# County Council Meeting
## Beaufort County, SC

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

**Monday, July 26, 2021**
**6:00 PM**

**AGENDA**

1. CALL TO ORDER
2. PLEDGE OF ALLEGIANCE AND INVOCATION – Council Member Larry McElynn
3. PUBLIC NOTIFICATION OF THIS MEETING HAS BEEN PUBLISHED, POSTED, AND DISTRIBUTED IN COMPLIANCE WITH THE SOUTH CAROLINA FREEDOM OF INFORMATION ACT
4. APPROVAL OF AGENDA
5. APPROVAL OF MINUTES – April 26, 2021; May 10, 2021; May 24, 2021; and June 14, 2021.
6. ADMINISTRATOR'S REPORT
7. GULLAH / GEECHEE NATION APPRECIATION WEEK PROCLAMATION

**CITIZEN COMMENTS**

**8. CITIZEN COMMENTS - (ANYONE who wishes to speak during the Citizen Comment portion of the meeting will limit their comments to no longer than three (3) minutes ( a total of 15 minutes ) and will address Council in a respectful manner appropriate to the decorum of the meeting, refraining from the use of profane, abusive, or obscene language)**

**COMMITTEE REPORTS**

9. LIASION AND COMMITTEE REPORTS

**PUBLIC HEARINGS AND ACTION ITEMS**

10. APPROVAL OF CONSENT AGENDA

11. THIRD READING OF AN ORDINANCE - TEXT AMENDMENTS TO THE COMMUNITY DEVELOPMENT CODE (CDC): ARTICLE 5, DIVISION 5.6, SECTIONS 5.6.10; 5.6.20; 5.6.30; 5.6.40; 5.6.50; 5.6.80; 5.6.90; 5.6.100; 5.6.120; 5.6.160; AND 5.6.170; ARTICLE 7, DIVISION 7.2, SECTION 7.2.40; AND ARTICLE 10, SECTIONS

10.1.10; 10.1.30; 10.1.40; 10.1.50; 10.1.60; 10.1.70; 10.1.90; 10.1.120; 10.1.140; 10.1.150; 10.1.160; 10.1.190; AND 10.1.200, TO UPDATE DEFINITIONS, REGULATIONS AND PROCEDURES FOR SIGNS AND SIGN PERMITS.
*VOTE AT FIRST READING: MAY 24, 2021, 10:1*
*VOTE AT SECOND READING: JUNE 14, 2021, 10:1*

12. THIRD READING AND PUBLIC HEARING OF AN ORDINANCE APPROVING CERTAIN INTERGOVERNMENTAL AGREEMENTS BY AND BETWEEN BEAUFORT COUNTY AND THE CITY OF BEAUFORT, SOUTH CAROLINA; APPROVING CERTAIN INTERGOVERNMENTAL AGREEMENTS BY AND BETWEEN BEAUFORT COUNTY AND THE TOWN OF PORT ROYAL, SOUTH CAROLINA; AMENDING PRIOR ORDINANCES REGARDING MULTI-COUNTY INDUSTRIAL PARKS; AND ADDRESSING OTHER MATTERS RELATED THERETO (PROJECTS BURGER, GARDEN, GLASS, AND STONE)

13. CONSIDERATION OF DEFERRAL OF FIRST READING OF AN ORDINANCE PROPOSING AMENDMENTS TO BEAUFORT COUNTY CODE OF ORDINANCES: CHAPTER 46, ARTICLE II, SECTIONS 46.26 THROUGH 46.33
*VOTE AT FIRST READING ON JUNE 14, 2021 WAS TO POSTPONE THE ORDINANCE UNTIL JULY 26, 2021.*

## CITIZEN COMMENTS

**14. CITIZEN COMMENTS - (ANYONE who wishes to speak during the Citizen Comment portion of the meeting will limit their comments to no longer than three (3) minutes ( a total of 15 minutes ) and will address Council in a respectful manner appropriate to the decorum of the meeting, refraining from the use of profane, abusive, or obscene language)**

15. ADJOURNMENT

## CONSENT AGENDA

**Items Originating from the Finance Committee**

1. A ONE YEAR CONTRACT EXTENSION FOR AUDITING SERVICES FROM MAULDIN & JENKINS

**Items Originating from the Public Facilities Committee**

2. HILTON HEAD ISLAND AIRPORT (HXD) – TBE WORK AUTHORIZATION 2119-2101
   *FISCAL IMPACT: $531,242 (FUNDED 100% (REIMBURSABLE) BY FAA GRANT 47*

3. HILTON HEAD ISLAND AIRPORT (HXD) - SECURITAS SECURITY SERVICES CONTRACT RENEWAL

4. BEAUFORT EXECUTIVE AIRPORT (ARW) – NEW FUEL PROVIDER – CAMPBELL OIL COMPANY
   *FISCAL IMPACT: 51000011-58000 (PURCHASES-FUEL/LUBRICANTS) $375,000 (RESALE FOR PROFIT)*

5. RECOMMENDATION OF AWARD FOR RFP #032421– PROJECT MANAGEMENT, LANDSCAPE MAINTENANCE SERVICES FOR LINEAR MEDIANS FOR VARIOUS COUNTY ROADS ($236,892.00)

6. BEAUFORT COUNTY AND CITY OF BEAUFORT INTERGOVERNMENTAL AGREEMENT AMENDMENT FOR AIRPORT FRONTAGE ROAD

## END OF CONSENT AGENDA

# Caucus
## Beaufort County, SC

This meeting was held both in person at County Council Chambers, 100 Ribaut Road, Beaufort, and also virtually through Zoom.

**Monday, April 26, 2021**
**5:00 PM**

**MINUTES**

**1. CALL TO ORDER**

Committee Chairman Passiment called the meeting to order at 5:00 PM.

**PRESENT**

Chairman Joseph F. Passiment
Vice Chairman D. Paul Sommerville
Council Member Gerald Dawson
Council Member Logan Cunningham
Council Member Brian Flewelling
Council Member York Glover
Council Member Stu Rodman
Council Member Chris Hervochon
Council Member Alice Howard
Council Member Mark Lawson (late to meeting)
Council Member Lawrence McElynn

**2. PLEDGE OF ALLEGIANCE**

Council Member Cunningham led the Pledge of Allegiance.

**3. FOIA**

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

**4. APPROVAL OF AGENDA**

**Motion:** It was moved by Council Member Rodman, seconded by Council Member Howard to approve Caucus Agenda. The motion was approved without objection. Council Member Lawson was absent.

**5. CITIZEN COMMENTS**

There were no citizen comments.

**6. AGENDA REVIEW**

Discussion: Council Member Flewelling stated he had an issue regarding the wording of the item pertaining to the Change of Government referendum.

County Attorney Kurt Taylor stated that the wording is precisely as required by the state statute. The statute states you must give the voters the opportunity to retain the existing form of government not do you want to change.

**7. NEW BUSINESS**

No new business to discuss.

**8. EXECUTIVE SESSION**

**Motion:** It was moved by Vice-Chairman Sommerville, Seconded by Council Member Dawson to go into executive session for the receipt of legal advice where the legal advice relates to a pending, threatened, or potential claims or other matters covered by the attorney-client privilege, settlement of legal claims, or the position of the public agency in other adversary situations involving the assertion against the agency of a claim. The motion was approved without objection @ 5:07 pm.

**Back in Session** @ 5:18 pm.

**9. ADJOURNMENT**

The meeting was adjourned at 5:19 PM

COUNTY COUNCIL OF BEAUFORT COUNTY

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

ATTEST:

_____
Sarah W. Brock, Clerk to Council
Ratified:

# County Council Meeting
## Beaufort County, SC

This meeting was held both in person at County Council Chambers, 100 Ribaut Road, Beaufort, and also virtually through Zoom.

**Monday, April 26, 2021**
**6:00 PM**

**MINUTES**

**1. CALL TO ORDER**

Chairman Passiment called the meeting to order at 6:00 PM.

**PRESENT**
Chairman Joseph F. Passiment
Vice-Chairman D. Paul Sommerville
Council Member York Glover
Council Member Chris Hervochon
Council Member Stu Rodman
Council Member Alice Howard
Council Member Mark Lawson
Council Member Lawrence McElynn
Council Member Gerald Dawson
Council Member Brian Flewelling
Council Member Logan Cunningham

**2. PLEDGE OF ALLEGIANCE AND INVOCATION**

Council Member Cunningham led the Pledge of Allegiance and Invocation

**3. FOIA**

Chairman Passiment noted public notification of this meeting has been published, posted, and distributed in compliance with the South Carolina freedom of information act.

**4. APPROVAL OF AGENDA**

**Motion:** It was moved by Council Member Rodman, Seconded by Vice-Chairman Sommerville to approve the agenda. Motion approved without objection.

**5. APPROVAL OF MINUTES**

**Motion:** It was moved by Council Member Howard, seconded by Council Member Cunningham to approve the minutes from February 8, 2021 and February 22, 2021. Motion approved without objection.

**6. ADMINISTRATOR'S REPORT**

To see Interim County Administrator, Eric Greenway's report please click the link below.

https://beaufortcountysc.new.swagit.com/videos/119976

**7. PROCLAMATION HONORING CORRECTIONAL OFFICERS**

Chairman Passiment presented a proclamation to all the Beaufort County Correctional Officers honoring them for the work they do.

**8. PRESENTATION BY BARBARA JOHNSON FROM LOWCOUNTRY COUNCIL OF GOVERNMENTS ON THE ANNUAL CONSOLIDATED PLAN**

To see the full presentation please click the link below.

https://beaufortcountysc.new.swagit.com/videos/119976

**9. US 278 Independent Review Final Report Presentation**

HDR Consultant Philip Hutchinson provided an update of the US 278 Independent Review.

**10. Discussion and presentation of the Comprehensive Annual Financial Report for 2020 by external auditor's Mauldin & Jenkins CPA's and Advisors.**

David Irwin, CPA with Mauldin & Jenkins reviewed the County's Financial and Compliance Audit.

To see the presentation please click the link below.

https://beaufortcountysc.new.swagit.com/videos/119976

**11. Citizen Comments**

There were no citizen comments.

**12. LIAISON AND COMMITTEE REPORTS**

Council Member Lawson stated the following items were coming forward from the Finance Committee for consideration for approval on the consent agenda:

- Resolution for acceptance of a grant award to the Beaufort County Sheriff's Office.

Council Member Rodman stated the following items were coming forward from the Public Facilities Committee for consideration for approval on the consent agenda:

- First Reading of an ordinance authorizing the execution and delivery of Utility Easements #901550 & 901551 encumbering property owned by Beaufort County.
- Recommendation for additional work - Beaufort County Road Resurfacing Year 4 contract ($399,517)
- Recommendation of Award RFQ#040920E 2018 One Cent Sales Tax Construction Engineering & Inspection Services ($3,347,718.68)
- Recommendation to Award IFB#021121E Earthwork & Site Utilities at Myrtle Business Park Commercial Development ($367,562)
- Intergovernmental Agreement between Beaufort County and Town of Yemassee for Special Projects and Associated Services

- RFQ 100820 Parks and Recreation Master Plan Consulting Services Contract Award Recommendation
- Commercial Property Lease Agreement Update for Stoneworks, LLC
  (Fiscal impact: Minor amount of forgone revenue, revenue that does not currently exist)
- Recommendation of award for IFB #031021 HVAC and Control Energy Management System Replacement for the Detention Center ($1,548,125.00)
- Lease Agreement for the Lobeco Library with the Beaufort County School District. ($1 for the term of the lease)
- Reappointment of Bruce Kline for a 4th term to the Construction Adjustment and Appeals Board with an expiration date of 2025.

Council Member Howard stated TCL enrollment is up and this summer they are going to offer dual enrollment for high school students.

Council Member McElynn stated there wasn't going to be a Community Services and Public Safety Committee meeting in May but they were already working on items for the June Meeting.

Council Member Glover stated he was concerned the Engineering Division staff may be overloaded and he wanted to put his concern on record.

**CONSENT AGENDA**

**Motion:** It was moved by Council Member Flewelling, Seconded by Council Member Rodman to approve the consent agenda. Motion approved without objection.

**13. ACCEPTANCE OF THE FISCAL YEAR 2020 COMPREHENSIVE ANNUAL FINANCIAL REPORT AND THE CORRECTIVE ACTION PLAN.**

**Motion:** It was moved by Vice-Chairman Sommerville, Seconded by Council Member Lawson to approve the Fiscal Year 2020 Comprehensive Annual Financial Report and Corrective Action Plan. Motion approved without objection.

**14. CONSIDERATION OF AUTHORIZATION TO PROCEED WITH DESIGN AND PERMITTING OF SC 170 IMPROVEMENTS BETWEEN 278 AND 462 ON AM EXPEDITED BASIS, NOT TO EXCEED $300,000.**

**Motion:** It was moved by Council Member Rodman, Seconded by Vice-Chairman Sommerville to approve authorization to proceed with design and permitting of SC 170 Improvements between 278 and 462 on an expedited basis not to exceed $300,000.

**Discussion:**

**The Vote -** Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Hervochon, Council Member Rodman, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson, Council Member Cunningham. Voting Nay: Council Member Glover, Council Member Flewelling. The motion passed 9:2.

**15. APPROVE ENTERING INTO THE LAWSUIT AGAINST THE ONLINE SHORT-TERM RENTAL COMPANIES**

**Motion:** It was moved by Council Member Howard, seconded by Council Member Cunningham to approve entering into a Class Action Suit against online, short-term rental companies. Motion approved without objection.

**16. PUBLIC HEARING AND THIRD READING OF AN ORDINANCE TO USE $5 MILLION IN FUND BALANCE TO DEFEASE BONDS.**

**Motion:** It was moved by Council Member Lawson, seconded by Council Member Dawson to approve the third reading of an ordinance to use $5 million in fund balance to defease bonds.

The Chairman opened the floor for public hearing.

No one came forward.

The Chairman closed public hearing.

The motion passed without objection.

**17. PUBLIC HEARING AND SECOND READING OF AN ORDINANCE TO MAKE PERMANENT THE PREVIOUSLY ADOPTED EMERGENCY RESOLUTION ALLOWING FOR ELECTRONIC OR HYBRID MEETINGS, AND OTHER MATTERS RELATED THERETO**

**Motion:** It was moved by made by Council Member Glover, seconded by Council Member Cunningham to approve the second reading of an ordinance to make permanent the previously adopted emergency resolution allowing for electronic meeting participation.

The Chairman opened the floor for public hearing.

No one came forward.

The Chairman closed public hearing.

**Motion to Amend:** It was moved by Council Member Cunningham, seconded by Council Member Flewelling to remove County Council Meetings (does not apply to committee meetings or boards or commissions) from this ordinance.

**Discussion:** To see the presentation please click the link below.

https://beaufortcountysc.new.swagit.com/videos/119976

**Amended Motion Vote -** Voting Yea: Council Member Hervochon, Council Member Rodman, Council Member Dawson, Council Member Flewelling, Council Member Cunningham. Voting Nay: Chairman Passiment, Vice-Chairman Sommerville, Council Member Glover, Council Member Howard, Council Member Lawson, Council Member McElynn. The motion failed 5:6.

**Main Motion Vote -** Voting Yea: Chairman Passiment, Vice- Chairman Sommerville, Council Member Glover, Council Member Rodman, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson, Council Member Flewelling. Voting Nay: Council Member Hervochon, Council Member Cunningham. The motion passed. 9:2

**18. PUBLIC HEARING AND SECOND READING OF AN ORDINANCE TO CALL FOR A REFERENDUM TO ALLOW THE QUALIFIED ELECTORS OF BEAUFORT COUNTY, SOUTH CAROLINA TO VOTE TO RETAIN THE COUNCIL-ADMINISTRATOR FORM OF GOVERNMENT OR CHANGE TO THE COUNCIL-MANAGER FORM OF GOVERNMENT**

**Motion:** It was moved by Vice-Chairman Sommerville, Seconded by Council Member McElynn to approve the second reading of an ordinance to call for a referendum to allow the qualified electors of Beaufort County, SC to vote to retain the Council Administrator form of Government.

**Discussion:** To see full discussion click the link below.

https://beaufortcountysc.new.swagit.com/videos/119976

The Chairman opened the floor for public hearing.

No one came forward.

The Chairman closed public hearing.

**The Vote -** Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson. Voting Nay: Council Member Hervochon, Council Member Rodman, Council Member Flewelling, Council Member Cunningham. The motion passed 7:4

**19. SECOND READING OF AN ORDINANCE TO LEVY AND IMPOSE A ONE PERCENT LOCAL OPTION SALES AND USE TAX WITHIN BEAUFORT COUNTY, SOUTH CAROLINA, PURSUANT TO SECTION 4-10-10 ET SEQ., OF THE SOUTH CAROLINA CODE OF LAWS, 1976, AS AMENDED; TO DEFINE THE SPECIFIC PURPOSE OF THE TAX; TO IMPOSE CONDITIONS AND RESTRICTIONS UPON THE USE OF THE PROCEEDS OF THE TAX; TO PROVIDE FOR A COUNTY-WIDE REFERENDUM FOR THE IMPOSITION OF THE TAX; TO PROVIDE FOR THE CONDUCT OF SUCH REFERENDUM; TO PROVIDE FOR THE ADMINISTRATION OF THE TAX, AND OTHER MATTERS RELATING THERETO.**

**Motion:** It was moved by Council Member Howard, Seconded by Council Member Lawson to approve a local option sales tax referendum.

**Discussion:** To see full discussion please click the link below.

https://beaufortcountysc.new.swagit.com/videos/119976

**EXTEND PAST 8 O'CLOCK**

**Motion:** It was moved by Council Member Lawson, seconded by Council Member Cunningham to go past the 8 pm. The motion was approved without objection.

**Main Motion Vote -** Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson, Council Member Flewelling. Voting Nay: Council Member Hervochon, Council Member Rodman, Council Member Cunningham. The motion passed 8:3.

**20. THE SECOND READING OF AN ORDINANCE AS AMENDED AUTHORIZING THE EXECUTION AND DELIVERY OF A SSRC BY AND BETWEEN BEAUFORT COUNTY, SOUTH CAROLINA AND PROJECT BURGER PROVIDING FOR A PAYMENT IN LIEU OF TAXES AND OTHER MATTERS RELATED THERETO**

**Motion:**It was moved by Vice-Chairman Sommerville, seconded by Council Member Howard to approve the second reading of an ordinance as amended authorizing the execution and delivery of a SSRC by and between Beaufort County, South Carolina and project burger providing for a payment in lieu of taxes and other matters related thereto.

**Discussion:** To see full discussion please click link below.

https://beaufortcountysc.new.swagit.com/videos/119976

This motion was approved without objection.

**21. THE SECOND READING OF AN ORDINANCE AS AMENDED AUTHORIZING THE EXECUTION AND DELIVERY OF A SSRC BY AND BETWEEN BEAUFORT COUNTY, SOUTH CAROLINA, AND PROJECT GARDEN, PROVIDING FOR A PAYMENT OF A FEE IN LIEU OF TAXES AND OTHER MATTERS RELATED THERETO**

**Motion:** It was moved by Council Member Dawson, seconded by Council Member Lawson to approve the second reading of an ordinance as amended authorizing the execution and delivery of a SSRC by and between Beaufort County, South Carolina, and project garden, providing for a payment of a fee in lieu of taxes and other matters related thereto. Motion was approved without objection.

**22. FIRST READING OF AN ORDINANCE AMENDING ORDINANCE NUMBER 2020/19 WHICH ESTABLISHED THE SOLID WASTE AND RECYCLING ENTERPRISE FUND**

**Motion:** It was moved by Council Member Rodman, seconded by Council Member Glover to approve the first reading of an ordinance amending ordinance number 2020/19 which established the solid waste and recycling enterprise fun. Motion was approved without objection.

**23. THE FIRST READING OF AN ORDINANCE APPROVING THE INTERGOVERNMENTAL AGREEMENTS BETWEEN BEAUFORT COUNTY, PORT ROYAL, AND THE CITY OF BEAUFORT REGARDING PROJECT BURGER, GARDEN, GLASS AND STONE.**

**Motion:** It was moved by Council Member Flewelling, seconded by Council Member Howard to approve the first reading of an ordinance approving the intergovernmental agreements between Beaufort County, Port Royal, and the City of Beaufort regarding project burger, garden, glass and stone. Motion approved without objection.

**24. MATTERS ARISING OUT OF EXECUTIVE SESSION**

**No matters arising**

**25. CITIZEN COMMENT**

There were no citizen comments.

**26. ADJOURNMENT**

The meeting adjourned at 8:17 pm.

COUNTY COUNCIL OF BEAUFORT COUNTY

BY: _____

Joseph F. Passiment, Jr., Chairman

ATTEST:

_____

Sarah W. Brock, Clerk to Council

Ratified:

# Caucus
## Beaufort County, SC

This meeting was held both in person at County Council Chambers, 100 Ribaut Road, Beaufort, and also virtually through Zoom.

**Monday, May 10, 2021**
**5:00 PM**

**MINUTES**

**1. CALL TO ORDER**

Chairman Passiment called the meeting to order at 5:00PM.

**PRESENT**
Chairman Joseph F. Passiment
Vice Chairman D. Paul Sommerville
Council Member Logan Cunningham
Council Member Gerald Dawson
Council Member Brian Flewelling
Council Member York Glover
Council Member Stu Rodman
Council Member Chris Hervochon
Council Member Alice Howard
Council Member Mark Lawson
Council Member Lawrence McElynn

**2. PLEDGE OF ALLEGIANCE- COUNCIL MEMBER LAWSON**

Council Member Lawson led the Pledge of Allegiance.

**3. FOIA**

Committee Chairman Passiment noted that the Public Notification of this meeting has been published, posted, and distributed in compliance with the South Carolina Freedom of Information Act.

**4. APPROVAL OF AGENDA**

**Motion to Amend:** It was moved by Vice-Chairman Sommerville, Seconded by Council Member Howard to remove the language "through the rural and critical lands program" from the title of the first executive session item. Motion approved without objection.

**Main Motion:** It was moved by Council by Council Member Cunningham, Seconded by Vice-Chairman Sommerville to approve the agenda as amended. Motion approved without objection.

**5. CITIZEN COMMENTS**

There were no citizen comments.

**6. AGENDA REVIEW**

Chairman Passiment stated item number 4 will be removed from the Council Consent agenda because leases require a resolution as well as public hearing so that item will come back at a later date.
Council Member Rodman asked that 5.2mills be added to the item regarding amending the Enterprise Fund Ordinance.
Council Member Flewelling stated he didn't think the millage rate would change yearly vs being permanently set.

To see full discussion regarding millage rate please click the link below.

https://beaufortcountysc.new.swagit.com/videos/120577

**7. NEW BUSINESS**

Council Member Flewelling asked about the 2020 census.
Interim County Administrator Greenway stated he expected to have the County data late summer, early fall.
Council Member Cunningham asked for an update regarding streaming meetings on Facebook.
Chairman Passiment stated he would discuss facebook with the IT department.
Council Member Glover asked for an update in the near future from the Beaufort County Economic

**8. EXECUTIVE SESSION**

**Motion:** It was moved by Council Member Rodman, Seconded by Council Member Howard to go into executive session to discuss negotiations incident to proposed contractual arrangements and proposed sale or purchase of property; and to receive legal advice where the legal advice relates to a pending, threatened, or potential claim or other matters covered by the attorney-client privilege. Motion approved without objection.

Council entered executive session at 5:20PM.

**9. ADJOURNMENT**

Meeting adjourned at 6:05PM.

COUNTY COUNCIL OF BEAUFORT COUNTY

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

ATTEST:

_____
Sarah W. Brock, Clerk to Council
Ratified:

# County Council Meeting
## Beaufort County, SC

This meeting was held both in person at County Council Chambers, 100 Ribaut Road, Beaufort, and also virtually through Zoom.

**Monday, May 10, 2021**
**6:00 PM**

**MINUTES**

**1. CALL TO ORDER**

Chairman Passiment called the meeting to order at 6:11PM.

**PRESENT**

Chairman Joseph F. Passiment
Vice Chairman D. Paul Sommerville
Council Member York Glover
Council Member Chris Hervochon
Council Member Stu Rodman
Council Member Alice Howard
Council Member Mark Lawson
Council Member Lawrence McElynn
Council Member Gerald Dawson
Council Member Brian Flewelling
Council Member Logan Cunningham

**2. PLEDGE OF ALLEGIANCE AND INVOCATION**

Council Member Lawson led the Pledge of Allegiance and gave the invocation.

**3. FOIA**

Chairman Passiment stated public notice of this meeting had been published, posted, and distributed in compliance with the SC FOIA Act.

**4. APPROVAL OF AGENDA**

**Motion to Amend:** It was moved by Vice-Chairman Sommerville, Seconded by Council Member Howard to remove item number 4 from the consent agenda. Motion approved without objection.

**Main Motion:** It was moved by Council Member Rodman, Seconded by Council Member Howard to approve the agenda as amended. Motion approved without objection.

**5. APPROVAL OF MINUTES**

**Motion:** It was moved by Vice-Chairman Sommerville, Seconded by Council Member Howard to approve the minutes of March 8, 2021 and March 22, 2021. Motion approved without objection.

**6. ADMINISTRATOR'S REPORT**

To see County Administrator, Eric Greenway's report please click the link below.
https://beaufortcountysc.new.swagit.com/videos/120610

**7. PROCLAMATION PRESENTED TO BEAUFORT COUNTY EMS IN HONOR OF EMERGENCY MEDICAL SERVICES WEEK**

Council Member Larry McElynn read and presented a proclamation to Beaufort County's EMS team in honor of Emergency Medical Services Week.

**8. PROCLAMATION RECOGNIZING MAY AS ASIAN AMERICAN AND PACIFIC ISLANDER HERITAGE MONTH**

Council Member Larry McElynn read and presented a proclamation to two of Beaufort County's Asian-Americal/ Pacific Islander Citizens in honor of Asian American and Pacific Islander Heritage Month.

**9. PROCLAMATION HONORING FRIEDA MITCHELL FOR HER WORK IN CHILD CARE REFORM AND CIVIL RIGHTS**

Council Member Gerald Dawson read and presented a proclamation honoring the life and achievements of Frieda Mitchell.

**10. CITIZEN COMMENTS**

Jim Backer of Okatie stated concerns regarding the sales and use tax.

**11. LIAISON AND COMMITTEE REPORTS**

Council Member Howard stated the Beaufort Memorial Hospital Board met on April 28th and reported they had a good month financially and stated they hired a full-time counselor for the ER for the Phentenol program.

**12. CONSENT AGENDA**

**Motion:** It was moved by Vice-Chairman Sommerville, Seconded by Council Member Rodman to approve the consent agenda. Motion approved without objection.

**13. THIRD READING OF AN ORDINANCE TO MAKE PERMANENT THE PREVIOUSLY ADOPTED EMERGENCY RESOLUTION ALLOWING FOR ELECTRONIC OR HYBRID MEETINGS, AND OTHER MATTERS RELATED THERETO**

**Motion:** It was moved by Vice-Chairman Sommerville, Seconded by Council Member Glover to approve the third reading of an ordinance to make permanent the previously adopted emergency resolution allowing for electronic meeting participation.

**Motion to Amend:** It was moved by Council Member Cunningham, Seconded by Council Member Hervochon to remove county council meetings from the proposed ordinance with the caveat that the chairman can allow a Council Member can attend virtually on an individual basis.

**Discussion:** to see full discussion regarding virtual attendance at County Council meetings click the link below.

https://beaufortcountysc.new.swagit.com/videos/120610

**The Vote -** Voting Yea: Council Member Hervochon, Council Member Rodman, Council Member Flewelling, Council Member Cunningham. Voting Nay: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson. Motion failed 4:7.

**Motion to Amend:** It was moved by Council Member Dawson, Seconded by Council Member Cunningham to amend the Virtual Meeting ordinance to allow Council members to attend County Council meetings virtually but not to exceed 3 on an annual basis (January to December).

**Discussion:** to see full discussion regarding virtual attendance at County Council meetings click the link below.

https://beaufortcountysc.new.swagit.com/videos/120610

**The Vote -** Voting Yea: Council Member Hervochon, Council Member Dawson, Council Member Flewelling, Council Member Cunningham. Voting Nay: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Rodman, Council Member Howard, Council Member Lawson, Council Member McElynn. Motion failed 4:7.

**Main Motion Vote -** Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson. Voting Nay: Council Member Hervochon, Council Member Rodman, Council Member Flewelling, Council Member Cunningham. Motion passed 7:4.

**14. PUBLIC HEARING AND THIRD READING OF AN ORDINANCE AS AMENDED AUTHORIZING THE EXECUTION AND DELIVERY OF A SSRC BY AND BETWEEN BEAUFORT COUNTY, SOUTH CAROLINA, AND PROJECT GARDEN (MATERIALS RESEARCH GROUP), PROVIDING FOR A PAYMENT OF A FEE IN LIEU OF TAXES AND OTHER MATTERS RELATED THERETO**

**Motion:** It was moved by Council Member McElynn, Seconded by Council Member Flewelling to approve the third reading of an ordinance as amended authorizing the execution and delivery of an SSRC by and between Beaufort County and Project Garden.

**Public Comment:**

John O'Toole gave details about the companies referenced in the ordinances.

- Project glass is Glassworks South Carolina and this company represents just over $15 million investment and 55 jobs.
- Project garden is Material Research Group which represents just over $3 million million investment and 26 jobs;
- Project burger is a Saltmarsh Brewery which represents just under $4.5 million investment and 43 jobs.
- Project a stone is Stoneworks which represents a $3.2 million investment and 21 new jobs.

Motion approved without objection.

**15. PUBLIC HEARING AND THIRD READING OF AN ORDINANCE AS AMENDED AUTHORIZING THE EXECUTION AND DELIVERY OF A SSRC BY AND BETWEEN BEAUFORT COUNTY, SOUTH CAROLINA AND PROJECT BURGER (SALT MARSH BREWING COMPANY) PROVIDING FOR A PAYMENT IN LIEU OF TAXES AND OTHER MATTERS RELATED THERETO**

**Motion:** It was moved by Council Member Howard, Seconded by Council Member Rodman to approve the third reading of an ordinance as amended authorizing the execution and delivery of an SSRC by and between Beaufort County and Project Burger.

**Public Comment:**

There was no public comment.

Motion approved without objection.

**16. PUBLIC HEARING AND THIRD READING OF AN ORDINANCE TO LEVY AND IMPOSE A ONE PERCENT LOCAL OPTION SALES AND USE TAX WITHIN BEAUFORT COUNTY, SOUTH CAROLINA, PURSUANT TO SECTION 4-10-10 ET SEQ., OF THE SOUTH CAROLINA CODE OF LAWS, 1976, AS AMENDED; TO DEFINE THE SPECIFIC PURPOSE OF THE TAX; TO IMPOSE CONDITIONS AND RESTRICTIONS UPON THE USE OF THE PROCEEDS OF THE TAX; TO PROVIDE FOR A COUNTY-WIDE REFERENDUM FOR THE IMPOSITION OF THE TAX; TO PROVIDE FOR THE CONDUCT OF SUCH REFERENDUM; TO PROVIDE FOR THE ADMINISTRATION OF THE TAX, AND OTHER MATTERS RELATING THERETO.**

**Motion:** It was moved by Vice-Chairman Sommerville, Seconded by Council Member Lawson to approve the third reading of an ordinance to levy and impose a one percent local option sales and use tax.

**Discussion:** To see full discussion regarding LOST please click the link below.

https://beaufortcountysc.new.swagit.com/videos/120610

**Public Comment:**

June Silberman spoke against LOST.

**The Vote -** Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Flewelling. Voting Nay: Council Member Hervochon, Council Member Rodman, Council Member Dawson, Council Member Cunningham. Motion passed 7:4.

**17. PUBLIC HEARING AND SECOND READING OF AN ORDINANCE AMENDING ORDINANCE NUMBER 2020/19 WHICH ESTABLISHED THE SOLID WASTE AND RECYCLING ENTERPRISE FUND.**

**Motion:** It was moved by Council Member Rodman, Seconded by Council Member Howard to approve the second reading of an ordinance amending ordinance 2020/19 establishing a solid waste and recycling enterprise fund.

**Public Comment:**

There was no public comment.

The motion was approved without objection.

**18. PUBLIC HEARING AND SECOND READING OF AN ORDINANCE AUTHORIZING THE EXECUTION AND DELIVERY OF UTILITY EASEMENTS #901550 & 901551 ENCUMBERING PROPERTY OWNED BY BEAUFORT COUNTY.**

**Motion:** It was moved by Council Member Rodman, Seconded by Council Member Cunningham to approve the second reading of an ordinance authorizing the execution and delivery of Utility easements encumbering property owned by Beaufort County.

**Public Comment:**

There was no public comment.

Motion was approved without objection.

**19. SECOND READING OF AN ORDINANCE APPROVING THE INTERGOVERNMENTAL AGREEMENTS BETWEEN BEAUFORT COUNTY, PORT ROYAL, AND THE CITY OF BEAUFORT REGARDING PROJECT BURGER (SALT MARSH BREWING COMPANY), GARDEN (MATERIALS RESEARCH GROUP), GLASS (GLASS WRX SC), AND STONE (STONEWORKS INCORPORATED).**

**Motion:** It was moved by Council Member Howard, Seconded by Council Member Flewelling to approve the second reading of an ordinance approving intergovernmental agreements between Beaufort County, the Town of Port Royal, and the City of Beaufort. Motion approved without objection.

**20. PUBLIC HEARING FOR RESOLUTION 2021/11: AUTHORIZING THE INTERIM COUNTY ADMINISTRATOR TO EXECUTE A LEASE AGREEMENT BETWEEN BEAUFORT COUNTY, THE TOWN OF HILTON HEAD ISLAND AND THE HISTORIC MITCHELVILLE FREEDOM PARK FOR THE PROPERTY KNOWN AS THE BEACH CITY ROAD PARCELS**

**Motion:** It was moved by Council Member Rodman, Seconded by Council Member Howard to approve a resolution authorizing the interim county administrator to execute a lease agreement between Beaufort County, The Town of Hilton Head and the historic Mitchellville freedom park for the property known as Beach City Road.

**Public Comment:**

There was no public comment.

Motion approved without objection.

**21. MATTERS ARISING OUT OF EXECUTIVE SESSION**

**Motion**: It was moved by Vice-Chairman Sommerville, Seconded by Council Member Cunningham to proceed with litigation as outlined in the executive session.

**Motion to Amend:** It was moved by Council Member Flewelling, Seconded by Council Member Rodman to postpone this matter till the next meeting.

**Discussion:** to see the full discussion please click the link below.

https://beaufortcountysc.new.swagit.com/videos/120610

**The Vote -** Voting Yea: Council Member Glover, Council Member Hervochon, Council Member Rodman, Council Member Flewelling. Voting Nay: Chairman Passiment, Vice Chairman Sommerville, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson, Council Member Cunningham. The motion to amend failed 4:7.

**Main Motion Vote -** Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Hervochon, Council Member Rodman, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson, Council Member Cunningham. Voting Nay: Council Member Flewelling. Motion passed 10:1.

**22. CITIZEN COMMENT**

There were no citizen comments.

**23. ADJOURNMENT**

Meeting adjourned at 7:49PM.

COUNTY COUNCIL OF BEAUFORT COUNTY

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

ATTEST:

_____
Sarah W. Brock, Clerk to Council
Ratified:

# Caucus

## Beaufort County, SC

This meeting was held both in person at County Council Chambers, 100 Ribaut Road, Beaufort, and also virtually through Zoom.

**Monday, May 24, 2021**
**4:00 PM**

**MINUTES**

**1. CALL TO ORDER**

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

**PRESENT**

Chairman Joseph F. Passiment
Vice Chairman D. Paul Sommerville
Council Member Logan Cunningham
Council Member Gerald Dawson
Council Member Brian Flewelling
Council Member York Glover
Council Member Stu Rodman
Council Member Alice Howard
Council Member Mark Lawson
Council Member Lawrence McElynn

**ABSENT**

Council Member Chris Hervochon

**2. PLEDGE OF ALLEGIANCE**

Vice Chairman Sommerville led the Pledge of Allegiance.

**3. FOIA**

Committee Chairman Passiment noted that the Public Notification of this meeting has been published, posted, and distributed in compliance with the South Carolina Freedom of Information Act.

**4. APPROVAL OF AGENDA**

**Motion:** It was moved by Council Member Rodman, seconded by Council Member McElynn to approve the agenda. The motion was approved without objection.

**5. CITIZEN COMMENTS**

There were no citizen comments.

**6. AGENDA REVIEW**

No questions or changes to Council Agenda.

**7. EXECUTIVE SESSION**

**Motion:** It was moved by Council Member McElynn, seconded by Council Member Cunningham to go into Executive Session to discuss the following items: discussions related to an employee regulated by county council; negotiations incident to proposed contractual arrangements and proposed sale or purchase of property; negotiations incident to proposed contractual arrangements and proposed sale or purchase of Beaufort County-owned property; receive legal advice where the legal advice relates to a pending, threatened, or potential claim or other matters covered by the attorney-client privilege; receive legal advice where the legal advice relates to a pending, threatened, or potential claim or other matters covered by the attorney-client privilege. Motion approved without objection.

**8. ADJOURNMENT**

Meeting Adjourned at 5:30 PM

COUNTY COUNCIL OF BEAUFORT COUNTY

BY: _____

Joseph Passiment, Chairman

ATTEST:

_____

Sarah W. Brock, Clerk to Council

Ratified:

# County Council Meeting
## Beaufort County, SC

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

**Monday, May 24, 2021**
**6:00 PM**

## MINUTES

**1. CALL TO ORDER**

Chairman Passiment called the meeting to order at 6:00 PM.

**PRESENT**
Chairman Joseph F. Passiment
Vice Chairman D. Paul Sommerville
Council Member York Glover
Council Member Chris Hervochon
Council Member Stu Rodman
Council Member Alice Howard
Council Member Mark Lawson
Council Member Lawrence McElynn
Council Member Gerald Dawson
Council Member Brian Flewelling
Council Member Logan Cunningham

**2. PLEDGE OF ALLEGIANCE AND INVOCATION**

Vice-Chairman Paul Sommerville led the Pledge of Allegiance and gave the invocation.

**3. FOIA**

Chairman Passiment stated public notice of this meeting had been published, posted, and distributed in compliance with the SC FOIA Act

**4. APPROVAL OF AGENDA**

**Motion**: It was moved by Council Member Rodman, seconded by Council Member McElynn to approve the agenda. The motion is approved without objection.

**5. ADMINISTRATOR'S REPORT**

To see Interim County Administrator, Eric Greenway's report please click the link below.

https://beaufortcountysc.new.swagit.com/videos/121941

**6. PROCLAMATION HONORING MICHAEL MATHEWS FOR HIS WORK ON THE RURAL AND CRITICAL LANDS BOARD**

Council Member Howard read and presented a proclamation honoring Michael Mathews.

**7. BEAUFORT COUNTY SCHOOL DISTRICTS BUDGET PRESENTATION**

Dr. Frank Rodriguez, Beaufort County Superintendent, presented the county school district certified general fiscal budget for 2021 - 2022.

**Discussion:** To see the full discussion click the link below.

https://beaufortcountysc.new.swagit.com/videos/121941

**8. CITIZENS COMMENTS**

Floyd Shannon spoke in support of maintaining the dirt roads.

Maurice Campbell spoke in support of retired employees of Beaufort County.

Danny and Brenda Lesesne spoke in support of maintaining the dirt roads.

Miriam Mitchell spoke in support of retired employees of Beaufort County.

Inez Miller spoke in support of that some of the money derived from the comprehensive plan to be used towards St. Helena residents to be used for land retention.

Dawn Page spoke against the comprehensive plan.

Sara Reynolds Green spoke against the comprehensive plan.

Larry Holman spoke about the comprehensive plan and the need for usage for People of Color business owners.

Will Smith spoke concerning the task force concerning the comprehensive plan.

Christina Gwozdr, Chairman of Beaufort County School Board, spoke concerning the impact fees for the school.

**9. LIAISON AND COMMITTEE REPORTS**

Council Member Howard stated the summer reading program be in all branches this summer.

Council Member Rodman stated the following items were coming forward from the Public Facilities Committee for consideration for approval on the consent agenda:

- Arthur Horne recommendation for award of furniture, fixtures, and equipment (FF&E)
- Request funding for post-construction costs related to Bluffton Branch Library Renovation Project.
- A resolution authorizing the county administrator to enter into a 50 year easement agreement with the department of the NAVY on USA Parcels R100 022 000 0034 0000, R100 022 000 034a 0000 (E-26) and R100 022 000 0029 0000 associated with a 50’ right of way on Northview Drive.
- Resolution for Lowcountry Natural Hazard Mitigation Plan.
- Third reading of an Ordinance amending ordinance number 2020/19 which established the Solid Waste and Recycling Enterprise Fund.
- Third reading of an ordinance authorizing the execution and delivery of utility easements #901550 & 901551 encumbering property owned by Beaufort County.

**10. CONSENT AGENDA**

**Motion:** It was moved by Council Member Rodman, seconded by Council Member Dawson to approve consent agenda items 1-6. Motion approved without objection.

**11. MATTERS ARISING OUT OF EXECUTIVE SESSION**

**Motion:** It was moved by Vice-Chairman Sommerville, seconded by Council Member Flewelling to appoint Interim County Administrator Eric Greenway to the position of permanent County Administrator of Beaufort County and that we authorize the Chairman and any other member of council who he desires to negotiate a contract with Eric Greenway to make him the administrator of Beaufort County. The contract will be brought before council for ratification.

**Discussion:** To see the full discussion click the link below.

https://beaufortcountysc.new.swagit.com/videos/121941

**The Vote:** Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Hervochon, Council Member Rodman, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson, Council Member Flewelling, Council Member Cunningham. The motion passed 11:0.

**Motion:** It was move by Council Member Howard, seconded by Council Member Cunningham to approve the ordinance authorizing the execution of a quick claim deed and waiver for reverter of real property located at 15 Old Shell Road with the real estate number of R110 011 000 105A 0000.

**Discussion:** To see the full discussion click the link below.

https://beaufortcountysc.new.swagit.com/videos/121941

**The Vote:** Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Hervochon, Council Member Rodman, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson, Council Member Flewelling, Council Member Cunningham. The motion passed 11:0.

