the community's ongoing strategy for ensuring continued compliance with the National Flood Insurance Program. Mitigation goals, objectives, and action steps for flooding, as determined by the committee, are as follows:

Flooding Mitigation Strategy and Recommendations

Goal 1: Educate the public and public safety officials on hazards.

Objective 1: Provide educational opportunities to school children.

Action Item 1: Educate students through partnerships with the Putnam County Board of Education.

Action Item 2: Encourage school systems to implement and review school emergency plans.

Objective 2: Provide educational information to the public.

Action Item 1: Educate the public on the availability and value of weather radios.

Action Item 2: Post public notices on the county's website during severe weather awareness campaigns.

Goal 2: Provide for power supplies to critical facilities.

Objective 1: Obtain backup generators for critical facilities.

Action Item 1: Conduct an assessment of critical facilities to determine how many are lacking backup generators.

Goal 3: Ensure a proper response in the event of a hazard.

Objective 1: Develop and enact local agreements relevant to hazard mitigation.

Action Item 1: Encourage the purchase of house numbering signs through the fire stations.

Goal 4: Establish necessary regulatory controls to address hazard events.

Objective 1: Establish land use controls to mitigate the effects of flood hazards.

Action Item 1: Encourage open-space uses and conservation easements on properties located in flood hazard areas.

Goal 5: Ensure adequate transportation routes for disaster response.

Objective 1: Develop or replace roads and bridges in county.

Action Item 1: Replace culverts in the city.

Goal 6: Ensure public facilities and infrastructure are adequate to meet hazard needs of the community.

Objective 1: Construct or rehabilitate necessary public facilities and infrastructure.

Action Item 1: Make improvements to the sewer system in the city to limit infiltration.

Action Item 2: Implement culvert replacement program within the city.

III. Winter Storms

Within Putnam County, there is a legitimate concern over the threat of periodic winter storms (see Chapter 2, Section VI). Putnam County does not receive the amounts of snow and ice that other areas of the country receive; however, this alone poses a problem in that the community does not have the equipment necessary to combat treacherous weather conditions. In the Middle Georgia region, the formation of ice on roads, tree limbs, and power lines is the cause of most damage. The Putnam County Pre-Disaster Mitigation Planning Committee determined during the update of this plan that several steps could be undertaken to ensure that the effects of winter storms within the community are minimized.

A range of options were considered, and both structural and non-structural mitigation measures are identified to adequately address all issues related to winter storm conditions. Implementation of these measures may involve altering or modifying current policies and practices. Currently, there are no historic or special considerations that pose extraordinary challenges for the community related to the effects of winter storms. Also, the mitigation goals and objectives identified for winter storms are consistent with the overall community mitigation goal of creating a safe and livable environment for all Putnam County citizens and for making Putnam County and its municipality less vulnerable to the effects of natural hazards. Mitigation goals, objectives, and action steps for winter storms, as determined by the committee, are as follows:

Winter Storm Mitigation Strategy and Recommendations

Goal 1: Educate the public and public safety officials on hazards.

Objective 1: Provide educational opportunities to school children.

Action Item 1: Educate students through partnerships with the Putnam County Board of Education.

Action Item 2: Encourage school systems to implement and review school emergency plans.

Objective 2: Provide educational opportunities to the public.

Action Item 1: Educate the public on the availability and value of weather radios.

Goal 2: Provide for power supplies to critical facilities.

Objective 1: Obtain backup generators for critical facilities.

Action Item 1: Conduct an assessment of critical facilities to determine how many are lacking backup generators.

Goal 3: Ensure a proper response in the event of a hazard.

Objective 1: Develop and enact local agreements relevant to hazard mitigation.

Action Item 1: Encourage the purchase of house numbering signs through the fire stations.

Action Item 2: Continue preventative maintenance on the part of Georgia Power and Tri-County EMC to cut down trees and limbs near power lines.

Goal 4: Ensure adequate transportation routes for disaster response.

Objective 1: Develop or replace roads and bridges in the county.

Action Item 1: Replace culverts in the city.

IV. Tornados

Should a tornado touch down in Putnam County, significant property and crop damage could be incurred, in addition to the potential human toll (see Chapter 2, Section II). In 1992, an F4 tornado touched down and traveled 20 miles, killing 4, injuring 55, and causing \$25 million in property damage. In addition to this tornado, 3 more documented events and countless tornado watches that, fortunately, never materialized provide a constant reminder of the potential for tornadic activity within Putnam County. Mitigation measures identified by the committee can be used by local officials to take appropriate actions whereby the community is potentially spared future losses.

The Putnam County Pre-Disaster Mitigation Planning Committee considered a range of mitigation options related to tornados and identified both structural and non-structural mitigation goals, objectives, and action steps. The goals and objectives identified here may result in the creation of new policies and procedures to administer implementation. Additionally, some existing policies, regulations, or ordinances may need to be modified or amended.

The mitigation goals and objectives identified for tornados are consistent with the overall community mitigation goal of creating a safe and livable environment for all Putnam County citizens. Mitigation goals, objectives, and action steps for tornados, as determined by the committee, are as follows:

Tornado Mitigation Strategy and Recommendations

Goal 1: Educate the public and public safety officials on hazards.

Objective 1: Provide educational opportunities to school children.

Action Item 1: Educate students through partnerships with Putnam County Board of Education.

Action Item 2: Encourage school systems to implement and review school emergency plans.

Objective 2: Provide educational opportunities to the public.

Action Item 1: Educate the public on the availability and value of weather radios.

Action Item 2: Post public notices on the county's website during severe weather awareness campaigns.

Goal 2: Provide for power supplies to critical facilities.

Objective 1: Obtain backup generators for critical facilities.

Action Item 1: Conduct an assessment of critical facilities to determine how many are lacking backup generators.

Goal 3: Establish necessary regulatory controls to address hazard events.

Objective 1: Develop or review local ordinances relevant to hazard mitigation.

Action Item 1: Require appropriate right-of-way through the platting process.

Action Item 2: Demolish dilapidated buildings utilizing the county's unsafe building abatement code.

Action Item 3: Cut down trees identified to be hazardous within the City of Eatonton.

Goal 4: Ensure a proper response in the event of a hazard.

Objective 1: Develop and enact local agreements relevant to hazard mitigation.

Action Item 1: Encourage the purchase of house numbering signs through the fire stations.

Goal 5: Ensure adequate transportation routes for disaster response.

Objective 1: Develop or replace roads and bridges in the county.

Action Item 1: Replace culverts in the city.

V. Thunderstorm Winds

Within Putnam County, the most frequent hazard event that occurs is damage associated with heavy thunderstorm winds (see Chapter 2, Section IV). On average, one severe thunderstorm capable of causing significant structural and property damage strikes Putnam County each year. Although heavy thunderstorm winds do not routinely affect critical facilities within the community, there is a real threat posed to these facilities as, primarily, roofs and windows could be damaged. During the update process, the planning committee agreed that mitigation measures could be undertaken to help minimize the effects of thunderstorm winds on the community.

The Putnam County Pre-Disaster Mitigation Planning Committee considered a range of mitigation options related to thunderstorm winds and identified both structural and non- structural mitigation measures to ensure that the community adequately tackles all issues related to thunderstorm winds. These measures may necessitate modifications to current policies and the implementation of appropriate local ordinances. The mitigation goals and objectives identified for thunderstorm winds are consistent with the overall community mitigation goal of creating a safe and livable environment for all Putnam County citizens. Mitigation goals, objectives, and action steps for thunderstorm winds, as determined by the committee, are as follows:

Thunderstorm Wind Mitigation Strategy and Recommendations

Goal 1: Educate the public and public safety officials on hazards.

Objective 1: Provide educational opportunities to school children.

Action Item 1: Educate students through partnerships with Putnam County Board of Education.

Action Item 2: Encourage school systems to implement and review school emergency plans.

Objective 2: Provide educational opportunities to the public.

Action Item 1: Educate the public on the availability and value of weather radios.

Action Item 2: Post public notices on the county's website during severe weather awareness campaigns.

Goal 2: Provide for power supplies to critical facilities.

Objective 1: Obtain backup generators for critical facilities.

Action Item 1: Conduct an assessment of critical facilities to determine how many are lacking backup generators.

Objective 2: Prevent power failure.

Action Item 1: Install lightning mitigation devices at the Sinclair Water Authority treatment plant.

Action Item 2: Install lightning mitigation devices at the Putnam County Courthouse Expansion.

Goal 3: Establish necessary regulatory controls to address hazard events.

Objective 1: Develop or review local ordinances relevant to hazard mitigation.

Action Item 1: Require appropriate right-of-way through the platting process.

Action Item 2: Demolish dilapidated buildings utilizing the county's unsafe building abatement code.

Action Item 3: Cut down trees identified to be hazardous within the City of Eatonton.

Goal 4: Ensure a proper response in the event of a hazard.

Objective 1: Develop and enact local agreements relevant to hazard mitigation.

Action Item 1: Encourage the purchase of house numbering signs through the fire stations.

Goal 5: Ensure adequate transportation routes for disaster response.

Objective 1: Develop or repair roads and bridges in the county.

Action Item 1: Replace culverts in the city.

VI. Wildland Fires

The Putnam County Pre-Disaster Mitigation Planning Committee considered a range of mitigation options related to wildland fires and identified both structural and non-structural mitigation measures to ensure that the community adequately tackles all issues related to such events. These measures may necessitate modifications to current policies and the implementation of appropriate local ordinances. The mitigation goals and objectives identified for wildland fires are consistent with the overall community mitigation goal of creating a safe and livable environment for all Putnam County citizens. Mitigation goals, objectives, and action steps for wildland fires, as determined by the committee, are as follows:

Wildland Fire Mitigation Strategy and Recommendations

Goal 1: Educate the public and public safety officials on hazards.

Objective 1: Provide educational opportunities to school children.

Action Item 1: Educate students through partnerships with the Putnam County Board of Education.

Action Item 2: Encourage school systems to implement and review school emergency plans.

Objective 2: Provide educational opportunities to the public.

Action Item 1: Educate the public on the availability and value of weather radios.

Action Item 2: Post public notices in the county's website during severe weather awareness campaigns.

Goal 2: Provide for power supplies to critical facilities.

Objective 1: Obtain backup generators for critical facilities.

Action Item 1: Conduct an assessment of critical facilities to determine how many are lacking backup generators.

Goal 3: Establish necessary regulatory controls to address hazard events.

Objective 1: Develop or review local ordinances relevant to hazard mitigation.

Action Item 1: Demolish dilapidated buildings utilizing the county's unsafe building abatement code.

Goal 4: Ensure a proper response in the event of a hazard.

Objective 1: Develop and enact local agreements relevant to hazard mitigation.

Action Item 1: Encourage the purchase of house numbering signs through the fire stations.

Goal 5: Prevent wildland fires.

Objective 1: Ensure regulatory issues are adequate for agencies active in hazard mitigation.

Action Item 1: Continued maintenance of fire breaks by the Georgia Forestry Commission.

Action Item 2: Encourage controlled burns.

Action Item 3: Continued fire inspections by the County Fire Department.

Goal 6: Ensure public facilities and infrastructure are adequate to meet hazard needs of the community.

Objective 1: Construct or rehabilitate necessary public facilities and infrastructure.

Action Item 1: Encourage sprinkler systems to be installed in all new construction.

Action Item 2: Expand water distribution and fire hydrant network to unserved areas of the county.

Action Item 3: Maintain current hydrants and replace out of service hydrants in the city.

VII. Earthquakes

Since 2009, three earthquakes have originated within county lines. According to the United States Geological Survey, approximately 20 earthquakes have been documented near and around the county in the past 58 years. It is important to note that county or city lines do not bind the damaging effects of earthquakes. Though an earthquake may be documented in one area, it can affect surrounding counties and cities, as well.

The planning committee considered several efforts to mitigate the effects of earthquakes. Mitigation goals, objectives, and action steps for earthquakes, as determined by the committee, are as follows:

Earthquake Mitigation Strategy and Recommendations

Goal 1: Educate the public and public safety officials on hazards.

- Objective 1: Provide educational opportunities to school children.
 - Action Item 1: Educate students through partnerships with the Putnam County Board of Education.
 - Action Item 2: Discuss the Great ShakeOut earthquake drills and determine if this is something the county and city are interested in implementing.
 - Action Item 3: Encourage school systems to implement and review school emergency plans.

- Objective 2: Provide educational opportunities to the public.
 - Action Item 1: Educate the public on the availability and value of weather radios.
 - Action Item 2: Post public notices in the county’s website during severe weather awareness campaigns.

Goal 2: Provide for power supplies to critical facilities.

- Objective 1: Obtain backup generators for critical facilities.
 - Action Item 1: Conduct an assessment of critical facilities to determine how many are lacking backup generators.

Goal 3: Establish necessary regulatory controls to address hazard events.

- Objective 1: Develop or review local ordinances relevant to hazard mitigation.
 - Action Item 1: Demolish dilapidated buildings utilizing the county’s unsafe building abatement code.

Goal 4: Ensure a proper response in the event of a hazard.

- Objective 1: Develop and enact local agreements relevant to hazard mitigation.
 - Action Item 1: Encourage the purchase of house numbering signs through the fire stations.

Goal 5: Ensure public facilities and infrastructure are adequate to meet hazard needs of the community.

- Objective 1: Construct or rehabilitate necessary public facilities and infrastructure.
 - Action Item 1: Encourage the construction of new buildings with the ability to withstand severe shaking.

VIII. Dam Failure

No dam failure has been known to occur in the past 58 years. However, the planning committee believes that dam failure is a real and potentially deadly threat, especially as there are currently 18 dams located in the county. Throughout the State of Georgia, dam failure has inflicted significant damage to both life and property. In 1977, Kelly Barnes Dam, located in Toccoa Falls, Georgia, killed 39 individuals and caused \$30 million in estimated damages. Lake Lonnie Dam failed at midnight and swept away cars and mobile homes. A dam failure can happen at any time. The planning committee believes it is best to prepare for a potential break. Mitigation goals, objectives, and action steps for dam failure, as determined by the committee, are as follows:

Dam Failure Mitigation Strategy and Recommendations

Goal 1: Educate the public and public safety officials on hazards.

Objective 1: Provide educational opportunities to school children.

Action Item 1: Educate students through partnerships with the Putnam County Board of Education.

Action Item 2: Encourage school systems to implement and review school emergency plans.

Objective 2: Provide educational opportunities to the public.

Action Item 1: Educate the public on the availability and value of weather radios.

Action Item 2: Post public notices in the county's website during severe weather awareness campaigns.

Goal 2: Provide for power supplies to critical facilities.

Objective 1: Obtain backup generators for critical facilities.

Action Item 1: Conduct an assessment of critical facilities to determine how many are lacking backup generators.

Goal 3: Establish necessary regulatory controls to address hazard events.

Objective 1: Develop or review local ordinances relevant to hazard mitigation.

Action Item 1: Demolish dilapidated buildings utilizing the county's unsafe building abatement code.

Goal 4: Ensure a proper response in the event of a hazard.

Objective 1: Develop and enact local agreements relevant to hazard mitigation.

Action Item 1: Encourage the purchase of house numbering signs through the fire departments.

Objective 2: Maintain an updated Emergency Management Plan.

Action Item 1: Incorporate dam failure mitigation into Emergency Management Plan.

Objective 3: Maintain a debris management plan.

Action Item 1: Incorporate dam failure mitigation into debris management plan.

Goal 5: Ensure public facilities and infrastructure are adequate to meet hazard needs of the community.

Objective 1: Construct or rehabilitate necessary public facilities and infrastructure.

Action Item 1: Encourage sprinkler systems to be installed in all new construction.

Action Item 2: Expand water distribution and fire hydrant network to unserved areas of the county.

Action Item 3: Maintain current hydrants and replace out of service hydrants in the city.

CHAPTER 5: TECHNOLOGICAL HAZARD MITIGATION GOALS, POLICIES, AND ACTION STEPS

Chapter 5	Updates to Section
<p>I. Hazardous Materials Spill</p>	<p>Some sentences were restructured to ensure clarification of the committee’s goals and observations. Updated Action Item 1 under Objective 2, Goal 1 to reflect the county and city’s true objectives. Removed Action Item 2 under Objective 1, Goal 3 as it has been completed. Removed Objective 2 from Goal 3 as this is no longer an objective the county and city wants to pursue.</p>

I. Hazardous Materials Spills

During the plan update process, the Planning Committee confirmed that hazardous materials spills constitute the most prevalent technological hazard potentially damaging to the community. As indicated in Chapter 3, Section I, there has been a considerable number of minor spills in recent history. However, this does not limit the potential of a catastrophic spill within the county. The threat is exacerbated by the fact that several industries within the county utilize large quantities of hazardous materials. Hazardous chemicals are transported to and from the county on a daily basis. Therefore, preventative measures should be taken to ensure the roads and rails throughout the county are protected.

The Planning Committee also identified methods of public education and awareness by which to inform individuals and businesses of technological hazard mitigation. They include the following: implementation of a countywide crisis alert or notification system, distribution of informational brochures or pamphlets, private and public-sector briefings, workshops and demonstrations, and Public Service Announcements.

Mitigation goals and objectives identified relative to hazardous materials spills are consistent with the overall goal of creating a safe and livable environment for all Putnam County citizens. They are also consistent with the goal of ensuring that Putnam County and the City of Eatonton are as impervious to the effects of technological hazards as possible. Mitigation goals, objectives, and action steps for hazardous materials spills, as determined by the committee, are as follows:

Material Spill Mitigation Strategy and Recommendations

Goal 1: Educate the public and public safety officials on hazards.

Objective 1: Provide educational opportunities to school children.

Action Item 1: Educate students through partnerships with the Putnam County Board of Education.

Action Item 2: Encourage school systems to implement and review school emergency plans.

Objective 2: Train relevant personnel.

Action Item 1: Encourage more hazardous material team members to train to the operational level.

Goal 2: Establish necessary regulatory controls to address hazard events.

Objective 1: Develop or review local ordinances relevant to hazard mitigation.

Action Item 1: Demolish dilapidated buildings utilizing the county's unsafe building abatement code.

Goal 3: Ensure a proper response in the event of a hazard.

Objective 1: Develop and enact local agreements relevant to hazard mitigation.

Action Item 1: Encourage the purchase of house numbering signs through the fire stations.

Goal 4: Purchase necessary equipment and/or supplies.

Objective 1: Obtain necessary equipment and gear for addressing hazard events.

Action Item 1: Acquire equipment to respond to hazardous material spills.

Goal 5: Ensure public facilities and infrastructure are adequate to meet hazard needs of the community.

Objective 1: Construct or rehabilitate necessary public facilities and infrastructure.

Action Item 1: Encourage sprinkler systems to be installed in all new construction.

Action Item 2: Expand water distribution and fire hydrant network to unserved areas of the county.

Action Item 3: Maintain current hydrants and replace out of service hydrants in the city.

Goal 6: Ensure adequate transportation routes for disaster response.

Objective 1: Develop or repair roads and bridges in the county.

Action Item 1: Replace culverts in the city.

CHAPTER 6: EXECUTING THE PLAN

Chapter 6	Updates to Section
I. Implementation/Action Plan	The EMA Director continues to assume the responsibility of upkeep and maintenance of the plan. The list of prioritized projects was updated to reflect changes in project status and additions.
II. Evaluation/Monitoring/Updating	Updated prioritized action items to include 10 more action items. Added existing planning mechanisms table.
III. Plan Update and Maintenance/Public Involvement	No major changes.

I. Implementation/Action Plan

The Putnam County Pre-Disaster Mitigation Plan update process was overseen by the Putnam County EMA. The Middle Georgia Regional Commission conducted facilitation of the planning process.

As a result of this update process, the Putnam County EMA Director shall assume the responsibility of upkeep and maintenance of the plan. It shall be the responsibility of the Putnam County EMA Director to ensure that the plan is utilized as a guide for undertaking mitigation measures within the community. The EMA Director shall also be authorized to reconvene the Planning Committee to periodically review and update the plan throughout the useful life of the plan, not to exceed five years.

Through this process, the EMA Director shall identify mitigation projects undertaken throughout the county. During subsequent updates to the plan, these projects shall be noted within the planning document to indicate their status (i.e. completed, underway, postponed, cancelled, etc.). Additionally, the Planning Committee shall continue to brainstorm, identify, and prioritize any additional mitigation projects that the community can/should undertake. The status of all projects, regardless of whether they are a part of the older version of the plan or the newer part of the plan, will be included in updates to the plan.

Each mitigation action item identified in this plan was prioritized by the members of the Putnam County Pre-Disaster Mitigation Plan update committee. Priority categories consist of High, Moderate, and Low. Action items were derived from the goals and objectives set forth for each disaster identified by the planning committee. The methodology involved a comprehensive review of the projects identified in the original plan, a determination as to those projects still active and/or relevant to the community, and identification of new projects to be included in the plan update. Several criteria were set forth to assist committee members in the prioritization of these projects. These criteria include perceived cost/benefit of the action, availability of potential funding sources, overall feasibility, measurable milestones within the project, whether multiple objectives were addressed, and political support for the project.

Through the prioritization process, several projects emerged as being of greater priority than others. Some of the projects involved expending considerable amounts of funds to undertake the action. Other projects allowed the community to pursue completion of the project under grant funding. Still, others required no significant financial commitment by the county.

The determination of the cost/benefit of a project was based upon the anticipated cost in relation to the perceived benefit of the action taken (see GEMA worksheet #4 in **Appendix D**). If a project was associated with a large financial cost, but a low benefit to individuals, the project was considered to have a low-cost benefit. Conversely, if minimal expenditures were required and the entire community would benefit, the project was considered to have a favorable cost-benefit rating. All projects were evaluated to determine the favorability of the benefits versus the costs.

High Priority Action Item	Medium Priority Action Item	Low Priority Action Item			
Action Item	Jurisdiction	Responsibility	Cost	Funding Source(s)	Status
<p>Educate students through partnerships with the Putnam County Board of Education.</p> <p>Educate the public on the availability and value of weather radios.</p> <p>Post public notices on the county's website during severe weather awareness campaigns.</p> <p>Encourage the purchase of house numbering signs through the fire departments.</p> <p>Continue preventative maintenance to cut down trees and limbs near power lines.</p> <p>Unite with surrounding counties to form regional hazardous material team.</p> <p>Make improvements to the sewer system in the city to limit infiltration.</p> <p>Expand water distribution and fire hydrant network to unserved areas of the county.</p> <p>Encourage controlled burns.</p> <p>Continue fire inspections by the County Fire Department.</p> <p>Acquire equipment to respond to hazardous material spills.</p> <p>Demolish dilapidated buildings utilizing the county's unsafe building abatement code.</p>	Countywide	City of Eatonton; Putnam County; Putnam County Board of Education	Staff Time	Putnam county	Ongoing
	Countywide	Putnam County EMA	Staff Time	Putnam County	Ongoing
	Countywide	EMA Director	Staff Time	Local General Funds; Grants	Ongoing
	Countywide	Putnam County Tri-County EMC; Georgia Power	Staff Time	Putnam County	Ongoing
	Countywide	Putnam County; Surrounding Counties; Office of Domestic Preparedness	\$10,000	Local General Funds; Grants	Ongoing
	Countywide	Eatonton-Putnam Water Sewer Authority	Staff Time	Putnam County	Complete
	City of Eatonton	Eatonton-Putnam Water Sewer Authority	\$3,000,000	Local General Funds; Grants	Ongoing
	Countywide	Putnam County; Sinclair Water Authority; Eatonton-Putnam Water Sewer Authority	\$1,000/fire hydrant + water distribution network	Authority General Funds; Local General Funds; Grants	Ongoing
	Countywide	Putnam County; City of Eatonton; Georgia Forestry Commission	Staff Time	Putnam County	Ongoing
	Countywide	Putnam County	Staff Time	Putnam County	Ongoing Deferred due to lack of funding
	Countywide	Putnam County	\$150,000	Local General Funds; Grants	Ongoing
	Countywide	Putnam County; City of Eatonton	\$5,000 per unit	Local General Funds; Grants	Ongoing

Require appropriate right-of-way through the platting process.	Countywide	Putnam County	Staff Time	Putnam County	Ongoing
Cut down trees in existing right-of-way identified to be hazardous within the City of Eatonton.	City of Eatonton	City of Eatonton	\$100,000+	Local General Funds	Ongoing
Continue maintenance of fire breaks by the Georgia Forestry Commission.	Countywide	Georgia Forestry Commission	Staff Time	Putnam County	Ongoing
Encourage open-space uses and conservation easements on properties located in flood hazard areas.	Countywide	Putnam County; City of Eatonton	Staff Time	Putnam County	Ongoing
Obtain backup generators for critical facilities.	Countywide	Putnam County; City of Eatonton; Critical Facilities	\$5,000/unit	Putnam County	Deferred
Implement culvert replacement program within the city.	Countywide	Putnam County; City of Eatonton	Staff Time	Putnam County	Ongoing
Encourage more hazardous material team members to train to the operational level.	Countywide	Putnam County; City of Eatonton; Putnam County EMA	Staff Time	Putnam County	Ongoing
Maintain current hydrants and replace out-of-service hydrants in the city.	City of Eatonton	Eatonton-Putnam Water Sewer Authority	\$1,000/fire hydrant	Putnam County	Ongoing
Incorporate dam failure mitigation efforts into Emergency Management Plan.	Countywide	Putnam County; City of Eatonton	Staff Time	Putnam County	Ongoing
Conduct an assessment of critical facilities to determine how many are lacking backup generators.	Countywide	Putnam County; City of Eatonton	Staff Time	Putnam County	Ongoing
Encourage school systems to implement and review school emergency plans.	Countywide	Putnam County; City of Eatonton	Staff Time	Putnam County	Ongoing
Replace Rooty Creek Bridge.	Putnam County	Georgia DOT	\$200,000	State of Georgia	Complete
Replace culverts in the city.	City of Eatonton	City of Eatonton	\$50,000	Local General Funds; Grants	Ongoing
Replace Crooked Creek Bridge over S.R. 16.	Putnam County	Georgia DOT	\$200,000	State of Georgia	Complete
Encourage sprinkler systems to be installed in all new construction.	Countywide	Putnam County	Staff Time	Putnam County	Ongoing
Install lightning mitigation devices at the Sinclair Water Authority treatment plant.	Putnam County	Sinclair Water Authority	\$500	Local General Funds; Grants	Deferred due to lack of funding

Install lightning mitigation devices at the Putnam County Courthouse.	Putnam County	Putnam County	\$500	Local General Funds; Grants	Deferred due to lack of funding
Encourage the construction of new buildings with the ability to withstand severe shaking.	Countywide	Putnam County; City of Eatonton	Staff Time	Putnam County	Ongoing
Discuss the Great ShakeOut earthquake drills and determine if this is something the county and city are interested in implementing.	Countywide	Putnam County; City of Eatonton	Staff Time	Putnam County	Ongoing

A comprehensive review by the steering committee substantiated that the goals, objectives, and action steps identified in this Putnam County Pre-Disaster Mitigation Plan update are consistent with other important community planning documents (see **Appendix B** and **Appendix C**). These include:

Existing Planning Mechanism	Incorporation into Mitigation Plan
2012 Putnam County Pre-Disaster Mitigation Plan	Baseline for the 2017 Plan; updated mitigation strategies, goals, action items, and supplemental information.
2006 Putnam County and the City of Eatonton Joint Comprehensive Plan	To identify future development trends and tailor strategies to consider the hazards of the area.
Putnam-Eatonton Joint Solid Waste Management Plan	Historical data; identification of floodplain areas.
Middle Georgia Regional Plan	To identify future development trends and tailor strategies to consider the hazards of the area.
Putnam County Emergency Operations Plan	Identification of current resources.
Georgia Forestry Commission's Community Wildfire Protection Plan	Mitigation strategies for drought and wildfire.
Middle Georgia Economic Development District's Comprehensive Economic Development Strategy	To identify future development trends and tailor strategies to consider the hazards of the area.
Debris Management Plan	Identification of debris management action plan and how to incorporate earthquakes and dam failure into the existing plan.

New mitigation projects identified in this update of the Putnam County Pre-Disaster Mitigation Plan will also be evaluated for possible inclusion in the next update of the Putnam County Community Work Program portion of its Comprehensive Plan (to be completed by October 2017), the Community Agenda portion of the Regional Plan update in 2021, and any local capital improvement plans. In addition, relevant sections of this Pre-Disaster Mitigation Plan update will be included in the next revision of the Putnam County Emergency Operations Plan. Putnam County and the City of Eatonton are committed to ensuring all relevant mitigation strategies identified in this plan will be incorporated and integrated into existing plans, as well as all applicable future planning efforts by referencing these strategies throughout each planning process. Please note that Putnam County does not have a Flood Mitigation Assistance plan or Flood Insurance Study on file at this time.

II. Evaluation/Monitoring/Updating

The Putnam County EMA Director will be charged with ensuring that this plan is monitored and periodically updated in subsequent years. An analysis of the previously approved plan's method and schedule for monitoring, evaluating, and updating the plan has indicated a high degree of success and satisfaction among local officials and community stakeholders. The method of evaluation employed, as agreed upon by the Pre-

Disaster Mitigation Planning Committee, will consist of the utilization of a report of accomplishments to illustrate the actions and projects undertaken, the completion date or current status of those actions and projects, the costs associated with the actions and projects, and a final determination as to whether the actions and projects are to be deemed successful.

Pursuant to the requirements set forth in the Disaster Mitigation Act of 2000, the county is again required to update and evaluate the plan no more than five years after its adoption. At the discretion of the Putnam County EMA Director, the committee, which is designated to review and update the plan, will convene in order to evaluate progress within the community. The Director is encouraged to maintain regular meetings, either quarterly, semi-annually, or annually to preserve continuity and consistency throughout the process.

No later than the conclusion of the five-year period following approval of the plan update, the Putnam County EMA Director shall submit a revised Pre-Disaster Mitigation Plan to GEMA for its approval. It is important to note that the plan update process, as established by the Planning Committee, is subject to change, depending upon subsequent regulations and/or requirements set forth by GEMA and FEMA.

III. Plan Update and Maintenance/Public Involvement

Because the Pre-Disaster Mitigation Plan is intended to help ensure a safe and livable environment for all Putnam County citizens, it is imperative that citizen involvement be an integral part of the planning process. Since adoption of the original Putnam County Pre-Disaster Mitigation Plan in 2006, citizens have been kept involved and apprised of plan progress through such forums as regularly scheduled meetings of the Board of Commissioners.

This same level of public education and awareness and citizen involvement will continue over the next five years until the required updated of the Putnam County Pre-Disaster Mitigation Plan. When specific issues dictate, public hearings will be conducted, and all other community planning efforts (Comprehensive Plan, Regional Plan, CEDS, etc.) will afford citizens the opportunity to participate in and comment on the need to incorporate hazard mitigation initiatives.

CHAPTER 7: CONCLUSION

Chapter 7 Section	Updates to Section
I. Conclusion	No major changes. The second paragraph was reworded to highlight the county's commitment to hazard mitigation efforts.

I. Conclusion

Due to the completion of the second update to the Pre-Disaster Mitigation Plan, the steering committee—the acting representatives of the community—obtained much knowledge and understanding regarding general disaster history and that which is pertinent to the county, the presence of natural and technological hazards in the area, and the impacts that these hazards present to the community. The update process began with the identification and verification of hazards that have occurred in Putnam County over the past 58 years. The steering committee then spent several weeks updating the critical facilities data, ensuring that the final list reflects an accurate compilation of those facilities needed in times of emergency due to hazards. The committee assessed the vulnerability of the community to various hazards and determined potential losses. Goals and actions were then developed to implement mitigation measures throughout the county. These goals and actions were prioritized and used to formulate an action plan to actively work toward making Putnam County and the City of Eatonton a safer place to live, work, and play.

The plan update process included reconvening the planning committee and continued citizen involvement through two public hearings. These public hearings were conducted to provide community members the opportunity to comment on and make suggestions regarding both current and future disaster mitigation efforts in Putnam County. It is intended that this plan will help to foster a hazard mitigation mindset countywide—through local government leadership, community-based partnerships, planning committees, and awareness efforts. All residents will live in a safer environment due to the measures undertaken with this plan as a guide to support continual hazard mitigation efforts.

Sources – Numerous sources were utilized to ensure that the most complete planning document could be assembled. To ensure that all data sources consulted are cited, references are listed in the following format: 1) publications, 2) web sites, 3) other sources.

Publications:

FEMA *How-to Guides* for Local Mitigation Planning

GEMA Local Multi-Hazard Mitigation Planning Guidance

2015 Woods & Poole Economics, Inc.

Web Sites:

FEMA (www.fema.gov)

GEMA (www.gema.state.ga.us)

Georgia Department of Education (www.doe.k12.ga.us)

Georgia Department of Labor (www.dol.state.ga.us)

Georgia Department of Natural Resources (www.gadnr.org)

Putnam County, GA (<http://www.putnamcountyga.com>)

National Climatic Data Center (www.ncdc.noaa.gov)

Roadside Georgia: National Register of Historic Places (www.roadsidegeorgia.com)

Tornado History Project (www.tornadohistoryproject.com)

American Community Survey (www.factfinder.census.gov)

Right to Know Network (<http://www.rtknet.org/>)

Other Sources:

American Red Cross, Central Georgia Chapter

Putnam County School District

Putnam County Health Department

Putnam County Tax Assessor

Georgia Forestry Commission

Georgia Mitigation Information System (GMIS)

US Geological Survey

National Lightning Detection Network

Appendix A

Hazard Identification, Risk Assessment and Vulnerability

- Hazard Descriptions
- GEMA Worksheet #3a
- Hazard Area Maps
- GMIS Critical Facility Inventory Reports
- Hazard Risk Analyses Supplement

Hazard Descriptions

Description of Flood Hazard - According to *FEMA How-to Guide #2: Understanding Your Risks*, a flood is a natural event for rivers and streams. Excess water from snowmelt, rainfall, or storm surge accumulates and overflows onto the banks and adjacent floodplains. Floodplains are lowlands, adjacent to rivers, lakes, and oceans that are subject to recurring floods. Hundreds of floods occur each year within the United States, making it one of the most common hazards in all 50 states and U.S. Territories. Floods kill an average of 150 people a year nationwide. They can occur at any time of day or night. Floodplains in the U.S. are home to over nine million households. Most injuries and deaths occur when people are swept away by flood currents, and most property damage results from inundation by sediment-filled water (*Understanding Your Risks*, 2-12).

Within any given geography, many different variables must be considered when determining if an area is susceptible to flooding. Topography, ground saturation, soil permeability, rainfall intensity and duration, drainage, and vegetative cover, to only name a few, contribute to the determination of whether or not an area will flood. Large amounts of rainfall over a short amount of time can result in flash floods, which routinely do minimal damage. Should the soil be saturated or super-saturated, even a small amount of rainfall can cause flooding issues. As more and more land is being developed, the presence of impermeable surfaces, roads, driveways, and parking lots causes an increase in the likelihood of flooding within an area.

Description of Tornado Hazard - A tornado is a violently rotating column of air extending from a thunderstorm cloud to the ground. The most violent tornados are capable of tremendous destruction, in some cases extreme devastation, with wind speeds that can exceed 250 miles per hour. Damage paths can be of varying widths up to and exceeding one mile, with the length of the path up to fifty miles long. Tornado season in Georgia typically runs from March through August; however, tornados can strike at any time of year if the deadly atmospheric conditions are present. Thunderstorms and hurricanes spawn tornadoes when cold air overrides a layer of warm air, causing the warm air to rise rapidly. The winds produced from hurricanes, earthquake-induced fires, and wildfires have also been known to produce tornadoes (*Understanding Your Risks*, 2-20).

Tornadoes can topple buildings, roll mobile homes, uproot trees, hurl people and animals through the air for hundreds of yards, and fill the air with lethal wind-borne debris. Tornadoes do their destructive work through the combined action of their strong rotary winds and the impact of wind-borne debris. Tornadoes travel at an average speed of 30 miles per hour, but speeds ranging from 0 to 70 miles per hour have been reported. Most tornados move from the southwest to the northeast but the direction may be erratic and subject to sudden change.

Tornadoes are rated and categorized by damage pattern:

Category EF0 – Gale Tornado (65-85 mph) – Light Damage

Category EF1 – Moderate Tornado (86-110 mph) – Moderate Damage

- Category EF2** – Significant Tornado (111-135 mph) – Considerable Damage
Category EF3 – Severe Tornado (136-165 mph) – Severe Damage
Category EF4 – Devastating Tornado (166-200 mph) – Devastating Damage
Category EF5 – Incredible Tornado (Over 200 mph) – Incredible Damage

Description of Wildfire Hazard – Wildfires are uncontrolled fire spreading through vegetative fuels, exposing, and possibly consuming structures. They often begin in small scale, but can quickly escalate into catastrophic events. They are routinely dependent upon fuels available, weather conditions, and topography of the area. Areas that have experience prolonged drought, or are excessively dry, are at risk of wildfires.

People start more than four out of every five wildfires, usually as a result of debris burns, arson, or carelessness. Lightning strikes are the next leading cause of wildfires. The type, and amount of fuel, as well as its burning qualities and level of moistures affect wildfire potential and behavior. Topography is important because it affects the movement of air (and thus the fire) over the ground surface. The slope and shape of terrain can change the rate of speed at which the fire travels. Weather affects the probability of wildfire and has a significant effect on its behavior. Additionally, temperature, humidity, and wind (both short and long term) affect the severity and duration of wildfires (Understanding Your Risks, 2-29)

Description of Thunderstorm Winds Hazard - Thunderstorm winds are generally short in duration involving straight-line winds and/or gusts in excess of 50 miles per hour. Thunderstorm winds tend to affect areas with significant tree stands, areas with exposed property and infrastructure, and above ground utilities. Thunderstorm winds can cause power outages, cause transportation and economic disruptions, significant property damage, and pose a high risk for injuries or loss of life. The National Weather Service defines a severe thunderstorm as one that produces winds greater than 57 miles per hour and/or hail $\frac{3}{4}$ inch or greater in diameter. These parameters are considered to be capable of inflicting damage on a community.

Description of Winter Storm Hazard – Winter storms bring the threat of freezing rain and ice storms. Freezing rain is rain occurring when surface temperatures are below freezing. The moisture falls in liquid form, but freezes upon impact, resulting in a coating of ice glaze on exposed objects. This occurrence is classified as an ice storm when a substantial glaze layer accumulates. Ice forming on exposed objects generally ranges from a thin glaze to coatings in excess of one inch thick. A heavy accumulation of ice, especially when accompanied by high winds, devastates trees and power lines. Sidewalks, streets, and highways become extremely hazardous to pedestrians and motorists. Additionally, freezing temperatures and ice accumulations can result in severe crop losses.

Sleet is also associated with winter storms. Sleet is usually recognized as frozen rain drops, or ice pellets, which bounce when hitting the ground or other objects. Sleet does not typically stick to trees and overhead wires, but sleet in sufficient depth does cause hazardous driving conditions.

Description of Hazardous Material Spill Hazard - Hazardous materials are substances that are harmful to the health and safety of people and property. Facilities that produce, process, store, or ship hazardous materials are at risk for spills, as well as facilities that treat or dispose of hazardous waste. Hazardous material spills are generally classified as one of two types: transportation or fixed. Transportation spills occur on or along roads or railways as hazardous substances are transported from one location to another. Fixed location spills can occur at any facility where they are stored, maintained, or handled.

Description of Earthquake Hazard – Earthquakes are generally defined as the sudden motion or trembling of the Earth’s surface caused by an abrupt release of slowly accumulated strain. This release typically manifests on the surface as ground shaking, surface faulting, tectonic uplifting and subsidence, or ground failures, and tsunamis. In the United States, earthquake activity east of the Rocky Mountains is relatively low compared to the West because it is away from active plate boundaries and the plate interior strain rates are known to be very low.

Earthquakes of magnitude less than 5.0 are not known to produce significant damage. Georgia’s greatest risks for earthquakes of magnitude 5.0 or greater are from three different seismic areas:

New Madrid Fault Zone- centered on the Mississippi River north of Memphis
Eastern Tennessee Seismic Belt- running west of the Appalachians between Knoxville and Northeastern Alabama
Charleston, SC

Modest earthquakes distributed throughout the Georgia Piedmont also occur; however, risk level remains low due to much lower magnitude and intensity associated with these events. The spatial extent of specific earthquakes largely depends on its magnitude (discussed in chapter 2). The temporal characteristics of earthquakes include rate of onset, duration, and the frequency of recurrence. Earthquakes rarely give warning of their impending occurrence, and hence such events are currently considered unpredictable by many in the scientific community. When one occurs ground failure can occur within a few seconds, and strong shaking can last from a few seconds to several minutes depending on the severity of the event, and the distance an individual is from its occurrence. Earthquake recurrence is based primarily on historical activity, and since earthquakes are infrequent within the eastern US, future earthquake probability remains low.

Description of Dam Failure -A dam is a constructed barrier across flowing water that obstructs, directs, or slows the velocity of the water, creating a reservoir, lake, or impoundment. The structure’s purpose is to retain water for a variety of purposes such as generating power, providing water for irrigation or water supply, or controlling flooding. The threat of dam failures is triggered by carelessness of design, construction, and maintenance. The integrity of older dams, often affected by weathering, mechanical changes, and the influence of chemical agents, is deteriorating. Not only is dam failure

risk increasing (with aging infrastructure) but the population vulnerable to this hazard is also increasing due to downstream development. Even structures outside of the known 100-year floodplain may prove affected by dam failures because of the water's often sudden release and velocity.

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: City of Eatonton

Hazard: Winter Storms, Tornadoes, Thunderstorm Winds, Wildland Fires, and Earthquakes

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	2,952	2,952	100.000%	161,242,380	161,242,380	100.000%	6,486	6,486	100%
Commercial	286	286	100.000%	68,020,544	68,020,544	100.000%	2,161	2,161	100%
Industrial	13	13	100.000%	22,426,162	22,426,162	100.000%	1,212	1,212	100%
Agricultural	14	14	100.000%	4,825,595	4,825,595	100.000%	36	36	100%
Religious/ Non-profit	73	73	100.000%	11,686,671	11,686,671	100.000%	55	55	100%
Government	39	39	100.000%	14,180,000	14,180,000	100.000%	398	398	100%
Education	7	7	100.000%	1,803,336	1,803,336	100.000%	2,081	2,081	100%
Utilities	1	1	100.000%	75,000,000	75,000,000	100.000%	2	2	100%
Total	3,385	3,385	100.000%	359,184,688	359,184,688	100.000%	12,431	12,431	100%

Task B. Determine whether (and where) you want to collect additional inventory data.

- | | | |
|---|---|---|
| | Y | N |
| 1. Do you know where the greatest damages may occur in your area? | X | |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | X | |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | X | |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | X | |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | X | |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | | X |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | X |

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Putnam County

Hazard: Winter Storms, Tornadoes, Thunderstorm Winds, Wildland Fires, and Earthquakes

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	13,770	13,770	100.000%	2,359,005,781	2,359,005,781	100.000%	21,247	21,247	100%
Commercial	424	424	100.000%	133,778,847	133,778,847	100.000%	4,969	4,969	100%
Industrial	15	15	100.000%	9,236,657	9,236,657	100.000%	1,319	1,319	100%
Agricultural	1,423	1,423	100.000%	118,875,965	118,875,965	100.000%	163	163	100%
Religious/ Non-profit	132	132	100.000%	23,480,620	23,480,620	100.000%	1,803	1,803	100%
Government	55	55	100.000%	20,000,000	20,000,000	100.000%	512	512	100%
Education	12	12	100.000%	3,091,609	3,091,609	100.000%	2,910	2,910	100%
Utilities	122	122	100.000%	300,000,000	300,000,000	100.000%	15	15	100%
Total	15,953	15,953	100.000%	2,967,469,479	2,967,469,479	100.000%	32,938	32,938	100%

Task B. Determine whether (and where) you want to collect additional inventory data.

- | | | |
|---|---|---|
| | Y | N |
| 1. Do you know where the greatest damages may occur in your area? | X | |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | X | |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | X | |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | X | |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | X | |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | | X |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | X |

GEMA Worksheet #3a**Inventory of Assets****Jurisdiction:** City of Eatonton**Hazard:** Flood and Dam Failure

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	2,952	300	10.163%	161,242,380	12,667,301	7.856%	6,486	659	10%
Commercial	286	19	6.643%	68,020,544	5,910,386	8.689%	2,161	144	7%
Industrial	13	8	61.538%	22,426,162	14,242,386	63.508%	1,212	746	62%
Agricultural	14	14	100.000%	4,825,595	4,825,595	100.000%	36	36	100%
Religious/ Non-profit	73	58	79.452%	11,686,671	9,285,300	79.452%	55	44	79%
Government	39	32	82.051%	14,180,000	11,634,872	82.051%	398	327	82%
Education	7	5	71.429%	1,803,336	1,288,097	71.429%	2,081	1,486	71%
Utilities	1	1	100.000%	75,000,000	75,000,000	100.000%	2	2	100%
Total	3,385	437	12.910%	359,184,688	134,853,937	37.544%	12,431	3,443	28%

Task B. Determine whether (and where) you want to collect additional inventory data.

- | | Y | N |
|---|---|---|
| 1. Do you know where the greatest damages may occur in your area? | X | |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | X | |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | X | |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | X | |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | X | |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | | X |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | X |

GEMA Worksheet #3a
Jurisdiction: Putnam County
Hazard: Flood and Dam Failure

Inventory of Assets

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	13,770	7,397	53.718%	2,359,005,781	670,832,444	28.437%	21,247	11,414	54%
Commercial	424	85	20.047%	133,778,847	26,818,873	20.047%	4,969	996	20%
Industrial	15	0	0.000%	9,236,657	0	0.000%	1,319	0	0%
Agricultural	1,423	301	21.152%	118,875,965	25,145,232	21.152%	163	34	21%
Religious/ Non-profit	132	88	66.667%	23,480,620	15,653,747	66.667%	1,803	1,202	67%
Government	55	35	63.636%	20,000,000	12,727,273	63.636%	512	326	64%
Education	12	8	66.667%	3,091,609	2,061,073	66.667%	2,910	1,940	67%
Utilities	122	122	100.000%	300,000,000	300,000,000	100.000%	15	15	100%
Total	15,953	8,036	50.373%	2,967,469,479	1,053,238,641	35.493%	32,938	15,927	48%

Task B. Determine whether (and where) you want to collect additional inventory data.

- | | | |
|---|---|---|
| | Y | N |
| 1. Do you know where the greatest damages may occur in your area? | X | |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | X | |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | X | |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | X | |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | X | |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | | X |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | X |

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: City of Eatonton

Hazard: Hazardous Material Spills

Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	2,952	2,952	100.000%	161,242,380	161,242,380	100.000%	6,486	6,486	100%
Commercial	286	286	100.000%	68,020,544	68,020,544	100.000%	2,161	2,161	100%
Industrial	13	13	100.000%	22,426,162	22,426,162	100.000%	1,212	1,212	100%
Agricultural	14	14	100.000%	4,825,595	4,825,595	100.000%	36	36	100%
Religious/ Non-profit	73	73	100.000%	11,686,671	11,686,671	100.000%	55	55	100%
Government	39	39	100.000%	14,180,000	14,180,000	100.000%	398	398	100%
Education	7	7	100.000%	1,803,336	1,803,336	100.000%	2,081	2,081	100%
Utilities	1	1	100.000%	75,000,000	75,000,000	100.000%	2	2	100%
Total	3,385	3,385	100.000%	359,184,688	359,184,688	100.000%	12,431	12,431	100%

Task B. Determine whether (and where) you want to collect additional inventory data.

- | | | |
|---|---|---|
| | Y | N |
| 1. Do you know where the greatest damages may occur in your area? | X | |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | X | |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | X | |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | X | |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | X | |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | | X |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | X |

GEMA Worksheet #3a

Inventory of Assets

Jurisdiction: Putnam County

Hazard: Hazardous Material Spills

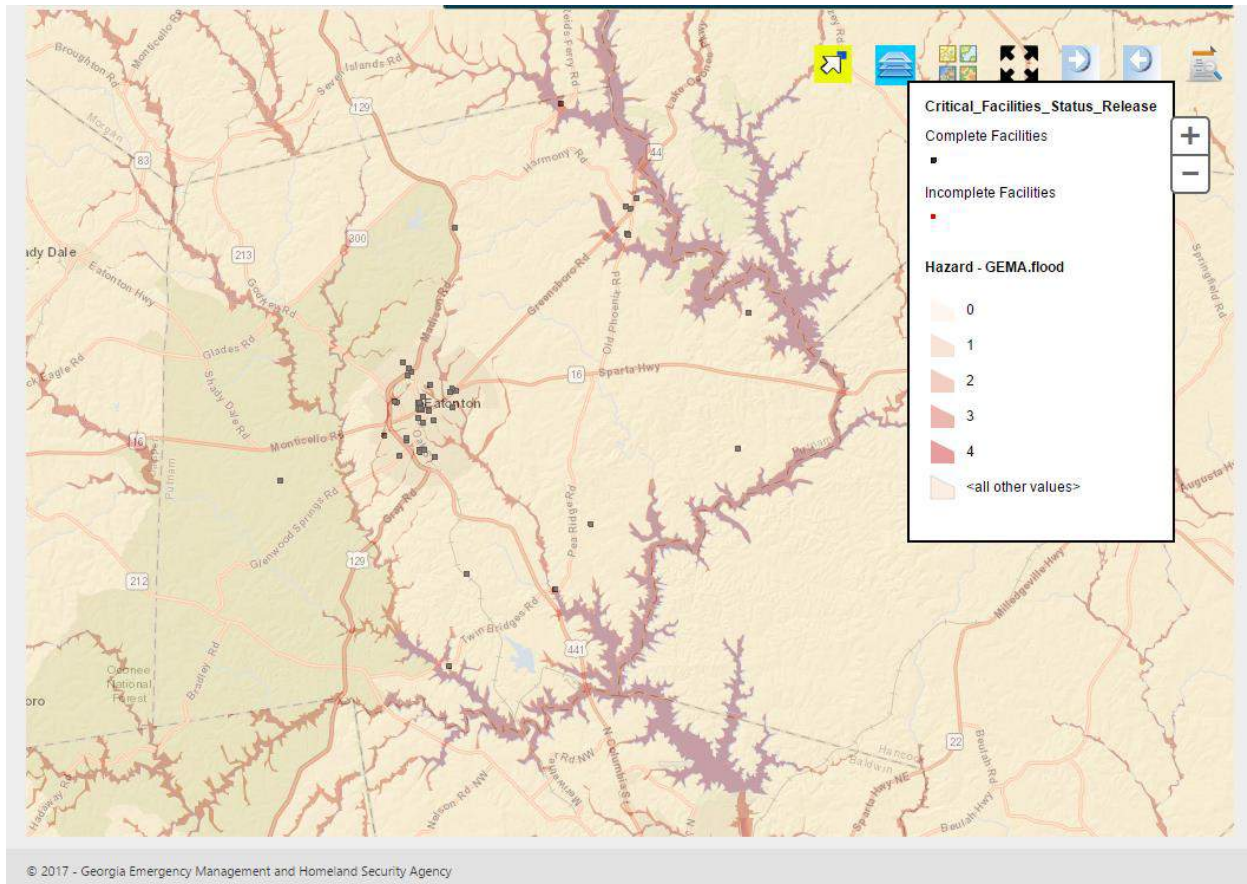
Task A. Determine the proportion of buildings, the value of buildings, and the population in your community or state that are located in hazard areas.

Type of Structure (Occupancy Class)	Number of Structures			Value of Structures			Number of People		
	# in Community of State	# in Hazard Area	% in Hazard Area	\$ in Community or State	\$ in Hazard Area	% in Hazard Area	# in Community or State	# in Hazard Area	% in Hazard Area
Residential	13,770	13,770	100.000%	2,359,005,781	2,359,005,781	100.000%	21,247	21,247	100%
Commercial	424	424	100.000%	133,778,847	133,778,847	100.000%	4,969	4,969	100%
Industrial	15	15	100.000%	9,236,657	9,236,657	100.000%	1,319	1,319	100%
Agricultural	1,423	1,423	100.000%	118,875,965	118,875,965	100.000%	163	163	100%
Religious/ Non-profit	132	132	100.000%	23,480,620	23,480,620	100.000%	1,803	1,803	100%
Government	55	55	100.000%	20,000,000	20,000,000	100.000%	512	512	100%
Education	12	12	100.000%	3,091,609	3,091,609	100.000%	2,910	2,910	100%
Utilities	122	122	100.000%	300,000,000	300,000,000	100.000%	15	15	100%
Total	15,953	15,953	100.000%	2,967,469,479	2,967,469,479	100.000%	32,938	32,938	100%

Task B. Determine whether (and where) you want to collect additional inventory data.

- | | | |
|---|---|---|
| | Y | N |
| 1. Do you know where the greatest damages may occur in your area? | X | |
| 2. Do you know whether your critical facilities will be operational after a hazard event? | X | |
| 3. Is there enough data to determine which assets are subject to the greatest potential damages? | X | |
| 4. Is there enough data to determine whether significant elements of the community are vulnerable to potential hazards? | X | |
| 5. Is there enough data to determine whether certain areas of historic, environmental, political, or cultural significance are vulnerable to potential hazards? | X | |
| 6. Is there concern about a particular hazard because of its severity, repetitiveness, or likelihood of occurrence? | | X |
| 7. Is additional data needed to justify the expenditure of community or state funds for mitigation initiatives? | | X |

FLOODING – COUNTYWIDE

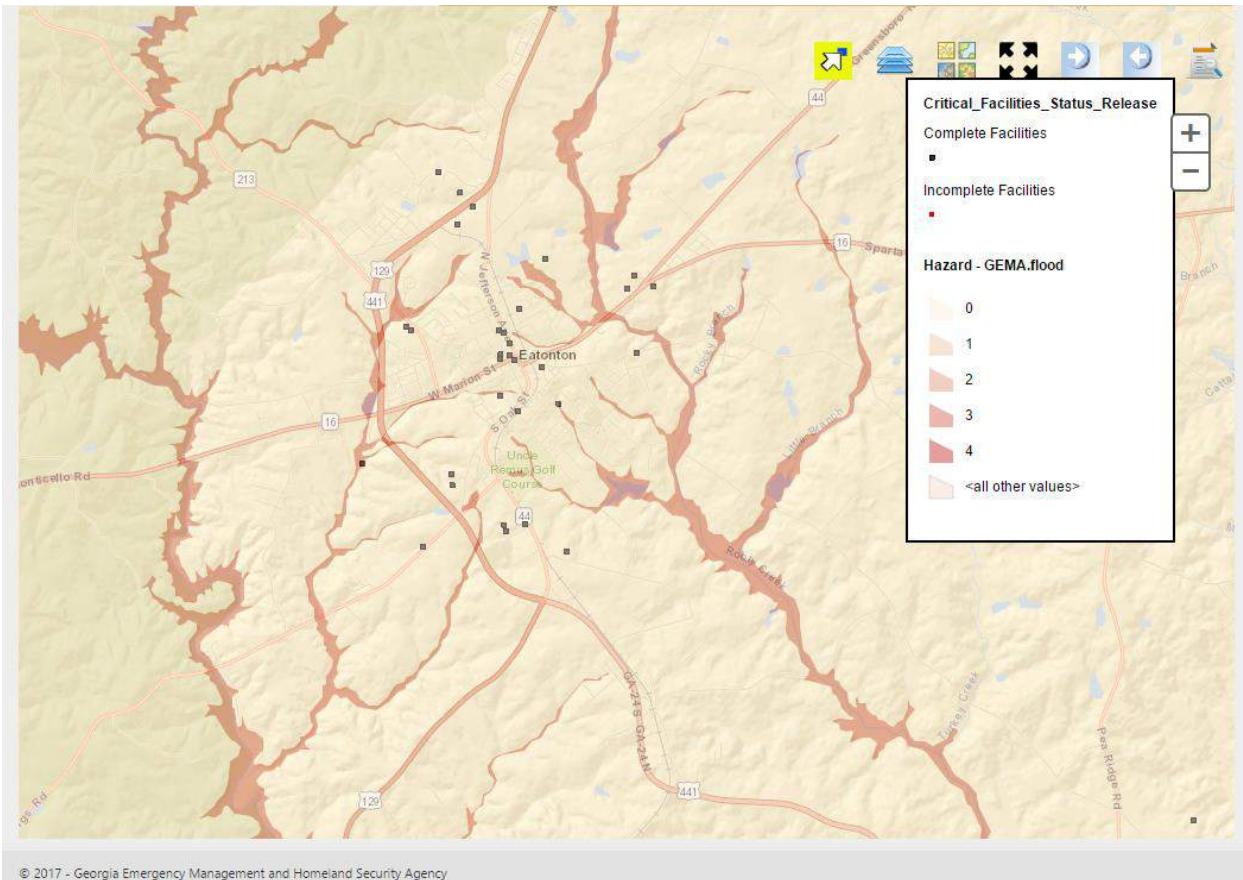


Description:

Simply put, flooding is an excess volume of water that is in a place or location where it is unwanted. Flooding is the most common and widespread of all natural disasters, except for fire according to FEMA. Additionally, it is typified by partial or complete inundation of two or more acres of normally dry land or two or more properties which have been inundated by overflow of inland or tidal waters, unusual and rapid accumulation of runoff or surface waters, mudflows, or dam failures. Only a few inches of rapidly moving water can sweep an adult off his or her feet and wash him or her downstream, causing serious injury or death. As evidenced, flooding can be slow-occurring events or they can happen almost instantaneously. Slower-occurring events occur after several days of heavy rains or winter snow thaws that result in water levels rising within a given geographic area. Faster-occurring events are visible as hurricanes slam against coastal regions, dams fail causing potentially millions of gallons of water to rush downstream, or localized flash flooding events. Flash flooding occurs from intense rains and can reach their full peak in only a few minutes. Occasionally, improperly maintained culverts, storm drainage, or curb and guttering can cause flash flooding conditions to be exacerbated.