**12. FIRST READING OF AN ORDINANCE TO MAKE APPROPRIATIONS FOR COUNTY GOVERNMENT, SPECIAL PURPOSE DISTRICTS FOR BEAUFORT COUNTY FOR THE FISCAL YEAR BEGINNING JULY 1, 2021 AND ENDING JUNE 30, 2022.**

**Motion:** It was moved by Vice-Chairman Sommerville, seconded by Council Member Lawson to approve the first reading of an Ordinance to make appropriations for County Government, special purpose districts for Beaufort County for the fiscal year beginning July 1, 2021, and ending June 30, 2022

**Discussion:** To see the full discussion click the link below.
https://beaufortcountysc.new.swagit.com/videos/121941

**The Vote:** Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Hervochon, Council Member Rodman, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson, Council Member Flewelling, Council Member Cunningham. The motion passed 11:0.

**13. FIRST READING OF AN ORDINANCE TO MAKE APPROPRIATIONS FOR BEAUFORT COUNTY SCHOOL DISTRICT FOR THE FISCAL YEAR BEGINNING JULY 1, 2021 AND ENDING JUNE 30, 2022.**

**Motion:** It was moved by Council Member Rodman, seconded by Vice-Chairman Sommerville to approve first reading of an ordinance to make appropriations for Beaufort County School District for the fiscal year beginning July 1, 2021, and ending June 30, 2022.

**Discussion:** To see the full discussion click the link below.

https://beaufortcountysc.new.swagit.com/videos/121941

**The Vote** - Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Hervochon, Council Member Rodman, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson, Council Member Flewelling. Voting Nay: Council Member Cunningham. The motion passed 10:1.

**EXTEND PAST 8 O'CLOCK**

**Motion:** It was moved by Council Member Rodman, seconded by Council Member Howard to extend the Council Meeting past 8 pm. The motion was approved without objection 11:0.

**14. FIRST READING OF AN ORDINANCE – TEXT AMENDMENTS TO THE COMMUNITY DEVELOPMENT CODE (CDC): ARTICLE 5, DIVISION 5.6, SECTIONS 5.6.10; 5.6.20; 5.6.30; 5.6.40; 5.6.50; 5.6.80; 5.6.90; 5.6.100; 5.6.120; 5.6.160; AND 5.6.170; ARTICLE 7, DIVISION 7.2, SECTION 7.2.40; AND ARTICLE 10, SECTIONS 10.1.10; 10.1.30; 10.1.40; 10.1.50; 10.1.60; 10.1.70; 10.1.90; 10.1.120; 10.1.140; 10.1.150; 10.1.160; 10.1.190; AND 10.1.200, TO UPDATE DEFINITIONS, REGULATIONS, AND PROCEDURES FOR SIGNS AND SIGN PERMITS.**

**Motion:** It was moved by Council Member McElynn, seconded by Council Member Howard to approve first reading of an ordinance to update the definition, regulations and procedures for signs and sign permits.

**Discussion:** To see the full discussion click the link below.

https://beaufortcountysc.new.swagit.com/videos/121941

**The Vote -** Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Rodman, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson, Council Member Flewelling, Council Member Cunningham
Voting Nay: Council Member Hervochon. The motion passed 10:1.

**15. FIRST READING OF AN ORDINANCE FOR THE FY2021 BUDGET AMENDMENT**

**Motion:** It was moved by Council Member McElynn, seconded by Council Member Howard to approve the First Reading of an Ordinance for the FY2021 Budget Amendment.

**Discussion:** To see the full discussion click the link below.

https://beaufortcountysc.new.swagit.com/videos/121941

**The Vote** - Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Hervochon, Council Member Rodman, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson, Council Member Flewelling, Council Member Cunningham. The motion passed 11:0.

16. **SECOND READING OF AN ORDINANCE OF THE COUNTY COUNCIL OF BEAUFORT COUNTY, SOUTH CAROLINA ("COUNCIL") ESTABLISHING AND ADOPTING A SCHOOL DEVELOPMENT IMPACT FEE ("IMPACT FEE") TO BE IMPOSED ON ALL NEW RESIDENTIAL DEVELOPMENT IN THE SOUTH BEAUFORT COUNTY SCHOOL SERVICE AREA PURSUANT TO ORDINANCE NO. 2021/____; TO ENSURE THAT SCHOOL FACILITY SYSTEM IMPROVEMENTS WILL BE AVAILABLE AND ADEQUATE TO ACCOMMODATE THE NEED EXPECTED TO BE GENERATED FROM THE SCHOOL CHILDREN IN NEW RESIDENTIAL DEVELOPMENTS IN THE SOUTH BEAUFORT COUNTY SCHOOL SERVICE AREA BASED ON THE SCHOOL DISTRICT'S LEVEL OF SERVICE STANDARDS AND CAPITAL IMPROVMENTS PLAN, AND TO ASSIGN THE COSTS OF SUCH PUBLIC SCHOOL FACILITIES ON A PROPROTIONATE SHARE BASIS TO NEW RESIDENTIAL DEVELOPMENT IN THE SERVICE AREA; AND ESTABLISHMENT OF INTERGOVERNMENTAL AGREEMENTS BETWEEN BEAUFORT COUNTY AND THE BEAUFORT COUNTY SCHOOL DISTRICT, AND INDIVIDUAL INTERGOVERNMENTAL AGREEMENTS BETWEEN BEAUFORT COUNTY AND THE TOWNS OF BLUFFTON AND HILTON ISLAND AND THE CITY OF HARDEEVILLE**

**Motion:** It was moved by Council Member Howard, seconded by Vice-Chairman Sommerville to approve the second reading of an ordinance of the County Council of Beaufort County, South Carolina ("council") establishing and adopting a school development impact fee ("impact fee") to be imposed on all new residential development in the South Beaufort County school service area pursuant to ordinance no. 2021/ ; to ensure that school facility system improvements will be available and adequate to accommodate the need expected to be generated from the school children in new residential developments in the South Beaufort County school service area based on the school district's level of service standards and capital improvements plan, and to assign the costs of such public school facilities on a proportionate share basis to new residential development in the service area; and establishment of intergovernmental agreements between Beaufort County and the Beaufort County School District, and individual intergovernmental agreements between Beaufort County and the Towns of Bluffton and Hilton Head Island and the City of Hardeeville .

**Discussion:** To see the full discussion click the link below.

https://beaufortcountysc.new.swagit.com/videos/121941

**The Vote** - Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Hervochon, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson, Council Member Flewelling. Voting Nay: Council Member Rodman, Council Member Cunningham. The motion passed 9:2.

17. **PUBLIC HEARING AND THIRD READING OF AN ORDINANCE APPROVING THE INTERGOVERNMENTAL AGREEMENTS BETWEEN BEAUFORT COUNTY, PORT ROYAL, AND THE CITY OF BEAUFORT REGARDING PROJECT BURGER (SALT MARSH BREWING COMPANY), GARDEN (MATERIALS RESEARCH GROUP), GLASS (GLASS WRX SC), AND STONE (STONEWORKS INCORPORATED).**

**Motion:** It was moved by Council Member Flewelling, seconded by Council Member Howard to approve public hearing and third reading of an ordinance approving the intergovernmental agreements between Beaufort County, Port Royal, and the City of Beaufort regarding Project Burger (Salt Marsh Brewing Company), Garden (materials research group), Glass (Glass WRX SC), And Stone (Stoneworks Incorporated).

**Discussion:** To see the full discussion click the link below.

https://beaufortcountysc.new.swagit.com/videos/121941

**The Vote -** Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Hervochon, Council Member Rodman, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson, Council Member Flewelling, Council Member Cunningham. The motion passed 11:0.

**18. PUBLIC HEARING AND APPROVAL OF A RESOLUTION REGARDING A COMMERCIAL PROPERTY LEASE AGREEMENT –30 HUNTER ROAD, HILTON HEAD ISLAND, SC 29926 - APAC-ATLANTIC INC. (FISCAL IMPACT: $12,600.00 INCOMING FUNDS)**

**Motion:** It was moved by Council Member Rodman, seconded by Council Member Howard to approve PUBLIC HEARING AND APPROVAL OF A RESOLUTION REGARDING A Commercial Property Lease Agreement –30 Hunter Road, Hilton Head Island, SC 29926 - APAC-Atlantic Inc. (Fiscal impact: $12,600.00 Incoming Funds).

**Discussion:** To see the full discussion click the link below.

https://beaufortcountysc.new.swagit.com/videos/121941

**The Vote** - Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Hervochon, Council Member Rodman, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Dawson, Council Member Flewelling, Council Member Cunningham. The motion passed 11:0.

**19. CITIZEN COMMENTS**

Will Smith spoke of the comprehensive study task force.

**20. ADJOURNMENT**

The meeting was adjourned at 8:20 PM.

COUNTY COUNCIL OF BEAUFORT COUNTY

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

ATTEST:

_____
Sarah W. Brock, Clerk to Council
Ratified:

# Caucus
## Beaufort County, SC

This meeting was held both in person at County Council Chambers, 100 Ribaut Road, Beaufort, and also virtually through Zoom.

**Monday, June 14, 2021**
**4:00 PM**

**MINUTES**

**1. CALL TO ORDER**

Committee Chairman Passiment called the meeting to order at 4:30 PM.

**PRESENT**

Chairman Joseph F. Passiment
Vice Chairman D. Paul Sommerville
Council Member Gerald Dawson
Council Member Logan Cunningham
Council Member Brian Flewelling
Council Member York Glover
Council Member Stu Rodman
Council Member Chris Hervochon
Council Member Alice Howard
Council Member Mark Lawson
Council Member Lawrence McElynn

**2. PLEDGE OF ALLEGIANCE**

Chairman Passiment led the Pledge of Allegiance.

**3. FOIA**

Committee Chairman Passiment noted that the Public Notification of this meeting has been published, posted, and distributed in compliance with the South Carolina Freedom of Information Act.

**4. APPROVAL OF AGENDA**

**Motion to Amend:** It was moved by Council Member McElynn, Seconded by Council Member Sommerville to amend the agenda to add an item to Executive Session. Item 11 reads; Pursuant to SC Code Section 30-4-70 (A)(2): Receipt of legal advice where the legal advice relates to pending, threatened or potential claims. The motion was approved with objection.

**Main Motion:** It was moved by Council Member Rodman, Seconded by Council Member Howard to approve the amended agenda. The motion was approved without objection.

**5. AGENDA REVIEW**

No comments or discussion from Council.

**6. COUNCIL MEMBER DISCUSSION**

No comments or discussion from Council.

**7. EXECUTIVE SESSION**

Council Member Flewelling asked for clarification on each item.

7: Regarding County Administrator

8: Regarding a lawsuit that has been filed by Beaufort Memorial Hospital

9: Regarding Jenkins Road

10: Regarding Hilton Head Island

11: Regarding Buckingham Landing

**Motion:** It was moved by Council Member Flewelling, Seconded by Council Member Howard to go into Executive Session to discuss the following items: discussion of employment of a person regulated by County Council; receive legal advice where the legal advice relates to pending, threatened, or potential claims; negotiations incident to proposed contractual arrangements with South Carolina Department of Transportation; receive of legal advice where the legal advice relates to pending, threatened, or potential claims; and receive legal advice where the legal advice relates to pending, threatened, or potential claims. Motion approved without objection.

**8. ADJOURNMENT**

Meeting Adjourned at 5:57 PM.

COUNTY COUNCIL OF BEAUFORT COUNTY

BY: _____

Joseph Passiment, Chairman

ATTEST:

_____

Sarah W. Brock, Clerk to Council

Ratified:

# Council

## Beaufort County, SC

This meeting was held both in person at County Council Chambers, 100 Ribaut Road, Beaufort, and also virtually through Zoom.

**Monday, June 14, 2021**
**6:00 PM**

**MINUTES**

**1. CALL TO ORDER**

Chairman Passiment called the meeting to order at 6:05 PM.

**PRESENT**

Chairman Joseph Passiment
Council Member Logan Cunningham
Council Member Gerald Dawson
Council Member Brian Flewelling
Council Member York Glover
Council Member Chris Hervochon
Council Member Alice Howard
Council Member Mark Lawson
Council Member Lawrence McElynn
Council Member Stu Rodman
Vice-Chairman Paul Sommerville

**2. PLEDGE OF ALLEGIANCE AND INVOCATION**

Chairman Joseph Passiment led the Pledge of Allegiance and gave the invocation.

**3. PUBLIC NOTIFICATION OF THIS MEETING HAS BEEN PUBLISHED, POSTED, AND DISTRIBUTED IN COMPLIANCE WITH THE SOUTH CAROLINA FREEDOM OF INFORMATION ACT**

Chairman Passiment stated public notice of this meeting had been published, posted, and distributed in compliance with the SC FOIA Act

**4. APPROVAL OF AGENDA**

**Motion:** It was moved by Council Member Rodman, seconded by Council Member Howard to approve the agenda. Motion approved without objection.

**5. ADMINISTRATOR'S REPORT**

To see Interim County Administrator, Eric Greenway's report please click the link below.

- Presentation by Jared Fralix, ACA Engineering regarding Federal and State annual appropriations requests

https://beaufortcountysc.new.swagit.com/videos/122773

**7. LIAISON AND COMMITTEE REPORTS**

Council Member Howard spoke regarding Natural Resources Committee:

- Rural and Critical Lands Board Retreat at Widgeon Point.

Council Member McElynn stated the following items were coming forward from the Community Services and Public Safety Committee for consideration for approval on the consent agenda:

- Appointment of Sheri Phillips for a partial 1st term to the Sheldon Fire District
- Recommendation to the Governor's Office for the appointment of Emily Mayer to the Disabilities and Special Needs Board for a 1st term.

Council Member Rodman spoke regarding the Public Facilities Committee:

- Transportation Penny Sales Tax continuation
- Hilton Head Airport Congestion
- Section of Hwy 170 between 278 and 462 studies

**8. CONSENT AGENDA**

**Motion**: It was moved by Council Member McElynn, Seconded by Council Member Cunningham to approve the consent agenda items 1-3. Motion approved without objection.

**9. MATTERS ARISING OUT OF EXECUTIVE SESSION**

There were no matters arising out of executive session.

**10. CONSIDERATION AND APPROVAL OF THE ADMINISTRATOR'S EMPLOYMENT CONTRACT**

**Motion:** It was moved by Council Member McElynn, Seconded by Council Member Howard to approve the contract of employment for Eric Greenway as the Administrator of Beaufort County.

**Discussion:** To see the full discussion click the link below.

https://beaufortcountysc.new.swagit.com/videos/122773

**The Vote –** Voting Yea: Chairman Passiment, Vice Chairman Sommerville, Council Member Glover, Council Member Rodman, Council Member Howard, Council Member McElynn, Council Member Lawson, Council Member Flewelling. Voting Nay: Council Member Dawson, Council Member Hervochon, Council Member Cunningham. Motion approved 8:3.

**11. RECOMMENDATION OF AWARD FOR RFP #030121 DAUFUSKIE ISLAND FERRY TRANSPORTATION SERVICES FOR BEAUFORT COUNTY ($259,000 ANNUALLY) TO HAIG POINT FERRY COMPANY, INC.**

**Motion**: It was moved by Council Member Rodman, Seconded by Council Member Lawson to approve the recommendation of award for RFP #030121 Daufuskie Island Ferry Transportation Services for Beaufort County ($259,000 annually) to Haig Point Ferry Company, Inc.

**Discussion:** To see the full discussion click the link below.

https://beaufortcountysc.new.swagit.com/videos/122773

**Public Comment:**

Ronnie Broom- Shares the property line with the ferry service, never given the opportunity to voice their concerns in the past. Bid process is flawed and believes Beaufort County is subsidizing a tourism operation. Free enterprise without government interference. County needs to enter into a month to month agreement and restart the bid process and move the location, so it does not negatively impact the residential community.

Leanne Coulter- Daufuskie Island Council Chair, Haig Pointe Ferry Service is outstanding and would like for the landing to remain at Buckingham Landing and would like a one-year contract. Utilizing Pinckney Island and making a visitor center is a great idea. Daufuskie is at maximum capacity with tourism.

John Thompson- Daufuskie Island Resident a decision cannot be made because the plans for the bridge and corridor are still up in the air. Shuttling from Lowes or Kroger is a real imposition to residents.

Julie Franklin- Haige Point needs to provide a website for pick up and drop off points instead of signs, additional transportation is needed, congregation setting for tourist waiting on the ferry, Pinckney Island landing is a good suggestion making it a point of tourism and history.

Adam Martin- Representing Daufuskie Island Ferry Company acknowledges that Buckingham Landing is a temporary site but has made investments to provide shuttle services to decrease traffic. Would also like to see a permanent place for parking and tourism. Explains the cost and parking at Buckingham Landing and the operation of the Ferry.

Tom Taylor, Attorney representing the residents of Buckingham Landing. Declines the extension of any services at Buckingham. There is a gentleman who is offering to provide services if the County would decline the contract. Rezoning this property for public service use is wrong and strongly suggests rebidding the project.

Dean Roberson- Daufuskie Island Resident support the contract to Haige Point at Buckingham Landing. There is a parking problem as Daufuskie continues to grow. Propose that all Daufuskie Island residents pay for parking monthly at the embarkation site for $50 a month.

**Motion to Amend**: It was moved by Council Member Hervochon, seconded by Council Member Cunningham to not rezone the public service use, to have clear and visible information via the ferry website along with the signage, move all the parking to a remote location, make this a one year duration that is not renewable so that it can be rebidded for a more permanent location.

**Discussion:** The County Administrator clarified for the record that this isn't a rezoning for the public use but to allow the County to establish a public service use which allows the County Council after conducting two public hearings; one with the planning commission and one in front of Council to establish that property as being able to carry out some legitimate government operation that is entitled to Council through the state law as a local governing body. The zoning would not change it is a public service use approval. Council can establish conditions, development, and length of time.

**The Vote** - Voting Yea: Council Member Hervochon, Council Member Cunningham. Voting Nay: Council Member Dawson, Council Member Flewelling, Council Member Glover, Council Member Howard, Council Member Lawson, Council Member McElynn, Council Member Rodman, Council Member Sommerville, Chairman Passiment. Motion to amend failed 2:9.

**Motion to Amend:** It was moved by Council Member Lawson, seconded by Council Member Flewelling to approve a one-year contract with a 2 year renewal as options, remote parking off site with shuttle services for tourist and allowing residents to park at Buckingham Landing, and for staff to submit a permanent plan within one-year.

**The Vote** - Voting Yea: Council Member Lawson, Council Member Flewelling, Council Member Dawson, Council Member Glover, Council Member McElynn, Council Member Howard, Council Member Rodman, Council Member Sommerville, Chairman Passiment. Voting Nay: Council Member Cunningham, Council Member Hervochon. The motion passed 9:2.

**Back to Main Motion**: **The Vote -** Voting Yea: Council Member Rodman, Council Member McElynn, Council Member Dawson, Council Member Flewelling, Council Member Glover, Council Member Howard, Council Member Lawson, Council Member Sommerville, Chairman Passiment. Voting Nay: Council Member Cunningham, Council Member Hervochon. The motion passed 9:2.

**MOTION TO EXTEND PAST 8:00 PM**

**Motion:** It was moved by Council Member Rodman, Seconded by Council Member Cunningham to extend the meeting past 8:00 PM. Motion was approved without objection.

**12. PUBLIC HEARING AND SECOND READING OF AN ORDINANCE FOR THE FY2021 BUDGET AMENDMENT**

**Motion:** It was moved by Council Member Lawson, Seconded by Council Member Cunningham to approve the Public Hearing and Second Reading of an Ordinance for the FY2021 Budget Amendment.

**Public Comment:** No public comment.

Motion was approved without objection.

**13. PUBLIC HEARING AND SECOND READING OF AN ORDINANCE – TEXT AMENDMENT TO THE COMMUNITY DEVELOPMENT CODE (CDC): ARTICLE 5, DIVISION 5.6, SECTIONS 5.6.10; 5.6.20; 5.6.30; 5.6.40; 5.6.50; 5.6.80; 5.6.90; 5.6.100; 5.6.120; 5.6.160; AND 5.6.170; ARTICLE 7, DIVISION 7.2, SECTION 7.2.40; AND ARTICLE 10, SECTIONS 10.1.10; 10.1.30; 10.1.40; 10.1.50; 10.1.60; 10.1.70; 10.1.90; 10.1.120; 10.1.140; 10.1.150; 10.1.160; 10.1.190; AND 10.1.200, TO UPDATE DEFINITIONS, REGULATIONS, AND PROCEDURES FOR SIGNS AND SIGN PERMITS.**

**Motion:** It was moved by Council Member Howard, Seconded by Council Member Glover to approve the Public Hearing and Second Reading of an Ordinance- Text Amendment to the Community Development Code (CDC): Article 5, Division 5.6, Sections 5.6.10; 5.6.20; 5.6.30; 5.6.40; 5.6.50; 5.6.80; 5.6.90; 5.6.100; 5.6.120; 5.6.160; And 5.6.170; Article 7, Division 7.2, Section 7.2.40; And Article 10, Sections 10.1.10; 10.1.30; 10.1.40; 10.1.50; 10.1.60; 10.1.70; 10.1.90; 10.1.120; 10.1.140; 10.1.150; 10.1.160; 10.1.190; And 10.1.200, To Update Definitions, Regulations, And Procedures For Signs And Sign Permits.

Presentation by Scott Bergthold.

**Discussion:** To see the full discussion click the link below.

https://beaufortcountysc.new.swagit.com/videos/122773

**Public Comment:** No public comment.

**The Vote** - Voting Yea: Council Member Howard, Council Member Glover, Council Member Cunningham, Council Member Dawson, Council Member Flewelling, Council Member Lawson, Council Member McElynn, Council Member Rodman, Council Member Sommerville, Chairman Passiment. Voting Nay: Council Member Hervochon. The motion passed 10:1.

**14. SECOND READING OF AN ORDINANCE TO MAKE APPROPRIATION FOR COUNTY GOVERNMENT, SPECIAL PURPOSE DISTRICTS FOR BEAUFORT COUNTY FOR THE FISCAL YEAR BEGINNING JULY 1, 2021, AND ENDING JULY 30, 2022**

**Motion:** It was moved by Council Member McElynn, Seconded by Council Member Dawson to approve the Second Reading of an Ordinance to Make Appropriation for County Government, Special Purpose Districts for Beaufort County for the Fiscal Year Beginning July 1, 2021, and Ending July 30, 2022. Motion approved without objection.

**15. SECOND READING OF AN ORDINANCE TO MAKE APPROPRIATIONS FOR THE BEAUFORT COUNTY SCHOOL DISTRICT FOR THE FISCAL YEAR BEGINNING JULY 1, 2021, AND ENDING JUNE 30, 2022**

**Motion:** It was moved by Council Member Dawson, Seconded by Council Member Glover to approve The Second Reading of An Ordinance to Make Appropriations for The Beaufort County School District for The Fiscal Year Beginning July 1, 2021, and Ending June 30, 2022.

**Discussion:** To see the full discussion click the link below.
https://beaufortcountysc.new.swagit.com/videos/122773

**The Vote** - Voting Yea: Council Member Dawson, Council Member Glover, Council Member Cunningham, Council Member Hervochon, Council Member Howard, Council Member McElynn, Council Member Rodman, Council Member Sommerville, Council Member Lawson, Chairman Passiment. Voting Nay: Council Member Flewelling. The motion passed 10:1

**16. SECOND READING OF AN ORDINANCE AUTHORIZING THE EXECUTION OF A QUITCLAIM DEED AND WAIVER OF REVERTER FOR REAL PROPERTY LOCATED AT 1508 OLD SHELL ROAD WITH TMS NO. R110 011 000 105a 0000**

**Motion:** It was moved by Council Member Flewelling, Seconded by Council Member McElynn to approve the Second Reading of an Ordinance authorizing the execution of a quitclaim deed and waiver of reverter for real property located at 1508 Old Shell Road with TMS NO. R110 011 000 105a 0000. Motion approved without objection.

**17. FIRST READING OF AN ORDINANCE PROPOSING AMENDMENTS TO BEAUFORT COUNTY CODE OF ORDINANCES: CHAPTER 46, ARTICLE 11, SECTIONS 46.26 THROUGH 46.33**

**Motion:** It was moved by Council Member Howard, Seconded by Council Member McElynn to approve the First Reading of An Ordinance proposing amendments to Beaufort County Code of Ordinances: Chapter 46, Article 11, Sections 46.26 through 46.33.

**Discussion:** To see the full discussion click the link below.
https://beaufortcountysc.new.swagit.com/videos/122773

**Public Comment:**
Russel Baxley, CEO of Beaufort Memorial Hospital stated that this item is not just proposed changes to the ordinance but changes that will fundamentally change the operation of the Hospital and the procurement policy and recommending that the Hospital seek approval for expenditures over $500,000.00 yet the daily operations is over $670,000.00 and doesn't see the concern for the daily operations and finances of the Hospital. Referencing the section 46-43 that has been struck through to eliminate from the ordinance which states that the Ordinance shall not be changes without mutual consent. Wish that the two sides would sit down and try to discuss a way to update the ordinance the right way.

Steve Lawrence, Medical Director of the Emergency Department and Board Member stated that going from this agency model to this proposal of being a County regulated Hospital is a step back and if it isn't broke don't fix it. The Board is a very diverse group and the CEO draws from the experience of its members.

Dr. Eric Billings, Radiologist stated that the Hospital is running now better than ever.

Kurt Ellenberger, Chief of Staff and Board Member concurs that this administration at the Hospital is the best he has ever seen. Being a member of the Board there are deep concerns with the changes of the Ordinances and the Board is extremely qualified and engaged with the welfare of Beaufort County. The Hospital despite two hurricanes and a pandemic has thrived and has become more profitable.

Geneva Baxley, Register Nurse and foundation Board Member, the Hospital has thrived since the CEO has arrived in 2016. The Board Members courageously directed the Hospital through COVID and implementing many needs required for the pandemic. Implores the Council to open the lines of communication.

Billy Keyserling, Former Mayor, believes that this Ordinance is more than changing and is more about a relationship that is important than any community can have with an entity or form of government. Doesn't believe in lawsuits and it is the wrong way to start a conversation. If the Ordinance is 40 years old, it needs to be revised.

**Further Discussion by Council:** To see the full discussion click the link below.
https://beaufortcountysc.new.swagit.com/videos/122773

**Amended Motion:** It was moved by Council Member Rodman, Seconded by Council Member Cunningham to postpone first reading for sixty (60) days or next Council meeting on July 26, 2021. The motion passed 7:4

**The Vote** - Voting Yea: Council Member Rodman, Council Member Cunningham, Council Member Dawson, Council Member Glover, Council Member Hervochon, Council Member Lawson, Chairman Passiment. Voting Nay: Council Member Flewelling, Council Member Howard, Council Member McElynn, Council Member Sommerville. The motion passed 7:4.

David House, Chairman of the Board of Trustee's for Beaufort Memorial spoke about the lawsuit and stated that both sides need to have a discussion and resolve this. The lawsuit is not being removed but is amendable to removing it but there needs to be a discussion first.

**18. FIRST READING OF AN ORDINANCE FOR A ZONING MAP AMENDMENT/REZONING REQUEST FOR 5.23 ACRES (R100 027 000 042B 0000) AT 335 JOE FRAZIER RD FROM T2 RURAL TO T2 RURAL CENTER**

**Motion:** It was moved by Council Member Flewelling, Seconded by Council Member Sommerville To Approve The First Reading Of An Ordinance For A Zoning Map Amendment/Rezoning Request For 5.23 Acres (R100 027 000 042B 0000) At 335 Joe Frazier Rd From T2 Rural To T2 Rural Center.

**Discussion:** To see the full discussion click the link below.
https://beaufortcountysc.new.swagit.com/videos/122773

Billy Player and the other owner of the property spoke regarding the request for rezoning.

**The Vote** - Voting Yea: Council Member Flewelling, Council Member Sommerville, Council Member Cunningham, Council Member Hervochon, Council Member Lawson, Council Member McElynn, Council Member Rodman, Chairman Passiment. Voting Nay: Council Member Dawson, Council Member Glover, Council Member Howard. The motion passed 8:3.

**19. REQUEST FOR APPROVAL FOR THE COUNTY ADMINISTRATOR TO RETAIN SOUTH CAROLINA REVENUE AND FISCAL AFFAIRS OFFICE FOR SERVICES NEEDED REGARDING REDISTRICTING**

**Motion:** It was moved by Council Member Rodman, Seconded by Glover to approve the request for the County Administrator to Retain South Carolina Revenue and Fiscal Affairs Office for Services needed Regarding Redistricting. Motion approved without objection.

**20. CITIZEN COMMENTS**

Joyce Gibbs a/k/a Joyce Hamm: Additional information on comprehensive plan, requested documents at a few county buildings and the police were called. Requesting a joint meeting for Burton and St. Helena regarding Comprehensive plan. Has a problem with her tax bill and needs assistance with clearing up some discrepancies.

**30. ADJOURNMENT**

The meeting adjourned at 9:45PM

COUNTY COUNCIL OF BEAUFORT COUNTY

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

ATTEST:

_____
Sarah W. Brock, Clerk to Council
Ratified:

# ~ Proclamation ~

**Whereas,** Africans began arriving on the Sea Islands in the 1500s; and

**Whereas,** the population of these Africans increased as chattel enslavement grew in the 1600s; and

**Whereas,** these Africans began to engage with and in some instances created families with indigenous Americans in the region; and

**Whereas,** the descendants of this group are called "Gullah/Geechee"; and

**Whereas,** this group of self-sufficient people came together in 1999 throughout the Sea Islands and Lowcountry of the Carolinas, Georgia, and Florida to stand on their human rights to self-determination; and

**Whereas,** this group took one year to elect their own leader; and

**Whereas,** they elected and enstooled St. Helena Island native whose family roots also stem from Polowana and Dataw Islands, Queen Quet, Chieftess of the Gullah/Geechee Nation; and

**Whereas,** Queen Quet has served as the official "Head pun de Bodee" and spokesperson for Gullah/Geechees since July 2, 2000; and

**Whereas,** the 21st Anniversary of Gullah/Geechee Nation is being celebrated under the theme "Celebrating Gullah/Geechee Land & Living Legacy"; and

**Whereas,** we support the continuation of Gullah/Geechee cultural heritage and sustainability of the Gullah/Geechee Nation; and

**Now, therefore, be it resolved,** that Beaufort County Council does hereby proclaim the week of July 31 – August 8, 2021 as "Gullah/Geechee Nation Appreciation Week" and call upon all our citizens to celebrate with the citizens of the Gullah/Geechee Nation under the theme "Celebrating Gullah/Geechee Land & Living Legacy"

**Gullah / Geechee Nation Appreciation Week**

Dated this 26th Day of July

Joseph F. Passiment, Jr.
Beaufort County Council

Proposed

# BEAUFORT COUNTY COUNCIL
## AGENDA ITEM SUMMARY

**ITEM TITLE:**

First Reading of an Ordinance – Text Amendments To The Community Development Code (CDC): Article 5, Division 5.6, Sections 5.6.10; 5.6.20; 5.6.30; 5.6.40; 5.6.50; 5.6.80; 5.6.90; 5.6.100; 5.6.120; 5.6.160; and 5.6.170; Article 7, Division 7.2, Section 7.2.40; and Article 10, Sections 10.1.10; 10.1.30; 10.1.40; 10.1.50; 10.1.60; 10.1.70; 10.1.90; 10.1.120; 10.1.140; 10.1.150; 10.1.160; 10.1.190; and 10.1.200, to Update Definitions, Regulations, and Procedures for Signs and Sign Permits.

**MEETING NAME AND DATE:**

County Council Meeting July 26, 2021

**UPDATE: APPROVED by Planning Commission on July 8, 2021. Vote 7:0**

**PRESENTER INFORMATION:**

Thomas J. Keaveny, II, Esquire, Deputy County Attorney

Scott D. Bergthold, Esquire
Law Office of Scott D. Bergthold

**ITEM BACKGROUND:**

The Planning Department the Legal Department **and the Planning Commission** recommend that various sign provisions of the CDC be updated

**PROJECT / ITEM NARRATIVE:**

Third and final reading of proposed amendments to CDC provisions regarding signs

**FISCAL IMPACT:**

No fiscal impact to Beaufort County government is anticipated

**STAFF RECOMMENDATIONS TO COUNCIL:**

Amend the relevant portions of the CDC as recommended

**OPTIONS FOR COUNCIL MOTION:**

Accept or reject amendments to the CDC as recommended

****PREPARED BY COUNSEL- ATTORNEY-CLIENT PRIVILEGED****

**Summary – Proposed Revisions to Beaufort County Sign Regulations Community Development Code (CDC) Division 5.6 (Sign Standards), Division 7.2 (Sign Permit Review Procedures), and Article 10 (Definitions)**

- The U.S. Supreme Court, and federal appellate courts, have issued decisions in recent years affecting regulations governing signs, and the law in this area is developing

- The County Council has the power and authority to revise the sign regulations

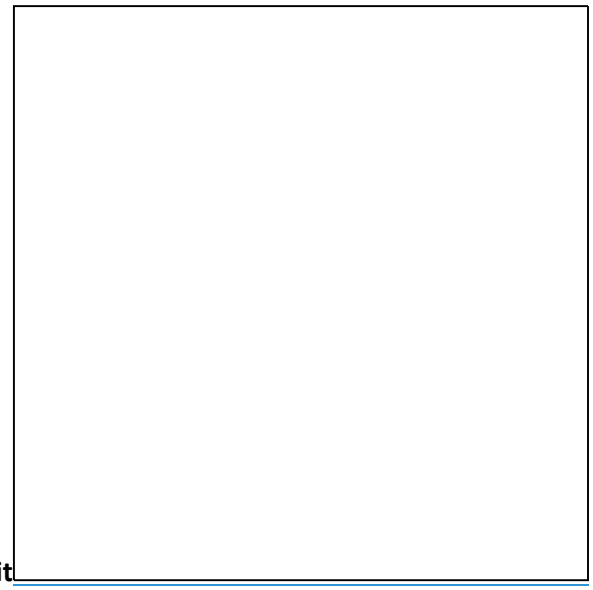
- Amendments have three main goals: (1) articulate more fully the bases for regulating signage, and the legislative record supporting such regulations; (2) modernize the standards and procedures for regulating signs; and (3) adopt new, and update older, definitions applicable to signs

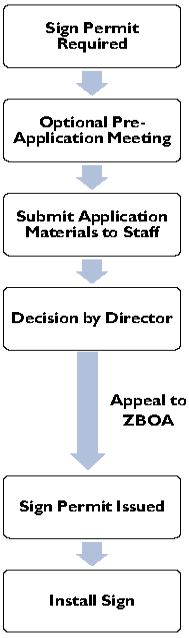
- Main proposed changes to the CDC:

  Article 10
  - Add relevant definitions, including definitions of "commercial billboard sign," "commercial message," "digital display," "off-premises sign," "on-premises sign," etc.
  - Update other sign definitions, including definitions of "directional sign," and "landscape wall sign"

  Article 7, Division 7.2
  - Distinguish between preliminary and final approval of a sign permit
  - Specify the information necessary to make a sign permit application complete
  - More specifically outline the time frames for processing applications
  - Set forth procedures for denial or revocation of a sign permit, and appeals therefrom

  Article 5, Division 5.6
  - Detail the County's governmental interests in controlling signage, including reducing driver distraction and fostering pedestrian and traffic safety, as well as serving the aesthetic interests of the community
  - Identifying judicial decisions and studies that relate to signs and support the County's governmental interests
  - Identifying certain signs exempt from regulation or from permitting requirements
  - Reinforce the County's prohibition on new commercial billboard signs and digital displays in certain locations
  - Elucidate the County's substitution policy whereby noncommercial messages may be substituted for commercial speech wherever commercial speech is permitted on a sign






**7.2.40 - Sign Permit**

A. **Purpose.** The purpose of this Section is to provide a uniform mechanism for reviewing applications for Sign Permits to ensure ~~all~~ that signs comply with the standards of Division 5.6 (Sign Standards).

B. **Applicability.** All signs, unless exempted in accordance with Section 5.6.10.B.4 or Section 5.6.10.B.5, shall obtain ~~a~~ Preliminary Approval of a Sign Permit in accordance with the requirements of this Section before being erected, replaced, relocated or altered.

C. **Sign Permit Procedure.**

1. **Pre-Application Conference is Optional.** See Section 7.4.20 (Pre-Application Conference).

2. **Application Submittal ~~and Acceptance~~.** ~~See Section 7.4.30 (Application Submittal and Acceptance).~~ An applicant for a sign permit shall submit to the office of the Director a completed application made on a form provided by the Director. The application shall be signed by the applicant and shall be notarized. An application shall be considered complete when it contains the following required information and/or items:

   a. The applicant's name, address, phone number, and email address.

   b. The name, address, phone number, email address, and business license number of the owner of the sign.

   c. The name and address of the owner of the property where the sign is (or is to be) located, the zoning district and tax map number and parcel number for the property, and the physical 911 address for the property.

   d. If the applicant does not own the property, the owner's written and signed authorization for the applicant to seek a permit to erect, replace, relocate or alter the sign as described in the application.

   e. The address of the location for the sign and the related Development/Zoning Permit number.

   f. The type of sign, the material of the sign, and statements of whether and how the sign would be illuminated.

   g. A statement of the sign's height, width, total area of sign, and number of faces.

   h. A statement of the name on the sign.

   i. A statement of an identifying number assigned to the sign by a governing authority, if any.

j. A statement of the value of the sign.

k. A statement of whether the proposed sign would replace an existing sign.

l. A statement of whether the sign owner plans to include the sign in its Business Inventory.

m. A statement of whether the proposed sign is a temporary sign, and if so, the date(s) being requested.

n. A form showing Business License Department approval concerning the sign manufacturer's business license number, the sign installer's business license number (if different from the sign manufacturer), and the sign permit applicant's business license number.

o. A copy of the certificate of occupancy issued for the property on which the sign is to be erected, replaced, relocated or altered.

p. A site plan of the property showing the proposed placement of the sign with respect to property lines, buildings, parking areas, driveways and any entrance island(s), and other improvements of the property. The sketch must also show the location and size of all existing signs on site. The sketch must also show the setbacks and separation distances for the sign.

q. A drawing of the proposed sign showing the sign, sign face, and sign copy area, as well as the shape, design, colors, height, and dimensions of the various sign elements.

r. Accurate color chips or Pantone Matching System (PMS) numbers included on the drawing of the proposed sign.

s. For a wall sign, a photograph of the actual building showing the wall for the proposed sign.

t. For a freestanding sign, a copy of the plans of any structure to support the proposed sign.

u. A description of the materials and construction for the sign, showing that the sign and any sign structure complies with the requirements of Division 5.6.

v. An application fee of 50¢ per square foot of the total area of the sign, or a minimum payment of $15 for each sign, payable to the Beaufort County Treasurer.

3. **Determination of Application Completeness. ~~Staff Review and Action.~~** ~~Applicable to a decision by the Director.~~ See Section 7.4.43~~0~~.F. ~~(Staff Review and Action). The Director's decision shall be based on the standards in Subsection 7.2.40.D.~~

4. **Issuance of Preliminary Approval of a Sign Permit.** Within thirty (30) days of the filing of a completed sign permit application, the Director or designee shall either issue Preliminary Approval of a sign permit to the applicant or issue a written notice of denial to the applicant. The Director or designee shall issue Preliminary Approval of a sign permit unless:

a. The applicant has failed to provide information required by Subsection 7.2.40.C.2 for issuance of a sign permit or has falsely answered a question or request for information on the application form.

b. The application fee has not been paid.

c. The applicant or the owner of the sign does not have a proper Development/Zoning Permit for the activity or land use actually occurring on the property.

d. The sign is located, or proposed to be located, on a premises where an establishment, land use, or business is operated in violation of, or in noncompliance with, its certificate of use and occupancy.

e. The permit sought is for a sign on a premises where an establishment, land use, or business is located, or is seeking to locate, contrary to the regulations of the Development Code.

f. The sign is prohibited under Division 5.6 (Sign Standards) of the Development Code.

g. The sign does not comply with the standards in Division 5.6 (Sign Standards) of the Development Code that govern the sign.

5. **Inspection; Issuance of a Sign Permit.** Upon Preliminary Approval of a Sign Permit, the applicant may erect, replace, relocate, or alter the sign authorized by the Preliminary Approval, shall complete the work, and shall request an inspection from the Codes Enforcement Officer before the Preliminary Approval expires under Subsection 7.2.40.D.[1] The Codes Enforcement Officer shall inspect the sign within ten (10) business days of receiving an inspection request. The Director or designee shall issue a Sign Permit to the applicant within five (5) business days of the inspection unless the sign work is incomplete or the sign as completed fails to comply with the Development Code or the permittee's building permit.[2]

6. **Grounds for Revocation of a Preliminary Approval or a Sign Permit.** The Director or designee is authorized to issue a written notice of revocation of a Preliminary Approval or of a Sign Permit if the approval or permit should have been denied under Subsection 7.2.40.C.4, or if the applicant/permittee erects, alters, or fails to maintain the sign in violation of the Development Code or the applicant/permittee's building permit. The Director or designee may also pursue any applicable remedies set forth in Subdivision 5.6.70.B. (Impoundment of Signs).

7. **Denial or Revocation of a Preliminary Approval or a Sign Permit.** When the Director or designee issues a written notice of denial or revocation of a Preliminary Approval or of a Sign Permit, the Director or designee shall immediately send such notice, which shall include the specific grounds under Subdivision 7.2.40.C.4 and/or Division 5.6 (Sign Standards) for such action, to the applicant/permittee by personal delivery, certified mail return receipt requested, or email. The notice shall be directed to the most current business address, other mailing address, or email address on file with the Director for the applicant/permittee. The notice shall also set forth the following: The applicant/permittee shall have thirty (30) days after receiving the written notice to deliver, at the office of the Director, a written Appeal application that specifies the grounds for the appeal. See Subsection 7.3.70.C.2. If the applicant/permittee does not deliver a written Appeal application within said thirty (30) days, the Director's written notice shall become a final decision on the thirty-first (31st) day after it is issued.

~~4~~8. **Appeal from Denial or Revocation.** The decision of the ~~Staff~~ Director or designee on a Preliminary Approval or a Sign Permit may be appealed to the ZBOA. See Section 7.3.70 (Appeals).

a. If the applicant/permittee (hereafter, "petitioner") timely delivers a written Appeal application in accord with Subsection 7.2.40.C.7 above, then the Director or designee shall, within fifteen (15) days after the delivery of the request, send a notice to the petitioner indicating the date, time, and place of the hearing before the ZBOA. The hearing shall be conducted not less than twelve (12) days nor more than forty (45) days after the date that the hearing notice is issued.

b. The public hearing (See Subsection 7.3.70.C.5 & C.6) shall be on the record of the appeal, with presentations limited to arguments on the record of the appeal as it relates to the grounds for appeal specified in the Appeal application. At the hearing, the petitioner and the Director shall have the opportunity to present all relevant arguments and to be represented by counsel. The hearing shall take no longer than one (1) day, unless extended at the request of the petitioner to meet the requirements of due process and proper administration of justice. The ZBOA may receive, consider, and adopt proposed written decisions tendered by the Director and/or the petitioner before or during the hearing. The ZBOA shall issue a final written decision, including specific reasons for the decision pursuant to this Development Code, to the Director and the petitioner within 15 business days after the hearing. The decision of the ZBOA may be appealed to the Circuit Court. (See Subsection 7.3.70.C.7.)

~~D. **Sign Permit Review Standards.** A Sign Permit shall be approved on a finding the applicant demonstrates the sign, as proposed, complies with the standards in Division 5.6 (Sign Standards).~~

~~E~~D. **Expiration.** Preliminary Approval of a Sign Permit shall automatically expire if the sign installation it authorizes is not commenced within six months after the date of approval, unless an extension of this period is authorized in accordance with Section 7.4.130 (Expiration of Development Approval).

~~F~~E. **Amendment.** A Preliminary Approval of a Sign Permit may be amended only in accordance with the procedures and standards established for its original approval.

Article 10: - Definitions

10.1.10 - A Definitions

**Access.** An area designated as a way for vehicles and pedestrians to enter or leave a property to a public or private street or alley.

**Access Easement.** A portion of a property used for access to another property and shown on a plat by a recorded easement declaration.

**Accessory Structure.** A structure physically detached from, secondary and incidental to, and commonly associated with a primary structure and/or use on the same site (see Division 4.2). Accessory Use. A subordinate use of a building, structure or lot that is customarily incidental to a principal use located on the same lot (see Division 4.2).

**Addition (to an existing building).** Any walled and/or roofed expansion to the perimeter of a building connected by a common load-bearing wall other than a firewall.

**ACI (Aggregate Caliper Inch).** A measure of the total combined number of inches of existing and proposed trees used to meet landscaping requirements. Caliper inch sizes for individual proposed trees are measured as indicated in the American Standard for Nursery Stock (ANSI 260.1-2004). Caliper inch sizes for existing trees are measured in diameter at breast height (DBH).

**Advertise or Advertisement.** Any form of public announcement intended to aid directly or indirectly, in the sale, use or promotion of a product, commodity, service, activity, or entertainment.

**AICUZ (Air Installations Compatible Use Zone).** The area surrounding MCAS—Beaufort as identified on the Zoning Map (Airport Overlay District/MCAS—Beaufort).

**Ancillary Structure/Ancillary Building.** See Accessory Structure.

**Apartment House.** See Section 5.1.120 (Building Type Standards).

**Aquaculture.** The cultivation of aquatic animals and plants, especially fish, shellfish, and seaweed, in natural or controlled marine or freshwater environments; underwater agriculture.

**Arcade.** A covered walkway with habitable space above often encroaching into the right-of-way (see Section 5.2.140).

**Archaeological Resources.** As defined in the Archaeological Resources Protection Act of 1979 (16 USC 470aa—470mm) Section (1): The term "archaeological resource" means any material remains of past human life that are of archaeological interest. Such determination shall include, but not be limited to: pottery, basketry, bottles, weapons, weapon projectiles, tools, structures or portions of structures, pit houses, rock paintings, rock carvings, intaglios, graves, human skeletal materials, or any portion or piece of the foregoing items. Nonfossilized and fossilized paleontological specimens, or any portion or piece thereof, shall not be considered archaeological resources, under this definition, unless found in an archaeological context. No item shall be treated as an archaeological resource under this definition unless such item is at least 100 years of age.

**Archaeological Site.** The area of the development identified as being listed in or having the potential for listing in the National Register of Historic Places. Effect and adverse effect mean as follows:

1. Effect means an undertaking has an effect on a historic resource when the undertaking may alter the characteristics of the resource that may qualify the resource for inclusion in the National Register of Historic Places.
2. Adverse effect means an undertaking in which the effect on a historic resource may diminish the integrity of the property's location, design, setting, materials, workmanship, feeling, or association.

**Architectural Features.** Exterior building elements intended to provide ornamentation to the building massing, including, but not limited to: eaves, cornices, bay windows, window and door surrounds, light fixtures, canopies, and balconies.

**Awning Sign.** Signs that are painted, screen printed, or appliquéd on an awning. (See Section 5.6.80).

10.1.20 - B Definitions

**Base Site Area.** An area of land calculated by subtracting various land areas from the gross site area of a lot. See Section 6.1.40.F (General Review Standards).

**Baseline Density.** The maximum density allowed on a receiving area property under baseline zoning and applicable overlay districts without participation in the Transfer of Development Rights (TDR) program (see Division 2:10).

**Baseline Zoning.** The zoning in effect on a receiving area property as of June 13, 2011. This term is specifically applied to the Transfer of Development Rights (TDR) Program (see Division 2:10).

**Berm.** An elongated earthen mound typically designed or constructed on a site to separate, screen, or buffer adjacent uses.

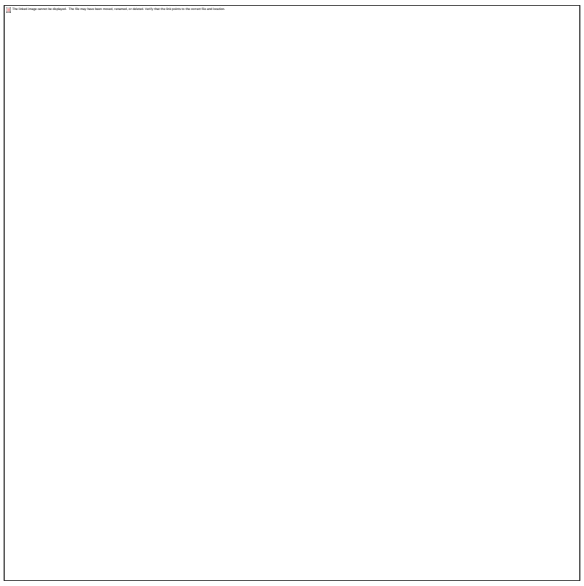
**Buffer, Perimeter.** An area of land along the perimeter of a development site that contains any combination of vegetative materials, berms, fences, and walls, and provides separation and screening to minimize potential adverse impacts between the development and dissimilar development on abutting property.

**Buffer, River.** An area of land along tidal waters or tidal wetlands extending inland 50 feet from the OCRM critical line. See also Critical Line.

**Building Envelope.** The area on a lot on which a structure can be erected as permitted by the front, side yard, and rear yard setbacks of the applicable zoning district.

**Building Type.** A structure defined by its combination of configuration, disposition and function.

**Build-to Line (BTL).** A line parallel to a property line or right-of-way where a building facade must be placed. The BTL may appear graphically on the regulating plan or be stated as a dimension from the property line or right-of-way. Figures 10.A and 10.B depict how to calculate the % of BTL Defined by a Building and % of Building at the BTL as may be required in the Building Form Standards. Minor deviations from the BTL are allowed for architectural features, recessed entries, and recessed balconies and do not count against the calculations of % of BTL Defined by a building or Building at the BTL.



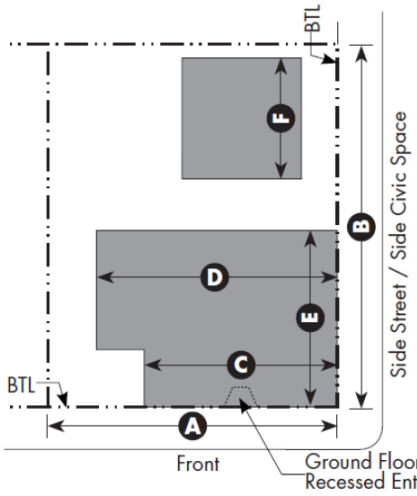



**Figure 10.A:**

**% of BTL Defined by a Building:**

**Front = C / A** **Side Street = E / B**

**% of Building at the BTL:**

**Front = C / D** **Side Street = E / ( E + F )**

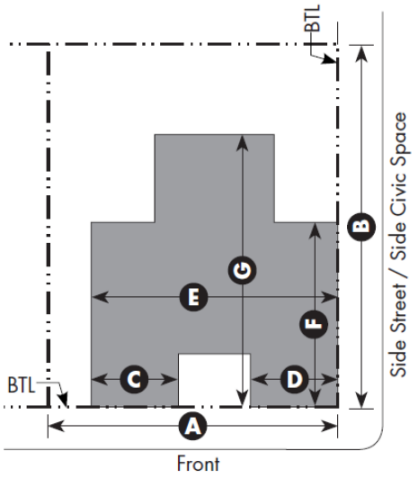



**Figure 10.B**

**% of BTL Defined by a Building:**

**Front = ( C + D ) / A**
**Side Street = F / B**

**% of Building at the BTL:**

**Front = ( C + D ) / E**
**Side Street = F / G**

10.1.30 - C Definitions

**Caliper.** Caliper - Diameter of the trunk measured six inches above the ground for trees up to and including four-inch diameter, and measured 12 inches above the ground for larger trees. This measurement is used for nursery-grown trees.

**Canopy Tree.** A tree that has an expected height at maturity greater than 30 feet and produces significant shade because it has a crown that is oval, round, vase-shaped, or umbrella-shaped.

**Carriage House.** This Building Type is a secondary accessory structure typically located at the rear of a lot. This structure typically provides either a small residential unit, home office space, or other small commercial or service use that may be above a garage or at ground level. This Building Type is important for providing affordable housing opportunities and incubating small businesses within walkable neighborhoods. Multiple Carriage Houses can be utilized to organize Family Compounds and Farmsteads. (See Section 5.1.40).

**Cash in-lieu.** The fee rate established by Beaufort County that can be paid for increased density on a receiving area property above baseline zoning.

**Ceiling Height, Ground Floor.** Height from finished floor to finished ceiling of primary rooms on the ground floor, not including secondary rooms such as bathrooms, closets, utility rooms and storage spaces.

**Ceiling Height, Upper Floor(s).** Height from finished floor to finished ceiling of primary rooms on the floor(s) above the ground floor, not including secondary rooms such as bathrooms, closets, utility rooms and storage spaces.

**Changeable Copy Sign**: A sign or portion thereof on which the copy or symbols change either through mechanical or electronic means, or manually through placement of letters or symbols on a panel mounted in or on a track system.

**Charrette.** A multiple-day collaborative design and planning workshop held on-site and inclusive of all affected stakeholders.

**Chicanes.** A means of slowing traffic through street design where alternating curb extensions create an S shaped curve in the street. They are categorized as horizontal deflectors - as opposed to vertical deflectors like speed bumps.

**Civic.** A term defining not-for-profit organizations that are dedicated to arts, culture, education, religious activities, recreation, government, transit, and public parking facilities.

**Civic Building.** A structure operated by governmental or not-for-profit organizations and limited to civic and related uses.

**Civic Space.** Civic space is a type of open space that is easily accessible and dedicated for public use or for common use of residents of a private community. Civic spaces generally do not include lands set aside for natural resource preservation, buffers, and stormwater management unless these lands are available for common use by the public or the residents of the community and that have amenities that encourage the use of these lands.

**Commercial.** A term defining workplace, office and retail uses collectively.

**Commercial Billboard Sign.** (Also known as an **off-premises sign**). A sign utilized for advertising a commercial establishment, activity, product, service or entertainment which is located, sold, produced, manufactured, available or furnished at a place other than on the property on which said sign is located. For purposes of this Division, noncommercial messages are never off-premises.

**Commercial Message.** Any sign wording, logo, or other representation or image that directly or indirectly names, advertises, or calls attention to a business, product, service, sale or sales event or other commercial activity.

**Common Yard.** A private frontage type where the main facade of the building has a large planted setback from the frontage line providing a buffer from the higher-speed thoroughfares. The front yard created remains unfenced and is visually continuous with adjacent yards, supporting a common landscape and working in conjunction with the other private frontages (See Section 5.2.40).

**Common Courtyard.** An entry court, forecourt or courtyard shared by multiple residential units or commercial spaces.

**Community Garden.** A civic/open space designed as a grouping of garden plots that are available to nearby residents for small-scale cultivation (see Division 2.8).

**Community Park.** A moderate sized civic/open space available for unstructured recreation and a limited amount of structured recreation (see Division 2.8).

**Conditional Use.** A use that is permitted in a zone subject to the standards specified for that use being met, as determined by the Director.

**Critical Line.** A line that is currently delineated by the South Carolina Office of Ocean and Coastal Resource Management (OCRM) or its successor that separates upland areas from coastal waters, tidelands and marshes.

**Critical Root Zone (CRZ).** An area surrounding a tree, both above and below ground, with a radius of 1.5 feet for every inch in trunk DBH.

**Critical Root Zone, Structural (SCRZ).** Similar to a Critical Root Zone, but with a smaller radius (see Section 5.11.90). Significant risk of catastrophic tree failure exists if roots within this area are damaged or destroyed.

10.1.40 - D Definitions

**DBH (Diameter at Breast Height).** The diameter (in inches) of the trunk of a tree (or, for multiple trunk trees, the aggregate diameters of the multiple trunks) measured 4 ½ feet from the existing grade at the base of the tree. This measurement is used for existing trees.

**Day-Night Average Noise Level (Ldn).** A measure for quantifying noise exposure based on the weighted sound level average over a 24-hour time period, with a ten decibel penalty applied to nighttime (10:00 p.m. to 7:00 a.m.) sound levels.

**Decibel (dB).** A unit of measure describing the loudness of sound.

**Density, Gross.** A measurement of intensity defined as the total number of dwelling units on a property divided by the Base Site Area, expressed as units per acre.

**Depth, Ground-Floor Commercial Space.** The distance from the street-facing facade to the rear interior wall of the ground-floor space available to a commercial tenant.

**Development.** This term includes the following:

1. All construction, modification, or use of any lot, parcel, building or structure.
2. All disturbances of land surfaces of 10,000 square feet or greater, including removal of vegetation, excavation, filling, and grading.
3. Any subdivision of a parcel or tract of land into two or more lots, parcels, or pieces for the purpose, whether immediate or future, of sale or transfer of title.

**Digital Display**. The portion of a sign made up of internally illuminated components capable of changing the display or message periodically. Digital displays may include but are not limited to LCD, LED, or plasma displays.

**Directional Sign.** ~~Secondary signage that provides guidance to entrances and parking locati~~A wall-mounted or freestanding sign placed within 30 feet of an entrance to, or exit from, an establishment or parking location.~~ons~~ (see Section 5.6.90).

**Director.** The Community Development Director or his or her duly appointed designee (see Section 7.5.60 for specific duties and responsibilities).

**Diseased Trees.** Those trees that may constitute a hazard to life and property or harbor insects or disease which represent a potential threat to other trees as determined by a Certified Arborist.

**Dooryard.** A private frontage type where the frontage line is defined by a low wall or hedge and the main facade of the building is set back a small distance creating a small dooryard. The dooryard may be raised, sunken, or at grade and is intended for ground floor residential in flex zones, live/ work, and small commercial uses (see Section 5.2.100).

**Duplex.** This Building Type is a small to medium-sized structure that consists of two side-by-side or two stacked dwelling units, both facing the street. This Type has the appearance of a medium to large single-family home and is appropriately scaled to fit within primarily single-family neighborhoods or medium-density neighborhoods (see Section 5.1.90).

**Dwelling.** A building, or portion thereof, used as a place of residence, containing living, sleeping, cooking, and sanitary facilities, excluding commercial lodging facilities.

## 10.1.50 - E Definitions

**Easement.** A portion of a property subject to an agreement between the property owner and another party that grants the other party the right to make limited use of that portion of the property for a specified purpose.

**Electronic Changeable Copy Sign**: A type of changeable copy sign on which the copy or symbols change automatically through electrical or electronic means.

**Encroachment.** Any architectural feature, structure or structural element, such as a gallery, fence, garden wall, porch, stoop, balcony, bay window, terrace or deck, that breaks the plane of a vertical or horizontal regulatory limit extending into a setback, beyond the build-to-line, into the public frontage, or above a height limit.

**Entablature.** The assemblage of horizontal moldings and bands supported by and located immediately above the columns of Classical buildings or similar structural supports in non-Classical buildings.

**Estate House.** This Building Type is a large detached structure on a large lot that incorporates one unit. It is typically located within a primarily single-family residential neighborhood in a more rural setting (see Section 5.1.50).

## 10.1.60 - F Definitions

**Facade.** The vertical surface of a building.

**Facade Zone.** The area between the minimum and maximum setback lines.

**Family.** Any number of individuals legally related through blood, marriage, adoption, or guardianship, including individuals placed for foster care by an authorized agency, or up to four unrelated individuals living and cooking together and functioning as a single housekeeping unit.

**Family Compound.** A form of traditional rural development that allows additional family dwelling units on, and/or subdivisions of, a single parcel of land owned by the same family for at least 50 years.

**Finish Level, Ground Floor.** Height difference between the ground floor finished floor of residential or commercial space, excluding lobbies and common-use areas, and the adjacent public walk. In the case of a loading dock frontage that serves as the public right-of-way, the floor finish level is the height of the walk above the adjacent street.

**Flag**: Any sign printed or painted on cloth, plastic, canvas, or other like material attached to a pole or staff and anchored along only one edge or supported or anchored at only two corners.

**Flex Space.** A room or group of internally connected rooms designed to accommodate an evolution of use over time in response to an evolving market demand. Typically designed to accommodate future commercial uses, while accommodating less intense short-term uses, such as residential or live/work, until the full commercial demand has been established.

**Flood Hazard Area.** The area designated by the Federal Flood Insurance Administration on official flood hazard area maps that is subject to a one percent or greater chance of flooding in any given year.

**Floor Area, Gross.** See Gross Floor Area.

**Floor Area Ratio (FAR).** A measure of the allowable size of building area on a lot compared to the size of the lot. The FAR is calculated by dividing the Gross Floor Area by the Base Site Area.

**Forecourt.** A private frontage type where the main facade of the building is at or near the frontage line and a small percentage is set back, creating a small court space (see Section 5.2.90).

**Forest, Maritime.** An indigenous forest community within close proximity to tidally influenced salt marshes and/or open water, also known as the South Atlantic Inland Maritime Forest, which is characterized by a canopy dominated by live oak, swamp laurel oak, southern magnolia, and cabbage palm.

**Forest, Mixed Upland, Young.** An area or stand of trees whose total combined canopy covers an area of one acre or more composed of canopies of trees having a DBH of less than 18 inches covering at least 60 percent of the area. This forest type is characterized as being southern mixed hardwood, beech-magnolia hammock, mesic oak-hickory, pine flatwoods (southeastern coastal plain subzeric longleaf pine), spruce-pine-mixed hardwood, and pine-saw palmetto flatwood communities. Pine plantations are not included.

**Forest, Mixed Upland, Mature.** An area or stand of trees whose total combined canopy covers an area of one acre or more composed of canopies of trees having a DBH of at least 18 inches or greater covering at least 75 percent of the area. Also, any stand or grove of trees consisting of eight or more individual trees having a DBH of at least 18 inches whose combined canopies cover at least 50 percent of the area encompassed by the grove. This forest type is characterized as being southern mixed hardwood, beech-magnolia hammock, mesic oak-hickory, pine flatwoods (southeastern coastal plain subzeric longleaf pine), spruce-pine-mixed hardwood, and pine-saw palmetto flatwood communities. Pine plantations are not included.

**Formally Disposed.** Composed in a formal arrangement, in a regular, classical, and typically symmetrical manner.

**Freestanding Signs: Freestanding signs encompass a variety of signs that are not attached to a building and have an integral support structure.** Three varieties include: Freestanding, Monument and Pole (see Section 5.6.120).

**Front.** The primary frontage(s) of a lot, determined as follows:

1. For lots with frontages along multiple thoroughfares, the frontage along the thoroughfare that is part of the lot's address will always be the Front. All other frontages may be considered to be side street frontages.
2. For lots with frontages along a thoroughfare and a civic space, the Front may be the frontage along either the thoroughfare or the civic space, or both frontages may be treated as Fronts, with

the following exception: the frontage along certain Civic Spaces may be required to be a Front, as per the standards in Division 2.7 (Civic and Open Space Types).

3. For lots with a frontage along either a thoroughfare or a Civic Space, but not both, that frontage is the Front.
4. Frontages along alleys, service drives, and parking drives may never be a front.

**Frontage.** A strip or extent of land abutting a thoroughfare, civic space or other public right-of-way.

1. **Private Frontage.** The area between the curb of the public right-of-way and the front or side façade (see Division 5.2).
2. **Public Frontage.** The area between the curb of the vehicular lanes and the frontage line (see Section 2.9.70).

**Frontage Line.** The property line(s) of a lot fronting a thoroughfare or other public way, or a civic space.

**Frontage Type.** The way in which a building engages the public realm. See Division 5.2 (Frontage Type Standards).

10.1.70 - G Definitions

**Gallery.** A private frontage type where the main facade of the building is at the frontage line and the gallery element overlaps the sidewalk. This Type is intended for buildings with ground-floor commercial uses and may be one or two stories (see Section 5.2.130).

**Garage.** A structure, or part thereof, used or intended to be used for the parking and storage of motor vehicles.

**Grand Tree.** An existing, exceptionally large tree as follows:

1. Live Oak (Quercus Virginiana), Black Walnut (Juglans Nigra), or Longleaf Pine (Pinus Palustris) equal to or greater than a diameter of 24 inches DBH;
2. Loblolly Pine (Pinus Taeda), Slash Pine (Pinus Ellitoi), and Shortleaf Pine (Pinus Echinata) equal to or greater than a diameter of 36 inches DBH;
3. All other non-invasive species of trees, not defined above, equal to or greater than a diameter of 30 inches DBH.

**Green.** A small civic/open space usually found in a residential area that is available for unstructured and limited amounts of structured recreation (see Division 2.8).

**Greenway.** A linear open space that may follow natural corridors providing unstructured and limited amounts of structured recreation (see Division 2.8).

**Ground Cover.** Low-growing plants that grow in a spreading fashion to form a more or less solid mat of vegetation, generally planted to provide decorative landscaping or permeable cover for bare earth that prevents soil erosion.

**Gross Floor Area (GFA).** The sum of the total horizontal areas of a building. The measurement of gross floor area is computed by applying the following criteria:

1. The horizontal square footage is measured from the outside face of all exterior walls.
2. Cellars, basements, attics, covered or uncovered porches, balconies and decks, enclosed storage or mechanical areas, mezzanines and similar structures shall be included as GFA wherever at least seven feet are provided between the finished floor and the ceiling.
3. No deduction shall apply for horizontal areas void of actual floor space; for example, elevator shafts and stairwells. The protected upper floors of open atriums and foyers shall not be included.

**Gross Site Area.** All land and water area contained within the surveyed boundaries of a lot or parcel.

**Guest House.** Living quarters within a detached accessory building located on the same premises with the main building, for use by guests of the occupants of the premises, such quarters may have no kitchen or cooking facilities and not rented or otherwise used as a separate dwelling (see Section 4.2.70).

10.1.80 - H Definitions

**Hedge.** A group of shrubs planted in line or in groups that forms a compact, dense, living barrier that demarcates an area from on-site or off-site views.

**Height.**

1. **Overall.** Overall building height shall be measured vertically from the natural grade or finished grade adjacent to the building exterior to the average height of the highest roof surface, excluding chimneys, cupolas, and spires.
2. **Eave/Parapet.** Building height to eave/parapet shall be measured from the eave or top of parapet to natural grade or finished grade at the lowest point adjacent to the building exterior, whichever yields the greatest height.

**Historic Resources.** According to the National Historic Preservation Act of 1966, as amended through 1992 (16 USC 470 et seq.) Section 101(a)(1)(A): The Secretary of the Interior is authorized to expand and maintain a National Register of Historic Places composed of districts, sites, buildings, structures, and objects significant in American history, architecture, archaeology, engineering, and culture. Criteria set forth by the Secretary of the Interior states that any district, site, building, structure, or object that is at least 50 years of age and is significant in American history, architecture, archaeology, engineering, and culture may be considered for inclusion on the National Register of Historic Places.

( Ord. No. 2016/18, 6-27-16 )

10.1.90 - I Definitions

**Illumination**. A source of any artificial or reflected light, either directly from a source of light incorporated in, or indirectly from an artificial source.

**Impervious Surface.** A surface that has been compacted or covered with a layer of material so that it is highly resistant to infiltration by water. It includes, but is not limited to, surfaces such as compacted clay, as well as most conventionally surfaced streets, roofs, sidewalks, parking lots, patios, swimming pool decks, and other similar structures.

**Incidental Sales.** Sales that are ancillary to the owner's primary business activity.

**Industrial/Agricultural Building.** This Building Type is a medium to large structure that accommodates retail, light industrial, agricultural and mixed uses that are too large to be appropriately housed in a residential building type. This Building Type is typically located on the edge of the commercial core within a rural crossroads or hamlet place type. The design and massing of this Building Type find their precedent in the vernacular packing sheds, barns, and warehouses of the Lowcountry (see Section 5.1.140).

**Infill.** Development or redevelopment of land that has been bypassed, remained vacant, or is underused in an otherwise developed area.

**Intensive Level Archaeological Survey.** A survey that will be based on a systematic approach to the entire tract, usually at 100-foot intervals, that are differentiated between having high or low potential for containing archaeological and historic resources. Topography and soil types are also taken into consideration to help determine the areas of high and low potential. In addition, subsurface activities such

as shovel tests are done, unless surface exposure is evident, and the materials are sifted. All of the findings, as well as a determination of eligible sites, are compiled into a final report.

**Internal Illumination.** A light source that is concealed or contained within the sign and becomes visible in darkness through a translucent surface. Digital displays and signs incorporating neon lighting shall not be considered internal illumination for the purposes of this Code.

**Invasive Species.** An introduced species (also called "non-indigenous" or "non-native") that adversely affects the natural habitat it invades by dominating and choking out indigenous species.

10.1.100 - J Definitions

No specialized terms beginning with the letter J are defined at this time.

10.1.110 - K Definitions

No specialized terms beginning with the letter K are defined at this time.

10.1.120 - L Definitions

**Landscape Strip, Perimeter.** Vegetative material associated with the perimeter landscaping required for a parking lot area.

**Landscape Wall Sign.** ~~Landscape wall~~A sign~~s are~~ attached to a freestanding wall~~s~~ that forms a perimeter or buffer for a landscape feature. ~~and are often used to mark a place of significance or the entrance to a location~~ (see Section 5.6.100).

**Ldn.** See Day-Night Average Noise Level.

**Liner Building.** An occupiable structure specifically designed to mask a parking lot or a parking structure from a frontage.

**Live/Work Unit.** An integrated housing unit and working space in a structure that has been designed or structurally modified to accommodate joint residential occupancy and work activity, which may accommodate a substantial commercial component with employees and walk-in trade.

**Lot.** An area designated as a separate and distinct parcel of land on a subdivision plat or deed as recorded with the Beaufort County Register of Deeds office.

**Lot Coverage.** The portion of a lot, expressed as a percentage, that is covered by any and all buildings including accessory buildings, excepting paved areas, uncovered parking areas, single level unenclosed covered parking areas (unless the roof space is used for any use or activity), unenclosed covered walkways, driveways, walks, porches, terraces, swimming pools, and landscape areas.

**Lot of Record.** A lot that existed prior to the date of adoption of this Development Code.

10.1.130 - M Definitions

**Main Street Mixed-Use Building.** A Building Type which consists of a small- to medium-sized structure, typically attached, intended to provide a vertical mix of uses with ground-floor commercial, service, or retail uses and upper-floor commercial, service, or residential uses. Smaller versions of this Type include live/work units (see Section 5.1.130).

**Mansion Apartment.** A Building Type which consists of a medium-sized structure with three to six side-by-side and/or stacked dwelling units, typically with one shared entry or individual entries along the front. This Type has the appearance of a medium-sized family home and is appropriately scaled to fit in

sparingly within primarily single-family neighborhoods or into medium-density neighborhoods (see Section 5.1.110).

**Manufactured Home.** A single family dwelling unit fabricated in an off-site manufacturing facility for installation at the building site, bearing a seal certifying that it was built in compliance with the Federal Manufactured Home Construction and Safety Standards Act of 1974, as amended.

**Mariculture.** Cultivation of marine organisms in their natural habitats, usually for commercial purposes.

**Maritime Forest.** See Forest, Maritime.

**Marquee Sign.** Marquee signs are vertical signs that are located either along the face where they project perpendicular to the facade; or at the corner of the building where they project at 45-degree angles (see Section 5.6.110).

**Memorandum of Agreement.** An agreement between the County and the applicant to avoid, reduce, or mitigate adverse effects on archaeological and historic properties, or to accept each effect in the public interest.

**Mitigation.** Measures taken to lessen the adverse impacts of a proposed land use or land disturbance activity.

**Mixed Upland Forest.** See Forest, Mixed Upland.

**Mixed-Use.** Multiple functions within the same building or the same general area through superimposition or within the same area through adjacency.

**Mixed-Use Project.** A development that combines both commercial and residential uses on the same site, typically with the commercial uses occupying the ground floor street frontage and the residential uses above.

**Mobile Home.** See Manufactured Home.

10.1.140 - N Definitions

**National Register of Historic Places.** The list of districts, sites, buildings, structures and objects significant in American history, architecture, archaeology, engineering, and culture, maintained by the Secretary of the Interior under authority of the National Historic Preservation Act.

**Naturally Disposed.** A preservation of the existing natural condition or a composition of elements arranged as they would appear in nature, with irregular shapes and asymmetry.

**Neckdowns.** Curb extensions at street intersections that reduce the roadway width from curb to curb. Neckdowns shorten crossing distances for pedestrians and tighten the curb radii at the corners therefore reducing the speeds of turning vehicles.

**Neon Sign.** A sign illuminated by a neon tube, or other visible light-emanating gas tube.

**Noncommercial message.** Any message on a sign that is not a commercial message.

**Nonconformities.** Land, structures, lots, signs, and other site features that were established before this Development Code was adopted or amended, and that do not conform to its terms and requirements. Nonconformities may be either legal or illegal.

1. **Legal Nonconformities.** Those nonconformities that were properly permitted and legally established but that no longer comply with the applicable provisions of this Development Code.

2. **Illegal Nonconformities.** Those nonconformities that were neither properly permitted nor legally established and that do not comply with the applicable provisions of this Development Code.

10.1.150 - O Definitions

**OCRM Critical Line.** See "Critical Line."

**Off-Premises Sign** (Also known as a **commercial billboard sign**). A sign utilized for advertising a commercial establishment, activity, product, service or entertainment which is located, sold, produced, manufactured, available or furnished at a place other than on the property on which said sign is located. For purposes of this Division, noncommercial messages are never off-premises.

**On-Premises Sign.** A sign utilized for advertising a commercial establishment, activity, product, service or entertainment which is located, sold, produced, manufactured, available or furnished on the property on which said sign is located.

**Open Space.** Land not covered by lots, buildings, accessory structures, driveways, parking areas, or impervious surfaces.

**Overstory Tree.** See "Canopy Tree."

10.1.160 - P Definitions

**Parcel.** See Lot.

**Passive Recreation.** Recreation requiring little or no physical exertion focusing on the enjoyment of one's natural surroundings. In determining appropriate recreational uses of passive parks, the promotion and development of resource-based activities such as fishing, camping, hunting, boating, gardening, bicycling, nature studies, horse-back riding, visiting historic sites, hiking, etc., shall be the predominate measure for passive park utilization.

**Peak Hour.** A one-hour period of time, usually occurring during the morning or evening commute periods, when traffic volume is at its highest.

**Pedestrian Shed.** An area centered on a major destination. Its size is limited by an average distance that may be traversed at an easy walking pace in a given amount of time from its center to its edge. Pedestrian sheds are useful for planning walkable areas. See Section 2.3.50 (Pedestrian Sheds).

**Permanent Sign**: Any one of the types of signs specifically listed within this Development Code as a permitted sign, excluding “temporary signs,” and which is installed and maintained in a fixed location for an indefinite period of time.

**Permitted Use.** A use that is allowed in a zone without the need for special administrative review and approval upon satisfaction of the standards and requirements of this Development Code.

**Planting Strip.** Areas intended for the placement of vegetation within the interior of parking lot areas or along street right-of-way edges, typically between the back of the curb and the inside edge of the sidewalk.

**Plaza.** A civic/open space designed for civic purposes and commercial activities in the more urban Transect Zones, generally paved and spatially defined by building frontages (see Division 2.8).

**Playground.** An open space designed and equipped for the recreation of children. A Playground may include an open shelter. Playgrounds may be included within other civic spaces (see Division 2.8).

**Pocket Park.** A small open space available for informal activities in close proximity to neighborhood residences (see Division 2.8).

**Pocket Plaza.** A small formal open space available for civic purposes and commercial activities. Pocket Plazas are typically hardscaped (see Division 2.8).

**Porch.** See Division 5.2 (Private Frontage Standards).

1. **Projecting Porch.** A porch which is open on three sides and all habitable space is located behind the setback line (see Section 5.2.50).
2. **Engaged Porch.** A porch which has two adjacent sides of the porch that are engaged to the building while the other two sides are open (see Section 5.2.60).
3. **Side Yard Porch.** A porch located on the side of the principle building with its front side in line with the front façade of the building (see Section 5.2.70).

**Primary Dune.** The major front dune immediately behind the beach.

**Principal Use.** The primary purpose for which a lot is occupied and/or used.

**Projecting Sign.** Projecting signs mount perpendicular to a building's facade. These signs are small, pedestrian scaled, and easily read from both sides (see Section 5.6.130).

( Ord. No. 2015/32, § 1, 11-9-15 )

10.1.170 - Q Definitions

**Qualified Personnel.** Professional consultants meeting the criteria set forth by the Secretary of the Interior, as well as the state historic preservation office and published in their Guidelines and Standards for Archaeological Investigation.

10.1.180 - R Definitions

**Regional Park.** For the purposes of this Code, an open space of at least 75 acres available for structured and unstructured recreation (see Division 2.8).

**Residential.** Premises used primarily for human habitation.

**Right-of-way.** An area of land not part of a lot that is dedicated for public or private use to accommodate a transportation system and necessary public utility infrastructure, including but not limited to water lines, sewer lines, power lines and gas lines.

**River Buffer.** See "Buffer, River."

**Rookery.** A vegetated area used by a colony of birds for nesting and rearing their young.

10.1.190 - S Definitions

**Security Quarter.** A dwelling unit associated with a nonresidential use in a nonresidential zone which is occupied by one or more employees who reside on-site and oversee or manage the operation or provide care, protection, or security for the property.

**Setback.** The mandatory clear distance between a property line and a structure.

**Shared Parking.** Any parking spaces assigned to more than one user, where different persons utilizing the spaces are unlikely to need the spaces at the same time of day.

**Shopfront.** A private frontage type where the main facade of the building is at or near the frontage line with an at-grade entrance along the public way (see Section 5.2.110).

**Shrub.** A woody plant, smaller than a tree, consisting of several small stems emerging from the ground, or small branches near the ground. Shrubs may be deciduous or evergreen.

**Sidewalk Sign.** A temporary, moveable sign type that may be used to announce daily specials, sales, or point to shops off the sidewalk (see Section 5.6.140).

**Sign**: Any device, structure, fixture, painting, emblem, or visual that uses words, graphics, colors, illumination, symbols, numbers, or letters for the purpose of communicating a message. Sign includes the sign faces as well as any sign supporting structure.

**Significant Resources.** Historic resources listed in or eligible for listing in the National Register of Historic Places.

**Small Lot House.** This Building Type is a small, detached structure on a small lot that incorporates one unit. It is typically located within a primarily single-family neighborhood in a walkable urban setting, potentially near a neighborhood main street (see Section 5.1.70).

**Small Wind Energy System.** Equipment that converts and then stores or transfers energy from the wind into usable forms of energy that is used primarily to reduce on-site consumption of utility power. Equipment includes any base, blade, foundation, generator, nacelle, rotor, tower, transformer, vane, wire, inverter, batteries or other component used in the system.

**Solar Energy Equipment.** Items including, but not limited to solar panels lines pumps, batteries, and mounting brackets framing around foundations used for, or intended to be used for, the collection of solar energy in connection with a building on residential municipal or commercial properties. Solar energy equipment, and its use, is accessory to the principal use of the property

**Special Use.** A use that may be permitted within a zone upon approval of a special use permit by the Zoning Board of Appeals (ZBOA). See Section 7.2.130 (Special Use Permits).

**Specified Anatomical Areas.** Those portions of the human body less than completely and opaquely covered including the human genitals and pubic region, buttocks, and female breasts below a point immediately above the top of the areola, and the human male genitals in a discernibly turgid state, even if completely and opaquely covered.

**Specified Sexual Activities.** Includes human genitals in a state of sexual stimulation or arousal; acts of human masturbation, sexual intercourse or sodomy; fondling or other erotic touching of human genitals, public region, buttock, or female breast.

**Specimen Tree.**

1. Understory trees as follows: dogwood, redbud, and southern magnolia greater than four inches dbh.
2. Canopy trees as follows: American holly, bald cypress, beech, black oak, black tupelo, cedar, hickory, live oak, palmetto, pecan, southern red oak, sycamore, or walnut with a dbh of greater than 16 inches dbh.
3. All other non-invasive trees with a dbh of 24 inches or greater.

**Sports Complex.** A regional scaled open space that consolidates heavily programmed athletic fields and associated facilities (see Division 2.8).

**Square.** An Open Space available for unstructured recreation and civic purposes. A Square is spatially defined by building Frontages. Its landscape shall consist of paths, lawns and trees, formally disposed (see Division 2.8).

**Storefront.** The portion of a frontage composed of the display window and/or entrance and its components, including windows, doors, transoms and sill pane, that is inserted into various frontage types, such as a shopfront or gallery, to accommodate retail uses.

**Stoop.** A private frontage type where the Facade is aligned close to the frontage line with the first story elevated from the sidewalk sufficiently to secure privacy for the windows. The entrance is usually an exterior stair and landing (see Section 5.2.80).

**Story.** An above-grade habitable floor level within a building.

1. **Half.** A conditioned space that rests primarily underneath the slope of the roof, usually having dormer windows.

**Street Tree.** A tree that is located within the public frontage.

**Structural Critical Root Zone (SCRZ).** See Critical Root Zone, Structural.

**Structure.** Anything constructed or erected, the use of which requires attachment to the ground, attachment to something located on the ground, or placement on the ground.

**Structure, Principal.** A structure in which is conducted the primary use of the lot on which the structure is situated.

**Stub-out.** A short road segment that is constructed to and terminates at a parcel line, and that is intended to serve current and future development by providing road connectivity between adjacent developments.

**Suspended Signs.** Suspended signs mount to the underside of beams or ceilings of a porch, gallery, arcade, breezeway or similar covered area. These signs are small, pedestrian scaled, and easily read from both sides (see Section 5.6.150).

**Subdivision.** The division of a lot, tract, or parcel of land by any means into two or more lots, tracts, parcels or other divisions of land for the purpose, whether immediate or future, of lease, transfer of ownership, or building development.

10.1.200 - T Definitions

**Tandem Parking.** A parking space deep enough to allow two cars to park, one behind the other. **TDR.** Transfer of Development Rights.

1. **Bank.** An intermediary authorized by Beaufort County to act on its behalf in the TDR program.
2. **Certificate.** The official document issued by the county identifying the number of TDRs owned by the holder of the TDR certificate.
3. **Intermediary.** Any individual or group, other than a sending area landowner or receiving area developer, which buys and sells TDRs.
4. **Option.** The option of a receiving area property owner to increase density above baseline zoning through participation in the TDR program.
5. **Program.** The rules and requirements of this article for the transfer of development rights from sending areas to receiving areas.
6. **Receiving Area.** Properties on which upzonings trigger the establishment of the TDR overlay district.
7. **Sending Area.** Areas within unincorporated Beaufort County that are eligible to sell TDRs.

**Temporary Parking Lots.** Parking lots that are not permanent, are only intended to fulfill a short-term need, and ultimately will be replaced by a permanent building or structure. Temporary Parking lots are not

subject to the parking location regulations and liner requirements for above grade parking in the building form standards, but must comply with all landscaping standards.

**Terrace.** A private frontage type where the main facade is at or near the frontage line with an elevated terrace providing public circulation along the facade. This Type can be used to provide at-grade access while accommodating a grade change (see Section 5.2.120).

**Townhouse.** A building type consisting of a small to medium-sized attached structure with three or more dwelling units placed side-by-side. This Type is typically located within medium-density neighborhoods or in a location that transitions from a primarily single-family neighborhood into a neighborhood main street (see Section 5.1.100).

**Traffic control device.** Any device used as a traffic control device and described and identified in the Manual on Uniform Traffic Control Devices approved by the Federal Highway Administration as the National Standard and as may be revised from time to time. A traffic control device includes those signs that are classified and defined by their function as regulatory signs (that give notice of traffic or parking laws or regulations), warning signs (that give notice of a situation that might not readily be apparent or that poses a threat of serious injury (e.g., gas line, high voltage, condemned building, etc.) or that provides warning of a violation of law (e.g., no trespassing, no hunting allowed, etc.)), and guide signs (that show route designations, directions, distances, services, points of interest, and other geographical, recreational, or cultural information).

**Transect.** A cross-section of the environment showing a range of different habitats. The rural-to-urban transect of the human environment is divided into multiple transect zones that describe the physical form and character of a place according to the intensity of its land use and urbanism.

**Transect Zone.** Transect Zones are zoning districts that primarily focus on mixed-use, walkable areas of the County and range in function and density from primarily residential areas with a mix of building types (e.g. T3 Hamlet Neighborhood), to medium density neighborhoods and other commercial and retail areas (e.g. T4-Hamlet Center).. See Division 3.2 (Transect Zones).