Source: FEMA

FLOODING – CITY

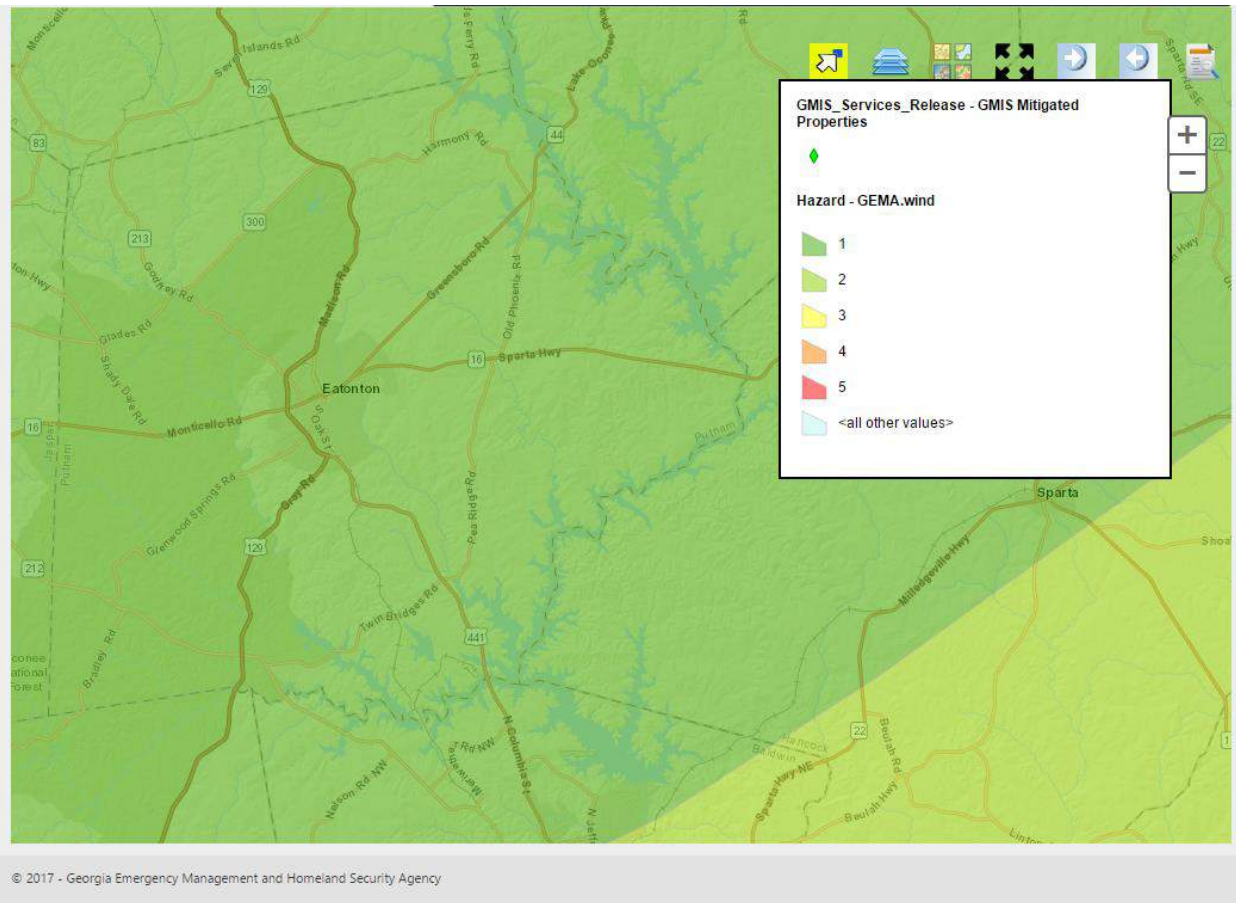


Flood Hazard Scores:

The flood hazard scores are derived from the FEMA Q3 “Zone” values. The Q3 layer is derived from the FEMA paper flood insurance rate maps. Although the resolution is 1:24,000, which has an allowable error of 40 feet, FEMA recommends using 250 feet as the potential error. This layer cannot be used for a legal flood determination.

Score	Original Value	Description
4	Floodway	Floodway (within zone AE)
	V	1% with Velocity no Base Flood Elevation (BFE)
	VE	1% with Velocity BFE
3	A	1% Annual Chance no BFE
	A99	1% Federal flood protection system
	AE	1% has BFE
	AH	1% Ponding has BFE
	AO	1% Sheet Flow has depths
	AR	1% Federal flood protection system
2	X500	0.2% Annual Chance
1	ANI	Area not included in survey
	D	Undetermined but possible
0	UNDES	Undesignated
	X	Outside Flood Zones

WIND HAZARD - COUNTYWIDE



Thunderstorm Winds

Description:

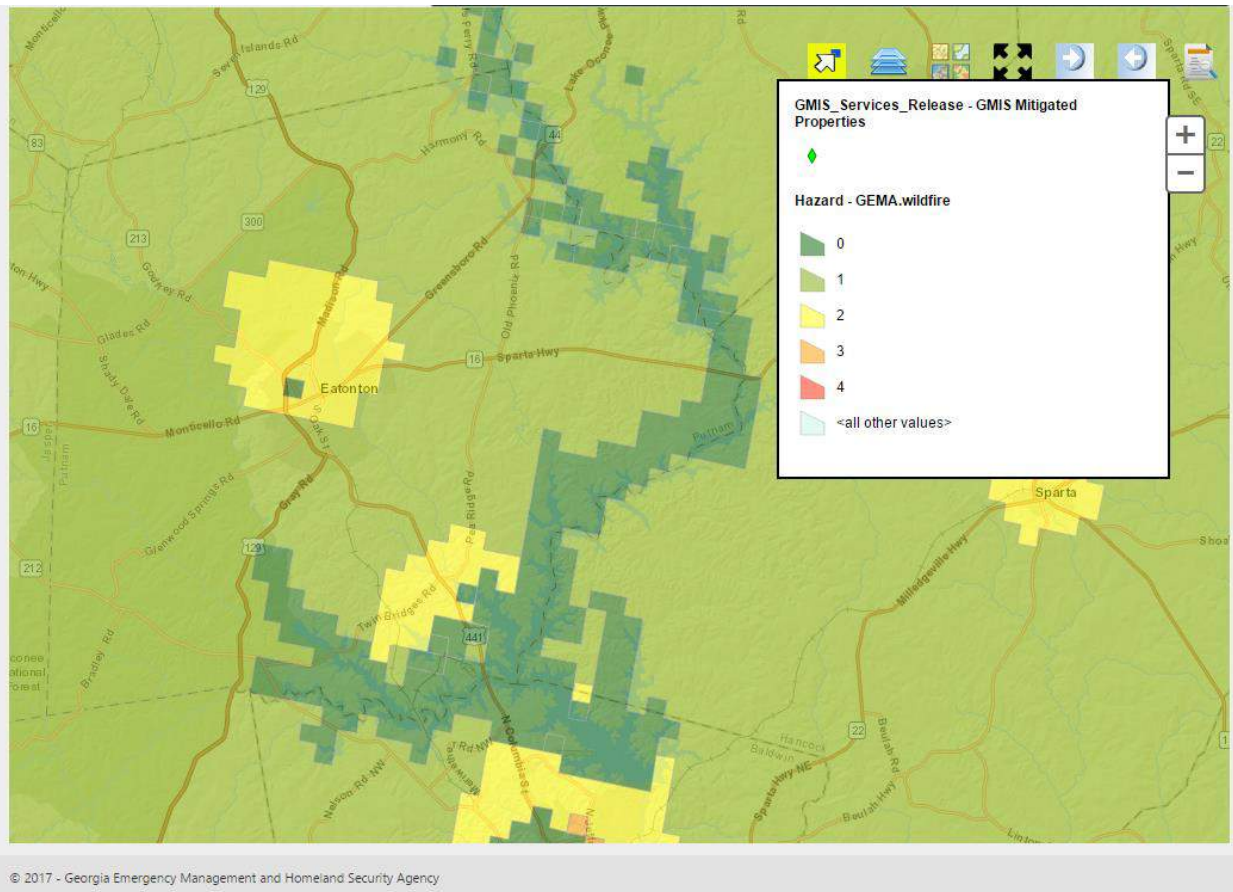
A severe thunderstorm as defined by the National Weather Service is a storm with hail equal to or greater than 3/4" in diameter or convective winds equal to or greater than 58 miles per hour. Even if a storm is not severe, it remains a potential killer. Lightning, flash flooding, hail, and general thunderstorm wind gusts pose a threat to life and/or property.

According to FEMA, all thunderstorms go through a three-stage life cycle, whether they become severe or not. The first stage, cumulus, occurs when thunderstorm development begins. Upward-moving air currents reach heights of around 20,000 feet above the ground. This stage is followed by the mature state, which is the most dangerous stage of the storm's cycle as it contains both upward and downward moving air currents with precipitation in the downdraft areas. A downdraft results from precipitation evaporating, which causes cooling. When the cool downdraft hits the ground, it spreads out and forms a gust front, which may include damaging winds called a downburst. At the top of the storm, the updraft rapidly decelerates and clouds spread out and form an anvil. The third, and final stage, is called the dissipating stage. Eventually excessive precipitation and downdraft will weaken the updraft. At the surface, the gust front will move away from the storm and cut off the inflow of energy into the storm.

The Wind Hazard Scores are based on the 2000 International Building Code, figure 1609 contours showing 3 second gust wind speeds with a 50 year return interval. The Northwest portion of the state scored an additional point for the 250 mph community tornado shelter design zone according to FEMA publications.

Score	Original Value	Description
5	> 120 mph	3 second gust greater than 120 mph
4	110 to 119 mph	
3	100 to 109 mph	
2	90 to 99 mph (or ZONE IV)	This score is also given to an area with Zone IV of the "Design Wind Speed Map for Community Shelters," representing an area exposed to 250 mph winds. This area is the Northwestern corner of the state.
1	< 90 mph	

WILDFIRE – COUNTYWIDE



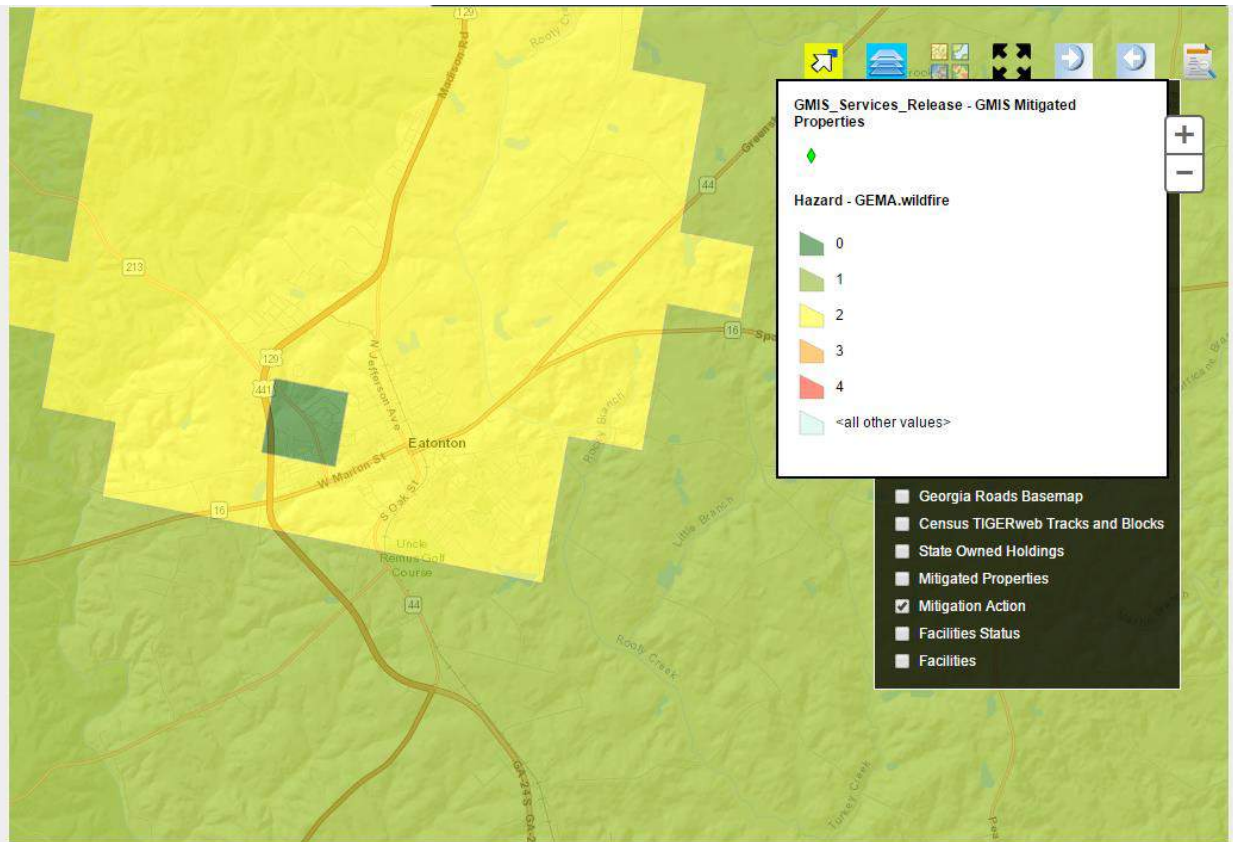
Description:

A wildland fire is an event where grassland, brush, and/or undergrowth is not intentionally set for the purpose of a prescribed burn by responsible entities. While healthy for the ecosystem in some cases, events where these fires rage out of control can place lives and property in extreme danger. The vast majority of these hazard events begin either through negligence or the deliberate setting of fires.

To alleviate the likelihood of a wildland fire occurring in the state of Georgia, the Georgia Forestry Commission (GFC) rates the fire hazard on a daily basis and informs the public of this through signs, bulletins, or websites. Additionally, the GFC has the authority to cease issuing burn permits if conditions are favorable for wildland fires to spread. Furthermore, the state of Georgia has begun enacting a burn ban to be in effect through summer months to limit the likelihood of wildland fires causing significant damages.

Source: Georgia Forestry Commission

WILDFIRE – CITY



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The Wildfire Risk Layer was based on the USDA Forest Service, RMRS Fire Sciences Laboratory “Wildland Fire Risk to Flammable Structures, V 1.0” map. Although this data was not intended for use at a detail greater than state-wide analysis, it has been included as the best available data on wildfire risk. The scores are based on the risk value from the original layer. The horizontal positional accuracy is unknown for this layer.

Score	Original Value	Description
4	5	High
3	4	Moderate
2	3	Low
1	2	Very Low
0	1	No Houses
	7	Agriculture
	8	Water
	9	City

Report for Flooding Countywide

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Putnam County	Putnam County Middle School	0	642506	2016	0	Education, K - 12
Putnam County	Putnam County Courthouse	0	2614734	2016	0	Government, Court House
Eatonton city	Eatonton City Hall	0	130776	2016	0	Government, City Hall
Putnam County	Putnam County Sheriff's Office	0	7326394	2016	0	Law Enforcement, Sheriff
Eatonton city	City of Eatonton Police Department	0	216806	2016	0	Government, Police
Eatonton city	Eatonton Fire Department	0	216806	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Sugar Creek Fire Station	3	242107	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Harmony Fire Station	0	583656	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Long Shoals Fire Dept	0	161807	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Flat Rock Fire Station	0	572675	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Twin Bridges Fire Station	0	208843	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Crooked Creek Fire Station	0	78986	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County High School	0	7591024	2016	0	Education, K - 12
Putnam County	Putnam General Hospital	0	979011	2016	0	Medical, Hospital
Putnam County	Eatonton-Putnam Water and Sewer Authority	0	292390	2016	0	NGO, Water/Sewer
Eatonton city	Eatonton Maintenance Department	0	740100	2016	0	Government, Transportation
Putnam County	Putnam County Public Works	0	570875	2016	0	Government, Transportation
Putnam County	Putnam County - Willard Fire Station	0	263725	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Rockville Fire Station	0	132606	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County Emergency Medical Services	0	97143	2016	0	Government, EMS
Eatonton city	Putnam County Primary School	0	3532000	2016	0	Education, K - 12

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Eatonton city	Putnam County Board of Education Office	0	7200	2016	0	Education, K - 12
Eatonton city	Stepping Stones Learning Center - First Baptist Church	0	854862	2016	0	Education, Day Care
Putnam County	Gatewood Academy, Inc.	0	314939	2016	0	Education, K - 12
Eatonton city	Putnam-Jasper Support Services	0	131159	2016	0	Government, Government Offices
Eatonton city	Department of Family & Children Services	0	126917	2016	0	Government, Government Offices
Eatonton city	Central Georgia Technical College	0	440307	2016	0	NGO, VoTech
Eatonton city	Eatonton Health & Rehabilitation	0	469336	2016	0	NGO, ALF
Eatonton city	Putnam County Administration Building	0	4580110	2016	0	Government, Government Offices
Putnam County	Lake Oconee Sheriff Precinct	0	118036	2016	0	Law Enforcement, Sheriff
Putnam County	Putnam County Animal Control	0	1693349	2016	0	Government, Government Offices
Eatonton city	Putnam County Elementary School	0	1144000	2016	0	Education, K - 12
Eatonton city	Lakeview Academy	0	367294	2016	0	Education, Day Care
Eatonton city	A Kids World of Peace Center	0	183670	2016	0	Education, Day Care
Eatonton city	Center of Peace Youth Center	3	339493	2016	0	Education, Day Care
Eatonton city	Putnam County Health Department	0	854438	2016	0	Medical, Clinics
Eatonton city	First United Methodist Pre-School	0	8400	2016	0	Education, Pre K
Eatonton city	Little Scholars Academy	0	340328	2016	0	Education, Pre K
Eatonton city	Harbor at Harmony Crossing Assisted Living	0	1715179	2016	0	NGO, ALF
Eatonton city	Eatonton-Putnam Water and Sewer Authority Eastside Sewer Plant & Facilities	0	5048305	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Westside Sewer Plant & Facilities	3	4165332	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Dennis Station Road Water Tank and Booster Pumps	0	1753060	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Highland Drive Water Tank	0	842320	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority North Madison Avenue Water Tank	0	838560	2016	0	Government, Water/Sewer

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Eatonton city	Eatonton-Putnam Water and Sewer Authority Industrial Boulevard Water Tank	0	1326180	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Jefferson Avenue Water Tank	0	1128280	2016	0	Government, Water/Sewer

Note: Building size, content value, content value year, and risk columns are omitted as there are no values reported in each.

Report for Landslide Countywide

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Putnam County	Putnam County Middle School	0	642506	2016	0	Education, K - 12
Putnam County	Putnam County Courthouse	0	2614734	2016	0	Government, Court House
Eatonton city	Eatonton City Hall	0	130776	2016	0	Government, City Hall
Putnam County	Putnam County Sheriff's Office	0	7326394	2016	0	Law Enforcement, Sheriff
Eatonton city	City of Eatonton Police Department	0	216806	2016	0	Government, Police
Eatonton city	Eatonton Fire Department	0	216806	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Sugar Creek Fire Station	0	242107	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Harmony Fire Station	0	583656	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Long Shoals Fire Dept	0	161807	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Flat Rock Fire Station	0	572675	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Twin Bridges Fire Station	0	208843	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Crooked Creek Fire Station	0	78986	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County High School	0	7591024	2016	0	Education, K - 12
Putnam County	Putnam General Hospital	0	979011	2016	0	Medical, Hospital
Putnam County	Eatonton-Putnam Water and Sewer Authority	0	292390	2016	0	NGO, Water/Sewer
Eatonton city	Eatonton Maintenance Department	0	740100	2016	0	Government, Transportation
Putnam County	Putnam County Public Works	0	570875	2016	0	Government, Transportation
Putnam County	Putnam County - Willard Fire Station	0	263725	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Rockville Fire Station	0	132606	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County Emergency Medical Services	0	97143	2016	0	Government, EMS
Eatonton city	Putnam County Primary School	0	3532000	2016	0	Education, K - 12

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Eatonton city	Putnam County Board of Education Office	0	7200	2016	0	Education, K - 12
Eatonton city	Stepping Stones Learning Center - First Baptist Church	0	854862	2016	0	Education, Day Care
Putnam County	Gatewood Academy, Inc.	0	314939	2016	0	Education, K - 12
Eatonton city	Putnam-Jasper Support Services	0	131159	2016	0	Government, Government Offices
Eatonton city	Department of Family & Children Services	0	126917	2016	0	Government, Government Offices
Eatonton city	Central Georgia Technical College	0	440307	2016	0	NGO, VoTech
Eatonton city	Eatonton Health & Rehabilitation	0	469336	2016	0	NGO, ALF
Eatonton city	Putnam County Administration Building	0	4580110	2016	0	Government, Government Offices
Putnam County	Lake Oconee Sheriff Precinct	0	118036	2016	0	Law Enforcement, Sheriff
Putnam County	Putnam County Animal Control	0	1693349	2016	0	Government, Government Offices
Eatonton city	Putnam County Elementary School	0	1144000	2016	0	Education, K - 12
Eatonton city	Lakeview Academy	0	367294	2016	0	Education, Day Care
Eatonton city	A Kids World of Peace Center	0	183670	2016	0	Education, Day Care
Eatonton city	Center of Peace Youth Center	0	339493	2016	0	Education, Day Care
Eatonton city	Putnam County Health Department	0	854438	2016	0	Medical, Clinics
Eatonton city	First United Methodist Pre-School	0	8400	2016	0	Education, Pre K
Eatonton city	Little Scholars Academy	0	340328	2016	0	Education, Pre K
Eatonton city	Harbor at Harmony Crossing Assisted Living	0	1715179	2016	0	NGO, ALF
Eatonton city	Eatonton-Putnam Water and Sewer Authority Eastside Sewer Plant & Facilities	0	5048305	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Westside Sewer Plant & Facilities	0	4165332	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Dennis Station Road Water Tank and Booster Pumps	0	1753060	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Highland Drive Water Tank	0	842320	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority North Madison Avenue Water Tank	0	838560	2016	0	Government, Water/Sewer

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Eatonton city	Eatonton-Putnam Water and Sewer Authority Industrial Boulevard Water Tank	0	1326180	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Jefferson Avenue Water Tank	0	1128280	2016	0	Government, Water/Sewer

Note: Building size, content value, content value year, and risk columns are omitted as there are no values reported in each.

Report for Seismic Activity Countywide

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Putnam County	Putnam County Middle School	2	642506	2016	0	Education, K - 12
Putnam County	Putnam County Courthouse	2	2614734	2016	0	Government, Court House
Eatonton city	Eatonton City Hall	2	130776	2016	0	Government, City Hall
Putnam County	Putnam County Sheriff's Office	2	7326394	2016	0	Law Enforcement, Sheriff
Eatonton city	City of Eatonton Police Department	2	216806	2016	0	Government, Police
Eatonton city	Eatonton Fire Department	2	216806	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Sugar Creek Fire Station	2	242107	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Harmony Fire Station	2	583656	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Long Shoals Fire Dept	2	161807	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Flat Rock Fire Station	2	572675	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Twin Bridges Fire Station	2	208843	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Crooked Creek Fire Station	2	78986	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County High School	2	7591024	2016	0	Education, K - 12
Putnam County	Putnam General Hospital	2	979011	2016	0	Medical, Hospital
Putnam County	Eatonton-Putnam Water and Sewer Authority	2	292390	2016	0	NGO, Water/Sewer
Eatonton city	Eatonton Maintenance Department	2	740100	2016	0	Government, Transportation
Putnam County	Putnam County Public Works	2	570875	2016	0	Government, Transportation
Putnam County	Putnam County - Willard Fire Station	2	263725	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Rockville Fire Station	2	132606	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County Emergency Medical Services	2	97143	2016	0	Government, EMS
Eatonton city	Putnam County Primary School	2	3532000	2016	0	Education, K - 12

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Eatonton city	Putnam County Board of Education Office	2	7200	2016	0	Education, K - 12
Eatonton city	Stepping Stones Learning Center - First Baptist Church	2	854862	2016	0	Education, Day Care
Putnam County	Gatewood Academy, Inc.	2	314939	2016	0	Education, K - 12
Eatonton city	Putnam-Jasper Support Services	2	131159	2016	0	Government, Government Offices
Eatonton city	Department of Family & Children Services	2	126917	2016	0	Government, Government Offices
Eatonton city	Central Georgia Technical College	2	440307	2016	0	NGO, VoTech
Eatonton city	Eatonton Health & Rehabilitation	2	469336	2016	0	NGO, ALF
Eatonton city	Putnam County Administration Building	2	4580110	2016	0	Government, Government Offices
Putnam County	Lake Oconee Sheriff Precinct	2	118036	2016	0	Law Enforcement, Sheriff
Putnam County	Putnam County Animal Control	2	1693349	2016	0	Government, Government Offices
Eatonton city	Putnam County Elementary School	2	1144000	2016	0	Education, K - 12
Eatonton city	Lakeview Academy	2	367294	2016	0	Education, Day Care
Eatonton city	A Kids World of Peace Center	2	183670	2016	0	Education, Day Care
Eatonton city	Center of Peace Youth Center	2	339493	2016	0	Education, Day Care
Eatonton city	Putnam County Health Department	2	854438	2016	0	Medical, Clinics
Eatonton city	First United Methodist Pre-School	2	8400	2016	0	Education, Pre K
Eatonton city	Little Scholars Academy	2	340328	2016	0	Education, Pre K
Eatonton city	Harbor at Harmony Crossing Assisted Living	2	1715179	2016	0	NGO, ALF
Eatonton city	Eatonton-Putnam Water and Sewer Authority Eastside Sewer Plant & Facilities	2	5048305	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Westside Sewer Plant & Facilities	2	4165332	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Dennis Station Road Water Tank and Booster Pumps	2	1753060	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Highland Drive Water Tank	2	842320	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority North Madison Avenue Water Tank	2	838560	2016	0	Government, Water/Sewer

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Eatonton city	Eatonton-Putnam Water and Sewer Authority Industrial Boulevard Water Tank	2	1326180	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Jefferson Avenue Water Tank	2	1128280	2016	0	Government, Water/Sewer

Note: Building size, content value, content value year, and risk columns are omitted as there are no values reported in each.

Report for SLOSH Countywide

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Putnam County	Putnam County Middle School	0	642506	2016	0	Education, K - 12
Putnam County	Putnam County Courthouse	0	2614734	2016	0	Government, Court House
Eatonton city	Eatonton City Hall	0	130776	2016	0	Government, City Hall
Putnam County	Putnam County Sheriff's Office	0	7326394	2016	0	Law Enforcement, Sheriff
Eatonton city	City of Eatonton Police Department	0	216806	2016	0	Government, Police
Eatonton city	Eatonton Fire Department	0	216806	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Sugar Creek Fire Station	0	242107	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Harmony Fire Station	0	583656	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Long Shoals Fire Dept	0	161807	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Flat Rock Fire Station	0	572675	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Twin Bridges Fire Station	0	208843	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Crooked Creek Fire Station	0	78986	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County High School	0	7591024	2016	0	Education, K - 12
Putnam County	Putnam General Hospital	0	979011	2016	0	Medical, Hospital
Putnam County	Eatonton-Putnam Water and Sewer Authority	0	292390	2016	0	NGO, Water/Sewer
Eatonton city	Eatonton Maintenance Department	0	740100	2016	0	Government, Transportation
Putnam County	Putnam County Public Works	0	570875	2016	0	Government, Transportation
Putnam County	Putnam County - Willard Fire Station	0	263725	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Rockville Fire Station	0	132606	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County Emergency Medical Services	0	97143	2016	0	Government, EMS
Eatonton city	Putnam County Primary School	0	3532000	2016	0	Education, K - 12

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Eatonton city	Putnam County Board of Education Office	0	7200	2016	0	Education, K - 12
Eatonton city	Stepping Stones Learning Center - First Baptist Church	0	854862	2016	0	Education, Day Care
Putnam County	Gatewood Academy, Inc.	0	314939	2016	0	Education, K - 12
Eatonton city	Putnam-Jasper Support Services	0	131159	2016	0	Government, Government Offices
Eatonton city	Department of Family & Children Services	0	126917	2016	0	Government, Government Offices
Eatonton city	Central Georgia Technical College	0	440307	2016	0	NGO, VoTech
Eatonton city	Eatonton Health & Rehabilitation	0	469336	2016	0	NGO, ALF
Eatonton city	Putnam County Administration Building	0	4580110	2016	0	Government, Government Offices
Putnam County	Lake Oconee Sheriff Precinct	0	118036	2016	0	Law Enforcement, Sheriff
Putnam County	Putnam County Animal Control	0	1693349	2016	0	Government, Government Offices
Eatonton city	Putnam County Elementary School	0	1144000	2016	0	Education, K - 12
Eatonton city	Lakeview Academy	0	367294	2016	0	Education, Day Care
Eatonton city	A Kids World of Peace Center	0	183670	2016	0	Education, Day Care
Eatonton city	Center of Peace Youth Center	0	339493	2016	0	Education, Day Care
Eatonton city	Putnam County Health Department	0	854438	2016	0	Medical, Clinics
Eatonton city	First United Methodist Pre-School	0	8400	2016	0	Education, Pre K
Eatonton city	Little Scholars Academy	0	340328	2016	0	Education, Pre K
Eatonton city	Harbor at Harmony Crossing Assisted Living	0	1715179	2016	0	NGO, ALF
Eatonton city	Eatonton-Putnam Water and Sewer Authority Eastside Sewer Plant & Facilities	0	5048305	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Westside Sewer Plant & Facilities	0	4165332	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Dennis Station Road Water Tank and Booster Pumps	0	1753060	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Highland Drive Water Tank	0	842320	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority North Madison Avenue Water Tank	0	838560	2016	0	Government, Water/Sewer

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Eatonton city	Eatonton-Putnam Water and Sewer Authority Industrial Boulevard Water Tank	0	1326180	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Jefferson Avenue Water Tank	0	1128280	2016	0	Government, Water/Sewer

Note: Building size, content value, content value year, and risk columns are omitted as there are no values reported in each.

Report for Wildfire Countywide

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Putnam County	Putnam County Middle School	2	642506	2016	0	Education, K - 12
Putnam County	Putnam County Courthouse	2	2614734	2016	0	Government, Court House
Eatonton city	Eatonton City Hall	2	130776	2016	0	Government, City Hall
Putnam County	Putnam County Sheriff's Office	1	7326394	2016	0	Law Enforcement, Sheriff
Eatonton city	City of Eatonton Police Department	2	216806	2016	0	Government, Police
Eatonton city	Eatonton Fire Department	2	216806	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Sugar Creek Fire Station	1	242107	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Harmony Fire Station	0	583656	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Long Shoals Fire Dept	1	161807	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Flat Rock Fire Station	2	572675	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Twin Bridges Fire Station	0	208843	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Crooked Creek Fire Station	1	78986	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County High School	1	7591024	2016	0	Education, K - 12
Putnam County	Putnam General Hospital	2	979011	2016	0	Medical, Hospital
Putnam County	Eatonton-Putnam Water and Sewer Authority	0	292390	2016	0	NGO, Water/Sewer
Eatonton city	Eatonton Maintenance Department	1	740100	2016	0	Government, Transportation
Putnam County	Putnam County Public Works	2	570875	2016	0	Government, Transportation
Putnam County	Putnam County - Willard Fire Station	1	263725	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Rockville Fire Station	0	132606	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County Emergency Medical Services	1	97143	2016	0	Government, EMS
Eatonton city	Putnam County Primary School	1	3532000	2016	0	Education, K - 12

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Eatonton city	Putnam County Board of Education Office	1	7200	2016	0	Education, K - 12
Eatonton city	Stepping Stones Learning Center - First Baptist Church	2	854862	2016	0	Education, Day Care
Putnam County	Gatewood Academy, Inc.	2	314939	2016	0	Education, K - 12
Eatonton city	Putnam-Jasper Support Services	2	131159	2016	0	Government, Government Offices
Eatonton city	Department of Family & Children Services	0	126917	2016	0	Government, Government Offices
Eatonton city	Central Georgia Technical College	2	440307	2016	0	NGO, VoTech
Eatonton city	Eatonton Health & Rehabilitation	2	469336	2016	0	NGO, ALF
Eatonton city	Putnam County Administration Building	2	4580110	2016	0	Government, Government Offices
Putnam County	Lake Oconee Sheriff Precinct	0	118036	2016	0	Law Enforcement, Sheriff
Putnam County	Putnam County Animal Control	1	1693349	2016	0	Government, Government Offices
Eatonton city	Putnam County Elementary School	2	1144000	2016	0	Education, K - 12
Eatonton city	Lakeview Academy	1	367294	2016	0	Education, Day Care
Eatonton city	A Kids World of Peace Center	2	183670	2016	0	Education, Day Care
Eatonton city	Center of Peace Youth Center	2	339493	2016	0	Education, Day Care
Eatonton city	Putnam County Health Department	2	854438	2016	0	Medical, Clinics
Eatonton city	First United Methodist Pre-School	2	8400	2016	0	Education, Pre K
Eatonton city	Little Scholars Academy	1	340328	2016	0	Education, Pre K
Eatonton city	Harbor at Harmony Crossing Assisted Living	1	1715179	2016	0	NGO, ALF
Eatonton city	Eatonton-Putnam Water and Sewer Authority Eastside Sewer Plant & Facilities	2	5048305	2016	0	Government, Water/Sewer
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Eatonton city	Eatonton-Putnam Water and Sewer Authority Highland Drive Water Tank	2	842320	2016	0	Government, Water/Sewer
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Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Eatonton city	Eatonton-Putnam Water and Sewer Authority Industrial Boulevard Water Tank	1	1326180	2016	0	Government, Water/Sewer
Eatonton city	Eatonton-Putnam Water and Sewer Authority Jefferson Avenue Water Tank	2	1128280	2016	0	Government, Water/Sewer

Note: Building size, content value, content value year, and risk columns are omitted as there are no values reported in each.

Report for Wind Hazard Countywide

Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
Putnam County	Putnam County Middle School	1	642506	2016	0	Education, K - 12
Putnam County	Putnam County Courthouse	1	2614734	2016	0	Government, Court House
Eatonton city	Eatonton City Hall	1	130776	2016	0	Government, City Hall
Putnam County	Putnam County Sheriff's Office	1	7326394	2016	0	Law Enforcement, Sheriff
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Putnam County	Putnam County - Flat Rock Fire Station	1	572675	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Twin Bridges Fire Station	1	208843	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Crooked Creek Fire Station	1	78986	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County High School	1	7591024	2016	0	Education, K - 12
Putnam County	Putnam General Hospital	1	979011	2016	0	Medical, Hospital
Putnam County	Eatonton-Putnam Water and Sewer Authority	1	292390	2016	0	NGO, Water/Sewer
Eatonton city	Eatonton Maintenance Department	1	740100	2016	0	Government, Transportation
Putnam County	Putnam County Public Works	1	570875	2016	0	Government, Transportation
Putnam County	Putnam County - Willard Fire Station	1	263725	2016	0	Emergency Services, Fire Fighters
Putnam County	Putnam County - Rockville Fire Station	1	132606	2016	0	Emergency Services, Fire Fighters
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Eatonton city	First United Methodist Pre-School	1	8400	2016	0	Education, Pre K
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Jurisdiction	Name	Hazard Score	Value	Replace Value Year	Functional Use value	Facility type
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Eatonton city	Eatonton-Putnam Water and Sewer Authority Jefferson Avenue Water Tank	1	1128280	2016	0	Government, Water/Sewer

Note: Building size, content value, content value year, and risk columns are omitted as there are no values reported in each.



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Introduction

The Federal Disaster Mitigation Act of 2000 (DMA2K) requires state, local, and tribal governments to develop and maintain a mitigation plan to be eligible for certain federal disaster assistance and hazard mitigation funding programs.

Mitigation seeks to reduce a hazard's impacts, which may include loss of life, property damage, disruption to local and regional economies, and the expenditure of public and private funds for recovery. Sound mitigation must be based on a sound risk assessment that quantifies the potential losses of a disaster by assessing the vulnerability of buildings, infrastructure, and people.

In recognition of the importance of planning in mitigation activities, FEMA Hazus-MH, a powerful disaster risk assessment tool based on geographic information systems (GIS). This tool enables communities of all sizes to predict estimated losses from floods, hurricanes, earthquakes, and other related phenomena and to measure the impact of various mitigation practices that might help reduce those losses.

In 2017 the Georgia Department of Emergency Management partnered with Middle Georgia Regional Commission to develop a detailed risk assessment focused on defining hurricane, riverine flood and tornado in Putnam County, Georgia. This assessment identifies the characteristics and potential consequences of the disaster, how much of the community could be affected by the disaster, and the impact on community assets.

Risk Assessment Process Overview

Hazus-MH Version 2.2 SP1 was used to perform the analyses for Putnam County. The Hazus-MH application includes default data for every county in the US. This Hazus-MH data was derived from a variety of national sources and in some cases the data are also several years old. Whenever possible, using local provided data is preferred. Putnam County provided building inventory information from the county's property tax assessment system. This section describes the changes made to the default Hazus-MH inventory and the modeling parameters used for each scenario.

County Inventory Changes

The default Hazus-MH site-specific point inventory was updated using data compiled from the Georgia Emergency Management Agency (GEMA). The default Hazus-MH aggregate inventory (General Building Stock) was also updated prior to running the scenarios. Reported losses reflect the updated data sets.

General Building Stock Updates

General Building Stock (GBS) is an inventory category that consists of aggregated data (grouped by census geography — tract or block). Hazus-MH generates a combination of site-specific and aggregated loss estimates based on the given analysis and user input.

The GBS records for Putnam County were replaced with data derived from parcel and property assessment data obtained from Putnam County. The county provided property assessment data was current as of February 2017 and the parcel data current as of February 2017. Records without improvements were deleted. The parcel boundaries were converted to parcel points located in the centroids of each parcel boundary; then, each parcel point was linked to an assessor record based upon matching parcel numbers. The parcel assessor match-rate for Putnam

County is 96.6%. The generated building inventory represents the approximate locations (within a parcel) of structures. The building inventory was aggregated by census block. Both the tract and block tables were updated. Table 1 shows the results of the changes to the GBS tables by occupancy class.

Table 1: GBS Building Exposure Updates by Occupancy Class*

Occupancy Classification	Default Count	Updated Count	Default Exposure	Updated Exposure
Agricultural	36	22	\$9,162,000	\$70,523,000
Commercial	420	475	\$226,770,000	\$365,714,000
Education	14	9	\$15,258,000	\$6,763,000
Government	12	24	\$6,539,000	\$15,865,000
Industrial	152	315	\$156,966,000	\$408,951,000
Religious	72	76	\$45,920,000	\$62,473,000
Residential	12,523	14,327	\$2,168,297,000	\$1,896,153,000
Total	13,229	15,248	\$2,628,912,000	\$2,826,442,000

*The exposure values represent the total number and replacement cost for all Putnam County Buildings

For Putnam County, the updated GBS was used to calculate hurricane wind losses. The flood losses and tornado losses were calculated from building inventory modeled in Hazus-MH as User-Defined Facility (UDF)¹, or site-specific points. Figure 1 shows the distribution of buildings as points based on the county provided data.

¹ The UDF inventory category in Hazus-MH allows the user to enter site-specific data in place of GBS data.

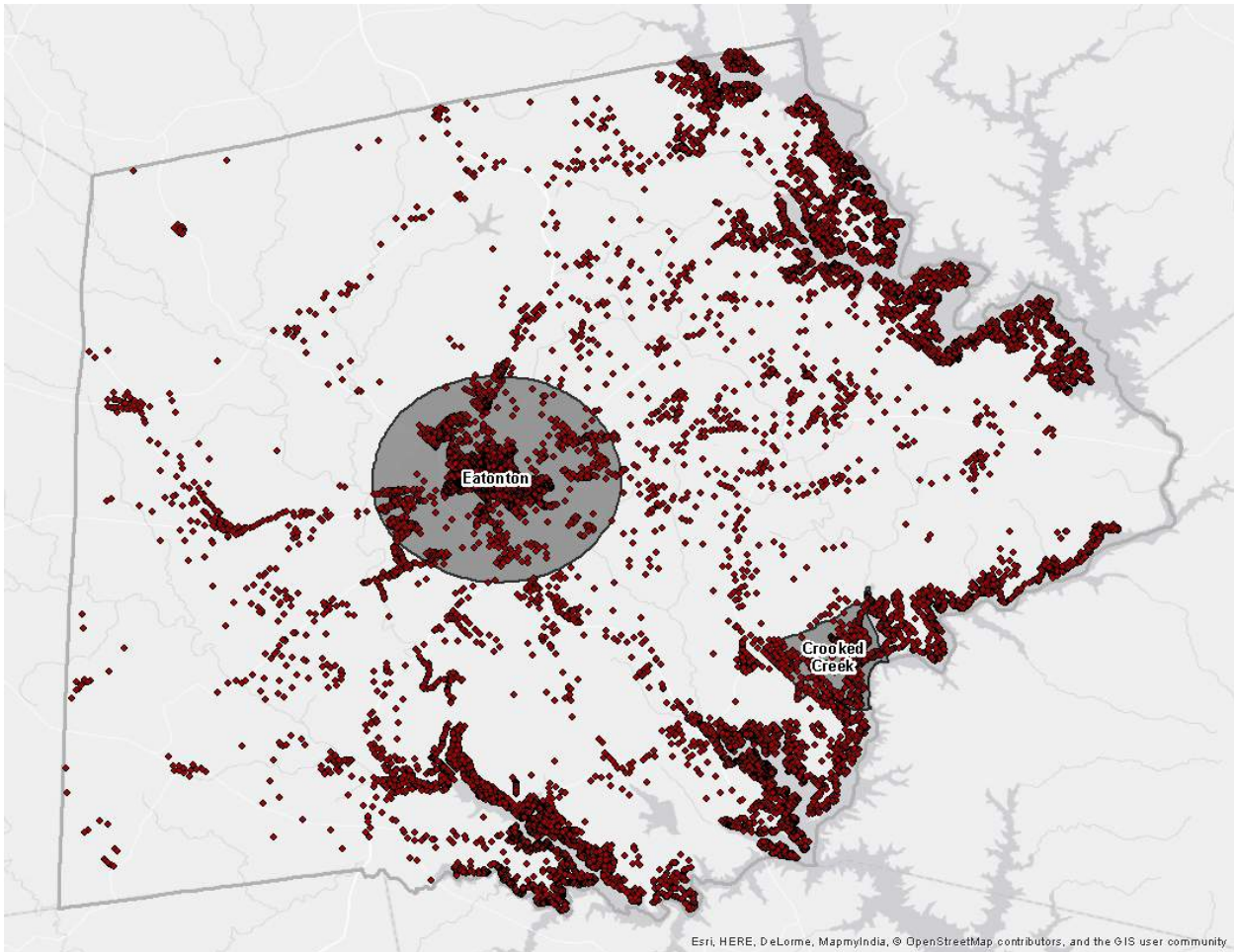


Figure 1: Putnam County Overview

Essential Facility Updates

The default Hazus-MH essential facility data was updated to reflect improved information available in the Georgia Mitigation Information System (GMIS) as of July 2017. For these risk analyses, only GMIS data for buildings that Hazus-MH classified as Essential Facilities was integrated into Hazus-MH because the application provides specialized reports for these five types of facilities. Essential Facility inventory was updated for the analysis conducted for this report. The following table summarizes the counts and exposures, where available, by Essential Facility classification of the updated data for the county.

Essential facilities include:

- Care facilities
- EOCs
- Fire stations
- Police stations
- Schools

Table 2: Updated Essential Facilities

Classification	Updated Count	Updated Exposure
Putnam County		
EOC	0	\$0
Care	1	\$10,315,000
Fire	10	\$2,552,000
Police	2	\$2,464,000
School	5	\$48,501,000
Total	18	\$63,832,000

Assumptions and Exceptions

Hazus-MH loss estimates may be impacted by certain assumptions and process variances made in this risk assessment.

- The Putnam County analysis used Hazus-MH Version 2.2 SP1, which was released by FEMA in May 2015.
- County provided parcel and property assessment data may not fully reflect all buildings in the county. For example, some counties do not report not-for-profit buildings such as government buildings, schools and churches in their property assessment data. This data was used to update the General Building Stock as well as the User Defined Facilities applied in this risk assessment.
- GBS updates from assessor data will skew loss calculations. The following attributes were defaulted or calculated:
 - Foundation Type was set from Occupancy Class
 - First Floor Height was set from Foundation Type
 - Content Cost was calculated from Replacement Cost
- It is assumed that the buildings are located at the centroid of the parcel.
- The essential facilities extracted from the GMIS were only used in the portion of the analysis designated as essential facility damage. They were not used in the update of the General Building Stock or the User Defined Facility inventory.

The hazard models included in this risk assessment included:

- Hurricane assessment which was comprised of a wind only damage assessment
- Flood assessment based on the 1% annual chance event that includes riverine assessments
- Tornado assessment based on GIS modeling

Hurricane Risk Assessment

Hazard Definition

The National Hurricane Center describes a hurricane as a tropical cyclone in which the maximum sustained wind is, at minimum, 74 miles per hour (mph)². The term hurricane is used for Northern Hemisphere tropical cyclones east of the International Dateline to the Greenwich Meridian. The term typhoon is used for Pacific tropical cyclones north of the Equator west of the International Dateline. Hurricanes in the Atlantic Ocean, Gulf of Mexico, and Caribbean form between June and November with the peak of hurricane season occurring in the middle of September. Figure 2 shows that many hurricanes have impacted the Atlantic and Gulf coasts of the United States.

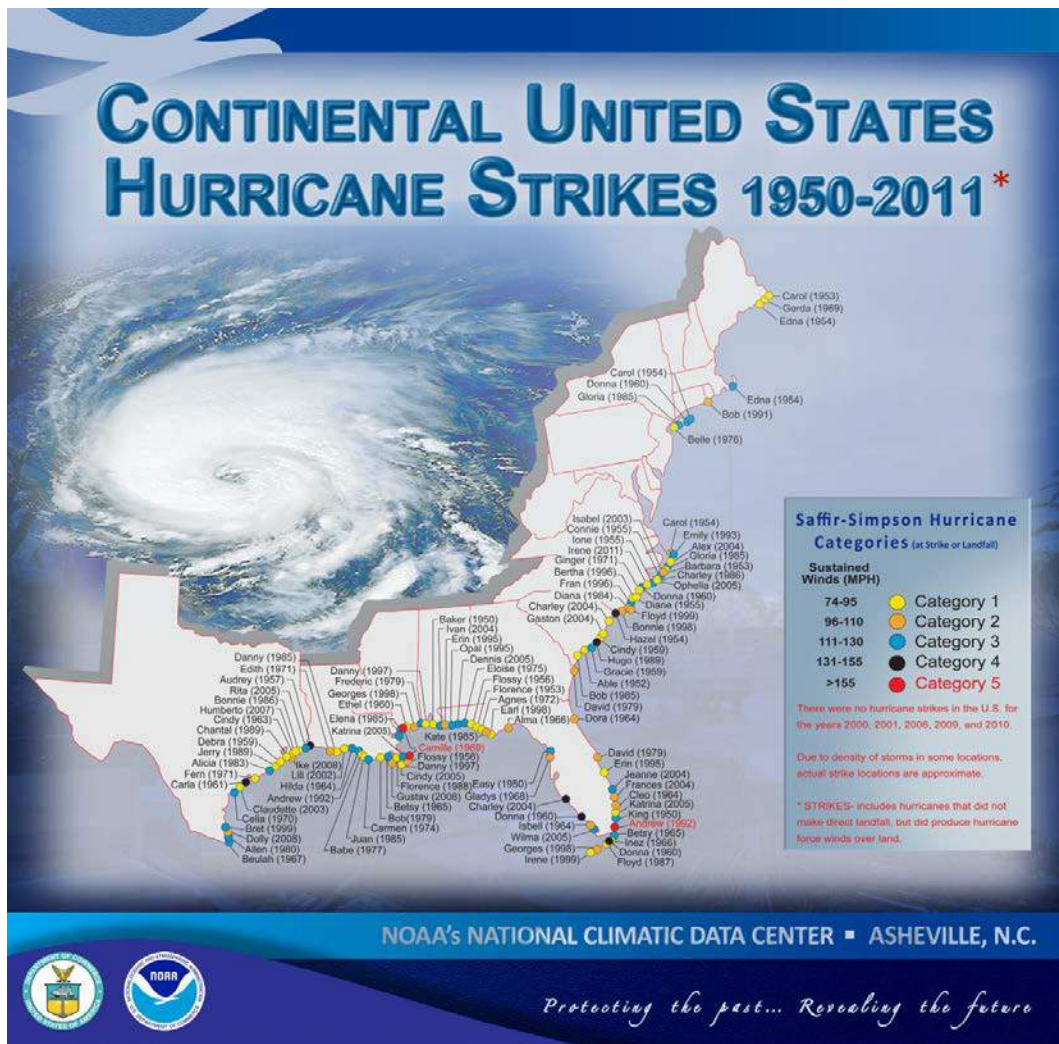


Figure 2: Continental United States Hurricane Strikes: 1950 to 2011³

² National Hurricane Center (2011). "Glossary of NHC Terms." National Oceanic and Atmospheric Administration. <http://www.nhc.noaa.gov/aboutgloss.shtml#h>. Retrieved 2-23-2012.

³ Source: NOAA National Climatic Data Center

Hurricane intensities are measured using the Saffir-Simpson Hurricane Wind Scale (Table 3). This scale is a 1 to 5 categorization based on the hurricane's intensity at the indicated time.

Table 3: Saffir-Simpson Hurricane Wind Scale

Category	Wind Speed (mph)	Damage
1	74 – 95	Very dangerous winds will produce some damage
2	96 – 110	Extremely dangerous winds will cause extensive damage
3	111 - 130	Devastating damage will occur
4	131 -155	Catastrophic damage will occur
5	> 155	Catastrophic damage will occur

Hurricanes bring a complex set of impacts. The winds from a hurricane produce a rise in the water level at landfall called storm surge. Storm surges produce coastal flooding effects that can be as damaging as the hurricane's winds. Hurricanes bring very intense inland riverine flooding. Hurricanes can also produce tornadoes that can add to the wind damages inland. In this risk assessment, only hurricane winds, and coastal storm surge are considered.

The National Oceanic and Atmospheric Administration's National Hurricane Center created the HURDAT database, which contains all of the tracks of tropical systems since the mid-1800s. This database was used to document the number of tropical systems that have affected Putnam County by creating a 20-mile buffer around the county to include storms that didn't make direct landfall in Putnam County but impacted the county. Since 1851, Putnam County has had 23 tropical systems within 20 miles of its county borders (Table 4).

Table 4: Tropical Systems affecting Putnam County⁴

Year	Month	Day	Name	Wind (Knots)	Category
1852	August	27	UNNAMED	40	TS
1859	September	16	UNNAMED	40	TS
1882	September	10	UNNAMED	40	TS
1882	September	11	UNNAMED	40	TS
1889	September	24	UNNAMED	45	TS
1893	October	3	UNNAMED	45	TS
1896	July	8	UNNAMED	45	TS
1896	July	8	UNNAMED	35	TS
1901	September	28	UNNAMED	35	ET
1928	August	10	UNNAMED	30	TS
1928	August	11	UNNAMED	30	TS
1947	October	8	UNNAMED	20	TS

⁴ Atlantic Oceanic and Meteorological Laboratory (2015). "Data Center." National Oceanic and Atmospheric Administration. http://www.aoml.noaa.gov/hrd/data_sub/re_anal.html. Retrieved 12-2-2015.

1947	October	9	UNNAMED	20	TS
1959	June	2	ARLENE	20	TS
1994	August	17	BERYL	20	TS
1995	August	27	JERRY	20	TS
2000	September	22	HELENE	25	TS
2000	September	23	HELENE	25	TS
2001	June	12	ALLISON	20	SS
2004	September	27	JEANNE	30	TS
2004	September	28	JEANNE	25	TS

Category Definitions:

TS – Tropical storm

TD – Tropical depression

CAT_1 – Category 1 (same format for 2, 3, and 4)

E – Extra-tropical cyclone

Probabilistic Hurricane Scenario

The following probabilistic wind damage risk assessment modeled a Tropical Storm with maximum winds of 73 mph.

Wind Damage Assessment

Wind losses were determined from probabilistic models run for the Tropical Storm which equates to the 1% chance storm event. Figure 3 shows wind speeds for the modeled hurricane.