**Transit Station.** A lot or structure used for the purpose of parking, loading and unloading freight and passengers from train or bus transportation. May include parking facilities and other commercial amenities to service transit passengers.

**Transit Stop.** A location where buses stop to load and unload passengers. A transit stop may or may not include a shelter or a pullout.

**Tree, Deciduous.** A tree that drops its foliage annually before becoming dormant.

**Tree, Evergreen.** A tree with foliage that is not dropped, or that remains green throughout the year.

**Tree, Shade.** See Canopy Tree.

**Tree, Street.** See Street Tree.

10.1.210 - U Definitions

**Understory Tree.** A tree that has an expected height at maturity of no greater than 30 feet.

**Utilities.** Installations or facilities or means for furnishing to the public, electricity, gas, steam, communications, water, drainage, sewage disposal, or flood control, irrespective of whether such facilities or means are underground or above ground; utilities may be owned and operated by any person, firm, corporation, municipal department or board, duly appointed by state or municipal regulations. Utility or utilities as used herein may also refer to such persons, firms, corporations, departments, or boards.

10.1.220 - V Definitions

**Vegetation, Native.** Any indigenous tree, shrub, ground cover or other plant adapted to the soil, climatic, and hydrographic conditions occurring on the site.

**Village House.** A building type consisting of a medium-sized detached structure on a medium-sized lot that incorporates one unit. It is typically located within a primarily single-family residential neighborhood in a walkable urban setting, potentially near a neighborhood main street (see Division 5.1.60).

### 10.1.230 - W Definitions

**Wall Sign.** A sign that is flat against the facade of a building consisting of individual cut letters applied directly to the building or painted directly on the surface of the building (see Section 5.6.160).

**Wall Mural Sign.** A sign that is flat against the building facade and is located on a secondary facade, typically along a side street, alley, or passageway. These signs are typically painted directly on the building and contain a combination of text and graphic elements (see Section 5.6.170).

**Window Sign.** Window signs are professionally painted consisting of individual letters and designs, gold leaf individual letters and designs, applied directly on the inside of a window (see Section 5.6.180).

### 10.1.240 - X Definitions

No specialized terms beginning with the letter X are defined at this time.

### 10.1.250 - Y Definitions

**Yard Sign.** Yard signs are signs mounted on a porch or in a yard between the public ROW and the building façade (see Section 5.6.190).

### 10.1.260 - Z Definitions

No specialized terms beginning with the letter Z are defined at this time.

Division 5.6: - Sign Standards

**5.6.10 ~~–~~ Purpose, Scope, and Intent~~Applicability~~**

**A. Purpose.** ~~The purpose of this Division is to establish regulations for commercial and non-commercial signage. These regulations are intended to help reinforce the vibrant, mixed-use pedestrian environment.~~ .

1. Signs perform an important function in identifying and promoting properties, businesses, services, residences, events, and other matters of interest to the public. The intent of this Division is to regulate all signs within the County to ensure that they are appropriate for their respective uses, in keeping with the appearance of the affected property and surrounding environment, and protective of the public health, safety, and general welfare.
2. The County Council specifically finds that these sign regulations are narrowly tailored to achieve the compelling and substantial governmental interests of traffic safety and aesthetics, and that there is no other way for the County to further these interests.
3. Article XII, Section 1 of the South Carolina Constitution provides that "[t]he health, welfare, and safety of the lives and property of the people of this State and the conservation of its natural resources are matters of public concern." Implementing the South Carolina Constitution is a compelling governmental interest.
4. The County finds that these sign regulations are necessary to achieve the overarching goal of the County's Comprehensive Plan of "promoting safe and healthy communities that preserve and build on the County's unique sense of place."
5. In accordance with the U.S. Supreme Court's cases on sign regulations, the regulations in this Division are not intended to regulate or censor speech based on its content or viewpoint, but rather to regulate the secondary effects of speech that may adversely affect the County's substantial and compelling governmental interests in preserving scenic beauty and community aesthetics, and in vehicular and pedestrian safety in conformance with the First Amendment. These cases and their holdings include, but are not limited to:
    a. Reed v. Town of Gilbert, U.S., 135 S. Ct. 2218, 192 L. Ed. 2d 236 (2015) on the topic on noncommercial temporary signs;
    b. Metromedia, Inc. v. City of San Diego, 453 U.S. 490 (1981) on the topic of commercial signs and off premise signs;
    c. City of Ladue v. Gilleo, 512 U.S. 43 (1994) on the topic of political protest signs in residential areas;
    d. Linmark Assocs., Inc. v. Township of Willingboro, 431 U.S. 85 (1977) on the topic of real estate signs in residential areas;
    e. Burson v. Freeman, 504 U.S. 191 (1992) on the topic of election signs near polling places;
    f. Central Hudson Gas & Electric Corp. v. Public Service Commission, 447 U.S. 557 (1980) on the topic of regulation of commercial speech; and
    ~~a.~~ City Council v. Taxpayers for Vincent, 466 U.S. 789 (1984) on the topic of signs on public property.
    g.
6. Specific legislative Intent. More specifically, the sign regulations in this Division are intended to:
    a. Encourage the effective use of signs as a means of communication in the County;
    b. Ensure pedestrian and traffic safety;
    c. Minimize the possible adverse effects of signs on nearby public and private property;

d. Lessen the visual clutter that may otherwise be caused by the proliferation, improper placement, illumination, animation, excessive height, and excessive area of signs which compete for the attention of pedestrian and vehicular traffic and are not necessary to aid in wayfinding; and

e. Regulate signs in a manner so as not to interfere with, obstruct the vision of, or distract motorists, bicyclists or pedestrians.

7. The County Council relies on judicial decisions, studies, and reports relevant to these regulations.

**B. ~~Applicability~~Scope.**

1. The provisions of this Division shall govern the number, size, location, and character of all signs allowed under the terms of this Division. No signs shall be allowed except in accordance with the provisions of this Division.~~These sign regulations apply to all signs within the County.~~

2. The provisions of this Division do not regulate the message content (sign copy) of any sign. ~~(sign copy), regardless of whether the message content is commercial or non-commercial.~~

3. ~~Sign installation shall require Sign Permit approval in compliance with this Code.~~ All signs, unless exempt from regulation under Section 5.6.10.B.4, or exempt from the permitting requirement under Section 5.6.10.B.5, shall obtain a Preliminary Approval of a Sign Permit in accordance with the requirements of Section 7.2.40 before being erected, replaced, relocated or altered.

4. Signs exempt from regulation. The following signs are exempt from regulation under this Division:

   a. A public notice or warning required by a federal, state, or local law, regulation, or ordinance, or issued pursuant to same.

   b. Public signage within the right-of-way including

      (1) public signs erected by or on behalf of a governmental agency to convey public information, identify public property, post legal notices, or direct or regulate pedestrian or vehicular traffic;

      (2) Bus stop signs installed by a public transit company;

      (3) Informational signs of a public utility regarding its lines, pipes, poles or other facilities; or

      (4) Emergency warning signs erected by a governmental agency, a public utility company, or a contractor doing authorized work within the public right-of-way.

   c. Wayfinding, directional, hazard, life safety, traffic control device, construction control, and similar signs authorized, required or installed by a government agency on private property.

5. Signs and activities exempt from permitting requirements. The following signs and activities are exempt from permitting requirements under Section 7.2.40, but shall comply with the standards of this Division, as applicable:

   ~~c~~a. A non-electrical sign ~~nameplate, displaying only the name and/or address of the occupant, and which~~ that is ~~one~~ two square foot or less in area and is located within three feet of an entry door or within fifteen feet of a driveway.

   ~~d. A clock, thermometer, barbershop pole, or similar device where not part of a permanent sign.~~

   ~~e~~b. ~~A F~~flags that meet the following conditions:~~of any nation, state or city.~~

      (1) Location. Flags and flagpoles shall not be located within any right-of-way

      (2) Height. No more than 30 feet

      (3) Number. No more than two (2) flags per lot in residential districts, no more than three flags per lot in all other districts

(4) Size. No more than 24 square feet in residential districts; no more than 35 square feet, in all other districts

~~f~~c. A display behind a shop front window.

~~g. A sculpture, statue, relief, mosaic or mural which is a work of art or otherwise decorative and does not contain a commercial message or symbol.~~

~~h. A property address number consisting of numerals or letters 12 inches or less in height.~~

~~i~~d. One or more non-illuminated ~~for sale, for rent, or for lease~~ signs, not exceeding a combined total of six square feet in sign face area, located on private property.

~~j. Official notices issued by any court, public agency or similar official body.~~

~~k. Private street or road name signs.~~

~~l~~e. The activity of changing ~~of~~ characters on any ~~moveable~~ changeable copy sign.

~~m. Signs prohibiting hunting, fishing, loitering, trespassing, and similar signs not exceeding one square foot in area.~~

~~n. One temporary, in-season, agricultural products sales sign not exceeding ten square feet in total area.~~

**C. Intent.**

1. Substitution of noncommercial speech for commercial speech. Notwithstanding any provisions of this Division to the contrary, to the extent that this Division allows a sign containing commercial content, it shall allow a noncommercial sign to the same extent. The noncommercial message may occupy the entire sign area or any portion thereof, and may substitute for or be combined with the commercial message. The sign message may be changed from commercial to noncommercial, or from one noncommercial message to another, as frequently as desired by the sign's owner, provided that the sign is not prohibited and the sign continues to comply with all requirements of this Division.

2. Severability.

a. Generally. If any part, section, subsection, paragraph, subparagraph, sentence, phrase, clause, term, or word of this Division, or any application thereof, is declared unconstitutional by any court of competent jurisdiction, this declaration of unconstitutionality or invalidity shall not affect any other part, section, subsection, paragraph, subparagraph, sentence, phrase, clause, term, or word of this Division, or any other application thereof.

b. Severability where less speech results. This subsection shall not be interpreted to limit the effect of Subsection 5.6.10.C.2.a. above, or any other applicable severability provisions in the code of ordinances or any adopting ordinance. The County Council specifically intends that severability shall be applied to these sign regulations even if the result would be to allow less speech in the County, whether by subjecting currently exempt signs to permitting or by some other means.

c. Severability of provisions pertaining to prohibited signs. This subsection shall not be interpreted to limit the effect of Subsection 5.6.10.C.2.a. above, or any other applicable severability provisions in the code of ordinances or any adopting ordinance. The County Council specifically intends that severability shall be applied to Section 5.6.20 "Prohibited Signs," so that each of the prohibited sign types listed in that section shall continue to be prohibited irrespective of whether another sign prohibition is declared unconstitutional or invalid.

Severability of prohibition on off-premises signs. This subsection shall not be interpreted to limit the effect of Subsection 5.6.10.C.2.a. above, or any other applicable severability provisions in the code of ordinances or any adopting ordinance. If any or all of Division 5.6 "Sign Standards," or any other provision of the Community Development Code is declared

unconstitutional or invalid by any court of competent jurisdiction, the County Council specifically intends that the declaration shall not affect the prohibition on off-premises signs in Section 5.6.20 “Prohibited Signs.”

d.

5.6.20 - Prohibited Signs

The following signs are prohibited when visible from a publically maintained street, road, or highway, whether county, state, or federal:

A. Off-premises signs / Commercial billboard signs ~~and pole signs~~;

B. Flashing, animated, or scrolling signs;

C. Internally illuminated signs;

D. Moving signs or signs having moving parts;

E. Signs using the words "stop," "danger" or any other word, phrase, symbol or character in a manner that might mislead, confuse or distract a vehicle driver;

F. Except, as otherwise provided, no sign, whether temporary or permanent, except by a public agency, is permitted within any street or highway right-of-way;

G. Signs painted on or attached to trees, fence posts, rocks or other natural features, telephone or utility poles, or painted on or projected from the roofs of buildings visible from any public thoroughfares;

H. No sign or any kind shall be erected or displayed in any salt marsh areas or any land subject to periodic inundation by tidal seawater;

I. Portable commercial signs or vehicle movable commercial signs except business identification painted on or magnetically attached to business cars and trucks;

J. Abandoned or dilapidated signs; and

K. All signs and supporting structures in conjunction with a business or use which is no longer in business or operation unless a new permit for the sign has been obtained.

5.6.30 - General Sign Requirements

The following shall apply to all signs:

A. **Visibility.** The area around the sign shall be properly maintained clear of brush, trees and other obstacles so as to make signs readily visible.

B. **Finish.** Reverse sides of signs must be properly finished with no exposed electrical wires or protrusions and shall be of one color.

C. **Illumination and Glare.**

1. If a sign is to be illuminated, a stationary light directed solely at the sign shall be used. No more than two stationary lights may be used for any one sign face.

a. Illuminated signs shall not have a light reflecting background, but may use reflective lettering.

b. Monument signs may be illuminated with reverse channel/halo lighting or one up-light per side. The up-light must have a shield to direct light at sign.

c. Wall signs may be illuminated with reverse channel/halo lighting or down lighting using a cut-off fixture. The brightness of the sign shall not exceed 30 foot-candles at any one point on the sign face.

d. Colored lamps or lights are not permitted.

e. Externally mounted neon signs are permitted in T4 Hamlet Center, T4 Hamlet Center Open, and T4 Neighborhood Center. Internally mounted neon signs are permitted in all zones.

f. ~~LED Message board signs are not permitted~~Digital displays are prohibited, except on a parcel containing a ~~for~~ school~~s~~, house~~s~~ of worship, gasoline ~~price signs~~station, ~~and~~ or a theater~~signs advertising films and live entertainment which change on a regular basis~~. ~~These items~~Digital displays shall be included in the overall maximum allowed square footage of the sign. The text and graphics on ~~an electronic reader board~~a digital display may be changed no more frequently than every thirty (30) minutes. Lighting levels are limited to a maximum luminous intensity of 200 nits (candela per square meter), full white mode, from sunset to sunrise.

2. Sign illumination shall be placed and shielded so as not to directly cast light rays into nearby residences, sleeping accommodations, or in the eyes of vehicle drivers. Light sources used to illuminate signs shall not:

   a. Be visible from a street right-of-way.

   b. Cause glare or reflection that is hazardous to pedestrians or vehicle drivers.

   c. Create a nuisance for adjacent properties.

3. Electrical requirements pertaining to signs shall be as prescribed under the adopted National Electrical Code for the County.

D. **Location.**

1. All signs shall be erected so as not to obstruct or impair driver vision at ingress-egress points and intersections.

2. Directional, landscape, pole/monument and yard signs shall not be located within or encroach into public rights-of-way.

3. Signs shall not be attached to any public utility pole, structure or street light, tree, fence, fire hydrant, bridge, curb, sidewalk, park bench, statue, memorial, or other location on public property, except those signs approved as part of a temporary use permit on County property, or banner signs permitted by Beaufort County on light poles in certain zones within the County.

4. Signs located in buffers shall be positioned so as to have the least impact on existing trees within the buffer. If trees must be removed, specimen trees must be replaced inch for inch. All other trees must be replaced tree for tree. The replacement trees shall be planted within the buffer(s) on site with the front buffer taking precedence for plant back. The sign shall be landscaped with shrubs and groundcovers with annuals and perennials used only as accents.

E. **Design.** Sign design and materials shall be as follows:

1. Signage, including overall design, materials, colors and illumination must be compatible with the overall design of the main building. Details of the sign, such as typeface and layout, shall be subject to minimal review only to prevent obtrusive designs.

2. An integrated sign system shall be required for all new commercial and residential subdivisions, and land developments. These systems shall be reviewed for materials, colors, shapes, sizes, compatibility with architecture and establishment of unity of design for the proposed development.

3. **Signs used for Business Identification/Advertisement.** The business name shall be the predominant feature of the sign. Graphic accents (items and info other than the business name) may not dominate the sign face.

4. **Sign Colors.**

   a. Bright, primary, or neon colors are not permitted. This includes corporate logos using these colors. A sign color guide outlining approvable colors for accents and letters shall be maintained by the Director.

   b. Sign backgrounds are to be a neutral base color. Neutral base colors are those that do not provide a contrast to the remaining sign elements such as letters and accents. Neutral base colors typically would match or be a shade of the sign foundation and/or building materials and color. The use of a sign background color to provide contrast to accent color and letter color is not permitted.

5. **Sign Shapes.** Signs shall be composed of standard geometric shapes and/or letters of the alphabet only and shall not be in the shape of a sponsor motif (bottles, hamburgers, human or animal figures, etc.). All elements of a sign structure shall be unified in such a way not to be construed as being more than one sign. Outcrops on signs are prohibited.

F. **Sign Measurement Criteria.**

1. **Sign Area Measurement.** Sign area for all sign types is measured as follows:

   a. Sign copy mounted, affixed, or painted on a background panel or surface distinctively painted, textured, or constructed as a background for the sign copy, is measured as that area contained within the sum of the smallest rectangle(s) that will enclose both the sign copy and the background. See figure on the next page.

   b. Sign copy mounted as individual letters or graphics against a wall, fascia, mansard, or parapet of a building or surface of another structure, that has not been painted, textured, or otherwise altered to provide a distinctive background for the sign copy, is measured as a sum of the smallest rectangle(s) that will enclose each word and each graphic in the total sign. See figure on next page.

   c. Sign copy mounted, affixed, or painted on an illuminated surface or illuminated element of a building or structure, is measured as the entire illuminated surface or illuminated element, which contains sign copy. Such elements may include, but are not limited to, lit canopy fascia signs; spanner board signs; and/or interior lit awnings. See figure on next page.

   d. Multi-face signs are measured as follows:

      (1) **Two face signs:** if the interior angle between the two sign faces is 45 degrees or less, the sign area is of one sign face only. If the angle between the two sign faces is greater than 45 degrees, the sign area is the sum of the areas of the two sign faces. See figure on next page.

      (2) **Three or four face signs:** the sign area is 50 percent of the sum of the areas of all sign faces. Signs with greater than four faces are prohibited. See figure on next page.

2. **Sign Height Measurement.** Sign height is measured as the vertical distance from the average elevation between the highest point and the lowest point of finished grade at the base of a sign to the top of the sign. Refer to sections 5.6.80 through 5.6.190 for height measurements by type of sign.

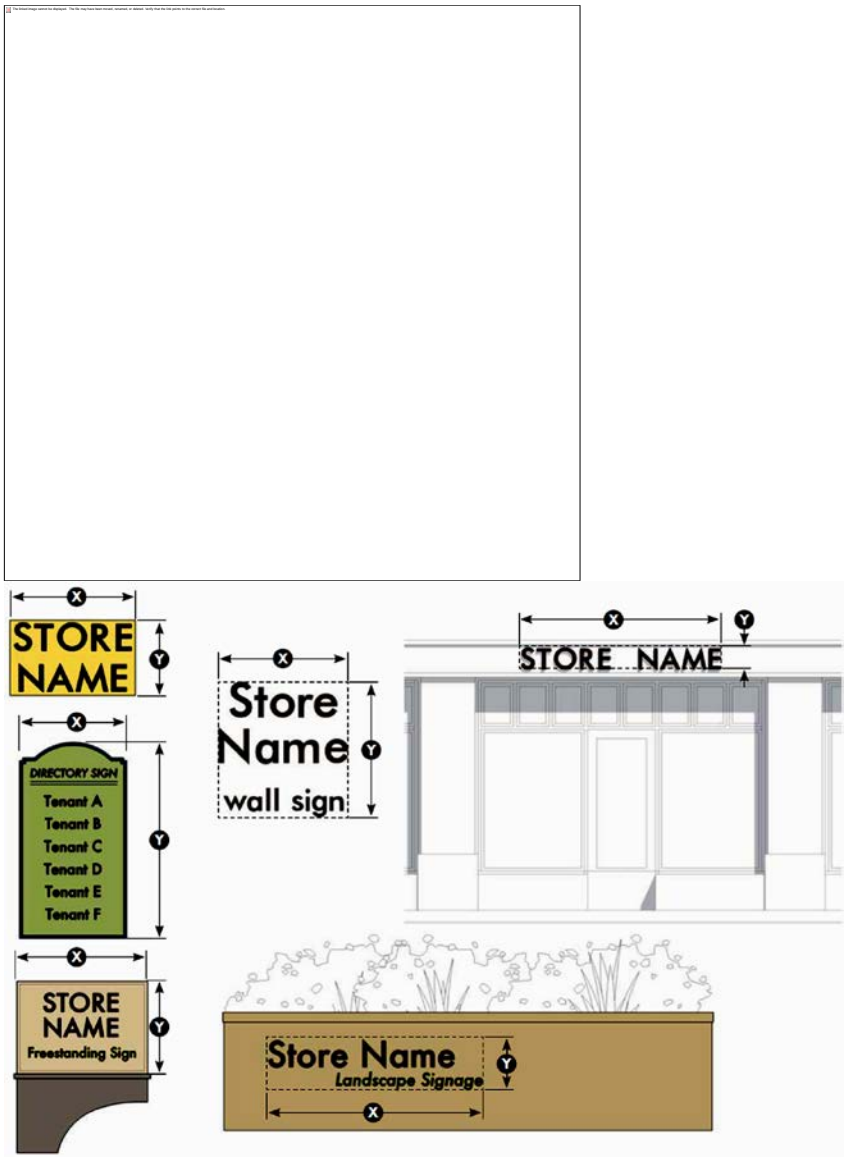



*Figure 5.6.30.F: Sign Area for Signs on Background Panel and Signs with Individual Letters*

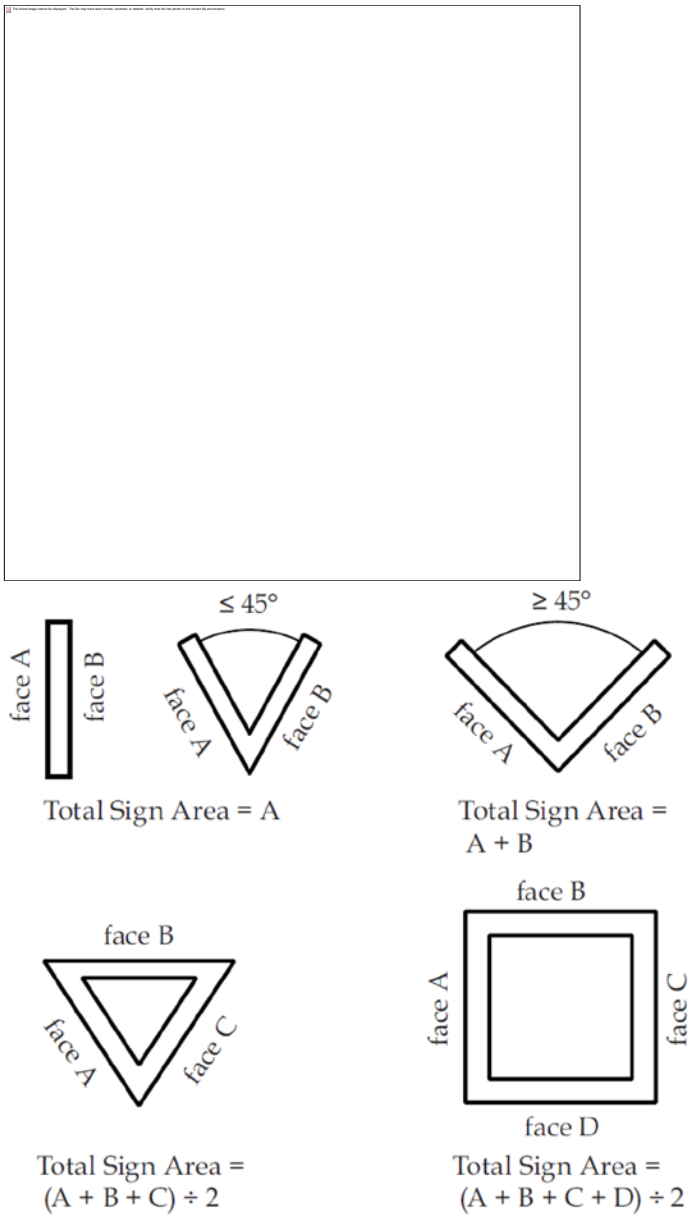



*Figure 5.6.30.A: Sign Area for Multi-face Signs or Free Form Signs*

G. **Materials.**

1. The finish materials to be used for signage throughout all districts shall be as follows:
   a. Wood: painted, stained, or natural;
   b. Metal: copper, brass, or galvanized steel;
   c. Stucco, tabby, or brick; or
   d. Any other material that is finished or painted and looks like wood.
2. Monument signs shall be constructed of materials compatible with the overall design of a development and/or building. This includes the sign face materials as well as the sign foundation.

( Ord. No. 2015/32, § 1, 11-9-15 )

5.6.40 - Permanent Sign Types for Buildings, Businesses and Communities

A. Table 5.6.40.A (Sign Types) establishes a variety of permanent sign types as well as the permitted zoning district for each type.

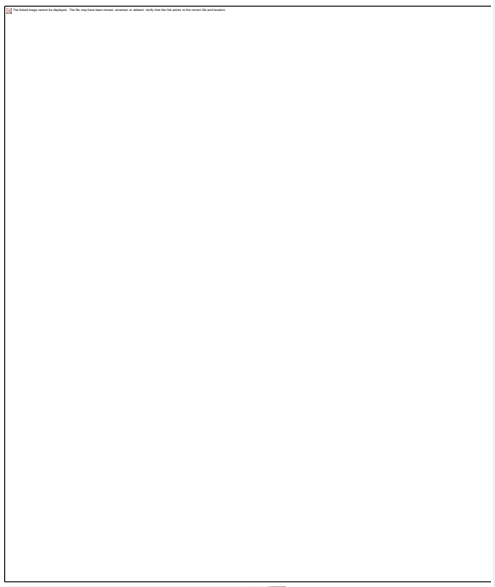
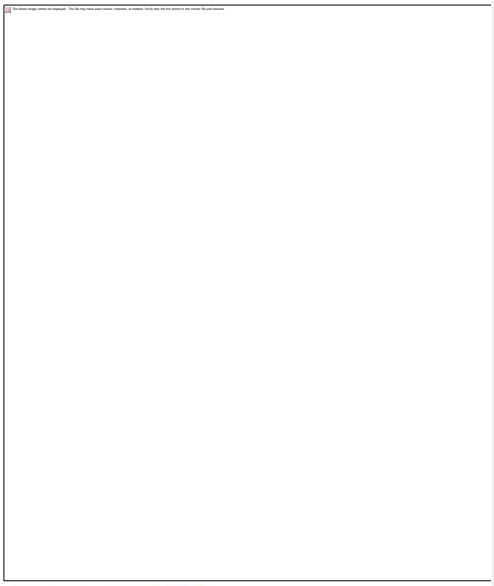
B. All businesses and community types located in the County may choose to utilize a combination of the sign types permitted in Table 5.6.40.A (Sign Types) in accordance with the limitations prescribed in Table 5.6.40.B (Aggregate Sign Area).

Table 5.6.40.A: Sign Types

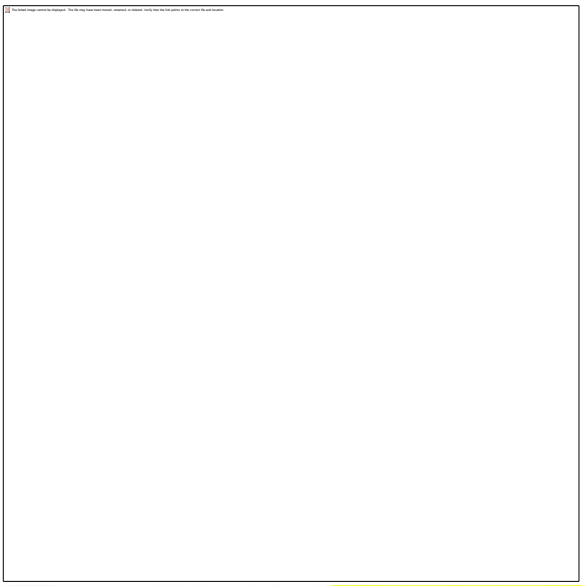
| Specific Sign Type | Illustration | Permit | Standards |
|---|---|---|---|
| **Awning Signs:** Awnings are a traditional storefront fitting and can be used to protect merchants' wares and keep storefront interiors shaded and cool in hot weather. |  | T1 T2 T3 T4 C3 C4 C5 S1 | 5.6.80 |

| | | | |
|---|---|---|---|
| **Directional Signs:** ~~Directional signs provide guidance to entrances and parking locations~~A wall-mounted or freestanding sign placed within 30 feet of an entrance to, or exit from, an establishment or parking location. |   | T1 T2 T3 T4 C3 C4 C5 S1 | 5.6.90 |
| **Landscape Wall Sign:** A sign attached to a freestanding wall that forms a perimeter or buffer for a landscape feature.~~Landscape wall signs are attached to freestanding walls and are often used to mark a place of significance or the entrance to a location~~. |   | T1 T2 T3 T4 C3 C4 C5 S1 | 5.6.100 |

| | | | |
|---|---|---|---|
| **Marquee Signs:** Marquee signs are vertical signs that are located either along the face where they project perpendicular to the facade; or at the corner of the building where they project at 45 degree angles. |  | T1 T2 T3 T4 C3 C4 C5 S1 | 5.6.110 |
| **Freestanding Signs:** Freestanding signs encompass a variety of signs that are not attached to a building and have an integral support structure. Three varieties include: Freestanding, Monument and Pole. |  | T1 T2 T3 T4 C3 C4 C5 S1 | 5.6.120 |

| | | | |
|---|---|---|---|
| **Projecting Signs:** Projecting signs mount perpendicular to a building's facade. These signs are small, pedestrian scaled, and easily read from both sides. Syn. Blade Sign. |  <br>  |  <br>T1 T2 T3 T4<br>C3 C4 C5 S1 | 5.6.130 |

Key



# Permitted

# Permitted with Conditions

# Sign Type Not Allowed

| | | | |
|---|---|---|---|
| **Sidewalk Signs:** Sidewalk signs provide secondary signage and may be used to announce daily specials, sales, or point to shops off the sidewalk (i.e., a shop located along a passageway). |  | T1 T2 T3 T4<br>C3 C4 C5 S1 | 5.6.140 |
| **Suspended Signs:** Suspended signs mount to the underside of beams or ceilings of a porch, gallery, arcade, breezeway or similar covered area. These signs are small, pedestrian scaled, and easily read from both sides. |  | T1 T2 T3 T4<br>C3 C4 C5 S1 | 5.6.150 |

| | | | |
|---|---|---|---|
| **Wall Signs:** Wall signs are signs flat against the facade consisting of individual cut letters applied directly to the building or painted directly on the surface of the building. |  | T1 T2 T3 T4 C3 C4 C5 S1 | 5.6.160 |
| **Wall Mural Signs:** Wall mural signs are flat against the facade and are located on a secondary facade, typically along a side street, alley, or passageway. These signs are typically painted directly on the building and contain a combination of text and graphic elements. |  | T1 T2 T3 T4 C3 C4 C5 S1 | 5.6.170 |

| | | | |
|---|---|---|---|
| **Window Signs:** Window signs are professionally painted consisting of individual letters and designs, gold leaf individual letters and designs, applied directly on the inside of a window. |  | T1 T2 T3 T4 C3 C4 C5 S1 | 5.6.180 |
| **Yard Signs:** Yard signs are signs mounted on a porch or in a yard between the public ROW and the building facade. |  | T1 T2 T3 T4 C3 C4 C5 S1 | 5.6.190 |
| Key | | | |


C. **Aggregate Sign Area.** Table 5.6.40.B (Aggregate Sign Area) conveys standards regarding the maximum amount of signage permitted on a building, a lot, or as part of a community. In order to establish appropriate parameters the sign types depicted in Table 5.6.40.A (Sign Types) are further classified as Building Attached or Building Detached signs. Depending upon the type and form utilized, Directional Signs and Yard Signs (indicated with an asterisk) may be characterized as either Building Attached or Building Detached signs.

1. *Building Attached* sign types include:
    a. Awning Signs
    b. Canopy Signs
    c. Directional Signs*
    d. Marquee Signs
    e. Projecting Signs
    f. Sidewalk Signs
    g. Suspended Signs
    h. Wall Signs
    i. Wall Mural Signs
    j. Window Signs
    k. Yard Signs*
2. *Building Detached* sign types include:
    a. Freestanding (Monument and Pole) Signs
    b. Directional Signs*

c. Landscape Wall Signs

d. Yard Signs*

| Table 5.6.40.B: Aggregate Sign Area | |
|---|---|
| Maximum Aggregate Sign Area | |
| Building Attached Signs | Building Detached Signs |
| Home Business | |
| One non-illuminated Attached Yard Sign, not more than six (6) square feet in area, may be placed on the property to advertise the business. | One non-illuminated Detached Yard Sign, not more than six (6) square feet in area, may be placed on the property to advertise the business. |
| Live Work | |
| Permitted signs may be sited on the principal frontage of the building or unit only and shall not be illuminated. The maximum aggregate sign area shall not exceed one (1) square foot per linear foot of principal frontage. | One non-illuminated Detached Yard Sign, not more than six (6) square feet in area, may be placed on the property to advertise the business. |
| Single-Family Neighborhood/Manufactured Home Community | |
| See Standards for Home Business and Live Work above. | One (1) Freestanding or Landscape Wall Sign, not to exceed 36 square feet, may be sited along the primary thoroughfare frontage at the primary vehicular entrance. |
| | One (1) Freestanding or Landscape Wall Sign, not to exceed 24 square feet, may be sited along each additional thoroughfare frontage at a vehicular entrance. |
| | Freestanding Directional Signs shall not count toward the maximum aggregate signage. |
| Multi-Family Oriented Community | |
| Where first floor businesses are permitted they shall comply with the standards for Live Work above. | Shall comply with the standards for Single Family Oriented Communities and Manufactured Home Communities. |
| One (1) Directional Sign shall be permitted per residential building as necessary. | |
| Commercial Oriented Community - Single Tenant Building Fronting One or More Thoroughfares | |
| **Principal Building Frontage.** Aggregate sign area for the Principal Building Frontage equals 1½ square feet for each linear foot of building frontage measured along the | One (1) Freestanding Sign, Landscape Wall Sign, or a combination of the two, not to exceed 40 square feet in aggregate, may be sited along the primary thoroughfare frontage at the primary vehicular entrance. Signs |

| | |
|---|---|
| thoroughfare where the building has frontage and/or the primary entrance.<br>If the building fronts one thoroughfare, up to 33% of the total signage permitted on the Principal Building Frontage may be applied to one or more alternative building elevations. Combined signage for alternative building elevations shall not exceed 33% of the aggregate sign area for the Principal Building Frontage.<br>If the building fronts two or more thoroughfares, up to 33% of the total signage permitted on the Principal Building Frontage may be applied to a building elevation that does not face a thoroughfare. | may be used for identification purposes, as a directory listing, or a combination thereof.<br>Freestanding Directional Signs shall not count toward the maximum aggregate signage.<br>**Drive-Through Menu Boards.** One (1) Freestanding Menu Board Sign per drive-through lane, not to exceed 32 square feet in aggregate, may be sited as part of a drive-through business. The sign may list the type and price of items or services offered and to the maximum extent possible, shall not be visible from a primary street right-of-way. Where appropriate the base of the menu board shall be landscaped and/or incorporated into the landscaping plan. |
| **Secondary Building Frontage.** Aggregate sign area for the Secondary Building Frontage equals ½ square foot for each linear foot of building frontage measured along the thoroughfare where the building has secondary frontage and/or a secondary entrance.<br>Up to 33% of total signage permitted along the Secondary Building Frontage may be applied to an alternative building elevation. However, Secondary Building Frontage signage may not be applied/added to an elevation containing Principal Building Frontage signage. | |
| Commercial Oriented Community - Multiple-Tenant Buildings With or Without Outparcel Buildings Fronting One or More Thoroughfares | |
| All permitted sign types may be utilized where allowed and shall comply with the standards for a Commercial Oriented Community (Single Tenant Business Fronting One or More Thoroughfares).<br>**Upper Story Business.** A second story retail or service oriented business is permitted one Projecting Sign, one Suspended Sign, or one Wall Sign, not to exceed one (1) square foot in size and located at the first floor entrance.<br>Additional upper floor businesses that share a common first floor entrance shall utilize an individual Wall Sign or Directory Sign located at the sidewalk level. | One (1) Freestanding Sign, Landscape Wall Sign, or a combination of the two, not to exceed 80 square feet in aggregate, may be sited at the primary vehicular entrance along each thoroughfare frontage. Signs may be used for identification purposes, as a directory listing, or a combination thereof.<br>Freestanding Directional Signs shall not count toward the maximum aggregate signage.<br>**Thoroughfare frontage exceeds 500 feet in length.** One additional Freestanding Sign, Landscape Wall Sign, or combination of the two, not to exceed 80 square feet in aggregate, may be sited at a secondary intersection along the frontage.<br>**Individual Tenants in a Multi-Tenant Building.** Individual businesses in a multi-tenant building shall not be allowed to have separate Freestanding Signs.<br>**Individual Tenant in an Outparcel Building.** In a pedestrian environment, one (1) Detached Yard Sign may be placed on the property to advertise the business.<br>**Drive-Through Menu Boards.** See above. |
| Traditional Neighborhood Plan (TCP) | |
| **Home Business, Live Work, Multi-family, and Non-Residential Development.** See above. | **Home Business, Live Work, and Drive-Through Menu Boards.** See above.<br>**Multi-family.** One Freestanding on or off-premises Directional Sign shall |

| | |
|---|---|
| | be permitted per internal street or lot as needed.<br>**Commercial.** Large scale, auto-oriented signage along thoroughfares (used for identification purposes, and directory listings) shall be discouraged in favor of human-scaled Building Attached and Building Detached signage. The above standards for **Individual Tenants in an Outparcel Building** shall apply. |

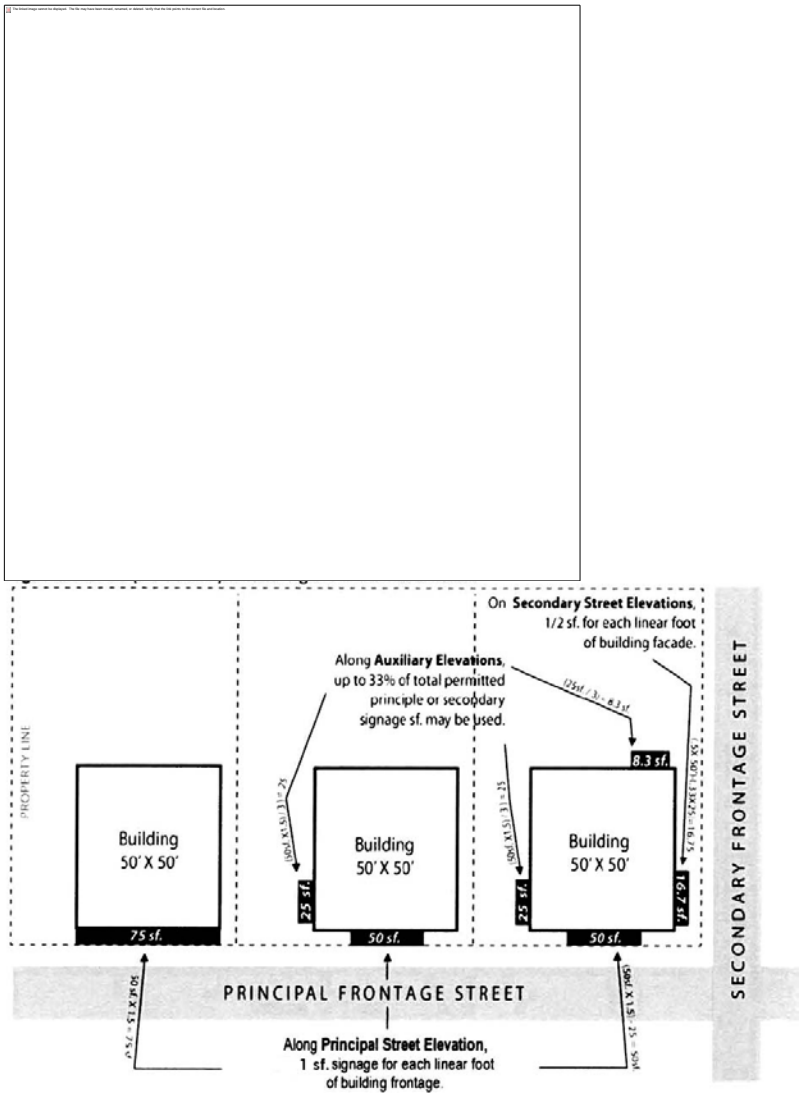



*Figure 5.6.40.B: Aggregate Signage Standards for Building Attached Signs based on a 50' x 50' Single-Tenant Building.*

( Ord. No. 2015/20, 7-27-15 ; Ord. No. 2015/32, 11-9-15 ; Ord. No. 2016/18, 6-27-16 )

5.6.50 - Off-Premises Sign Standards

A. ~~Commercial~~ **Off-Premises Signs / Commercial Billboard Signs.** New ~~commercial~~ off-premises signs / commercial billboard signs are prohibited. Digital displays are prohibited on all off-premises signs / commercial billboard signs.