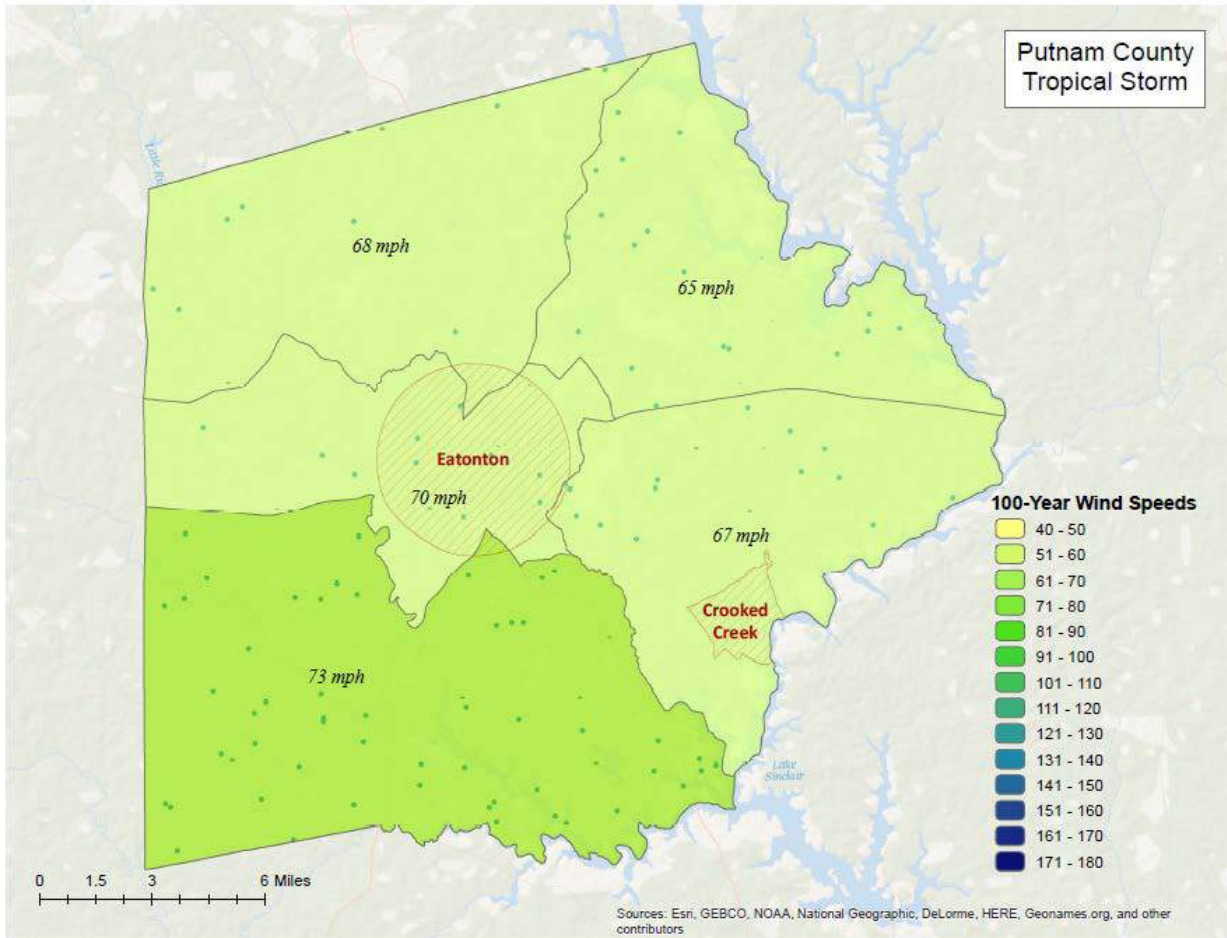


Figure 3: Wind Speeds by Storm Category

Wind-Related Building Damages

Buildings in Putnam County are vulnerable to storm events, and the cost to rebuild may have significant consequences to the community. The following table shows a summary of the results of wind-related building damage in Putnam County for the Tropical Storm (100 Year Event). The loss ratio expresses building losses as a percentage of total building replacement cost in the county. Figure 4 illustrates the building loss ratios of the modeled Tropical Storm.

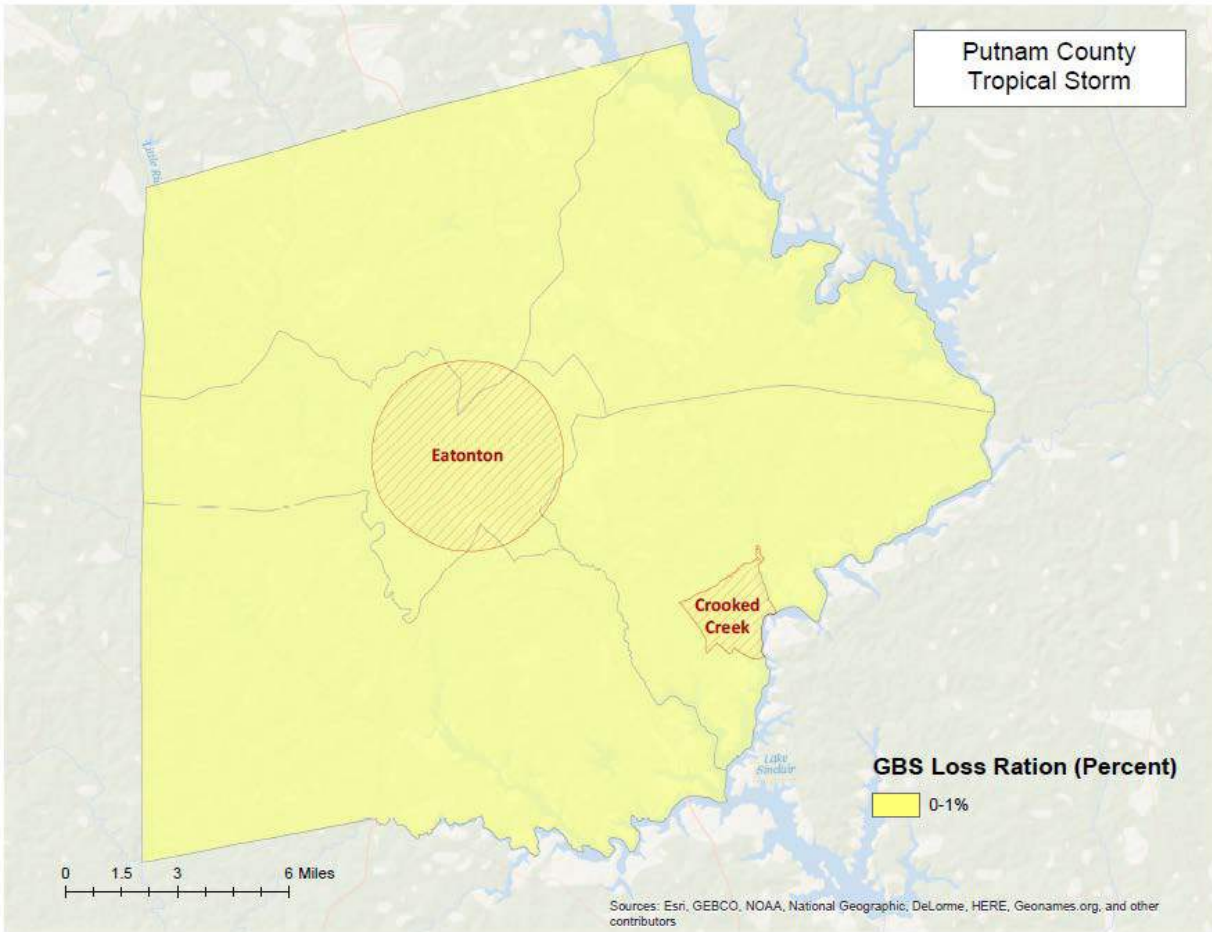


Figure 4: Tropical Storm Wind GBS Loss Ratios

Table 5 shows the Hurricane Wind Building Damage results including the number of buildings damaged, total building damage, and economic loss.

Table 5: Hurricane Wind Building Damage

Storm Classification	Number of Damaged Buildings	Building Damages	Total Economic Loss	Loss Ratio
Tropical Storm	31	\$2,351,000	\$3,472,000	0.08

Essential Facility Losses

Essential facilities are also vulnerable to storm events, and the potential loss of functionality may have significant consequences to the community. Hazus-MH identified the essential facilities that may be moderately or severely damaged by winds. The results are compiled in Table 6.

There are 18 essential facilities in Putnam County.

Classification	Number
EOCs	0
Fire Stations	10
Care Facilities	1
Police Stations	2
Schools	5

Table 6: Wind-Damaged Essential Facility Losses

Storm Classification	Facilities Moderately Damaged (>50%)	Facilities Completely Damaged (>50%)	Facilities with expected loss (<1day)
Tropical Storm	0	0	18

Shelter Requirements

Hazus-MH estimates the number of households evacuated from buildings with severe damage from high velocity winds as well as the number of people who will require short-term sheltering. There were no shelter requirements resulting from the current scenario.

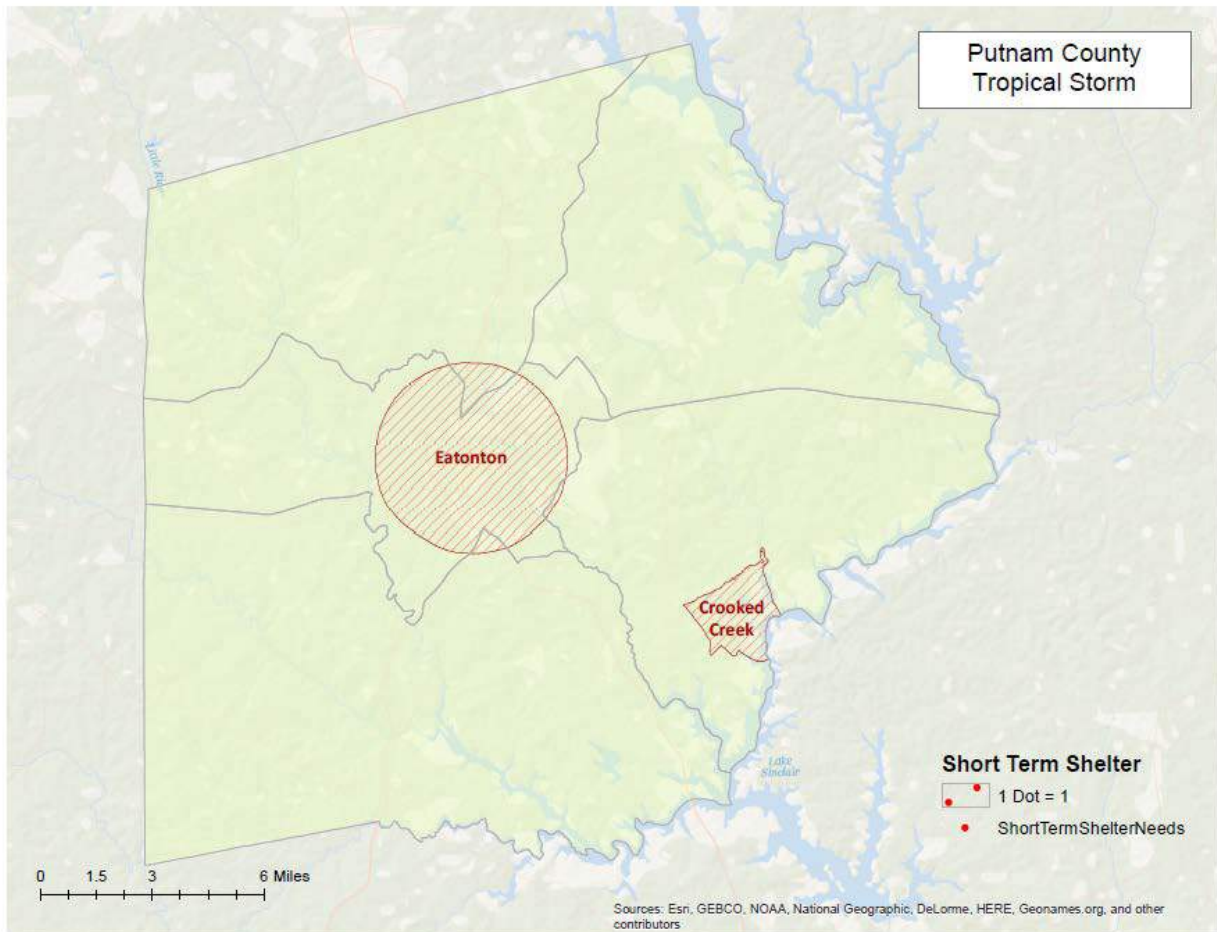


Figure 5: Hurricane Wind Shelter Requirements

Debris Generated from Hurricane Wind

Hazus-MH estimates the amount of debris that will be generated by high velocity hurricane winds and quantifies it into three broad categories to determine the material handling equipment needed:

- Reinforced Concrete and Steel Debris

- Brick and Wood and Other Building Debris
- Tree Debris

Different material handling equipment is required for each category of debris. The estimates of debris for this scenario are listed in Table 7. The amount of hurricane wind related tree debris that is estimated to require pick up at the public’s expense is listed in the eligible tree debris column.

Table 7: Wind-Related Debris Weight (Tons)

Storm Classification	Brick, Wood, and Other	Reinforced Concrete/Steel	Tree Debris	Other Tree Debris	Total
Tropical Storm	127	0	1,392	21,745	23,264

Figure 6 shows the distribution of all wind related debris resulting from a Tropical Storm. Each dot represents 12.508 tons of debris within the census tract in which it is located. The dots are randomly distributed within each census tract and therefore do not represent the specific location of debris sites.

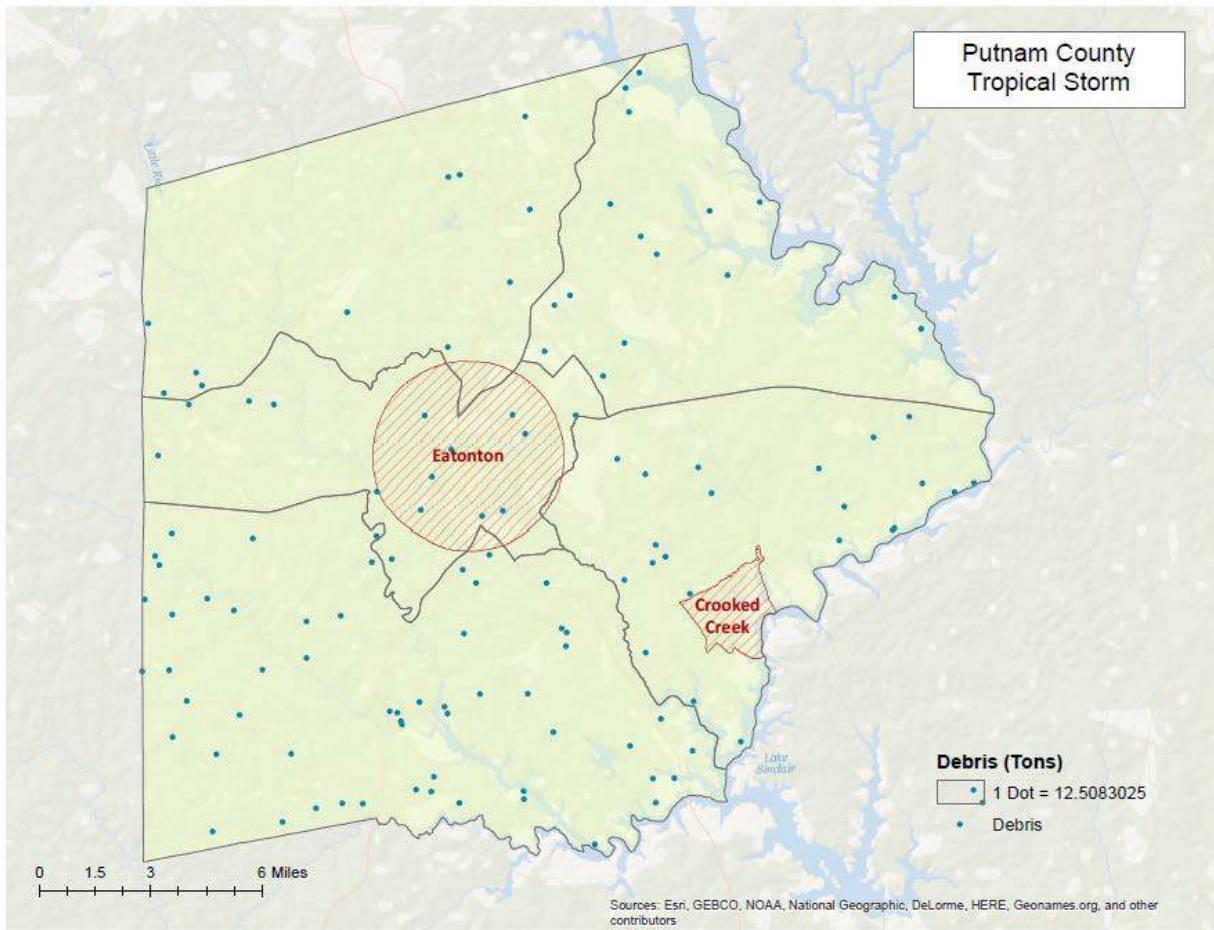


Figure 6: Wind-Related Debris Weight (Tons)

Flood Risk Assessment

Hazard Definition

Flooding is a significant natural hazard throughout the United States. The type, magnitude, and severity of flooding are functions of the amount and distribution of precipitation over a given area, the rate at which precipitation infiltrates the ground, the geometry and hydrology of the catchment, and flow dynamics and conditions in and along the river channel. Floods can be classified as one of three types: upstream floods, downstream floods, or coastal floods.

Upstream floods, also called flash floods, occur in the upper parts of drainage basins and are generally characterized by periods of intense rainfall over a short duration. These floods arise with very little warning and often result in locally intense damage, and sometimes loss of life, due to the high energy of the flowing water. Flood waters can snap trees, topple buildings, and easily move large boulders or other structures. Six inches of rushing water can upend a person; another 18 inches might carry off a car. Generally, upstream floods cause damage over relatively localized areas, but they can be quite severe in the local areas in which they occur. Urban flooding is a type of upstream flood. Urban flooding involves the overflow of storm drain systems and can be the result of inadequate drainage combined with heavy rainfall or rapid snowmelt. Upstream or flash floods can occur at any time of the year in Georgia, but they are most common in the spring and summer months.

Downstream floods, also called riverine floods, refer to floods on large rivers at locations with large upstream catchments. Downstream floods are typically associated with precipitation events that are of relatively long duration and occur over large areas. Flooding on small tributary streams may be limited, but the contribution of increased runoff may result in a large flood downstream. The lag time between precipitation and time of the flood peak is much longer for downstream floods than for upstream floods, generally providing ample warning for people to move to safe locations and, to some extent, secure some property against damage.

Coastal floods occurring on the Atlantic and Gulf coasts may be related to hurricanes or other combined offshore, nearshore, and shoreline processes. The effects of these complex interrelationships vary significantly across coastal settings, leading to challenges in the determination of the base (1-percent-annual-chance) flood for hazard mapping purposes. Land area covered by floodwaters of the base flood is identified as a Special Flood Hazard Area (SFHA). The Putnam County flood risk assessment analyzed at risk structures in the SFHA.

The SFHA is the area where the National Flood Insurance Program's (NFIP) floodplain management regulations must be enforced and the area where the mandatory purchase of flood insurance applies. The owner of a structure in a high-risk area must carry flood insurance, if the owner carries a mortgage from a federally regulated or insured lender or servicer.

The following probabilistic risk assessment involves an analysis of a 1% annual chance riverine flood event (100-Year Flood).

Riverine 1% Flood Scenario

Riverine losses were determined from the 1% flood boundaries downloaded from the FEMA Flood Map Service Center in June 2017. The flood boundaries were overlaid with the USGS 10 meter DEM using

the Hazus-MH Enhanced Quick Look tool to generate riverine depth grids. The riverine flood depth grid was then imported into Hazus-MH to calculate the riverine flood loss estimates. Figure 7 illustrates the riverine inundation boundary associated with the 1% annual chance.

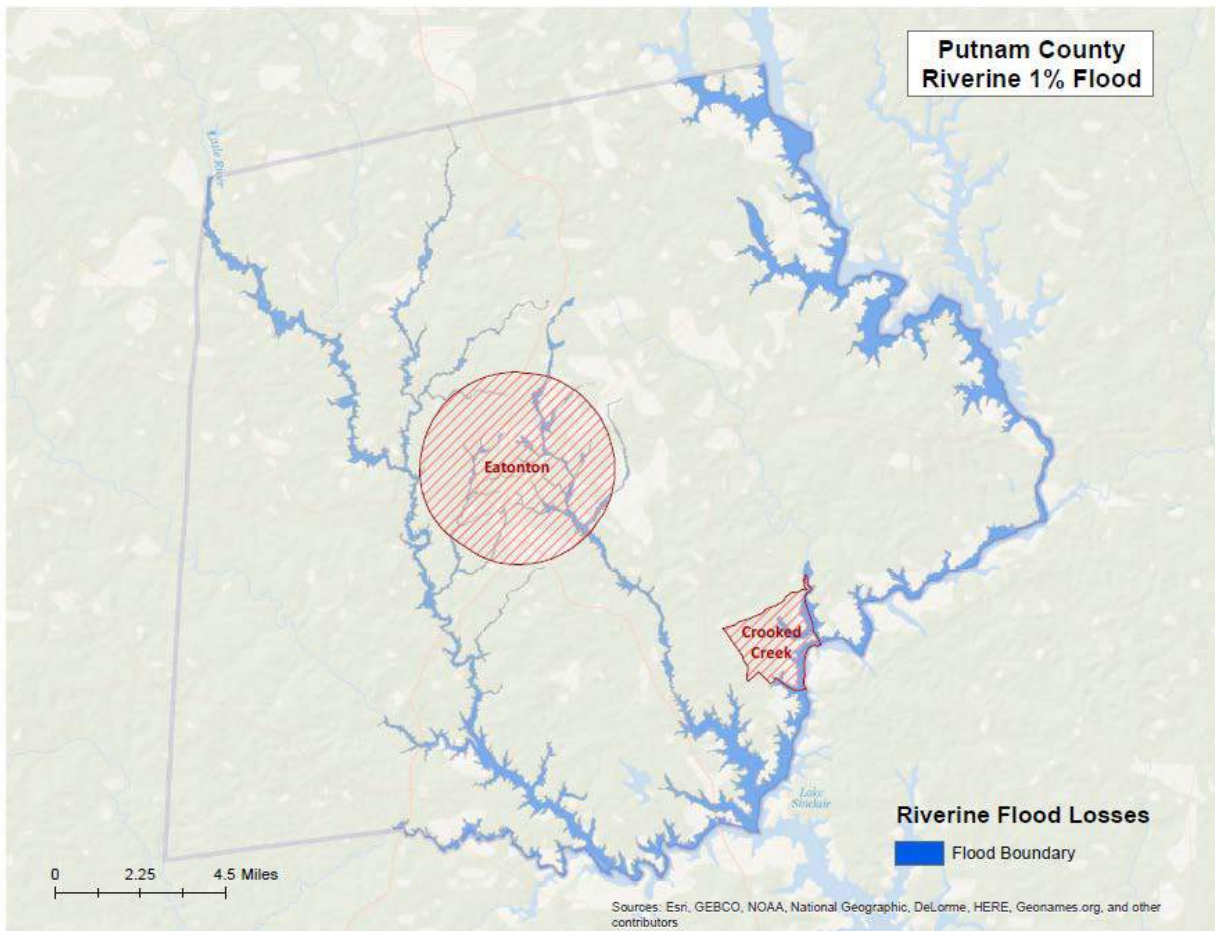


Figure 7: Riverine 1% Flood Inundation

Riverine 1% Flood Building Damages

Buildings in Putnam County are vulnerable to flooding from events equivalent to the 1% riverine flood. The economic and social impacts from a flood of this magnitude can be significant. Table 8 provides a summary of the potential flood-related building damage in Putnam County by jurisdiction that might be experienced from the 1% flood. Figure 8 maps the potential loss ratios of total building exposure to losses sustained to buildings from the 1% flood by 2010 census block and Figure 9 illustrates the relationship of building locations to the 1% flood inundation boundary.

Table 8: Putnam County Riverine 1% Building Losses

Occupancy Classification	Total Buildings	Total Buildings Damaged	Total Building Exposure	Total Losses to Buildings	Loss Ratio of Exposed to Damaged
Putnam					
Residential	14,327	857	\$1,896,169,197	\$46,797,730	2.468%
Commercial	254	6	\$185,718,468	\$1,377,738	0.741%
Agriculture	7	1	\$51,643,432	\$29,822	0.057%
Religious	28	1	\$36,336,699	\$124,617	0.342%
County Total					
Total	14,616	865	\$2,169,867,796	\$48,329,907	2.227%

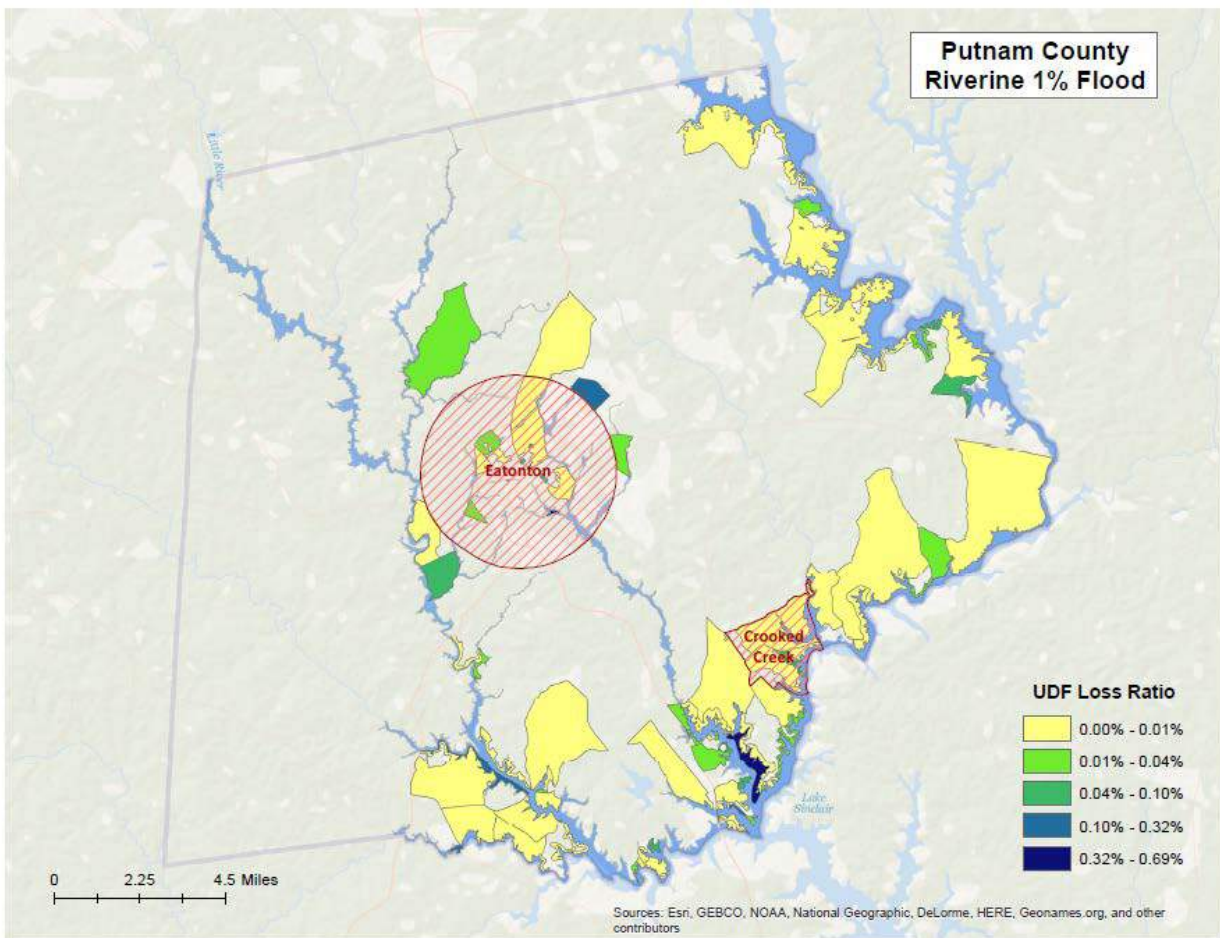


Figure 8: Potential UDF Loss Ratios from the 1% Riverine Flood

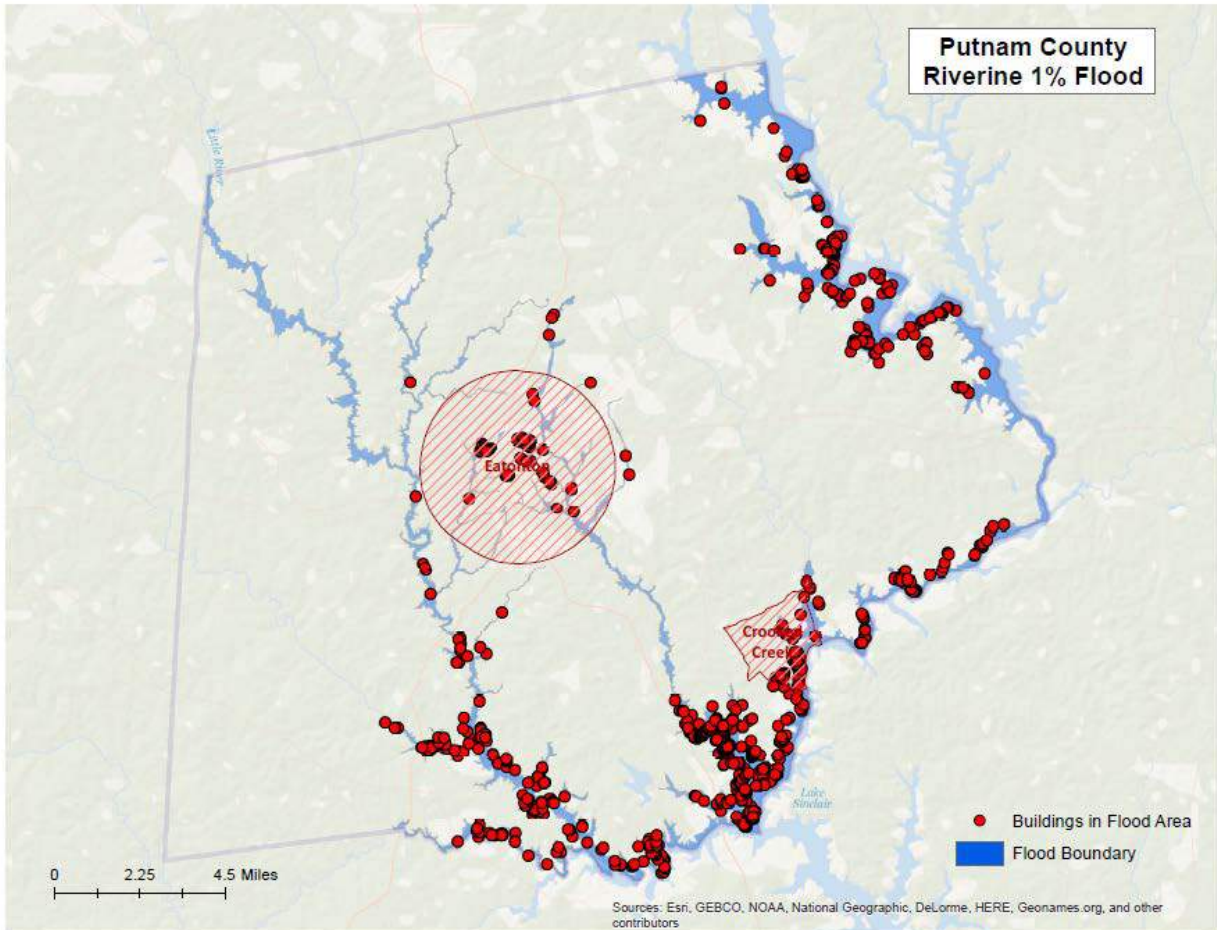


Figure 9: Damaged Buildings in 1% Riverine Flood

Riverine 1% Flood Essential Facility Losses

An essential facility may encounter many of the same impacts as other buildings within the flood boundary. These impacts can include structural failure, extensive water damage to the facility and loss of facility functionality (e.g. a damaged police station will no longer be able to serve the community). The analysis did not identify any essential facilities that were subject to damage in the Putnam County riverine 1% probability floodplain.

Riverine 1% Flood Shelter Requirements

Hazus-MH estimates that the number of households that are expected to be displaced from their homes due to riverine flooding and the associated potential evacuation. The model estimates 518 households might be displaced due to the flood. Displacement includes households evacuated within or very near to the inundated area. Displaced households represent 1,553 individuals, of which 754 may require short term publicly provided shelter. The results are mapped in Figure 10.

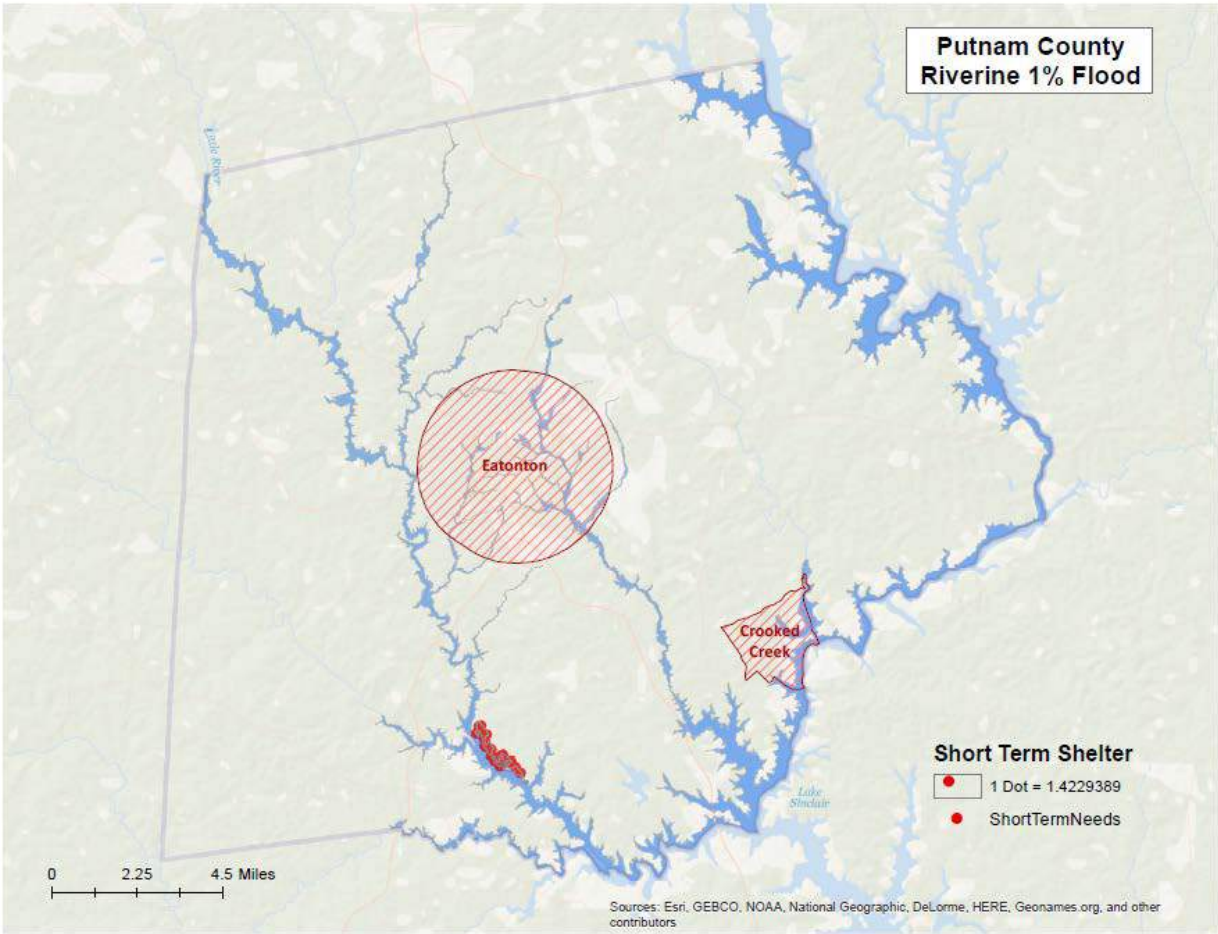


Figure 10: Estimated Flood Shelter Requirements in 1% Riverine Flood

Riverine 1% Flood Debris

Hazus-MH estimates the amount of debris that will be generated by the flood. The model breaks debris into three general categories:

- Finishes (dry wall, insulation, etc.)
- Structural (wood, brick, etc.)
- Foundations (concrete slab, concrete block, rebar, etc.)

Different types of material handling equipment will be required for each category. Debris definitions applied in Hazus-MH are unique to the Hazus-MH model and so do not necessarily conform to other definitions that may be employed in other models or guidelines.

The analysis estimates that an approximate total of 60,313 tons of debris might be generated: 1) Finishes – 11,784 tons; 2) Structural – 21,655 tons; and 3) Foundations- 26,875 tons. The results are mapped in Figure 11.

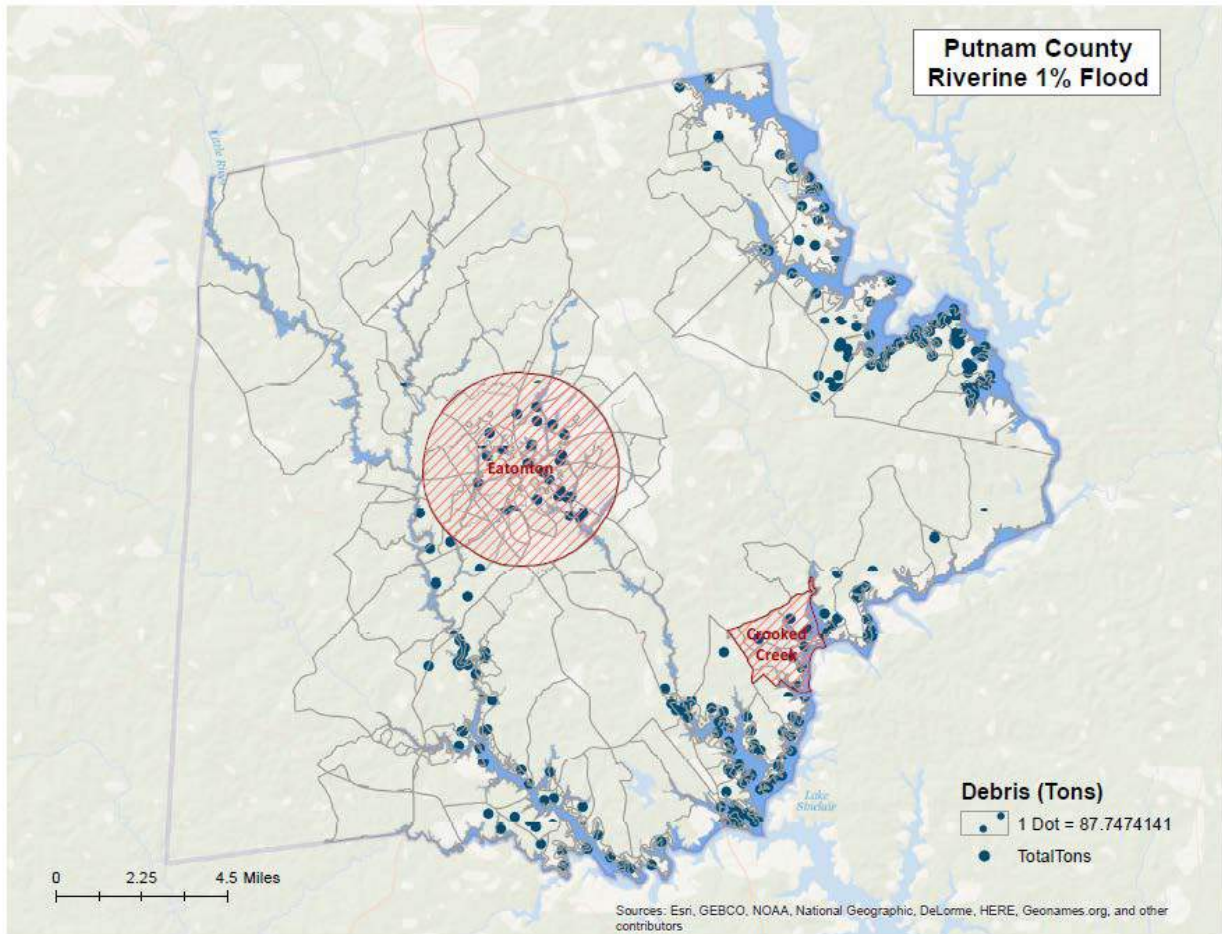


Figure 11: Flood Debris Weight (Tons) in 1% Riverine Flood

Tornado Risk Assessment

Hazard Definition

Tornadoes pose a great risk to the state of Georgia and its citizens. Tornadoes can occur at any time during the day or night. They can also happen during any month of the year. The unpredictability of tornadoes makes them one of Georgia's most dangerous hazards. Their extreme winds are violently destructive when they touch down in the region's developed and populated areas. Current estimates place the maximum velocity at about 300 miles per hour, but higher and lower values can occur. A wind velocity of 200 miles per hour will result in a wind pressure of 102.4 pounds per square foot of surface area—a load that exceeds the tolerance limits of most buildings. Considering these factors, it is easy to understand why tornadoes can be so devastating for the communities they hit.

Tornadoes are defined as violently-rotating columns of air extending from thunderstorms and cyclonic events. Funnel clouds are rotating columns of air not in contact with the ground; however, the violently-rotating column of air can reach the ground very quickly and become a tornado. If the funnel cloud picks up and blows debris, it has reached the ground and is a tornado.

Tornadoes are classified according to the Fujita tornado intensity scale. Originally introduced in 1971, the scale was modified in 2006 to better define the damage and estimated wind scale. The Enhanced Fujita Scale ranges from low intensity EF0 with effective wind speeds of 65 to 85 miles per hour, to EF5 tornadoes with effective wind speeds of over 200 miles per hour. The Enhanced Fujita intensity scale is included in Table 9.

Table 9: Enhanced Fujita Tornado Rating

Fujita Number	Estimated Wind Speed	Path Width	Path Length	Description of Destruction
EF0 <i>Gale</i>	65-85 mph	6-17 yards	0.3-0.9 miles	Light damage, some damage to chimneys, branches broken, sign boards damaged, shallow-rooted trees blown over.
EF1 <i>Moderate</i>	86-110 mph	18-55 yards	1.0-3.1 miles	Moderate damage, roof surfaces peeled off, mobile homes pushed off foundations, attached garages damaged.
EF2 <i>Significant</i>	111-135 mph	56-175 yards	3.2-9.9 miles	Considerable damage, entire roofs torn from frame houses, mobile homes demolished, boxcars pushed over, large trees snapped or uprooted.
EF3 <i>Severe</i>	136-165 mph	176-566 yards	10-31 miles	Severe damage, walls torn from well-constructed houses, trains overturned, most trees in forests uprooted, heavy cars thrown about.
EF4 <i>Devastating</i>	166-200 mph	0.3-0.9 miles	32-99 miles	Complete damage, well-constructed houses leveled, structures with weak foundations blown off for some distance, large missiles generated.
EF5 <i>Incredible</i>	Over 200 mph	1.0-3.1 miles	100-315 miles	Foundations swept clean, automobiles become missiles and thrown for 100 yards or more, steel-reinforced concrete structures badly damaged.

Source: <http://www.srh.noaa.gov>

Hypothetical Tornado Scenario

For this report, an EF3 tornado was modeled to illustrate the potential impacts of tornadoes of this magnitude in the county. The analysis used a hypothetical path based upon an EF3 tornado event running along the predominant direction of historical tornados (southeast to northwest). The tornado path was placed to travel through Putnam County. The selected widths were modeled after a recreation of the Fujita-Scale guidelines based on conceptual wind speeds, path widths, and path lengths. There is no guarantee that every tornado will fit exactly into one of these categories. Table 10 depicts tornado path widths and expected damage.

Table 10: Tornado Path Widths and Damage Curves

Enhanced Fujita Scale	Path Width (feet)	Maximum Expected Damage
EF5	2,400	100%
EF4	1,800	100%
EF3	1,200	80%
EF2	600	50%
EF1	300	10%

Within any given tornado path there are degrees of damage. The most intense damage occurs within the center of the damage path, with decreasing amounts of damage away from the center. After the hypothetical path is digitized on a map, the process is modeled in GIS by adding buffers (damage zones) around the tornado path. Figure 12 describes the zone analysis.

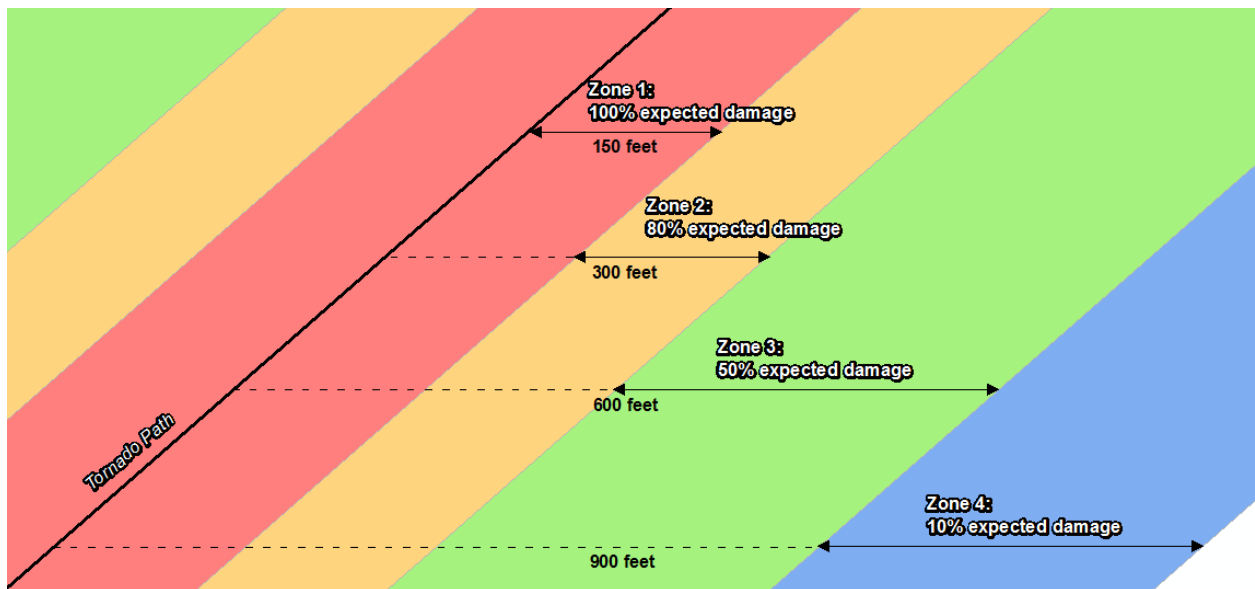


Figure 12: EF Scale Tornado Zones

An EF3 tornado has four damage zones, depicted in Table 11. Major damage is estimated within 150 feet of the tornado path. The outer buffer is 900 feet from the tornado path, within which buildings will not experience any damage. The selected hypothetical tornado path is depicted in Figure 13 and the damage curve buffer zones are shown in Figure 14.

Table 11: EF3 Tornado Zones and Damage Curves

Zone	Buffer (feet)	Damage Curve
1	0-150	80%
2	150-300	50%
3	300-600	10%
4	600-900	0%

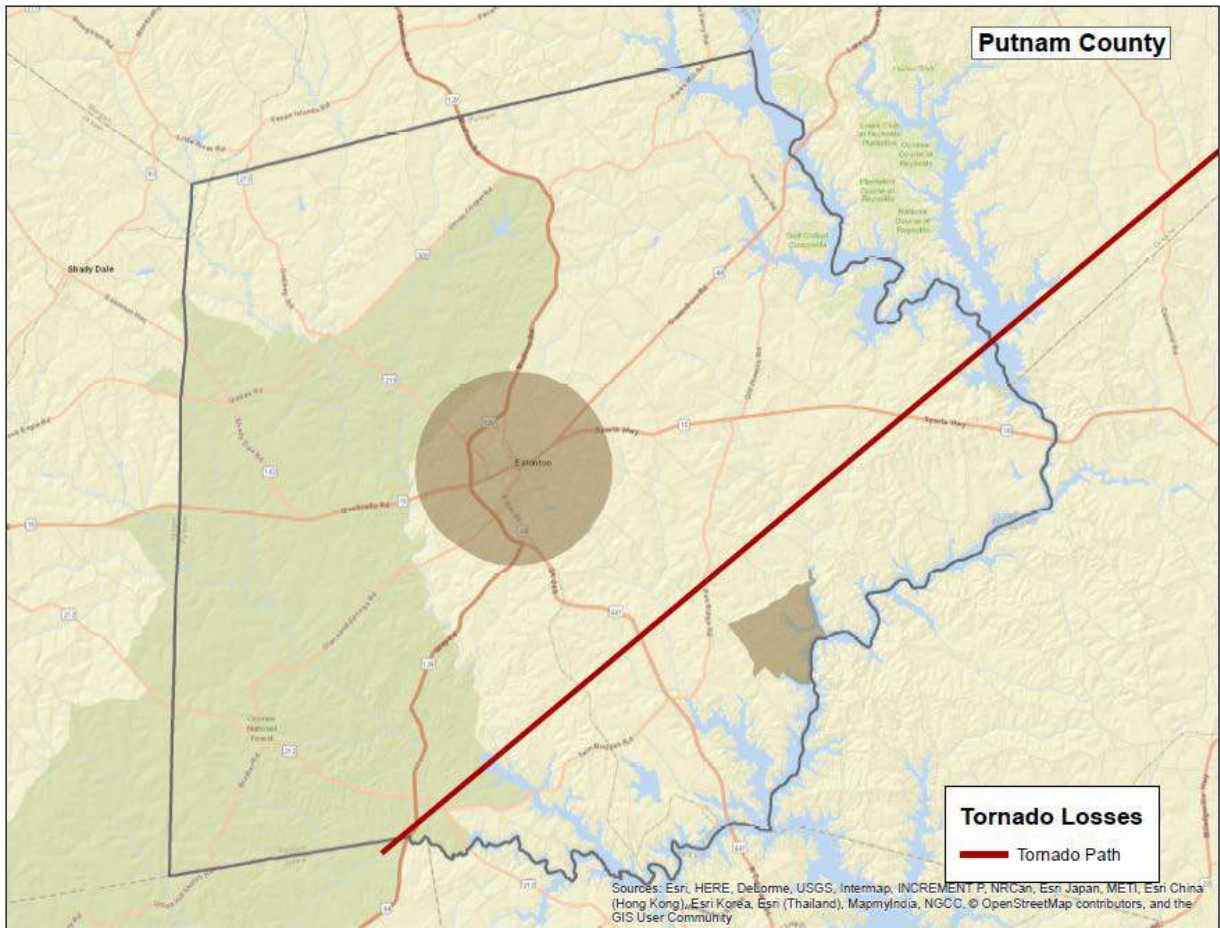


Figure 13: Hypothetical EF3 Tornado Path

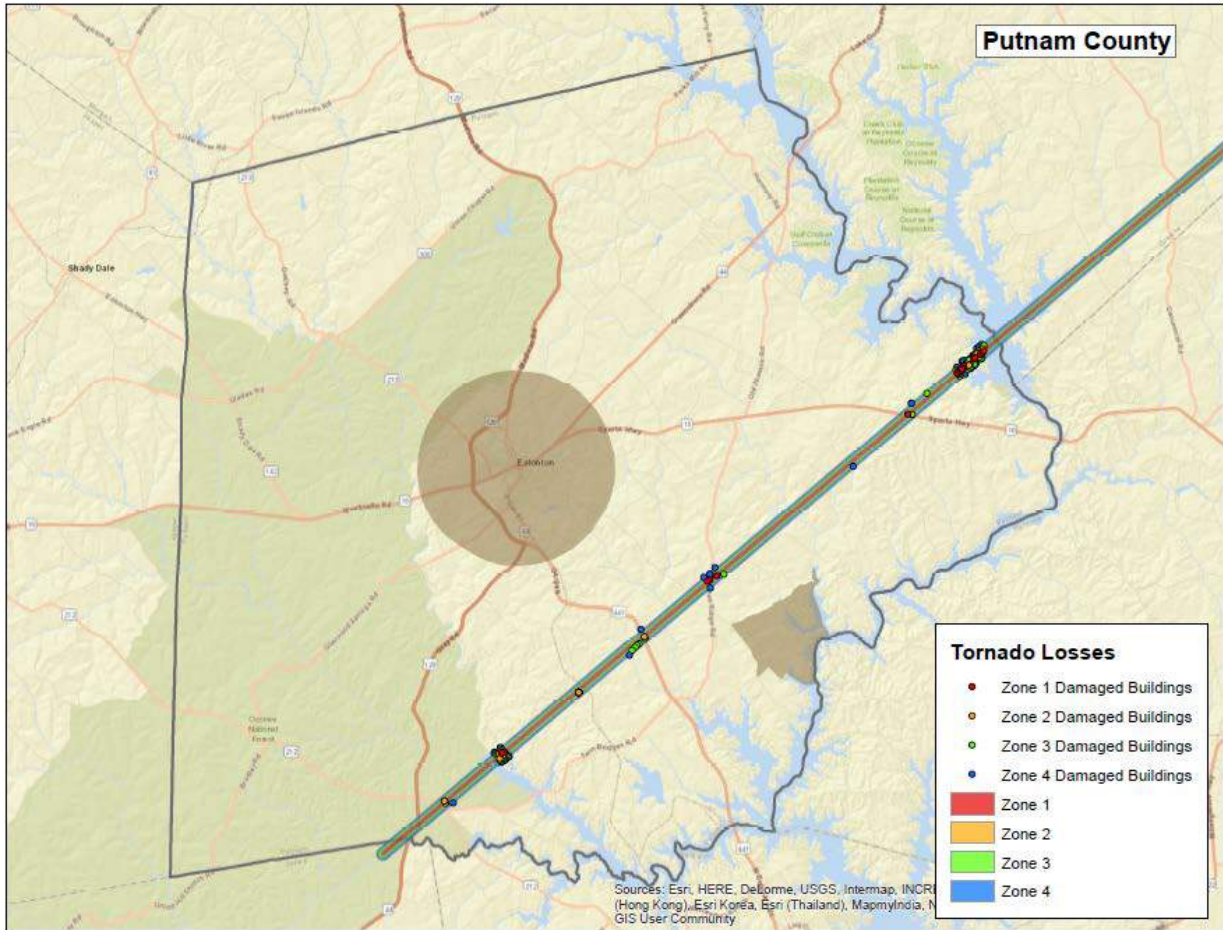


Figure 14: Modeled EF3 Tornado Damage Buffers

EF3 Tornado Building Damages

The analysis estimated that approximately 137 buildings could be damaged, with estimated building losses of \$3.8 million. The building losses are an estimate of building replacement costs multiplied by the percentages of damage. The overlay was performed against parcels provided by Putnam County that were joined with Assessor records showing estimated property replacement costs. The Assessor records often do not distinguish parcels by occupancy class if the parcels are not taxable and thus the number of buildings and replacement costs may be underestimated. The results of the analysis are depicted in Table 12.

Table 12: Estimated Building Losses by Occupancy Type

Occupancy Classification	Buildings Damaged	Building Losses
Residential	140	\$12,748,678
Commercial	2	\$6,732,550
Industrial	10	\$26,122,264
Total	137	\$3,776,588

EF3 Tornado Essential Facility Damage

There are no essential facilities located within 900 feet of the modeled tornado path.

Exceptions Report

Hazus Version 2.2 SP1 was used to perform the loss estimates for Putnam County, Georgia. Changes made to the default Hazus-MH inventory and the modeling parameters used to setup the hazard scenarios are described within this document.

Reported losses reflect the updated data sets. Steps, algorithms and assumptions used during the data update process are documented in the project workflow named PDM_GA_Workflow.doc.

Statewide Inventory Changes

The default Hazus-MH Essential Facility inventory was updated for the entire state prior to running the hazard scenarios for Putnam County.

Statewide facility data were supplied by GEMA through the GMIS in August 2017. These updates were applied by the Middle Georgia Regional Commission. Table 13 summarizes the difference between the original Hazus-MH default data and the updated data for Putnam County.