B. ~~**Non-Commercial Off-Premises Signs.**~~

~~1. **Location.**~~

~~a. Non-commercial off-premises signs may be placed on any premises where the placement of commercial on-premises signs are allowed.~~

~~b. No portion of any noncommercial off-premises sign shall be located within 300 feet of any other off-premises sign on the same side of the street or highway, or any residence (single-family or multi-family).~~

~~2. **Standards.** Noncommercial off-premises signs shall meet the standards in Section 5.6.120 (Freestanding Sign Type).~~

~~C. **Directional Signs.**~~

~~1. **Location.** In order to provide information and directional aid to the general public, directional signs may be erected within 300 feet of intersections of major traveled thoroughfares and secondary roads to identify businesses, services, organizations, agencies, facilities and activities located down the secondary road. Such directional signs shall not be utilized to identify uses on the major traveled thoroughfare.~~

~~2. **Standards.** Directional signs shall meet the standards in Section 5.6.90 (Directional Sign Type).~~

~~D. **Directory Listings.**~~

~~1. **Location.** Directory listing signs may be placed at strategic locations along major highways in order to provide pertinent County area information to tourists and visitors.~~

~~2. **Content.** Directory listings are intended to be informational and helpful for the convenience of visitors and not promotional of any particular business or type of business. Listings may be limited to local area hotels/motels, restaurants, major residential developments, major retail outlet centers and the like.~~

~~3. **Standards.** Directory listings shall meet the standards in Section 5.6.120 (Freestanding Sign Type).~~

~~E.~~ **Maintenance Standards For Off-Premises Signs.** All off-premises signs must be structurally safe and maintained in a good state of repair, including, but not limited to, the following standards:

1. The sign face must be maintained free of peeling, chipping, rusting, wearing and fading so as to be fully legible at all times.
2. Commercial off-premises signs may be maintained only by painting or refinishing the surface of the sign face or sign structure so as to keep the appearance of the sign as it was when originally permitted. Minor modification to the sign face to improve hurricane safety, i.e. "hurricane frames" may be performed as long as the sign foundation is not included so as to improve the structural integrity of the billboard structure in the hurricane safety modification. Upon determination by the Code Enforcement Department and notice to the permittee that a sign has become dilapidated or structurally unsound, such sign shall be removed within 20 days, unless an appeal of such determination has been previously filed with the ZBOA. Such sign shall, thereafter, be removed within 20 days of disposition of such appeal in favor of the council, its agencies, departments, and/or officials. Any structural or other substantive maintenance to a sign shall be deemed an abandonment of the sign, shall render the prior permit void and shall result in removal of the sign without compensation. Costs and expenses of such removal shall be paid by the owner of such sign.
3. Extension, enlargement, replacement, rebuilding, adding lights to an un-illuminated sign, changing the height of the sign above ground, or re-erection of the sign are prohibited.
4. Any signs suffering damage in excess of normal wear cannot be repaired without:

a. Notifying the Code Enforcement Department in writing of the extent of the damage, the reason the damage is in excess of normal wear, and providing a description of the repair work to be undertaken, including the estimated cost of repair; and

b. Receiving written notice from the Code Enforcement Department authorizing the repair work. If the work authorization is granted, it shall be mailed to the applicant within 30 days of receipt of the information described in Subsection 5.6.50.E.4.a. of this section. Any such sign that is repaired without the department's authorization shall be removed by the County, and the costs and expenses of such removal shall be paid by that person or entity making the unauthorized repairs.

c. If a sign is partially destroyed by wind or other natural forces, the Director must determine whether to allow the sign to be rebuilt. If the Director determines that the damage to the sign was greater than 50 percent of its replacement cost as of the time of the damage, the sign must be consistent with all current requirements of this chapter.

( Ord. No. 2020/45, 10-26-20 )

5.6.60 - Temporary Signs

A. **Allowed Sign Types.** The following types of signs are classified as temporary signs:

1. Special event signs which are in the nature of noncommercial advertising;
2. Grand opening, going out of business and sale signs of businesses and services;
3. Signs for work under construction;
4. Land subdivision or development signs;
5. Signs advertising the sale or lease of property upon which they are located; and
6. Political signs.

a. On private property along major corridors, freestanding political signs must be no closer than ten (10) feet from the highway right-of-way. Major corridors are US 21, US 17, US 278, SC 170, SC 802, SC 280, SC 46, SC 116, and SC 163. Sign placement on other roads may be placed on property lines.

b. Political signs may be displayed or erected at any time within an election year. Political candidates are required to obtain a sign permit. All political signs must be removed within 48 hours after the election.

c. If approval for placement within the state rights-of-way is granted to the political candidates, the candidates shall present the approval whenever they apply for the county permit.

d. A single permit will allow each candidate to post an unlimited number of signs. Only the candidates whose name will appear on the ballot for an upcoming election may display signs.

e. Impoundment of Political Signs. See Section 5.6.70.B.

B. **Area, Height, Location.**

1. **Area.** The total area of temporary signs shall not exceed 80 square feet.
2. **Height.** The maximum height of temporary signs shall not exceed ten (10) feet measured from the highest part of any sign or supporting structure and existing ground level except special event promotional banners.
3. **Location.** No off-premises temporary sign, except those identified in Subsections 5.6.50.A.5 shall be located nearer than 100 feet to any church, cemetery, public building, historic site or district and intersection of two or more public streets or highways.

C. **Time Limits on Erection.**

1. **Special Event Signs.** Special event signs may be erected no sooner than 30 days preceding a special event, and shall be removed within 48 hours following the special event. Temporary signs for special events shall be permitted for no more than 32 days at a time. The signs are limited to 4 times a calendar year per site for a total of 128 days.
2. **Grand Opening Signs.** Grand opening signs shall be erected for a period not to exceed 30 days.
3. **Work Under Construction Signs.** Work under construction signs pertaining to owners, architects, engineers, contractors, development agencies, financial institutions and the like may be erected on the construction site during construction and shall be removed within 30 days following completion of the project.
4. **Announcement of Subdivision of Land.** Signs announcing the subdivision of land may be erected on the land being developed and shall be removed when 75 percent of the lots are conveyed or after two years, whichever comes first.

D. **Permits.** Unless exempted in Subsection 5.6.10.B.4, temporary signs must be permitted in the same manner as permanent signs.

5.6.70 - Administration

A. **Display of Permit.** All signs for which a permit has been issued shall be in compliance with the following:

1. **Display of Permit Tag.** All permit tags issued for the erection of a sign shall be displayed on the sign and shall be readily visible.
2. **Relocation of Permit Tag.** Under no circumstances may the permit tag be removed from one sign to another, nor may the sign to which it is attached be relocated to another location.
3. **Return of Permit Tag.** If a sign is dismantled, removed or the ownership transferred, the permit tag shall be removed, returned to the Community Development Department and a new application made as appropriate.
4. **Lost or Illegible Permit Tag.** If a permit tag is lost, defaced, destroyed or otherwise becomes illegible through normal wear or an act of vandalism, a new application shall be made to the Community Development Department.

B. **Impoundment of Signs.**

1. **Signs Subject to Removal without Notice.** The Code Enforcement Department shall have the authority to remove, without notice to the owners thereof, and impound for a period of ten days, signs placed within any street or highway right-of-way; signs attached to trees, fence posts, telephone and utility poles, or other natural features; and signs erected without a permit.
2. **Impoundment of Signs Erected without Permit, but Otherwise in Compliance.** When a sign requiring a permit under the terms of this Division is erected without a Sign Permit, the Code Enforcement Department shall use the following procedure:
    a. **Violation Sticker.** The Code Enforcement Department shall issue a Notice of Warning to the owner of the sign that is in violation. The Notice of Warning shall include instructions to call the Code Enforcement Department immediately for permitting compliance.
    b. **Failure to Obtain Permit.** If the owner of the sign fails to contact the Code Enforcement Department, to bring the sign into conformance with this article and get a permit for the sign, the Code Enforcement Department shall have the sign removed and impounded without any further notice.

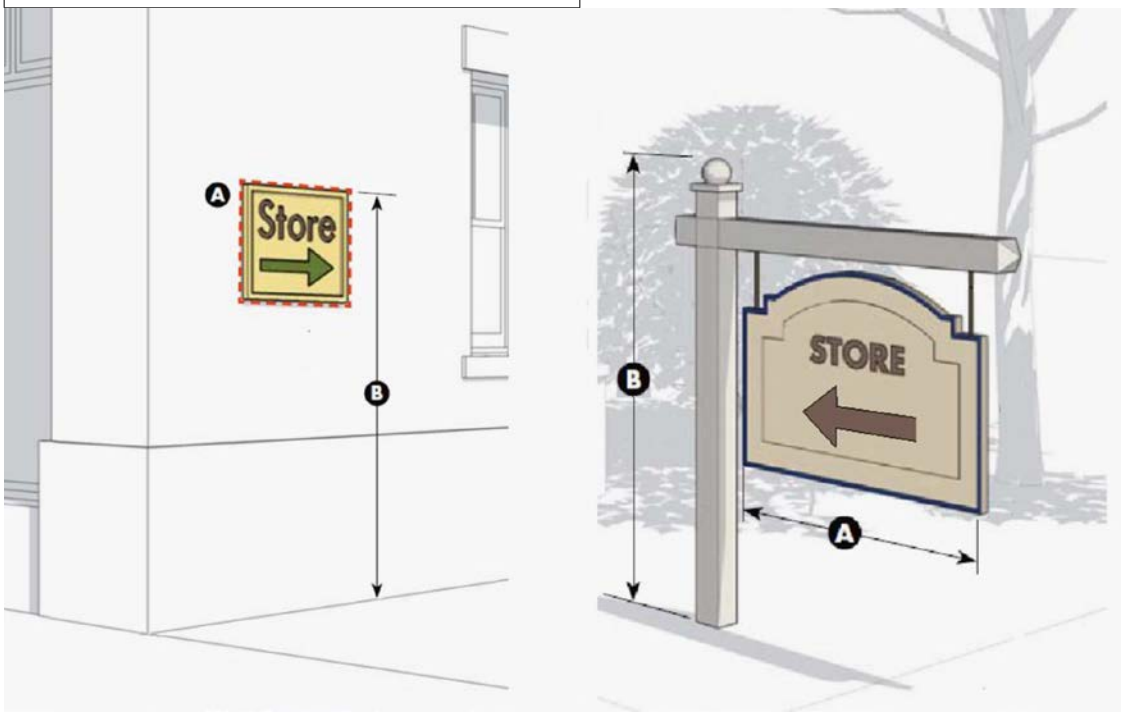
C. **Recovery and Disposal of Impounded Signs.** The owner of a sign impounded may recover the sign upon the payment of $2.00 for each square foot of such impounded sign, prior to the expiration of the ten-day impoundment period. If it is not claimed within ten days, the Code Enforcement Department shall have authority to either discard or sell the sign.

## 5.6.80 - Awning/Canopy Sign Type


| A. Description |
| --- |
| **Awning Signs** are a traditional storefront fitting and can be used to protect merchant's wares and keep storefront interiors shaded and cool in hot weather. Retail tenant signs may be painted, screen printed, or appliquéd on the awnings. |
| B. Standards |
| Size |

| | | |
|---|---|---|
| Projecting: | | |
| Sign Area | 1 per SF per linear ft. of shop front, max. | Ⓐ |
| Lettering Height | 16" max. | Ⓑ |
| Lettering Thickness | 6" max. | Ⓒ |
| Sloping Plane: | | |
| Sign Area | 25% coverage max. | Ⓓ |
| Lettering Height | 18" max. | Ⓔ |
| Valance: | | |
| Sign Area | 75% coverage max. | Ⓕ |
| Width | Storefront width max. | Ⓖ |
| Height | 8" min.; 16" max. | Ⓗ |
| Lettering Height | 8" max. | Ⓘ |
| Location | | |
| Clear Height | 8' min. | Ⓙ |
| Signs per awning | 1 projecting; or 1 valance and 1 sloping plane max. | |
| Miscellaneous | | |
| ~~Only the tenant's store name, logo, and/or address should be applied to the awning. Additional information is prohibited.~~ | | |
| Open-ended awnings are strongly encouraged. | | |
| Fabric awnings shall be covered only with canvas, woven acrylic, or similar fabric materials. Shiny or glossy materials like vinyl and plastic are not permitted. | | |
| Sign copy on awnings on second story windows is not permitted. | | |

## 5.6.90 - Directional Sign Type




| A. Description |
| --- |
| **Directional Signs** are wall-mounted or freestanding signs placed within 30 feet of an entrance to, or exit from, an establishment or parking location. ~~provide guidance to entrances and parking locations.~~ |
| B. Standards |
| Size |
| Signable Area: |

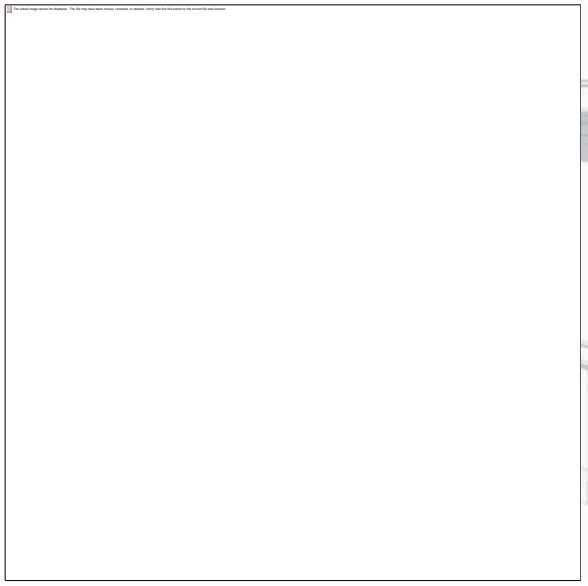
| | | |
|---|---|---|
| Transect Zones | 3 SF max. | Ⓐ |
| Conventional Zones | 6 SF max. | Ⓐ |
| Location | | |
| Height: | | Ⓑ |
| Wall-Mounted | 8' max. | |
| Freestanding | 6' max. | |
| Number of Signs | 1 per lot or access way | |
| [1] See Section 5.6.120 (Freestanding Signs) for additional standards. | | |
| Miscellaneous | | |
| ~~May say "enter," "exit," "drive-in," "service entrance," "no parking," etc., without any advertising words or phrases.~~ | | |
| ~~Name of business or address may appear on directional sign.~~ | | |
| No permit fee. | | |

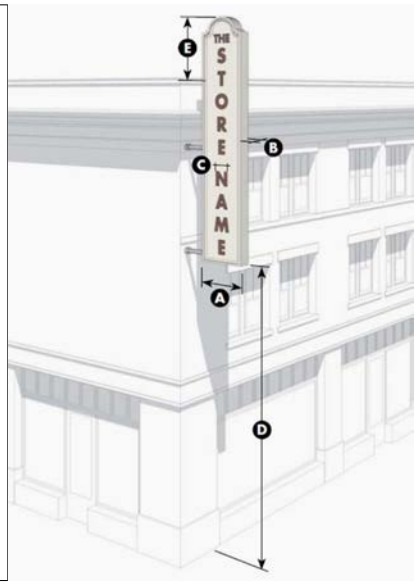
## 5.6.100 - Landscape Wall Sign Type


| A. Description | | |
|---|---|---|
| **Landscape Wall Signs** are attached to freestanding walls ~~and are often used to mark a place of significance or the entrance to a location. The signs are often used in place of a monument sign~~that form a perimeter or buffer for a landscape feature. | | |
| B. Standards | | |
| Size | | |
| Signable Area | 24 SF Max. | Ⓐ |
| Location | | |

| | | |
|---|---|---|
| Height of Wall | 4' max. | Ⓑ |
| Mounting Height: | | |
| Top of Wall | | Ⓒ |
| Above Grade | At least 12" | Ⓓ |
| Number of Signs | 1 per wall face | |

## 5.6.110 - Marquee Sign Type



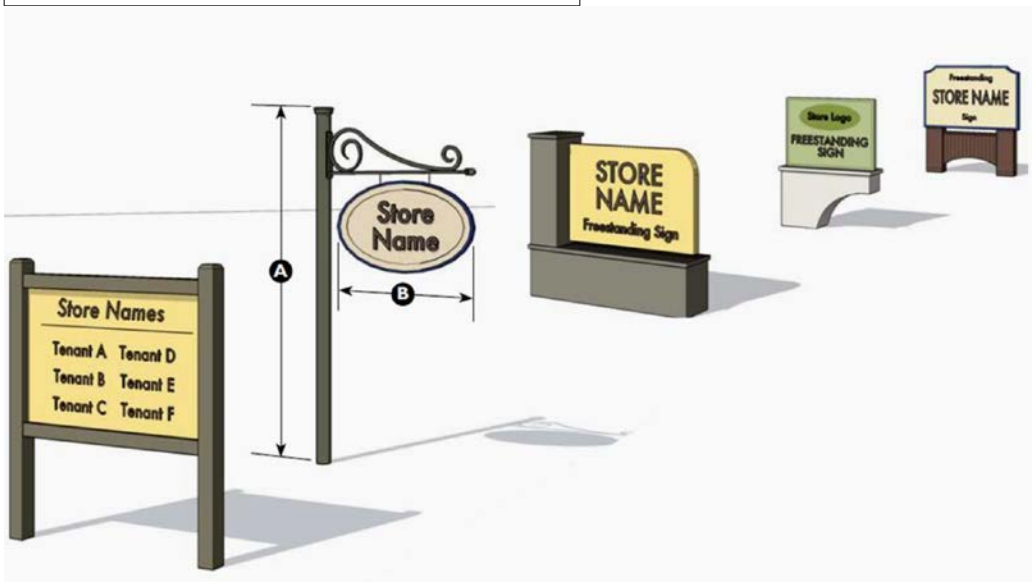



| A. Description |
|---|
| **Marquee Signs** are vertical signs that are located either along the face where they project perpendicular to the façade; or at the corner of the building where they project at a 45 degree angle. Marquee signs often extend beyond the parapet of the building, but may also terminate below the cornice or eave. Marquee signs often have neon lettering used in conjunction with painted lettering. |

| B. Standards | | |
|---|---|---|
| Size | | |
| Signable Area: | | |
| Width | 24" max. | Ⓐ |

| | | |
|---|---|---|
| Depth | 10" max. | Ⓑ |
| Lettering: | | |
| Width | 75% of sign width max. | Ⓒ |
| Location | | |
| Clear Height | 12' min. | Ⓓ |
| Extension | 10' max. [1] | Ⓔ |
| Signs per building | 1 max. | |
| [1] Marquee signs may not extend beyond the eave of a pitched roof. | | |
| Miscellaneous | | |
| Neon letter may only be used in conjunction with painted lettering. Signs consisting only of neon lettering are not permitted. | | |

## 5.6.120 - Freestanding Sign Type

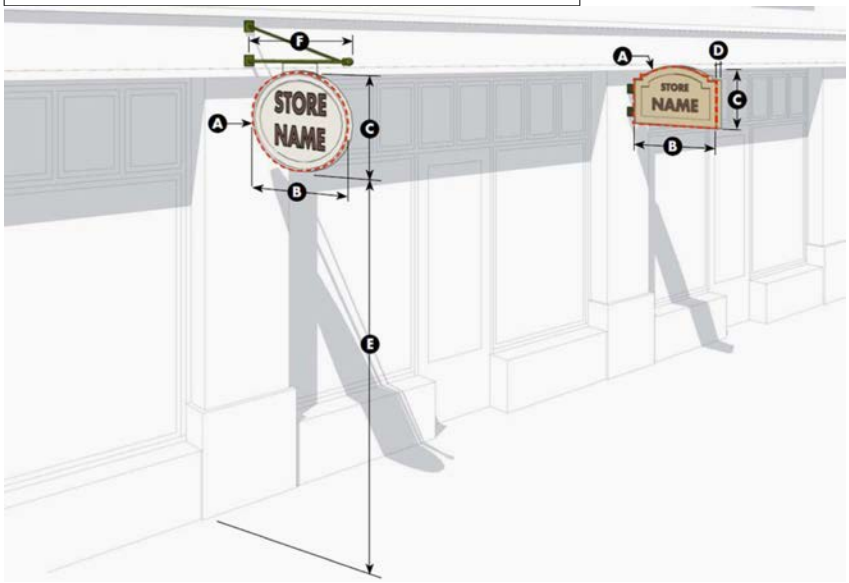



| A. Description |
| --- |
| **Freestanding Signs** encompass a variety of signs that are not attached to a building and have an integral support structure. Freestanding varieties include Monument and Pole Signs. |
| A Pole Sign, usually double-faced, mounted on a single or pair of round poles, square tubes, or other fabricated members without any type of secondary support. |
| A Monument Sign stands directly on the ground or ground level foundation and is often used to mark a place of significance or the entrance to a location. |
| B. Standards |
| Size |

| Signable Area | T4 | All Other Districts> |
|---|---|---|
| Single Tenant | 24 SF max. | 40 SF max. |
| Multiple Tenant with one highway frontage | 32 SF max. | 80 SF max. |
| Multiple Tenant with two highway frontages | 32 SF per frontage | 80 SF per frontage |
| Location | | |
| Signs per Highway Frontage: | | |
| Single Tenant | 1 max. | |
| Multiple Tenant | 1 max. [1,2] | |
| Height | 10' max. | Ⓐ |
| Width | 15' max. | Ⓑ |
| Distance from ground to the base if the sign | 4' max. | |
| Setback from ROW | 10' min. | |
| [1] Individual tenants may not have a Freestanding Sign. | | |
| [2] Frontages greater than 500 feet may include one additional freestanding sign not to exceed 80 SF in area and with a total allowable sign area not exceeding the maximum allowable sign area for the multiple tenant center. | | |
| Miscellaneous | | |
| Changeable copy signs are allowed ~~for~~ on the premises of gasoline ~~price signs~~stations, houses of worship, schools, ~~directory signs listing more than one tenant~~buildings with more than one tenant, ~~and signs advertising restaurant food specials~~restaurants, and theaters. ~~films and live entertainment or more highway frontages which change on a regular basis.~~ | | |

( Ord. No. 2015/20, 7-27-15 ; Ord. No. 2015/32, § 1, 11-9-15 ; Ord. No. 2017/20, 6-26-17 )

5.6.130 - Projecting Sign Type




| A. Description |
|---|
| **Projecting Signs** mount perpendicular to a building's façade. They are typically hung from decorative cast or wrought iron brackets in a manner that permits them to swing slightly. These signs are small, pedestrian-scale, and easily read from both sides. Often, Projecting Signs offer the opportunity for a more creative or "playful" sign. Projecting Signs should be hung well out of reach of pedestrians and all exposed edges of the sign should be finished. Synonym: Blade Sign. |
| B. Standards |
| Size |
| Signable Area: |

| | | |
|---|---|---|
| Area | 6 SF max. | Ⓐ |

| | | |
|---|---|---|
| Width | 48" max. | Ⓑ |
| Height | 36" max. | Ⓒ |
| Thickness | 4" max. [1] | Ⓓ |
| [1] Special and creative signs that have a three-dimensional quality may have a greater thickness subject to approval by the review authority. | | |
| Location | | |
| Clear Height | 8' min. | Ⓔ |
| Extension | 8.5' max. | Ⓕ |
| Signs per building | 1 per storefront max. [2] | |
| [2] One (1) additional sign may be located along an auxiliary elevation at a secondary entrance. | | |

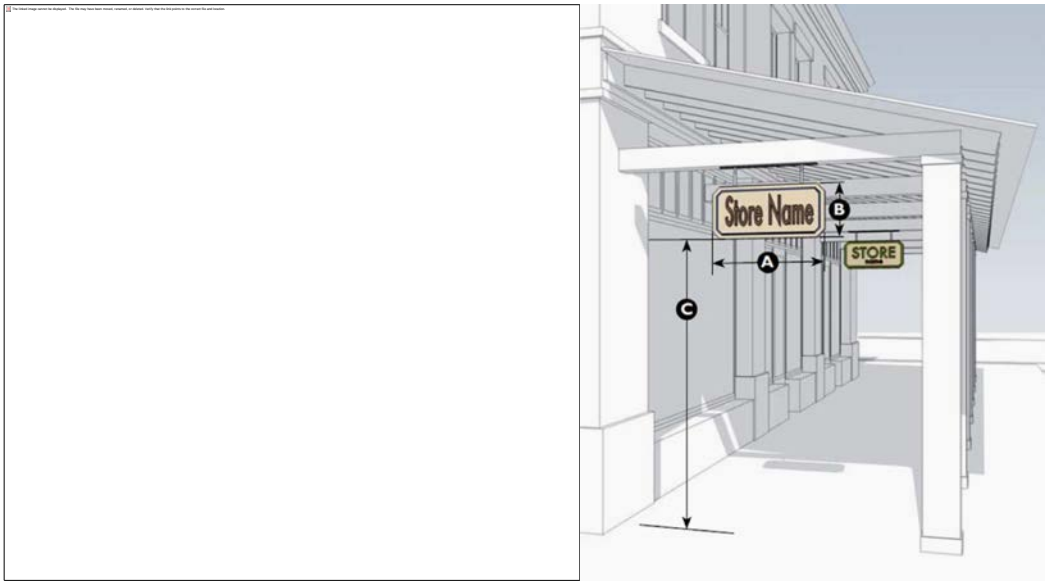
## 5.6.140 - Sidewalk Sign Type


| A. Description |
|---|
| **Sidewalk Signs** provide secondary signage and may be used to announce daily specials, sales, or point to shops off the sidewalk (i.e., a shop located along a passageway). They may be painted wood panels or cut wood shapes. Traditional slate boards are highly recommended. Chaser lights or illuminated signs may not be used. |

| B. Standards | | |
|---|---|---|
| Size | | |
| Signable Area: | | |
| Area | 6 SF max. | Ⓐ |
| Width | 30" max. | Ⓑ |

| | | |
|---|---|---|
| Height | 42" max. | © |
| Location | | |
| Sidewalk Signs must be located on or adjacent to a sidewalk and shall not interfere with pedestrian travel or encroach upon the required accessible path. | | |
| Sidewalk Signs may only be displayed during business hours and must be removed when the business is closed. | | |
| Signs per building | 1 per storefront max. | |

## 5.6.150 - Suspended Sign Type




### A. Description

**Suspended Signs** mount to the underside of beams or ceilings of a porch, gallery, arcade, breezeway or similar covered area. They are typically hung in a manner that permits them to swing slightly. These signs are small, pedestrian-scaled, and easily read from both sides. Suspended signs should be hung well out of reach of pedestrians and all exposed edges of the sign should be finished.

### B. Standards

Size

| | | |
|---|---|---|
| Signable Area: | | |
| Area | 6 SF max. | |
| Width | 36" max. | Ⓐ |
| Height | 36" max. | Ⓑ |
| Location | | |
| Clear Height | 8' min. | Ⓒ |
| Signs per building | 1 per shop front, max. [1] | |
| [1] One (1) additional sign may be located along an auxiliary elevation at a secondary entrance. | | |
| Miscellaneous | | |
| Suspended Signs shall not extend beyond the edge of the building façade, frontage, or overhang on which it is placed. | | |

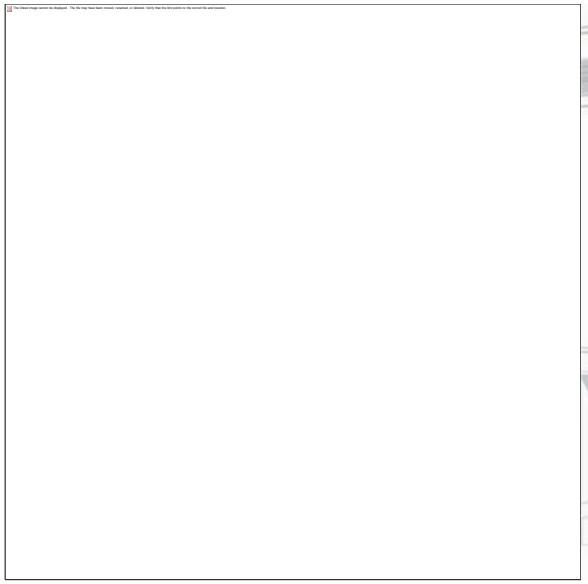
5.6.160 - Wall Sign Type

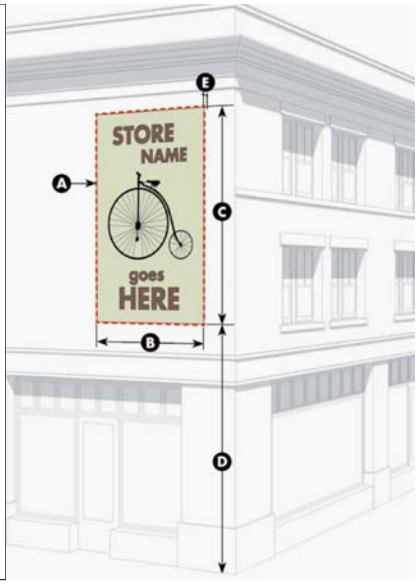

| A. Description |
|---|
| **Wall Signs** are flat against the facade consisting of individual cut letters applied directly to the building, or painted directly on the surface of the building. Wall signs are placed directly above the main entrance and often run horizontally along the "expression line" or entablature of traditional buildings. Wall signs do not protrude beyond the roofline or cornice of a building. Wall signs are typically intended to be seen from a distance and are often accompanied by additional pedestrian-scaled signage. |
| B. Standards |
| Size |
| Signable Area: |

| | | |
|---|---|---|
| Area | 1 SF per linear foot of shop front width up to 80 SF max. | Ⓐ |

| | | |
|---|---|---|
| Width | Storefront width, max. | Ⓑ |
| Height | 12" min.; 5' max. | Ⓒ |
| Lettering: | | |
| Width | 75% of signable width, max. | Ⓓ |
| Height | 75% of signable height, max.; 35" max. | Ⓔ |
| Location | | |
| Projection from facade | 8" max. | |
| Signs per building | 1 per shop front and/or elevation | |
| 2 nd Story Business | 1 sign located at 1 st floor entrance, max size 1 SF | |
| Miscellaneous | | |
| Changeable Copy Signs are allowed ~~for gasoline price signs~~on the premises of gas stations, ~~directory signs listing~~buildings with more than one tenant, ~~and signs advertising restaurant food specials~~restaurants, and theaters.~~films and live entertainment which change on a regular basis.~~ | | |

## 5.6.170 - Wall Mural Sign Type





| A. Description | | |
|---|---|---|
| Wall Mural Signs are flat against the facade and are located on a secondary facade, typically along a side street, alley, or passageway. These signs are typically painted directly on the building and contain a combination of text and graphic elements. ~~These signs are intended to be visible from a greater distance and must be accompanied by additional signage on the primary facade at the business entrance. Wall Mural Signs that provide off-site signage for a business or do not provide signage for a specific business (artistic wall mural) are considered wall mural signs and are prohibited.~~ | | |
| B. Standards | | |
| Size | | |
| Sign Area: | | |
| Area | 1,000 SF max. | Ⓐ |
| Width | 200' max. | Ⓑ |
| Height | 50' max. | Ⓒ |
| Location | | |
| Height above ground | 8' min. | Ⓓ |
| Projection | 8" max. | Ⓔ |
| Signs per building: | 1 max. | |
| Any size | 2 spaces/1,000 SF min. | |

## 5.6.180 - Window Sign Type


| A. Description |
|---|
| **Window signs** are professionally painted consisting of individual letters and designs, gold leaf individual letters and designs, applied directly on the inside of a window. Window signs offer a high level of craftsmanship and visibility, and are often used for small professional offices. Window signs are often repeated on storefronts with several divided openings, however, repetition should be done with great care to ensure that the entrance to the business is clearly marked. |

| B. Standards | | |
|---|---|---|
| Size | | |
| Sign Area: | | Ⓐ |
| Per Shop front Bay | 25% max. | |

| | | |
|---|---|---|
| Per Shop front | 15% max. | |
| Width | 5' max. | Ⓑ |
| Height | 36" max. | Ⓒ |
| Location | | |
| Window signs shall be placed at or above eye level. | | |
| Window signs shall be applied directly to the inside of the glass. | | |
| Miscellaneous | | |
| Applied plastic or vinyl cut letters are strongly discouraged. | | |
| Window signs must have a clear background. | | |

## 5.6.190 - Yard Sign Type


| A. Description |
|---|
| **Yard Signs** are signs mounted on a porch or in a yard between the public ROW and the building facade. Yard signs mounted on a porch are placed parallel to the building's facade. Yard signs mounted in a yard are placed parallel or perpendicular to the ROW. Yard signs work well for home businesses. |
| B. Standards |
| Size |
| Signable Area: |

| | | |
|---|---|---|
| Area | 6" max. | |

| | | |
|---|---|---|
| Width | 36" max. | Ⓐ |
| Height | 36" max. | Ⓑ |
| Location | | |
| Clear Height: | | Ⓒ |
| Mounted on Porch | 6' 8" min. | |
| Mounted in Yard | 12" min. | |
| Overall Height | 5' max. | Ⓓ |
| Signs per Building: | | |
| Mounted on Porch | 1 max. | |
| Mounted in Yard | 1 max. | |
| Miscellaneous | | |
| Yard signs may not be located within a public ROW. | | |
| Yard mounted signs shall be parallel or perpendicular to the ROW. | | |

**ORDINANCE 2021/ _____**

**TEXT AMENDMENTS TO COMMUNITY DEVELOPMENT CODE ("CDC"): ARTICLE 5, DIVISION 5.6, SECTIONS 5.6.10; 5.6.20; 5.6.30; 5.6.40; 5.6.50; 5.6.80; 5.6.90; 5.6.100; 5.6.120; 5.6.160; AND 5.6.170; ARTICLE 7, DIVISION 7.2, SECTION 7.2.40; AND ARTICLE 10, SECTIONS 10.1.10; 10.1.30; 10.1.40; 10.1.50; 10.1.60; 10.1.70; 10.1.90; 10.1.120; 10.1.140; 10.1.150; 10.1.160; 10.1.190; AND 10.1.200 TO UPDATE DEFINITIONS, REGUALTIONS AND PROCEDURES FOR SIGNS AND SIGN PERMITS.**

**WHEREAS** deleted text is stricken through; added text is underlined.

Adopted this _____ day of _____, 202___.

COUNTY COUNCIL OF BEAUFORT COUNTY

By: _____

Joseph Passiment, Chairman

ATTEST:

_____

Sarah w. Brock, JD, Clerk to Council

First Reading:
Second Reading:
Third reading:

**BEAUFORT COUNTY, SOUTH CAROLINA**
**COMMUNITY DEVELOPMENT CODE SIGN STANDARD REGULATIONS**
**INDEX TO LEGISLATIVE SECONDARY EFFECTS DOCUMENTATION**

1. U.S. Supreme Court Cases

2. *Compendium of Recent Research Studies on Distraction from Commercial Electronic Variable Message Signs (CEVMS)*, Jerry Wachtel, 2018

3. *Expert Report of Jerry Wachtel, CPE in the matter of: Adams Outdoor Advertising Limited Partnership v. City of Madison, et al.*, Jerry Wachtel, 2018

4. *Empirical Evaluation on Driving Simulator of Effect of Distractions Inside and Outside the Vehicle on Drivers' Eye Behavior*, Abstract (2008) (Washington , D.C.)

5. *Conflicts of Interest: The Implications of roadside advertising for driver attention* (Abstract), Transportation Research Part F: Traffic Psychology and Behaviour Vol. 12, Issue 5, September 2009

6. *Influence of Billboards on Driving Behaviour and Road Safety* (Abstract), Gitelman V., Zaidel D., Doveh E., Haifa, Israel, 2010

7. *The role of roadside advertising signs in distracting drivers*, Saudi Arabia, 2008

8. Articles re: Jerry Wachtel's critique of 2013 FHWA Study

9. *Effects of Outdoor Advertising Displays on Driver Safety*, Caltrans Division of Research and Innovation, California, 2012

10. *The impact of road advertising signs on driver behavior and implications for road safety: A critical systematic review*, Oviedo-Trespalacios, et al., Australia, 2004

11. *Effect of External Distractions: Behavior and Vehicle Control of Novice and Experienced Drivers Evaluated*, Divekar, et al., Amherst, MA, 2012

12. *Roadside Advertising Affects Driver Attention and Safety*, Herstedt, et al., Denmark, 2013

13. *Evaluation of the Visual Demands of Digital Billboards Using a Hybrid Driving Simulator*, Schieber, et al., 2014

14. *Distracted Driving and risk of Road Crashes among Novice and Experienced Drivers*, Klauer, et al., New England Journal of Medicine, 2014

KeyCite Yellow Flag - Negative Treatment
Declined to Extend by Republican Party of Minnesota v. White, 8th Cir. (Minn.), August 2, 2005

112 S.Ct. 1846
Supreme Court of the United States

Charles W. BURSON, Attorney General and Reporter for Tennessee, Petitioner
v.
Mary Rebecca FREEMAN.

No. 90–1056.
|
Argued Oct. 8, 1991.
|
Decided May 26, 1992.

**Synopsis**
Political party worker brought action seeking to enjoin enforcement of Tennessee statutes prohibiting solicitation of votes and display of campaign materials within 100 feet of entrance to polling place on election day. The Chancery Court, Davidson County, Irvin H. Kilcrease, Jr., Chancellor, upheld the statutes. Appeal was taken. The Tennessee Supreme Court reversed, 802 S.W.2d 210, and certiorari was granted. The Supreme Court, Justice Blackmun, held that Tennessee statute prohibiting solicitation of votes and display or distribution of campaign materials within 100 feet of entrance to polling place was narrowly tailored to serve compelling state interest in preventing voter intimidation and election fraud, as required by First Amendment.

Reversed and remanded.

Justice Kennedy filed concurring opinion.

Justice Scalia filed opinion concurring in judgment.

Justice Stevens filed dissenting opinion in which Justice O'Connor and Justice Souter joined.

Justice Thomas took no part in consideration or decision of case.

West Headnotes (4)

[1] **Constitutional Law** Polling places

Tennessee statute prohibiting solicitation of votes and displays or distributions of campaign materials within 100 feet of entrance to a polling place, as a facially content-based restriction on political speech in a public forum, was subject to exacting scrutiny under First Amendment: state was required to show that regulation was necessary to serve compelling state interest and that it was narrowly drawn to achieve that end. (Per opinion of Justice Blackmun, with three Justices concurring and one Justice concurring in judgment.) T.C.A. § 2–7–111(b); U.S.C.A. Const.Amend. 1.

293 Cases that cite this headnote

[2] **Constitutional Law** Public Forum in General

**Constitutional Law** Justification for exclusion or limitation

**Constitutional Law** Voting and political rights

Under either free speech or equal protection theory, content-based regulation of political speech in public forum is valid only if it can survive strict scrutiny. (Per opinion of Justice Blackmun, with three Justices concurring and one Justice concurring in judgment.) U.S.C.A. Const.Amends. 1, 14.

76 Cases that cite this headnote

[3] **Constitutional Law** Polling places

**Election Law** Constitutional and Statutory Provisions

Tennessee statute prohibiting solicitation of votes and display or distribution of campaign materials within 100 feet of entrance to polling place was narrowly tailored to serve compelling state interest in preventing voter intimidation and election fraud, as required by First Amendment. (Per opinion of Justice Blackmun, with three

Justices concurring and one Justice concurring in judgment.) T.C.A. § 2–7–111(b); U.S.C.A. Const.Amend. 1.

158 Cases that cite this headnote

**[4]** **Constitutional Law** Elections, voting, or ballot access in general

Modified burden of proof applied in determining whether statute is narrowly drawn to achieve state's compelling interest in protecting right to vote does not apply to all cases in which there is conflict between First Amendment rights and state's election process; instead, it applies only when First Amendment right threatens to interfere with act of voting itself, i.e., cases involving voter confusion from overcrowded ballots, or cases in which challenged activity physically interferes with electors attempting to cast their ballots. (Per opinion of Justice Blackmun, with three Justices concurring and one Justice concurring in judgment.) U.S.C.A. Const.Amend. 1.

99 Cases that cite this headnote

****1847** ***191** *Syllabus*[*]

Respondent Freeman, while the treasurer for a political campaign in Tennessee, filed an action in the Chancery Court, alleging, among other things, that § 2–7–111(b) of the Tennessee Code—which prohibits the solicitation of votes and the display or distribution of campaign materials within 100 feet of the entrance to a polling place—limited her ability to communicate with voters in violation of, *inter alia,* the First and Fourteenth Amendments. The court dismissed her suit, but the State Supreme Court reversed, ruling that the State had a compelling interest in banning such activities within the polling place itself but not on the premises around the polling place. Thus, it concluded, the 100–foot limit was not narrowly tailored to protect, and was not the least restrictive means to serve, the State's interests.

*Held:* The judgment is reversed, and the case is remanded.

802 S.W.2d 210 (Tenn.1990), reversed and remanded.

Justice BLACKMUN, joined by THE CHIEF JUSTICE, Justice WHITE, and Justice KENNEDY, concluded that § 2–7–111(b) does not violate the First and Fourteenth Amendments. Pp. 1849–1858.

(a) The section is a facially content-based restriction on political speech in a public forum and, thus, must be subjected to exacting scrutiny: The State must show that the regulation is necessary to serve a compelling state interest and that it is narrowly drawn to achieve that end. This case presents a particularly difficult reconciliation, since it involves a conflict between the exercise of the right to engage in political discourse and the fundamental right to vote, which is at the heart of this country's democracy. Pp. 1849–1851.

(b) Section 2–7–111(b) advances Tennessee's compelling interests in preventing voter intimidation and election fraud. There is a substantial and long-lived consensus among the 50 States that *some* restricted zone around polling places is necessary to serve the interest in protecting the right to vote freely and effectively. The real question then is *how large* a restricted zone is permissible or sufficiently tailored. A State is not required to prove empirically that an election regulation is perfectly tailored to secure such a compelling interest. Rather, legislatures should be permitted to respond to potential ****1848** deficiencies in the electoral process with foresight, provided that the response is reasonable and ***192** does not significantly impinge on constitutionally protected rights. *Munro v. Socialist Workers Party,* 479 U.S. 189, 195–196, 107 S.Ct. 533, 537–38, 93 L.Ed.2d 499. Section 2–7–111(b)'s minor geographical limitation does not constitute such a significant impingement. While it is possible that at some measurable distance from the polls governmental regulation of vote solicitation could effectively become an impermissible burden on the First Amendment, Tennessee, in establishing its 100–foot boundary, is on the constitutional side of the line. Pp. 1851–1858.

Justice SCALIA concluded that § 2–7–111 is constitutional because it is a reasonable, viewpoint-neutral regulation of a nonpublic forum. The environs of a polling place, including adjacent streets and sidewalks, have traditionally not been devoted to assembly and debate and therefore do not constitute a traditional public forum. Cf. *Greer v. Spock,* 424 U.S. 828, 96 S.Ct. 1211, 47 L.Ed.2d 505. Thus, speech restrictions such as those in § 2–7–111 need not be subjected to "exacting scrutiny" analysis. Pp. 1859–1861.

BLACKMUN, J., announced the judgment of the Court and delivered an opinion, in which REHNQUIST, C.J., and WHITE and KENNEDY, JJ., joined. KENNEDY, J., filed a concurring opinion, *post,* p. 1858. SCALIA, J., filed an opinion concurring in the judgment, *post*, p. 1859. STEVENS, J., filed a dissenting opinion, in which O'CONNOR and SOUTER, JJ., joined, *post,* p. 1861. THOMAS, J., took no part in the consideration or decision of the case.

**Attorneys and Law Firms**

*Charles W. Burson,* Attorney General of Tennessee, petitioner, argued the cause, *pro se.* With him on the briefs were *John Knox Walkup,* Solicitor General, and *Andy D. Bennett* and *Michael W. Catalano,* Deputy Attorneys General.