Table 13: Essential Facility Updates

Occupancy Classification	Default Replacement Cost	Default Count	Updated Replacement Cost	Updated Count
Care	\$10,315,000	1	\$10,315,000	1
EOC	\$0	0	\$0	0
Fire	\$0	1	\$0	1
Police	\$2,464,000	2	\$2,464,000	2
School	\$48,501,000	5	\$48,501,000	5

County Inventory Changes

The GBS records for Putnam County were replaced with data derived from parcel and property assessment data obtained from Putnam County. The county provided property assessment data was current as of February 2017 and the parcel data current as of February 2017.

General Building Stock Updates

The parcel boundaries and assessor records were obtained from the Putnam County Tax Assessors Office. Records without improvements were deleted. The parcel boundaries were converted to parcel points located in the centroids of each parcel boundary. Each parcel point was linked to an assessor record based upon matching parcel numbers. The generated Building Inventory represents the approximate locations (within a parcel) of building exposure. The Building Inventory was aggregated by Census Block and imported into Hazus-MH using the Hazus-MH Comprehensive Data Management System (CDMS). Both the 2010 Census Tract and Census Block tables were updated.

The match between parcel records and assessor records was based upon a common Parcel ID. For this type of project, unless the hit rate is better than 85%, the records are not used to update the default aggregate inventory in Hazus-MH. The Parcel-Assessor hit rate for Putnam County was 96.6%.

Adjustments were made to records when primary fields did not have a value. In these cases, default values were applied to the fields. Table 14 outlines the adjustments made to Putnam County records.

Table 14: Building Inventory Default Adjustment Rates

Type of Adjustment	Building Count	Percentage
Area Unknown	1435	10%
Construction Unknown	1783	12%
Condition Unknown	1037	7%
Foundation Unknown	1738	11%
Year Built Unknown	156	1%

Portions of the CAMA values were either missing (<Null> or '0'), did not match CAMA domains or were unusable ('Unknown', 'Other', 'Pending'). These were replaced with 'best available' values. Missing YearBuilt values were populated from average values per Census Block. Missing Condition, Construction and Foundation values were populated with the highest-frequency CAMA values per Occupancy Class. Missing Area values were populated with the average CAMA values per Occupancy Class.

The resulting Building Inventory was used to populate the Hazus-MH General Building Stock and User Defined Facility tables. The updated General Building Stock was used to calculate flood and tornado losses. Changes to the building counts and exposure that were modeled in Putnam County are sorted by General Occupancy in Table 1 at the beginning of this report. If replacements cost or building value were not present for a given record in the Assessor data, replacement costs were calculated from the Building Area (sqft) multiplied by the Hazus-MH RS Means (\$/sqft) values for each Occupancy Class.

Differences between the default and updated data are due to various factors. The Assessor records often do not distinguish parcels by occupancy class when the parcels are not taxable; therefore, the total number of buildings and the building replacement costs for government, religious/non-profit, and education may be underestimated.

User Defined Facilities

Local parcel and CAMA data were used to develop points representing the locations of buildings in the county, referred to as User Defined Facilities (UDF) in the Hazus model. For the flood model, this includes only buildings located in the 1% Annual Chance Riverine Flood Area. Table 15 identifies the

total building count & exposure for the county and the total building count & exposure for buildings located in the 1% Annual Chance Riverine Flood Area.

Table 15: Building Count and Exposure for County and Riverine Flood Area

Feature	Counts	Exposure
Total buildings in the County	15,248	\$2,826,492,831
Total buildings inside the 1% Annual Chance Riverine Flood Area	1,179	\$167,808,699

It should be noted that UDFs are only used in the flood modeling process, due to the fact that it is important to identify if individual buildings are located within the flood area to obtain the depth of flood.

Assumptions

- Flood analysis was performed on UDF. The point locations are parcel centroid accuracy.
- The analysis is restricted to the county boundary within the flood area. Events that occur near the county boundary do not contain loss estimates from adjacent counties.
- The following attributes were defaulted or calculated:
 - First Floor Height was set from Foundation Type
 - Content Cost was calculated from Building Cost

Appendix B

Growth & Development Trends / Community Information

- Putnam County/City of Eatonton Comprehensive Plan Introduction & Existing Land Use Section
- Putnam County Demographic Profile
- Putnam County Labor Profile

**JOINT COMPREHENSIVE PLAN
FOR PUTNAM COUNTY AND
CITY OF EATONTON**

**COMMUNITY ASSESSMENT AND
COMMUNITY PARTICIPATION PROGRAM**



**Prepared by
Comprehensive Planning Steering Committee
with Assistance from
Middle Georgia Regional
Development Center**

October 2006

INTRODUCTION

The 1989 Georgia Planning Act requires that each community in Georgia prepare and adopt a local comprehensive plan. It is in the best interest of a community to develop a comprehensive plan not only because it is required to meet State law and maintain its Qualified Local Government Status (QLG), but also to achieve certain local goals, such as:

- A growing and balanced economy;
- Protection of environmental, natural, and cultural resources;
- Provision of infrastructure and services to support efficient growth and development patterns;
- Access to adequate and affordable housing for all residents;
- Coordination of land use planning and transportation planning to support sustainable economic development, protection of natural and cultural resources, and provision of adequate and affordable housing;
- Coordination of local planning efforts with other local service providers and authorities, neighboring communities, and state and regional plans;
- Involve all segments of the community in developing the vision for the community's future;
- Generate local pride and enthusiasm about the future of the community; and
- Provide a guide to everyday decision-making for use by local government officials and community leaders.

The Georgia Department of Community Affairs has been the authority by O.C.G.A. 50-8-1 et seq to establish standards and procedures for appropriate and timely comprehensive planning by all governments in Georgia. The latest standards and procedures became effective on May 1, 2005. These latest standards have divided the comprehensive plan into three components: (1) a Community Assessment, (2) a Community Participation Program, and (3) a Community Agenda, as described below.

- **Community Assessment** - An objective assessment of data and information about the community. It is to be a concise and informative report to be used during the development of the Community Agenda portion of the Plan and includes:
 - List of potential issues and opportunities the community wishes to take action to address;
 - Analysis of existing development patterns, including a map of recommended character areas;
 - Consistency with State Quality Community Objectives; and
 - Analysis of data and information to verify potential issues and opportunities.
- **Community Participation Program** - Describes the local government's strategy for ensuring adequate public and stakeholder involvement in the preparation of the Community Agenda and includes:
 - List of stakeholders;
 - Community participation techniques; and
 - Community Agenda Completion Schedule.

- **Community Agenda** - Includes the community's vision for the future and its strategy for achieving this vision. The major components of the Community Agenda are:
 - A community vision for the future physical development of the community, expressed in the form of a map indicating unique character areas, each with its own strategy for guiding future development patterns;
 - A list of issues and opportunities identified by the community for further action;
 - An implementation program for achieving the community's vision for the future and addressing the identified issues and opportunities.

The sections of the Comprehensive Plan that are contained within this document are the Community Assessment and Community Participation Program.

Putnam County and the City of Eatonton have a desire to work together to develop a Joint Comprehensive Plan. The first action taken by these local governments was the formation of a Comprehensive Planning Steering Committee appointed by the elected officials of the involved communities. The membership of this group is diverse and represents a cross-section of the community. The responsibilities of this group are to facilitate the entire planning process and help formulate a Joint Comprehensive Plan for Putnam County and the City of Eatonton, and to invite and encourage community participation throughout the planning process.

In short, the Joint Comprehensive Plan is intended to be:

- A **Roadmap** for a thriving community....
- A **Guidebook** for local decisions....
- A **Commitment** to these communities' future....

The journey now begins to accomplish this end.

ANALYSIS OF EXISTING DEVELOPMENT PATTERNS

Putnam County occupies a total of 360.6 square miles, of which 16.1 square miles is water. It is bounded by Morgan and Greene Counties to the north, Jones and Baldwin Counties to the south, Jasper County to the east, and Hancock County to the west. Map 1 illustrates the Putnam County location in relation to the State of Georgia and the region.

The Analysis of Existing Development Patterns consists of three major sections: (1) evaluation of the existing land use patterns within the City of Eatonton and unincorporated Putnam County (see Maps 2a and 2b in the Appendix); (2) a discussion of the areas requiring special attention (see Maps 3a and 3b in the Appendix); and (3) the identification of recommended character areas (see Maps 4a and 4b in the Appendix).

Existing Land Use

This section of the report includes an inventory and analysis of existing land use patterns within Putnam County and the City of Eatonton. To derive the existing land use maps for unincorporated Putnam County and the City of Eatonton, windshield surveys were conducted in 2000 and 2002, respectively, and have been updated several times based on discussions with representatives from the Putnam County Planning and Development Office.

Existing Land Use Definitions

For this study, the following existing land use categories were used:

- **Residential:**
 - Single-Family Residential – Site-built and industrialized detached dwelling units; can include zero-lot line and cluster subdivisions.
 - Mixed-Use Residential – Mixture of manufactured homes and single-family site-built or industrialized dwelling units.
 - Manufactured Home Residential – Manufactured homes either in a subdivision or a land-lease community.
 - Multi-Family – Duplexes, triplexes, and garden and townhouse apartments.
- **Commercial:** This category is for land dedicated to non-industrial business uses, including retail sales, office, service and entertainment facilities, organized into general categories of intensities. Commercial uses may be located as a single use in one building or grouped together in a shopping center or office building.

- **Industrial:** This category is for land dedicated to manufacturing facilities, processing plants, factories, warehousing and wholesale trade facilities, mining or mineral extraction activities, or other similar uses.
- **Public/Institutional:** This category includes certain state, federal, or local government uses and institutional uses. Government uses include city halls and government building complexes, police and fire stations, libraries, prisons, post offices, schools, military installations, etc. Examples of institutional land uses include colleges, churches, cemeteries, hospitals, etc.
- **Transportation/Communication/Utilities:** This category includes such uses as major transportation routes, public transit stations, power generation plants, railroad facilities, radio towers, telephone switching stations, airports, or other similar uses.
- **Park/Recreation/Conservation:** This category is for land dedicated to active or passive recreation uses. These areas may be either publicly or privately owned and may include playgrounds, public parks, nature preserves, wildlife management areas, national forests, golf courses, recreation centers, or similar uses.
- **Agriculture/Forestry:** This category is for land dedicated to farming (fields, lots, pastures, farmsteads, specialty farms, livestock production, etc.), agriculture, or commercial timber, or pulpwood harvesting.
- **Undeveloped/Vacant:** This category is for lots or tracts of land that are served by typical urban public services (water, sewer, etc.) but have not been developed for a specific use or were developed for a specific use that has since been abandoned.

City of Eatonton

Residential

- Single-family residential concentrated in core of City from Windsor Drive in the north to Walnut Street in the south and Godfrey Road/Hudson Street in the west to Phillips Drive/Crestview Drive area in the east. This area includes the residential Historic District.
- Mixture of manufactured and single-family site-built housing situated along the borders of the single-family residential areas: (1) Bailey Street south of Hogan Boulevard and East Street, and includes the areas along Oconee Road and Martin Luther King, Jr. Drive; (2) North of West Marion Street just east of the Bypass and includes a large manufactured home park; (3) North of Old Glenwood Springs Road near the elementary school; (4) Between Sparta Road and Lake Oconee Parkway; (5) East of the Bypass in the Imperial Mill area; (6) Extreme western section of the City south of Highway 16; (7) Southeastern section along Martin Luther King, Jr. Drive; and (7) Southwestern section along Glenwood Springs Road.

- There are three small areas of multi-family residential use in the City of Eatonton: Custer Avenue along Highway 16 West; North Maple Street; and in the Imperial Mill area.

Commercial

- Historic central business district located along Marion Street and Jefferson Avenue and several nearby streets includes a variety of retail shops, offices, eateries, and service establishments.
- At the U.S. 129/441 Bypass area, there are several restaurants and truck stops designed to cater to the highway-traveling public and to the employees of the nearby industrial park, and the new Wal-Mart Supercenter and several outparcels occupied by fast-food restaurants and a quick-lube establishment.
- At Highway 16 West and the Bypass, a large grocery store serves city residents at the northwest corner and there is a new commercial development on the southeast corner.
- Remaining commercial areas in the City of Eatonton include medical and government offices at the intersection of Highway 16 East and Highway 44, and a mix of commercial uses along Highway 441 North.

Industrial

- Industrial Park South located along U.S. 441 and Industrial Boulevard is home of Horton Homes and other ancillary industries.
- Industrial Park North along the Bypass near the Imperial Mill area.
- South of Central Business District is an area of established light industrial uses that include site of former Enterprise Mill complex.

Public/Institutional

- Includes three public schools, one private school, the workplace-training center, cemeteries, city and county government buildings (City Hall, County Courthouse and Administration Center, Sheriff's Department Office and Jail, City/County Public Works complexes, City Police and Fire Department, County Fire Department/EMT, etc.), Putnam County Hospital, Federal government office center, old County landfill, and the Uncle Remus Museum.

Transportation/Communication/Utilities

- Includes the Eatonton water treatment plant, the two wastewater treatment facilities, the various utilities' offices and substations and the Georgia DOT Maintenance Office, as well as the railroad and highway rights-of-way.

Parks/Recreation/Conservation

- Includes the Jimmy Davis Park south of East Street, Poole Recreation Center off of Recreation Park Road, the Marion Street Park and pool, and the Uncle Remus Golf Course off of U.S. 441 South.

Agriculture/Forestry

- Despite its primary urban character, the City of Eatonton contains numerous large tracts of land being used for agricultural purposes:
 - Northeastern section of City between U.S. 129/441 North and Highway 44;
 - North and south of Highway 16;
 - Southern end of Martin Luther King, Jr. Drive;
 - U.S. 129/441 South; and
 - Portions of Bypass between Glenwood Springs Road and Godfrey Road.
- With the proper application of growth management techniques, agriculture use should continue to be an important and prosperous use within the City during the planning period.
- Commercial forestry takes place in a very limited scale in the City of Eatonton; thus it is not considered a significant factor related to land use development.

Undeveloped

- Undeveloped land occupies land west of the Bypass and south of Highway 16 East.
- The soils/topography of most of these tracts will make it difficult to develop them in a more intensive use.
- For the tracts closer to the core of the City, it is recommended that existing development codes be amended to allow developers to cluster the buildings on the site and reserve the restrictive portion in perpetuity as public conservation areas.

Unincorporated Putnam County

Residential

- Single-family residential development is concentrated in the subdivisions along Lake Oconee and a subdivision bordering Lake Sinclair near Dennis Station Road.
- Isolated pockets of single-family residential along Glades Road; Highways 129, 441, 16 and 44; Dennis Station Road near intersection of Twin Bridges Road; Intersection of Pea Ridge Road and Scuffleboro Road; North Wesley Chapel Road; Sugar Creek Road; Denham Road; Harmony Road; Wards Chapel Road; and New Phoenix Road.
- Mixture of single-family site-built dwellings, manufactured homes, travel trailers, and cabins in the subdivisions bordering Lake Sinclair. Recently, many of the

manufactured homes, travel trailers, and cabins are being replaced by single-family site-built dwellings to be used for permanent residency.

- Mixed-use residential can be found along portions of Lake Oconee and various linear developments along the county's highways.
- Manufactured subdivisions and land-lease communities are scattered throughout the unincorporated areas, with a small area along the eastern end of Lake Oconee, Crooked Creek Road, and Highway 441 just north of Rock Eagle.
- Multi-family dwellings including condominiums have begun to be developed in close proximity to Lake Oconee and Lake Sinclair, and along Hwy 44.

Commercial

- Largest concentration of commercial development is occurring near Lake Oconee along Highway 44, Harmony Road, and portions of Old Phoenix Road. This development includes establishments that service both the residents of the nearby subdivisions and the lake visitors.
- Next largest concentration of commercial development in unincorporated Putnam County is Highway 441 South near the Baldwin County line and along the intersection of Highway 441 South and Dennis Station Road. As with the development along Lake Oconee, commercial uses near Lake Sinclair also cater to the residents of the nearby subdivisions and lake visitors.
- Convenient commercial establishments serving the highway traveling public, the seasonal visitors, and the residents of the surrounding neighborhoods are found along Highways 129, 142, 441, and 16 and several county roads, including Pea Ridge Road and Parks Mill Road.

Industrial

- Industrial uses located within unincorporated areas of Putnam County include cement processing plants at the intersection of Highway 44 and New Phoenix Road and on Harmony Road; and the Rayonier Wood Products Plant.

Public/Institutional

- Public/institutional uses include fire stations, churches, cemeteries, and solid waste convenience centers scattered throughout the unincorporated area.

Transportation/Communication/Utilities

- Georgia Power's Plant Harlee Branch on Lake Sinclair and Wallace Dam are the primary T/C/U uses in unincorporated Putnam County. The remaining T/C/U uses are the Georgia Power and Dixie Pipeline utility easements, various electric and natural gas substations, and highway and railroad rights-of-way.

Parks/Recreation/Conservation

- Most of the area west of U.S. 129/441 is occupied by the Oconee National Forest, Rock Eagle 4-H Center and the Cedar Creek Wildlife Management Area. Other significant P/R/C uses in unincorporated Putnam County include the Lawrence Shoals Park owned and managed by Georgia Power and the Oconee Springs Park owned and operated by Putnam County.

Agriculture/Forestry

- Most of the remaining land in the unincorporated area of Jones County is classified as agriculture/forestry use that includes owners, which either they or through a lease agreement perform some type of farming and/or silvaculture activity.
- There are 174,500 acres of timberland in Putnam County based on a 1997 U.S. Forest Service report. Of that total, 35.3% is owned by federal, state, or local government. The forest industry at the time of the study owned or leased 12,800 acres or 7.3% of the total timberland in the County. They are in the process of selling most of this land to private interests who will likely convert it to estate-lot residential developments.

Existing Land Use Analysis

- The western one-third of the county that is either within a national forest, wildlife management area, or part of a 4-H Center will likely see little or no growth.
- Most of the future land development will likely occur within two miles of Lake Oconee and Lake Sinclair and the corridor between U.S. 441 North to State Highway 16. Within the U.S. 441-State Highway 16 corridor and portions of the area south of Highway 16 there is an important agricultural belt. This area, however, will certainly experience extreme pressure as residential and commercial development moves northward along Highway 44 from Eatonton and southward from Lake Oconee. Strategies should be set in place in the comprehensive plan to balance the need for future urban development, while at the same time, protecting this important county resource.
- The enormous amount of available land in the City of Eatonton creates a prime opportunity for new development. The biggest drawback is available water and sewer infrastructure to make it happen. The ability to utilize some of the water supply from the new treatment plant on Lake Sinclair would satisfy the water demand. The real issue is creating sufficient wastewater treatment capacity to fully capitalize on this opportunity.

Areas Requiring Special Attention

Areas requiring special attention include:

- **Areas of significant natural or cultural resources, particularly where these are likely to be intruded upon or otherwise impacted by development:**
 - Lakes/River Corridor – Within two miles of Lake Oconee and Lake Sinclair is expected to see substantial urban development during the planning period. Realizing that with more urban-type development comes more impervious surface and with that the potential for increased non-point pollution to the streams feeding into Lake Oconee/Lake Sinclair/Oconee River and to the lakes and river itself. The enactment of strong stormwater management practices and enforcement should be applied in this area during the planning period to ensure the uses in which these valuable resources were intended are maintained. In addition, Lake Sinclair is now an important water source for portions of Baldwin and Putnam Counties. To reduce the risk of contamination of this water supply from non-point pollution, careful monitoring of the uses in the intake's water supply watershed, along with the protection of nearby wetlands and stream buffers should be implemented.
- **Areas where rapid development or change of land use is likely to occur:**
 - Highway 441 North and South Corridors - The widening of U.S. 441 North and South through Putnam County will bring with it the potential of rapid change in land use in the corridor bordering this highway. North of Eatonton, the current pristine beauty of rolling hills and farmland will likely become a mixture of residential and commercial development, while to the south, commercial development will likely spread northward from Lake Sinclair to merge with existing development at the U.S 441/U.S. 129 Bypass area. The land bordering the western Eatonton bypass, though currently mostly undeveloped, will likely see pressure for more intensive uses as development north and south of it takes place.
 - Highway 44 Corridor – Though in rural state at the present time, it is highly unlikely that the area between Highway 441 and Highway 16 will maintain as such for very much longer. As stated earlier in the existing land use section above, development is moving north and south along Highway 44 at a very rapid pace, along with the transition from a rural to an urban environment. The land bordering Highway 44 is expected to be a commercial corridor to serve the residential developments that will be occurring east and west of this highway.
 - Harmony Road/Old Phoenix Road Corridor – Portions of Harmony Road and Old Phoenix Road have become an important commercial and office corridor serving the growing residential population on the Putnam County

side of Lake Oconee, as well as the visitors to the lake. With the continued expansion of residential growth expected within a two-mile area of Lake Oconee, this corridor will continue its preeminence for commercial and office development during the planning period. Expansion of such use is expected to spread along Harmony Road to Parks Mill Road and along Old Phoenix Road to where it intersects with Lake Oconee Parkway.

- **Areas where the pace of development has and/or may outpace the availability of community facilities and services, including transportation:**
 - Lakes/River and Harmony Road/Old Phoenix Road Corridors – Providing adequate water supply and wastewater treatment in the Lake Oconee area will be critical to meet projected demand in the area.
 - Highway 441 North and South and Highway 44 Corridors - If these corridors are to be developed as projected, adequate water supply must be provided to these areas.
 - East Bypass Corridor – This corridor and the surrounding vacant land around it will not reach its development potential unless adequate water supply and wastewater treatment is provided. (See also discussion under infill development opportunities.)

- **Areas in need of redevelopment and/or significant improvements to aesthetics or attractiveness.**
 - Downtown Eatonton – With the Better Hometown Program leading the way along with support from the Downtown Development Authority and several key private investors, efforts are underway to renovate and occupy buildings and to make improvements to the aesthetics, attractiveness, and pedestrian mobility in downtown Eatonton.
 - Neighborhood off Martin Luther King, Jr. Drive located south of the downtown area – An area in need of physical redevelopment both in terms of housing and supporting infrastructure and services. A number of social and economic problems besetting many of the residents of the neighborhood must also be addressed in order for it to become a fully stable living environment.
 - Imperial Mill neighborhood – Once served as housing for the employees of the once active mill, the neighborhood has begun showing signs of decline. With the proper redevelopment plan and support from community leaders, this once proud historical area can once again become a stable area and a source of pride to the community.

- **Large abandoned structures or sites, including those that may be environmentally contaminated:**
 - None identified.

- **Areas with significant infill development opportunities (scattered vacant sites):**
 - Undeveloped areas in the eastern and western sections of the City – Provided that the water supply and wastewater treatment capacity issues that the City of Eatonton faces can be rectified, these areas hold enormous potential for new residential and mixed-use developments to meet the needs of those desiring to live closer to major activity centers, or those who work in Putnam County and would like to live in the county but can not afford the prices of residences near the two lakes.

Recommended Character Areas

One aspect of the Joint Comprehensive Planning process that differs from previous efforts is the employment of the Character Area planning concept. In accordance with Department of Community Affairs (DCA) recommendations, the use of character areas in planning acknowledges the visual and functional differences of varying neighborhoods and allows for more intentional guidance of future development through adequate and specific planning and implementation. Under the program, all incorporated and unincorporated areas of the County are assigned one of a number of described Character Area designations. These designations are used to define areas that either have unique or special characteristics that need to be preserved, have the potential to evolve into unique areas, or that may require special attention due to unique development issues. In the process of identifying and defining character areas, it is important to create recommendations that include the present character of an area as well as the future desired character for these places in the community.

Below are the Character Areas that the Comprehensive Planning Steering Committee have received preliminary recommendation for inclusion in the Joint Comprehensive Plan for Putnam County and the City of Eatonton. The Steering Committee will make a final recommendation of the Character Areas after it has received extensive community input obtained from its Community Participation Program. The final Character Areas will be shown on the Future Development Map in the Community Agenda portion of the Plan.

Conservation Area and Greenspace

Description

Conservation Area and Greenspace is primarily undeveloped natural lands and environmentally sensitive areas not suitable for development, e.g. scenic views, steep slopes, floodplains, wetlands, watersheds, wildlife management areas, and other environmentally sensitive areas.

Location within Putnam County

- Unincorporated Putnam County – Includes most of the area within the Oconee National Forest, Cedar Creek Wildlife Management Area, and Rock Eagle 4-H Center.

Agricultural Area

Description

Agricultural Areas are lands in open or cultivated state or sparsely settled, including woodlands and farmlands.

Location within Putnam County

- Unincorporated Putnam County – Includes the prime agricultural areas in Putnam County that stretch just north of Highway 44 near Tanyard Road, across Highways 44 and 16 and south along Pea Ridge Road-Old Copeland Road-Pinkerton Road.

Rural Residential

Description

Rural Residential can be described as rural, undeveloped land likely to face development pressures for lower density (one unit per one acre or more) residential development. Typically, it will have low pedestrian orientation and access, very large lots, open space, pastoral views, and high degree of building separation.

Location within Putnam County

Unincorporated Putnam County – Includes the area between the Conservation and Greenspace and Lakes/River Corridor Character Areas and the City of Eatonton on the west and south; and between the Lakes/River Corridor Character Area and the City of Eatonton (with exception of Agricultural Character Area) on the north and east.

- City of Eatonton – Includes most of the area west of the Bypass and the eastern section of the City.

Lakes/River Corridor

Description

Lakes/River Corridor is an area characterized by residential subdivisions concentrated along or within a two-mile radius of Lake Oconee and Lake Sinclair with some scattered multi-family and condominium development. Supportive commercial and office development for lake residents and visitors is located along the major thoroughfares serving these areas (Highway 44, U.S. 441, Harmony Road, Old Phoenix Road). Corridor is expected to experience considerable residential and commercial growth during the planning period. Protection of the lakes' and river's scenic and recreational qualities along with the Sinclair's water supply watershed is viewed as critically important.

Location within Putnam County

- Unincorporated Putnam County – Includes within the two-mile radius of Lake Oconee and Lake Sinclair.

Traditional Neighborhood - Stable

Description

Traditional Neighborhood – Stable is a neighborhood having relatively well-maintained housing, possesses a distinct identity through architectural style, lot and street design, and has higher rates of homeownership. Location near declining areas of town may also cause this neighborhood to decline over time.

Location within Putnam County

- City of Eatonton – Includes the area north of Highway 16 West between the residential historic district and the Highway 441/129 Bypass, the area north of Highway 16 East and east of Jefferson Avenue.

Traditional Neighborhood - Redevelopment Area

Description

Traditional Neighborhood - Redevelopment Area is a neighborhood that has declined sufficiently that housing conditions are bad; there may be large areas of vacant land or deteriorating unoccupied structures.

Location within Putnam County

- City of Eatonton – Includes the area south of Highway 16 East and Oak Street between Rock Lane and Oconee Street, and the area north of the Highway 441/129 Bypass between Godfrey Road and Imperial Mill Road.

Historic District

Description

Historic district is an area containing features, landmarks, civic, or cultural uses of historic interest. Characteristics may vary based on size, location, and history of the community.

Location within Putnam County

- City of Eatonton – Includes the historic residential area north of the downtown area between Jefferson Street and North Lafayette Avenue.

Downtown District

Description

The **Downtown District** is a traditional central business district of an incorporated area. It generally includes a combination of retail, service, professional, and governmental uses.

Location within Putnam County

- City of Eatonton – Includes the area bounded by Walnut Street, North Lafayette Avenue, Wayne Street, and Pine Lane/Plum Street/Putnam Avenue.

Scenic Corridor

Description

Scenic Corridor is developed or undeveloped land paralleling the route of a major thoroughfare that has significant natural, historic, or cultural features and scenic or pastoral views.

Location within Putnam County

- City of Eatonton and Unincorporated Putnam County – Highway 16 East and West from SR 142 to the Oconee River.

Major Highway Corridor

Description

Major Highway Corridor is developed or undeveloped land on both sides of designated high-volume transportation facility, such as arterial roads and highways.

Location within Putnam County

- City of Eatonton and Unincorporated Putnam County – Includes the Highway 441 Corridor from Lake Sinclair through the City of Eatonton (except downtown area) to Morgan County Line; Highway 441/129 Bypass Corridor; East Bypass Corridor; Highway 44 Corridor from Highway 16 to Lake Oconee Parkway and Harmony Road/Old Phoenix Road Corridor from Parks Mill Road to Lake Oconee Parkway.

Light Industrial Area

Description

Light Industrial Area is an area used in low-intensity manufacturing, wholesale trade and distribution activities that do not generate excessive noise, particulate matter, vibration, smoke, dust, gas, fumes odors, radiation, or other nuisance characteristics.

Location within Putnam County

- City of Eatonton – Includes the area north and south of the Bypass between Imperial Mill Road and Highway 441/129 (North Industrial Park).

Industrial Area

Description

Industrial Area is an area used in higher-intensity manufacturing, assembly, processing activities where noise, particulate matter, vibration, smoke, dust, gas, fumes odors, radiation, or other nuisance characteristics are not contained on-site.

Location within Putnam County

- City of Eatonton – Includes the area around Industrial Boulevard and Ted Dunn Boulevard (South Industrial Park).

DP05

ACS DEMOGRAPHIC AND HOUSING ESTIMATES

2011-2015 American Community Survey 5-Year Estimates

Supporting documentation on code lists, subject definitions, data accuracy, and statistical testing can be found on the American Community Survey website in the Data and Documentation section.

Sample size and data quality measures (including coverage rates, allocation rates, and response rates) can be found on the American Community Survey website in the Methodology section.

Tell us what you think. Provide feedback to help make American Community Survey data more useful for you.

Although the American Community Survey (ACS) produces population, demographic and housing unit estimates, it is the Census Bureau's Population Estimates Program that produces and disseminates the official estimates of the population for the nation, states, counties, cities and towns and estimates of housing units for states and counties.

Subject	Putnam County, Georgia			
	Estimate	Margin of Error	Percent	Percent Margin of Error
SEX AND AGE				
Total population	21,247	*****	21,247	(X)
Male	10,565	+/-224	49.7%	+/-1.1
Female	10,682	+/-224	50.3%	+/-1.1
Under 5 years	1,133	+/-114	5.3%	+/-0.5
5 to 9 years	1,162	+/-261	5.5%	+/-1.2
10 to 14 years	1,103	+/-261	5.2%	+/-1.2
15 to 19 years	1,252	+/-123	5.9%	+/-0.6
20 to 24 years	897	+/-155	4.2%	+/-0.7
25 to 34 years	2,521	+/-491	11.9%	+/-2.3
35 to 44 years	2,368	+/-247	11.1%	+/-1.2
45 to 54 years	2,997	+/-381	14.1%	+/-1.8
55 to 59 years	1,932	+/-284	9.1%	+/-1.3
60 to 64 years	1,501	+/-273	7.1%	+/-1.3
65 to 74 years	2,933	+/-129	13.8%	+/-0.6
75 to 84 years	1,174	+/-121	5.5%	+/-0.6
85 years and over	274	+/-109	1.3%	+/-0.5
Median age (years)	45.6	+/-1.2	(X)	(X)
18 years and over	17,180	+/-114	80.9%	+/-0.5
21 years and over	16,490	+/-158	77.6%	+/-0.7
62 years and over	5,332	+/-267	25.1%	+/-1.3
65 years and over	4,381	+/-101	20.6%	+/-0.5
18 years and over	17,180	+/-114	17,180	(X)
Male	8,566	+/-176	49.9%	+/-0.8
Female	8,614	+/-100	50.1%	+/-0.8
65 years and over	4,381	+/-101	4,381	(X)
Male	2,152	+/-101	49.1%	+/-1.2

Subject	Putnam County, Georgia			
	Estimate	Margin of Error	Percent	Percent Margin of Error
Female	2,229	+/-2	50.9%	+/-1.2
RACE				
Total population	21,247	*****	21,247	(X)
One race	21,010	+/-126	98.9%	+/-0.6
Two or more races	237	+/-126	1.1%	+/-0.6
One race	21,010	+/-126	98.9%	+/-0.6
White	14,648	+/-450	68.9%	+/-2.1
Black or African American	5,650	+/-162	26.6%	+/-0.8
American Indian and Alaska Native	2	+/-4	0.0%	+/-0.1
Cherokee tribal grouping	0	+/-24	0.0%	+/-0.2
Chippewa tribal grouping	0	+/-24	0.0%	+/-0.2
Navajo tribal grouping	0	+/-24	0.0%	+/-0.2
Sioux tribal grouping	0	+/-24	0.0%	+/-0.2
Asian	116	+/-133	0.5%	+/-0.6
Asian Indian	0	+/-24	0.0%	+/-0.2
Chinese	108	+/-133	0.5%	+/-0.6
Filipino	0	+/-24	0.0%	+/-0.2
Japanese	8	+/-14	0.0%	+/-0.1
Korean	0	+/-24	0.0%	+/-0.2
Vietnamese	0	+/-24	0.0%	+/-0.2
Other Asian	0	+/-24	0.0%	+/-0.2
Native Hawaiian and Other Pacific Islander	0	+/-24	0.0%	+/-0.2
Native Hawaiian	0	+/-24	0.0%	+/-0.2
Guamanian or Chamorro	0	+/-24	0.0%	+/-0.2
Samoa	0	+/-24	0.0%	+/-0.2
Other Pacific Islander	0	+/-24	0.0%	+/-0.2
Some other race	594	+/-459	2.8%	+/-2.2
Two or more races	237	+/-126	1.1%	+/-0.6
White and Black or African American	191	+/-120	0.9%	+/-0.6
White and American Indian and Alaska Native	19	+/-24	0.1%	+/-0.1
White and Asian	11	+/-19	0.1%	+/-0.1
Black or African American and American Indian and Alaska Native	0	+/-24	0.0%	+/-0.2
Race alone or in combination with one or more other races				
Total population	21,247	*****	21,247	(X)
White	14,885	+/-458	70.1%	+/-2.2
Black or African American	5,857	+/-109	27.6%	+/-0.5
American Indian and Alaska Native	21	+/-25	0.1%	+/-0.1
Asian	143	+/-140	0.7%	+/-0.7
Native Hawaiian and Other Pacific Islander	0	+/-24	0.0%	+/-0.2
Some other race	594	+/-459	2.8%	+/-2.2
HISPANIC OR LATINO AND RACE				
Total population	21,247	*****	21,247	(X)
Hispanic or Latino (of any race)	1,411	*****	6.6%	*****
Mexican	854	+/-459	4.0%	+/-2.2
Puerto Rican	18	+/-40	0.1%	+/-0.2
Cuban	123	+/-135	0.6%	+/-0.6
Other Hispanic or Latino	416	+/-398	2.0%	+/-1.9
Not Hispanic or Latino	19,836	*****	93.4%	*****
White alone	13,871	+/-24	65.3%	+/-0.2
Black or African American alone	5,650	+/-162	26.6%	+/-0.8
American Indian and Alaska Native alone	2	+/-4	0.0%	+/-0.1
Asian alone	76	+/-103	0.4%	+/-0.5
Native Hawaiian and Other Pacific Islander alone	0	+/-24	0.0%	+/-0.2

Subject	Putnam County, Georgia			
	Estimate	Margin of Error	Percent	Percent Margin of Error
Some other race alone	0	+/-24	0.0%	+/-0.2
Two or more races	237	+/-126	1.1%	+/-0.6
Two races including Some other race	0	+/-24	0.0%	+/-0.2
Two races excluding Some other race, and Three or more races	237	+/-126	1.1%	+/-0.6
Total housing units	12,748	+/-48	(X)	(X)
CITIZEN, VOTING AGE POPULATION				
Citizen, 18 and over population	16,165	+/-160	16,165	(X)
Male	7,710	+/-130	47.7%	+/-0.6
Female	8,455	+/-124	52.3%	+/-0.6

Data are based on a sample and are subject to sampling variability. The degree of uncertainty for an estimate arising from sampling variability is represented through the use of a margin of error. The value shown here is the 90 percent margin of error. The margin of error can be interpreted roughly as providing a 90 percent probability that the interval defined by the estimate minus the margin of error and the estimate plus the margin of error (the lower and upper confidence bounds) contains the true value. In addition to sampling variability, the ACS estimates are subject to nonsampling error (for a discussion of nonsampling variability, see Accuracy of the Data). The effect of nonsampling error is not represented in these tables.

For more information on understanding race and Hispanic origin data, please see the Census 2010 Brief entitled, Overview of Race and Hispanic Origin: 2010, issued March 2011. (pdf format)

While the 2011-2015 American Community Survey (ACS) data generally reflect the February 2013 Office of Management and Budget (OMB) definitions of metropolitan and micropolitan statistical areas; in certain instances the names, codes, and boundaries of the principal cities shown in ACS tables may differ from the OMB definitions due to differences in the effective dates of the geographic entities.

Estimates of urban and rural population, housing units, and characteristics reflect boundaries of urban areas defined based on Census 2010 data. As a result, data for urban and rural areas from the ACS do not necessarily reflect the results of ongoing urbanization.

Source: U.S. Census Bureau, 2011-2015 American Community Survey 5-Year Estimates

Explanation of Symbols:

1. An '***' entry in the margin of error column indicates that either no sample observations or too few sample observations were available to compute a standard error and thus the margin of error. A statistical test is not appropriate.
2. An '-' entry in the estimate column indicates that either no sample observations or too few sample observations were available to compute an estimate, or a ratio of medians cannot be calculated because one or both of the median estimates falls in the lowest interval or upper interval of an open-ended distribution.
3. An '-' following a median estimate means the median falls in the lowest interval of an open-ended distribution.
4. An '+' following a median estimate means the median falls in the upper interval of an open-ended distribution.
5. An '****' entry in the margin of error column indicates that the median falls in the lowest interval or upper interval of an open-ended distribution. A statistical test is not appropriate.
6. An '*****' entry in the margin of error column indicates that the estimate is controlled. A statistical test for sampling variability is not appropriate.
7. An 'N' entry in the estimate and margin of error columns indicates that data for this geographic area cannot be displayed because the number of sample cases is too small.
8. An '(X)' means that the estimate is not applicable or not available.

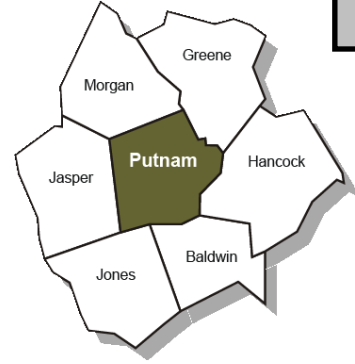


Georgia

Area Labor Profile

Putnam

County



Updated: May 2016

Labor Force Activity - 2015

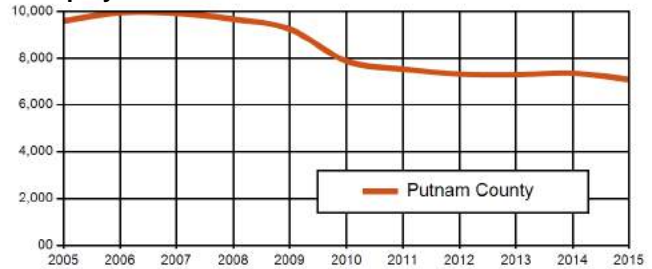
2015 ANNUAL AVERAGES

	Labor Force	Employed	Unemployed	Rate
Putnam	7,701	7,087	614	8.0%
Baldwin	17,454	16,099	1,355	7.8%
Greene	6,362	5,917	445	7.0%
Hancock	2,423	2,180	243	10.0%
Jasper	6,431	6,083	348	5.4%
Jones	13,666	12,936	730	5.3%
Morgan	8,486	8,031	455	5.4%
Putnam Area	62,523	58,333	4,190	6.7%
Georgia	4,770,873	4,490,931	279,942	5.9%
United States	157,129,917	148,833,417	8,296,333	5.3%

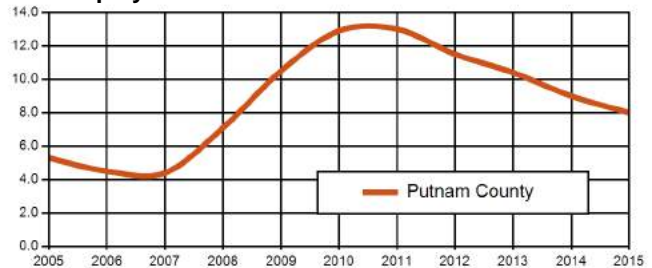
Note: This series reflects the latest information available. Labor Force includes residents of the county who are employed or actively seeking employment.

Source: Georgia Department of Labor; U.S. Bureau of Labor Statistics.

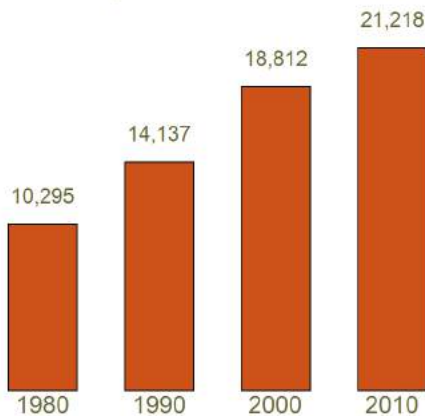
Employment Trends



Unemployment Rate Trends



Population Estimates



Population

	2010 Census	2015 Rank	2015 Estimate	% Change 2000-2015	2025 Projected*	% Change 2010-2025
Putnam	21,218	176	21,353	0.6	26,738	26.0
City of Eatonton	6,480					
Putnam Area	152,798		152,248	-0.4	211,194	38.2
Georgia	9,687,653		10,214,860	5.4	13,426,590	38.6
United States	308,745,538		321,418,820	4.1	349,439,199	13.2

Source: Population Division, U.S. Census Bureau, *Governor's Office of Planning and Budget.

MARK BUTLER - COMMISSIONER, GEORGIA DEPARTMENT OF LABOR
Equal Opportunity Employer/Program
Auxillary Aids and Services Available upon Request to Individuals with Disabilities

Workforce Statistics & Economic Research; E-mail: Workforce_Info@gdol.ga.gov Phone: (404) 232-3875

Industry Mix - 4th Quarter of 2015

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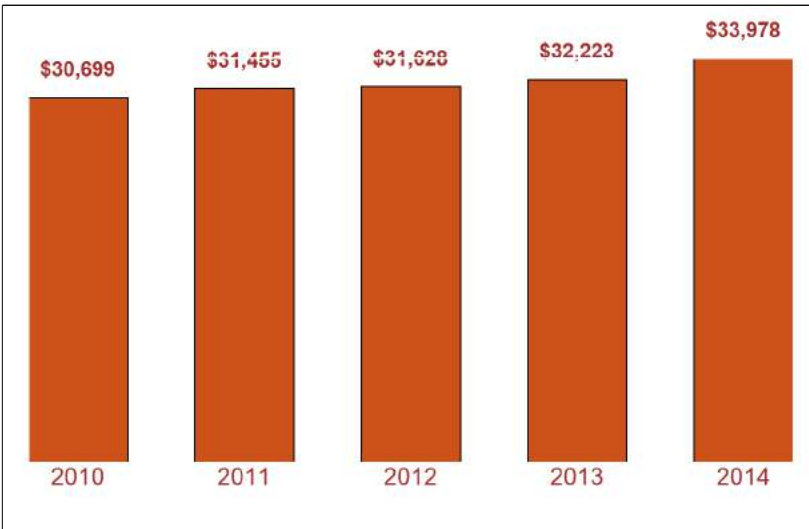
INDUSTRY	Putnam				Putnam Area			
	NUMBER	EMPLOYMENT		WEEKLY	NUMBER	EMPLOYMENT		WEEKLY
	OF FIRMS	NUMBER	PERCENT	WAGE	OF FIRMS	NUMBER	PERCENT	WAGE
Goods-Producing	113	1,185	21.3	697	527	8,023	19.4	874
Agriculture, Forestry, Fishing and Hunting	15	364	6.5	601	74	1,016	2.5	657
Mining, Quarrying, and Oil and Gas Extraction	0	0	0.0	0	6	168	0.4	1,179
Construction	72	432	7.8	656	323	2,398	5.8	761
Manufacturing	26	389	7.0	832	124	4,440	10.7	972
Food	3	38	0.7	685	10	71	0.2	557
Textile Product Mills	1	*	*	*	1	*	*	*
Wood Product	5	181	3.3	883	15	887	2.1	945
Chemical	2	*	*	*	7	138	0.3	1,281
Plastics and Rubber Products	1	*	*	*	9	766	1.8	884
Nonmetallic Mineral Product	3	*	*	*	9	497	1.2	960
Fabricated Metal Product	3	*	*	*	12	267	0.6	757
Machinery	2	*	*	*	13	343	0.8	1,872
Transportation Equipment	1	*	*	*	8	870	2.1	943
Furniture and Related Product	4	28	0.5	895	10	49	0.1	830
Miscellaneous	1	*	*	*	7	6	0.0	1,127
Beverage and Tobacco Product	0	0	0.0	0	1	*	*	*
Apparel	0	0	0.0	0	1	*	*	*
Textile Mills	0	0	0.0	0	1	*	*	*
Primary Metal	0	0	0.0	0	1	*	*	*
Electrical Equipment, Appliance, and Component	0	0	0.0	0	2	*	*	*
Computer and Electronic Product	0	0	0.0	0	2	*	*	*
Paper	0	0	0.0	0	3	33	0.1	751
Printing and Related Support Activities	0	0	0.0	0	12	67	0.2	502
Service-Providing	330	2,847	51.2	554	2,345	22,932	55.4	579
Utilities	6	*	*	*	16	215	0.5	1,484
Wholesale Trade	17	76	1.4	1,099	116	672	1.6	1,026
Retail Trade	74	755	13.6	456	481	5,446	13.2	476
Transportation and Warehousing	14	422	7.6	557	85	714	1.7	691
Information	3	*	*	*	28	223	0.5	863
Finance and Insurance	22	146	2.6	1,117	167	1,014	2.4	1,055
Real Estate and Rental and Leasing	14	35	0.6	1,510	112	342	0.8	840
Professional, Scientific, and Technical Services	41	100	1.8	1,087	227	590	1.4	1,066
Management of Companies and Enterprises	4	14	0.3	553	9	26	0.1	859
Administrative and Support and Waste Management and Remediation Services	20	94	1.7	476	146	1,874	4.5	548
Educational Services	2	*	*	*	26	287	0.7	515
Health Care and Social Assistance	36	414	7.4	443	297	5,328	12.9	690
Arts, Entertainment, and Recreation	8	46	0.8	474	43	271	0.7	476
Accommodation and Food Services	38	529	9.5	284	272	4,993	12.1	304
Other Services (except Public Administration)	31	57	1.0	400	201	829	2.0	490
Unclassified - industry not assigned	24	23	0.4	1,109	119	108	0.3	777
Total - Private Sector	467	4,055	72.9	599	2,872	30,955	74.8	655
Total - Government	34	1,509	27.1	626	234	10,457	25.3	670
Federal Government	6	63	1.1	947	39	276	0.7	1,028
State Government	15	*	*	*	106	3,964	9.6	695
Local Government	13	1,014	18.2	625	89	6,217	15.0	638
ALL INDUSTRIES	501	5,565	100.0	606	3,106	41,412	100.0	659
ALL INDUSTRIES - Georgia					296,056	4,232,832		1,002

Note: *Denotes confidential data relating to individual employers and cannot be released. These data use the North American Industrial Classification System (NAICS) categories. Average weekly wage is derived by dividing gross payroll dollars paid to all employees - both hourly and salaried - by the average number of employees who had earnings; average earnings are then divided by the number of weeks in a reporting period to obtain weekly figures. Figures in other columns may not sum accurately due to rounding. All figures are 4th Quarter of 2015.

Source: Georgia Department of Labor. These data represent jobs that are covered by unemployment insurance laws.

Putnam Per Capita Income

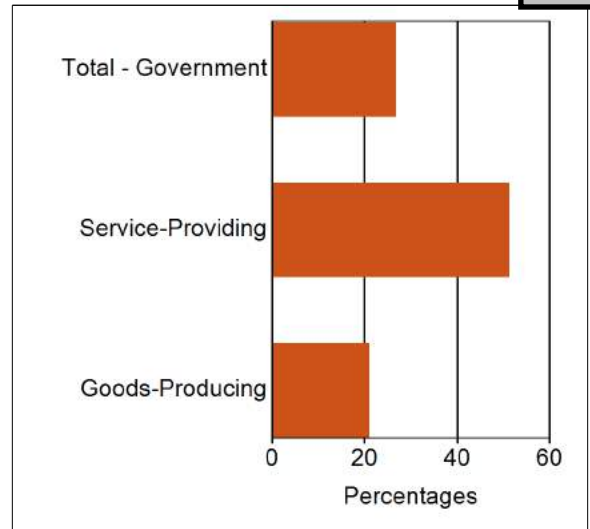
Source: U.S. Bureau of Economic Analysis



Putnam Industry Mix 2015

Source: See Industry Mix data on P

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Top Ten Largest Employers - 2015*

Putnam

Cuscowilla Management
 Eatonton Health & Rehabilitation
 Haband Company, LLC
 Health Care Plus, LLC
 Ingles Markets, Inc.
 McDonald's
 Popeyes
 Rayonier Wood Products, LLC
 Rose Acre Farms, Inc.
 Walmart

*Note: Represents employment covered by unemployment insurance excluding all government agencies except correctional institutions, state and local hospitals, state colleges and universities. Data shown for the Third Quarter of 2015. Employers are listed alphabetically by area, not by the number of employees.

Source: Georgia Department of Labor

Putnam Area

Employer	COUNTY
Daniel RP Management, LLC	Greene
Georgia College & State University	Baldwin
Georgia Department of Behavioral Health and Developmental Disabilities	Baldwin
Georgia Department of Corrections	Baldwin
Georgia Military College	Baldwin
Georgia-Pacific Wood Products, LLC	Morgan
Oconee Regional Medical Center, Inc.	Baldwin
Ritz-Carlton Hotel	Greene
SGD Manufacturing, Inc.	Hancock
Triumph Aerostructures, LLC	Baldwin

Commuting Patterns

EMPLOYED RESIDENTS OF			PERSONS WORKING IN		
Putnam			Putnam		
COUNTY WHERE EMPLOYED	NUMBER	PERCENT OF TOTAL	COUNTY OF RESIDENCE	NUMBER	PERCENT OF TOTAL
Putnam, GA	4,829	56.3	Putnam, GA	4,829	67.8
Baldwin, GA	1,047	12.2	Baldwin, GA	796	11.2
Greene, GA	743	8.7	Greene, GA	312	4.4
Morgan, GA	262	3.1	Hancock, GA	215	3.0
Newton, GA	215	2.5	Jasper, GA	166	2.3
Bibb, GA	208	2.4	Morgan, GA	162	2.3
Jasper, GA	181	2.1	Walton, GA	86	1.2
Fulton, GA	149	1.7	Clarke, GA	55	0.8
Other	945	11.0	Other	445	6.2
Total Residents:	8,579	100.0	Total Residents:	7,121	100.0

Note: Other category represents employment from U.S. counties only.

Source: U.S. Census Bureau - 2010 County-To-County Worker Flow Files.

Putnam Area

	PERCENT OF TOTAL	PERCENT DISTRIBUTION BY AGE				
		18-24	25-34	35-44	45-64	65+
Elementary	7.2%	3.8%	3.9%	5.2%	6.2%	16.9%
Some High School	14.2%	18.9%	13.6%	11.0%	13.3%	15.9%
High Scholl Grad/GED	36.4%	31.9%	38.5%	39.4%	37.5%	33.3%
Some College	20.6%	37.7%	20.9%	19.2%	18.3%	12.6%
Collgege Grad 2 Yr	5.6%	4.0%	6.9%	7.7%	5.7%	3.7%
Collgege Grad 4 Yr	10.0%	3.4%	11.9%	11.8%	11.1%	9.7%
Post Graduate Studie	5.9%	0.2%	4.3%	5.8%	7.8%	8.0%
Totals	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Note: Totals are based on the portion of the labor force between ages 18 - 65+. Some College category represents workers with some college with no degree less than two years.

Source: U.S. Census Bureau - 2010 Decennial Census.

High School Graduates - 2015

	PUBLIC SCHOOLS	PRIVATE SCHOOLS*	TOTAL
Baldwin	275	--	275
Greene	118	--	118
Hancock	60	--	60
Jasper	123	--	123
Jones	319	--	319
Morgan	232	--	232
Putnam	121	--	121
Putnam Area	1,248	--	1,248



Note: Public schools include city as well as county schools systems.

* Private schools data is not available for 2015 from Georgia Independent School Association.

Source: The Governor's Office of Student Achievement of Georgia.

Putnam Area

Greene

Greene County Campus (Satellite campus of Athens Technical College) www.athenstech.edu/

Jones

Jones County Center (Satellite campus of Central Georgia Technical College) www.centralgatech.edu

Putnam

Putnam County Center (Satellite campus of Central Georgia Technical College) www.centralgatech.edu

Baldwin

Georgia College & State University www.gcsu.edu

Georgia Military College www.gmc.cc.ga.us/

Hancock

Hancock County Center (Satellite campus of Oconee Fall Line Technical College) www.oftc.edu

Jasper

Jasper County Center (Satellite campus of Southern Crescent Technical College) www.sctech.edu

Note: The colleges and universities listed include public and private institutions. This list is updated periodically as information becomes available.

Source: Integrated Postsecondary Education Data System (IPEDS).

Technical College Graduates - 2015*

PROGRAMS	TOTAL GRADUATES			PERCENT CHANGE	
	2013	2014	2015	2013-2014	2014-2015
Accounting Technology/Technician and Bookkeeping°	545	727	751	33.4	3.3
Administrative Assistant and Secretarial Science, General°	255	231	265	-9.4	14.7
Aesthetician/Esthetician and Skin Care Specialist°	15	10	9	-33.3	-10.0
Airframe Mechanics and Aircraft Maintenance Technology/Technician°	120	74	84	-38.3	13.5
Allied Health and Medical Assisting Services, Other°	217	79	47	-63.6	-40.5
Autobody/Collision and Repair Technology/Technician°	130	94	94	-27.7	0.0
Automobile/Automotive Mechanics Technology/Technician°	850	999	956	17.5	-4.3
Banking and Financial Support Services°	16	40	38	150.0	-5.0
Barbering/Barber°	9	18	16	100.0	-11.1
Biology Technician/Biotechnology Laboratory Technician°	21	36	31	71.4	-13.9
Business Administration and Management, General°	261	382	605	46.4	58.4
Business Administration, Management and Operations, Other	6	2	1	-66.7	-50.0
Business/Office Automation/Technology/Data Entry°	10	3	5	-70.0	66.7
Cabinetmaking and Millwork°	14	15	8	7.1	-46.7
CAD/CADD Drafting and/or Design Technology/Technician°	5	11	8	120.0	-27.3
Cardiovascular Technology/Technologist	5	10	5	100.0	-50.0
Carpentry/Carpenter°	70	59	66	-15.7	11.9
Child Care and Support Services Management°	64	51	44	-20.3	-13.7
Child Care Provider/Assistant°	594	573	716	-3.5	25.0

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Technical College Graduates - 2015*

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PROGRAMS	TOTAL GRADUATES			PERCENT CHANGE	
	2013	2014	2015	2013-2014	2014-2015
Clinical/Medical Laboratory Technician	15	13	19	-13.3	46.2
Commercial Photography°	8	8	4	0.0	-50.0
Communications Systems Installation and Repair Technology°	5	18	13	260.0	-27.8
Computer Engineering Technology/Technician°	12	12	24	0.0	100.0
Computer Installation and Repair Technology/Technician°	367	631	639	71.9	1.3
Computer Programming Special Applications°	1	3	7	200.0	133.3
Computer Programming, Specific Applications°	1	6	12	500.0	100.0
Computer Programming/Programmer, General	14	11	20	-21.4	81.8
Construction Management°	4	2	2	-50.0	0.0
Cosmetology, Barber/Styling, and Nail Instructor°	2	3	1	50.0	-66.7
Cosmetology/Cosmetologist, General°	357	332	290	-7.0	-12.7
Criminal Justice/Police Science°	27	25	29	-7.4	16.0
Criminal Justice/Safety Studies°	469	413	459	-11.9	11.1
Crisis/Emergency/Disaster Management°	16	15	12	-6.3	-20.0
Culinary Arts/Chef Training	7	17	16	142.9	-5.9
Customer Service Support/Call Center/Teleservice Operation	922	916	710	-0.7	-22.5
Data Entry/Microcomputer Applications, General°	124	227	167	83.1	-26.4
Data Modeling/Warehousing and Database Administration	7	8	15	14.3	87.5
Data Processing and Data Processing Technology/Technician°	181	218	230	20.4	5.5
Dental Assisting/Assistant	17	32	29	88.2	-9.4
Dental Hygiene/Hygienist	39	32	38	-17.9	18.8
Design and Visual Communications, General°	18	11	23	-38.9	109.1
Diesel Mechanics Technology/Technician°	26	47	41	80.8	-12.8
Drafting and Design Technology/Technician, General°	42	53	39	26.2	-26.4
Early Childhood Education and Teaching°	262	250	335	-4.6	34.0
Electrical, Electronic and Communications Engineering Technology/Technician	5	5	11	0.0	120.0
Electrical/Electronics Equipment Installation and Repair, General°	135	83	87	-38.5	4.8
Electrician°	85	93	83	9.4	-10.8
Electrocardiograph Technology/Technician°	13	12	17	-7.7	41.7
Emergency Medical Technology/Technician (EMT Paramedic)°	333	380	420	14.1	10.5
Entrepreneurship/Entrepreneurial Studies°	10	16	2	60.0	-87.5
Fire Science/Fire-fighting°	8	6	7	-25.0	16.7
Fire Services Administration	4	4	5	0.0	25.0
Food Preparation/Professional Cooking/Kitchen Assistant°	70	69	67	-1.4	-2.9
Forensic Science and Technology°	11	17	14	54.5	-17.6
General Office Occupations and Clerical Services°	125	167	160	33.6	-4.2

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PROGRAMS	TOTAL GRADUATES			PERCENT CHANGE	
	2013	2014	2015	2013-2014	2014-2015
Geographic Information Science and Cartography°	3	3	4	0.0	33.3
Health Information/Medical Records Technology/Technician	44	24	25	-45.5	4.2
Health Services/Allied Health/Health Sciences, General°	23	100	114	334.8	14.0
Heating, Air Conditioning, Ventilation and Refrigeration Maintenance Technology°	519	630	460	21.4	-27.0
Heavy Equipment Maintenance Technology/Technician°	3	1	2	-66.7	100.0
Hospitality Administration/Management, General°	51	44	44	-13.7	0.0
Hotel/Motel Administration/Management°	7	12	10	71.4	-16.7
Human Resources Management and Services, Other°	4	14	8	250.0	-42.9
Human Resources Management/Personnel Administration, General°	104	107	147	2.9	37.4
Industrial Mechanics and Maintenance Technology°	151	199	189	31.8	-5.0
Instrumentation Technology/Technician°	6	6	4	0.0	-33.3
Interior Design°	2	42	28	2000.0	-33.3
Legal Administrative Assistant/Secretary°	5	9	16	80.0	77.8
Legal Assistant/Paralegal°	39	75	65	92.3	-13.3
Licensed Practical/Vocational Nurse Training	205	192	198	-6.3	3.1
Logistics, Materials, and Supply Chain Management°	27	22	52	-18.5	136.4
Machine Shop Technology/Assistant°	73	125	118	71.2	-5.6
Magnetic Resonance Imaging (MRI)°	3	3	4	0.0	33.3
Marketing/Marketing Management, General	38	30	52	-21.1	73.3
Mechanic and Repair Technologies/Technicians, Other	15	19	32	26.7	68.4
Medical Insurance Coding Specialist/Coder°	17	6	9	-64.7	50.0
Medical Office Assistant/Specialist°	50	105	67	110.0	-36.2
Medical Transcription/Transcriptionist°	1	2	3	100.0	50.0
Medical/Clinical Assistant°	108	92	125	-14.8	35.9
Medical/Health Management and Clinical Assistant/Specialist°	11	15	5	36.4	-66.7
Medium/Heavy Vehicle and Truck Technology/Technician°	41	62	77	51.2	24.2
Meeting and Event Planning°	10	18	11	80.0	-38.9
Motorcycle Maintenance and Repair Technology/Technician	12	7	9	-41.7	28.6
Network and System Administration/Administrator°	83	232	284	179.5	22.4
Nursing Assistant/Aide and Patient Care Assistant/Aide°	246	169	129	-31.3	-23.7
Pharmacy Technician/Assistant°	36	73	63	102.8	-13.7
Phlebotomy Technician/Phlebotomist°	82	70	96	-14.6	37.1
Physical Therapy Technician/Assistant	18	20	13	11.1	-35.0
Plumbing Technology/Plumber°	13	23	6	76.9	-73.9
Polysomnography°	9	7	14	-22.2	100.0
Professional, Technical, Business, and Scientific Writing°	5	9	51	80.0	466.7
Radiologic Technology/Science - Radiographer°	66	65	68	-1.5	4.6
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PROGRAMS	TOTAL GRADUATES			PERCENT CHANGE	
	2013	2014	2015	2013-2014	2014-2015
Registered Nursing/Registered Nurse	44	46	46	4.5	0.0
Rehabilitation and Therapeutic Professions, Other	17	12	19	-29.4	58.3
Renal/Dialysis Technologist/Technician°	41	74	79	80.5	6.8
Respiratory Care Therapy/Therapist	22	23	22	4.5	-4.3
Retailing and Retail Operations°	2	1	2	-50.0	100.0
Selling Skills and Sales Operations°	34	44	31	29.4	-29.5
Social Work, Other°	30	35	23	16.7	-34.3
Surgical Technology/Technologist°	63	78	70	23.8	-10.3
Teacher Assistant/Aide°	12	10	11	-16.7	10.0
Truck and Bus Driver/Commercial Vehicle Operator and Instructor°	179	329	282	83.8	-14.3
Veterinary/Animal Health Technology/Technician and Veterinary Assistant°	24	22	15	-8.3	-31.8
Web Page, Digital/Multimedia and Information Resources Design°	17	35	54	105.9	54.3
Welding Technology/Welder°	388	606	551	56.2	-9.1

Definition: All graduates except those listed as technical certificates(°) are diploma and degree graduates. Diploma and degree programs are one to two years in length. Technical certificates are less than a year in length. Duplication may occur due to graduates with multiple awards.

Source: Technical College System of Georgia

*Data shown represents Annual 2013, 2014, and 2015.

Note: Please visit TCSG website for any college configuration changes.

Active Applicants - Georgia Department of Labor

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	TOTAL	Mgt.	Bus. and Finance	Comp. and Arch. Math	and Eng.	Life and Soc. Svcs.	Comm. and Svcs	Legal	Ed. and Training	Arts and Design	Health Prac.	Support
Baldwin	319	60	16	14	13	7	16	1	23	17	23	129
Greene	70	24	4	4	2	0	5	1	8	2	5	15
Hancock	41	8	0	1	3	0	3	1	4	5	1	15
Jasper	36	8	2	3	3	2	2	0	2	4	2	8
Jones	84	28	6	7	7	1	3	0	4	4	13	11
Morgan	71	24	10	3	4	1	5	1	6	5	3	9
Putnam	56	17	7	1	2	1	3	0	7	2	4	12
Subtotal Area	677	169	45	33	34	12	37	4	54	39	51	199

Active Applicants - Georgia Department of Labor (cont.)

	TOTAL	Protect. Svcs.	Food Prep.	Ground Cleaning	Personal Care	Sales	Office Support	Farm. and Forestry	Cons- truction	Installation Main.	Prod.	Trans. and Moving
Baldwin	2,075	71	277	110	67	268	310	7	133	75	445	312
Greene	560	4	65	47	14	54	86	4	25	25	119	117
Hancock	353	15	18	11	7	28	55	0	17	8	112	82
Jasper	168	2	3	4	2	12	45	1	18	8	44	29
Jones	347	15	21	15	7	28	87	2	39	25	62	46
Morgan	300	5	24	10	1	19	49	0	24	12	89	67
Putnam	509	6	41	31	12	45	87	2	50	21	111	103
Subtotal Area	4,312	118	449	228	110	454	719	16	306	174	982	756

Note: For current applicant data available for a specific occupation, contact the nearest Georgia Department of Labor Career Center.
 Source: Georgia Department of Labor (active applicants as of April 2016).

Georgia Department of Labor Location(s)

Career Center(s)

156 Roberson Mill Road
 Milledgeville GA 31061
Phone: (478) 445 - 5465

Fax: (478) 445 - 2040

For copies of Area Labor Profiles, please visit our website at: <http://dol.georgia.gov> or contact Workforce Statistics & Economic Research, Georgia Department of Labor, 148 Andrew Young International Blvd N.E. Atlanta, GA. 30303-1751. Phone: 404-232-3875; Fax: 404-232-3888 or Email us at workforce_info@gdol.ga.gov

Appendix C

Relevant Community Planning Documents

- Middle Georgia Regionally Important Resources Plan Introduction
- Putnam-Eatonton Joint Solid Waste Management Plan Introduction
- Middle Georgia Regional Plan Executive Summary
- Putnam County/City of Eatonton Summary of Service Delivery Arrangements for Emergency Management
- Debris Management Plan

Regionally Important Resources Plan

MIDDLE GEORGIA

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Middle Georgia
Regional Commission
January 2010



REGIONALLY IMPORTANT RESOURCES PLAN MIDDLE GEORGIA JANUARY 2010

Prepared by:



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Purpose

This plan is intended to serve as a guide for the protection and management of the many important natural, cultural, and historic resources found throughout the Middle Georgia region. These resources, hereinafter referred to as Regionally Important Resources (RIR), are those determined to be of value to the region and thus the state, and to be vulnerable to the effects of uncontrolled or incompatible development. Additionally, the plan hopes to lay a foundation for improved local, regional and state level coordination in protecting and managing these important resources.

The plan has been prepared in accordance with the rules and procedures established by the Georgia Department of Community Affairs (effective July 1, 2009) for the identification of RIRs, the development of a plan for protection and management of the RIRs, and for review of activities potentially impacting the RIRs.

Overview

The plan contains three (3) categories of RIRs: Cultural and Historic Resources, Parks and Forestry Resources, and Water Resources. Each individual resource is identified by category and reflects “snapshot” data, a description of the resource’s value to the region, and an explanation of its susceptibility to the impacts of new development. Each category concludes with appropriate development practices recommended for developers when designing new developments to be located near RIRs, and general policies and protection measures recommended for use by local governments in making decisions that affect RIRs.

Another important component of the plan is a Regionally Important Resources Map, which depicts the area’s important resources, and includes a Green Infrastructure Network overlay illustrating important linkages connecting the RIRs.

**THE JOINT SOLID WASTE MANAGEMENT PLAN
FOR PUTNAM COUNTY AND THE CITY
OF EATONTON**

Prepared for
Putnam County and the City of Eatonton

Prepared by
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August 2007

INTRODUCTION

In 1990, the Georgia General Assembly passed the Georgia Comprehensive Solid Waste Management Act. The intent of the General Assembly in developing and adopting this legislation was to establish a solid waste management planning process necessary to prevent environmental degradation, to manage resources and to effectively reduce and manage solid waste for the State and its residents.

The Act specifies that in order to receive a permit, grant or loan for a solid waste management facility, each city and county shall develop or be included in a comprehensive solid waste management plan. The Act requires that any request for a solid waste handling facility permit or funding for publicly owned and operated solid waste management facilities or equipment must be consistent with the solid waste management plans of all affected local governments. The most recent Solid Waste Management Plan for Putnam County and the City of Eatonton was adopted in September 1993.

To guide the preparation of local, multi-jurisdictional or regional plans, the Act mandated the preparation of Minimum Planning Standards and Procedures for Solid Waste Management. These Minimum Standards are adopted by the Georgia Department of Community Affairs Board; the most recent addition became effective on January 1, 2004. Based on these Minimum Standards, the Joint Solid Waste Management Plan for Putnam County and the City of Eatonton has the following components:

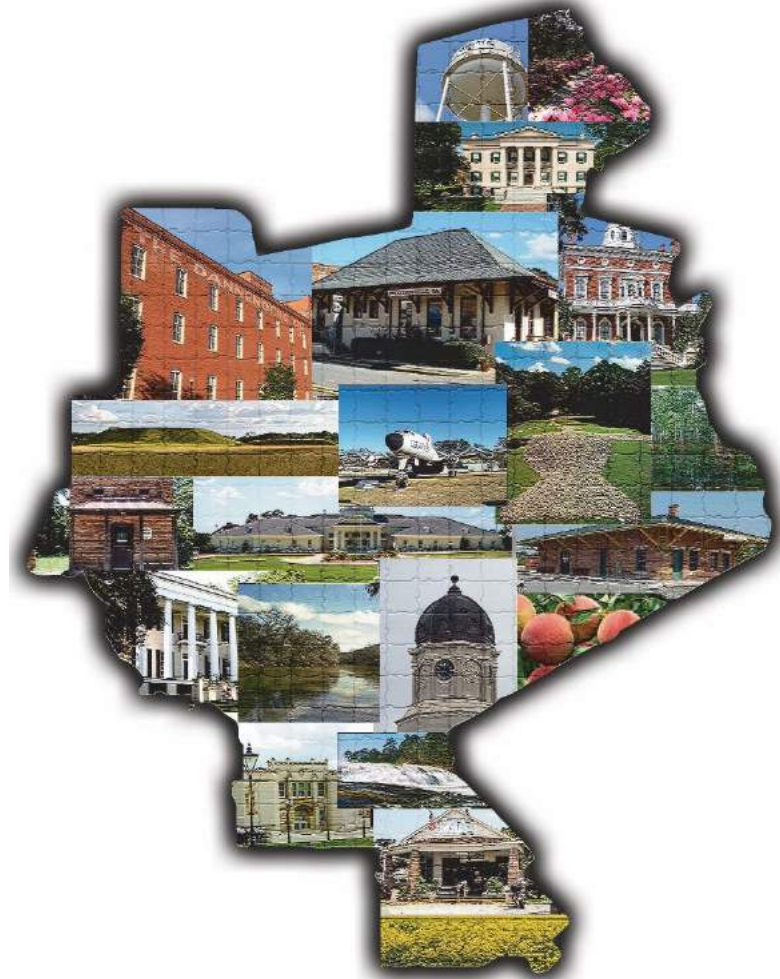
1. An **Overview of the Area** that includes a discussion of location, topography, population, and commercial and industrial activity in the area.
2. A **Waste Disposal Stream Analysis** that assesses who is generating the waste in the county and what they generate. This section of the report also includes the projected waste stream for the ten-year planning period.
3. Five core planning elements that relate back to the Waste Disposal Stream Analysis; **Waste Reduction, Collection, Disposal, Land Limitation, and Public Education and Involvement**. Each of the elements must include an inventory and assessment and a list of needs and goals. For the Collection and Disposal Elements, a contingency strategy in the event of disruption to the primary option must be identified. The contingency strategy must include an alternative collection/disposal option on an interim basis and the estimated time to bring the contingency option on line. The Land Limitation Element must include procedures the local governments will follow to determine if a proposed facility, public or private, is consistent with the plan.
4. A **Disaster Debris Management Plan** that specifies what procedures the local governments will follow for the collection and disposal of significant volumes of waste and/or special wastes resulting from any type of disaster, encouraging reduction (recycling) of such waste and public notification of the programs established to handle waste generated by a disaster.

5. After all the elements have been inventoried and assessed and the needs and goals have been identified, the Plan must identify an **Implementation Strategy** that includes specific actions that will be taken over the ten-year planning period to address the needs and goals expressed in the planning elements. The Strategy will consist of a table that lists the names of all jurisdictions included in the Plan, the activities, the year or years the activities are covering, the party or parties responsible for managing the activities, the estimated cost of the activities, and the funding source. The first five years of the Implementation Strategy will serve as the first Short-Term Work Program, while the second five-year period will be updated in accordance with the planning schedule established and revised from time to time by the Georgia Department of Community Affairs.

2016-2036

Plan for . . .

A THRIVING MIDDLE GEORGIA



REGIONAL AGENDA



EXECUTIVE SUMMARY

Middle Georgia is an exceptionally diverse region. From the large cities to the small towns, significant opportunities are present, requiring only the fortitude to overcome equally significant challenges. The Regional Agenda is the third and final component of the broader Middle Georgia Regional Plan. While the Regional Assessment discussed these challenges and opportunities in a factual context, the Regional Agenda is informed by the Stakeholder Involvement Program and by thoughts and feelings about what Middle Georgians want their region to look like in the future. The Agenda should help provide a road map and a toolbox of resources to allow local and regional decision-makers the ability to improve the overall prosperity and quality of life within their communities and strive for the creation of a thriving Middle Georgia.



The 11 counties that compose the Middle Georgia Region.

One of the major themes heard from stakeholders across the region is the need for additional economic development within Middle Georgia. In many cases, this is tied closely to the themes of education and workforce development. Additional investment of time, resources, and collaborative learning experiences is necessary to keep the economy of the region moving in the right direction. Few stakeholders doubted that Middle Georgia had the potential to improve the quality of its workforce, but many stressed the need to build connections that can enhance the best practices already in place. Apprenticeship and mentorship programs can be particularly beneficial in teaching not only the hard skills necessary to succeed, but also the soft skills that many employers believe are becoming harder to find. There was also broad consensus that while opportunities to improve an individual's marketability in the labor force exist, additional work needs to occur in spreading the news of opportunities and effectively communicating the availability of regional resources.

Another commonly heard theme is that the region has great opportunities related to its natural resources. With several large lakes, three major rivers, and the Ocmulgee National Monument all present in Middle Georgia, the region is positioned to capitalize on these assets through ecotourism initiatives. Walking and bicycling trails are a simple upgrade that can rejuvenate an area and bring more visitors in, and aquatic recreation opportunities can even draw people from far away. For example, Columbus, Georgia used the Chattahoochee River to create artificial whitewater rapids that have become a major tourist draw for the



The Ocmulgee Heritage Trail in Macon is one example of Middle Georgia embracing the natural environment to help improve the community as a whole.

city. The Flint, Ocmulgee, and Oconee rivers can likewise be used as recreational opportunities if combined with infrastructure investments from local residents and government entities. In addition, the provision of new recreational opportunities can also help improve the overall health of the community.

Challenges also remain for many local governments in terms of ensuring adequate service provision. Many local governments have been encountering shrinking budgets and tax bases which strains their ability to keep infrastructure in acceptable shape. As a result, potholes sometimes go unrepaired,

water lines rupture more frequently than they should, and infiltration seeps into sanitary sewer systems. The fixes for these are often not simple or inexpensive. As a result, grant funding remains a prime opportunity for local governments to undertake much needed repairs to their critical infrastructure. It was also heard from stakeholders that the availability of infrastructure itself may also be lacking in some places. For example, some industries need more natural gas capacity than is currently available in the region. Transportation infrastructure can also be an issue, as some local governments seek opportunities to widen existing roads or construct new ones (especially East-West corridors across the Ocmulgee River). While grant funding will always be an important part of this equation, local governments may also need to find ways to set aside funds for regular maintenance activities, as well as large capital improvement projects.



Even seemingly simple repairs can be costly if happening at the wrong time or place. The City of Jeffersonville would spend nearly \$50,000 to repair this broken water main under U.S. 80.

In addition, stakeholders have identified a need to review current land use and development patterns. As Baby Boomers are increasingly left with “empty nests,” and as Millennials enter the real estate market, more and more Americans are becoming interested in returning to downtown or small town living as an alternative to the traditional suburbs that grew in the post-war era. This underscores a need for additional investment in the revitalization of town centers and the promotion of smart growth principles that allow for easy mobility of residents ages 8 to 80. If town centers are able to meet the needs of potential residents (particularly older Americans in many small towns), then not only will residents have an attractive place to live, but they will also aid in growing more commercial activity in town centers. These growth patterns will prove beneficial for many local governments, as new infill developments carry with them a lower cost of service provision for the local government.

Finally, it is worth noting that the protection of Robins Air Force Base (RAFB) and the missions it hosts are of the utmost importance. As the region’s largest employer, no other entity has as large an economic impact as RAFB, particularly in Houston County, one of the most populous counties in the region. However, it remains true that the entire region must prepare for the possibility that missions could be lost. While economically impactful, missions are frequently added, moved, and lost at military installations all across the country. This requires a commitment to economic diversification across the region to make the economy of Middle Georgia resilient in case the unfortunate were to occur.

These are only some of the major findings of the Regional Agenda which will be detailed in the pages that follow. The next section of this document will briefly detail the planning process, describing the ways in which the general public was involved in the creation of this plan. Afterward, the Regional Agenda will lay out a vision statement for the region, which will be expounded upon in the context of land use and development in the following narratives. Next this plan will discuss Issues and Opportunities that have been identified for the region, followed by an Implementation Program. This section includes the Regional Work Program of activities that will be undertaken by the Middle Georgia Regional Commission in the months ahead. Finally, we will note plans for ongoing evaluation and monitoring of plan implementation.



**SERVICE DELIVERY STRATEGY
SUMMARY OF SERVICE DELIVERY ARRANGEMENTS PAGE 2**

Instructions:

Make copies of this form and complete one for each service listed on page 1, Section III. Use exactly the same service names listed on page 1. Answer each question below, attaching additional pages as necessary. If the contact person for this service (listed at the bottom of the page) changes, this should be reported to the Department of Community Affairs.

County: _____ **Service:** _____

1. Check the box that best describes the agreed upon delivery arrangement for this service:

Service will be provided countywide (i.e., including all cities and unincorporated areas) by a single service provider. (If this box is checked, identify the government, authority or organization providing the service.): _____

Service will be provided only in the unincorporated portion of the county by a single service provider. (If this box is checked, identify the government, authority or organization providing the service.): _____

One or more cities will provide this service only within their incorporated boundaries, and the service will not be provided in unincorporated areas. (If this box is checked, identify the government(s), authority or organization providing the service: _____

One or more cities will provide this service only within their incorporated boundaries, and the county will provide the service in unincorporated areas. (If this box is checked, identify the government(s), authority or organization providing the service.): _____

Other (If this box is checked, **attach a legible map delineating the service area of each service provider**, and identify the government, authority, or other organization that will provide service within each service area.): _____

2. In developing the strategy, were overlapping service areas, unnecessary competition and/or duplication of this service identified?

Yes No

If these conditions will continue under the strategy, **attach an explanation for continuing the arrangement** (i.e., overlapping but higher levels of service (See O.C.G.A. 36-70-24(1)), overriding benefits of the duplication, or reasons that overlapping service areas or competition cannot be eliminated).

If these conditions will be eliminated under the strategy, **attach an implementation schedule** listing each step or action that will be taken to eliminate them, the responsible party and the agreed upon deadline for completing it.

3. List each government or authority that will help to pay for this service and indicate how the service will be funded (e.g., enterprise funds, user fees, general funds, special service district revenues, hotel/motel taxes, franchise taxes, impact fees, bonded indebtedness, etc.).

<i>Local Government or Authority:</i>	<i>Funding Method:</i>

4. How will the strategy change the previous arrangements for providing and/or funding this service within the county?

5. List any formal service delivery agreements or intergovernmental contracts that will be used to implement the strategy for this service:

<i>Agreement Name:</i>	<i>Contracting Parties:</i>	<i>Effective and Ending Dates:</i>

6. What other mechanisms (if any) will be used to implement the strategy for this service (e.g., ordinances, resolutions, local acts of the General Assembly, rate or fee changes, etc.), and when will they take effect?

7. Person completing form: _____
 Phone number: _____ Date completed: _____

8. Is this the person who should be contacted by state agencies when evaluating whether proposed local government projects are consistent with the service delivery strategy? Yes No

If not, provide designated contact person(s) and phone number(s) below:

PUTNAM COUNTY DEBRIS MANAGEMENT PLAN – 08

Subgrantee

June 16, 2008

MISSION

To facilitate and coordinate the removal, collection, and disposal of debris following a disaster, to mitigate against any potential threat to the health, safety, and welfare of the impacted citizens, and expedite recovery efforts in the impacted area, and address any threat of significant damage to improved public or private property.

SITUATION

Natural and man-made disasters precipitate a variety of debris that includes, but is not limited to, such things as trees, sand, gravel, building/construction materials, vehicles, personal property, etc.

The quantity and type of debris generated from any particular disaster is a function of the location and kind of event experienced, as well as its magnitude, duration, and intensity.

The quantity and type of debris generated, its location, and the size of the area over which it is dispersed directly impacts the type of collection and disposal methods used to address the debris problem, associated costs incurred, and the speed with which the problem can be addressed.

In a major or catastrophic disaster, Putnam County may have difficulty in locating staff, equipment, and funds to devote to debris removal, in the short as well as long term.

Private contractors play a significant role in the debris removal, collection, reduction, and disposal process.

The debris management program implemented by Putnam County will be based on the waste management approach of reduction, reuse, and reclamation. Resources recovery, incineration, and landfilling, respectively.

ORGANIZATION AND CONCEPT OF OPERATIONS

The Eatonton/Putnam EMA is responsible for the debris removal function. The Eatonton/Putnam EMA (E/P EMA) will work in conjunction with designated support agencies utility companies, waste management firms, and trucking companies, to facilitate the debris clearance, collection, reduction, and disposal needs following a disaster. E/P EMA will be responsible for removing debris from the public right-of-way. Only when pre approved and it is deemed in the public interest will E/P EMA remove debris from private property. E/P EMA will further stage equipment in strategic locations locally as well as regionally, if necessary, to protect the equipment from damage, preserve the decision maker's flexibility for employment of the equipment, and allow for the clearing crews to begin work immediately after the disaster.

Because of the limited quantity of resources and service commitments following the disaster, will be relying heavily on private contractors to remove, collect, and manage debris for reuse, resource recovery, reduction, and disposal. Using private Contractors instead of government workers in debris removal activities has a number of benefits. It shifts the burden of conducting the work from Putnam County to the private sector, freeing up government personnel to devote more time to their regularly assigned duties. Private contracting also stimulates local, regional, and State economies impacted by the storm, as

well as maximizes State and local governments' level of financial assistance from the Federal government. Private contracting allows the State and its political subdivisions to more closely tailor their contract services to their specific needs. The entire process (i.e., clearance, collection, transporting, reduction, and disposal, etc.) or segments of the process can be contracted out.

The E/P EMA will also develop and maintain a list of approved contractors who have the capability to provide debris removal, collection, and disposal in a cost effective, expeditious, and environmentally sound manner following a disaster.

STAFF DEVELOPMENT & RESPONSIBILITIES

The E/P EMA is responsible for the developing a debris management plan and shall select a “Debris Manager” to supervise a “Debris Management Staff”. The staff shall be comprised of personnel to perform:

1. Administration
Function: Housekeeping, supplies, equipment, funding, accounting.
2. Contracting and Procurement
Function: Bidding requirements, forms, advertisements for bids, Instructions to bidders, contract development.
3. Legal
Function: Contract review, right of entry permits, community liability condemnation of buildings, land acquisition for temporary staging and reduction sites, land acquisition for disposal sites, insurance.
4. Operations
Function: Supervision of government and contract resources and overall project management.
5. Engineering
Function: Detailed damage assessment, identification of project tasks, assignments of tasks, preparation of estimates, plans, specifications, and recommendation of contract award.
6. Public Information Specialist
Function: Coordinate press releases, contacts with local organizations, individuals, and media; and public notices for debris removal and disposal contracts.

The staff shall coordinate with all State and Federal agencies responsible for disaster response and recovery operations. The staff will be assigned the task of:

1. Assembling to develop a Debris Management Plan.
2. Developing an analysis and debris management capability
3. Discourage development in hazardous zones.
4. Encourage public information and education programs.
5. Train personnel in debris management techniques.
6. Maintain pre-disaster maps, blueprints, photos and other documents.
7. Make a list of critical facilities (streets, roads, and bridges).
8. Identify non-government groups that could assist.

CONTRACT AND COOPERATIVE AGREEMENTS

Sample contracts with a menu of services and generic scopes of work will be developed by the Putnam County Attorney’s Office prior to the disaster to allow the E/P EMA to more closely tailor its contracts to its needs, as well as expedite their implementation in a prompt and effective manner.

The E/P EMA will be responsible for managing the debris contract from project inception to completion. Managing the debris contract includes such things as monitoring of performance, contract modifications, inspections, acceptance, payment, and closing out of activities. E/P EMA is encouraged to enter into cooperative agreements with other State agencies and local governments to maximize public assets. The development of such agreements must comply with the guidelines established in their agency procurement manual. All State agencies and local governments that wish to participate in such agreements should be identified prior to the development and implementation of the agreement.

The three types of contracts required are the:

1. Time and Materials Contract. Will be limited to the first 70 hours of operation and only after all State and local equipment has been committed. The price for equipment applies only when the equipment is operating, the E/P EMA can terminate the contract at its convenience, and the E/P EMA does not guarantee a minimum number of hours.
2. Lump Sum Contract. The price of the work is fixed unless there is a change in the scope of work to be performed. Lump sum contracts will be calculated on either the "area" method or the "pass" method. The lump sum contract shall only be used when the scope of work is clearly defined and the areas of work can be specifically quantified.
3. The Unit Price Contract. Is the most accurate account of actual quantities removed? Requires field inspectors to eliminate contractor fraud. All contractor trucks must be measured. Requires load tickets identifying truck number, contract number, contractor's name, date, time departed site, and estimated volume.

The Putnam County Attorney's Office has drawn-up sample contracts and these contracts are attached to this plan as an annex.

E/P EMA has established Mutual Aid Agreements with the following entities to provide assistance with debris removal in the event of a disaster resulting in copious amounts of debris:

- (1) Seeking commitments
- (2)
- (3)
- (4)
- (5)

These agreements include utilization of personnel, equipment, temporary landfill sites, emergency services, and law enforcement.

E/P EMA has further identified certain volunteer (VOAD), State and Federal agencies ready to assist. These agencies include Civic Clubs, Church organizations, Salvation Army, State Department of Transportation, National Guard, scrap dealers, and U.S. Department of Labor. These VOAD organizations will be coordinated by the State.

SITE SELECTION

Debris storage and reduction sites will be identified and evaluated by interagency site selection teams comprised of a multi-disciplinary staff who are familiar with the area. A listing of appropriate local, State, and Federal contacts will be developed by the appropriate agencies to expedite the formation of the interagency, multi-disciplinary site selection teams.

Initially, debris will be placed in temporary holding areas, determined before the onset of the disaster, until such time as a detailed plan of debris collection and disposal is prepared. This is not anticipated

until after the local traffic has been restored. Temporary debris collection sites should be readily accessible by recovery equipment and should not require extensive preparation or coordination for use. Collection sites will be on public property when feasible to facilitate the implementation of the mission and mitigate against any potential liability requirements. Activation of sites will be under the control of the Director of Public Works, and will be coordinated with other recovery efforts through the emergency operations center.

Site selection criteria will be developed into a checklist format for use by these teams to facilitate identification and assessment of potential sites. Criteria will include such factors of ownership of property, size of parcel, surrounding land uses and environmental conditions, and transportation facilities that serve the site. A site selection priority list is attached as an annex to this plan.

The following is a list of temporary holding sites:

1. Horse arena off Reids Dr
2. County Bottoms off Crooked Creek Rd
3. County owned land adjacent to Sta. #8 on Hillsborough Rd
4. Land behind Sta. #9 maintained by Rock Eagle 4H Center on Union Chapel Rd.

DEBRIS REMOVAL PRIORITIES

The debris removal process must be initiated promptly and conducted in an orderly, effective manner in order to protect public health and safety following a major or catastrophic event. To achieve this objective, the first priority will be to clear debris from key roads in order to provide access for emergency vehicles and resources into the impacted area. Key roads in Putnam County are identified as follows:

1. Hwy 441
2. Hwy 129
3. Hwy 44
4. Hwy 16
5. Hwy 142
6. Pearidge Rd.
7. Twin Bridges Rd.
8. Upper Harmony Rd.
9. Oconee Springs Rd.
10. Rockville Springs Rd.

The need and demand for critical services will be increased significantly following a disaster. Therefore, the second priority that debris removal resources will be assigned is providing access to critical facilities pre-identified by State and local governments. Critical facilities in Putnam County have been identified as:

1. Hospital
2. 911 Center
3. Emergency Services Facilities
4. Government Building
5. Water Plants

The third priority for the debris removal teams to address will be the elimination of debris related threats to public health and safety. This will include such things as the repair, demolition, or barricading of heavily damaged and structurally unstable buildings, systems, or facilities that pose a danger to the public. Any actions taken to mitigate or eliminate the threat to the public health and safety must be

closely coordinated with the owner or responsible party. If access to the area can be controlled, the necessary actions can be deferred.

DEBRIS CLASSIFICATION

To facilitate the debris management process, debris will be segregated by type. It is recommended that the categories of debris established for recovery operations will be standardized. Putnam County will adopt the categories established for recovery operations by the U.S. Army Corps of Engineers following Hurricane Andrew. Debris removed will consist of two broad categories (clean wood debris and construction and demolition debris. Most common hurricane-generated debris will consist of 30% clean woody material and 70% C&D. Of the 70% mixed C&D it is estimated 42% will be burnable but require sorting, 5% will be soil, 15% will be metals, and 38% landfill.

Definition of classifications of debris are as follows:

Burnable Materials: Burnable materials will be of two types with separate burn locations:

Burnable Debris: Burnable debris includes, but is not limited to, damaged and disturbed trees; bushes and shrubs; broken, partially broken and severed tree limbs; and bushes. Burnable debris consists predominately of trees and vegetation. Burnable debris does not include garbage or construction and demolition material debris.

Burnable Construction Debris: Burnable construction and demolition debris consists of non-creosote structural timber, wood products, and other materials designated by the coordinating agency representative.

Non-burnable Debris: Non-burnable construction and demolition debris includes, but is not limited to, creosote timber, plastic, glass, rubber and metal products, sheet rock, roofing shingles, carpet, tires, and other materials as may be designated by the coordinating agency. Garbage will be considered non-burnable debris.

Stumps: Stumps will be considered tree remnants exceeding 24 inches in diameter; but no taller than 18 inches above grade, to include the stump ball. Any questionable stumps shall be referred to the designated coordinating agency representative for determination of its disposition.

Ineligible Debris: Ineligible debris to remain in place includes, but is not limited to, chemicals, petroleum products, paint products, asbestos, and power transformers.

Any material that is found to be classified as hazardous or toxic waste (HTW) shall be reported immediately to the designated coordinating agency representative. At the coordinating agency representative's direction, this material shall be segregated from the remaining debris in such a way as to allow the remaining debris to be loaded and transported. Standing broken utility poles, damaged and downed utility poles and appurtenances, transformers and other electrical material will be reported to the coordinating agency representative. Emergency workers shall exercise due caution with existing overhead and underground utilities and above ground appurtenances, and advise the appropriate authorities of any situation that poses a health or safety risk to workers on site or to the general population.

- X Debris classifications developed and used by the Corps of Engineers in Hurricane Andrew recovery.

ESTIMATING DEBRIS QUANTITIES

The formula for estimating debris quantity is: $Q=H(C)(V)(B)(S)$

H (Households)=Population/3 (3 persons per household)
 C (Category of Storm)=Factor (See table below)
 V (Vegetation Multiplier)= Factor (See table below)
 B (Commercial Density Multiplier)= Factor (See table below)
 S (Precipitation Multiplier)= Factor (See table below)

Hurricane Category	Value of “C” Factor
1	2 CY
2	8 CY
3	26 CY
4	50 CY
5	80 CY
Vegetative Cover	Value of “V” Multiplier
Light	1.1
Medium	1.3
Heavy	1.5
Commercial Density	Value of “B” Multiplier
Light	1.0
Medium	1.2
Heavy	1.3
Precipitation	Value of “S” Multiplier
None to Light	1.0
Medium to Heavy	1.3

Once the amount of debris has been estimated, Putnam County will require temporary storage sites the size of which can be determined by taking the following factors into consideration:

1. *The debris pile shall be stacked to a height of no more than 10 feet.*
2. *60% usage of the land area will be devoted to roads, safety buffers, burn pits, household hazardous waste, etc.,.*
3. *10 foot stack height = 3.33 yards*
4. *1 acre = 4,840 square yards (sy)*
5. *Total volume per acre = 4,840 sy/ac x 3.33y = 16,133 cy/ac.*

Using the above assumptions, the estimate of total debris from any hurricane will be within 30% plus or minus of the actual amount of debris accumulated. Putnam County has estimated that under the worst scenario, e. g., is a Category 5 hurricane, heavy vegetation cover, heavy commercial density, and heavy precipitation, the amount of acres needed for a temporary landfill is 3,352 acres. The calculation (assuming a population of 500,000) is as follows:

$$Q = H(C)(V)(B)(S)$$

$$Q = 166,667 \times 80 \times 1.5 \times 1.3 \times 1.3$$

$$Q = 33,800,068 \text{ cy of debris.}$$

$$33,800,068 \text{ (cy of debris) / } 16,133 \text{ (cy/ac) = } 2,095 \text{ acres of debris.}$$

$$2,095 \text{ acres} \times 1.66 \text{ (60\% more area needed for roads, etc.)} = 3,352 \text{ acres.}$$

Note: To help visualize what 33,800,068 cy of debris looks like, picture a building occupying 1 acre. 1,000,000 cy of debris would create a stack 62' high on one acre. That building would be 2,046 feet high or approximately 200 stories high.

DEBRIS DISPOSAL AND REDUCTION

Once the debris is removed from the damage sites, it will be taken to the temporary land fills. The three methods of disposal are burning, recycling, and grinding/chipping.

Grinding and chipping will be utilized as a viable reduction method. Grinding and chipping reduces the volume on a 4 to 1 ratio. For grinding and chipping to be feasible, 25% of volume remaining must have some benefit or use.

The three primary burning methods are open burning, air curtain pit burning, and incineration. Controlled open burning is a cost-effective method for reducing clean woody debris in rural areas. Burning reduces the volume by 95%, leaving only ash residue to be disposed of. Air curtain pit burning substantially reduces environmental concerns. The blower unit must have adequate air velocity to provide a "curtain effect" to hold smoke in and to feed air to the fire below. Portable incinerators use the same methods as air curtain pit systems. The only difference is that portable incinerators utilize a pre-manufactured pit in lieu of an onsite constructed earth/limestone pit.

Metals, wood, and soils are prime candidates for recycling. Most of the non-ferrous metals are suitable for recycling. Specialized contractors are available to bid on disposal of debris by recycling if it is well sorted.

SITE CLOSE-OUT PROCEDURES

Each temporary debris staging and reduction site will eventually be emptied of all material and be restored to its previous condition and use.

Before activities begin ground and aerial photos will be taken, important features such as structures, fences, culverts, and landscaping will be noted. Random soil samples will be taken as well as water samples from existing wells. The site will be checked for volatile organic compounds.

After activities begin, constant monitoring of air quality and soil and water samples will take place. Photo, maps, and sketches of the site will be updated and fuel spills will be noted.

At close-out final testing of soil, water, and air quality and compared to original conditions. All ash will be removed and any remediation actions will be taken.

DEBRIS MANAGEMENT ACTIONS

The Debris Management Plan is separated into four stages:

1. Normal Operations

Develop local and regional resource list of contractors who can assist local governments in all phases of debris management.

Develop sample contracts with generic scopes of work to expedite the implementation of their debris management strategies.

Develop mutual aid agreements with other State agencies and local governments, as appropriate, following guidelines established in agency procurement manual.

Identify and pre-designate potential debris storage sites for the type and quantity of debris anticipated following a catastrophic event.

Pre identify local and regional critical routes in cooperation with contiguous and regional jurisdictions.

Develop site selection criteria checklists to assist in identifying potential debris storage sites.

Identify and coordinate with appropriate regulatory agencies regarding potential regulatory issues and emergency response needs.

Develop the necessary right of entry and hold harmless agreements indemnifying all levels of government against any potential claims.

Establish debris assessment process to define scope of problem.

Develop and coordinate pre-scripted announcements with the Public Information Office (PIO) regarding debris removal process, collection times, temporary storage sites, use of private contractors, environmental and health issues, etc.

2. Increased Readiness

(A natural or man-made disaster is threatening the local area)

Review and update plans, standard operating procedures, generic contracts, and checklists relating to debris removal, storage, reduction, and disposal process.

Alert local departments that have debris removal responsibilities ensuring that personnel, facilities, and equipment are ready and available for emergency use.

Relocate personnel and resources out of harm's way and stage in areas where they can be effectively mobilized.

Review potential local, regional, and debris staging and reduction sites that may be used in the response and recovery phases in the context of the impending threat.

Review resource listing of private contractors who may assist in debris removal process. Make necessary arrangements to ensure their availability in the event of the disaster.

3. Response

Activate debris management plan, coordinate with needs assessment team.

Begin documenting costs.

Coordinate and track resources (public and private).

Establish priorities regarding allocation and use of available resources.

Identify and establish debris temporary storage and disposal sites (local, regional).

Address any legal, environmental, and health issues relating to the debris removal process.

Continue to keep public informed through the PIO.

4. Recovery

Continue to collect, store, reduce, and dispose of debris generated from the event in a Cost-effective and environmentally responsible manner.

Continue to document costs.

Upon completion of debris removal mission, close out debris storage and reduction sites by developing and implementing the necessary site restoration actions.

Perform necessary audits of operation and submit claim for Federal assistance.

SAMPLE DEBRIS PLAN ANNEX

Table of Contents

Sample:	Notice to public
Sample:	Mutual Aid Agreement
Sample:	Intergovernmental Emergency Mutual Aid Agreement
Sample:	Time and Material Contract
Sample:	Lump Sum Contract
Sample:	Unit Price Contract
Sample:	Right of Entry Agreement
Sample:	Site Selection Priority List

Appendix D

Planning Process Worksheets

- GEMA Worksheet #1 : Identify the Hazards
- GEMA Worksheet #1: Hazards Addendum
- GEMA Worksheet #2 : Profile Hazard Events
- GEMA Worksheet #4 : Evaluate Alternative Mitigation Actions
- Hazard Frequency Table

Date: April 2017

What kinds of natural hazards can affect you?

Task A. List the hazards that may occur.

1. Research newspapers and other historical records
2. Review existing plans and reports.
3. Talk to the experts in your community, state, or region.
4. Gather information on Internet Websites.
5. Next to the hazard list below, put a check mark in the Task A boxes beside all hazards that may occur in your community or state.

Task B. Focus on the most prevalent hazard in your community or state.

1. Go to hazard Websites.
2. Locate your community or state on the Website map.
3. Determine whether you are in a high-risk area. Get more localized information if necessary.
4. Next to the hazard list below, put a check mark in the Task B boxes beside all hazards that post a significant threat.

Task A **Task B** Use this space to record information you find for each of the hazards you will be researching. Attach additional pages as necessary.

- Avalanche ___ ___
- Costal Erosion** ___ ___
- Costal Storm** ___ ___
- Dam Failure** ✓ ___
- Drought ___ ___
- Earthquake** ✓ ___
- Expansive Soils ___ ___
- Extreme Heat ___ ___
- Flood** ✓ ✓
- Hailstorm ___ ___
- Hurricane** ___ ___
- Land Slide ___ ___
- Severe Winter Storm ✓ ___
- Tornado** ✓ ___
- Tsunami** ___ ___
- Volcano ___ ___
- Wildfire** ✓ ✓
- Windstorm ___ ___
- Hazard Material ✓ ✓
- Radiological ___ ___
- Other Thunderstorm ✓ ✓
- Winds
- Other _____ ___ ___
- Other _____ ___ ___

Hazard or Event Description (Type of hazard, date of event, number of injuries, cost and types of damage, etc.)	Source of Information	Map Available for this Hazard?	Scale of Map
See attached addendum.			

Note: **Bolded** hazards are addressed in this How-to Guide.

GEMA Worksheet #1 Addendum

Use this space to record information you find for each of the hazards you will be researching. Attach additional pages as necessary.

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Date	Hazard or Event Description (type of hazard, N/A, date of event, number of injuries, cost and types of damage, etc.)	Source of Information	Map Available for this Hazard?	Scale of Map
1/21/2017	Tornado, Magnitude, 0 Injuries, 0 Deaths, \$25000 Property Damage, \$0 Crop Damage.	Emergency Manager	No	N/A
6/28/2016	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$4000 Property Damage, \$0 Crop Damage.	Emergency Manager	No	N/A
6/17/2016	Thunderstorm Wind, 55 Magnitude, 0 Injuries, 0 Deaths, \$20000 Property Damage, \$0 Crop Damage.	Newspaper	No	N/A
12/30/2015	Flash Flood, Magnitude, 0 Injuries, 0 Deaths, \$3000 Property Damage, \$0 Crop Damage.	Emergency Manager	No	N/A
11/16/2015	Earthquake, 2.6 Magnitude, Injuries, Deaths, Property Damage, Crop Damage.	USGS	No	N/A
10/4/2015	Earthquake, 2.0 Magnitude, Injuries, Deaths, Property Damage, Crop Damage.	USGS	No	N/A
8/6/2015	Thunderstorm Wind, 75 Magnitude, 0 Injuries, 0 Deaths, \$200000 Property Damage, \$0 Crop Damage.	NWS Storm Survey	No	N/A
6/24/2015	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	911 Call Center	No	N/A
5/26/2015	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	Emergency Manager	No	N/A
3/24/2014	Wildfire, Magnitude, 0 Injuries, 0 Deaths, \$1000 Property Damage, \$0 Crop Damage.	Park/Forest Service	No	N/A
1/28/2014	Winter Storm, Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	Emergency Manager	No	N/A
9/19/2013	Hazardous Materials Incident, Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	Office of Hazardous Materials Safety	No	N/A
8/19/2013	Flash Flood, Magnitude, 0 Injuries, 0 Deaths, \$2000 Property Damage, \$0 Crop Damage.	Other Federal Agency	No	N/A
7/1/2012	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$1500 Property Damage, \$0 Crop Damage.	911 Call Center	No	N/A
7/1/2012	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$1500 Property Damage, \$0 Crop Damage.	911 Call Center	No	N/A
6/10/2012	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$2000 Property Damage, \$0 Crop Damage.	County Official	No	N/A
5/31/2012	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$3000 Property Damage, \$0 Crop Damage.	County Official	No	N/A
3/17/2012	Wildfire, Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	Park/Forest Service	No	N/A
2/24/2012	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	County Official	No	N/A
11/9/2011	Wildfire, Magnitude, 0 Injuries, 0 Deaths, \$1500 Property Damage, \$0 Crop Damage.	Park/Forest Service	No	N/A
4/28/2011	Flash Flood, Magnitude, 0 Injuries, 0 Deaths, \$30000 Property Damage, \$0 Crop Damage.	Emergency Manager	No	N/A
4/28/2011	Tornado, Magnitude, 0 Injuries, 0 Deaths, \$1000000 Property Damage, \$0 Crop Damage.	NWS Storm Survey	No	N/A
4/5/2011	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$2000 Property Damage, \$0 Crop Damage.	County Official	No	N/A
2/10/2011	Winter Weather, Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	County Official	No	N/A
1/10/2011	Heavy Snow, Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	County Official	No	N/A
12/25/2010	Winter Weather, Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	County Official	No	N/A
10/27/2010	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	Public	No	N/A
9/27/2010	Thunderstorm Wind, 39 Magnitude, 0 Injuries, 0 Deaths, \$1500 Property Damage, \$0 Crop Damage.	County Official	No	N/A
7/31/2010	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$3000 Property Damage, \$0 Crop Damage.	Public	No	N/A
6/21/2010	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$75000 Property Damage, \$0 Crop Damage.	Newspaper	No	N/A
3/9/2010	Wildfire, Magnitude, 0 Injuries, 0 Deaths, \$900 Property Damage, \$0 Crop Damage.	Park/Forest Service	No	N/A
2/12/2010	Heavy Snow, Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	County Official	No	N/A
12/2/2009	Thunderstorm Wind, 70 Magnitude, 0 Injuries, 0 Deaths, \$15000 Property Damage, \$0 Crop Damage.	NWS Storm Survey	No	N/A
12/2/2009	Tornado, Magnitude, 0 Injuries, 0 Deaths, \$100000 Property Damage, \$0 Crop Damage.	NWS Storm Survey	No	N/A
12/2/2009	Tornado, Magnitude, 0 Injuries, 0 Deaths, \$120000 Property Damage, \$0 Crop Damage.	NWS Storm Survey	No	N/A
9/21/2009	Flash Flood, Magnitude, 0 Injuries, 0 Deaths, \$10000 Property Damage, \$0 Crop Damage.	River/Stream Gage	No	N/A
9/18/2009	Flood, Magnitude, 0 Injuries, 0 Deaths, \$3000 Property Damage, \$0 Crop Damage.	River/Stream Gage	No	N/A
9/17/2009	Flash Flood, Magnitude, 0 Injuries, 0 Deaths, \$2000 Property Damage, \$0 Crop Damage.	River/Stream Gage	No	N/A
7/24/2009	Earthquake, 2.2 Magnitude, Injuries, Deaths, Property Damage, Crop Damage.	USGS	No	N/A
4/10/2009	Thunderstorm Wind, 52 Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	Emergency Manager	No	N/A
4/10/2009	Thunderstorm Wind, 54 Magnitude, 0 Injuries, 0 Deaths, \$50000 Property Damage, \$0 Crop Damage.	Emergency Manager	No	N/A
3/11/2009	Wildfire, Magnitude, 0 Injuries, 0 Deaths, \$500 Property Damage, \$0 Crop Damage.	Park/Forest Service	No	N/A
3/1/2009	Heavy Snow, Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	County Official	No	N/A
2/18/2009	Tornado, Magnitude, 1 Injuries, 0 Deaths, \$200000 Property Damage, \$0 Crop Damage.	NWS Storm Survey	No	N/A
2/13/2009	Wildfire, Magnitude, 0 Injuries, 0 Deaths, \$500 Property Damage, \$0 Crop Damage.	Park/Forest Service	No	N/A
7/21/2008	Thunderstorm Wind, 52 Magnitude, 0 Injuries, 0 Deaths, \$10000 Property Damage, \$0 Crop Damage.	Emergency Manager	No	N/A
7/5/2008	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$75000 Property Damage, \$0 Crop Damage.	Public	No	N/A
5/20/2008	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	County Official	No	N/A
5/20/2008	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$3000 Property Damage, \$0 Crop Damage.	Emergency Manager	No	N/A
3/15/2008	Thunderstorm Wind, 50 Magnitude, 0 Injuries, 0 Deaths, \$2000 Property Damage, \$0 Crop Damage.	Public	No	N/A
3/15/2008	Thunderstorm Wind, 52 Magnitude, 0 Injuries, 0 Deaths, \$2000 Property Damage, \$0 Crop Damage.	Public	No	N/A

Date	Hazard or Event Description (type of hazard, N/A, date of event, number of injuries, cost and types of damage, etc.)	Source of Information	Map Available for this Hazard?	226
3/4/2008	Thunderstorm Wind,30 Magnitude, 0 Injuries, 0 Deaths, \$1000 Property Damage, \$0 Crop Damage.	County Official	No	N/A
6/12/2007	Thunderstorm Wind,50 Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	Emergency Manager	No	N/A
3/1/2007	Thunderstorm Wind,50 Magnitude, 0 Injuries, 0 Deaths, \$2000 Property Damage, \$0 Crop Damage.	Fire Department/Rescue	No	N/A
8/22/2005	Thunderstorm Wind,50 Magnitude, 0 Injuries, 0 Deaths, \$25000 Property Damage, \$0 Crop Damage.	NEWSPAPER	No	N/A
1/28/2005	Winter Storm, Magnitude, 0 Injuries, 0 Deaths, \$150000 Property Damage, \$0 Crop Damage.	GOVT OFFICIAL	No	N/A
9/27/2004	Flood, Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	GOVT OFFICIAL	No	N/A
9/7/2004	Flood, Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	GOVT OFFICIAL	No	N/A
9/1/2004	Thunderstorm Wind,50 Magnitude, 0 Injuries, 0 Deaths, \$500 Property Damage, \$0 Crop Damage.	LAW ENFORCEMENT	No	N/A
8/30/2004	Thunderstorm Wind,39 Magnitude, 0 Injuries, 0 Deaths, \$500 Property Damage, \$0 Crop Damage.	NEWSPAPER	No	N/A
07/15/04	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
6/21/2004	Flash Flood, Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	GOVT OFFICIAL	No	N/A
6/21/2004	Thunderstorm Wind,39 Magnitude, 0 Injuries, 0 Deaths, \$250 Property Damage, \$0 Crop Damage.	GOVT OFFICIAL	No	N/A
05/25/04	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
03/14/04	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
2/26/2004	Winter Storm, Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	GOVT OFFICIAL	No	N/A
02/26/04	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
08/27/03	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
7/19/2003	Thunderstorm Wind,50 Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	EMERGENCY MANAGER	No	N/A
06/18/03	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
5/17/2003	Flash Flood, Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	NEWSPAPER	No	N/A
5/17/2003	Thunderstorm Wind,39 Magnitude, 0 Injuries, 0 Deaths, \$250 Property Damage, \$0 Crop Damage.	EMERGENCY MANAGER	No	N/A
05/14/03	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
5/2/2003	Thunderstorm Wind,50 Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	EMERGENCY MANAGER	No	N/A
5/2/2003	Thunderstorm Wind,50 Magnitude, 0 Injuries, 0 Deaths, \$2000 Property Damage, \$0 Crop Damage.	AMATEUR RADIO	No	N/A
09/10/02	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
02/21/02	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
1/2/2002	Heavy Snow, Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	EMERGENCY MANAGER	No	N/A
8/24/2001	Thunderstorm Wind, Magnitude, 0 Injuries, 0 Deaths, \$250 Property Damage, \$0 Crop Damage.	GENERAL PUBLIC	No	N/A
6/27/2001	Thunderstorm Wind, Magnitude, 0 Injuries, 0 Deaths, \$1500 Property Damage, \$0 Crop Damage.	EMERGENCY MANAGER	No	N/A
6/27/2001	Thunderstorm Wind, Magnitude, 0 Injuries, 0 Deaths, \$250 Property Damage, \$0 Crop Damage.	FIRE DEPT/RESCUE SQUAD	No	N/A
6/12/2001	Flash Flood, Magnitude, 0 Injuries, 0 Deaths, \$200000 Property Damage, \$0 Crop Damage.	EMERGENCY MANAGER	No	N/A
6/12/2001	Flood, Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	BROADCAST MEDIA	No	N/A
6/3/2001	Thunderstorm Wind, Magnitude, 0 Injuries, 0 Deaths, \$2000 Property Damage, \$0 Crop Damage.	LAW ENFORCEMENT	No	N/A
01/27/01	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
12/07/00	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
10/06/00	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
06/30/00	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
6/25/2000	Thunderstorm Wind, Magnitude, 0 Injuries, 0 Deaths, \$8000 Property Damage, \$0 Crop Damage.	GENERAL PUBLIC	No	N/A
04/19/00	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
11/19/99	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
08/12/99	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
6/4/1999	Thunderstorm Wind, Magnitude, 0 Injuries, 0 Deaths, \$1000 Property Damage, \$0 Crop Damage.	LAW ENFORCEMENT	No	N/A
5/13/1999	Thunderstorm Wind,50 Magnitude, 0 Injuries, 0 Deaths, \$2000 Property Damage, \$0 Crop Damage.	GENERAL PUBLIC	No	N/A
3/18/1999	Hazardous Materials Incident, Magnitude, 0 Injuries, 0 Deaths, \$250 Property Damage, \$0 Crop Damage.	Office of Hazardous Materials Safety	No	N/A
12/07/98	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
7/20/1998	Thunderstorm Wind, Magnitude, 0 Injuries, 0 Deaths, \$2000 Property Damage, \$0 Crop Damage.	FIRE DEPT/RESCUE SQUAD	No	N/A
7/20/1998	Thunderstorm Wind, Magnitude, 0 Injuries, 0 Deaths, \$500 Property Damage, \$0 Crop Damage.	FIRE DEPT/RESCUE SQUAD	No	N/A
07/16/98	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
05/02/98	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
04/16/98	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
04/13/98	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A

Date	Hazard or Event Description (type of hazard, N/A, date of event, number of injuries, cost and types of damage, etc.)	Source of Information	Map Available for this Hazard?	227
03/06/98	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
03/01/98	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
2/4/1998	Flood, Magnitude, 0 Injuries, 0 Deaths, \$20000 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
09/05/97	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
7/27/1997	Thunderstorm Wind, Magnitude, 0 Injuries, 0 Deaths, \$2000 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
7/8/1997	Thunderstorm Wind, Magnitude, 3 Injuries, 0 Deaths, \$40000 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
4/7/1997	Hazardous Materials Incident, Magnitude, 0 Injuries, 0 Deaths, \$120 Property Damage, \$0 Crop Damage.	Office of Hazardous Materials Safety	No	N/A
12/18/1996	Heavy Snow, Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
10/15/96	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
5/15/1996	Hazardous Materials Incident, Magnitude, 0 Injuries, 0 Deaths, \$50 Property Damage, \$0 Crop Damage.	Office of Hazardous Materials Safety	No	N/A
01/15/96	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
10/27/1995	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
10/27/1995	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
7/26/1995	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$500 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
7/21/1995	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$500 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
7/10/1995	Hazardous Materials Incident, Magnitude, 0 Injuries, 0 Deaths, \$10 Property Damage, \$0 Crop Damage.	Office of Hazardous Materials Safety	No	N/A
07/06/95	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
6/2/1995	Hazardous Materials Incident, Magnitude, 0 Injuries, 0 Deaths, \$191500 Property Damage, \$0 Crop Damage.	Office of Hazardous Materials Safety	No	N/A
06/02/95	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
5/15/1995	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
04/29/95	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
04/19/95	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
03/17/95	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
8/3/1994	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
07/20/94	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
6/24/1994	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
6/24/1994	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
6/24/1994	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
6/18/1994	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$5000 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
06/16/94	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
06/15/94	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
6/9/1994	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$500 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
04/05/94	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
02/14/93	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
01/27/93	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
11/22/1992	Tornado,0 Magnitude, 55 Injuries, 4 Deaths, \$25000000 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
11/22/92	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
11/17/92	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
10/23/92	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
7/31/1992	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
6/26/1992	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
06/09/92	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
04/23/92	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
2/26/1992	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
02/19/92	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
08/07/91	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
06/05/91	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
06/03/91	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
04/07/91	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
11/08/90	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
8/29/1990	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
07/31/90	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	182 N/A

Date	Hazard or Event Description (type of hazard, N/A, date of event, number of injuries, cost and types of damage, etc.)	Source of Information	Map Available for this Hazard?	
07/31/90	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
05/18/90	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
2/10/1990	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
09/13/89	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
6/29/1989	Hazardous Materials Incident, Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	Office of Hazardous Materials Safety	No	N/A
06/29/89	Hazardous Materials Incident, N/A, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	DNR	No	N/A
4/4/1989	Thunderstorm Wind,55 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
7/16/1988	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
6/26/1986	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
4/5/1985	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
4/5/1985	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
4/23/1983	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
11/12/1982	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
3/25/1980	Hazardous Materials Incident, Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	Office of Hazardous Materials Safety	No	N/A
4/13/1979	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
2/24/1976	Hazardous Materials Incident, Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	Office of Hazardous Materials Safety	No	N/A
5/3/1975	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
3/21/1974	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A
9/3/1959	Thunderstorm Wind,0 Magnitude, 0 Injuries, 0 Deaths, \$0 Property Damage, \$0 Crop Damage.	NCDC	No	N/A

GEMA Worksheet #2

Profile Hazard Events Step 2

County: **Putnam**

Date: **May 2017**

How Bad Can It Get?