*John E. Herbison* argued the cause for respondent. With him on the brief was *Alan B. Morrison.**

* Briefs of *amici curiae* urging reversal were filed for the State of Arizona et al. by *Kenneth O. Eikenberry,* Attorney General of Washington, and *James M. Johnson,* Senior Assistant Attorney General, and by the Attorneys General for their respective States as follows: *Grant Woods* of Arizona, *Gail Norton* of Colorado, *Richard Blumenthal* of Connecticut, *Robert A. Butterworth* of Florida, *Michael J. Bowers* of Georgia, *Warren Price III* of Hawaii, *Roland W. Burris* of Illinois, *Linley E. Pearson* of Indiana, *Bonnie J. Campbell* of Iowa, *Frederic J. Cowan* of Kentucky, *Michael E. Carpenter* of Maine, *Scott Harshbarger* of Massachusetts, *Frank J. Kelley* of Michigan, *Hubert H. Humphrey III* of Minnesota, *William L. Webster* of Missouri, *Marc Racicot* of Montana, *Frankie Sue Del Papa* of Nevada, *Nicholas J. Spaeth* of North Dakota, *Mark Barnett* of South Dakota, *Paul Van Dam* of Utah, *Mary Sue Terry* of Virginia, and *Mario J. Palumbo* of West Virginia; and for the National Conference of State Legislatures et al. by *Richard Ruda* and *Frederick C. Schafrick.*

**Opinion**

***193** Justice BLACKMUN announced the judgment of the Court and delivered an opinion, in which THE CHIEF JUSTICE, Justice WHITE, and Justice KENNEDY join.

Twenty-six years ago, this Court, in a majority opinion written by Justice Hugo L. Black, struck down a state law that made it a crime for a newspaper editor to publish an editorial on election day urging readers to vote in a particular way. *Mills v. Alabama,* 384 U.S. 214, 86 S.Ct. 1434, 16 L.Ed.2d 484 (1966). While the Court did not hesitate to denounce the statute as an "obvious and flagrant abridgment" of First Amendment rights, *id.,* at 219, 86 S.Ct., at 1437, it was quick to point out that its holding "in no way involve [d] the extent of a State's power to regulate conduct in and around the polls in order to maintain peace, order and decorum there," *id.,* at 218, 86 S.Ct., at 1437.

Today, we confront the issue carefully left open in *Mills.* The question presented is whether a provision of the Tennessee Code, which prohibits the solicitation of votes and the display or distribution of campaign materials within 100 feet of the entrance to a polling place, violates the First and Fourteenth Amendments.

I

The State of Tennessee has carved out an election-day "campaign-free zone" through § 2–7–111(b) of its election code. That section reads in pertinent part:

> "Within the appropriate boundary as established in subsection (a) [100 feet from the entrances], and the building in which the polling place is located, the display of campaign posters, signs or other campaign materials, distribution of campaign materials, and solicitation of votes for or against any person or political party or position ***194** on a question are prohibited." Tenn.Code Ann. § 2–7–111(b) (Supp.1991).[1]

****1849** Violation of § 2–7–111(b) is a Class C misdemeanor punishable by a term of imprisonment not greater than 30 days or a fine not to exceed $50, or both. Tenn.Code Ann. §§ 2–19–119 and 40–35–111(e)(3) (1990).

II

Respondent Mary Rebecca Freeman has been a candidate for office in Tennessee, has managed local campaigns, and has worked actively in statewide elections. In 1987, she was the treasurer for the campaign of a city-council candidate in Metropolitan Nashville–Davidson County.

Asserting that §§ 2–7–111(b) and 2–19–119 limited her ability to communicate with voters, respondent brought a facial challenge to these statutes in Davidson County Chancery Court. She sought a declaratory judgment that the

provisions were unconstitutional under both the United States and the Tennessee Constitutions. She also sought a permanent injunction against their enforcement.

The Chancellor ruled that the statutes did not violate the United States or Tennessee Constitutions and dismissed respondent's suit. App. 50. He determined that § 2–7–111(b) was a content-neutral and reasonable time, place, and manner restriction; that the 100–foot boundary served a compelling state interest in protecting voters from interference, harassment, ***195** and intimidation during the voting process; and that there was an alternative channel for respondent to exercise her free speech rights outside the 100–foot boundary. App. to Pet. for Cert. 1a.

The Tennessee Supreme Court, by a 4–to–1 vote, reversed. 802 S.W.2d 210 (1990). The court first held that § 2–7–111(b) was content based "because it regulates a specific subject matter, the solicitation of votes and the display or distribution of campaign materials, and a certain category of speakers, campaign workers." *Id.,* at 213. The court then held that such a content-based statute could not be upheld unless (i) the burden placed on free speech rights is justified by a compelling state interest and (ii) the means chosen bear a substantial relation to that interest and are the least intrusive to achieve the State's goals. While the Tennessee Supreme Court found that the State unquestionably had shown a compelling interest in banning solicitation of voters and distribution of campaign materials within the polling place itself, it concluded that the State had not shown a compelling interest in regulating the premises around the polling place. Accordingly, the court held that the 100–foot limit was not narrowly tailored to protect the demonstrated interest. The court also held that the statute was not the least restrictive means to serve the State's interests. The court found less restrictive the current Tennessee statutes prohibiting interference with an election or the use of violence or intimidation to prevent voting. See Tenn.Code Ann. §§ 2–19–101 and 2–19–115 (Supp.1991). Finally, the court noted that if the State were able to show a compelling interest in preventing congestion and disruption at the entrances to polling places, a shorter radius "might perhaps pass constitutional muster." 802 S.W.2d, at 214.

Because of the importance of the issue, we granted certiorari. 499 U.S. 958, 111 S.Ct. 1578, 113 L.Ed.2d 644 (1991). We now reverse the Tennessee Supreme Court's judgment that the statute violates the First Amendment of the United States Constitution.

***196** III

**[1]** The First Amendment provides that "Congress shall make no law ... abridging ****1850** the freedom of speech...." This Court in *Thornhill v. Alabama,* 310 U.S. 88, 95, 60 S.Ct. 736, 741, 84 L.Ed. 1093 (1940), said: "The freedom of speech ... which [is] secured by the First Amendment against abridgment by the United States, [is] among the fundamental personal rights and liberties which are secured to all persons by the Fourteenth Amendment against abridgment by a State."

The Tennessee statute implicates three central concerns in our First Amendment jurisprudence: regulation of political speech, regulation of speech in a public forum, and regulation based on the content of the speech. The speech restricted by § 2–7–111(b) obviously is political speech. "Whatever differences may exist about interpretations of the First Amendment, there is practically universal agreement that a major purpose of that Amendment was to protect the free discussion of governmental affairs." *Mills v. Alabama,* 384 U.S., at 218, 86 S.Ct., at 1437. "For speech concerning public affairs is more than self-expression; it is the essence of self-government." *Garrison v. Louisiana,* 379 U.S. 64, 74–75, 85 S.Ct. 209, 216, 13 L.Ed.2d 125 (1964). Accordingly, this Court has recognized that "the First Amendment 'has its fullest and most urgent application' to speech uttered during a campaign for political office." *Eu v. San Francisco Cty. Democratic Central Comm.,* 489 U.S. 214, 223, 109 S.Ct. 1013, 1020, 103 L.Ed.2d 271 (1989) (quoting *Monitor Patriot Co. v. Roy,* 401 U.S. 265, 272, 91 S.Ct. 621, 625, 28 L.Ed.2d 35 (1971)).

The second important feature of § 2–7–111(b) is that it bars speech in quintessential public forums. These forums include those places "which by long tradition or by government fiat have been devoted to assembly and debate," such as parks, streets, and sidewalks. *Perry Ed. Assn. v. Perry Local Educators' Assn.,* 460 U.S. 37, 45, 103 S.Ct. 948, 955, 74 L.Ed.2d 794 (1983).[2] "Such use ***197** of the streets and public places has, from ancient times, been a part of the privileges, immunities, rights, and liberties of citizens." *Hague v. CIO,* 307 U.S. 496, 515, 59 S.Ct. 954, 964, 83 L.Ed. 1423 (1939) (opinion of Roberts, J.). At the same time, however, expressive activity, even in a quintessential public forum, may interfere with other important activities for which the property is used. Accordingly, this Court has held that the government may regulate the time, place, and manner

of the expressive activity, so long as such restrictions are content neutral, are narrowly tailored to serve a significant governmental interest, and leave open ample alternatives for communication. *United States v. Grace,* 461 U.S. 171, 177, 103 S.Ct. 1702, 1707, 75 L.Ed.2d 736 (1983). See also *Ward v. Rock Against Racism,* 491 U.S. 781, 791, 109 S.Ct. 2746, 2753, 105 L.Ed.2d 661 (1989).

**[2]** The Tennessee restriction under consideration, however, is not a facially content-neutral time, place, or manner restriction. Whether individuals may exercise their free speech rights near polling places depends entirely on whether their speech is related to a political campaign. The statute does not reach other categories of speech, such as commercial solicitation, distribution, and display. This Court has held that the First Amendment's hostility to content-based regulation extends not only to a restriction on a particular viewpoint, but also to a prohibition of public discussion of an entire topic. See, *e.g., Consolidated Edison Co. of N.Y. v. Public Service Comm'n of N.Y.,* 447 U.S. 530, 537, 100 S.Ct. 2326, 2333, 65 L.Ed.2d 319 (1980). Accord, *Simon & Schuster, Inc. v. Members of N.Y. State Crime Victims Bd.,* 502 U.S. 105, 116, 112 S.Ct. 501, 508, 116 L.Ed.2d 476 (1991) (statute restricting speech about crime is content based).[3]

**1851 *198 As a facially content-based restriction on political speech in a public forum, § 2–7–111(b) must be subjected to exacting scrutiny: The State must show that the "regulation is necessary to serve a compelling state interest and that it is narrowly drawn to achieve that end." *Perry Ed. Assn. v. Perry Local Educators' Assn.,* 460 U.S., at 45, 103 S.Ct., at 955. Accord, *Board of Airport Comm'rs of Los Angeles v. Jews for Jesus, Inc.,* 482 U.S. 569, 573, 107 S.Ct. 2568, 2571, 96 L.Ed.2d 500 (1987); *Cornelius v. NAACP Legal Defense & Ed. Fund, Inc.,* 473 U.S. 788, 800, 105 S.Ct. 3439, 3448, 87 L.Ed.2d 567 (1985); *United States v. Grace,* 461 U.S., at 177, 103 S.Ct., at 1707.

Despite the ritualistic ease with which we state this now-familiar standard, its announcement does not allow us to avoid the truly difficult issues involving the First Amendment. Perhaps foremost among these serious issues are cases that force us to reconcile our commitment to free speech with our commitment to other constitutional rights embodied in government proceedings. See, *e.g., Sheppard v. Maxwell,* 384 U.S. 333, 361–363, 86 S.Ct. 1507, 1521–1522, 16 L.Ed.2d 600 (1966) (outlining restrictions on speech of trial participants that courts may impose to protect an accused's right to a fair trial). This case presents us with a particularly difficult reconciliation: the accommodation of the right to engage in political discourse with the right to vote—a right at the heart of our democracy.

IV

**[3]** Tennessee asserts that its campaign-free zone serves two compelling interests. First, the State argues that its regulation serves its compelling interest in protecting the right of its citizens to vote freely for the candidates of their choice.[4] ***199** Second, Tennessee argues that its restriction protects the right to vote in an election conducted with integrity and reliability.[5]

The interests advanced by Tennessee obviously are compelling ones. This Court has recognized that the "right to vote freely for the candidate of one's choice is of the essence of a democratic society." *Reynolds v. Sims,* 377 U.S. 533, 555, 84 S.Ct. 1362, 1378, 12 L.Ed.2d 506 (1964). Indeed,

> "[n]o right is more precious in a free country than that of having a voice in the election of those who make the laws under which, as good citizens, we must live. Other rights, even the most basic, are illusory if the right to vote is undermined." *Wesberry v. Sanders,* 376 U.S. 1, 17, 84 S.Ct. 526, 535, 11 L.Ed.2d 481 (1964).

Accordingly, this Court has concluded that a State has a compelling interest in protecting voters from confusion and undue influence. See *Eu,* 489 U.S., at 228–229, 109 S.Ct., at 1023.

**1852 The Court also has recognized that a State "indisputably has a compelling interest in preserving the integrity of its election process." *Id.,* at 231, 109 S.Ct., at 1024. The Court thus has "upheld generally applicable and evenhanded restrictions that protect the integrity and reliability of the electoral process itself." *Anderson v. Celebrezze,* 460 U.S. 780, 788, n. 9, 103 S.Ct. 1564, 1570, n. 9, 75 L.Ed.2d 547 (1983) (collecting cases). In other words, it has recognized that a State has a compelling interest in ensuring that an individual's right to vote is not undermined by fraud in the election process.

To survive strict scrutiny, however, a State must do more than assert a compelling state interest—it must demonstrate that its law is necessary to serve the asserted interest. ***200** While we readily acknowledge that a law rarely survives such scrutiny, an examination of the evolution of election reform,

both in this country and abroad, demonstrates the necessity of restricted areas in or around polling places.

During the colonial period, many government officials were elected by the *viva voce* method or by the showing of hands, as was the custom in most parts of Europe. That voting scheme was not a private affair, but an open, public decision, witnessed by all and improperly influenced by some. The opportunities that the *viva voce* system gave for bribery and intimidation gradually led to its repeal. See generally E. Evans, A History of the Australian Ballot System in the United States 1–6 (1917) (Evans); J. Harris, Election Administration in the United States 15–16 (1934) (Harris); J. Rusk, The Effect of the Australian Ballot Reform on Split Ticket Voting: 1876–1908, pp. 8–11 (1968) (Rusk).

Within 20 years of the formation of the Union, most States had incorporated the paper ballot into their electoral system. Initially, this paper ballot was a vast improvement. Individual voters made their own handwritten ballots, marked them in the privacy of their homes, and then brought them to the polls for counting. But the effort of making out such a ballot became increasingly more complex and cumbersome. See generally S. Albright, The American Ballot 14–19 (1942) (Albright); Evans 5; Rusk 9–14.

Wishing to gain influence, political parties began to produce their own ballots for voters. These ballots were often printed with flamboyant colors, distinctive designs, and emblems so that they could be recognized at a distance. State attempts to standardize the ballots were easily thwarted—the vote buyer could simply place a ballot in the hands of the bribed voter and watch until he placed it in the polling box. Thus, the evils associated with the earlier *viva voce* system reinfected the election process; the failure of ***201** the law to secure secrecy opened the door to bribery[6] and intimidation.[7] See generally Albright 19–20; Evans 7, 11; Harris 17, 151–****1853** 152; V. Key, Politics, Parties, and Pressure Groups 649 (1952); J. Reynolds, Testing Democracy: Electoral Behavior and Progressive Reform in New Jersey, 1880–1920, p. 36 (1988); Rusk 14–23.

***202** Approaching the polling place under this system was akin to entering an open auction place. As the elector started his journey to the polls, he was met by various party ticket peddlers "who were only too anxious to supply him with their party tickets." Evans 9. Often the competition became heated when several such peddlers found an uncommitted or wavering voter. See L. Fredman, The Australian Ballot: The Story of an American Reform 24 (1968) (Fredman); Rusk 17. Sham battles were frequently engaged in to keep away elderly and timid voters of the opposition. See Fredman 24, 26–27; 143 North American Review 628–629 (1886) (cited in Evans 16). In short, these early elections "were not a very pleasant spectacle for those who believed in democratic government." *Id.,* at 10.

The problems with voter intimidation and election fraud that the United States was experiencing were not unique. Several other countries were attempting to work out satisfactory solutions to these same problems. Some Australian provinces adopted a series of reforms intended to secure the secrecy of an elector's vote. The most famous feature of the Australian system was its provision for an official ballot, encompassing all candidates of all parties on the same ticket. But this was not the only measure adopted to preserve the secrecy of the ballot. The Australian system also provided for the erection of polling booths (containing several voting compartments) open only to election officials, two "scrutinees" for each candidate, and electors about to vote. See J. Wigmore, The Australian Ballot System as Embodied in the Legislation of Various Countries 69, 71, 78, 79 (1889) (Wigmore) (excerpting provisions adopted by South Australia and Queensland). See generally Albright 23; Evans 17; Rusk 23–24.

The Australian system was enacted in England in 1872 after a study by the committee of election practices identified Australia's ballot as the best possible remedy for the existing situation. See Wigmore 14–16. Belgium followed England's ***203** example in 1877. Like the Australian provinces, both England and Belgium excluded the general public from the entire polling room. See Wigmore 94, 105. See generally Albright 23–24; Evans 17–18; Rusk 24–25.

One of the earliest indications of the reform movement in this country came in 1882 when the Philadelphia Civil Service Reform Association urged its adoption in a pamphlet entitled "English Elections." Many articles were written praising its usefulness in preventing bribery, intimidation, disorder, and inefficiency at the polls. Commentators argued that it would diminish the growing evil of bribery by removing the knowledge of whether it had been successful. Another argument strongly urged in favor of the reform was that it would protect the weak and dependent against intimidation and coercion by employers and creditors. The inability to determine the effectiveness of bribery and intimidation

accordingly would create order and decency at the polls. See generally Albright 24–26; Evans 21–23; Rusk 25–29, 42–43.

After several failed attempts to adopt the Australian system in Michigan and Wisconsin, ****1854** the Louisville, Kentucky, municipal government, the Commonwealth of Massachusetts, and the State of New York adopted the Australian system in 1888. The Louisville law prohibited all but voters, candidates or their agents, and electors from coming within 50 feet of the voting room inclosure. The Louisville law also provided that candidates' agents within the restricted area "were not allowed to persuade, influence, or intimidate any one in the choice of his candidate, or to attempt doing so...." Wigmore 120. The Massachusetts and New York laws differed somewhat from the previous Acts in that they excluded the general public only from the area encompassed within a guardrail constructed six feet from the voting compartments. See *id.,* at 47, 128. This modification was considered an improvement because it provided additional monitoring by members of the general public and independent ***204** candidates, who in most States were not allowed to be represented by separate inspectors. Otherwise, "in order to perpetrate almost every election fraud it would only be necessary to buy up the election officers of the other party." *Id.,* at 52. Finally, New York also prohibited any person from "electioneering on election day within any polling-place, or within one hundred feet of any polling place." *Id.,* at 131. See generally Evans 18–21; Rusk 26.

The success achieved through these reforms was immediately noticed and widely praised. See generally Evans 21–24; Rusk 26–31, 42–43. One commentator remarked of the New York law of 1888:

> "We have secured secrecy; and intimidation by employers, party bosses, police officers, saloonkeepers and others has come to an end.
>
> "In earlier times our polling places were frequently, to quote the litany, 'scenes of battle, murder, and sudden death.' This also has come to an end, and until nightfall, when the jubilation begins, our election days are now as peaceful as our Sabbaths.
>
> "The new legislation has also rendered impossible the old methods of frank, hardy, straightforward and shameless bribery of voters at the polls." W. Ivins, The Electoral System of the State of New York, Proceedings of the 29th Annual Meeting of the New York State Bar Association 316 (1906).[8]

The triumphs of 1888 set off a rapid and widespread adoption of the Australian system in the United States. By 1896, ***205** almost 90 percent of the States had adopted the Australian system. This accounted for 92 percent of the national electorate. See Rusk 30–31. See also Albright 26–28; Evans 27; *post,* at 1860, n. 1 (SCALIA, J., concurring in Judgment) (citations to statutes passed before 1900).

The roots of Tennessee's regulation can be traced back to two provisions passed during this period of rapid reform. Tennessee passed the first relevant provision in 1890 as part of its switch to an Australian system. In its effort to "secur[e] the purity of elections," Tennessee provided that only voters and certain election officials were permitted within the room where the election was held or within 50 feet of the entrance. The Act did not provide any penalty for violation and applied only in the more highly populated counties and cities. 1890 Tenn.Pub.Acts, ch. 24, §§ 12 and 13.

The second relevant provision was passed in 1901 as an amendment to Tennessee's "Act to preserve the purity of elections, and define and punish offenses against the elective franchise." The original Act, passed in 1897, made it a misdemeanor to commit ****1855** various election offenses, including the use of bribery, violence, or intimidation in order to induce a person to vote or refrain from voting for any particular person or measure. 1897 Tenn.Pub.Acts, ch. 14. The 1901 amendment made it a misdemeanor for any person, except the officers holding the elections, to approach nearer than 30 feet to any voter or ballot box. This provision applied to all Tennessee elections. 1901 Tenn.Pub.Acts, ch. 142.

These two laws remained relatively unchanged until 1967, when Tennessee added yet another proscription to its secret ballot law. This amendment prohibited the distribution of campaign literature "on the same floor of a building, or within one hundred (100) feet thereof, where an election is in progress." 1967 Tenn.Pub.Acts, ch. 85.

In 1972, the State enacted a comprehensive code to regulate the conduct of elections. The code included a section that proscribed the display and the distribution of campaign ***206** material and the solicitation of votes within 100 feet of the entrance to a polling place. The 1972 "campaign-free zone" is the direct precursor of the restriction challenged in the present litigation.

Today, all 50 States limit access to the areas in or around polling places. See App. to Pet. for Cert. 26a–50a; Note, Defoliating the Grassroots: Election Day Restrictions on Political Speech, 77 Geo.L.J. 2137 (1989) (summarizing statutes as of 1989). The National Labor Relations Board also limits activities at or near polling places in union-representation elections.[9]

In sum, an examination of the history of election regulation in this country reveals a persistent battle against two evils: voter intimidation and election fraud. After an unsuccessful experiment with an unofficial ballot system, all 50 States, together with numerous other Western democracies, settled on the same solution: a secret ballot secured in part by a restricted zone around the voting compartments. We find that this widespread and time-tested consensus demonstrates that some restricted zone is necessary in order to serve the States' compelling interests in preventing voter intimidation and election fraud.

Respondent and the dissent advance three principal challenges to this conclusion. First, respondent argues that restricted zones are overinclusive because States could secure these same compelling interests with statutes that make it a misdemeanor to interfere with an election or to use violence or intimidation to prevent voting. See, *e.g.,* Tenn.Code Ann. §§ 2–19–101 and 2–19–115 (Supp.1991). We are not persuaded. Intimidation and interference laws fall short of serving a State's compelling interests because they "deal ***207** with only the most blatant and specific attempts" to impede elections. Cf. *Buckley v. Valeo,* 424 U.S. 1, 28, 96 S.Ct. 612, 639, 46 L.Ed.2d 659 (1976) (existence of bribery statute does not preclude need for limits on contributions to political campaigns). Moreover, because law enforcement officers generally are barred from the vicinity of the polls to avoid any appearance of coercion in the electoral process, see Tenn.Code Ann. § 2–7–103 (1985), many acts of interference would go undetected. These undetected or less than blatant acts may nonetheless drive the voter away before remedial action can be taken.

Second, respondent and the dissent argue that Tennessee's statute is underinclusive because it does not restrict other types of speech, such as charitable and commercial solicitation or exit polling, within the 100–foot zone. We agree that distinguishing among types of speech requires that the statute be subjected to strict scrutiny. We do not, however, agree that the failure to regulate all speech renders the statute fatally underinclusive. In fact, as one early commentator ****1856** pointed out, allowing members of the general public access to the polling place makes it more difficult for political machines to buy off all the monitors. See Wigmore 52. But regardless of the need for such additional monitoring, there is, as summarized above, ample evidence that political candidates have used campaign workers to commit voter intimidation or electoral fraud. In contrast, there is simply no evidence that political candidates have used other forms of solicitation or exit polling to commit such electoral abuses. States adopt laws to address the problems that confront them. The First Amendment does not require States to regulate for problems that do not exist.

Finally, the dissent argues that we confuse history with necessity. Yet the dissent concedes that a secret ballot was necessary to cure electoral abuses. Contrary to the dissent's contention, the link between ballot secrecy and some restricted zone surrounding the voting area is not merely timing—it is common sense. The only way to preserve the ***208** secrecy of the ballot is to limit access to the area around the voter.[10] Accordingly, we hold that *some* restricted zone around the voting area is necessary to secure the State's compelling interest.

The real question then is *how large* a restricted zone is permissible or sufficiently tailored. Respondent and the dissent argue that Tennessee's 100–foot boundary is not narrowly drawn to achieve the State's compelling interest in protecting the right to vote. We disagree.

As a preliminary matter, the long, uninterrupted and prevalent use of these statutes makes it difficult for States to come forward with the sort of proof the dissent wishes to require. The majority of these laws were adopted originally in the 1890s, long before States engaged in extensive legislative hearings on election regulations. The prevalence of these laws, both here and abroad, then encouraged their reenactment without much comment. The fact that these laws have been in effect for a long period of time also makes it difficult for the States to put on witnesses who can testify as to what would happen without them. Finally, it is difficult to isolate the exact effect of these laws on voter intimidation and election fraud. Voter intimidation and election fraud are successful precisely because they are difficult to detect.

**[4]** Furthermore, because a government has such a compelling interest in securing the right to vote freely and effectively, this Court never has held a State "to the burden of demonstrating empirically the objective effects on political

stability that [are] produced" by the voting regulation in question. ***209** *Munro v. Socialist Workers Party,* 479 U.S. 189, 195, 107 S.Ct. 533, 537, 93 L.Ed.2d 499 (1986).[11] Elections vary from year to year, and place to place. It is therefore difficult to make specific findings about the effects of a voting regulation. Moreover, the remedy for a tainted election is an imperfect one. Rerunning an election would have a ****1857** negative impact on voter turnout.[12] Thus, requiring proof that a 100–foot boundary is perfectly tailored to deal with voter intimidation and election fraud

> "would necessitate that a State's political system sustain some level of damage before the legislature could take corrective action. Legislatures, we think, should be permitted to respond to potential deficiencies in the electoral process with foresight rather than reactively, provided that the response is reasonable and does not *significantly impinge* on constitutionally protected rights." *Id.,* at 195–196, 107 S.Ct., at 537–38 (emphasis added).

***210** We do not think that the minor geographic limitation prescribed by § 2–7–111(b) constitutes such a significant impingement. Thus, we simply do not view the question whether the 100–foot boundary line could be somewhat tighter as a question of "constitutional dimension." *Id.,* at 197, 107 S.Ct., at 538. Reducing the boundary to 25 feet, as suggested by the Tennessee Supreme Court, 802 S.W.2d, at 214, is a difference only in degree, not a less restrictive alternative in kind. *Buckley v. Valeo,* 424 U.S., at 30, 96 S.Ct., at 640. As was pointed out in the dissenting opinion in the Tennessee Supreme Court, it "takes approximately 15 seconds to walk 75 feet." 802 S.W.2d, at 215. The State of Tennessee has decided that these last 15 seconds before its citizens enter the polling place should be their own, as free from interference as possible. We do not find that this is an unconstitutional choice.[13]

At some measurable distance from the polls, of course, governmental regulation of vote solicitation could effectively become an impermissible burden akin to the statute struck down in *Mills v. Alabama,* 384 U.S. 214, 86 S.Ct. 1434, 16 L.Ed.2d 484 (1966). See also *Meyer v. Grant,* 486 U.S. 414, 108 S.Ct. 1886, 100 L.Ed.2d 425 (1988) (invalidating absolute bar against the use of paid circulators). In reviewing challenges to specific provisions of a State's election laws, however, this Court has not employed any " 'litmus-paper test' ***211** that will separate valid from invalid restrictions." *Anderson v. Celebrezze,* 460 U.S., at 789, 103 S.Ct., at 1570 (quoting *Storer v. Brown,* 415 U.S. 724, 730, 94 S.Ct. 1274, 1279, 39 L.Ed.2d 714 (1974)). Accordingly, it is sufficient to say that in establishing a 100–foot boundary, Tennessee is on the constitutional side of the line.

In conclusion, we reaffirm that it is the rare case in which we have held that a law survives strict scrutiny. This, however, is such a rare case. Here, the State, as recognized ****1858** administrator of elections, has asserted that the exercise of free speech rights conflicts with another fundamental right, the right to cast a ballot in an election free from the taint of intimidation and fraud. A long history, a substantial consensus, and simple common sense show that some restricted zone around polling places is necessary to protect that fundamental right. Given the conflict between these two rights, we hold that requiring solicitors to stand 100 feet from the entrances to polling places does not constitute an unconstitutional compromise.

The judgment of the Tennessee Supreme Court is reversed, and the case is remanded for further proceedings not inconsistent with this opinion.

*It is so ordered.*

Justice THOMAS took no part in the consideration or decision of this case.

Justice KENNEDY, concurring.

Earlier this Term, I questioned the validity of the Court's recent First Amendment precedents suggesting that a State may restrict speech based on its content in the pursuit of a compelling interest. *Simon & Schuster, Inc. v. Members of N.Y. State Crime Victims Bd.,* 502 U.S. 105, 124–125, 112 S.Ct. 501, 512–513, 116 L.Ed.2d 476 (1991) (opinion concurring in judgment). Under what I deem the proper approach, neither a general content-based proscription of speech nor a content-based proscription of speech in a public forum can be justified unless the speech falls within ***212** one of a limited set of well-defined categories. See *ibid.* Today's case warrants some elaboration on the meaning of the term "content based" as used in our jurisprudence.

In *Simon & Schuster,* my concurrence pointed out the seeming paradox that notwithstanding "our repeated statement that 'above all else, the First Amendment means that government has no power to restrict expression because of its message, its ideas, its subject matter, or its content,' " *id.,* at 126, 112 S.Ct., at 514 (quoting *Police Dept. of Chicago v. Mosley,* 408

U.S. 92, 95, 92 S.Ct. 2286, 2290, 33 L.Ed.2d 212 (1972)), we had fallen into the practice of suggesting that content-based limits on speech can be upheld if confined in a narrow way to serve a compelling state interest. I continue to believe that our adoption of the compelling-interest test was accomplished by accident, 502 U.S., at 125, 112 S.Ct., at 513, and as a general matter produces a misunderstanding that has the potential to encourage attempts to suppress legitimate expression.

The test may have a legitimate role, however, in sorting out what is and what is not a content-based restriction. See *id.,* at 128, 112 S.Ct., at 514 ("[W]e cannot avoid the necessity of deciding ... whether the regulation is in fact content based or content neutral"). As the Court has recognized in the context of regulations of the time, place, or manner of speech, "[g]overnment regulation of expressive activity is content neutral so long as it is '*justified* without reference to the content of the regulated speech.' " *Ward v. Rock Against Racism,* 491 U.S. 781, 791, 109 S.Ct. 2746, 2754, 105 L.Ed.2d 661 (1989) (quoting *Clark v. Community for Creative Non–Violence,* 468 U.S. 288, 293, 104 S.Ct. 3065, 3069, 82 L.Ed.2d 221 (1984)) (emphasis added in *Ward* ). In some cases, the fact that a regulation is content based and invalid because outside any recognized category permitting suppression will be apparent from its face. In my view that was true of the New York statute we considered in *Simon & Schuster,* and no further inquiry was necessary. To read the statute was sufficient to strike it down as an effort by government to restrict expression because of its content.

***213** Discerning the justification for a restriction of expression, however, is not always so straightforward as it was, or should have been, in *Simon & Schuster.* In some cases, a censorial justification will not be apparent from the face of a regulation which draws distinctions based on content, and the government ****1859** will tender a plausible justification unrelated to the suppression of speech or ideas. There the compelling-interest test may be one analytical device to detect, in an objective way, whether the asserted justification is in fact an accurate description of the purpose and effect of the law. This explanation of the compelling-interest analysis is not explicit in our decisions; yet it does appear that in time, place, and manner cases, the regulation's justification is a central inquiry. See, *e.g., Ward v. Rock Against Racism, supra,* 491 U.S., at 791, 109 S.Ct., at 2754; *Clark v. Community for Creative Non–Violence, supra,* 468 U.S., at 293, 104 S.Ct., at 3069; *Heffron v. International Society for Krishna Consciousness, Inc.,* 452 U.S. 640, 648–649, and n. 12, 101 S.Ct. 2559, 2564, and n. 12, 69 L.Ed.2d 298 (1981). And in those matters we do not apply as strict a requirement of narrow tailoring as in other contexts, *Ward v. Rock Against Racism, supra,* 491 U.S., at 797, 109 S.Ct., at 2757, although this may be because in cases like *Ward, Clark,* and *Heffron,* content neutrality was evident on the face of the regulations once the justification was identified and became itself the object of examination.

The same use of the compelling-interest test is adopted today, not to justify or condemn a category of suppression but to determine the accuracy of the justification the State gives for its law. The outcome of that analysis is that the justification for the speech restriction is to protect another constitutional right. As I noted in *Simon & Schuster,* there is a narrow area in which the First Amendment permits freedom of expression to yield to the extent necessary for the accommodation of another constitutional right. 502 U.S., at 124, 128, 112 S.Ct., at 512–513, 514–515. That principle can apply here without danger that the general rule permitting no content restriction will be engulfed by the analysis; for under the statute the State acts ***214** to protect the integrity of the polling place where citizens exercise the right to vote. Voting is one of the most fundamental and cherished liberties in our democratic system of government. The State is not using this justification to suppress legitimate expression. With these observations, I concur in the opinion of Justice BLACKMUN and the judgment of the Court.

Justice SCALIA, concurring in the judgment.
If the category of "traditional public forum" is to be a tool of analysis rather than a conclusory label, it must remain faithful to its name and derive its content from *tradition.* Because restrictions on speech around polling places on election day are as venerable a part of the American tradition as the secret ballot, Tenn.Code Ann. § 2–7–111 (Supp.1991) does not restrict speech in a traditional public forum, and the "exacting scrutiny" that the plurality purports to apply, *ante,* at 1851, is inappropriate. Instead, I believe that § 2–7–111, though content-based, is constitutional because it is a reasonable, viewpoint-neutral regulation of a nonpublic forum. I therefore concur in the judgment of the Court.

As the plurality correctly notes, the 100–foot zone established by § 2–7–111 sometimes encompasses streets and sidewalks adjacent to the polling places. *Ante,* at 1850, n. 2. The plurality's determination that § 2–7–111 is subject to strict scrutiny is premised on its view that these areas are "quintessential public forums," having " '*by long tradition*

... been devoted to assembly and debate.' " *Ante,* at 1850 (emphasis added). Insofar as areas adjacent to functioning polling places are concerned, that is simply not so. Statutes such as § 2–7–111 have an impressively long history of general use. Ever since the widespread adoption of the secret ballot in the late 19th century, viewpoint-neutral restrictions on election-day speech within a specified distance of the polling place—or on physical presence there—have been commonplace, indeed prevalent. By 1900, at least 34 of the 45 ***215** States (including Tennessee) had enacted such restrictions. ****1860** [1]]] It is noteworthy that most of the statutes banning election-day speech near the polling place specified the same distance set forth in § 2–7–111 (100 feet),[2] and it is clear that the restricted ***216** zones often encompassed streets and sidewalks. Thus, the streets and sidewalks around polling places have traditionally *not* been devoted to assembly and debate.

Nothing in the public forum doctrine or in this Court's precedents warrants disregard of this longstanding tradition. "Streets and sidewalks" are not public forums *in all places,* see *Greer v. Spock,* 424 U.S. 828, 96 S.Ct. 1211, 47 L.Ed.2d 505 (1976) (streets and sidewalks on military base are not a public forum), and the long usage of our people demonstrates that the portions of streets and sidewalks adjacent to polling places are not public forums *at all times* either. This unquestionable tradition could be accommodated, I suppose, by holding laws such as § 2–7–111 to be covered by our doctrine of permissible "time, place, and manner" restrictions upon public forum speech—which doctrine is itself no more than a reflection of our traditions, see *Perry Ed. Assn. v. Perry Local Educators' Assn.,* 460 U.S. 37, 45, 103 S.Ct. 948, 955, 74 L.Ed.2d 794 (1983). The problem with this approach, however, is that it would require some expansion of (or a unique exception to) the "time, place, and manner" doctrine, which does not permit restrictions that are not content neutral (§ 2–7–111 prohibits only electioneering speech). *Ibid.* It is doctrinally less confusing to acknowledge that the environs of a polling place, on election day, are simply not a "traditional public forum"—which means that they are subject to speech restrictions that are reasonable and viewpoint neutral. *Id.,* at 46, 103 S.Ct., at 955.

For the reasons that the plurality believes § 2–7–111 survives exacting scrutiny, *ante,* at 1851–1858, I believe it is at least reasonable; and respondent does not contend that it is viewpoint discriminatory. I therefore ****1861** agree with the judgment of the Court that § 2–7–111 is constitutional.

***217** Justice STEVENS, with whom Justice O'CONNOR and Justice SOUTER join, dissenting.

The speech and conduct prohibited in the campaign-free zone created by Tenn.Code Ann. § 2–7–111 (Supp.1991) is classic political expression. As this Court has long recognized, "[d]iscussion of public issues and debate on the qualifications of candidates are integral to the operation of the system of government established by our Constitution. The First Amendment affords the broadest protection to such political expression in order 'to assure [the] unfettered interchange of ideas for the bringing about of political and social changes desired by the people.' " *Buckley v. Valeo,* 424 U.S. 1, 14, 96 S.Ct. 612, 632, 46 L.Ed.2d 659 (1976) (citation omitted). Therefore, I fully agree with the plurality that Tennessee must show that its " 'regulation is necessary to serve a compelling state interest and that it is narrowly drawn to achieve that end.' " *Ante,* at 1851 (citations omitted). I do not agree, however, that Tennessee has made anything approaching such a showing.

I

Tennessee's statutory "campaign-free zone" raises constitutional concerns of the first magnitude. The statute directly regulates political expression and thus implicates a core concern of the First Amendment. Moreover, it targets only a specific subject matter (campaign speech) and a defined class of speakers (campaign workers) and thus regulates expression based on its content. In doing so, the Tennessee statute somewhat perversely disfavors speech that normally is accorded greater protection than the kinds of speech that the statute does not regulate. For these reasons, Tennessee unquestionably bears the heavy burden of demonstrating that its silencing of political expression is necessary and narrowly tailored to serve a compelling state interest.

Statutes creating campaign-free zones outside polling places serve two quite different functions—they protect orderly ***218** access to the polls and they prevent last-minute campaigning. There can be no question that the former constitutes a compelling state interest and that, in light of our decision in *Mills v. Alabama,* 384 U.S. 214, 86 S.Ct. 1434, 16 L.Ed.2d 484 (1966), the latter does not. Accordingly, a State must demonstrate that the particular means it has fashioned to ensure orderly access to the polls do not unnecessarily hinder last-minute campaigning.

Campaign-free zones are noteworthy for their broad, antiseptic sweep. The Tennessee zone encompasses at least 30,000 square feet around each polling place; in some States, such as Kentucky and Wisconsin, the radius of the restricted zone is 500 feet—silencing an area of over 750,000 square feet. Even under the most sanguine scenario of participatory democracy, it is difficult to imagine voter turnout so complete as to require the clearing of hundreds of thousands of square feet simply to ensure that the path to the polling-place door remains open and that the curtain that protects the secrecy of the ballot box remains closed.

The fact that campaign-free zones cover such a large area in some States unmistakably identifies censorship of election-day campaigning as an animating force behind these restrictions. That some States have no problem maintaining order with zones of 50 feet or less strongly suggests that the more expansive prohibitions are not necessary to maintain access and order. Indeed, on its face, Tennessee's statute appears informed by political concerns. Although the statute initially established a 100–foot zone, it was later amended to establish a 300–foot zone in 12 of the State's 95 counties. As the State Attorney General observed, "there is not a rational basis" for this special treatment, for there is no "discernable reason why an extension of the boundary ... is necessary in" ****1862** those 12 counties. Brief in Opposition 4a, Tenn.Op.Atty.Gen. No. 87–185.

Moreover, the Tennessee statute does not merely regulate conduct that might inhibit voting; it bars the simple ***219** "display of campaign posters, signs, or other campaign materials." § 2–7–111(b). Bumper stickers on parked cars and lapel buttons on pedestrians are taboo. The notion that such sweeping restrictions on speech are necessary to maintain the freedom to vote and the integrity of the ballot box borders on the absurd.

The evidence introduced at trial to demonstrate the necessity for Tennessee's campaign-free zone was exceptionally thin. Although the State's sole witness explained the need for special restrictions *inside* the polling place itself, she offered no justification for a ban on political expression *outside* the polling place.[1] On this record it is far from surprising that the Tennessee Supreme Court—which surely is more familiar with the State's electoral practices and traditions than we are—concluded that the 100–foot ban outside the polling place was not justified by regulatory concerns. This conclusion is bolstered by Tennessee law, which indicates that normal police protection is completely adequate to maintain order in the area more than *10* feet from the polling place.[2]

Perhaps in recognition of the poverty of the record, the plurality—without briefing, or legislative or judicial factfinding—looks to history to assess whether Tennessee's statute ***220** is in fact necessary to serve the State's interests. From its review of the history of electoral reform, the plurality finds that

> "all 50 States ... settled on the same solution: a secret ballot secured in part by a restricted zone around the voting compartments. We find that this wide-spread and time-tested consensus demonstrates that *some* restricted zone is necessary in order to serve the States' compelling interest in preventing voter intimidation and election fraud." *Ante,* at 1855–1856 (emphasis added).

This analysis is deeply flawed; it confuses history with necessity, and mistakes the traditional for the indispensable. The plurality's reasoning combines two logical errors: First, the plurality assumes that a practice's long life itself establishes its necessity; and second, the plurality assumes that a practice that was once necessary remains necessary until it is ended.[3]

With regard to the first, the fact that campaign-free zones were, as the plurality indicates, introduced as part of a broader package of electoral reforms does not demonstrate that such zones were *necessary.* The abuses that affected the electoral system could have been cured by the institution of the secret ballot and by the heightened regulation of the polling place alone, without silencing the political speech *outside* the polling place.[4] In my opinion, more than mere ****1863** timing is required to infer necessity from tradition.