Task A. Obtain or create a base map.

GEMA will be providing you with a base map, USGS topos and DOQQ as part of our deliverables to local government for the planning process. Additionally, we will be providing you with detailed hazard layer coverages. These data layers originate from state or nationwide coverage or datasets. Therefore, it is important for local government to assess what you already have at the local level. It is important for you at the local level to have an idea of what existing maps you have available for the planning process. Some important things to think about:

- 1) What maps do we already have in the county that would be relevant to the planning process?
- 2) Have other local plans used maps or mapping technology where there is specific data that is also needed in my local plan?
- 3) What digital maps do we have?
- 4) Do we have any Geographic Information System (GIS) data, map themes or layers or databases here at the local level (or regional) that we can use?
- 5) If we do have any GIS data, where is it located at, and who is our local expert?
- 6) Are there any ongoing GIS or mapping initiatives at the local level in other planning or mapping efforts? If so, what are they, and what are the timetables for completion?
- 7) Are there mapping needs that have been identified at the local level in the past? If so, what are they and when were they identified?
- 8) Of the existing maps, GIS data and other digital mapping information, what confidence do we have at the local level that it is accurate data?

Please answer the above questions on a separate sheet of paper and attach to this worksheet.

It is important to realize that those counties that already have GIS and digital mapping, (ie: parcel level data, GPS fire hydrants, etc) higher levels of spatial accuracy and detail will exist for some data layers at the local level. However, for this planning process, that level of detail will not be needed on all layers in the overall mapping and analysis.

You can use existing maps from:

- Road Maps
- USGS topographic maps or Digital Orthophoto Quarter Quads (DOQQ)
- Topographic and/or planimetric maps from other agencies
- Aerial topographic and/or planimetric maps
- Field Surveys
- GIS software
- CADD software
- Digitized paper map

Title of Map	Scale	Date
GDOT Highway & Transportation Map	1" : ¼ Mile	2013
USGS Topographic Map	1: 24,000	2014
Georgia Flood Map	Interactive/ varies	2017
FEMA Flood Data FIRM Map	1 : 2000	2010
Georgia Mitigation Information System	Interactive/ varies	2017

Task B. Obtain a hazard event profile.	Task C. Record your hazard event profile information.
Avalanche -N/A	
Coastal Storm / Coastal Erosion <ol style="list-style-type: none"> 1. Get a copy of your FIRM. X 2. Verify that the FIRM is up-to-date and complete. X 3. Determine the annual rate of coastal erosion. N/A 4. Find your design wind speed. 200 mph 	<ol style="list-style-type: none"> 1. Transfer the boundaries of your coastal storm hazard areas onto your base map. 2. Transfer the BFEs onto your base map. 3. Record the erosion rates on your base map: N/A 4. Record the design wind speed here and on your base map: 200 mph
Dam Failure	
Drought – Entire Planning Area	
Earthquake <ol style="list-style-type: none"> 1. Go to the http://geohazards.cr.usgs.gov Website. 2. Locate your planning area on the map. 3. Determine your PGA. 	<ol style="list-style-type: none"> 1. Record your PGA: .054* 2. If you have more than one PGA print, download or order your PGA map. *https://earthquake.usgs.gov/hazards/interactive/
Expansive Soils-N/A	
Extreme Heat-N/A	
Flood <ol style="list-style-type: none"> 1. Get a copy of your FIRM. X 2. Verify the FIRM is up-to-date and complete. X 	<ol style="list-style-type: none"> 1. Transfer the boundaries from your firm onto your base map (floodway, 100-yr flood, 500-yr flood). 2. Transfer the BFEs onto your base map.
Hailstorm-N/A	
Hurricane-N/A	
Land Subsidence-N/A	
Landslide <ol style="list-style-type: none"> 1. Map location of previous landslides. N/A 2. Map the topography. N/A 3. Map the geology. N/A 4. Identify the high-hazard areas on your map. N/A 	<ol style="list-style-type: none"> 1. Mark the areas susceptible to landslides onto your base map.
Severe Winter Storm – Entire Planning Area	
Tornado <ol style="list-style-type: none"> 1. Find your design wind speed. 200 mph 	<ol style="list-style-type: none"> 1. Record your design wind speed: 200 mph 2. If you have more than one design wind speed, print, download or copy your design wind speed zones, copy the boundary of your design wind speed zones on your base map, then record the design wind speed zones on your base map.
Tsunami - N/A	
Wildfire <ol style="list-style-type: none"> 1. Map the fuel models located within the urban-wildland interface areas. X 2. Map the topography. X 3. Determine your critical fire weather frequency. X 4. Determine your fire hazard severity. ___ X ___ 	<ol style="list-style-type: none"> 1. Draw the boundaries of your wildfire hazard areas onto your base map.
Other <ol style="list-style-type: none"> 1. Map the hazard. ___X___ 	<ol style="list-style-type: none"> 1. Record hazard event info on your base map.

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

Goal: Ensure a proper response in the event of a hazard.

Objective: Maintain a debris management plan.

STAPLEE Criteria Considerations → for Alternative Actions ↓	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Incorporate dam failure mitigation into debris management plan.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)

Alternative Actions	Comments	232
Incorporate dam failure mitigation into debris management plan.	Staff time.	

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

Goal: Educate the public and public safety officials on hazards.

Objective: Provide educational opportunities to school children.

STAPLEE Criteria Considerations → for Alternative Actions ↓	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Educate students through partnerships with the Putnam County Board of Education.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Discuss the Great ShakeOut earthquake drills and determine if this is something the county and city are interested in implementing.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Encourage school systems to implement and review school emergency plans.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)

Alternative Actions	Comments
Educate students through partnerships with the Putnam County Board of Education.	Staff time.
Discuss the Great ShakeOut earthquake drills and determine if this is something the county and city are interested in implementing.	Staff time.
Encourage school systems to implement and review school emergency plans.	Staff time.

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

Goal: Educate the public and public safety officials on hazards.

Objective: Provide educational information to the public.

STAPLEE Criteria Considerations → for Alternative Actions ↓	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Educate the public on the availability and value of weather radios.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Post public notices on the county's website during severe weather awareness campaigns.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)

Alternative Actions	Comments
Educate the public on the availability and value of weather radios.	Staff time will be utilized.
Post public notices on the county's website during severe weather awareness campaigns.	Staff time will be utilized.

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

Goal: Provide for power supplies to critical facilities.

Objective: Prevent power failure.

STAPLEE Criteria Considerations → for Alternative Actions ↓	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Install lightning mitigation devices at the Sinclair Water Authority treatment plant.	(+)	(+)	(+)	(+)	(+)	(+)	(-)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Install lightning mitigation devices at the Putnam County Courthouse Expansion.	(+)	(+)	(+)	(+)	(+)	(+)	(-)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)

Alternative Actions	Comments
Install lightning mitigation devices at the Sinclair Water Authority treatment plant.	Cost is estimated at \$500. Deferred due to lack of funding.
Install lightning mitigation devices at the Putnam County Courthouse Expansion.	Cost is estimated at \$500. Deferred due to lack of funding.

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

Goal: Ensure a proper response in the event of a hazard.

Objective: Maintain an updated Emergency Management Plan.

STAPLEE Criteria Considerations → for Alternative Actions ↓	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Incorporate dam failure mitigation into Emergency Management Plan.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)

Alternative Actions	Comments	240
Incorporate dam failure mitigation into Emergency Management Plan.	Staff time.	

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

Goal: Ensure adequate transportation routes for disaster response.

Objective: Develop or replace roads and bridges in county.

STAPLEE Criteria Considerations → for Alternative Actions ↓	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Replace culverts in the city.	(+)	(+)	(+)	(+)	(+)	(+)	(-)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)

Alternative Actions	Comments
Replace culverts in the city.	Estimated cost of \$50,000.

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

Goal: Educate the public and public safety officials on hazards.

Objective: Train relevant personnel.

STAPLEE Criteria Considerations → for Alternative Actions ↓	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Encourage more hazardous material team members to train to the operational level.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)

Alternative Actions	Comments	244
Encourage more hazardous material team members to train to the operational level.	Staff time.	

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

Goal: Prevent wildland fires.

Objective: Ensure regulatory issues are adequate for agencies active in hazard mitigation.

STAPLEE Criteria Considerations → for Alternative Actions ↓	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Continued maintenance of fire breaks by the Georgia Forestry Commission.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Encourage controlled burns.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Continued fire inspections by the County Fire Department.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)

Alternative Actions	Comments	246
Continued maintenance of fire breaks by the Georgia Forestry Commission.	Staff time.	
Encourage controlled burns.	Staff time.	
Continued fire inspections by the County Fire Department.	Staff time.	

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

Goal: Educate the public and public safety officials on hazards.

Objective: Provide educational opportunities to school children.

STAPLEE Criteria Considerations → for Alternative Actions ↓	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Educate students through partnerships with the Putnam County Board of Education.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)

Alternative Actions	Comments
Educate students through partnerships with the Putnam County Board of Education.	Staff time will be utilized to ensure students are provided with educational opportunities.

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

Goal: Ensure public facilities and infrastructure are adequate to meet hazard needs of the community.

Objective: Construct or rehabilitate necessary public facilities and infrastructure.

STAPLEE Criteria Considerations → for Alternative Actions ↓	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Make improvements to the sewer system in the city to limit infiltration.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Implement culvert replacement program within the city.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Encourage sprinkler systems to be installed in all new construction.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Expand water distribution and fire hydrant network to unserved areas of the county.	(+)	(+)	(+)	(+)	(+)	(+)	(-)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Maintain current hydrants and replace out of service hydrants in the city	(+)	(+)	(+)	(+)	(+)	(+)	(-)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)

Encourage the construction of new buildings with the ability to withstand severe shaking. (+)

Alternative Actions	Comments
Make improvements to the sewer system in the city to limit infiltration.	Staff time.
Make improvements to the sewer system in the city to limit infiltration.	Staff time.
Encourage sprinkler systems to be installed in all new construction.	Staff time.
Expand water distribution and fire hydrant network to unserved areas of the county.	Moderate cost, high benefit initiative. Estimated cost not yet determined.
<p>Maintain current hydrants and replace out of service hydrants in the city.</p> <p>Encourage the construction of new buildings with the ability to withstand severe shaking.</p>	<p>Estimated cost not yet associated with this action item. However, high benefit is expected.</p> <p>Staff time.</p>

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

Goal: Establish necessary regulatory controls to address hazard events.

Objective: Develop or review local ordinances relevant to hazard mitigation.

STAPLEE Criteria → for Alternative Actions ↓	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Encourage open-space uses and conservation easements on properties located in flood hazard areas.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Require appropriate right-of-way through the platting process.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Demolish dilapidated buildings utilizing the county's unsafe building abatement code.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Cut down trees identified to be hazardous within the City of Eatonton.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)

Alternative Actions	Comments
Encourage open-space uses and conservation easements on properties located in flood hazard areas.	Staff time.
Require appropriate right-of-way through the platting process.	Staff time.
Demolish dilapidated buildings utilizing the county's unsafe building abatement code.	Determined to cost approximately \$5,000 per unit.
Cut down trees identified to be hazardous within the City of Eatonton.	Determined to cost \$100,000+.

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

Goal: Ensure a proper response in the event of a hazard.

Objective: Develop and enact local agreements relevant to hazard mitigation.

STAPLEE Criteria Considerations → for Alternative Actions ↓	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Encourage the purchase of house numbering signs through the fire stations.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)
Continue preventative maintenance to cut down trees and limbs near power lines.	(+)	(+)	(+)	(+)	(+)	(+)	(-)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)

Alternative Actions	Comments
Encourage the purchase of house numbering signs through the fire stations.	Staff time will be utilized.
Continue preventative maintenance to cut down trees and limbs near power lines.	Low cost, high benefit preventative measure. Cost is assumed to be about \$10,000 per year.

1. Fill in the goal and its corresponding objective. Use a separate worksheet for each objective. The considerations under each criterion are suggested ones to use; you can revise these to reflect your own considerations (see Table 2-1).
2. Fill in the alternative actions that address the specific objectives the planning team identified in Worksheet #1.
3. **Scoring:** For each consideration, indicate a plus (+) for favorable, and a negative (-) for less favorable.

When you complete the scoring; negatives will indicate gaps or shortcomings in the particular action, which can be noted in the Comments section. For considerations that do not apply, fill in N/A for not applicable. Only leave a blank if you do not know an answer. In this case, make a note in the Comments section of the “expert” or source to consult to help you evaluate the criterion.

Goal: Provide for power supplies to critical facilities.

Objective: Obtain backup generators for critical facilities.

STAPLEE Criteria Considerations → for Alternative Actions ↓	S (Social)		T (Technical)			A (Administrative)			P (Political)			L (Legal)			E (Economic)				E (Environmental)				
	Community Acceptance	Effect on Segment of Population	Technical Feasibility	Long-term Solution	Secondary Impacts	Staffing	Funding Allocated	Maintenance / Operations	Political Support	Local Champion	Public Support	State Authority	Existing Local Authority	Potential Legal Challenge	Benefit of Action	Cost of Action	Contributes to Economic Goals	Outside Funding Required	Effect on Land / Water	Effect on Endangered Species	Effect on HAZMAT / Waste Sites	Consistent with Community Environmental Goals	Consistent With Federal Laws
Conduct an assessment of critical facilities to determine how many are lacking backup generators.	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)	(+)

Alternative Actions	Comments	256
Conduct an assessment of critical facilities to determine how many are lacking backup generators.	Staff time will be utilized.	

PUTNAM COUNTY
HAZARD FREQUENCY TABLE

Hazard	Number of Events in Historic Record	Number of Years in Historic Record	Number of Events in Past 10 Years	Number of Events in Past 20 Years	Number of Events in Past 50 Years	Historic Recurrence Interval (years)	Historic Frequency % chance/year	Past 10 Year Record Frequency Per Year	Past 20 Year Record Frequency Per Year	Past 50 Year Record Frequency Per Year
Hurricane Surge - Cat 1	0	58	0	2	2	0.00	0.00	0	0.1	0.04
Hurricane Surge - Cat 2	0	58	0	0	0	0.00	0.00	0	0	0
Hurricane Surge - Cat 3	0	58	0	0	0	0.00	0.00	0	0	0
Hurricane Surge - Cat 4	0	58	0	0	0	0.00	0.00	0	0	0
Hurricane Surge - Cat 5	0	58	0	0	0	0.00	0.00	0	0	0
Hurricane Wind	2	58	0	0	2	0.00	3.45	0	0	0.04
Floods	13	58	6	13	13	4.46	22.41	0.6	0.65	0.26
Wildfire	6	58	6	6	6	9.67	10.34	0.6	0.3	0.12
Earthquake	3	58	3	3	3	0.00	5.17	0.3	0.15	0.06
Tornado	6	58	5	5	6	9.67	10.34	0.5	0.25	0.12
Thunderstorm Wind	73	58	27	46	73	0.79	125.86	2.7	2.3	1.46
Hail	43	58	14	34	43	1.35	74.14	1.4	1.7	0.86
Drought	27	58	11	27	27	2.15	46.55	1.1	1.35	0.54
Extreme Heat	4	58	3	4	4	14.50	6.90	0.3	0.2	0.08
Snow & Ice	10	58	5	9	10	5.80	17.24	0.5	0.45	0.2
Landslide	0	58	0	0	0	0.00	0.00	0	0	0
Dam Failure	0	58	0	0	0	0.00	0.00	0	0	0
HazMat Release (fixed)	53	27	0	24	53	0.51	196.30	0	1.2	1.06
HazMat Release (trans)	9	27	1	3	9	3.00	33.33	0.1	0.15	0.18
Radiological Release	0	58	0	0	0	0.00	0.00	0	0	0

NOTE: The historic frequency of a hazard event over a given period of time determines the historic recurrence interval. For example: If there have been 20 HazMat Releases in the County in the past 5 years, statistically you could expect that there will be 4 releases a year.

Realize that from a statistical standpoint, there are several variables to consider. 1) Accurate hazard history data and collection are crucial to an accurate recurrence interval and frequency. 2) Data collection and accuracy has been much better in the past 10-20 years (NCDC weather records). 3) It is important to include all significant recorded hazard events which will include periodic updates to this table.

By updating and reviewing this table over time, it may be possible to see if certain types of hazard events are increasing in the past 10-20 years.

Appendix E

Planning Documentation

- Kick-Off Meeting Sign-In Sheet & Agenda
- Meeting 2 Sign-In Sheet & Agenda
- Meeting 3 Sign-In Sheet & Agenda
- Meeting 4 Sign-In Sheet & Agenda
- Meeting 5 Sign-In Sheet & Agenda
- Meeting 6 Sign-In Sheet & Agenda
- Meeting 7 Sign-In Sheet & Agenda
- Meeting 8 Sign-In Sheet & Agenda
- First Public Hearing Notice, Sign-In Sheet, Agenda
- Second Public Hearing Notice, Sign-In Sheet, Agenda
- Neighboring County Plan Review Documentation

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

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**MEETING 1 KICK-OFF AGENDA
JUNE 2, 2016 | 2:00 P.M. | 117 PUTNAM DRIVE**

Name/Title	Agency	Email
Andrea Fuller, RN	Putnam Co. Health Dept.	andrea.fuller@dph.ga.gov
Howard R. Sells sheriff EMT Director	Putnam County	sherriff@putnamcountysheriff.org
Billy F Webster County Commissioner	Putnam County	billy_webster@windstream.net
Jonny Clark Public Works Director	Putnam County	jclack@putnamco.ga.us
Charlie Bales		cbales@bellsouth.net
City of Eatonton Gas Lynward Lindsey GPC Manager	City of Eatonton Ga. Power	lindsey@southern.com
Lisa Jackson Planning Director County Manager	Putnam County	ljackson@putnamcountyga.us
Anel Colington Fire-Rescue	putnam county	amullinspcfr@gmail.com
Russell Blank Chief Deputy, EMA Deputy Director	Putnam County SO	chiefblank@putnamcountysheriff.org
Teresa Slade 911 Dir / Dep EMA Dir	It	teresaslade@putnamcountysheriff.org
Christine Trueman Director Animal Services		ctrueman@putnamcountyga.us
Ashley Moran officer-city animal services	Animal Control	mama@sadie@gmail.com
Gary Sanders City Administrator	City of Eatonton	gsanders@eatontonga.us

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**MEETING 1 KICK-OFF AGENDA
JUNE 2, 2016 | 2:00 P.M. | 117 PUTNAM DRIVE**

Name/Title	Agency	Email
Laura Radford Hazard Mitigation Planner	GEMFSA	laura.radford@gema.ga.gov
Tern P. Camp	Rock Eagle 4H camp	

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**MEETING 1 KICK-OFF AGENDA
JUNE 2, 2016 | 2:00 P.M. | 117 PUTNAM DRIVE**

Welcome & Introduction

GEMA Presentation

Roles and Responsibilities of the Planning Committee

In-Kind Contribution

Project Budget	
Federal Share	\$18,000
Local Share	\$6,000
Total Cost	\$24,000

Schedule Public Hearing

Schedule Next Meeting

Adjourn

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

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**MEETING 2 AGENDA
JULY 13, 2016 | 1:00 P.M. | 117 PUTNAM DRIVE**

Name/Title	Agency	Email
✓ Billy Webster Commissioner	Putnam County	billy.webster@windstream.net
✓ Walter E. Rooker City Mayor	City	ed.rooker@grail.com
✓ Andrew Simpson Eatonton Main Street Director	City	andrew@eatontonmainstreet.com
✓ Ariel Covington Putnam Fire Rescue	county	amullinspcfr@gmail.com
✓ Lynn Butterworth County Clerk	Putnam County	lbutterworth@putnamcounty.ga.us
✓ Jianne Pounds Putnam County Transit	Putnam County	dpounds@putnamcountyga.us
✓ Derrick Powers Eatonton Fire Dept	Eatonton FD	derick_powers@yahoo.com
✓ Jonathan Anderson Eatonton Fire Dept.	EFD	janderson13@yahoo.com
✓ JOE HAWKINS CITY OF EATONTON	PUBLIC WORKS	jhawkins@bellsouth.net
✓ Andrea Fuller, RN Putnam Co. Health Dept	Putnam Co. Health Dept	andrea.fuller@dph.ga.gov
✓ Charlie Bales Chief	City of Eatonton - Gas Dept	cbales@bellsouth.net
✓ Chief Kent Lawrence	Eatonton Police Dept.	eatontopolice@bellsouth.net
✓ Gary Sanders City Administrator	City of Eatonton	gsanders@eatontonga.us

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**MEETING 2 AGENDA
JULY 13, 2016 | 1:00 P.M. | 117 PUTNAM DRIVE**

Name/Title	Agency	Email
✓ Roddie Anne Blackwell President	Easton Putnam Chamber of Commerce	roddieanne@easton .com
✓ Tom Woods ROAD/Shop Supervisor	PUTNAM Co	twoods@putnam countyga.com
✓ Adam Swymer Coordinator	Putnam Co, Family Connection	adam@putnamfc.com
✓ CLIFF COLLINS BATTALION CHIEF	PUTNAM County Fire RESCUE	CCOLLINSPCFR@GMAIL.COM
✓ Carrie Dietrich Director of Putnam Center GTC	Central Georgia Technical College	cdietrich@centralgatedu
Marcel Lundy	Putnam General Hospital	mlundy@putnamgeneral.com

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**MEETING 2 AGENDA
JULY 13, 2016 | 1:00 P.M. | 117 PUTNAM DRIVE**

Welcome

Initiate Update of Critical Facilities Data

Identify Hazards

- **Natural Hazards**
- **Technological Hazards**

Schedule Next Meeting

Adjourn

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

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**MEETING 3 SIGN IN SHEET
August 3, 2016 | 2:00 P.M. | 117 Putnam Drive**

Name/Title	Agency	Email
Andrea Fuller RN	Putnam County Health Department	andrea.fuller@dph.ga.gov
Charlotte Green, RN	Putnam Jasper Support Services	csgreens1294@gmail.com
Annie L. Bishop, CLS Admin	Putnam Jasper Support Services	albputnamjasper@bellsouth.net
Adam Swymer	Putnam Co. Family Connection	adam@putnamfc.org
Ray Ricks	Putnam School DIST	RAY-RICK@putnam.k12.ga.us
Walter Ricketts	City	W.Ricketts.Jr@gsnet.com
Derick Austin	Putnam Co BOE	derick-austin@putnam.k12.ga.us
Lynward Lindsey	Georgia Power Co.	lindsey@southernco.com
Stephanie McMullen	Putnam Co. BOC	smcmullen@putnamcountygga.us smcmullen@putnamcoga.us
Lynn Butterworth	Putnam Co. BOC	lbutterworth@putnamcountyga.us
Nathan Mason / Director	Putnam Co EMS	nmason@putnamcountygga.us
Amel Covington	Putnam Co. Fire Rescue	amullinspcfr@gmail.com
Marcel Lundy	Putnam General Hospital	mlundy@putnamgeneral.com

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

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**MEETING 3 SIGN IN SHEET
August 3, 2016 | 2:00 P.M. | 117 Putnam Drive**

Name/Title	Agency	Email
Tony Clark / Public Works Director	P.C. B.O.C.	tclark@putnamcountyga.us
JOE HAWKINS	CITY OF EATONTON PUBLIC WORKS	jhawks@bellsouth.net
Charlie Bales	City of Eatonton Gas Dept	cbales@bellsouth.net
Gary Sanders / City Admin	City of Eatonton	gsanders@eatontonga.us
Tom Wooten / County Road Foreman	PUTNAM PUBLIC WORKS	twooten@putnamcountyga.us
L. Jay Moran / Putnam Animal Services ^{officer}	PCAS	mamato.sadie@gmail.com
Chief Kent Lawrence / Eatonton Police Dept	EATONTON Police Dept	eatontopolice@bellsouth.net
Off. PAT WEICH	EATONTON Police Dept.	eatontopolice@bellsouth.net
Kimberly Hicks - Grable / Instructor CATC	CGTC	khicks-grable@centralga.edu
Carnie Dietrich / Director - CGTC Putnam Chr.	CGTC	cdietrich@centralga.edu
Lisa Jackson / Director Planning	Putnam County	
Russell Blank / Chief Deputy / Deputy EMA	Putnam County S.O./EMA	chiefblank@putnamcountysheriff.org
Teresa Slade / 911 Dir / Dep EMA	PCSO/EMA	teresa.slade@putnamcountysheriff.org

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**MEETING 3 AGENDA
AUGUST 3, 2016 | 2:00 P.M. | 117 PUTNAM DRIVE**

Welcome

Review Draft Critical Facilities Data

Validate current goals, objectives & action items

- **Flooding**
- **Winter Storm**
- **Tornado**

Reminder: Public Hearing August 11, 2016 @ 2:00 p.m.

Schedule Next Meeting

Adjourn

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

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**MEETING 4 SIGN-IN SHEET
SEPTEMBER 7, 2016 | 2:00 P.M. | 117 Putnam Road**

Name/Title	Agency	Email
Billy Webster Commissioner	Putnam County	billy_webster@windstream.net
RAY RICKS	PUTNAM BOE	ray_ricks@putnam.k12.ga.us
Anthony Frazier Shop Foreman	Putnam County Public Works	afrazier@putnamcountyga.us
Howard Sills	SHERIFF & EMA Dir. Putnam Co.	sheriffsills@putnamcountysheriff.org
Andrea Fuller	Putnam Co - Health Dept	andrea.fuller@dph.ga.gov
Marcel Lundy	Putnam General Hosp	mlundy@putnamgeneral.com
Gary Sanders City Administrator	City of Eatonton	gsanders@eatontonga.us
Walter Rucker	City of Eatonton	w.Rucker.5r@gmail.com
Andrew Simpson Eatonton Main Street	City of Eatonton	andrew@eatontonmainstreet.com
Shane E. Hill Putnam County Fire Chief	Putnam County	shill@putnamcountyga.us
Russell Blank Chief Deputy	Sheriff's office / Deputy EMA Director	chiefblank@putnamcountysheriff.org
Teresa Slade EMA Dir	PWO Dep Director EMA	teresaslade@putnamcountysheriff.org
Lynn Butterworth County Clerk	Putnam BOE	lbutterworth@putnamcountyga.us

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

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**MEETING 4 SIGN-IN SHEET
SEPTEMBER 7, 2016 | 2:00 P.M. | 117 Putnam Road**

Name/Title	Agency	Email
Stephanie Mcmullen Admin Asst/Start (BOC)	Board of Commissioners	smcmullen@putnamcountyga.us
Lisa Jackson Planning Director	BOC	ljackson@putnamcountyga.us
PAUL VAN HAUTE Co. Mgr	BOC	puenhaut@putnamcountyga.us
Carnie Dietrich Director - Putnam Ctr.	Central GA Technical College	cdietrich@centralgated.edu
DERICK Austin Asst BOE - Superintendent	BOE	derrick_austin@putnam.k12.ga.us
Tony Clack Director - Public Works Putnam BOC	Putnam Co. Bd of Commissioners	tclack@putnamcountyga.us
Nathan Mason Director EMS	Putnam Co BOC	nmason@putnamcountyga.us
Peggy K. Pettitt, RN Nurse Manager	Putnam Co. Health Dept.	peggy.pettitt@dph.ga.gov
Dianne Pounds Director - Transit	Putnam Co. BOC	dpounds@putnamcountyga.us
Marcus Turner	PUTNAM CO P&S	mturner@putnamcountyga.us
TORREY WHITTAKER	Public Buildings	twhittaker@putnamcountyga.us

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**MEETING 4 AGENDA
SEPTEMBER 7, 2016 | 2:00 P.M. | 117 PUTNAM DRIVE**

Welcome

Critical Facilities Data

Assessment of Previous Mitigation Activities / Actions

In-Kind Contribution Form

Next Meeting: Wednesday, October 5, 2016 at 2:00 p.m.

Adjourn

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

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**MEETING 5 SIGN-IN SHEET
October 5, 2016 | 2:00 PM | 117 Putnam Road**

Name/Title	Agency	Email
Charlotte Green R.N	Putnam Jasper Service Center	CSgreen1294@gmail.com
Irene Mitchell RN	Putnam Co Health Dept	irene.mitchell@dph.ga.gov
Elizabeth Reaves	Putnam Co. Health Dept	elizabeth.reaves@dph.ga.gov
Andrea Fuller, RN	Putnam Co. Health Dept	andrea.fuller@dph.ga.gov
Felicia McDonel RT(RN)	Putnam General Hospital	fmcdonel@putnamgeneral.com
Tom Wooten - Road Foreman	Putnam Public Works	twooten@putnamcountyga.com
Stephanie McMullen - Admin Assistant	Putnam Co. BOC	smcmullen@putnamcountyga.us
Lynn Butterworth County Clerk	Putnam County BOC	lbutterworth@putnamcountyga.us
Karen Rago Data Entry Tech	Putnam Co BOC	krago@putnamcountyga.us
Pat Walker Patrol OFFICER	Eatonton Police Dept	eatontonpolice@bellsouth.net
Karen Pennamon Admin Asst	Putnam Planning & Develop	Kpennamon@putnamcountyga.us
Anthony Frazier Shop Foreman	Public Works	afrazier@putnamcountyga.us
Lisa Jackson	Planning & Develop	ljackson@putnamcountyga.us

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**MEETING 5 AGENDA
OCTOBER 5, 2016 | 2:00 P.M. | 117 PUTNAM DRIVE**

Welcome

Critical Facilities Data

Schedule Second Public Hearing

In-Kind Contribution Form

Announcements

Next Meeting: Wednesday, November 2, 2016, 2:00 p.m.

Adjourn

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**MEETING 6 SIGN-IN SHEET
November 1, 2016 | 2:00 PM**

Name/Title	Agency	Email
Judy D. Jaeger	Student	
Denise Collier	Student	
Trainisha Smith	Student	
Calvisha Harris	Student	
Belinda McLemore	Student	
Marcus Jackson	Student	
Angela D. Curry	Student	
Aaron Hunt	Student	
Jeremy Lester	Student	

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**MEETING 6
NOVEMBER 1, 2016, 2016 | 2:00 P.M.**

Welcome & Introduction

Roles and Responsibilities of the Planning Committee

In-Kind Contribution

Project Budget	
Federal Share	\$18,000
Local Share	\$6,000
Total Cost	\$24,000

Adjourn

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**MEETING 7 SIGN-IN SHEET
January 31, 2017 | 3:00 PM | 117 Putnam Road**

Name	Title	Agency	Email
Peggy K. Pettit	Nurse Manager Expanded Role	Putnam Co. Health Dept	peggy.pettit@dph.ga.gov
Donna Elderleyler	nurse	Putnam Co. Health Dept	donna.elderleyler@dph.ga.gov
Andrea Fuller	Public Health RN 3 RN	Putnam Co. Health Dept	andrea.fuller@dph.ga.gov
Tommy Cook	Membership Manager	Eatonton - Putnam Chamber	tommy@eatonton.com
Roddi Anne Blackwell	President	Eatonton - Put Chamber	roddianne@eatonton.com
Kaitlyn Parham	Tourism Coordinator	Eatonton - Putnam Chamber	Kaitlyn@eatonton.com
Carne Dietrich	Director of Putnam Center	Central GA Tech. College	cdietrich@centralgatech.edu
Gary Sanders	City Administrator	City of Eatonton	gsanders@eatontonga.us
PAUL VAN HAUTE	County Manager	Putnam Co	pvahaute@putnamcountyga.us
Stephanie McMullen	Assistant to County Manager	Putnam BOC	smcmullen@putnamcountyga.us
Lynn Butterworth	County Clerk	Putnam County	lbutterworth@putnamcountyga.us
Barbara Vargo	P.C. Finance	Putnam County	bvargo@putnamcountyga.us
Jennifer Fricks	Accounting Technician	Putnam County BOC	jfricks@putnamcountyga.us

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

MEETING 7 AGENDA

January 31, 2017 | 3:00 P.M. | 117 PUTNAM DRIVE

Welcome

Discuss Critical Facilities Data

In-Kind Contribution Form

Announcements

Schedule Next Meeting

Adjourn

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

280

**MEETING 8 SIGN-IN SHEET
February 15, 2017 | 2:00 PM | 117 Putnam Road**

Name	Title	Agency	Email
✓ Gary Sanders	City Administrator	City of Eatonton	gsanders@eatontonga.us
✓ Reeshemah Ellison	Accounts Payable	City of Eatonton	rellison@eatontonga.us
✓ Kevin Reid	Building and Grounds	City of Eatonton	None
✓ Darren Alfred	Battalion Chief	Putnam County Fire Dept	pcsdcapt21@yahoo.com
✓ Tom Wooten	Road Foreman	Putnam County	twooten@putnamcountyga.us
✓ Tony Crack	Public Works Director	" "	tcrack@putnamcountyga.us
✓ Anthony Frazier	Public Works Shop Foreman	Putnam County	afrazier@putnamcountyga.us
✓ Peggy K. Pettit	Nurse Manager Putnam	Putnam Co. HHS	peggy.pettit@dph.ga.gov
✓ Elizabeth Reaves	Staff Nurse Putnam Co. Health Dept	Putnam Co. HD	elizabeth.reaves@dph.ga.gov
✓ Andrea Fuller	Staff Nurse PCHD	PCHD	andrea.fuller@dph.ga.gov
✓ Corbin Stone	EHS	PC HD	gobri.l.stone@dph.ga.gov
✓ Andrew Simpson	City of Eatonton	Eatonton Municipal Manager	asimpson@eatontonga.us
✓ Teresa Slade	PCSO EQU DIR Dep EMA	PCSO	teresaslade@putnamcountysheriff.org

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**MEETING 8 SIGN-IN SHEET
February 15, 2017 | 2:00 PM | 117 Putnam Road**

Name	Title	Agency	Email
✓ Dianne Founds	Director	Putnam Co.	dfounds@putnamcountyga.us
✓ Kathryn Hill	EHSCM	P.C. Health Dept	Kathryn.Hill@phdga.gov
✓ Carrie Dietrick	Director	CGTC	cdietrick@centralgaitech.edu
✓ Nathan Mason	EMS Director	Putnam County EMS	nmason@putnamcountyga.us
✓ Cynthia US	HR Director	Putnam County BOC	
✓ Karen Rago	HR Assistant	"	
✓ Donna Todd		Putnam Co.	
✓ Billy Webster			
✓ Paul van Halle			
✓ Alan Foster			
✓ Lynn Butterworth			
✓ Stephanie McMullen			
✓ Barbara Vargo			

✓ Jennifer Tricks
✓ Linda Cook

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**MEETING 8 AGENDA
FEBRUARY 15, 2017 | 2:00 P.M. | 117 PUTNAM DRIVE**

Welcome

Discuss Critical Facilities Data

In-Kind Contribution Form

Announcements

Schedule Public Hearing

Adjourn

THEM'S TOURISM & TOURISM
 Development Resource Team program as a way to build product outlined in the resource team's reports. The Tourism Product Development Resource Team program works to evaluate a community's potential for tourism growth and development through innovative and unique experiences based on a community's local culture and heritage.

"The Tourism Product Development Resource Team has streamlined its initiative in assisting our communities with funding, which is one of the greatest needs in fortifying tourism product development in Georgia," said Cindy Eidson, director of Tourism Product Development for the Georgia Department of Economic Development. "By providing funds to projects that we help inspire, we are jump-starting tourism economic development

build new product from the recommendations made by the Tourism Product Development Resource Team members or supports projects the community has developed as an expansion of the resource team's recommendations. The recommendations and financial support provided through this funding program is designed to spur tourism development activities at the local level that maintain and create jobs, attract tourists, and enhance the visitor experience.

Recipients of the 2016 Tourism Product Development Funding Program include:

>> Eatonton-Putnam Downtown Development Authority - Bike Tour Brochure.

>> Eatonton-Putnam Downtown Development Authority - Eatonton-Putnam Briar Patch Pocket Parks.

and Chariton County - Folkston Gateway Signage.

>> Douglas County - "Caught on Camera": Film Trail of Douglas County Georgia.

>> Dublin Downtown Development Authority - Downtown Dublin Mobile & Audio Tour.

>> Liberty County Industrial Authority - Gateway Heritage Rehabilitation & Renewal.

>> Meriwether County Industrial Development Authority - Meriwether County Murals Trail.

>> Sandersville Downtown Development Authority - Kaolin Banner Project.

The Georgia Tourism review panel consists of members from the public and private sector as well as fellow professionals who are experienced in the tourism industry or the type of grant being reviewed.

Museum and enjoy free coffee and networking. While you are there, you can learn a little about this valuable marketing tool both for yourself and your business," said Kaitlyn Parham, tourism marketing and special events coordinator for the E-P Chamber. Parham will instruct the final class of this series.

This series is an extension of a beginner course taught at the Georgia Writers Museum by Parham in March of this year. Each session of this series, entitled, "Let's Get Social," has been free to the public and has lasted from 9-10 a.m. at the Georgia Writers Museum. The first session took place on June 21 and covered the question, "Why should I use social media for myself and/or my business?" The second class, which was offered on July 14, was geared

Public Hearing Notice

A public hearing will be held for the Putnam County Pre-Disaster Mitigation Plan Update on Thursday, August 11, 2016 at 2:00 p.m. in room 204 at the Putnam County Administration Building located at 117 Putnam Drive, Eatonton, GA 31024. The purpose of this hearing is to inform citizens of the planning process and to obtain citizen input into the development of the plan update. Representatives from the Pre-Disaster Mitigation Planning Committee and the Middle Georgia Regional Commission will be on hand to provide information and receive comments. Questions and comments concerning the Putnam County Pre-Disaster Mitigation Plan Update should be directed to Kayleigh Sullivan with the Middle Georgia Regional Commission at (478)751-6160.

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**Initial Public Hearing Agenda
AUGUST 11, 2016 | 2:00 P.M. | 117 PUTNAM DRIVE**

Welcome & Introduction

Background

- **Disaster Mitigation Act of 2000**
- **Plan developed, approved and adopted**
- **Plan Components**

The Update Process

- **Grant awarded to Putnam County**
- **Planning Committee**
- **Roles and responsibilities**
- **Update requirements**
- **Timelines**

Engaging the Public

- **Participation and input encouraged**

Discussion

Adjourn

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PUBLIC HEARING NOTICE

A public hearing will be held for the Putnam County Pre-Disaster Mitigation Plan Update on Tuesday, May 23, 2017 at 3:00 p.m. in room 203 at the Putnam County Administration Building located at 117 Putnam Drive, Eatonton, GA 31024. The purpose of this hearing is to obtain citizen input on the plan update. Representatives from the Pre-Disaster Mitigation Planning Committee and the Middle Georgia Regional Commission will be on hand to provide information and receive comments. Questions and comments concerning the Putnam County Pre-Disaster Mitigation Plan Update should be directed to Kayleigh Sullivan with the Middle Georgia Regional Commission at (478)751-6160.

the discussions submitted to council within a few weeks. After the recent closing of Georgia Power Plant Branch, officials throughout the city have been asked to find ways to cut their budgets to compensate for the large amount of tax revenue lost by the subsidiary's closing.

- A motion by James Gorley to allow local firefighters to volunteer services to fight an out-of-control fire in South Georgia's Okefenokee Swamp was met with a unanimous approval. The request from Fire Chief Eugene Hubert was for 48 hours of service from local safety workers at no cost to the city of Eatonton.

- Shannon Sneed

nominate by vehicle and reckless driving. The charges stemmed from a single-vehicle crash on July 24, 2015 on Little River Trail. Turner, then 17, was old according to reports.

memories of listening to the Grand Ole Opry from his early childhood in his grandparents' living room and as a teenager on his car radio. He said he

we had been under attack lately," Silis wrote in an email to members of the Georgia Sheriffs Association, "(Conley) then performed a song

his front porch listening to The Grand Ole Opry on the radio - a customary favorite pastime of his, he said. That particular evening's broadcast

Members of area law enforcement agencies joined on country legend John Conlee on

lyn@mogr.com

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**Public Hearing 2 Sign-In Sheet
MAY 23, 2017 | 3:00 P.M. | 117 PUTNAM DRIVE**

Name/Title	Agency	Email
Lynn Butterworth County Clerk	Putnam County	lbutterworth@putnamcountyga.us
Ariel Covington First Five Safety Co.	PCFR	amullinspcfr@gmail
Lisa Jackson	Putnam County	
PAUL VAN HAUTE	" "	pvanhoute@putnamcountyga.us
Chuck Camp	/ /	campheatingandair@gmail.com
Kimberly Hicks-Gracie	CGTC	khicks-gracie@centralga.net.edu
Gary Sanders	Eatonton	gsanders@eatontonga.us
Shane Hill	Putnam County Fire Dept	shill@putnamcountyga.us
Andrea Fullerton	Putnam Co HD	andrea.fuller@dph.ga.gov

**PUTNAM COUNTY
PRE-DISASTER MITIGATION PLAN UPDATE**

**Public Hearing 2 Agenda
MAY 23, 2017 | 3:00 P.M. | 117 PUTNAM DRIVE**

Welcome & Introduction

Background

- **Disaster Mitigation Act of 2000**
- **Plan developed, approved and adopted**
- **Plan Components**

The Update Process

- **Planning Committee Involvement**
- **Roles and responsibilities**
- **Update requirements**

Engaging the Public

- **Begin review process**

Discussion

Adjourn

From: [Kayleigh Sullivan](#)
To: "don.graham@jonescountyga.org"; "wjohnson@baldwincofirerescue.com"; "colin.duke@dph.ga.gov"; "treynolds@baldwincountyga.com"; "blombard@greeneconomyga.gov"; "gruark@morganga.org"; "bettyjump@jaspercountyga.org"; "morgan.county@gema.ga.gov"; "mariochapple@yahoo.com"
Subject: Putnam County Pre-Disaster Mitigation Plan Review
Date: Wednesday, May 24, 2017 4:38:00 PM

Good Afternoon,

Putnam County's Pre-Disaster Mitigation Planning Committee has completed the update to their plan. As a part of the update process, the plan is distributed to surrounding counties for review. The link below provides easy access to the files within the plan update. The Planning Committee would greatly appreciate any feedback you may have regarding the plan.

https://middlegeorgiarc-my.sharepoint.com/personal/ksullivan_mg-rc_org/_layouts/15/guestaccess.aspx?docid=1b3b1c6e48d634aceb2b9674c83d7a015&authkey=AeKXg9atZ-4JnB85FzhqZec

Thank you,

Kayleigh Sullivan
Government Services Specialist
Middle Georgia Regional Commission
175 Emery Highway, Suite C
Macon, Georgia 31217
P: 478-751-6160

Note: As of 5/31/2017, no neighboring counties have responded to our request for comments. If responses are received, they will be added to the final Pre-Disaster Mitigation Plan.

Backup material for agenda item:

9. Approval of 2017 Budget Amendment #2 (staff-FD)

2017 BUDGET AMENDMENT #2

	Increase (Decrease) to Current Budget	Total
General Fund Revenues:		
License & Permits	35,195	35,195
Charges for Services		
Auto Tag & Title Fees	2,300	
Services Tax Commissioner	15,500	
Recreation Program Fees	19,605	
Recreation Concessions	3,090	
Total Charges for Services		40,495
Interest & Miscellaneous		
Interest Earned	7,640	
Revenue - Sale of Assets	9,175	
Total Interest & Miscellaneous		16,815
Appropriation from Fund Balance	(92,505)	(92,505)
Total General Fund Revenue Adjustment		0
General Fund Expenditures:		
General Administration	(38,375)	
Regional Development Fees	400	
Superior Court	11,000	
Clerk of Superior Court & Image Account	(5,000)	
District Attorney	710	
Solicitor's Office	700	
Magistrate Court	8,320	
Public Transit System	9,000	
Recreation Department	13,245	
Total General Fund Expenditure Adjustment		0
Juvenile Services Fund Revenues	515	
Juvenile Services Fund Expenditures	515	
Oconee Springs Park Fund Revenues	173,250	
Oconee Springs Park Fund Expenses	88,915	

Backup material for agenda item:

10. Authorization for Chairman to sign letter to GDOT requesting a traffic study at Imperial Mill Road and Highway 441 Bypass (KI)

November 3, 2017

Mr. Jimmy Smith
District Engineer
Georgia Department of Transportation
District 2
643 GA Highway 15
Tennille, GA 31089

RE: Putnam County Traffic Study

Dear Mr. Smith:

Putnam County respectfully requests a traffic study at the intersection of Imperial Mill Road and the Highway 441 Bypass. Please contact County Manager Paul Van Haute regarding this request.

Sincerely,

Stephen J. Hersey
Chairman

Backup material for agenda item:

11. Awarding of Solicitation 17-42001-001 LMIG Off-System Safety Projects and Authorization for Chairman to sign Construction Agreement (staff-CM)

September 28, 2017

**PUTNAM COUNTY, GEORGIA
LMIG OFF-SYSTEM SAFETY PROGRAM**

The Putnam County Board of Commissioners will be receiving sealed Bids for all material, labor, equipment and services to successfully accomplish the following work: **“LMIG OFF-SYSTEM SAFETY PROJECTS”**. Work required under the Contract includes striping, sign fabrication and installations and installation of raised pavement markers as identified in the bid documents. Bids shall be on Unit Price Items.

The project shall be Substantially Complete within **60 calendar** days from the date of issuance of Notice to Proceed. Liquidated damages of \$100 per day will be assessed if work is not completed within 60 calendar days from the date of the Notice to Proceed.

Putnam County will receive bids until **11:30 AM on October 16, 2017 at 117 Putnam Drive, Suite A, Eatonton, GA 31024; ATTN: Paul Van Haute – County Manager**. Bids received after this time will not be accepted. Bids will be opened and publicly read aloud in the Administration Building Conference Room (Room 301) at approximately 11:35 AM on October 16, 2017. All interested parties are invited to attend. Pre-bid conference will not be held. Apparent bid results will be available within three (3) business days on the county web site: <http://www.putnamcountyga.us>.

Bidding Documents and Construction Plans are available for download from the Putnam County Board of Commissioners web site: <http://www.putnamcountyga.us>.

Bids are legal and binding upon the bidder when submitted. All bids should be submitted in duplicate.

Award will be made to the vendor submitting the lowest responsive and responsible bid. The Putnam County Board of Commissioners reserves the right to reject any or all bids, to waive technicalities and to make an award as deemed in its best interest. The written bid documents supersede any verbal or written prior communications between the parties.

All contractors shall submit with bid, a bid bond, certified check or cashier's check in the amount of five percent (5%) of the total bid, made payable to Putnam County, Georgia. The successful contractor will be required to submit a one hundred percent (100%) performance bond and a one hundred percent (100%) payment bond. Insurance and Bonding Company must be authorized to do business in Georgia by The Georgia Insurance Department, listed in the Department of Treasury's Publication of Companies holding Certificates of Authority as Acceptable Surety on Federal Bonds and as acceptable reinsuring companies, and must have an A.M. Best rating of A-6 or higher.

Putnam County does not discriminate on the basis of disability in the admission or access to its programs or activities. Any requests for reasonable accommodations required by individuals to fully participate in any open meeting, program or activity of the Putnam County Government should be directed to Paul Van Haute, County Manager, Putnam County Administrative Offices, 706-485-5826.

No DBE requirements exist.

All questions regarding the bid documents shall be made via email to: kaiser@co-infra-services.com. The deadline to submit questions is 5:00 PM on October 9, 2017. The County will post “Response to Questions and/or Addendum”, if applicable, on the county web site by 12:00 PM, October 10, 2017. Bidders are responsible for ensuring emails are received at kaiser@co-infra-services.com. Bidders may call Larry Kaiser at 404-909-5619 to inquire on delivery of email.

The **Putnam County Board of Commissioners** reserves the right to waive any informalities or irregularities, or to reject any or all bids and to re-advertise.



**FY 17 LMIG OFF-SYSTEM SAFETY
ENHANCEMENT PROGRAM**

BID OPENING: OCTOBER 16th, 2017; 11:30 A.M.

BIDDER	SIGNED "INVITATION TO BID" (yes/no)	BID FORM & ADDENDA ACKNOW. (yes/no)	BID BOND (yes/no)	QUALIFICATION SIGNATURE & CERTIFICATION (yes/no)	LIST OF SUBCONTRACTORS (yes/no)	CONTRACTOR AFFIDAVIT & AGREEMENT (yes/no)	DISCLOSURE FORM (yes/no)	SPONSOR CERTIFICATE DRUG FREE WORKPLACE (yes/no)	QUESTIONNAIRE (yes/no)	BID SCHEDULE OF ITEMS
PEEK	YES	YES	YES	YES	YES	YES	YES	YES	YES	73,100.00
MIDSTATE STRIPING	YES	YES	YES	YES	YES	YES	YES	YES	YES	67,875.05
PITTMAN CONST.CO.	YES	YES	YES	YES	YES	YES	YES	YES	YES	100,943.90

BIDS RECEIVED BY: Tom K. Kaiser Kaiser

[Signature] Van Haute

DATE: 10/16/17

NOTE: Bids not official until all required submittals are verified in accordance with the project bid documents and/or specifications

CONSTRUCTION AGREEMENT

THIS CONSTRUCTION AGREEMENT (hereinafter referred to as this “Agreement”) is made and entered into effective the date last signed below (hereinafter referred to as the “Effective Date”), by and between the **Putnam County Board of Commissioners** (hereinafter referred to as the “BOC”), and **Mid-State Striping, Inc.** (hereinafter referred to as the “Contractor”).

WITNESSETH:

WHEREAS, BOC desires that Contractor perform the Construction described in Paragraph II below, and Contractor desires to perform said Construction as specified in, and subject to, the terms and conditions in this Agreement.

NOW THEREFORE, in consideration of the mutual covenants stated herein, and for other good and valuable consideration, the receipt and sufficiency of which is hereby acknowledged, the parties agree as follows:

I. DEFINITIONS

- A. “Construction” is defined as those construction tasks to be provided by Contractor as described in Paragraph II below.
- B. “Work Area” is defined as the entire geographic area Contractor utilizes or affects in order to perform the construction improvements.
- C. “Project” is defined as Off-System Safety Enhancement Program

II. CONSTRUCTION TO BE PERFORMED

- A. Contractor agrees to provide all labor, materials, and equipment to perform striping, sign installations and traffic control in accordance with the Invitation to Bid (ITB) dated September 29th, 2017 and attached as Exhibit “A” and Addendum #1 & #2 dated October 9th, 2017 and attached as Exhibit “B”. Other specific requirements include:
 - 1) A Notice to Proceed will be issued by the BOC’s Project Engineer. Within five (5) calendar days of a Notice to Proceed, the Contractor shall mobilize and begin work on the Project. The Contractor shall notify CIS, Inc. at least three (3) business days prior to beginning Construction. Once construction begins, the Contractor must continuously (within the allowed allowable hours of operation set out below) pursue completion of the Project without undue delay. The Projects must be completed within one hundred twenty (120) calendar days from issuance of a Notice to Proceed. Liquidated damages in the

amount of \$150 dollars per calendar day will be assessed by the BOC if construction is not substantially completed within 120 calendar days.

- 2) Prior to beginning work in the Work Area, Contractor shall be responsible for coordinating with any utilities prior to sign installations. The Contractor shall alert the Project Engineer of any conflicts and to relocate signs as deemed appropriate by the Project Engineer.
- 3) Contractor is responsible for maintaining a clean and safe Work Area. Contractor shall remove and dispose of all trash and debris removed from the Work Area on a daily basis.
- 4) Contractor is responsible for providing all traffic control for each Project Work Area in accordance with the attached Section 150 as supplemented by the Plans, Specifications, and Manual of Uniform Traffic Control Devices (“MUTCD”). A traffic control plan for each Project Work Area shall be provided to the Project Engineer prior to commencement of Construction. A general traffic control plan submitted for all the Project Work Areas will be submitted for approval. Allowable hours for Construction in the Work Area are 8:00 a.m. – 5:00 p.m., Monday through Friday. Other work hours or days are at the discretion of the BOC.
- 5) All work shall be performed by the Contractor on County right-of-way. Any disturbance of property outside right-of-way or temporary construction easements shall require BOC and the property owner’s written approval. Contractor shall make every effort to ensure private property outside the ROW or easements is not disturbed.
- 6) The Contractor shall be responsible in ensuring that its construction fits existing field conditions. Slight adjustments with the striping or sign locations may be necessary. Such adjustments will be in coordination with the Project Engineer.

- B. The Construction required of Contractor under this Agreement shall at all times be in accordance with the Georgia Department of Transportation (“GDOT”) Standard Specifications for Construction of Transportation Systems, 2001 Edition, and any modifications identified in this Agreement or the Exhibits as well as adhere to Putnam County standards and requirements.

III. MATERIALS, SUPPLIES AND SERVICEMANSHIP

- A. Contractor shall purchase and provide all equipment, materials, supplies and labor to timely complete the Construction to BOC’s satisfaction. The risk of loss or damage to any such materials, supplies, or equipment due to fire, theft, vandalism, or any other cause whatsoever shall remain with and be borne by the Contractor.
- B. All Construction provided by Contractor shall be performed in a workmanlike and professional manner to the satisfaction of BOC. Contractor warrants that all

material, equipment and workmanship furnished hereunder shall be free from fault or defect and suitable in appearance without cracks or degradation and for the purposes for which they were installed, and agrees, at its expense, to promptly remedy any failure of such material, equipment or workmanship to comply with such warranty, if such failure is discovered, and Contractor is notified thereof in writing, within one (1) year of the approval of the punch list by the Project Engineer.

IV. RELATIONSHIP OF THE PARTIES

- A. Contractor is retained by BOC only for the purposes set forth in this Agreement, and its relation to BOC shall be that of an independent contractor. Neither Party shall act as an agent, employee, partner, joint venturer or associate of the other Party. All employees furnished by Contractor will be employees of Contractor, and will at all times be subject to the direct supervision and control of Contractor. Contractor will have the sole responsibility of paying the salaries, taxes (including, but not limited to, Federal Social Security Taxes and Federal and State Unemployment Taxes), Worker's Compensation Insurance, and all other expenses relating to each such employee of Contractor, and for paying all other costs incurred in performing the Construction. Contractor shall employ only qualified personnel for the purpose of performing its obligations hereunder.

V. PERFORMANCE OF CONSTRUCTION BY CONTRACTOR

- A. Contractor shall conduct its Construction in a manner that will cause minimum interference with the business operations and activities of the property owners, tenants, employees and the general public along the roadway and in and around the Work Area (s). Contractor shall adhere to the schedule requirement outlined in the ITB. Contractor agrees to work in harmony with other trades, businesses and tenants in the Work Area (s).
- B. Contractor shall provide at all times during the performance of its duties under this Agreement, on-site supervisory personnel, who can speak fluent English, and who shall be responsible for the direct supervision of the employees of Contractor and who shall be available as needed to report to and confer with a BOC representative.
- C. The BOC Project Engineer (along with other BOC representatives) shall have access to the Work Area (s) at all times for the purpose of making inspections of the Construction. Neither the making nor the failure to make inspections nor the express or implied approval of the Construction shall relieve Contractor of the responsibility to complete and guarantee the Construction as specified in this Agreement. Any unsatisfactory Construction shall be remedied by Contractor at its expense or, in the event Contractor fails to so remedy the Construction immediately, BOC may have unsatisfactory Construction remedied by a contractor other than Contractor at Contractor's expense.

- D. Contractor shall be responsible for the adequacy and safety of materials, tools, equipment, temporary and permanent structures and Construction used in the Construction, whether furnished or constructed by Contractor or another.
- E. Tools and equipment provided by Contractor shall be maintained in good repair and efficient operating condition. Contractor acknowledges that no materials, supplies, tools or equipment may be stored in the Work Area and all shall be removed from the Work Area at the end of each work day.
- F. Contractor acknowledges that no sanitary facilities are provided by BOC in the Work Area and Contractor agrees to make provision for same to its employees.
- G. The apparent silence of these specifications and any supplemental specifications as to any details, or the omission from it of a detailed description concerning any point, shall be regarded as meaning that only the best commercial practices are to prevail and that only materials of first quality and correct type, size and design are to be used. All workmanship is to be first quality. All interpretations of the specification shall be made upon the basis of this statement, with BOC interpretation to prevail.
- H. It shall be the responsibility of the Contractor to coordinate its work with any work to be performed by others in the public right-of-way and arrange a schedule of operations that will allow for completion of the Project without undue delay. Where stage construction is required, it shall be the Contractor's responsibility to notify the utility owner when each stage of work is completed and the site is available for utility work to proceed.
- I. The Contractor will not be paid for any delays or extra expense caused by utility facilities, obstructions, or any other items not being removed or relocated to clear construction in advance of its work.
- J. Georgia law requires that a telephone call or adequate notice must be given to the Utilities Protection Center (UPC) at 811 a minimum of three (3) days before work is to begin. The notice will remain in effect for 10 working days from the date the Utilities Protection Center is notified.
- K. Contractor shall provide 100% Performance and 100% Labor/Materials bonds to the BOC a minimum of five (5) days prior to Project Engineer's issuance of a NTP; bonds to be included in the Agreement as Exhibit "C".

VI. COMPLIANCE WITH LAWS

- A. Contractor shall plan and conduct the Construction to comply with local, state and federal laws, rules and regulations, to exercise the highest degree of care to safeguard persons and property from injury. Contractor shall direct the performance of the Construction in compliance with reasonable safety

regulations and Construction practice and with applicable federal, state, and local laws, rules and regulations including but not limited to, "Occupational Safety and Health Standards" promulgated by the U.S. Secretary of Labor. Neither the giving of such special instructions by the BOC Representative nor the adherence thereto by Contractor shall relieve Contractor of the sole responsibility to maintain safe and efficient working conditions. Contractor will perform all Construction in compliance with applicable Federal Health and Safety laws currently in effect.

- B. Contractor shall obtain and maintain current any and all licenses, certificates, registrations, permits and any other item or permission necessary to perform and complete the Construction.
- C. Contractor shall be fully knowledgeable and comply with all Putnam County and State of Georgia rules and regulations either currently in effect or as may be promulgated in the future, while performing the Construction.
- D. Contractor shall require its employees to wear protective clothing, reflective vests, masks, eye protections, etc., during any operation as required or directed by applicable laws, regulations, ordinances, and/or directions by manufacturer of materials or equipment.
- E. Contractor shall adequately protect worker, land owners, tenant, adjacent property, and the public during his operations. Contractor must maintain Erosion and Sedimentation Controls throughout the Construction in accordance with all governmental standards.
- F. Contractor acknowledges it and its subcontractors are solely responsible for complying with the provisions of, including maintaining and providing records of compliance, and providing affidavits verifying compliance with, the Immigration Reform and Control Act of 1986, located at 8 U.S.C Section 1324, *et seq.*, the Georgia Security and Immigration Compliance Act of 2006 located at OCGA §13-10-90, *et seq.*, Georgia Department of Labor Rule 300-10-1-.02, and all regulations relating to the foregoing.
- G. Contractor shall adhere to the various Certifications and Affidavits included in the Contractors Bid Proposal submittal, attached as Exhibit "D"

VII. INSURANCE AND INDEMNITY

- A. Contractor shall assume responsibility and liability for any damage, loss, or injury, including death, of any kind or nature whatever to person or property, including but not limited to employees and property of Putnam County, State of Georgia, utilities, and property owners, caused by or resulting from any error or omission of the

Contractor, or the negligent act of the Contractor, or its subcontractors or any of the Contractor's or its subcontractors' officers, agents, servants, or employees, arising from the performance of the Construction under this Agreement. Contractor shall defend, indemnify and hold harmless Putman County BOC and their officials, officers, directors, commissioners, agents, inspectors, servants and employees, past and present, from and against any and all claims, loss, damage, charge, expense and liability without limitation of any nature whatsoever resulting from injury to or death of any persons, or any damage, destruction or injury to any property, arising out of or in any way connected with the performance of this Agreement or from Contractor's or its subcontractors' negligent or intentionally wrongful acts or omissions, however caused, regardless of any negligence of BOC or its representative, whether active or passive. Contractor shall, on request, defend, at its sole expense, any suit, action or other legal proceeding asserting a claim covered by this obligation to indemnify, whether such claims or actions are rightfully or wrongfully brought or filed, and Contractor agrees to satisfy, pay and cause to be discharged of record any judgment which may be rendered against Putnam County BOC or others protected by this indemnification arising therefrom or the BOC acting within the scope of his/her employment or function shall be held personally liable in tort or named as a defendant in any action for injury or damage suffered because of any act, event, or failure to act.

- B. Contractor and each subcontractor shall procure and maintain in full force and effect, at all times during the term of this Agreement, the following insurance through companies with an "A" rating from Bests, licensed to conduct business in the State of Georgia and approved by Putnam County BOC:
- 1) Comprehensive General Liability insurance covering Contractor's operations as set forth in this Agreement with a combined single limit of not less than \$3,000,000 for bodily injury and property damage, \$1,000,000 each occurrence, \$250,000 fire damage, \$10,000 medical expense, \$2,000,000 personal & advertising injury general aggregate, and \$2,000,000 products & completed operations.
 - 2) Business Automobile Liability insurance with a minimum \$1,000,000 combined single limit/each occurrence (including operation of non-owned, owned, and hired autos).
 - 3) Said liability insurance policies shall name Putnam County Board of Commissioners. Said liability insurance shall recognize and insure performance by Contractor of the obligation to indemnify herein contained. Contractor's insurance must provide coverage for fines, penalties, and punitive damages.
 - 4) Professional Liability Insurance covering Contractor's Construction with a limit of not less than \$1,000,000.
 - 5) Worker's Compensation insurance covering all employees of Contractor or any subcontractor engaged in performing the Construction required by this Agreement as required by Georgia statute, and Employer's Liability insurance of not less than the minimum requirement of \$500,000.

- C. Contractor shall provide Putnam BOC with valid certification of insurance confirming the purchase of said insurance, and the inclusion of the above listed named additional insured. The certificate will further confirm that at least thirty (30) days prior written notice will be furnished to Putnam County BOC by insurer before any material change, cancellation or non-renewal of policy. The certificates must contain the policy number, policy limits, policy expiration date, location and operations to which the insurance applies, and protective coverage for any subcontractor operations. It is further agreed that any coverage extended by reason of this paragraph shall be primary and that any similar insurance maintained by BOC for its own protection shall be secondary or excess and non-contributing insurance. Insurance certifications to be included in the Agreement as Exhibit "E".
- D. Prior to initiating performance of Construction, Contractor will obtain from all subcontractors and provide to BOC a waiver of subrogation from their insurance carriers, waiving any right to subrogate back against BOC in the event of a claim for damages.

VIII. TERM AND PAYMENT

- A. The Term of this Agreement shall commence on the Effective Date and shall continue in full force and effect final acceptance of the Project by Putnam County.
- B. Total compensation to be paid by BOC to Contractor for the Construction provided herein shall be based upon the bid prices shown on Exhibit "D". These bid prices are considered a part of this Agreement. Liquidated damages of \$150.00/day will be assessed if Projects are not completed within one hundred twenty (120) days from the Notice to Proceed. Upon proper and timely performance by Contractor of each Project, and subject to any other provisions of this Agreement, BOC shall pay Contractor within thirty (30) days after receipt of an itemized invoice and approval of the Construction by the BOC's Project Engineer, the sum for performance of the Construction, minus Ten Percent (10%) retainage pending final acceptance by the Project Engineer of the satisfactory completion of each Project. Said invoice shall specify a description of the Construction performed.
- C. BOC shall withhold from payments owed to Contractor and credit against its account with Contractor sufficient funds for the following:
 1. To cover the cost of property damage incurred to Putnam County, State of Georgia, utilities, or any property owner or any tenant as a result of conduct by Contractor, its agents or employees regardless of whether said conduct is in the performance of Contractor's Construction hereunder;

2. To indemnify BOC pursuant to Insurance and Indemnity paragraphs of this Agreement;
 3. To compensate BOC for cost to correct Construction rejected by BOC and not remedied by Contractor pursuant to this Agreement; or
 4. To compensate for any failure by Contractor to clean up the Work Area (s) pursuant to this Agreement.
- D. The Contractor agrees that acceptance of final payment shall be in full and final settlement of all claims arising against the BOC for Construction, work done, materials furnished, costs incurred, or otherwise arising out of this Agreement and shall release the BOC from any and all further claims of whatever nature, whether known or unknown for and on account of said Agreement, and for any and all work done, and labor and materials furnished, in connection with same.

No final payment shall be made until the Contractor and its subcontractors furnish to the BOC a sworn affidavit to the effect that all bills are paid and no outstanding claims, suits and/or liens are pending in connection with the work done or labor and materials furnished under this Agreement. Final payment will be made within sixty (60) days after approval by BOC's Project Engineer.

The Contractor will be required to maintain all work done in a first-class condition for sixty (60) days after the same has been completed as a whole, and CIS, Inc. has notified the Contractor in writing that the Projects have been completed to BOC's Project Engineers satisfaction. The retained percentage will not be due or payable to the Contractor until the 60-day maintenance period has ended. The maintenance period is not the same as the one (1) year warranty period set forth in Section III (B), above.

IX. TERMINATION

- A. BOC shall have the right to terminate this Agreement at any time and for any reason whatsoever upon giving the Contractor written notice of its intention to exercise its right of termination. BOC shall pay for construction satisfactorily rendered through the date of termination, subject to BOC's rights in Article VIII, and BOC shall have no further liability to Contractor.

X. GENERAL PROVISIONS

- A. No subcontract, delegation or assignment of this Agreement or of any duty, right, or obligation of performance hereunder shall be made by Contractor, in whole or in part, without the prior written consent of BOC. Any attempted transfer, delegation or assignment without BOC's prior written consent shall be void and confer no

rights upon any third person. In the event that prior written consent is given by BOC with respect to an assignment, delegation or subcontract, said consent shall not relieve Contractor of any obligation to BOC unless specified therein.

- B. If BOC finds it appropriate to file any action at law or in equity is necessary to enforce or interpret the terms of this Agreement, BOC shall be entitled to reasonable attorneys' fees, costs and necessary disbursements in addition to any other relief to which BOC may be entitled.
- C. No oral statement shall in any manner modify or otherwise affect the terms and conditions set forth herein, and no charge shall be made for extra Construction, changes, or materials unless they have been previously ordered in writing by a BOC representative.
- D. Contractor shall discharge at once, and hold Putnam County and all property owners and tenants harmless from liens that may be filed in connection with the Construction.
- E. This Agreement shall be governed by the laws of the State of Georgia. The conflicts of law provisions of Georgia law shall not apply to this Agreement. The Parties acknowledge that this Agreement is to be at least partially performed in Putnam County, Georgia. Each Party hereby consents to Putnam County as the sole jurisdiction over any dispute which arises as a result of the execution or performance of this Agreement, and each Party hereby waives any and all objections to venue in the Putnam Judicial Circuit Courts.
- F. This constitutes the entire Agreement between the Parties regarding its subject matter. If any provision or portion of a provision is held by a court to be invalid, void or unenforceable, the remaining provision and portions thereof shall nevertheless continue in full force and effect. Should any dispute or alleged ambiguity arise concerning the meaning or construction of any term or terms of this Agreement, no part or term of this Agreement shall be construed for or against BOC as the drafting Party.
- G. All notices, demands, or other writing in this Agreement provided to be give, made or sent by either Party hereto to the other, or to Putnam County, shall be deemed to have fully given when made in writing and hand delivered or sent certified mail, Federal Express, or similar carrier and addressed as follows:

TO PUTNAM COUNTY: Putnam County Board of Commissioners
 Attn: Stephen J. Hersey
 Chairman, Board of Commissioners
 117 Putnam Drive
 Suite A
 Eatonton, GA 31024

TO CONTRACTOR: Mid-State Striping, Inc.
Attn: David Steed
113 Wilson Road, S.E.
Eatonton, GA 31024

- H. "Time Is Of The Essence" of this Agreement and every term, covenant and condition herein.
- I. Any delay, deferral, forbearance or selective enforcement by BOC of any provision of this Agreement is not a waiver or release of the right to enforce that provision in full at a future date. No waiver of any right under this Agreement by BOC will be effective unless in writing.
- J. The words "BOC" and "Contractor", as herein used, shall include the plural as well as the singular. In the event there is more than one Contractor, the obligations to be performed shall be joint and several.
- K. The provisions of this Agreement shall not impart rights enforceable by any person or entity not a Party to this Agreement or not a permitted successor or assignee of the party bound by this Agreement. This Agreement shall not be construed to create any third party beneficiary rights of any sort.
- L. This Agreement may be executed in any number of counterparts, each of which shall be an original, but all of which together shall constitute one and the same instrument.
- M. The provisions of Sections III, VII, VIII, IX, and X shall survive the expiration or earlier termination of this Agreement.
- N. Contractor must maintain complete records during the life of this Agreement and for a period of two (2) years after completion. Such records are to be made available to Putnam County BOC if requested, to be audited by a designated BOC auditing staff. In such audits reveal overcharges and/or undercharges, such will be adjusted and compensation made by the appropriate Party to correct charges.
- O. Putnam County is not a party to this Agreement and has no obligations to the Contractor.

IN WITNESS WHEREOF, the Parties hereto have entered into this Agreement effective on the date last signed below.

THIS AGREEMENT IS NOT VALID UNTIL EXECUTED BY ALL PARTIES INDICATED BELOW.

PUTNAM COUNTY BOARD OF COMMISSIONERS

Witness:

By: _____ (Seal)

Name: _____

Title: _____

Date: _____

MID-STATE STRIPING, INC.

Witness:

By: _____ (Seal)

David Steed, President

President

Date: _____

EXHIBIT A



PUTNAM COUNTY
INVITATION TO BID (ITB)

Project Name: FY 17 LMIG OFF-SYSTEM SAFETY ENHANCEMENT PROGRAM	
Due Date and Time: October 16 th , 2017 Local Time: 11:30 AM	Number of Pages: <u> 34 </u>

ISSUING DEPARTMENT INFORMATION	
County Manager's Office Issue Date: September 29th, 2017	
Putnam County	Phone: 706-485-5826 Fax: 706-923-2345 Website: www.putnamga.us

INSTRUCTIONS TO BIDDERS	
Return Submittal to: Putnam County Board of Commissioners <u>ATTN:</u> Paul Van Haute County Manager 117 Putnam Drive Suite A Eatonton, GA 31024	Mark Face of Sealed Envelope/Package: Bid Number: _____ Name of Company or Firm: _____ <ul style="list-style-type: none"> • Special Instructions: Deadline for Questions: Oct. 9th, 2016 – 5:00 PM • Email questions to Larry Kaiser at (owner's representative); kaiser@co-infra-services.com (call 404-909-5619 to confirm receipt of email) • Refer to Schedule of Events in bid package for additional instructions

BIDDERS MUST COMPLETE THE FOLLOWING	
Bidder Name/Address:	Authorized Bidder Signatory: (Please print name and sign in ink)
Bidder Phone Number:	Bidder FAX Number:
Bidder Federal I.D. Number:	Bidder E-mail Address:
BIDDERS MUST RETURN THIS COVER SHEET WITH BID RESPONSE	

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September 28, 2017

**PUTNAM COUNTY, GEORGIA
LMIG OFF-SYSTEM SAFETY PROGRAM**

The Putnam County Board of Commissioners will be receiving sealed Bids for all material, labor, equipment and services to successfully accomplish the following work: **“LMIG OFF-SYSTEM SAFETY PROJECTS”**. Work required under the Contract includes striping, sign fabrication and installations and installation of raised pavement markers as identified in the bid documents. Bids shall be on Unit Price Items.

The project shall be Substantially Complete within **60 calendar** days from the date of issuance of Notice to Proceed. Liquidated damages of \$150 per day will be assessed if work is not completed within 60 calendar days from the date of the Notice to Proceed.

Putnam County will receive bids until **11:30 AM on October 16, 2017 at 117 Putnam Drive, Suite A, Eatonton, GA 31024; ATTN: Paul Van Haute – County Manager**. Bids received after this time will not be accepted. Bids will be opened and publicly read aloud in the Administration Building Conference Room (Room 301) at approximately 11:35 AM on October 16, 2017. All interested parties are invited to attend. Pre-bid conference will not be held. Apparent bid results will be available within three (3) business days on the county web site: <http://www.putnamcountyga.us>.

Bidding Documents and Construction Plans are available for download from the Putnam County Board of Commissioners web site: <http://www.putnamcountyga.us>.

Bids are legal and binding upon the bidder when submitted. All bids should be submitted in duplicate.

Award will be made to the vendor submitting the lowest responsive and responsible bid. The Putnam County Board of Commissioners reserves the right to reject any or all bids, to waive technicalities and to make an award as deemed in its best interest. The written bid documents supersede any verbal or written prior communications between the parties.

All contractors shall submit with bid, a bid bond, certified check or cashier's check in the amount of five percent (5%) of the total bid, made payable to Putnam County, Georgia. The successful contractor will be required to submit a one hundred percent (100%) performance bond and a one hundred percent (100%) payment bond. Insurance and Bonding Company must be authorized to do business in Georgia by The Georgia Insurance Department, listed in the Department of Treasury's Publication of Companies holding Certificates of Authority as Acceptable Surety on Federal Bonds and as acceptable reinsuring companies, and must have an A.M. Best rating of A-6 or higher.

Putnam County does not discriminate on the basis of disability in the admission or access to its programs or activities. Any requests for reasonable accommodations required by individuals to fully participate in any open meeting, program or activity of the Putnam County Government should be directed to Paul Van Haute, County Manager, Putnam County Administrative Offices, 706-485-5826.

No DBE requirements exist.

All questions regarding the bid documents shall be made via email to: kaiser@co-infra-services.com. The deadline to submit questions is 5:00 PM on October 9, 2017. The County will post “Response to Questions and/or Addendum”, if applicable, on the county web site by 12:00 PM, October 10, 2017. Bidders are responsible for ensuring emails are received at kaiser@co-infra-services.com. Bidders may call Larry Kaiser at 404-909-5619 to inquire on delivery of email.

The **Putnam County Board of Commissioners** reserves the right to waive any informalities or irregularities, or to reject any or all bids and to re-advertise.

NOTICE TO ALL BIDDERS

To report bid rigging activities call:

1-800-424-9071

The U.S. County of Transportation (DOT) operates the above toll-free “hotline” Monday through Friday, 8:00 AM to 5:00 PM, Eastern Time. Anyone with the knowledge of possible bid rigging, bidder collusion, or other fraudulent activities should use the “hotline” to report such activities.

The “hotline” is part of the DOT’s continuing effort to identify and investigate highway construction contract fraud and abuse, and is operated under the direction of the DOT Inspector General. All information will be treated confidentially and caller anonymity will be respected.

BIDDING INSTRUCTIONS

**FAILURE TO RETURN THE FOLLOWING BID DOCUMENTS COULD RESULT IN THE BID BEING DEEMED
NON-RESPONSIVE AND BEING REJECTED:**

Item	Description	Page(s)
1	Filled out and Signed Invitation to Bid	1
2	Bid Form and Addenda Acknowledgement (2 pages)	9-10
3	Bid Bond (3 pages)	11-13
4	Qualification Signature and Certification	14
5	List of Subcontractors	15
6	Contractor Affidavit and Agreement (E-Verify)	16
7	Disclosure Form	17
8	Certificate of Sponsor Drug-Free Workplace	18
9	Questionnaire	19
10	Bid Schedule of Items	22

INFORMATION AND INSTRUCTIONS

The purpose of this solicitation is to enter into a unit price contract with one firm to be the primary contractor for the ***‘LMIG OFF-SYSTEM SAFETY ENHANCEMENT’*** project. Project scope can generally be described as installation of new roadway regulatory warning signage, installation of raised pavement markings, removal of existing signage (to be identified by Putnam County), striping which includes optical speed bar pavement markings

No specification expressed or implied shall be construed as any type of restrictive specification that would limit competition.

Unless clearly shown as “no substitute” or any words to that effect, any items in these contract documents which have been identified, described or referenced by a brand name or trade name are for reference only. Such identification is intended to be descriptive, but not restrictive and is to indicate the general quality and characteristics of products that may be offered. Each bid item for which an equivalent item is proposed must be individually identified on the bid sheet with the following information: brand name, model or manufacturer’s number or identification regularly used in the trade. Photographs, specifications and cut sheets shall be provided of the proposed alternative. The County shall be the sole judge of the suitability of the proposed alternative and may consider function, design, materials, construction, workmanship, finishes, operating features, overall quality, local service facilities, warranty terms and service or other relevant features.

The County reserves the right to cancel the contract at any time with 30 days written notice.

Title to any supplies, materials, equipment or other personal property shall remain the Contractors’ until fully paid for by the County.

All items to be bid FOB, Putnam County,, Georgia. No sales taxes are to be charged.

Any damage to any building or traffic control device, or equipment incurred during the course of work shall be repaired at the contractor’s expense to the complete satisfaction of Putnam County with no additional expense to the County.

The Prime contractor shall perform a minimum of 60% of the total bid amount of the work.

EVALUATION

The County intends to evaluate the Invitation-to-Bid (ITB) on the lowest, best, responsible, and responsive vendor.

INSURANCE REQUIREMENTS

Within 5 days of Notice of Award, the Contractor shall obtain, maintain and furnish the County Certificates of Insurance from licensed companies doing business in the State of Georgia with an A.M. Best Rating A-6 or higher and acceptable to the County. These Certificates must remain valid at all times that this Contract is in force.

Insurance requirements are provided below and will be included in the CONTRACT AGREEMENT.

- (1) Requirements: The Contractor shall have and maintain in full force and effect for the duration of this Agreement, insurance insuring against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Work by the Contractor, its agents, representatives, employees or subcontractors. All policies shall be subject to approval by the County Attorney as to form and content. These requirements are subject to amendment or waiver if so approved in writing by the County.
- (2) Minimum Limits of Insurance: Contractor shall maintain the following insurance policies with limits no less than:
 - (a) Comprehensive General Liability of \$1,000,000 (one million dollars) limit per single occurrence, \$2,000,000 (two million dollars) umbrella, including coverage for bodily and personal injury, sickness, disease or death, injury to or destruction of property, including loss of use resulting therefrom, vandalism, property loss and theft.
 - (b) Comprehensive Automobile Liability (owned, non-owned, hired) of \$1,000,000 (one million dollars) combined single limit per occurrence for bodily and personal injury, sickness, disease or death, injury to or destruction of property, including loss of use resulting therefrom.
 - (c) Workers' Compensation limits as required by the State of Georgia and Employers Liability limits of \$1,000,000 (one million dollars) per accident.
- (3) Deductibles and Self-Insured Retentions: Any deductibles or self-insured retentions must be declared to and approved by the County in writing.
- (4) Other Insurance Provisions: The policy is to contain, or be endorsed to contain, the following provisions:

- (a) General Liability and Automobile Liability Coverage.
- (i) The County and County Parties are to be covered as insureds. The coverage shall contain no special limitations on the scope of protection afforded to the County or County Parties.
 - (ii) The Contractor's insurance coverage shall be primary noncontributing insurance as respects to any other insurance or self-insurance available to the County or County Parties. Any insurance or self-insurance maintained by the County or County Parties shall be in excess of the Contractor's insurance and shall not contribute with it.
 - (iii) Any failure to comply with reporting provisions of the policies shall not affect coverage provided to the County or County Parties.
 - (iv) Coverage shall state that the Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.
 - (v) Coverage shall be provided on a "pay on behalf" basis, with defense costs payable in addition to policy limits. There shall be no cross liability exclusion.
 - (vi) The insurer agrees to waive all rights of subrogation against the County and County Parties for losses arising from Work performed by the Contractor for the County for General Liability coverage only.
- (b) Workers' Compensation Coverage: The insurer providing Workers' Compensation Coverage will agree to waive all rights of subrogation against the County and County Parties for losses arising from Work performed by the Contractor for the County.
- (c) All Coverages:
- (i) Each insurance policy required by this clause shall be endorsed to state that coverage shall not be suspended, voided, canceled, reduced in coverage or in limits except after thirty (30) days prior written notice by certified mail, return receipt requested, has been given to the County.
 - (ii) Policies shall have concurrent starting and ending dates.
- (5) Acceptability of Insurers: Insurance is to be placed with insurers authorized to do business in the State of Georgia and with an A.M. Best's rating of no less than A:VI.
- (6) Verification of Coverage: Contractor shall furnish the County with certificates of insurance and endorsements to the policies evidencing coverage required by this clause prior to the start of Work. The certificate of insurance and endorsements shall be on a form utilized by Contractor's insurer in its normal course of business and shall be received and approved by the County within seven (7) days of the Notice of Award. The County reserves the right to require complete, certified copies of all required insurance policies, at any time.

The Contractor shall provide proof that any expiring coverage has been renewed or replaced at least two (2) weeks prior to the expiration of the coverage.

- (7) Subcontractors: Contractor shall include all subcontractors as insureds under its policies or shall furnish separate certificates and endorsements for each subcontractor. All coverage for subcontractors shall be subject to all of the requirements stated in this Agreement, including but not limited to naming the Parties as additional insureds.
- (8) Claims-Made Policies: Contractor shall extend any claims-made insurance policy for at least six (6) years after termination or final payment under the Agreement, whichever is later.
- (9) County as Additional Insured and Loss Payee: The County shall be named as an additional insured and loss payee on all policies required by this Agreement, except the County need not be named as an additional insured and loss payee on any Workers' Compensation policy.

BONDING REQUIREMENTS

Each bid must be accompanied with a **BID BOND** (bond only: certified checks or other forms are not acceptable) in an amount equal to five percent (5%) of the base bid, payable to the Putnam County. Said bid bond guarantees the bidder will enter into a contract to construct the project strictly within the terms and conditions stated in this bid and in the bidding and contract documents, should the construction contract be awarded.

The Successful Bidder shall be required to furnish **PAYMENT AND PERFORMANCE BONDS** for the faithful performance on the contract and a bond to secure payment of all claims for materials furnished and/or labor performed in performance of the project. A 100% performance bond and a 100% payment bond will be required by of the successful bidder in the combined amount equal to 200% of the contract price

Bonds shall be issued by a corporate surety appearing on the Treasury Department's most current list (Circular 570 as amended) and be authorized to do business in the State of Georgia. Bonds shall be on the forms provided by the County and subject to the review and approval of the County Attorney.

Date of Bond must not be prior to date of Contract. If Contractor is a Partnership, all partners shall execute Bond.

OATH

Prior to commencing the Work, the successful bidder shall execute a written oath as required by O.C.G.A. §§ 32-4-122 and 36-91-21(e).

COST OF PREPARING A PROPOSAL

The costs for developing and delivering responses to this ITB and any subsequent presentations of the proposal as requested by the County are entirely the responsibility of the bidder. The County is not liable for any expense incurred by the bidder in the preparation and presentation of their proposal. All materials submitted in response to this ITB become the property of the Putnam County.

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

BID FORM and ADDENDA ACKNOWLEDGEMENT

**TO: COUNTY MANAGER
PUTNAM COUNTY
117 Putnam Drive; Suite A
EATONTON, GA 31024**

Ladies and Gentlemen:

In compliance with your Invitation To Bid, the undersigned, hereinafter termed the Bidder, proposes to enter into a Contract with Putnam County, Georgia, to provide the necessary machinery, tools, apparatus, other means of construction, and all materials and labor specified in the Contract Documents or as necessary to complete the Work in the manner therein specified within the time specified, as therein set forth, for:

“LMIG OFF-SYSTEM SAFETY ENHANCEMENT PROGRAM”

The Bidder has carefully examined and fully understands the Contract, Specifications, and other documents hereto attached, has made a personal examination of the Site of the proposed Work, has satisfied himself as to the actual conditions and requirements of the Work, and hereby proposes and agrees that if his bid is accepted, he will contract with the Putnam County in full conformance with the Contract Documents.

Unless otherwise directed, all work performed shall be in accordance with the plans and specifications as provided for with this bid package

It is the intent of this Bid to include all items of construction and all Work called for in the Specifications, or otherwise a part of the Contract Documents.

In accordance with the foregoing, the undersigned proposes to furnish and construct the items listed in the attached Bid schedule for the unit prices stated.

The 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.

The Bidder further proposes and agrees hereby to promptly commence the Work with adequate forces and equipment within five (5) calendar days from receipt of Notice to Proceed and to complete all Work within **one hundred twenty (120) calendar days** from the Notice to Proceed. The selected contractor must be under contract with the County prior to 12/31/2017 and commence with some aspect of the Project Scope prior to 12/31/2017. If weather affects the required completion schedule, The County and selected Bidder will negotiate a new completion date.

Liquidated damages of \$150 per day will be assessed if the project is not substantially completed within 120 calendar days. Delays as a result of County actions or weather will be excluded from the 120 Calendar Day requirement.

Attached hereto is an executed Bid Bond in the amount of _____ Dollars (\$) (Five Percent of Amount Bid). **Bid Bond Amount to be for the largest bid amount submitted.**

If this bid shall be accepted by the Putnam County and the undersigned shall fail to execute a satisfactory contract in the form of said proposed Contract, and give satisfactory Performance and Payment Bonds or furnish satisfactory proof of carriage of the insurance required within seven days from the date of Notice of Award of the Contract, then the Putnam County may, at its option, determine that the undersigned abandoned the Contract and there upon this bid shall be null and void, and the sum stipulated in the attached Bid Bond shall be forfeited to the Putnam County as liquidated damages.

Bidder acknowledges receipt of the following addenda:

Addendum No.	Date viewed
_____	_____
_____	_____
_____	_____
_____	_____

Add additional pages as necessary for the Addendum.

Bidder further declares that the full name and resident address of Bidder's Principal is as follows:

Signed, sealed, and dated this _____ day of _____, 20_____

Bidder _____ (Seal)
Company Name

Bidder Mailing Address:

Signature: _____

Print Name: _____

Title: _____

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

**BID BOND
PUTNAM COUNTY, GEORGIA**

BIDDER (Name and Address):

SURETY (Name and Address of Principal Place of Business):

OWNER (hereinafter referred to as the "County" (Name and Address):

Putnam County
ATTN: County Manager
117 Putnam Drive; Suite A
Eatonton, GA 31024

BID

BID DUE DATE:

PROJECT (Brief Description Including Location):

BOND

BOND NUMBER:

DATE (Not later than Bid due date):

PENAL SUM: _____
(Words) (Figures)

IN WITNESS WHEREOF, Surety and Bidder, intending to be legally bound hereby to the County, subject to the terms printed below or on the reverse side hereof, do each cause this Bid Bond to be duly executed on its behalf by its authorized officer, agent or representative.

BIDDER

SURETY

_____(Seal)
Bidder's Name and Corporate Seal

_____(Seal)
Surety's Name and Corporate Seal

By: _____
Signature and Title:

By: _____
Signature and Title:
(Attach Power of Attorney)

Attest: _____
Signature and Title:

Attest: _____
Signature and Title:

- Note:
- (1) Above addresses are to be used for giving any notice required by the terms of this Bid Bond.
 - (2) Any singular reference to Bidder, Surety, the County or any other party shall be considered plural where applicable.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay to the County upon Default of Bidder the penal sum set forth on the face of this Bond.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension of that time agreed to in writing by the County) the executed Agreement required by the Bidding Documents and any performance and payment Bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
 - 3.1 The County accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension of that time agreed to in writing by the County) the executed Agreement required by the Bidding Documents and any performance and payment Bonds required by the Bidding Documents; or
 - 3.2 All Bids are rejected by the County; or
 - 3.3 The County fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension of that time agreed to in writing by Bidder and, if applicable, consented to by Surety when required by paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon Default by Bidder within 30 calendar days after receipt by Bidder and Surety of a written Notice of Default from the County, which Notice will be given with reasonable promptness and will identify this Bond and the Project and include a statement of the amount due.
5. Surety waives notice of, as well as any and all defenses based on or arising out of, any time extension to issue a Notice of Award agreed to in writing by the County and Bidder, provided that the total time, including extensions, for issuing a Notice of Award shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond either prior to 30 calendar days after the Notice of Default required in paragraph 4 above is received by Bidder and Surety or later than one year after Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the State of Georgia.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent or representative who executed this Bond on behalf of Surety to execute, seal and deliver such Bond and bind the Surety thereby.

10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer or proposal, as applicable under the particular circumstances.

12. The terms of this Bid Bond shall be governed by the laws of the State of Georgia.

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

QUALIFICATIONS SIGNATURE AND CERTIFICATION

I certify that this offer is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a proposal for the same materials, supplies, equipment, or services and is in all respects fair and without collusion or fraud. I understand collusive bidding is a violation of State and Federal Law and can result in fines, prison sentences, and civil damage awards. I agree to abide by all conditions of the proposal and certify that I am authorized to sign this proposal for the proposer. I further certify that the provisions of the Official Code of Georgia Annotated, including but not limited to Title 32, Chapter 4, Article 4, Part 2 and Sections 45-10-20 et seq. have not been violated and will not be violated in any respect.

Authorized Signature _____ Date _____

Print/Type Name _____

Print/Type Company Name Here _____

CORPORATE CERTIFICATE

I, _____, certify that I am the Secretary of the Corporation named as Contractor in the foregoing bid; that _____ who signed said bid in behalf of the Contractor, was then (title) _____ of said Corporation; that said bid was duly signed for and in behalf of said Corporation by authority of its Board of Directors, and is within the scope of its corporate powers; that said Corporation is organized under the laws of the State of _____.

This _____ day of _____, 20 _____

_____(Seal)
(Signature)

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

LIST OF SUBCONTRACTORS

I do _____, do not _____, propose to subcontract some of the work on this project. I propose to Subcontract work to the following subcontractor(s):

Company #1

Company Name: _____

Company Address: _____

Company President & Phone Number: _____

Company #2:

Company Name: _____

Company Address: _____

Company President & Phone Number: _____

Company #3:

Company Name: _____

Company Address: _____

Company President & Phone Number: _____

PRIME CONTRACTOR PERFORMANCE OF WORK

Prime contractor certifies that a minimum of **60%** of the total bid amount will be performed by the prime contractor's employees

Authorized Signature _____ Date _____

Print/Type Name _____

Print/Type Company Name Here _____

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

STATE OF GEORGIA

PUTNAM COUNTY

CONTRACTOR AFFIDAVIT AND AGREEMENT

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with the Putnam County has registered with and is participating in a federal work authorization program, in accordance with the applicability provisions and deadlines established in O.C.G.A. § 13-10-91.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with the Putnam County County, contractor will secure from such subcontractor(s) similar verification of compliance with O.C.G.A. § 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 in the form attached hereto as Exhibit "G." Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the Putnam County at the time the subcontractor(s) is retained to perform such service.

EEV / Basic Pilot Program User Identification Number

BY: Authorized Officer or Agent Date

Print Contractor Name

Title of Authorized Officer or Agent of Contractor

Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE
____ DAY OF _____, 201_

Notary Public
My Commission Expires: _____

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

DISCLOSURE FORM

This form is for disclosure of campaign contributions and family member relations with Putnam County’s officials/employees or County Project Engineer (Collaborative Infrastructure Service employees).

Please complete this form and return as part of your bid package when it is submitted.

Name of Bidder _____

Name and the official position of the Putnam County Official to whom the campaign contribution was made (Please use a separate form for each official to whom a contribution has been made in the past two (2) years.)

List the dollar amount/value and description of each campaign contribution made over the past two (2) years by the Applicant/Oponent to the named Putnam County Official.

Amount/Value	Description
_____	_____
_____	_____
_____	_____

Please list any family member that is currently (or has been employed within the last 12 months) by the Putnam County and your relation:

_____	_____
_____	_____

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

CERTIFICATION OF SPONSOR DRUG-FREE WORKPLACE

*I hereby certify that I am a principle and duly authorized representative
or _____*

whose address _____

and it is also that:

1. The provisions of Section 50-24-1 through 50-24-6 of the Official Code of Georgia Annotated, relating to the “Drug-Free Workplace Act” have been complied with in full; and,
2. A drug-free workplace will be provided for the sponsor’s employees during the performance or the contract; and,
3. Each subcontractor hired by the SPONSOR shall be required to ensure that the subcontractor’s employees are provided a drug-free workplace. The SPONSOR shall secure from that subcontractor the following written certification: “As part of the subcontracting agreement with _____
_____ certifies to the SPONSOR that a drug-free workplace will be provided for the subcontractor’s employees during the performance of this contract pursuant to paragraph (7) of subsection (b) of the Official Code of Georgia Annotated Section 50-24-3; and,
4. It is certified that the undersigned will not engage in unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the contract.

Date: _____

Signature: _____

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

QUESTIONNAIRE

Project Name: LMIG OFF-SYSTEM SAFETY ENHANCEMENT PROGRAM

Date: _____

(PLEASE ATTACH SEPARATE SHEETS AS NECESSARY)

*****ALL QUESTIONS MUST BE ANSWERED THOROUGHLY BY THE BIDDER. DO NOT LEAVE ANY QUESTION BLANK. MARK N/A IF NOT APPLICABLE. FAILURE TO THOROUGHLY ANSWER ALL QUESTIONS MAY RESULT IN DELAY OF CONTRACT OR DISQUALIFICATION OF THE BIDDER. *****
PLEASE RETURN COMPLETED QUESTIONNAIRE WITH THE BID SUBMITTAL

○ GENERAL INFORMATION

- How many years has your organization been in business as a Contractor performing roadway construction? _____
- State the true and exact, correct, and complete name under which you do business.

- How many years has your organization been in business under its present name? _____
- Under what other or former names has your organization operated? _____

- State the true and exact, correct, and complete address of facility where service will be provided from.

○ EXPERIENCE

- Briefly describe the nature and contract value of projects typically executed by your organization.

- On a separate sheet, list a minimum of three projects that you have completed similar in type, size, and nature as the one proposed. Preference should be given to county/state/federal projects. Provide the following information for each project:
 - Name of Project:

 - Owner:

 - Contact and Phone Number:

- Address: _____
- Engineer _____
- Contact and Phone Number: _____
- _____
- Address: _____
- _____
- Date Started: _____
- _____
- Date Completed: _____
- _____
- Project Superintendent: _____
- _____
- Value of Contract: _____
- _____
- Description of Project: _____

- Provide at least three (3) references familiar with roadway construction projects you have completed in the past five (5) years. Preference should be given to county/state/federal projects. References should not be a current employee or subcontractor that will be utilized by your firm.

Reference #1

- A. Organization Name: _____
- B. Description of Project: _____
- C. Contract Period: _____
- D. Contact Person/Title: _____
- E. Phone Number: _____

Reference #2

- 1 Organization Name: _____
- 2 Description of Project: _____
- 3 Contract Period: _____
- 4 Contact Person/Title: _____
- 5 Phone Number: _____

Reference #3

- 1. Organization Name: _____
- 2. Description of Project: _____
- 3. Contract Period: _____
- 4. Contact Person/Title: _____
- 5. Phone Number: _____

The undersigned all statements and answers contained herein are true, complete, and accurate to the best of your knowledge.

Date Questionnaire Submitted: _____

Name of Organization _____

Authorized Signature _____

Name & Title of Signer (Printed) _____

Business Address _____

Phone Number: _____ Fax Number: _____

END QUESTIONNAIRE

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

**BID SCHEDULE OF ITEMS
FOR
OFF SYSTEM SAFETY ENHANCEMENT PROGRAM
9/29/2017**

SCOPE: Provide all labor, materials and equipment to install new roadway regulatory warning signage, install raised pavement markings, removal of existing signage (to be identified by Putnam County), striping & optical speed bar pavement markings

NO.	PAY ITEM	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL AMOUNT
1	150-1000	TRAFFIC CONTROL	1.00	LS		\$
2	610-6515	REMOVE SIGN	50	EA		\$
3	636-1030	HIGHWAY SIGNS, TP 2, MATL, HIGH INTENSITY REFL SHEETING, TYPE 3	1856	SF		\$
4	636-2080	GALV STEEL POSTS; TP 8	936	LF		\$
5	652-2501	SOLID TRAFFIC STRIPE, 5 Inch, White Paint	21.80	Lane Mile		\$
6	652-2502	SOLID TRAFFIC STRIPE, 5 Inch, Yellow Paint	17.69	Lane Mile		\$
7	652-3502	SKIP TRAFFIC STRIPE, 5 Inch, Yellow Paint	5.0	Lane Mile		\$
8	653-1704	THERMOPLASTIC SOLID TRAFFIC STRIPE, 24 Inch, White	50	LF		\$
9	654-1003	RAISED PAVEMENT MARKERS; TP 3; YELLOW	954	EA		\$
10	NA	THERMOPASTIC PREFORMED PAVEMENT MARKINGS (optical speed bars; (160 total @ 12" x 18"))	240	SF		\$
TOTAL						\$

TOTAL BID AMOUNT: \$ _____

Print Total Bid Price: (print) _____

COMPANY _____

ADDRESS _____

AUTHORIZED SIGNATURE _____

PRINT / TYPE NAME/TITLE _____

APPENDIX A

TABLE A
SUMMARY OF QUANTITIES

LOCATION (note: the 2 nd road name at each location is the intersecting road requiring a W16-8P road blade)	MAP SECTION (refer to maps)	WARNING SIGN DESIGNATION – PANEL (QTY)	STREET NAME BLADE DESIGNATION/DIMENSION (QTY)	HIGH INTENSITY REFL SHEETING, TYPE III – warning and street blades (SF)	GALVANIZED POSTS – TYPE 8 (QTY)	RAISED PAVEMENT MARKERS – RPM Type 1 – yellow (QTY)	STRIPING Paint (feet)	COMMENTS
Twin Bridges Rd @ Putnam Beach Rd	1	W2-2 (2)	W16-8P / 30"x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Twin Bridges Road @ Napier Road	1	W2-2 (2)	W16-8P / 30"x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Twin Bridges Road @ Avant Road	1	W2-2 (1)	W16-8P / 30" x 24" (1)	28	1	0	0	Refer to layout design for W16-8P
Twin Bridges Rd @ Napier Rd	1	NA	NA	NA	NA	30	NA	
Twin Bridges Rd @ Putnam Beach Rd	1	NA	NA	NA	NA	30	NA	
Twin Bridges Rd. @ Avant Rd.	2	W2-4 (1)	W16-8P / 30" X 24" (1)	28	1	0	0	Refer to layout design for W16-8P
Twin Bridges Rd @ Tanglewood Rd	2	W2-2 (2)	W16-8P / 30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Twin Bridges Rd @ Bear Creek Rd / Blue Branch Rd	2	W2-1 (4)	W16-8P / 30"x24" (4)	112	4	0	0	Refer to design layout for W16-8P
Twin Bridges Rd @ Bear Creek Rd	2	W2-2 (2)	W16-8P;/ 30"x18" (2)	51	2	0	0	Refer to layout design for W16-8P
Twin Bridges Rd @ Southshore Rd	2	W2-2 (2)	W16-8P / 30"x18" (2)	51	2	0	0	Refer to layout design for W16-8P

Twin Bridges Rd	2	NA	NA	NA	0	100	0	
Twin Bridges Rd @ Fire Station	2	NA	NA	NA	0	20	0	
Twin Bridges Rd @ Dennis Station Rd	3	W2-7R (1)	W16-8P / 30" x 24" (1)	28	1	0	0	Refer to layout design for W16-8P
Twin Bridges Ed @ Dennis Station Rd	3	W2-7L (1)	W16-8P / 30" x 24" (1)	28	1	0	0	Refer to layout design for W16-8P
Twin Bridges Rd @ Welch Trail	3	W2-2 (2)	W16-8P/ 30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Harmony Rd	1	NA	NA	NA	NA	90	0	
Harmony Rd	2	NA	NA	NA	NA	38	0	
Harmony Rd	3	NA	NA	NA	NA	48	0	
Harmony Rd @ Little Rd	4	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Harmony Rd @ Harmony Church Rd	4	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Harmony Rd @ Lower Harmony Rd	4	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	16	0	Refer to layout design for W16-8P
Harmony Rd @ Harmony Farms Dr.	5	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Harmony Rd @ Parks Mill Rd	6	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	30	0	Refer to layout design for W16-8P
Harmony Rd @ South Harmony Ct	6	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P

Harmony Rd @ Joseph Rd	7	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Harmony Rd @ South Sugar Creek Rd	7	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Harmony Rd @ Jefferson Rd	8	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	60	0	Refer to layout design for W16-8P
Harmony Rd	8	NA	NA	NA	NA	50	0	0
Harmony Rd @ Scott Rd	9	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	66	0	Refer to layout design for W16-8P
Harmony Rd @ Lake Man Rd	9	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Harmony Rd @ Sammons Industrial Pkwy	10	W2-2 (4)	W16-8P/30" x 18" (4)	102	4	0	0	Refer to layout design for W16-8P
Harmony Rd @ Ferrier's Lane	10	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Harmony Rd @ Harmony Lane	10	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Harmony Rd @ Village Ln	10	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Oconee Springs Rd	1	0	0	0	0	20	0	Refer to layout design for W16-8P
Oconee Springs Rd @ Crooked Creek Rd	1	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Oconee Springs Rd @ Wesley Chapel Rd	1	W2-1 (4)	W16-8P/30" x 24" (4)	112	4	0	0	Refer to special design for W16-8P below in Notes
Oconee Springs Rd @ Carter Dearman Rd	2	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P

Oconee Springs Rd	2	NA	NA	NA	NA	80	0	
Old Phoenix Rd @ Cuscowilla Dr	1	W2-7R W2-7L (2)	W16-8P/30" x 24" (2)	56	2	0	0	Refer to layout design for W16-8P
Old Phoenix Rd @ Fire Station	1	NA	NA	NA	NA	30	0	
Old Phoenix Rd @ Lake Forest Dr	2	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Old Phoenix Rd @ Wards Chapel Rd	2	W2-2 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Old Phoenix Rd	2	NA	NA	NA	NA	80	0	
Old Phoenix Rd @ New Phoenix Rd	3	W2-1 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
New Phoenix Rd @ Old Phoenix Rd	3	W2-1 (2)	W16-8P/30" x 18" (2)	51	2	0	0	Refer to layout design for W16-8P
Old Phoenix Rd @ New Phoenix Rd (all 4 approaches)	4	NA	NA	NA	NA	NA	See Map Sections	8000 LF DOUBLE YELLOW "PAINT"
								8000 LF WHITE EDGE LINE "PAINT"
Old Phoenix Rd @ New Phoenix Rd (all 4 approaches)	5	NA	NA	NA	NA	NA	See Table B	Optical Speed Bars – refer to Table A for spacing & Maps 4 & 5
								240 SF Thermoplastic Preformed Striping

Old Phoenix Rd @ Little Circle	3		W2-2 (2)	W16-8P/30" x 18" (2)	51		2		0		0	Refer to layout design for W16-8P	337
Old Phoenix Rd @ (county road – TBD)	3		W2-2 (2)	W16-8P/30" x 18" (2)	51		2		0		0	Refer to layout design for W16-8P	
Dennis Station Rd	1		NA	NA	NA		NA		40		0		
Dennis Station Rd @ Avant Rd	1		W2-2 (2)	W16-8P/30" x 18" (2)	51		2		0		0	Refer to layout design for W16-8P	
Dennis Station Rd	1		NA	NA	NA		NA		40		0		
Dennis Station Rd	1		NA	NA	NA		NA		36		0		
Dennis Station Rd	2		NA	NA	NA		NA		50		0		
Dennis Station Rd @ Twin Bridges Rd	2		W2-4 (1)	W16-8P/ 30" x 18" (1)	51		2		0		0	Refer to layout design for W16-8P	
Hillsboro Rd	1		NA	NA	NA		NA		NA			See Map Sections	15.8 miles solid white; 12.8 miles solid yellow; 3 miles skip yellow; 25 feet 24" white solid
Park Rd	1		NA	NA	NA		NA		NA			See Map Sections	4.48 miles solid white; 2.48 miles solid yellow; 2.0 miles skip; 25 feet white solid
			77	77	1,856 SF		78 @ 12 ft. = 936 LF		954				

Note: All galvanized posts to be Type 8. Posts to be breakaway. Post length to be 12 feet. Dimension from ground surface to bottom of sign to be 7 feet. Type 9 – 2 ½ in. 12 gauge insert to be used for breakaway

All “warning” sign panels to be 36” x 36”

Street name blades to be either 30”x 18 “ or 36”x 24”; letter size 6 inches; all **letters uppercase, green background with white lettering and white border**

All RPM’s to be Type I – Yellow (double-sided). RPM locations to be pre-marked in the field and location verified by County Project Engineer before installations occur. Each location to have 2 RPM’s; spacing to be 40 feet. O.C.

All sign sheeting to be High Intensity Type III; Class 2 adhesive backing

All striping to be PAINT – exception is the Optical Speed Bars & stop bars

All materials to be in accordance with GDOT standards

Optical Speed Bar locations to be pre-marked in the field and location verified by County Project Engineer before installations occur

Optical speed bars to be White, Preformed “High Build” Thermoplastic with reflectorized beads per GDOT standard.