***221** We have never regarded tradition as a proxy for necessity where necessity must be demonstrated. To the contrary, our election-law jurisprudence is rich with examples of traditions that, though longstanding, were later held to be unnecessary. For example, "[m]ost of the early Colonies had [poll taxes]; many of the States have had them during much of their histories...." *Harper v. Virginia Bd. of Elections,* 383 U.S. 663, 684, 86 S.Ct. 1079, 1091, 16 L.Ed.2d 169 (1966) (Harlan, J., dissenting). Similarly, substantial barriers to candidacy, such as stringent petition requirements, see *Williams v. Rhodes,* 393 U.S. 23, 89 S.Ct. 5, 21 L.Ed.2d 24 (1968), property-ownership requirements, see *Turner v. Fouche,* 396 U.S. 346, 90 S.Ct. 532, 24 L.Ed.2d 567 (1970),

and onerous filing fees, see *Lubin v. Panish,* 415 U.S. 709, 94 S.Ct. 1315, 39 L.Ed.2d 702 (1974), were all longstanding features of the electoral labyrinth.

In fact, two of our most noted decisions in this area involve, as does this case, Tennessee's electoral traditions. *Dunn v. Blumstein,* 405 U.S. 330, 92 S.Ct. 995, 31 L.Ed.2d 274 (1972), which invalidated Tennessee's 1–year residency requirement, is particularly instructive. Tennessee's residency requirement was indisputably "traditional," having been in place since 1870. App. in *Dunn v. Blumstein,* O.T.1971, No. 13, p. 22. As in this case, the State defended its law on the basis of its interest in " 'secur[ing] the freedom of elections and the purity of the ballot box.' " *Id.,* at 23. Again like this case, *Dunn* involved a conflict between two rights—the right to travel and the right to vote. The Court applied strict scrutiny, ruling that residency requirements are "unconstitutional unless the State can demonstrate that such laws are '*necessary* to promote a *compelling* governmental interest.' " 405 U.S., at 342, 92 S.Ct., at 1003 (emphasis in original) (citation omitted). Although we recognized that "[p]reservation of the 'purity of the ballot box' is a formidable-sounding state interest," *id.,* at 345, 92 S.Ct., at 1004, we rejected the State's argument that a 1–year requirement was necessary to promote that interest. In doing so, we did not even mention, let alone find determinative, the fact that Tennessee's requirement was more than 100 years old.

***222** In *Baker v. Carr,* 369 U.S. 186, 82 S.Ct. 691, 7 L.Ed.2d 663 (1962), we addressed the apportionment of Tennessee's Legislature. The State's apportionment regime had remained unchanged since 1901 and was such that, by the time of trial, "40% of the voters elect[ed] 63 of the 99 members of the [state] House" of Representatives. *Id.,* at 253, 82 S.Ct., at 729 (Clark, J., concurring). Although, as Justice Frankfurter observed in dissent, " 'very unequal' representation" had been a feature of the Nation's political landscape since colonial times, *id.,* at 307–318, 82 S.Ct., at 759–765, the Court was not bound by this long tradition. Our other cases resemble *Dunn* and *Baker* in this way: Never have we indicated that tradition was synonymous with necessity.

Even if we assume that campaign-free zones were once somehow "necessary," it would not follow that, 100 years later, those practices remain necessary. Much in our political culture, institutions, and practices has changed since the turn of the century: Our elections are far less corrupt, far more civil, and far more democratic today than 100 years ago. These salutary developments have substantially eliminated the need for what is, in my opinion, a sweeping suppression of core political speech.

Although the plurality today blithely dispenses with the need for factual findings to ****1864** determine the necessity of "traditional" restrictions on speech, courts that have made such findings with regard to other campaign-free zones have, without exception, found such zones unnecessary. See, *e.g., Florida Comm. for Liability Reform v. McMillan,* 682 F.Supp. 1536, 1541–1542 (MD Fla.1988); *Clean–Up '84 v. Heinrich,* 582 F.Supp. 125 (MD Fla.1984), aff'd, 759 F.2d 1511 (CA11 1985). Likewise, courts that have invalidated similar restrictions on so-called "exit polling" by the news media have, after careful factfinding, also declined to find such prohibitions "necessary." See, *e.g., Firestone v. News–Press Publishing Co.,* 538 So.2d 457, 459 (Fla.1989) (invalidating Florida's 50–foot zone to the extent that it reaches outside the polling room and noting that "[a]t the evidentiary ***223** hearing, no witnesses testified of any disturbances having occurred within fifty feet of the polling room.... The state's unsubstantiated concern of potential disturbance is not sufficient to overcome the chilling effect on first amendment rights"); *Daily Herald Co. v. Munro,* 838 F.2d 380, 385, n. 8 (CA9 1988) (observing with regard to Washington's 300–foot zone that " '[t]here isn't one iota of testimony about a single voter that was upset, or intimidated, or threatened' " (quoting trial transcript)); *National Broadcasting Co. v. Cleland,* 697 F.Supp. 1204, 1211–1212 (ND Ga.1988); *CBS Inc. v. Smith,* 681 F.Supp. 794, 803 (SD Fla.1988). All of these courts, having received evidence on this issue, were far better situated than we are to assess the contemporary necessity of campaign-free zones. All of these courts concluded that such suppression of expression is unnecessary, suggesting that such zones were something of a social atavism. To my mind, this recent history, developed in the context of an adversarial search for the truth, indicates that, whatever the original historical basis for campaign-free zones may have been, their continued "necessity" has not been established. Especially when we deal with the First Amendment, when the reason for a restriction disappears, the restriction should as well.

II

In addition to sweeping too broadly in its reach, Tennessee's campaign-free zone selectively prohibits speech based on content. Like the statute the Court found invalid in *First*

*Nat. Bank of Boston v. Bellotti,* 435 U.S. 765, 785, 98 S.Ct. 1407, 1420, 55 L.Ed.2d 707 (1978), the Tennessee statute regulates "the subjects about which persons may speak and the speakers who may address a public issue." Within the zone, § 2–7–111 silences all campaign-related expression, but allows expression on any other subject: religious, artistic, commercial speech, even political debate and solicitation concerning issues or candidates not on the day's ballot. Indeed, as I read it, § 2–7–111 does not prohibit exit polling, which surely presents at least as ***224** great a potential interference with orderly access to the polls as does the distribution of campaign leaflets, the display of campaign posters, or the wearing of campaign buttons. This discriminatory feature of the statute severely undercuts the credibility of its purported law-and-order justification.

Tennessee's content-based discrimination is particularly problematic because such a regulation will inevitably favor certain groups of candidates. As the testimony in this case illustrates, several groups of candidates rely heavily on last-minute campaigning. See App. 22–23. Candidates with fewer resources, candidates for lower visibility offices, and "grassroots" candidates benefit disproportionately from last-minute campaigning near the polling place. See Note, Defoliating the Grassroots: Election Day Restrictions on Political Speech, 77 Geo.L.J. 2137, 2158–2160 (1989) (collecting authorities).

Although the plurality recognizes that the Tennessee statute is content based, see *ante,* at 1850–1851, it does not inquire into whether that discrimination itself is related to any purported state interest. To the contrary, the plurality makes the surprising and unsupported claim that the selective regulation ****1865** of protected speech is justified because, "[t]he First Amendment does not require States to regulate for problems that do not exist." *Ante,* at 1856. Yet earlier this Term, the Court rejected an asserted state interest because that interest "ha[d] nothing to do with the State's" content-based distinctions among expressive activities. *Simon & Schuster, Inc. v. Members of N.Y. State Crime Victims Bd.,* 502 U.S. 105, 120, 112 S.Ct. 501, 510, 116 L.Ed.2d 476 (1991); see also *Arkansas Writers' Project, Inc. v. Ragland,* 481 U.S. 221, 231, 107 S.Ct. 1722, 1728, 95 L.Ed.2d 209 (1987). Similarly in *Carey v. Brown,* 447 U.S. 455, 464–465, 100 S.Ct. 2286, 2292, 65 L.Ed.2d 263 (1980), the Court acknowledged Illinois' interest in "residential privacy" but invalidated that State's ban on picketing because its distinction between labor and nonlabor picketing could not be "justified by reference to the State's interest in maintaining domestic tranquility."

***225** In this case the same is true: Tennessee's differential treatment of campaign speech furthers no asserted state interest. Access to, and order around, the polls would be just as threatened by the congregation of citizens concerned about a local environmental issue not on the ballot as by the congregation of citizens urging election of their favored candidate. Similarly, assuming that disorder immediately outside the polling place could lead to the commission of errors or the perpetration of fraud, such disorder could just as easily be caused by a religious dispute sparked by a colporteur as by a campaign-related dispute sparked by a campaign worker. In short, Tennessee has failed to point to any legitimate interest that would justify its selective regulation of campaign-related expression.

III

Although the plurality purports to apply "exacting scrutiny," its three marked departures from that familiar standard may have greater significance for the future than its precise holding about campaign-free zones. First, the plurality declines to take a hard look at whether a state law is in fact "necessary." Under the plurality's analysis, a State need not demonstrate that contemporary demands compel its regulation of protected expression; it need only show that that regulation can be traced to a longstanding tradition.[5]

Second, citing *Munro v. Socialist Workers Party,* 479 U.S. 189, 107 S.Ct. 533, 93 L.Ed.2d 499 (1986), the plurality lightens the State's burden of proof in showing that a restriction on speech is "narrowly tailored." ***226** In *Munro,* we upheld a Washington ballot-access law and, in doing so, observed that we would not "requir[e] a State to make a particularized showing of the existence of voter confusion, ballot overcrowding, or the presence of frivolous candidacies prior to the imposition of reasonable restrictions on ballot access." *Id.,* 479 U.S., at 194–195, 107 S.Ct., at 537. We stated that legislatures "should be permitted to respond to potential deficiencies in the electoral process with foresight rather than reactively, provided that the response is reasonable and does not significantly impinge on constitutionally protected rights." *Id.,* at 195–196, 107 S.Ct., at 537–38. I have substantial doubts about the plurality's extension of *Munro* 's reasoning to this case, most fundamentally because I question the plurality's assumption that campaign-free zones do "not significantly impinge on constitutionally protected rights." Not only is this the very question before us, but in light of the

sweep **1866 of such zones and the vital First Amendment interests at stake, I do not know how that assumption can be sound.

Third, although the plurality recognizes the problematic character of Tennessee's content-based suppressive regulation, *ante,* at 1850–1851, it nonetheless upholds the statute because "there is simply no evidence" that commercial or charitable solicitation outside the polling place poses the same potential dangers as campaigning outside the polling place, *ante,* at 1856. This analysis contradicts a core premise of strict scrutiny—namely, that the heavy burden of justification is *on the State.* The plurality has effectively shifted the burden of proving the necessity of content discrimination from the State to the plaintiff.

In sum, what the plurality early in its opinion calls "exacting scrutiny," *ante,* at 1851, appears by the end of its analysis to be neither exacting nor scrutiny. To borrow a mixed metaphor, the plurality's scrutiny is "toothless." *Mathews v. Lucas,* 427 U.S. 495, 510, 96 S.Ct. 2755, 2764, 49 L.Ed.2d 651 (1976).

*227 IV

Ours is a Nation rich with traditions. Those traditions sometimes support, and sometimes are superseded by, constitutional rules. By tradition, for example, Presidential campaigns end on election eve; yet Congress certainly could not enforce that tradition by enacting a law proscribing campaigning on election day. At one time as well, bans on election-day editorial endorsements were traditional in some States,[6] but *Mills v. Alabama,* 384 U.S. 214, 86 S.Ct. 1434, 16 L.Ed.2d 484 (1966), established that such bans are incompatible with the First Amendment.

In *Mills,* we set aside the conviction of a newspaper editor who violated such a ban. In doing so, we declined to accept the State's analogy between the electoral process and the judicial process, and its claim that the State could, on election day, insulate voters from political sentiments and ideas much the same way as a jury is sequestered.[7] We squarely rejected the State's claim that its ban was justified by the need to protect the public " 'from confusive last-minute charges and countercharges and the distribution of propaganda in an effort to influence voters on an election day.' " *Id.,* at 219, 86 S.Ct., at 1437 (quoting *State v. Mills,* 278 Ala. 188, 195–196, 176 So.2d 884, 890 (1965)). To the contrary, we recognized that it is precisely *on election day* that advocacy and campaigning "can be most effective." *Mills,* 384 U.S., at 219, 86 S.Ct., at 1437. *Mills* stands for the simple proposition that, tradition notwithstanding, the State does not have a legitimate interest in insulating voters from election-day campaigning. Thus, in *228 light of *Mills,* the fact that campaign-free zones are "traditional" tends to undermine, rather than to support, the validity of the Tennessee statute. In short, we should scrutinize the Tennessee statute for what it is—a police power regulation that also silences a substantial amount of protected political expression.

In my opinion, the presence of campaign workers outside a polling place is, in most situations, a minor nuisance. But we have long recognized that " 'the fact that society may find speech offensive is not a sufficient reason for suppressing it.' " *Hustler Magazine, Inc. v. Falwell,* 485 U.S. 46, 55, 108 S.Ct. 876, 882, 99 L.Ed.2d 41 (1988) (citation omitted). Although we often pay homage to the electoral process, we must be careful not to confuse sanctity with silence. The hubbub of campaign workers outside a polling place **1867 may be a nuisance, but it is also the sound of a vibrant democracy.

In silencing that sound, Tennessee "trenches upon an area in which the importance of First Amendment protections is 'at its zenith.' " *Meyer v. Grant,* 486 U.S. 414, 425, 108 S.Ct. 1886, 1894, 100 L.Ed.2d 425 (1988) (citation omitted). For that reason, Tennessee must shoulder the burden of demonstrating that its restrictions on political speech are no broader than necessary to protect orderly access to the polls. It has not done so.

I therefore respectfully dissent.

**All Citations**

504 U.S. 191, 112 S.Ct. 1846, 119 L.Ed.2d 5, 60 USLW 4393, 20 Media L. Rep. 1137

Footnotes

* The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See *United States v. Detroit Lumber Co.,* 200 U.S. 321, 337, 26 S.Ct. 282, 287, 50 L.Ed. 499.

1 Section 2–7–111(a) also provides for boundaries of 300 feet for counties within specified population ranges. Petitioner's predecessor Attorney General (an original defendant) opined that this distinction was unconstitutional under Art. XI, § 8, of the Tennessee Constitution. Tenn.Op.Atty.Gen. No. 87–185 (1987). While this issue was raised in the pleadings, the District Court held that respondent did not have standing to challenge the 300–foot boundaries because she was not a resident of any of those counties. The Tennessee Supreme Court did not reach the issue. Accordingly, the constitutionality of the 100–foot boundary is the only restriction before us.

2 Testimony at trial established that at some Tennessee polling locations the campaign-free zone included sidewalks and streets adjacent to the polling places. See App. 23–24, 42. See also 802 S.W.2d 210, 213 (1990).

3 Content-based restrictions also have been held to raise Fourteenth Amendment equal protection concerns because, in the course of regulating speech, such restrictions differentiate between types of speech. See *Police Dept. of Chicago v. Mosley,* 408 U.S. 92, 92 S.Ct. 2286, 33 L.Ed.2d 212 (1972) (exemption of labor picketing from ban on picketing near schools violates Fourteenth Amendment right to equal protection). See also *City Council of Los Angeles v. Taxpayers for Vincent,* 466 U.S. 789, 816, 104 S.Ct. 2118, 2134, 80 L.Ed.2d 772 (1984) (suggesting that exception for political campaign signs from general ordinance prohibiting posting of signs might entail constitutionally forbidden content discrimination). Under either a free speech or equal protection theory, a content-based regulation of political speech in a public forum is valid only if it can survive strict scrutiny. *Carey v. Brown,* 447 U.S. 455, 461 –462, 100 S.Ct. 2286, 2290–91, 65 L.Ed.2d 263 (1980).

4 See *Piper v. Swan,* 319 F.Supp. 908, 911 (ED Tenn.1970) (purpose of regulation is to prevent intimidation of voters entering the polling place by political workers), writ of mandamus denied *sub nom. Piper v. United States District Court,* 401 U.S. 971, 91 S.Ct. 1194, 28 L.Ed.2d 337 (1971).

5 See Tennessee Law Revision Commission, Special Report of the Law Revision Commission to Eighty–Seventh General Assembly of Tennessee Concerning a Bill to Adopt an Elections Act Containing a Unified and Coherent Treatment of All Elections 13 (1972) (provision is one of numerous safeguards included to preserve “purity of elections”).

6 One writer described the conditions as follows:

> “This sounds like exaggeration, but it is truth; and these are facts so notorious that no one acquainted with the conduct of recent elections now attempts a denial—that the raising of colossal sums for the purpose of bribery has been rewarded by promotion to the highest offices in the Government; that systematic organization for the purchase of votes, individually and in blocks, at the polls, has become a recognized factor in the machinery of the parties; that the number of voters who demand money compensation for their ballots has grown greater with each recurring election.” J. Gordon, The Protection of Suffrage 13 (1891) (quoted in Evans 11).

Evans reports that the bribery of voters in Indiana in 1880 and 1888 was sufficient to determine the results of the election and that “[m]any electors, aware that the corrupt element was large enough to be able to turn the election, held aloof altogether.” *Ibid.*

7 According to a report of a committee of the 46th Congress, men were frequently marched or carried to the polls in their employers' carriages. They were then furnished with ballots and compelled to hold their hands up with their ballots in them so they could easily be watched until the ballots were dropped into the box. S.Rep. No. 497, 46th Cong., 2d Sess., 9–10 (1880).

Evans recounted that intimidation, particularly by employers, was “extensively practiced”:

> “Many labor men were afraid to vote and remained away from the polls. Others who voted against their employers' wishes frequently lost their jobs. If the employee lived in a factory town, he probably lived in a tenement owned by the company, and possibly his wife and children worked in the mill. If he voted against the wishes of the mill-owners, he and his family were thrown out of the mill, out of the tenement, and out of the means of earning a livelihood. Frequently the owner and the manager of the mill stood at the entrance of the polling-place and closely observed the employees while they voted. In this condition, it cannot be said that the workingmen exercised any real choice.” Evans 12–13 (footnote omitted).

8 Similar results were achieved with the Massachusetts law:

“Quiet, order, and cleanliness reign in and about the polling-places. I have visited precincts where, under the old system, coats were torn off the backs of voters, where ballots of one kind have been snatched from voters' hands and others put in their places, with threats against using any but the substituted ballots; and under the new system all was orderly and peaceable.” 2 Annals of the American Academy of Political and Social Science 738 (1892).

9 See, *e.g., Season–All Industries, Inc. v. NLRB,* 654 F.2d 932 (CA3 1981); *NLRB v. Carroll Contracting and Ready–Mix, Inc.,* 636 F.2d 111 (CA5 1981); *Midwest Stock Exchange, Inc. v. NLRB,* 620 F.2d 629 (CA7), cert. denied, 449 U.S.

873, 101 S.Ct. 214, 66 L.Ed.2d 94 (1980); *Michem, Inc.,* 170 N.L.R.B. 362 (1968); *Claussen Baking Co.,* 134 N.L.R.B. 111 (1961).

10 The logical connection between ballot secrecy and restricted zones distinguishes this case from those cited by the dissent in which the Court struck down longstanding election regulations. In those cases, there was no rational connection between the asserted interest and the regulation. See, *e.g., Harper v. Virginia Bd. of Elections,* 383 U.S. 663, 666, 86 S.Ct. 1079, 1081, 16 L.Ed.2d 169 (1966) ("Voter qualifications have no relation to wealth nor to paying or not paying this or any other tax").

11 This modified "burden of proof" does not apply to all cases in which there is a conflict between First Amendment rights and a State's election process—instead, it applies only when the First Amendment right threatens to interfere with the act of voting itself, *i.e.,* cases involving voter confusion from overcrowded ballots, like *Munro,* or cases such as this one, in which the challenged activity physically interferes with electors attempting to cast their ballots. Thus, for example, States must come forward with more specific findings to support regulations directed at intangible "influence," such as the ban on election-day editorials struck down in *Mills v. Alabama,* 384 U.S. 214, 86 S.Ct. 1434, 16 L.Ed.2d 484 (1966).

12 The dissent argues that our unwillingness to require more specific findings is in tension with *Sheppard v. Maxwell,* 384 U.S. 333, 86 S.Ct. 1507, 16 L.Ed.2d 600 (1966), another case in which there was conflict between two constitutional rights. Trials do not, however, present the same evidentiary or remedial problems. Because the judge is concerned only with the trial before him, it is much easier to make specific findings. And while the remedy of rerunning a trial is an onerous one, it does not suffer from the imperfections of a rescheduled election. Nonetheless, even in the fair trial context, we reaffirmed that, given the importance of the countervailing right, " 'our system of law has always endeavored to prevent even the *probability* of unfairness.' " *Id.,* at 352, 86 S.Ct., at 1517 (quoting *In re Murchison,* 349 U.S. 133, 136, 75 S.Ct. 623, 625, 99 L.Ed. 942 (1955)) (emphasis added).

13 Respondent also raises two more specific challenges to the tailoring of the Tennessee statute. First, she contends that there may be some polling places so situated that the 100–foot boundary falls in or on the other side of a highway. Second, respondent argues that the inclusion of quintessential public forums in some campaign-free zones could result in the prosecution of an individual for driving by in an automobile with a campaign bumper sticker. At oral argument, petitioner denied that the statute would reach this latter, inadvertent conduct, since this would not constitute "display" of campaign material. Tr. of Oral Arg. 33–35. In any event, these arguments are "as applied" challenges that should be made by an individual prosecuted for such conduct. If successful, these challenges would call for a limiting construction rather than a facial invalidation. In the absence of any factual record to support respondent's contention that the statute has been applied to reach such circumstances, we do not entertain the challenges in this case.

1 Act of Mar. 3, 1875, No. 18, § 95, 1874–1875 Ala.Acts 76, 99; Act of Mar. 4, 1891, No. 30, § 39, 1891 Ark.Gen.Acts 32, 48; Act of Mar. 20, 1891, ch. 130, § 1215, 1891 Cal.Stats. 165, 178; Act of Mar. 26, 1891, § 37, 1891 Colo.Sess.Laws 143, 164; Act of June 22, 1889, ch. 247, § 13, 1889 Conn.Pub.Acts 155, 158; Act of May 15, 1891, ch. 37, § 33, 1891 Del.Laws 85, 100; Act of May 25, 1895, ch. 4328, § 39, 1895 Fla.Laws 56, 76; Act of Feb. 25, 1891, § 4, 1891 Idaho Sess.Laws 50, 51; Act of June 22, 1891, § 28, 1891 Ill.Laws 107, 119; Act of Mar. 6, 1889, ch. 87, § 55, 1889 Ind.Acts 157, 182; Act of Apr. 12, 1886, ch. 161, § 13, 1886 Iowa Acts 187, 192; Act of Mar. 11, 1893, ch. 78, § 26, 1893 Kan.Sess.Laws 106, 120; Act of June 30, 1892, ch. 65, § 25, 1891–1892 Ky.Acts 106, 121; Act of Apr. 2, 1896, ch. 202, § 103, 1896 Md.Laws 327, 384; Act of Apr. 12, 1895, ch. 275, 1895 Mass.Acts 276; Act of Apr. 21, 1893, ch. 4, § 108, 1893 Minn.Laws 16, 51; Act of 1880, ch. 16, § 11, 1880 Miss.Gen.Laws 108, 112; Act of May 16, 1889, § 35, 1889 Mo.Laws 105, 110; Mont.Code Ann., Title 4, § 73 (1895); Act of Mar. 4, 1891, ch. 24, § 29, 1891 Neb.Laws 238, 255; Act of Mar. 13, 1891, ch. 40, § 30, 1891 Nev.Stats. 40, 46; Act of May 28, 1890, ch. 231, § 63, 1890 N.J.Laws 361, 397; Act of May 2, 1890, ch. 262, § 35, 1890 N.Y.Laws 482, 494; Act of Mar. 7, 1891, ch. 66, § 34, 1891 N.D.Laws 171, 182; Act of May 4, 1885, 1885 Ohio Leg.Acts 232, 235; Act of Feb. 13, 1891, § 19, 1891 Ore.Laws 8, 13; Act of Mar. 5, 1891, ch. 57, § 35, 1891 S.D.Laws 152, 164; Act of Mar. 11, 1890, ch. 24, § 13, 1890 Tenn.Pub.Acts 50, 55; Act of Mar. 28, 1896, ch. 69, § 37, 1896 Utah Laws 183, 208; Act of Mar. 6, 1894, ch. 746, § 10, 1893–1894 Va.Acts 862, 864; Act of Mar. 19, 1890, ch. 13, § 33, 1889–1890 Wash.Laws 400, 412; Act of Mar. 11, 1891, ch. 89, § 79, 1891 W.Va.Acts 226, 257; Act of Apr. 3, 1889, ch. 248, § 36, 1889 Wis.Laws 253, 267; Act of Jan. 1, 1891, ch. 100, 1890 Wyo.Sess.Laws 392.

2 *E.g.,* Act of Mar. 4, 1891, No. 30, § 39, 1891 Ark.Gen.Acts 32, 48; Act of Mar. 20, 1891, ch. 130, § 1215, 1891 Cal.Stats. 165, 178; Act of Mar. 26, 1891, § 37, 1891 Colo.Sess.Laws 143, 164; Act of June 22, 1889, ch. 247, § 13, 1889 Conn.Pub.Acts 155, 158; Act of Feb. 25, 1891, § 4, 1890 Idaho Sess.Laws 50, 51; Act of June 22, 1891, § 28, 1891 Ill.Laws 107, 119; Act of Apr. 12, 1886, ch. 161, § 13, 1886 Iowa Acts 187, 192; Act of Mar. 11, 1893, ch. 78, § 26, 1893 Kan.Sess.Laws 106, 120; Act of Apr. 2, 1896, ch. 202, § 103, 1896 Md.Laws 327, 384; Act of May 16, 1889, § 35, 1889 Mo.Laws 105, 110; Act of Mar. 4, 1891, ch. 24, § 29, 1891 Neb.Laws 238, 255; Act of Mar. 13, 1891, ch. 40,

§ 30, 1891 Nev.Stats. 40, 46; Act of May 28, 1890, ch. 231, § 63, 1890 N.J.Laws 361, 397; Act of May 4, 1885, 1885 Ohio Leg.Acts 232, 235; Act of Mar. 28, 1896, ch. 69, § 37, 1896 Utah Laws 183, 208; Act of Apr. 3, 1889, ch. 248, § 36, 1889 Wis.Laws 253, 267.

1 See 802 S.W.2d 210, 213 (Tenn.1990) ("The specific testimony of the State's witness about confusion, error, overcrowding, etc. concerned the numbers of persons present in the polling place itself, not the numbers of persons outside the polls").

2 Within the polling place itself, and within 10 feet of its entrance, a prohibition against the presence of nonvoters is justified, in part by the absence of normal police protection. Section 2–7–103(c) provides:

"No policeman or other law-enforcement officer may come nearer to the entrance to a polling place than ten feet (10#) or enter the polling place except at the request of the officer of elections or the county election commission or to make an arrest or to vote."

There is, however, no reason to believe that the Tennessee Legislature regarded the normal protection against disruptive conduct outside that 10–foot area as insufficient to guarantee orderly access.

3 I leave it to historians to review the substantive accuracy of the plurality's narrative, for I find more disturbing the plurality's *use* of history.

4 The plurality's suggestion that "[t]he only way to preserve the secrecy of the ballot is to limit access to the area around the voter," *ante,* at 1856, is specious. First, there are obvious and simple means of preserving voter secrecy (*e.g.,* opaque doors or curtains on the voting booth) that do not involve the suppression of political speech. Second, there is no disagreement that the restrictions on campaigning *within the polling place* are constitutional; the issue is not whether the State may limit access to the "area *around the voter* " but whether the State may limit speech in the area *around the polling place.*

5 The plurality emphasizes that this case "force[s] us to reconcile our commitment to free speech with our commitment to other constitutional rights." *Ante,* at 1851 (citing *Sheppard v. Maxwell,* 384 U.S. 333, 361–363, 86 S.Ct. 1507, 1521–1522, 16 L.Ed.2d 600 (1966)). Although I agree with the plurality on this matter, this characterization of the controversy does not compel (or even indicate) deference to tradition. Indeed in *Sheppard* itself, the Court did not defer to tradition or established practices, but rather imposed on "appellate tribunals ... the duty to make an independent evaluation of the circumstances" of every case. *Id.,* at 362, 86 S.Ct., at 1522.

6 See, *e.g.,* 1913 Mont.Laws § 34, pp. 590, 607; 1911 N.D.Laws, ch. 129, § 16, pp. 210, 214; 1909 Ore.Laws, ch. 3, § 34, pp. 15, 29.

7 "The idea behind [the ban on endorsements] was to prevent the voters from being subjected to unfair pressure and 'brainwashing' on the day when their minds should remain clear and untrammeled by such influences, just as this court is insulated against further partisan advocacy once these arguments are submitted." Brief for Appellee, O.T.1965, No. 597, p. 9.

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100 S.Ct. 2343
Supreme Court of the United States

# CENTRAL HUDSON GAS & ELECTRIC CORPORATION, Appellant, v. PUBLIC SERVICE COMMISSION OF NEW YORK.

No. 79–565.
|
Argued March 17, 1980.
|
Decided June 20, 1980.

**Synopsis**
Electrical utility brought suit in New York State court to challenge the constitutionality of a regulation of the New York Public Service Commission which completely banned promotional advertising by the utility. The regulation was upheld by the trial court and at the intermediate appellate level, 63 A.D.2d 364, 407 N.Y.S.2d 735. On appeal by the utility, the New York Court of Appeals, 47 N.Y.2d 94, 417 N.Y.S.2d 30, 390 N.E.2d 749, sustained the regulation, concluding that governmental interests outweighed the limited constitutional value of the commercial speech at issue. The utility appealed, and the United States Supreme Court, Mr. Justice Powell, held that: (1) the fact that the electrical utility held a monopoly over the sale of electricity in its service area did not mean that its promotional advertising was unprotected commercial speech; (2) the state's asserted interest in preventing inequities in the utility's rates did not provide a constitutionally adequate reason for restricting protected speech where the link between the advertising prohibition and the utility's rate structure was, at most, tenuous; and (3) though the state of New York had a legitimate interest in energy conservation and though that interest was directly advanced by the Commission's order, the Commission's complete suppression of speech ordinarily protected by the First Amendment was more extensive than necessary to further the state's interest in conservation and thus violated the First and Fourteenth Amendments.

Judgment of the New York Court of Appeals reversed.

Mr. Justice Brennan concurred in the judgment and filed opinion.

Mr. Justice Blackmun concurred in the judgment and filed opinion in which Mr. Justice Brennan joined.

Mr. Justice Stevens concurred in the judgment and filed opinion in which Mr. Justice Brennan joined.

Mr. Justice Rehnquist dissented and filed opinion.

West Headnotes (24)

[1] **Constitutional Law** Reasonableness; Relationship to Governmental Interest

The First Amendment, as applied to the states through the Fourteenth Amendment, protects commercial speech from unwarranted governmental regulation. U.S.C.A.Const. Amends. 1, 14.

122 Cases that cite this headnote

[2] **Constitutional Law** False or Deceptive Claims; Misrepresentation

Even when advertising communicates only an incomplete version of the relevant facts, the First Amendment presumes that some accurate information is better than no information at all. U.S.C.A.Const. Amends. 1, 14.

9 Cases that cite this headnote

[3] **Constitutional Law** Reasonableness; Relationship to Governmental Interest

In the context of commercial transactions, the state retains the power to ensure that the stream of commercial information flows cleanly as well as freely. U.S.C.A.Const. Amends. 1, 14.

5 Cases that cite this headnote

[4] **Constitutional Law** Difference in Protection Given to Other Speech

  

The Constitution accords a lesser protection to commercial speech than to other constitutionally protected expression. U.S.C.A.Const. Amends. 1, 14.

224 Cases that cite this headnote

[5] **Constitutional Law** Commercial Speech in General

The constitutional protection that is available for particular commercial expression turns on the nature both of the expression and of the governmental interests served by its regulation. U.S.C.A.Const. Amends. 1, 14.

60 Cases that cite this headnote

[6] **Constitutional Law** False or Deceptive Claims; Misrepresentation

The First Amendment's concern for commercial speech is based on the informational function of advertising and, therefore, there can be no constitutional objection to the suppression of commercial messages that do not accurately inform the public about lawful activity. U.S.C.A.Const. Amends. 1, 14.

164 Cases that cite this headnote

[7] **Constitutional Law** Unlawful Speech or Activities

The government may ban forms of commercial communication that are more likely to deceive the public than to inform it or are related to illegal activity. U.S.C.A.Const. Amends. 1, 14.

77 Cases that cite this headnote

[8] **Constitutional Law** Overbreadth

The two features of commercial speech that permit regulation of its content are that commercial speakers have extensive knowledge of both the market and of their products and are thus well-situated to evaluate the accuracy of their messages and the lawfulness of the underlying activity and that commercial speech, being the offspring of economic self-interest, is a hardy breed of expression that is not particularly susceptible to being crushed by overbroad regulation. U.S.C.A.Const. Amends. 1, 14.

203 Cases that cite this headnote

[9] **Constitutional Law** Unlawful Speech or Activities

**Constitutional Law** Reasonableness; Relationship to Governmental Interest

If a commercial communication is neither misleading nor related to unlawful activity, the government's power to restrict such communication is circumscribed and must be supported by a substantial interest. U.S.C.A.Const. Amends. 1, 14.

204 Cases that cite this headnote

[10] **Constitutional Law** Unlawful Speech or Activities

**Constitutional Law** Reasonableness; Relationship to Governmental Interest

If the government seeks to restrict commercial communications that are neither misleading nor related to unlawful activity, the regulatory technique used must be in proportion to the interest to be served by the restriction and the limitation on expression must be designed carefully to achieve the state's goal. U.S.C.A.Const. Amends. 1, 14.

348 Cases that cite this headnote

[11] **Constitutional Law** Reasonableness; Relationship to Governmental Interest

A restriction on commercial speech that is neither misleading nor related to unlawful activity must directly advance the governmental interest involved and may not be sustained if it provides only ineffective or remote support for the government's purpose; additionally, if the governmental interest could be served as well by a more limited restriction on the commercial speech, excessive restrictions cannot survive. U.S.C.A.Const. Amends. 1, 14.

  

533 Cases that cite this headnote

[12] **Constitutional Law** Narrow Tailoring

The First Amendment mandates that restrictions on speech be narrowly drawn. U.S.C.A.Const. Amends. 1, 14.

18 Cases that cite this headnote

[13] **Constitutional Law** Overbreadth in General

The "overbreadth" doctrine permits invalidation of regulations on First Amendment grounds even when the litigant challenging the regulation has engaged in no constitutionally protected activity. U.S.C.A.Const. Amends. 1, 14.

9 Cases that cite this headnote

[14] **Constitutional Law** Overbreadth

The doctrine of overbreadth derives from the recognition that unconstitutional restriction of expression may deter protected speech by parties not before the court and thereby escape judicial review. U.S.C.A.Const. Amends. 1, 14.

11 Cases that cite this headnote

[15] **Constitutional Law** Reasonableness; Relationship to Governmental Interest

The state cannot regulate commercial speech that poses no danger to the state interest assertedly underlying the regulation nor can it completely suppress information when narrower restrictions on expression would serve the state's interest just as well. U.S.C.A.Const. Amends. 1, 14.

60 Cases that cite this headnote

[16] **Constitutional Law** Reasonableness; Relationship to Governmental Interest

Regulations that entirely suppress commercial speech in order to pursue a nonspeech-related policy are subject to review with special care since, in those circumstances, a ban on speech could screen from public view the underlying governmental policy. U.S.C.A.Const. Amends. 1, 14.

21 Cases that cite this headnote

[17] **Constitutional Law** Reasonableness; Relationship to Governmental Interest

In a commercial speech case, the court must first determine whether the expression is protected by the First Amendment and must next ask whether the asserted governmental interest is substantial; if both inquiries yield positive answers, the court must determine whether the regulation directly advances the governmental interest asserted and whether it is more extensive than is necessary to serve that interest. U.S.C.A.Const. Amends. 1, 14.

876 Cases that cite this headnote

[18] **Constitutional Law** Advertising

**Electricity** In General; Convenience and Necessity in General

Fact that electrical utility held a monopoly on the sale of electricity in its service area did not establish that advertising by the utility was unprotected by the First Amendment; monopoly over the supply of a product provides no protection from competition with substitutes for that product and, for consumers in those markets in which electrical utilities compete with suppliers of fuel oil and natural gas, advertising by utilities may be just as valuable as advertising by unregulated firms. U.S.C.A.Const. Amends. 1, 14.

6 Cases that cite this headnote

[19] **Constitutional Law** Advertising

Even in monopoly markets, the suppression of advertising reduces the information available for consumer decisions and thereby defeats the purpose of the First Amendment. U.S.C.A.Const. Amends. 1, 14.

1 Cases that cite this headnote

  

[20] **Electricity** Regulation in General; Statutes and Ordinances

The New York Public Service Commission's laudable concern over equity and efficiency of electrical utility's rates did not provide a constitutionally adequate reason for restricting the utility's protected commercial speech where the link between the Commission's prohibition on advertising by the utility and the utility's rate structure was, at most, tenuous and the impact of promotional advertising on the equity of the utility's rates was highly speculative. U.S.C.A.Const. Amends. 1, 14.

9 Cases that cite this headnote

[21] **Constitutional Law** Advertising

Contingent and remote eventualities could not justify silencing electrical utility's promotional advertising. U.S.C.A.Const. Amends. 1, 14.

[22] **Electricity** Regulation in General; Statutes and Ordinances

In view of fact that there is an immediate connection between advertising and demand for electricity and since electrical utility would not contest advertising ban unless it believed that promotion would increase its sales, there was a direct link between the interest of the state of New York in energy conservation and an order of the New York Public Service Commission which completely banned promotional advertising by the utility.

14 Cases that cite this headnote

[23] **Constitutional Law** Advertising

**Constitutional Law** Gas and Electricity

Regulation, promulgated by the New York Public Service Commission, which completely banned promotional advertising by an electrical utility, was more extensive than necessary to further the state's interest in energy conservation and thus violated the First and Fourteenth Amendments where the Commission's order reached all promotional advertising, regardless of the impact of the advertised service on overall energy use and where the regulation prevented the utility from promoting electric services that would reduce energy use and the Commission did not demonstrate that its interest in conservation could not be adequately protected by more limited regulation of commercial expression. U.S.C.A.Const. Amends. 1, 14.

257 Cases that cite this headnote

[24] **Constitutional Law** Public Utilities

**Constitutional Law** Gas and Electricity

**Public Utilities** Regulation

Administrative bodies that are empowered to regulate utilities have the authority and indeed the duty to take appropriate action to further the national interest in energy conservation; when, however, such action involves the suppression of speech, the Constitution requires that the restriction be no more extensive than is necessary to serve the state interest. U.S.C.A.Const. Amends. 1, 14.

35 Cases that cite this headnote

****2346** ***557** *Syllabus*[*]

*Held* : A regulation of appellee New York Public Service Commission which completely bans an electric utility from advertising to promote the use of electricity violates the First and Fourteenth Amendments. Pp. 2349–2354.

(a) Although the Constitution accords a lesser protection to commercial speech than to other constitutionally guaranteed expression, nevertheless the First Amendment protects commercial speech from unwarranted governmental regulation. For commercial speech to come within the First Amendment, it at least must concern lawful activity and not be misleading. Next, it must be determined whether the asserted governmental interest to be served by the restriction on commercial speech is substantial. If both inquiries yield positive answers, it must then be decided whether the regulation directly advances the governmental interest asserted, and whether it is ****2347** not more extensive than is necessary to serve that interest. Pp. 2349–2351.

  

(b) In this case, it is not claimed that the expression at issue is either inaccurate or relates to unlawful activity. Nor is appellant electrical utility's promotional advertising unprotected commercial speech merely because appellant holds a monopoly over the sale of electricity in its service area. Since monopoly over the supply of a product provides no protection from competition with substitutes for that product, advertising by utilities is just as valuable to consumers as advertising by unregulated firms, and there is no indication that appellant's decision to advertise was not based on the belief that consumers were interested in the advertising. Pp. 2351–2352.

(c) The State's interest in energy conservation is clearly substantial and is directly advanced by appellee's regulations. The State's further interest in preventing inequities in appellant's rates—based on the assertion that successful promotion of consumption in "off-peak" periods would create extra costs that would, because of appellant's rate structure, be borne by all consumers through higher overall rates—is also substantial. The latter interest does not, however, provide a constitutionally adequate reason for restricting protected speech because the link between the advertising prohibition and appellant's rate structure is, at most, tenuous. Pp. 2352–2353.

***558** d) Appellee's regulation, which reaches all promotional advertising regardless of the impact of the touted service on overall energy use, is more extensive than necessary to further the State's interest in energy conservation which, as important as it is, cannot justify suppressing information about electric devices or services that would cause no net increase in total energy use. In addition, no showing has been made that a more limited restriction on the content of promotional advertising would not serve adequately the State's interests. Pp. 2353–2354.

47 N.Y.2d 94, 417 N.Y.S.2d 30, 390 N.E.2d 749, reversed.

**Attorneys and Law Firms**

Telford Taylor, New York City, for appellant.

Peter H. Schiff, Albany, N. Y., for appellee.

**Opinion**

Mr. Justice POWELL delivered the opinion of the Court.

This case presents the question whether a regulation of the Public Service Commission of the State of New York violates the First and Fourteenth Amendments because it completely bans promotional advertising by an electrical utility.

I

In December 1973, the Commission, appellee here, ordered electric utilities in New York State to cease all advertising that "promot[es] the use of electricity." App. to Juris. Statement 31a. The order was based on the Commission's finding that "the interconnected utility system in New York State does not have sufficient fuel stocks or sources of supply to continue furnishing all customer demands for the 1973–1974 winter." *Id.*, at 26a.

Three years later, when the fuel shortage had eased, the Commission requested comments from the public on its proposal to continue the ban on promotional advertising. Central Hudson Gas & Electric Corp., the appellant in this case, opposed the ban on First Amendment grounds. App. A10. After reviewing the public comments, the Commission extended the prohibition in a Policy Statement issued on February 25, 1977.