Contractor to provide a PDF sign template for each of the street blades (W16-8P) to ensure that Owner & Consultant are in agreement with the design prior to fabrication

TABLE B
OLD PHOENIX ROAD @ NEW PHOENIX ROAD
“OPTICAL SPEED BAR SPACING DIMENSIONS”

BARS	SPACING BETWEEN BARS (ft.)	TOTAL LENGTH (ACCUMULATION – ft.)
1-2	100	100
2-3	100	200
3-4	100	300
4-5	75	375
5-6	75	450
6-7	50	500
7-8	50	550
8-9	50	600
9-10	25	625
10-11	25	650
11-12	25	675
12-13	15	690
13-14	15	705
14-15	15	720
15-16	15	735
16-17	15	750
17-18	15	765
18-19	15	780
19-20	15	795

- Note:**
1. Total length of bars on each approach – 795 feet
 2. Bars end 100 feet from the intersection
 3. All 4 approaches to have optical speed bars at the same spacing
 4. Refer to Old Phoenix maps 4 & 4A for speed bar spacing layout
 5. Dimensions of each speed bar; **12 inches wide** (parallel to travel path) & **18 inches long** (perpendicular to travel path)
 6. Each speed bar to be **white preformed thermoplastic (min. 90 mils)**; reflective beads per GDOT
 7. Optical speed bars to be chalked in the field and verified by the Project Engineer prior to installation
 8. Each speed bar location to have 2 speed bar markings
 9. Quantities of thermoplastic striping – 240 SF (160 speed bars; 12 in. x 18 in. each)

TABLE C
REPRESENTATIVE SIGN TEMPLATES

W16-8p

30" X 18"

TYPICAL LAYOUTS

Twin Bridges Rd @ Putnam Beach Rd

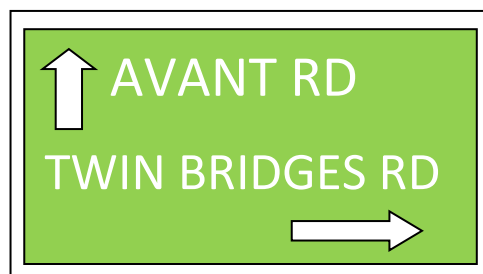


W2-2

30" X 24"

TYPICAL LAYOUT

Twin Bridges Road @ Avant Road



W2-4

30" X 24"

TYPICAL LAYOUT

TWIN BRIDGES ROAD @ AVANT



W2-1

30" X 24"

TYPICAL LAYOUT

Twin Bridges Rd @ Bear Creek Rd / Blue Branch Rd

(arrow's reversed on opposite approach)

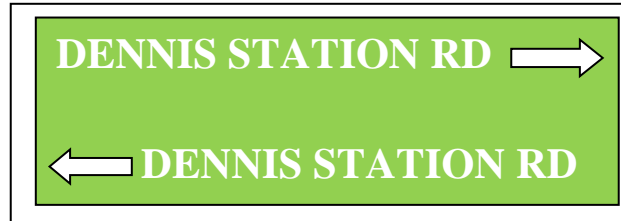


W2-7 R

30" X 24"

TYPICAL LAYOUT

Twin Bridges Rd @ Dennis Station Rd



W2-4

30" X 18"

TYPICAL LAYOUT

Dennis Station Rd @ Twin Bridges



APPENDIX B

TWIN BRIDGES - 1

344

Intersection warning signs w/ name plates and RPM's



Intersection warning sign w/ name plates



Intersection warning signs w/ name plates and RPM's



TWIN BRIDGES - 2

345

Intersection warning sign w/ name plate



Intersection warning sign w/ name plate



RPM's



Twin Bridges Rd SW

Intersection warning sign w/ name plate



Intersection warning sign w/ name plate



Intersection warning sign w/ name plate



Intersection warning sign w/ name plate



RPM's @ Fire Station

RPM's

Blue Branch Rd W

Blue Branch Rd E

Twin Bridges Rd SW

Southshore Rd

Bluegill Rd

TWIN BRIDGES - 3

346

Dennis Station Rd SW

Twin Bridges Rd SW

Welch Trail

Milledgeville Rd

24

Winding Creek Rd SW



Intersection warning sign with name plates



Intersection warning sign w/ name plate

HARMONY ROAD - 1

347

Harmony Rd. NE



HARMONY ROAD - 2

348



RPM's

Harmony Rd NE

HARMONY ROAD - 3

349



RPM's

HARMONY ROAD - 4

350

Little's Rd

Intersection warning sign w/
name plate

Intersection warning sign w/
name plate

Intersection warning sign
w/ name plate

Harmony Rd

RPM's

Harmony Church Rd



HARMONY ROAD - 5

351

Intersection warning sign
w/ name plate



Harmony Rd

Harmony Farms Dr

Harmony Rd

Lower Harmony Rd-NE

HARMONY ROAD - 6

352

Intersection warning sign w/ name plate



RPM'S



Intersection warning sign w/ name plate



HARMONY ROAD - 7

353



**Intersection warning sign w/
name plate**



**Intersection warning sign w/
name plate**

HARMONY ROAD - 8

354

Intersection warning sign w/ name plate



RPM'S

HARMONY ROAD - 9

**Intersection warning sign w/
name plate**



RPM'S

Intersection warning sign w/ name plate



355

HRMONY ROAD - 10

356

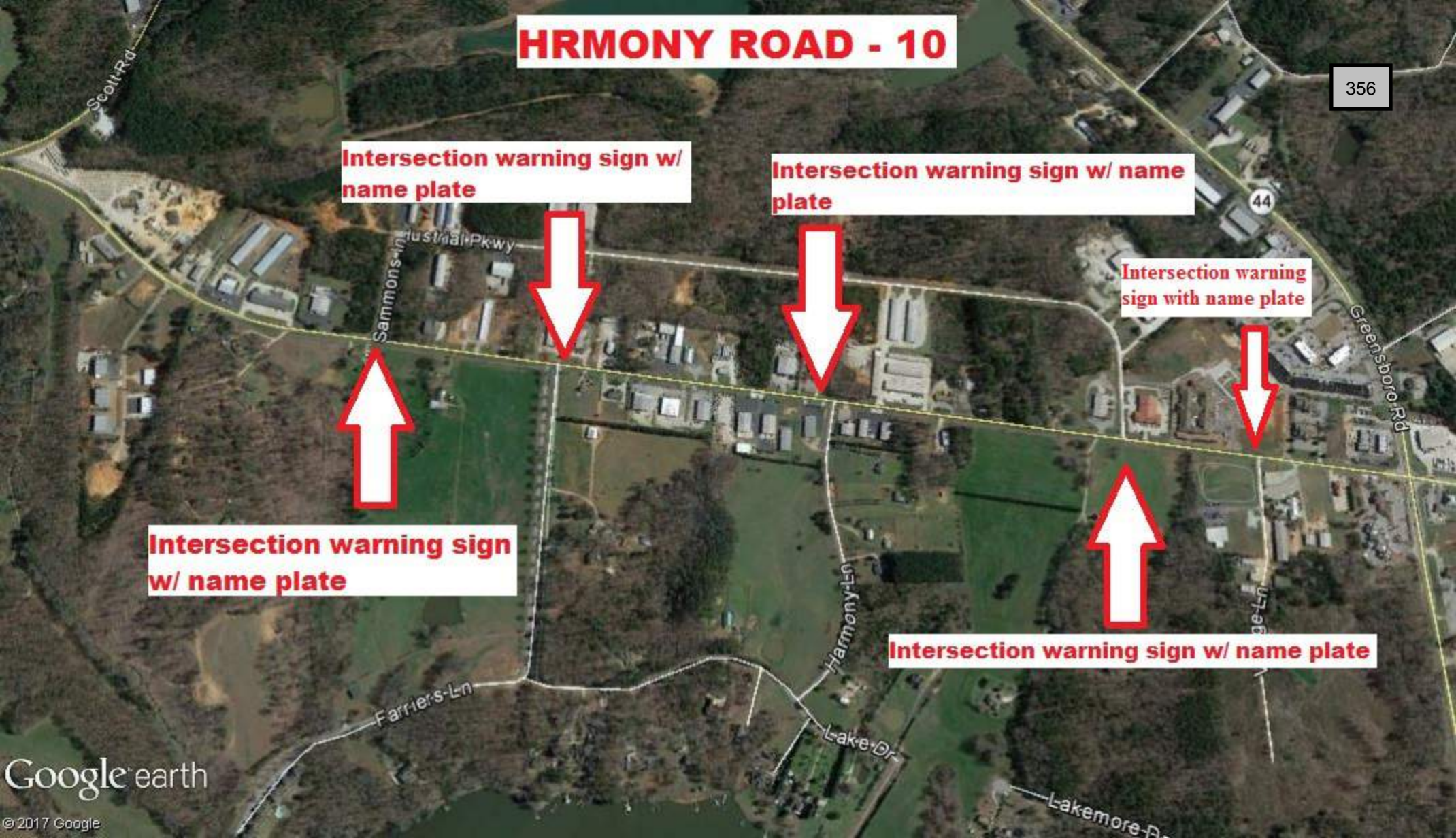
Intersection warning sign w/
name plate

Intersection warning sign w/ name
plate

Intersection warning
sign with name plate

Intersection warning sign
w/ name plate

Intersection warning sign w/ name plate



OCONEE SPRINGS ROAD - 1

357

Intersection warning sign w/ name plate



RPM'S



Intersection warning sign w/ name plate



OCONEE SPRINGS ROAD - 2

358

Ocone

S Wesley Chapel Rd

Garter Dealman Rd SE

Oconee Springs Rd SE



RPM'S



Intersection warning sign w/
name plate

pear Ridge Rd

Crooked Creek Rd

OLD PHOENIX ROAD - 1

359

**Intersection
warning sign w/
name plate**



RPM'S



**Intersection warning sign w/
name plate**



**Intersection
warning sign w/
name plate**



OLD PHOENIX ROAD - 2

Intersection warning sign w/ name plate 360

Intersection warning sign w/ name plate

RPM'S

Old Phoenix Rd NE



OLD PHOENIX ROAD - 3

361

Intersection warning sign w/
name blades



Little Cir

OPTICAL SPEED BARS

OPTICAL SPEED BARS

Old Phoenix Rd NE

OPTICAL SPEED BARS

OPTICAL SPEED BARS

Intersection warning
sign w/ name blades

New Phoenix Rd NE

362

SPEED BARS BEGIN

SPEED BARS END

100 FT.

795 feet

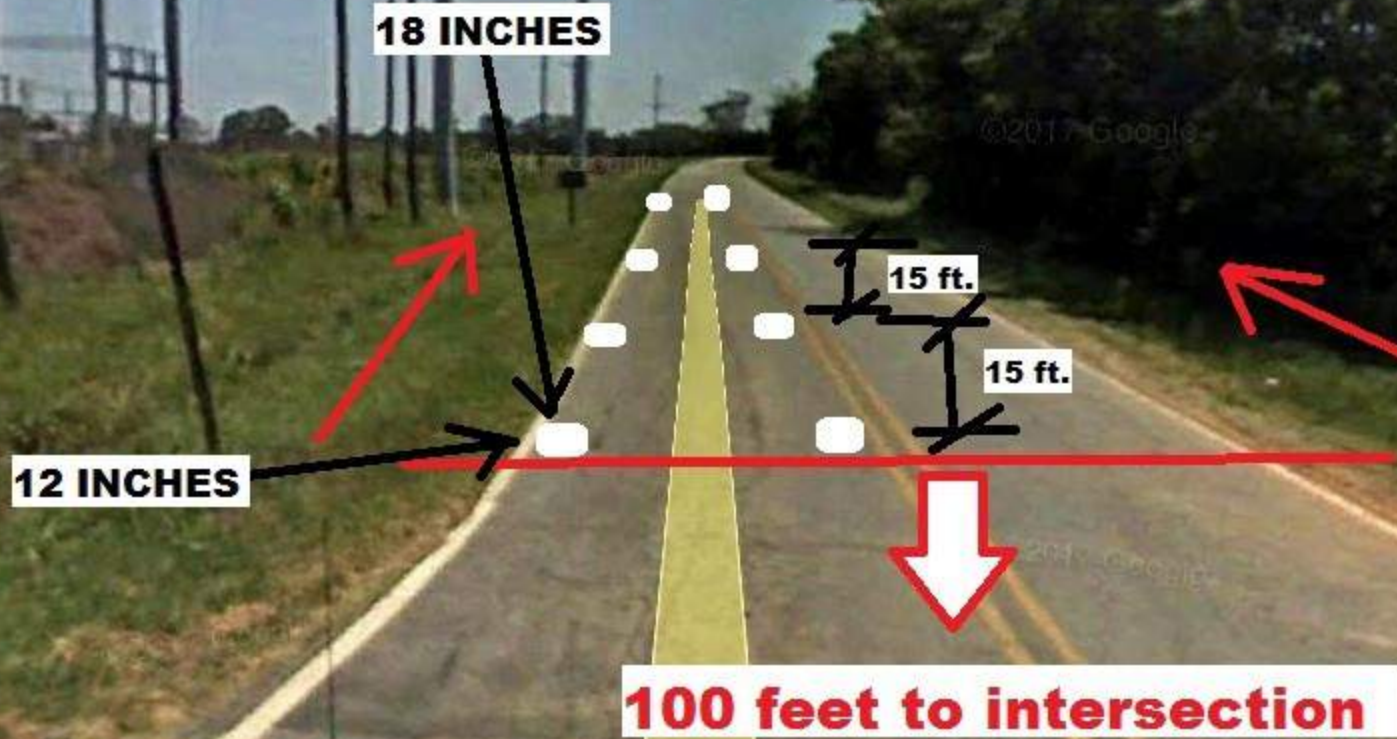
EDGE & CENTERLINE (DOUBLE YELLOW) PAINT FOR 1000 FEET EACH APPROACH - STRIPING TO OCCUR PRIOR TO INSTALLATION OF OPTICAL SPEED BARS

**OLD PHOENIX @ NEW PHOENIX RD - 4
"OPTICAL SPEED BAR (TYP.)"
AND EDGE / CENTERLINE STRIPING**

OPTICAL SPEED BAR SPACINGS LAYOUT

OLD PHOENIX RD @ NEW PHOENIX RD - 5

363



DENNIS STATION ROAD - 1

RPM'S

364



Intersection warning sign and name blades

RPM'S



DENNIS STATION ROAD - 2

365

RPM's



**Intersection warning sign
w/ name blades**



HILLSBORO ROAD

366

Hwy 212



Begin

Kindershook Rd

212

Rabbit Skip Rd S.W.

Hillsboro Rd

Hillsboro Rd

142

16

Shady Dale Rd NW

End



PARK ROAD - 1

367

Industrial
Dvd

Martin-Luther-King-Jr-Dr

END

Park Rd

Park Rd

Edwards-Reeves-Rd

BEGIN



Milledgeville

EXHIBIT B

ADDENDUM #1
to the
Bid Documents
for the
FY 17 LMIG OFF-SYSTEM SAFETY ENHANCEMENT PROGRAM

Date of Addendum Issuance: October 9th, 2017

Please refer to the following questions received prior to the October 9th, 5:00 PM deadline and the corresponding answers:

Question #1: What is the anticipated Notice to Proceed Date?

Answer: **First week of November 2017**

Question #2: What Type of Paint will be required for the Traffic Striping?

Answer: **For Pay Item 653-1704, GA DOT 2013 Specifications, which require 25 mils wet film thickness paint, shall be utilized. For the Optical Speed bars, refer to the Notes on Tables A&B in Appendix A for details**

For Pay Items 652-2501, 652-2502 & 652-3502, the GA DOT 2009 Specification, which calls for 15 mils wet film thickness, shall be utilized.

Question #3: Can you please clarify the unit of measure for painting? Will the Solid Line be paid for the entire length of a Single Solid Line (Line Mile)?

Will the Skip Line be paid for the entire length of the line including the gaps or spaces between the painted lines (Gross Linear Mile)?

Answer: **The Solid Traffic Stripe; pay items 652-2501 & 652-2502, will be paid only where solid striping exists (Line Mile).**

For pay item 652-3502, payment will occur on a Gross Linear Mile basis.

Refer to the corrected “Bid Schedule of Items” spreadsheet to be utilized for submittal.

Question #4: I think pay items 3 and 4 need to be changed;

#3 - 636-1030 should be 636-1020 tp1/rs3

#4 - 636-2080 should be 636-2070 tp7

Details call for 2 tp8 at one location, that does not meet spec without ground mounted break away, which they are no pay items for.

Answer: Yes, 636-1030 will be changed to 636-1020.

Refer to the Notes in Tables A & B of Appendix A regarding breakaway requirements. No changes to 636-2080

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

**BID SCHEDULE OF ITEMS
FOR
OFF SYSTEM SAFETY ENHANCEMENT PROGRAM
10/9/2017**

SCOPE: Provide all labor, materials and equipment to install new roadway regulatory warning signage, install raised pavement markings, removal of existing signage (to be identified by Putnam County), striping & optical speed bar pavement markings

NO.	PAY ITEM	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL AMOUNT
1	150-1000	TRAFFIC CONTROL	1.00	LS		\$
2	610-6515	REMOVE SIGN	50	EA		\$
3	636-1020	HIGHWAY SIGNS, TP 1, MATL, HIGH INTENSITY REFL SHEETING, TYPE 3	1856	SF		\$
4	636-2080	GALV STEEL POSTS; TP 8	936	LF		\$
5	652-2501	SOLID TRAFFIC STRIPE, 5 Inch, White Paint	21.80	Line Mile		\$
6	652-2502	SOLID TRAFFIC STRIPE, 5 Inch, Yellow Paint	17.69	Line Mile		\$
7	652-3502	SKIP TRAFFIC STRIPE, 5 Inch, Yellow Paint	5.0	GLM		\$
8	653-1704	THERMOPLASTIC SOLID TRAFFIC STRIPE, 24 Inch, White	50	LF		\$
9	654-1003	RAISED PAVEMENT MARKERS; TP 3; YELLOW	954	EA		\$
10	NA	THERMOPASTIC PREFORMED PAVEMENT MARKINGS (optical speed bars; (160 total @ 12" x 18"))	240	SF		\$
					TOTAL	\$

TOTAL BID AMOUNT: \$ _____

Print Total Bid Price: (print) _____

COMPANY _____

ADDRESS _____

AUTHORIZED SIGNATURE _____

PRINT / TYPE NAME/TITLE _____

ADDENDUM #2
to the
Bid Documents
for the
FY 17 LMIG OFF-SYSTEM SAFETY ENHANCEMENT
PROGRAM

Date of Addendum Issuance: October 9th, 2017

Please refer to the following revision to the Bid Documents regarding **“Substantial Time for Completion”** (change from 60 to 120 calendar days):

On Page 9 – Bid Form shall be replaced with the following:

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

BID FORM and ADDENDA ACKNOWLEDGEMENT

**TO: COUNTY MANAGER
PUTNAM COUNTY
117 Putnam Drive; Suite A
EATONTON, GA 31024**

Ladies and Gentlemen:

In compliance with your Invitation To Bid, the undersigned, hereinafter termed the Bidder, proposes to enter into a Contract with Putnam County, Georgia, to provide the necessary machinery, tools, apparatus, other means of construction, and all materials and labor specified in the Contract Documents or as necessary to complete the Work in the manner therein specified within the time specified, as therein set forth, for:

“LMIG OFF-SYSTEM SAFETY ENHANCEMENT PROGRAM”

The Bidder has carefully examined and fully understands the Contract, Specifications, and other documents hereto attached, has made a personal examination of the Site of the proposed Work, has satisfied himself as to the actual conditions and requirements of the Work, and hereby proposes and agrees that if his bid is accepted, he will contract with the Putnam County in full conformance with the Contract Documents.

Unless otherwise directed, all work performed shall be in accordance with the plans and specifications as provided for with this bid package

It is the intent of this Bid to include all items of construction and all Work called for in the Specifications, or otherwise a part of the Contract Documents.

In accordance with the foregoing, the undersigned proposes to furnish and construct the items listed in the attached Bid schedule for the unit prices stated.

The 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.

The Bidder further proposes and agrees hereby to promptly commence the Work with adequate forces and equipment within five (5) calendar days from receipt of Notice to Proceed and to complete all Work within **one hundred twenty (120) calendar days** from the Notice to Proceed. The selected contractor must be under contract with the County prior to 12/31/2017 and commence with some aspect of the Project Scope prior to 12/31/2017. If weather affects the required completion schedule, The County and selected Bidder will negotiate a new completion date.

Liquidated damages of \$150 per day will be assessed if the project is not substantially completed within 120 calendar days. Delays as a result of County actions or weather will be excluded from the 120 Calendar Day requirement.

EXHIBIT C

EXHIBIT D

COPY



PUTNAM COUNTY
INVITATION TO BID (ITB)

Project Name: FY 17 LMIG OFF-SYSTEM SAFETY ENHANCEMENT PROGRAM
Solicitation #17-42001-001

Due Date and Time:
October 16th, 2017
Local Time:
11:30 AM

Number of Pages: 34

ISSUING DEPARTMENT INFORMATION
County Manager's Office
Issue Date: September 29th, 2017

Putnam County

Phone: 706-485-5826
Fax: 706-923-2345
Website: www.putnamga.us

INSTRUCTIONS TO BIDDERS

Return Submittal to:
Putnam County Board of Commissioners
ATTN: Paul Van Haute
County Manager
117 Putnam Drive
Suite A
Eatonton, GA 31024

Mark Face of Sealed Envelope/Package:
Bid Number: _____
Name of Company or Firm: _____

- **Special Instructions: Deadline for Questions: Oct. 9th, 2016 – 5:00 PM**
- **Email questions to Larry Kaiser at (owner's representative); kaiser@co-infra-services.com (call 404-909-5619 to confirm receipt of email)**
- **Refer to Schedule of Events in bid package for additional instructions**

BIDDERS MUST COMPLETE THE FOLLOWING

Bidder Name/Address: <i>Mid-State Striping, Inc.</i> <i>113 Wilson Rd SE.</i> <i>Eatonton, GA 31024</i>	Authorized Bidder Signatory: <i>David Steel</i> <i>David Steel</i> <small>(Please print name and sign in ink)</small>
Bidder Phone Number: <i>478-755-9795</i>	Bidder FAX Number: <i>478-755-9556</i>
Bidder Federal I.D. Number: <i>58-1979635</i>	Bidder E-mail Address: <i>dsteel90@AOL.COM</i>

BIDDERS MUST RETURN THIS COVER SHEET WITH BID RESPONSE

ADDENDUM #1
to the
Bid Documents
for the
FY 17 LMIG OFF-SYSTEM SAFETY ENHANCEMENT PROGRAM

Date of Addendum Issuance: October 9th, 2017

Please refer to the following questions received prior to the October 9th, 5:00 PM deadline and the corresponding answers:

Question #1: What is the anticipated Notice to Proceed Date?

Answer: First week of November 2017

Question #2: What Type of Paint will be required for the Traffic Striping?

Answer: For Pay Item 653-1704, GA DOT 2013 Specifications, which require 25 mils wet film thickness paint, shall be utilized. For the Optical Speed bars, refer to the Notes on Tables A&B in Appendix A for details

For Pay Items 652-2501, 652-2502 & 652-3502, the GA DOT 2009 Specification, which calls for 15 mils wet film thickness, shall be utilized.

Question #3: Can you please clarify the unit of measure for painting? Will the Solid Line be paid for the entire length of a *Single Solid Line* (Line Mile)?

Will the Skip Line be paid for the entire length of the line including the gaps or spaces between the painted lines (*Gross Linear Mile*)?

Answer: The Solid Traffic Stripe; pay items 652-2501 & 652-2502, will be paid only where solid striping exists (Line Mile).

For pay item 652-3502, payment will occur on a Gross Linear Mile basis.

Refer to the corrected "Bid Schedule of Items" spreadsheet to be utilized for submittal.

Question #4: I think pay items 3 and 4 need to be changed;

#3 - 636-1030 should be 636-1020 tp1/rs3

#4 - 636-2080 should be 636-2070 tp7

Details call for 2 tp8 at one location, that does not meet spec without ground mounted break away, which they are no pay items for.

Answer: Yes, 636-1030 will be changed to 636-1020.

Refer to the Notes in Tables A & B of Appendix A regarding breakaway requirements. No changes to 636-2080

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

**BID SCHEDULE OF ITEMS
FOR
OFF SYSTEM SAFETY ENHANCEMENT PROGRAM
10/9/2017**

SCOPE: Provide all labor, materials and equipment to install new roadway regulatory warning signage, install raised pavement markings, removal of existing signage (to be identified by Putnam County), striping & optical speed bar pavement markings

NO.	PAY ITEM	DESCRIPTION	QTY	UNIT	UNIT PRICE	TOTAL AMOUNT
1	150-1000	TRAFFIC CONTROL	1.00	LS	1,000.00	\$ 1,000.00
2	610-6515	REMOVE SIGN	50	EA	30.00	\$ 1,500.00
3	636-1020	HIGHWAY SIGNS, TP 1, MATL. HIGH INTENSITY REFL SHEETING, TYPE 3	1856	SF	16.00	\$ 29,696.00
4	636-2080	GALV STEEL POSTS; TP 8	936	LF	10.00	\$ 9,360.00
5	652-2501	SOLID TRAFFIC STRIPE, 5 Inch, White Paint	21.80	Line Mile	420.00	\$ 9,156.00
6	652-2502	SOLID TRAFFIC STRIPE, 5 Inch, Yellow Paint	17.69	Line Mile	445.00	\$ 7,872.05
7	652-3502	SKIP TRAFFIC STRIPE, 5 Inch, Yellow Paint	5.0	GLM	275.00	\$ 1,375.00
8	653-1704	THERMOPLASTIC SOLID TRAFFIC STRIPE, 24 Inch, White	50	LF	10.00	\$ 500.00
9	654-1003	RAISED PAVEMENT MARKERS; TP 3; YELLOW	954	EA	4.00	\$ 3,816.00
10	NA	THERMOPASTIC PREFORMED PAVEMENT MARKINGS (optical speed bars; (160 total @ 12" x 18"))	240	SF	15.00	\$ 3,600.00
TOTAL						\$ 67,875.05

TOTAL BID AMOUNT: \$ 67,875.05

Print Total Bid Price: (print) Sixty Seven thousand Eight hundred Seventy Five and 05/100

COMPANY Mid-state Striping, Inc.

ADDRESS 113 Wilson Rd SE, Eatonton, Georgia 31024

AUTHORIZED SIGNATURE (David Steed)

PRINT / TYPE NAME/TITLE David Steed Vice-President

ADDENDUM #2
to the
Bid Documents
for the
FY 17 LMIG OFF-SYSTEM SAFETY ENHANCEMENT
PROGRAM

Date of Addendum Issuance: October 9th, 2017

Please refer to the following revision to the Bid Documents regarding **“Substantial Time for Completion”** (change from 60 to 120 calendar days):

On Page 9 – Bid Form shall be replaced with the following:

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

BID FORM and ADDENDA ACKNOWLEDGEMENT

**TO: COUNTY MANAGER
PUTNAM COUNTY
117 Putnam Drive; Suite A
EATONTON, GA 31024**

Ladies and Gentlemen:

In compliance with your Invitation To Bid, the undersigned, hereinafter termed the Bidder, proposes to enter into a Contract with Putnam County, Georgia, to provide the necessary machinery, tools, apparatus, other means of construction, and all materials and labor specified in the Contract Documents or as necessary to complete the Work in the manner therein specified within the time specified, as therein set forth, for:

“LMIG OFF-SYSTEM SAFETY ENHANCEMENT PROGRAM”

The Bidder has carefully examined and fully understands the Contract, Specifications, and other documents hereto attached, has made a personal examination of the Site of the proposed Work, has satisfied himself as to the actual conditions and requirements of the Work, and hereby proposes and agrees that if his bid is accepted, he will contract with the Putnam County in full conformance with the Contract Documents.

Unless otherwise directed, all work performed shall be in accordance with the plans and specifications as provided for with this bid package

It is the intent of this Bid to include all items of construction and all Work called for in the Specifications, or otherwise a part of the Contract Documents.

In accordance with the foregoing, the undersigned proposes to furnish and construct the items listed in the attached Bid schedule for the unit prices stated.

The 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.

The Bidder further proposes and agrees hereby to promptly commence the Work with adequate forces and equipment within five (5) calendar days from receipt of Notice to Proceed and to complete all Work within **one hundred twenty (120) calendar days** from the Notice to Proceed. The selected contractor must be under contract with the County prior to 12/31/2017 and commence with some aspect of the Project Scope prior to 12/31/2017. If weather affects the required completion schedule, The County and selected Bidder will negotiate a new completion date.

Liquidated damages of \$150 per day will be assessed if the project is not substantially completed within 120 calendar days. Delays as a result of County actions or weather will be excluded from the 120 Calendar Day requirement.

Attached hereto is an executed Bid Bond in the amount of 5% Dollars (\$) (Five Percent of Amount Bid). **Bid Bond Amount to be for the largest bid amount submitted.**

If this bid shall be accepted by the Putnam County and the undersigned shall fail to execute a satisfactory contract in the form of said proposed Contract, and give satisfactory Performance and Payment Bonds or furnish satisfactory proof of carriage of the insurance required within seven days from the date of Notice of Award of the Contract, then the Putnam County may, at its option, determine that the undersigned abandoned the Contract and there upon this bid shall be null and void, and the sum stipulated in the attached Bid Bond shall be forfeited to the Putnam County as liquidated damages.

Bidder acknowledges receipt of the following addenda:

Addendum No.	Date viewed
<u>#1</u>	<u>10/9/17</u>
<u>#2</u>	<u>10/9/17</u>
_____	_____
_____	_____

Add additional pages as necessary for the Addendum.

Bidder further declares that the full name and resident address of Bidder's Principal is as follows:

Signed, sealed, and dated this 16th day of October, 2017

Bidder Mid-State Shipping
Company Name

Bidder Mailing Address:

113 Wilson Rd SE.
Eatonton, Georgia 31024



Signature: David Steed

Print Name: David Steed

Title: Vice-President

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

**BID BOND
PUTNAM COUNTY, GEORGIA**

BIDDER (Name and Address):
Mid State Striping, Inc., 113 Wilson Road, Eatonton, GA 31024

SURETY (Name and Address of Principal Place of Business):
Contractors Bonding and Insurance Company, 9025 N. Lindbergh Dr., Peoria, IL 61612

OWNER (hereinafter referred to as the "County" (Name and Address):

Putnam County
ATTN: County Manager
117 Putnam Drive, Suite A
Eatonton, GA 31024

BID
BID DUE DATE: 10/16/2017
PROJECT (Brief Description Including Location):
Road Improvements in Putnam County

BOND
BOND NUMBER:
DATE (Not later than Bid due date):
PENAL SUM: 5% of Bid (Words) (Figures)

IN WITNESS WHEREOF, Surety and Bidder, intending to be legally bound hereby to the County, subject to the terms printed below or on the reverse side hereof, do each cause this Bid Bond to be duly executed on its behalf by its authorized officer, agent or representative.

BIDDER
Mid-State Striping Inc.
Bidder's Name and Corporate Seal
By: [Signature]
Signature and Title:



SURETY
Contractors Bonding and Insurance Company
Surety's Name and Corporate Seal
By: [Signature]
Signature and Title: G. Michael Standard
(Attach Power of Attorney)



Attest: [Signature]
Signature and Title:

Attest: _____
Signature and Title:

- Note:
- (1) Above addresses are to be used for giving any notice required by the terms of this Bid Bond.
 - (2) Any singular reference to Bidder, Surety, the County or any other party shall be considered plural where applicable.

1. Bidder and Surety, jointly and severally, bind themselves, their heirs, executors, administrators, successors and assigns to pay to the County upon Default of Bidder the penal sum set forth on the face of this Bond.
2. Default of Bidder shall occur upon the failure of Bidder to deliver within the time required by the Bidding Documents (or any extension of that time agreed to in writing by the County) the executed Agreement required by the Bidding Documents and any performance and payment Bonds required by the Bidding Documents.
3. This obligation shall be null and void if:
 - 3.1 The County accepts Bidder's Bid and Bidder delivers within the time required by the Bidding Documents (or any extension of that time agreed to in writing by the County) the executed Agreement required by the Bidding Documents and any performance and payment Bonds required by the Bidding Documents; or
 - 3.2 All Bids are rejected by the County; or
 - 3.3 The County fails to issue a Notice of Award to Bidder within the time specified in the Bidding Documents (or any extension of that time agreed to in writing by Bidder and, if applicable, consented to by Surety when required by paragraph 5 hereof).
4. Payment under this Bond will be due and payable upon Default by Bidder within 30 calendar days after receipt by Bidder and Surety of a written Notice of Default from the County, which Notice will be given with reasonable promptness and will identify this Bond and the Project and include a statement of the amount due.
5. Surety waives notice of, as well as any and all defenses based on or arising out of, any time extension to issue a Notice of Award agreed to in writing by the County and Bidder, provided that the total time, including extensions, for issuing a Notice of Award shall not in the aggregate exceed 120 days from Bid due date without Surety's written consent.
6. No suit or action shall be commenced under this Bond either prior to 30 calendar days after the Notice of Default required in paragraph 4 above is received by Bidder and Surety or later than one year after Bid due date.
7. Any suit or action under this Bond shall be commenced only in a court of competent jurisdiction located in the State of Georgia.
8. Notices required hereunder shall be in writing and sent to Bidder and Surety at their respective addresses shown on the face of this Bond. Such notices may be sent by personal delivery, commercial courier or by United States Registered or Certified Mail, return receipt requested, postage pre-paid, and shall be deemed to be effective upon receipt by the party concerned.
9. Surety shall cause to be attached to this Bond a current and effective Power of Attorney evidencing the authority of the officer, agent or representative who executed this Bond on behalf of Surety to execute, seal and deliver such Bond and bind the Surety thereby.

10. This Bond is intended to conform to all applicable statutory requirements. Any applicable requirement of any applicable statute that has been omitted from this Bond shall be deemed to be included herein as if set forth at length. If any provision of this Bond conflicts with any applicable statute, then the provision of said statute shall govern and the remainder of this Bond that is not in conflict therewith shall continue in full force and effect.

11. The term "Bid" as used herein includes a Bid, offer or proposal, as applicable under the particular circumstances.

12. The terms of this Bid Bond shall be governed by the laws of the State of Georgia.

Know All Men by These Presents:

That this Power of Attorney is not valid or in effect unless attached to the bond which it authorizes executed, but may be detached by the approving officer if desired.

That this Power of Attorney may be effective and given to either or both of **RLI Insurance Company** and **Contractors Bonding and Insurance Company**, required for the applicable bond.

That **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company**, each Illinois corporations (as applicable), each authorized and licensed to do business in all states and the District of Columbia do hereby make, constitute and appoint:

Lindsey McGarity, G. Michael Standard, Kim Braswell, jointly or severally

in the City of McDonough, State of Georgia, as Attorney in Fact, with full power and authority hereby conferred upon him/her to sign, execute, acknowledge and deliver for and on its behalf as Surety, in general, any and all bonds, undertakings, and recognizances in an amount not to exceed Ten Million Dollars (\$10,000,000.00) for any single obligation.

The acknowledgment and execution of such bond by the said Attorney in Fact shall be as binding upon this Company as if such bond had been executed and acknowledged by the regularly elected officers of this Company.

RLI Insurance Company and **Contractors Bonding and Insurance Company**, as applicable, have each further certified that the following is a true and exact copy of the Resolution adopted by the Board of Directors of each such corporation, and now in force, to-wit:

"All bonds, policies, undertakings, Powers of Attorney or other obligations of the Corporation shall be executed in the corporate name of the Corporation by the President, Secretary, any Assistant Secretary, Treasurer, or any Vice President, or by such other officers as the Board of Directors may authorize. The President, any Vice President, Secretary, any Assistant Secretary, or the Treasurer may appoint Attorneys in Fact or Agents who shall have authority to issue bonds, policies or undertakings in the name of the Corporation. The corporate seal is not necessary for the validity of any bonds, policies, undertakings, Powers of Attorney or other obligations of the Corporation. The signature of any such officer and the corporate seal may be printed by facsimile or other electronic image."

IN WITNESS WHEREOF, **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company**, as applicable, have caused these presents to be executed by its respective Vice President with its corporate seal affixed this 25th day of November, 2015.



State of Illinois }
County of Peoria } SS

RLI Insurance Company
Contractors Bonding and Insurance Company

B. W. Davis

Barton W. Davis Vice President

CERTIFICATE

On this 25th day of November, 2015, before me, a Notary Public, personally appeared Barton W. Davis, who being by me duly sworn, acknowledged that he signed the above Power of Attorney as the aforesaid officer of the **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company**, and acknowledged said instrument to be the voluntary act and deed of said corporation.

I, the undersigned officer of **RLI Insurance Company**, and/or **Contractors Bonding and Insurance Company**, each Illinois corporations, do hereby certify that the attached Power of Attorney is in full force and effect and is irrevocable; and furthermore, that the Resolution of the Company as set forth in the Power of Attorney, is now in force. In testimony whereof, I have hereunto set my hand and the seal of the **RLI Insurance Company** and/or **Contractors Bonding and Insurance Company** this _____ day of _____.

Jacqueline M. Bockler
Jacqueline M. Bockler Notary Public

RLI Insurance Company
Contractors Bonding and Insurance Company

B. W. Davis

Barton W. Davis Vice President



[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

BID FORM and ADDENDA ACKNOWLEDGEMENT

**TO: COUNTY MANAGER
PUTNAM COUNTY
117 Putnam Drive; Suite A
EATONTON, GA 31024**

Ladies and Gentlemen:

In compliance with your Invitation To Bid, the undersigned, hereinafter termed the Bidder, proposes to enter into a Contract with Putnam County, Georgia, to provide the necessary machinery, tools, apparatus, other means of construction, and all materials and labor specified in the Contract Documents or as necessary to complete the Work in the manner therein specified within the time specified, as therein set forth, for:

“LMIG OFF-SYSTEM SAFETY ENHANCEMENT PROGRAM”

The Bidder has carefully examined and fully understands the Contract, Specifications, and other documents hereto attached, has made a personal examination of the Site of the proposed Work, has satisfied himself as to the actual conditions and requirements of the Work, and hereby proposes and agrees that if his bid is accepted, he will contract with the Putnam County in full conformance with the Contract Documents.

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The Bidder further proposes and agrees hereby to promptly commence the Work with adequate forces and equipment within five (5) calendar days from receipt of Notice to Proceed and to complete all Work within sixty (60) calendar days from the Notice to Proceed. If weather affects the required completion schedule, The County and selected Bidder will negotiate a new completion date.

Liquidated damages of \$150 per day will be assessed if the project is not substantially completed within 60 calendar days. Delays as a result of County actions or weather will be excluded from the 60 Calendar Day requirement.

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

QUALIFICATIONS SIGNATURE AND CERTIFICATION

I certify that this offer is made without prior understanding, agreement, or connection with any corporation, firm, or person submitting a proposal for the same materials, supplies, equipment, or services and is in all respects fair and without collusion or fraud. I understand collusive bidding is a violation of State and Federal Law and can result in fines, prison sentences, and civil damage awards. I agree to abide by all conditions of the proposal and certify that I am authorized to sign this proposal for the proposer. I further certify that the provisions of the Official Code of Georgia Annotated, including but not limited to Title 32, Chapter 4, Article 4, Part 2 and Sections 45-10-20 et seq. have not been violated and will not be violated in any respect.

Authorized Signature David Steed Date 10-16-17

Print/Type Name David Steed

Print/Type Company Name Here Mid-state Striping, Inc.

CORPORATE CERTIFICATE

I, Michael Steed, certify that I am the Secretary of the Corporation named as Contractor in the foregoing bid; that David Steed who signed said bid in behalf of the Contractor, was then (title) Vice-President of said Corporation; that said bid was duly signed for and in behalf of said Corporation by authority of its Board of Directors, and is within the scope of its corporate powers; that said Corporation is organized under the laws of the State of Georgia.

This 16 day of October, 2017

Michael Steed
(Signature)



[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

LIST OF SUBCONTRACTORS

I do , do not , propose to subcontract some of the work on this project. I propose to Subcontract work to the following subcontractor(s):

Company #1

Company Name: Middle Georgia Signs / Design Effect, Inc.

Company Address: 296 Westside Rd Cochran, GA 31014

Company President & Phone Number: Johnny Norris, 478-934-1094

Company #2:

Company Name: _____

Company Address: _____

Company President & Phone Number: _____

Company #3:

Company Name: _____

Company Address: _____

Company President & Phone Number: _____

PRIME CONTRACTOR PERFORMANCE OF WORK

Prime contractor certifies that a minimum of **60%** of the total bid amount will be performed by the prime contractor's employees

Authorized Signature David Steed Date 10-10-17

Print/Type Name David Steed

Print/Type Company Name Here Mid-State Striping, Inc.

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

STATE OF GEORGIA

PUTNAM COUNTY

CONTRACTOR AFFIDAVIT AND AGREEMENT

By executing this affidavit, the undersigned contractor verifies its compliance with O.C.G.A. § 13-10-91, stating affirmatively that the individual, firm, or corporation which is contracting with the Putnam County has registered with and is participating in a federal work authorization program, in accordance with the applicability provisions and deadlines established in O.C.G.A. § 13-10-91.

The undersigned further agrees that, should it employ or contract with any subcontractor(s) in connection with the physical performance of services pursuant to this contract with the Putnam County County, contractor will secure from such subcontractor(s) similar verification of compliance with O.C.G.A. § 13-10-91 on the Subcontractor Affidavit provided in Rule 300-10-01-.08 in the form attached hereto as Exhibit "G." Contractor further agrees to maintain records of such compliance and provide a copy of each such verification to the Putnam County at the time the subcontractor(s) is retained to perform such service.

263416
EEY / Basic Pilot Program User Identification Number
David Steed December 4, 2009
BY: Authorized Officer or Agent Date
Mid-State Striping Inc.
Print Contractor Name
Vice-President
Title of Authorized Officer or Agent of Contractor
David Steed
Printed Name of Authorized Officer or Agent

SUBSCRIBED AND SWORN BEFORE ME
ON THIS THE
16 DAY OF October, 2017
Stephanie Steed
Notary Public
My Commission Expires: 4/26/2020



[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

DISCLOSURE FORM

This form is for disclosure of campaign contributions and family member relations with Putnam County's officials/employees or County Project Engineer (Collaborative Infrastructure Service employees).

Please complete this form and return as part of your bid package when it is submitted.

Name of Bidder Mid-State Striping, Inc.

Name and the official position of the Putnam County Official to whom the campaign contribution was made (Please use a separate form for each official to whom a contribution has been made in the past two (2) years.)

NA

List the dollar amount/value and description of each campaign contribution made over the past two (2) years by the Applicant/Opponent to the named Putnam County Official.

Amount/Value	Description
_____	_____
_____	_____
_____	_____

Please list any family member that is currently (or has been employed within the last 12 months) by the Putnam County and your relation:

NA

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

CERTIFICATION OF SPONSOR DRUG-FREE WORKPLACE

I hereby certify that I am a principle and duly authorized representative or Vice-President Mid-State Striping, Inc. whose address 113 Wilson Rd SE. Eatonton, GA 31024 and it is also that:

- 1. The provisions of Section 50-24-1 through 50-24-6 of the Official Code of Georgia Annotated, relating to the "Drug-Free Workplace Act" have been complied with in full; and,
2. A drug-free workplace will be provided for the sponsor's employees during the performance or the contract; and,
3. Each subcontractor hired by the SPONSOR shall be required to ensure that the subcontractor's employees are provided a drug-free workplace. The SPONSOR shall secure from that subcontractor the following written certification: "As part of the subcontracting agreement with Mid-State Striping Inc. certifies to the SPONSOR that a drug-free workplace will be provided for the subcontractor's employees during the performance of this contract pursuant to paragraph (7) of subsection (b) of the Official Code of Georgia Annotated Section 50-24-3; and,
4. It is certified that the undersigned will not engage in unlawful manufacture, sale, distribution, dispensation, possession, or use of a controlled substance or marijuana during the performance of the contract.

Date: 10-16-17
Signature: [Handwritten Signature]

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

QUESTIONNAIRE

Project Name: LMIG OFF-SYSTEM SAFETY ENHANCEMENT PROGRAM

Date: October 16, 2017

(PLEASE ATTACH SEPARATE SHEETS AS NECESSARY)

***ALL QUESTIONS MUST BE ANSWERED THOROUGHLY BY THE BIDDER. DO NOT LEAVE ANY QUESTION BLANK. MARK N/A IF NOT APPLICABLE. FAILURE TO THOROUGHLY ANSWER ALL QUESTIONS MAY RESULT IN DELAY OF CONTRACT OR DISQUALIFICATION OF THE BIDDER. *** PLEASE RETURN COMPLETED QUESTIONNAIRE WITH THE BID SUBMITTAL

GENERAL INFORMATION

How many years has your organization been in business as a Contractor performing roadway construction? 25 years

State the true and exact, correct, and complete name under which you do business. Mid-States Striping, Inc.

How many years has your organization been in business under its present name? 25 years

Under what other or former names has your organization operated? NA

State the true and exact, correct, and complete address of facility where service will be provided from. 2772 Old Gray Hwy, Macon, Georgia 31211

EXPERIENCE

Briefly describe the nature and contract value of projects typically executed by your organization.

Highway markings on roads, parking lots, and Airports. Value range from 500,000 to 500,000 Each

On a separate sheet, list a minimum of three projects that you have completed similar in type, size, and nature as the one proposed. Preference should be given to county/state/federal projects. Provide the following information for each project:

- Name of Project: Macon-Bibb Co. Pavement Striping
Owner: Macon-Bibb County Board of Commissioners
Contact and Phone Number: David Fortson 478-621-6660

- Address:
700 Poplar St. Suite 308 Macon, Georgia 31201
- Engineer
David Fortson
- Contact and Phone Number:
David Fortson 478-621-6660
- Address:
700 Poplar St. Suite 308 Macon, Georgia 31201
- Date Started:
November 2016
- Date Completed:
March 2017
- Project Superintendent:
N/A
- Value of Contract:
248,000.00
- Description of Project:
Highway markings, Long line paint, thermoplastic
and RPM's work,

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

QUESTIONNAIRE

Project Name: LMIG OFF-SYSTEM SAFETY ENHANCEMENT PROGRAM

Date: October 16, 2017

(PLEASE ATTACH SEPARATE SHEETS AS NECESSARY)

*****ALL QUESTIONS MUST BE ANSWERED THOROUGHLY BY THE BIDDER. DO NOT LEAVE ANY QUESTION BLANK. MARK N/A IF NOT APPLICABLE. FAILURE TO THOROUGHLY ANSWER ALL QUESTIONS MAY RESULT IN DELAY OF CONTRACT OR DISQUALIFICATION OF THE BIDDER. *****
PLEASE RETURN COMPLETED QUESTIONNAIRE WITH THE BID SUBMITTAL

o GENERAL INFORMATION

• How many years has your organization been in business as a Contractor performing roadway construction? _____

• State the true and exact, correct, and complete name under which you do business.

• How many years has your organization been in business under its present name? _____

• Under what other or former names has your organization operated? _____

• State the true and exact, correct, and complete address of facility where service will be provided from.
Previews park

o EXPERIENCE

• Briefly describe the nature and contract value of projects typically executed by your organization.

• On a separate sheet, list a minimum of three projects that you have completed similar in type, size, and nature as the one proposed. Preference should be given to county/state/federal projects. Provide the following information for each project:

- Name of Project: Jones County LMIG Project
- Owner: Jones County Board of Commissioners
- Contact and Phone Number: Wendell Cannon 478-954-1552

- Address: P.O. Box 1359, Gray, Georgia 31032-1359
- Engineer: Wendell Cannon
- Contact and Phone Number: Wendell Cannon
- Address: P.O. Box 1359 Gray, Georgia 31032-1359
- Date Started: Jan. 1, 2016
- Date Completed: December 31, 2016
- Project Superintendent: NA
- Value of Contract: 45,000.00
- Description of Project: Highway markings, longline road striping

[BIDDERS MUST RETURN THIS FORM WITH BID RESPONSE]

QUESTIONNAIRE

Project Name: LMIG OFF-SYSTEM SAFETY ENHANCEMENT PROGRAM

Date: _____

(PLEASE ATTACH SEPARATE SHEETS AS NECESSARY)

***ALL QUESTIONS MUST BE ANSWERED THOROUGHLY BY THE BIDDER. DO NOT LEAVE ANY QUESTION BLANK. MARK N/A IF NOT APPLICABLE. FAILURE TO THOROUGHLY ANSWER ALL QUESTIONS MAY RESULT IN DELAY OF CONTRACT OR DISQUALIFICATION OF THE BIDDER. ***
PLEASE RETURN COMPLETED QUESTIONNAIRE WITH THE BID SUBMITTAL

o GENERAL INFORMATION

• How many years has your organization been in business as a Contractor performing roadway construction? _____

• State the true and exact, correct, and complete name under which you do business.

• How many years has your organization been in business under its present name? _____

• Under what other or former names has your organization operated? _____

• State the true and exact, correct, and complete address of facility where service will be provided from.

o EXPERIENCE

• Briefly describe the nature and contract value of projects typically executed by your organization.

• On a separate sheet, list a minimum of three projects that you have completed similar in type, size, and nature as the one proposed. Preference should be given to county/state/federal projects. Provide the following information for each project:

- Name of Project: Clayton County LMIG Striping
- Owner: Clayton County Board of Commissioners
- Contact and Phone Number: Bruce Mercer 678-859-5472

- Address: 7994 North McDonough St
- Engineer: Bruce Mercer
- Contact and Phone Number: Bruce Mercer 678-859-5472
- Address: 7994 North McDonough St.
- Date Started: January 1, 2017
- Date Completed: May 31, 2017
- Project Superintendent: NA
- Value of Contract: 400,000.00
- Description of Project: Highway road striping Longline thermo, paint, and handwork

- Provide at least three (3) references familiar with roadway construction projects you have completed in the past five (5) years. Preference should be given to county/state/federal projects. References should not be a current employee or subcontractor that will be utilized by your firm.

Reference #1

- A. Organization Name: Clayton County Board of Commissioners
 B. Description of Project: Yearly Contract
 C. Contract Period: 10/17 - 10/19
 D. Contact Person/Title: Bruce Mercer, Head Engineer
 E. Phone Number: 678-859-5472

Reference #2

1. Organization Name: Upson County Board of Commissioners
 2. Description of Project: Yearly Striping
 3. Contract Period: ~~varies~~ varies on being low bidder
 4. Contact Person/Title: James Melton / Road Superintendent
 5. Phone Number: 706-647-2824

Reference #3

1. Organization Name: Bulth County Board of Commissioners
 2. Description of Project: various striping needs
 3. Contract Period: on call basis
 4. Contact Person/Title: Marty Long Road Superintendent
 5. Phone Number: 678-8734565

The undersigned all statements and answers contained herein are true, complete, and accurate to the best of your knowledge.

Date Questionnaire Submitted: October 16, 2017

Name of Organization: Mid-State Striping, Inc.

Authorized Signature: David Steed

Name & Title of Signer (Printed): David Steed Vice-President

Business Address: 113 Wilson Rd SE

Eatonville, Georgia 31024

Phone Number: 478-960-4725 Fax Number: 478-755-9556

END QUESTIONNAIRE

EXHIBIT E

Backup material for agenda item:

12. Authorization for staff to schedule a Public Hearing on proposed changes to the Putnam County Code of Ordinances - Appendix D-Short Term Vacation Rental (AF)

ORDINANCE

AN ORDINANCE REGULATING SHORT TERM VACATION RENTALS WITHIN THE UNINCORPORATED AREAS OF PUTNAM COUNTY

WHEREAS, the Putnam County Board of Commissioner's ("Board") recognizes the significant impact short term vacation rentals within the unincorporated areas of the County may have on limited public resources; and

WHEREAS, the Board wishes to provide for the health and safety of all individuals renting, offering for rent and residing adjacent and near to short term vacation rentals;

NOW, THEREFORE, THE BOARD OF COMMISSIONERS OF PUTNAM COUNTY, GEORGIA, HEREBY ORDAIN as follows:

SECTION 1: That Appendix D, Short Term Vacation Rental, is hereby included in the Code of Ordinances, Putnam County, Georgia and shall read as follows:

Sec. 1. – Short Title

This ordinance shall be titled the "Putnam County Short Term Vacation Rental Ordinance."

Sec. 2. – Definitions

For the purpose of this ordinance, the following terms, phrases, words and derivations shall have the meaning given herein. When not inconsistent with the context, words used in the present tense include the future, words in the plural number include the singular number, and words in the singular number include the plural number. The word "shall" is always mandatory and not merely dicta.

- a. *Short Term Vacation Rental.* Short term vacation rental means an accommodation for transient guests where, in exchange for compensation, a residential dwelling unit is provided for lodging for a period of time not to exceed 30 consecutive days. Short term vacation rental shall not include any residential dwelling unit not regularly offered for rental, which shall be defined as any residence offered for rental less than 14 days in any given calendar year. For the purposes of this definition, a residential dwelling shall include all housing types and shall exclude group living or other lodging uses.

Sec. 3 – Regulations for short term vacation rentals.

Short term vacation rentals may be offered to the public for rental following issuance of a short term vacation rental certificate, receipt of an occupation tax certificate, and payment of any and all applicable state and county taxes. Owners shall

also insure occupants do not disrupt or interfere with rights of adjacent property owners to quiet enjoyment of their property and shall adhere to the following requirements:

- a. Owner shall not allow any gathering of persons at the short term vacation rental in excess of 2 more than the stated residential occupancy.
- b. Owner shall not allow occupants to cause excessive noise at the residence and shall maintain against any noise after 10:00 PM which is audible at a distance of 100 feet from the residence.
- c. Owners shall not allow occupants to park any vehicle on a public or private road or at any other location other than those areas specifically designated within the application for the short term vacation rental certificate.
- d. Owners shall not allow occupants to violate any federal, state, or local law, statute, rule or ordinances.

Sec. 4 – Application; fee.

- a. An application for a short term vacation rental certificate shall be submitted, on an annual basis, under oath, on a form specified by the County Clerk, accompanied by a non-refundable application fee as set forth by the Board of Commissioners, which shall include at a minimum the following information or documentation:
 1. The name, address, telephone and email address of the owner(s) of record of the dwelling unit for which a certificate is sought. If such owner is not a natural person, the application shall identify all partners, officers and/or directors of any such entity, including personal contact information;
 2. The address of the unit to be used as a short term vacation rental;
 3. The name, address, telephone number and email address of the short term vacation rental agent, which shall constitute his or her 24 hour contact information and who shall:
 - a. Be reasonably available to handle any problems arising from use of the short term vacation rental unit;
 - b. Appear on the premises within 24 hours following notification from the Planning and Development Director, or his/her designee, of issues related to the use or occupancy of the premises, including, but not limited to, complaints of unreasonable noise or disturbances, disorderly conduct, or other illegal activity.

- c. Receive and accept service of any notice of violation related to the use or occupancy of the premises; and
 - d. Monitor the short term vacation rental unit for compliance with this chapter;
4. The owner's sworn acknowledgment that he or she has received a copy of this section, has reviewed it and understands its requirements;
5. The owner's designation of how many occupants may reside at the short term vacation rental;
6. The number and location of parking spaces allotted to the premises;
7. The owner's agreement to use his or her best efforts to assure that use of the premises by short term vacation rental occupants will not disrupt the neighborhood, and will not interfere with the rights of neighboring property owners to the quiet enjoyment of their properties;
8. A copy of an exemplar agreement between the owner and occupant(s) which obligate the occupant to abide by all of the requirements of the chapter, and other Putnam County ordinances, state and federal law, and that such a violation of any of these rules may result in the immediate termination of the agreement and eviction from the premises, as well as potential liability for payment of fines levied;
9. Proof of the owner's current ownership of the short term vacation rental unit;
10. Proof of insurance; and
11. Any other information or documentation deemed necessary by the County Clerk or any other county department.

Sec. 5 – Review of application.

Review of an application shall be conducted in accordance with due process principles and shall be granted unless the applicant fails to meet the conditions and requirements of this chapter, or otherwise fails to demonstrate the ability to comply with local, state, or federal laws. Any false statements or information provided in the application are grounds for revocation, suspension and/or imposition of penalties, including denial of future applications. A certificate shall not be issued unless the owner demonstrates compliance with the applicable codes.

Sec. 6 – Violations; revocation.

a. In any instance in which use of the short term rental by a guest results in a violation of these ordinances, or any other ordinance of Putnam County, notice of such violation shall be provided to the short term vacation rental agent. Upon notice of three violations within a period of 12 consecutive months, the Planning & Development Director shall revoke the short term vacation rental certificate and reject all applications for the subject premises for a period of 12 consecutive months. Failure to remedy any notice of violations may result in the issuance of a citation, which shall be prosecuted pursuant to this Code. Upon a conviction of violation, the Planning & Development Director may revoke the short term vacation rental certificate and reject all applications for the subject premises for a period of 12 consecution months.

Sec. 7 – Appeal Rights.

A person aggrieved by the Planning & Development Director’s decision to revoke, suspend or deny a short term vacation rental certificate may appeal the decision to the County Manager. The appeal must be filed with the County Manager’s office in writing, within 30 calendar days after the adverse action and it shall contain a concise statement of the reasons for the appeal. A decision from the County Manager shall be rendered within 5 business days of receipt of the appeal, and may hold any administrative hearing deemed necessary in consideration of the appeal.

SECTION 2: That any ordinances or resolutions as adopted by this Board which are in conflict with these ordinances are hereby repealed and rendered ineffective.

IN WITNESS WHEREOF, this ordinance has been duly adopted by the governing authority of Putnam County, Georgia on the ___ day of _____, 2017.

Chairman

CERTIFICATION

I hereby certify that the foregoing is a true and correct copy of an original ordinance adopted by the Putnam County Board of Commissioners on the ____ day of _____, 2017.

In witness whereof, I hereunto set my hand and affix the seal of Putnam County, this ____ day of _____, 2017.

County Clerk

[Affix Seal]