The Policy Statement divided advertising expenses "into two broad categories: promotional—advertising intended to stimulate the purchase of utility services—and institutional and informational, a broad category inclusive of all advertising not clearly intended to promote sales."[1] App. to Juris. ****2348** Statement 35a. The Commission declared all promotional advertising contrary to the national policy of conserving energy. It acknowledged that the ban is not a perfect vehicle for conserving energy. For example, the Commission's order prohibits promotional advertising to develop consumption during periods when demand for electricity is low. By limiting growth in "off-peak" consumption, the ban limits the "beneficial side effects" of such growth in terms of more efficient use of existing power-plants. *Id.*, at 37a. And since oil dealers are not under the Commission's jurisdiction and ***560** thus remain free to advertise, it was recognized that the ban can achieve only "piecemeal conservationism." Still, the Commission adopted the restriction because it was deemed likely to "result in some dampening of unnecessary growth" in energy consumption. *Ibid.*

  

The Commission's order explicitly permitted "informational" advertising designed to encourage "*shifts* of consumption" from peak demand times to periods of low electricity demand. *Ibid*. (emphasis in original). Informational advertising would not seek to increase aggregate consumption, but would invite a leveling of demand throughout any given 24-hour period. The agency offered to review "specific proposals by the companies for specifically described [advertising] programs that meet these criteria." *Id*., at 38a.

When it rejected requests for rehearing on the Policy Statement, the Commission supplemented its rationale for the advertising ban. The agency observed that additional electricity probably would be more expensive to produce than existing output. Because electricity rates in New York were not then based on marginal cost,[2] the Commission feared that additional power would be priced below the actual cost of generation. This additional electricity would be subsidized by all consumers through generally higher rates. *Id.*, at 57a–58a. The state agency also thought that promotional advertising would give "misleading signals" to the public by appearing to encourage energy consumption at a time when conservation is needed. *Id.*, at 59a.

Appellant challenged the order in state court, arguing that the Commission had restrained commercial speech in violation of the First and Fourteenth Amendments.[3] The Commission's ***561** order was upheld by the trial court and at the intermediate appellate level.[4] The New York Court of Appeals affirmed. It found little value to advertising in "the noncompetitive market in which electric corporations operate." *Consolidated Edison Co. v. Public Service Comm'n*, 47 N.Y.2d 94, 110, 417 N.Y.S.2d 30, 39, 390 N.E.2d 749, 757 (1979). Since consumers "have no choice regarding the source of their electric power," the court denied that "promotional advertising of electricity might contribute to society's interest in 'informed and reliable' economic decisionmaking." *Ibid.* The court also observed that by encouraging consumption, promotional advertising would only exacerbate the current energy situation. *Id.*, at 110, 417 N.Y.S.2d, at 39, 390 N.E.2d, at 758. The court concluded that the governmental interest in ****2349** the prohibition outweighed the limited constitutional value of the commercial speech at issue. We noted probable jurisdiction, 444 U.S. 962, 100 S.Ct. 446, 62 L.Ed.2d 374 (1979), and now reverse.

II

**[1]** **[2]** The Commission's order restricts only commercial speech, that is, expression related solely to the economic interests of the speaker and its audience. *Virginia Pharmacy Board v. Virginia Citizens Consumer Council*, 425 U.S. 748, 762, 96 S.Ct. 1817, 1825, 48 L.Ed.2d 346 (1976); *Bates v. State Bar of Arizona*, 433 U.S. 350, 363–364, 97 S.Ct. 2691, 2698–2699, 53 L.Ed.2d 810 (1977); *Friedman v. Rogers*, 440 U.S. 1, 11, 99 S.Ct. 887, 895, 59 L.Ed.2d 100 (1979). The First Amendment, as applied to the States through the Fourteenth Amendment, protects commercial speech from unwarranted governmental regulation. *Virginia Pharmacy Board*, 425 U.S., at 761–762, 96 S.Ct., at 1825. Commercial expression not only serves the economic interest of the speaker, but also assists consumers and furthers the societal interest in the fullest possible ***562** dissemination of information. In applying the First Amendment to this area, we have rejected the "highly paternalistic" view that government has complete power to suppress or regulate commercial speech. "[P]eople will perceive their own best interests if only they are well enough informed, and . . . the best means to that end is to open the channels of communication rather than to close them. . . ." *Id.*, at 770, 96 S.Ct., at 1829, see *Linmark Associates, Inc. v. Willingboro*, 431 U.S. 85, 92, 97 S.Ct. 1614, 1618, 50 L.Ed.2d 155 (1977). Even when advertising communicates only an incomplete version of the relevant facts, the First Amendment presumes that some accurate information is better than no information at all. *Bates v. State Bar of Arizona, supra*, at 374, 97 S.Ct., at 2704.

**[3]** **[4]** **[5]** **[6]** **[7]** **[8]** Nevertheless, our decisions have recognized "the 'commonsense' distinction between speech proposing a commercial transaction, which occurs in an area traditionally subject to government regulation, and other varieties of speech." *Ohralik v. Ohio State Bar Assn.*, 436 U.S. 447, 455–456, 98 S.Ct. 1912, 1918, 56 L.Ed.2d 444 (1978); see *Bates v. State Bar of Arizona, supra*, 433 U.S., at 381, 97 S.Ct., at 2707; see also Jackson & Jeffries, Commercial Speech: Economic Due Process and the First Amendment, 65 Va.L.Rev. 1, 38–39 (1979).[5] ****2350** The ***563** Constitution therefore accords a lesser protection to commercial speech than to other constitutionally guaranteed expression. 436 U.S., at 456, 457, 98 S.Ct., at 1918, 1919. The protection available for particular commercial expression turns on the nature both of the expression and of the governmental interests served by its regulation.

The First Amendment's concern for commercial speech is based on the informational function of advertising. See *First National Bank of Boston v. Bellotti*, 435 U.S. 765, 783, 98 S.Ct. 1407, 1419, 55 L.Ed.2d 707 (1978). Consequently, there can be no constitutional objection to the suppression of commercial messages that do not accurately inform the public about lawful activity. The government may ban forms of communication more likely to deceive the public than to inform it, *Friedman v. Rogers, supra*, at 13, 15–16, 99 S.Ct., at 896, 897; *Ohralik v. Ohio State Bar Assn., supra*, at 464–465, 98 S.Ct., at 1923–1925, or ***564** commercial speech related to illegal activity, *Pittsburgh Press Co. v. Human Relations Comm'n*, 413 U.S. 376, 388, 93 S.Ct. 2553, 2560, 37 L.Ed.2d 669 (1973).[6]

**[9]** **[10]** **[11]** If the communication is neither misleading nor related to unlawful activity, the government's power is more circumscribed. The State must assert a substantial interest to be achieved by restrictions on commercial speech. Moreover, the regulatory technique must be in proportion to that interest. The limitation on expression must be designed carefully to achieve the State's goal. Compliance with this requirement may be measured by two criteria. First, the restriction must directly advance the state interest involved; the regulation may not be sustained if it provides only ineffective or remote support for the government's purpose. Second, if the governmental interest could be served as well by a more limited restriction on commercial speech, the excessive restrictions cannot survive.

**[12]** Under the first criterion, the Court has declined to uphold regulations that only indirectly advance the state interest involved. In both *Bates* and *Virginia Pharmacy Board*, the Court concluded that an advertising ban could not be imposed to protect the ethical or performance standards of a profession. The Court noted in *Virginia Pharmacy Board* that "[t]he advertising ban does not directly affect professional standards one way or the other." 425 U.S., at 769, 96 S.Ct., at 1829. In *Bates*, the Court overturned an advertising prohibition that was designed to protect the "quality" of a lawyer's work. ***565** "Restraints on advertising . . . are an ineffective way of deterring shoddy work." 433 U.S., at 378, 97 S.Ct., at 2706.[7]

****2351** **[13]** **[14]** **[15]** **[16]** The second criterion recognizes that the First Amendment mandates that speech restrictions be "narrowly drawn." *In re Primus*, 436 U.S. 412, 438, 98 S.Ct. 1893, 1908, 56 L.Ed.2d 417 (1978).[8] The regulatory technique may extend only as far as the interest it serves. The State cannot regulate speech that poses no danger to the asserted state interest, see *First National Bank of Boston v. Bellotti, supra*, at 794–795, 98 S.Ct., at 1425–1426, nor can it completely suppress information when narrower restrictions on expression would serve its interest as well. For example, in *Bates* the Court explicitly did not "foreclose the possibility that some limited supplementation, by way of warning or disclaimer or the like, might be required" in promotional materials. 433 U.S., at 384, 97 S.Ct., at 2709. See *Virginia Pharmacy Board, supra*, at 773, 96 S.Ct., at 1831. And in *Carey v. Population Services International*, 431 U.S. 678, 701–702, 97 S.Ct. 2010, 2025, 52 L.Ed.2d 675 (1977), we held that the State's "arguments ... do not justify the total suppression of advertising concerning contraceptives." This holding left open the possibility that ***566** the State could implement more carefully drawn restrictions. See *id.*, at 712, 97 S.Ct., at 2030 (POWELL, J., concurring in part and in judgment); *id.*, at 716–717, 97 S.Ct., at 2032 (STEVENS, J., concurring in part and in judgment).[9]

**[17]** In commercial speech cases, then, a four-part analysis has developed. At the outset, we must determine whether the expression is protected by the First Amendment. For commercial speech to come within that provision, it at least must concern lawful activity and not be misleading. Next, we ask whether the asserted governmental interest is substantial. If both inquiries yield positive answers, we must determine whether the regulation directly advances the governmental interest asserted, and whether it is not more extensive than is necessary to serve that interest.

III

We now apply this four-step analysis for commercial speech to the Commission's arguments in support of its ban on promotional advertising.

A

**[18]** The Commission does not claim that the expression at issue either is inaccurate or relates to unlawful activity. Yet the New York Court of Appeals questioned whether Central Hudson's advertising is protected commercial speech. Because appellant holds a monopoly over the sale of electricity in its service area, the state court suggested that the Commission's order restricts no commercial speech of any worth. The court stated that advertising in a

  

"noncompetitive market" *567 could not improve the **2352 decisionmaking of consumers. 47 N.Y.2d, at 110, 417 N.Y.S.2d, at 39, 390 N.E.2d, at 757. The court saw no constitutional problem with barring commercial speech that it viewed as conveying little useful information.

This reasoning falls short of establishing that appellant's advertising is not commercial speech protected by the First Amendment. Monopoly over the supply of a product provides no protection from competition with substitutes for that product. Electric utilities compete with suppliers of fuel oil and natural gas in several markets, such as those for home heating and industrial power. This Court noted the existence of interfuel competition 45 years ago, see *West Ohio Gas Co. v. Public Utilities Comm'n*, 294 U.S. 63, 72, 55 S.Ct. 316, 321, 79 L.Ed. 761 (1935). Each energy source continues to offer peculiar advantages and disadvantages that may influence consumer choice. For consumers in those competitive markets, advertising by utilities is just as valuable as advertising by unregulated firms.[10]

**[19]** Even in monopoly markets, the suppression of advertising reduces the information available for consumer decisions and thereby defeats the purpose of the First Amendment. The New York court's argument appears to assume that the providers of a monopoly service or product are willing to pay for wholly ineffective advertising. Most businesses—even regulated monopolies—are unlikely to underwrite promotional advertising that is of no interest or use to consumers. Indeed, a monopoly enterprise legitimately may wish to inform the public that it has developed new services or terms of doing business. A consumer may need information to aid his decision whether or not to use the monopoly service at all, or how much of the service he should purchase. In the absence of factors that would distort the decision to advertise, we *568 may assume that the willingness of a business to promote its products reflects a belief that consumers are interested in the advertising.[11] Since no such extraordinary conditions have been identified in this case, appellant's monopoly position does not alter the First Amendment's protection for its commercial speech.

B

The Commission offers two state interests as justifications for the ban on promotional advertising. The first concerns energy conservation. Any increase in demand for electricity—during peak or off-peak periods—means greater consumption of energy. The Commission argues, and the New York court agreed, that the State's interest in conserving energy is sufficient to support suppression of advertising designed to increase consumption of electricity. In view of our country's dependence on energy resources beyond our control, no one can doubt the importance of energy conservation. Plainly, therefore, the state interest asserted is substantial.

The Commission also argues that promotional advertising will aggravate inequities caused by the failure to base the utilities' rates on marginal cost. The utilities argued to the Commission that if they could promote the use of electricity in periods of low demand, they would improve their utilization of generating capacity. The Commission responded that promotion of off-peak consumption also would increase consumption **2353 during peak periods. If peak demand were to rise, the absence of marginal cost rates would mean that the rates charged for the additional power would not reflect the true costs of expanding production. Instead, the extra costs would *569 be borne by all consumers through higher overall rates. Without promotional advertising, the Commission stated, this inequitable turn of events would be less likely to occur. The choice among rate structures involves difficult and important questions of economic supply and distributional fairness.[12] The State's concern that rates be fair and efficient represents a clear and substantial governmental interest.

C

**[20]** **[21]** Next, we focus on the relationship between the State's interests and the advertising ban. Under this criterion, the Commission's laudable concern over the equity and efficiency of appellant's rates does not provide a constitutionally adequate reason for restricting protected speech. The link between the advertising prohibition and appellant's rate structure is, at most, tenuous. The impact of promotional advertising on the equity of appellant's rates is highly speculative. Advertising to increase off-peak usage would have to increase peak usage, while other factors that directly affect the fairness and efficiency of appellant's rates remained constant. Such conditional and remote eventualities simply cannot justify silencing appellant's promotional advertising.

**[22]** In contrast, the State's interest in energy conservation is directly advanced by the Commission order at issue here. There is an immediate connection between advertising and

demand for electricity. Central Hudson would not contest the advertising ban unless it believed that promotion would increase its sales. Thus, we find a direct link between the state interest in conservation and the Commission's order.

D

**[23]** We come finally to the critical inquiry in this case: whether the Commission's complete suppression of speech ordinarily protected by the First Amendment is no more extensive than ***570** necessary to further the State's interest in energy conservation. The Commission's order reaches all promotional advertising, regardless of the impact of the touted service on overall energy use. But the energy conservation rationale, as important as it is, cannot justify suppressing information about electric devices or services that would cause no net increase in total energy use. In addition, no showing has been made that a more limited restriction on the content of promotional advertising would not serve adequately the State's interests.

Appellant insists that but for the ban, it would advertise products and services that use energy efficiently. These include the "heat pump," which both parties acknowledge to be a major improvement in electric heating, and the use of electric heat as a "backup" to solar and other heat sources. Although the Commission has questioned the efficiency of electric heating before this Court, neither the Commission's Policy Statement nor its order denying rehearing made findings on this issue. In the absence of authoritative findings to the contrary, we must credit as within the realm of possibility the claim that electric heat can be an efficient alternative in some circumstances.

The Commission's order prevents appellant from promoting electric services that would reduce energy use by diverting demand from less efficient sources, or that would consume roughly the same amount of energy as do alternative sources. In neither situation would the utility's advertising endanger conservation or mislead the public. To the extent that the Commission's order suppresses speech that in no way impairs the State's interest in energy conservation, the Commission's order violates the First and Fourteenth Amendments and must be invalidated. See *First* ****2354** *National Bank of Boston v. Bellotti*, 435 U.S. 765, 98 S.Ct. 1407, 55 L.Ed.2d 707 (1978).

The Commission also has not demonstrated that its interest in conservation cannot be protected adequately by more limited regulation of appellant's commercial expression. To further ***571** its policy of conservation, the Commission could attempt to restrict the format and content of Central Hudson's advertising. It might, for example, require that the advertisements include information about the relative efficiency and expense of the offered service, both under current conditions and for the foreseeable future. Cf. *Banzhaf v. FCC*, 132 U.S.App.D.C. 14, 405 F.2d 1082 (1968), cert. denied *sub nom. Tobacco Institute, Inc. v. FCC*, 396 U.S. 842, 90 S.Ct. 50, 24 L.Ed.2d 93 (1969).[13] In the absence of a showing that more limited speech regulation would be ineffective, we cannot approve the complete suppression of Central Hudson's advertising.[14]

IV

**[24]** Our decision today in no way disparages the national interest in energy conservation. We accept without reservation the argument that conservation, as well as the development of alternative energy sources, is an imperative national goal. Administrative bodies empowered to regulate electric utilities have the authority—and indeed the duty—to take appropriate action to further this goal. When, however, such action involves ***572** the suppression of speech, the First and Fourteenth Amendments require that the restriction be no more extensive than is necessary to serve the state interest. In this case, the record before us fails to show that the total ban on promotional advertising meets this requirement.[15]

Accordingly, the judgment of the New York Court of Appeals is

Reversed.

Mr. Justice BRENNAN, concurring in the judgment.

One of the major difficulties in this case is the proper characterization of the Commission's Policy Statement. I find it impossible to determine on the present record whether the Commission's ban on all "promotional" advertising, in contrast to "institutional and informational" advertising, see *ante*, at 2347, is intended to encompass more than "commercial speech." I am inclined to think that Mr. Justice STEVENS is correct that the Commission's order prohibits more than mere proposals to engage in certain kinds of commercial transactions, and therefore I agree with his conclusion that the ban surely violates the First and Fourteenth Amendments. But even on the assumption that

  

the Court is correct that the Commission's order reaches only commercial speech, I agree with Mr. Justice BLACKMUN that "[n]o differences between **2355 commercial speech and other protected speech justify suppression of commercial speech in order to influence public conduct through manipulation of the availability of information." *Post*, at 2357.

Accordingly, with the qualifications implicit in the precedingparagraph, *573 I join the opinions of Mr. Justice BLACKMUN and Mr. Justice STEVENS concurring in the judgment.

Mr. Justice BLACKMUN, with whom Mr. Justice BRENNAN joins, concurring in the judgment.

I agree with the Court that the Public Service Commission's ban on promotional advertising of electricity by public utilities is inconsistent with the First and Fourteenth Amendments. I concur only in the Court's judgment, however, because I believe the test now evolved and applied by the Court is not consistent with our prior cases and does not provide adequate protection for truthful, nonmisleading, noncoercive commercial speech.

The Court asserts, *ante*, at 2351, that "a four-part analysis has developed" from our decisions concerning commercial speech. Under this four-part test a restraint on commercial "communication [that] is neither misleading nor related to unlawful activity" is subject to an intermediate level of scrutiny, and suppression is permitted whenever it "directly advances" a "substantial" governmental interest and is "not more extensive than is necessary to serve that interest." *Ante*, at 2350 and 2351. I agree with the Court that this level of intermediate scrutiny is appropriate for a restraint on commercial speech designed to protect consumers from misleading or coercive speech, or a regulation related to the time, place, or manner of commercial speech. I do not agree, however, that the Court's four-part test is the proper one to be applied when a State seeks to suppress information about a product in order to manipulate a private economic decision that the State cannot or has not regulated or outlawed directly.

Since the Court, without citing empirical data or other authority, finds a "direct link" between advertising and energy consumption, it leaves open the possibility that the State may suppress advertising of electricity in order to lessen demand for electricity. I, of course, agree with the Court that, *574 in today's world, energy conservation is a goal of paramount national and local importance. I disagree with the Court, however, when it says that suppression of speech may be a permissible means to achieve that goal. Mr. Justice STEVENS appropriately notes: "The justification for the regulation is nothing more than the expressed fear that the audience may find the utility's message persuasive. Without the aid of any coercion, deception, or misinformation, truthful communication may persuade some citizens to consume more electricity than they otherwise would." *Post*, at 2359.

The Court recognizes that we have never held that commercial speech may be suppressed in order to further the State's interest in discouraging purchases of the underlying product that is advertised. *Ante*, at 2351, n. 9. Permissible restraints on commercial speech have been limited to measures designed to protect consumers from fraudulent, misleading, or coercive sales techniques.[1] Those designed to deprive consumers of information about products or services that are legally offered for sale consistently have been invalidated.[2]

**2356 I seriously doubt whether suppression of information concerning the availability and price of a legally offered product is ever a permissible way for the State to "dampen" demand for or use of the product. Even though "commercial" speech is involved, such a regulatory measure strikes at the heart of the First Amendment. This is because it is a covert attempt *575 by the State to manipulate the choices of its citizens, not by persuasion or direct regulation, but by depriving the public of the information needed to make a free choice. As the Court recognizes, the State's policy choices are insulated from the visibility and scrutiny that direct regulation would entail and the conduct of citizens is molded by the information that government chooses to give them. *Ante*, at 2351, n. 9 ("We review with special care regulations that entirely suppress commercial speech in order to pursue a nonspeech-related policy. In those circumstances, a ban on speech could screen from public view the underlying governmental policy"). See Rotunda, The Commercial Speech Doctrine in the Supreme Court, 1976 U.Ill.Law Forum 1080, 1080–1083.

If the First Amendment guarantee means anything, it means that, absent clear and present danger, government has no power to restrict expression because of the effect its message is likely to have on the public. See generally Comment, First Amendment Protection for Commercial Advertising: The New Constitutional Doctrine, 44 U.Chi.L.Rev. 205, 243–251 (1976). Our cases indicate that this guarantee applies even to commercial speech. In *Virginia Pharmacy Board v.*

  

*Virginia Consumer Council*, 425 U.S. 748, 96 S.Ct. 1817, 48 L.Ed.2d 346 (1976), we held that Virginia could not pursue its goal of encouraging the public to patronize the "professional pharmacist" (one who provided individual attention and a stable pharmacist-customer relationship) by "keeping the public in ignorance of the entirely lawful terms that competing pharmacists are offering." *Id.*, at 770, 96 S.Ct., at 1829–30. We noted that our decision left the State free to pursue its goal of maintaining high standards among its pharmacists by "requir[ing] whatever professional standards it wishes of its pharmacists." *Ibid.*

We went on in *Virginia Pharmacy Board* to discuss the types of regulation of commercial speech that, due to the "commonsense differences" between this form of speech and other forms, are or may be constitutionally permissible. We indicated that government may impose reasonable "time, ***576** place, and manner" restrictions, and that it can deal with false, deceptive, and misleading commercial speech. We noted that the question of advertising of illegal transactions and the special problems of the electronic broadcast media were not presented.

Concluding with a restatement of the type of restraint that is not permitted, we said: "What is at issue is whether a State may completely suppress the dissemination of concededly truthful information about entirely lawful activity, fearful of that information's effect upon its disseminators and its recipients. . . . [W]e conclude that the answer to this [question] is in the negative." *Id.*, at 773, 96 S.Ct., at 1831.

*Virginia Pharmacy Board* did not analyze the State's interests to determine whether they were "substantial." Obviously, preventing professional dereliction and low quality health care are "substantial," legitimate, and important state goals. Nor did the opinion analyze the ban on speech to determine whether it "directly advance[d]," *ante*, at 2351, 2353, these goals. We also did not inquire whether a "more limited regulation of . . . commercial expression," *ante*, at 2353, would adequately serve the State's interests. Rather, we held that the State "may *not* [pursue its goals] by keeping the public in ignorance." ****2357** 425 U.S., at 770, 96 S.Ct., at 1829. (Emphasis supplied.)

Until today, this principle has governed. In *Linmark Associates, Inc. v. Willingboro*, 431 U.S. 85, 97 S.Ct. 1614, 50 L.Ed.2d 155 (1977), we considered whether a town could ban "For Sale" signs on residential property to further its goal of promoting stable, racially integrated housing. We did note that the record did not establish that the ordinance was necessary to enable the State to achieve its goal. The holding of *Linmark*, however, was much broader.[3] We stated:

> "The constitutional defect in this ordinance, however, ***577** is far more basic. The Township Council here, like the Virginia Assembly in *Virginia Pharmacy Bd.*, acted to prevent its residents from obtaining certain information . . . which pertains to sales activity in Willingboro . . . . The Council has sought to restrict the free flow of these data because it fears that otherwise homeowners will make decisions inimical to what the Council views as the homeowners' self-interest and the corporate interest of the township: they will choose to leave town. The Council's concern, then, was not with any commercial aspect of "For Sale" signs—with offerors communicating offers to offerees—but with the substance of the information communicated to Willingboro citizens." *Id.*, at 96, 97 S.Ct., at 1620.
>
> The Court in *Linmark* resolved beyond all doubt that a strict standard of review applies to suppression of commercial information, where the purpose of the restraint is to influence behavior by depriving citizens of information. The Court followed the strong statement above with an explicit adoption of the standard advocated by Mr. Justice Brandeis in his concurring opinion in *Whitney v. California*, 274 U.S. 357, 377, 47 S.Ct. 641, 649, 71 L.Ed. 1095 (1927): "If there be time to expose through discussion the falsehood and fallacies, to avert the evil by the processes of education, the remedy to be applied is more speech, not enforced silence. Only an emergency can justify repression." 431 U.S., at 97, 97 S.Ct., at 1620.

*Carey v. Population Services International*, 431 U.S. 678, 700–702, 97 S.Ct. 2010, 2024–2025, 52 L.Ed.2d 675 (1977), also applied to content-based restraints on commercial speech the same standard of review we have applied to other varieties of speech. There the Court held that a ban on advertising of contraceptives could not be justified ***578** by the State's interest in avoiding " 'legitimation' of illicit sexual behavior" because the advertisements could not be characterized as " 'directed to inciting or producing imminent lawless action and . . . likely to incite or produce such action,' " *id.*, at 701, 97 S.Ct., at 2024, quoting *Brandenburg v. Ohio*, 395 U.S. 444, 447, 89 S.Ct. 1827, 1829, 23 L.Ed.2d 430 (1969).

Our prior references to the " 'commonsense differences' " between commercial speech and other speech " 'suggest that a different degree of protection is necessary to insure that

  

the flow of truthful and legitimate commercial information is unimpaired.' " *Linmark Associates*, 431 U.S., at 98, 97 S.Ct., at 1621, quoting *Virginia Pharmacy Board*, 425 U.S., at 771–772, n. 24, 96 S.Ct., at 1830, n. 24. We have not suggested that the "commonsense differences" between commercial speech and other speech justify relaxed scrutiny of restraints that suppress truthful, nondeceptive, noncoercive commercial speech. The differences articulated by the Court, see *ante*, at 2350, n. 6, justify a more permissive approach to regulation of the manner of commercial speech for the purpose of protecting consumers from deception or coercion, and these differences explain why doctrines designed to prevent "chilling" of protected ****2358** speech are inapplicable to commercial speech. No differences between commercial speech and other protected speech justify suppression of commercial speech in order to influence public conduct through manipulation of the availability of information. The Court stated in *Carey v. Population Services International* :

> "Appellants suggest no distinction between commercial and noncommercial speech that would render these discredited arguments meritorious when offered to justify prohibitions on commercial speech. On the contrary, such arguments are clearly directed not at any commercial aspect of the prohibited advertising but at the ideas conveyed and form of expression—*the core of First Amendment values*." 431 U.S., at 701, n. 28, 97 S.Ct., at 2025, n. 28 (emphasis added).

***579** It appears that the Court would permit the State to ban all direct advertising of air conditioning, assuming that a more limited restriction on such advertising would not effectively deter the public from cooling its homes. In my view, our cases do not support this type of suppression. If a governmental unit believes that use or overuse of air conditioning is a serious problem, it must attack that problem directly, by prohibiting air conditioning or regulating thermostat levels. Just as the Commonwealth of Virginia may promote professionalism of pharmacists directly, so too New York may *not* promote energy conservation "by keeping the public in ignorance." *Virginia Pharmacy Board*, 425 U.S., at 770, 96 S.Ct., at 1829.

Mr. Justice STEVENS, with whom Mr. Justice BRENNAN joins, concurring in the judgment.

Because "commercial speech" is afforded less constitutional protection than other forms of speech,[1] it is important that the commercial speech concept not be defined too broadly lest speech deserving of greater constitutional protection be inadvertently suppressed. The issue in this case is whether New York's prohibition on the promotion of the use of electricity through advertising is a ban on nothing but commercial speech.

In my judgment one of the two definitions the Court uses in addressing that issue is too broad and the other may be somewhat too narrow. The Court first describes commercial speech as "expression related solely to the economic interests of the speaker and its audience." *Ante*, at 2349. Although it is not entirely clear whether this definition uses the subject matter of the speech or the motivation of the speaker as the limiting factor, it seems clear to me that it encompasses speech that is entitled to the maximum protection afforded by the First Amendment. Neither a labor leader's exhortation to ***580** strike, nor an economist's dissertation on the money supply, should receive any lesser protection because the subject matter concerns only the economic interests of the audience. Nor should the economic motivation of a speaker qualify his constitutional protection; even Shakespeare may have been motivated by the prospect of pecuniary reward. Thus, the Court's first definition of commercial speech is unquestionably too broad.[2]

The Court's second definition refers to " 'speech proposing a commercial transaction.' " *Ante*, at 2349. A salesman's solicitation, a broker's offer, and a manufacturer's publication of a price list or the terms of his standard warranty would unquestionably fit within this concept.[3] Presumably, ****2359** the definition is intended to encompass advertising that advises possible buyers of the availability of specific products at specific prices and describes the advantages of purchasing such items. Perhaps it also extends to other communications that do little more than make the name of a product or a service more familiar to the general public. Whatever the precise contours of the concept, and perhaps it is too early to enunciate an exact formulation, I am persuaded that it should not include the entire range of communication that is embraced within the term "promotional advertising."

This case involves a governmental regulation that completely bans promotional advertising by an electric utility. This ban encompasses a great deal more than mere proposals to engage in certain kinds of commercial transactions. It prohibits all advocacy of the immediate or future use of electricity. ***581** It curtails expression by an informed and interested group of persons of their point of view on questions relating to the production and consumption of electrical energy—questions frequently discussed and debated by our political leaders. for

  

example, an electric company's advocacy of the use of electric heat for environmental reasons, as opposed to wood-burning stoves, would seem to fall squarely within New York's promotional advertising ban and also within the bounds of maximum First Amendment protection. The breadth of the ban thus exceeds the boundaries of the commercial speech concept, however that concept may be defined.[4]

The justification for the regulation is nothing more than the expressed fear that the audience may find the utility's message persuasive. Without the aid of any coercion, deception, or misinformation, truthful communication may persuade some citizens to consume more electricity than they otherwise would. I assume that such a consequence would be undesirable and that government may therefore prohibit and punish the unnecessary or excessive use of electricity. But if the perceived harm associated with greater electrical usage is not sufficiently serious to justify direct regulation, surely it does not constitute the kind of clear and present danger that can justify the suppression of speech.

***582** Although they were written in a different context, the words used by Mr. Justice Brandeis in his concurring opinion in *Whitney v. California*, 274 U.S. 357, 376–377, 47 S.Ct. 641, 648–649, 71 L.Ed. 1095, explain my reaction to the prohibition against advocacy involved in this case:

> "But even advocacy of violation, however reprehensible morally, is not a justification for denying free speech where the advocacy falls short of incitement and there is nothing to indicate that the advocacy would be immediately acted on. The wide difference between advocacy and incitement, between preparation and attempt, between assembling and conspiracy, must be borne in mind. In order to support a finding of clear and present danger it must be shown either that immediate serious violence was to be expected or was advocated, or that the past conduct furnished reason to believe that such advocacy was then contemplated.
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> "Those who won our independence by revolution were not cowards. They did not fear political change. They did not exalt order at the cost of liberty. To courageous, self-reliant men, with confidence ****2360** in the power of free and fearless reasoning applied through the processes of popular government, no danger flowing from speech can be deemed clear and present, unless the incidence of the evil apprehended is so imminent that it may befall before there is opportunity for full discussion. If there be time to expose through discussion the falsehood and fallacies, to avert the evil by the processes of education, the remedy to be applied is more speech, not enforced silence. Only an emergency can justify repression. Such must be the rule if authority is to be reconciled with freedom. Such, in my opinion, is the command of the Constitution." (Footnote omitted.)[5]

***583** In sum, I concur in the result because I do not consider this to be a "commercial speech" case. Accordingly, I see no need to decide whether the Court's four-part analysis, *ante*, at 2351, adequately protects commercial speech—as properly defined—in the face of a blanket ban of the sort involved in this case.

Mr. Justice REHNQUIST, dissenting.

The Court today invalidates an order issued by the New York Public Service Commission designed to promote a policy that has been declared to be of critical national concern. The order was issued by the Commission in 1973 in response to the Mideastern oil embargo crisis. It prohibits electric corporations "from *promoting* the use of electricity through the use of advertising, subsidy payments . . ., or employee incentives." State of New York Public Service Commission, Case No. 26532 (Dec. 5, 1973), App. to Juris. Statement 31a (emphasis added). Although the immediate crisis created by the oil embargo has subsided, the ban on promotional advertising remains in effect. The regulation was re-examined by the New York Public Service Commission in 1977. Its constitutionality was subsequently upheld by the New York Court of Appeals, which concluded that the paramount national interest in energy conservation justified its retention.[1]

***584** The Court's asserted justification for invalidating the New York law is the public interest discerned by the Court to underlie the First Amendment in the free flow of commercial information. Prior to this Court's recent decision in *Virginia Pharmacy Board v. Virginia Citizens Consumer Council*, 425 U.S. 748, 96 S.Ct. 1817, 48 L.Ed.2d 346 (1976), however, commercial speech was afforded no protection under the First Amendment whatsoever. See *E. g., Breard v. Alexandria*, 341 U.S. 622, 71 S.Ct. 920, 95 L.Ed. 1233 (1951); *Valentine v. Chrestensen*, 316 U.S. 52, 62 S.Ct. 920, 86 L.Ed. 1262 (1942). Given what seems to me full recognition of the holding of *Virginia Pharmacy Board* that commercial speech is entitled to some degree of First Amendment protection, I think the Court is nonetheless incorrect in invalidating the carefully considered state ban on promotional advertising ****2361** in light of pressing national and state energy needs.

  

The Court's analysis in my view is wrong in several respects. Initially, I disagree with the Court's conclusion that the speech of a state-created monopoly, which is the subject of a comprehensive regulatory scheme, is entitled to protection under the First Amendment. I also think that the Court errs here in failing to recognize that the state law is most accurately viewed as an economic regulation and that the speech involved (if it falls within the scope of the First Amendment at all) occupies a significantly more subordinate position in the hierarchy of First Amendment values than the Court gives it today. Finally, the Court in reaching its decision improperly substitutes its own judgment for that of the State in deciding how a proper ban on promotional advertising should be drafted. With regard to this latter point, the Court adopts as its final part of a four-part test a "no more ***585** extensive than necessary" analysis that will unduly impair a state legislature's ability to adopt legislation reasonably designed to promote interests that have always been rightly thought to be of great importance to the State.

I

In concluding that appellant's promotional advertising constitutes protected speech, the Court reasons that speech by electric utilities is valuable to consumers who must decide whether to use the monopoly service or turn to an alternative energy source, and if they decide to use the service how much of it to purchase. *Ante*, at 2352. The Court in so doing "assume[s] that the willingness of a business to promote its products reflects a belief that consumers are interested in the advertising." *Ante*, at 2352. The Court's analysis ignores the fact that the monopoly here is entirely state-created and subject to an extensive state regulatory scheme from which it derives benefits as well as burdens.

While this Court has stated that the "capacity [of speech] for informing the public does not depend upon the identity of its source," *First National Bank of Boston v. Bellotti*, 435 U.S. 765, 777, 98 S.Ct. 1407, 1416, 55 L.Ed.2d 707 (1978), the source of the speech nevertheless may be relevant in determining whether a given message is protected under the First Amendment.[2] When the source of the speech is a state-created monopoly such as this, traditional First Amendment concerns, if they come into play at all, certainly do not justify the broad interventionist role adopted by the Court today. In ***586** *Consolidated Edison Co. v. Public Service Comm'n*, 447 U.S. 530, 549–550, 100 S.Ct. 2326, 2339–2340, 65 L.Ed.2d 319, Mr. Justice BLACKMUN observed:

> "A public utility is a state-created monopoly. See, *e. g.*, N. Y. Pub. Serv. Law § 68 (McKinney 1955); Jones, Origins of the Certificate of Public Convenience and Necessity; Developments in the States 1870–1920, 79 Colum. L.Rev. 426, 458–461 (1979); Comment, Utility Rates, Consumers, and the New York State Public Service Commission, 39 Albany L.Rev. 707, 709–714 (1975). Although monopolies generally are against the public policies of the United States and of the State of New York, see, *e. g.*, N. Y. Gen. Bus. Law § 340 (McKinney 1968 and Supp.1979–1980), . . . utilities are permitted to operate as monopolies because of a determination by the State that the public interest is better served by protecting them from competition. See 2 A. Kahn, ****2362** The Economics of Regulation 113–171 (1971).
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> > "This exceptional grant of power to private enterprises justifies extensive oversight on the part of the State to protect the ratepayers from exploitation of the monopoly power through excessive rates and other forms of overreaching. . . . New York law gives its Public Service Commission plenary supervisory powers over all property, real and personal, 'used or to be used for or in connection with or to facilitate the . . . sale or furnishing of electricity for light, heat or power.' N.Y.Pub.Serv.Law §§ 2(12) and 66(1) (McKinney 1955)."

Thus, although *First National Bank of Boston v. Bellotti, supra*, holds that speech of a corporation is entitled to some First Amendment protection, it by no means follows that a utility with monopoly power conferred by a State is also entitled to such protection.

The state-created monopoly status of a utility arises from the unique characteristics of the services that a utility provides. As recognized in *Cantor v. Detroit Edison Co.*, 428 U.S. 579, 595–596, 96 S.Ct. 3110, 3120, 49 L.Ed.2d 1141 (1976), "public utility regulation typically ***587** assumes that the private firm is a natural monopoly and that public controls are necessary to protect the consumer from exploitation." The consequences of this natural monopoly in my view justify much more wide-ranging supervision and control of a utility under the First Amendment than this Court held in *Bellotti* to be permissible with regard to ordinary corporations. Corporate status is generally conferred as a result of a State's determination that the corporate characteristics "enhance its efficiency as an economic entity." *First National Bank of Boston v. Bellotti, supra*, at 825–826, 98 S.Ct., at 1441

  

(REHNQUIST, J., dissenting). A utility, by contrast fulfills a function that serves special public interests as a result of the natural monopoly of the service provided. Indeed, the extensive regulations governing decisionmaking by public utilities suggest that for purposes of First Amendment analysis, a utility is far closer to a state-controlled enterprise than is an ordinary corporation.[3] Accordingly, I think a State has broad discretion in determining the statements that a utility may make in that such statements emanate from the entity created by the State to provide important and unique public services. And a state regulatory body charged with the oversight of these types of services may reasonably decide to impose on the utility a special duty to conform its conduct to ***588** the agency's conception of the public interest. Thus I think it is constitutionally permissible for it to decide that promotional advertising is inconsistent with the public interest in energy conservation. I also think New York's ban on such advertising falls within the scope of permissible state regulation of an economic activity by an entity that could not exist in corporate form, say nothing of enjoy monopoly status, were it not for the laws of New York.[4]

****2363** II

This Court has previously recognized that although commercial speech may be entitled to First Amendment protection, that protection is not as extensive as that accorded to the advocacy of ideas. Thus, we stated in *Ohralik v. Ohio State Bar Assn.*, 436 U.S. 447, 455–456, 98 S.Ct. 1912, 1918, 56 L.Ed.2d 444 (1978):

> "Expression concerning purely commercial transactions has come within the ambit of the Amendment's protection ***589** only recently. In rejecting the notion that such speech 'is wholly outside the protection of the First Amendment,' *Virginia Pharmacy, supra*, [425 U.S.], at 761, [96 S.Ct., at 1825], we were careful not to hold 'that it is wholly undifferentiable from other forms' of speech. 425 U.S., at 771, n. 24, [96 S.Ct., at 1831, n. 24]. We have not discarded the 'common-sense' distinction between speech proposing a commercial transaction, which occurs in an area traditionally subject to government regulation, and other varieties of speech. *Ibid*. To require a parity of constitutional protection for commercial and noncommercial speech alike could invite dilution, simply by a leveling process, of the force of the Amendment's guarantee with respect to the latter kind of speech. Rather than subject the First Amendment to such a devitalization, we instead have afforded commercial speech a limited measure of protection, commensurate with its subordinate position in the scale of First Amendment values, while allowing modes of regulation that might be impermissible in the realm of noncommercial expression." (Footnote omitted.)

The Court's decision today fails to give due deference to this subordinate position of commercial speech. The Court in so doing returns to the bygone era of *Lochner v. New York*, 198 U.S. 45, 25 S.Ct. 539, 49 L.Ed. 937 (1905), in which it was common practice for this Court to strike down economic regulations adopted by a State based on the Court's own notions of the most appropriate means for the State to implement its considered policies.

I had thought by now it had become well established that a State has broad discretion in imposing economic regulations. As this Court stated in *Nebbia v. New York*, 291 U.S. 502, 537, 54 S.Ct. 505, 516, 78 L.Ed. 940 (1934):

> "[T]here can be no doubt that upon proper occasion and by appropriate measures the state may regulate a business in any of its aspects. . . .
>
> ***590** "So far as the requirement of due process is concerned, and in the absence of other constitutional restriction, a state is free to adopt whatever economic policy may reasonably be deemed to promote public welfare, and to enforce that policy by legislation adapted to its purpose. The courts are without authority either to declare such policy, or, when it is declared by the legislature, to override it. If the laws passed are seen to have a reasonable relation to a proper legislative purpose, and are neither arbitrary nor discriminatory, the requirements of due process are satisfied, and judicial determination to that effect renders a court ****2364** *functus officio*. . . . [I]t does not lie with the courts to determine that the rule is unwise."

And Mr. Justice Black, writing for the Court, observed more recently in *Ferguson v. Skrupa*, 372 U.S. 726, 730, 83 S.Ct. 1028, 1031, 10 L.Ed.2d 93 (1963):

> "The doctrine . . . that due process authorizes courts to hold laws unconstitutional when they believe the legislature has acted unwisely—has long since been discarded. We have returned to the original constitutional proposition that courts do not substitute their social and economic beliefs for the judgment of legislative bodies, who are elected to pass laws."

  

The State of New York has determined here that economic realities require the grant of monopoly status to public utilities in order to distribute efficiently the services they provide, and in granting utilities such status it has made them subject to an extensive regulatory scheme. When the State adopted this scheme and when its Public Service Commission issued its initial ban on promotional advertising in 1973, commercial speech had not been held to fall within the scope of the First Amendment at all. *Virginia Pharmacy Board v. Virginia Citizens Consumer Council*, 425 U.S. 748, 96 S.Ct. 1817, 48 L.Ed.2d 346 (1976), however, subsequently accorded commercial speech a limited measure of First Amendment protection.

***591** The Court today holds not only that commercial speech is entitled to First Amendment protection, but also that when it is protected a State may not regulate it unless its reason for doing so amounts to a "substantial" governmental interest, its regulation "directly advances" that interest, and its manner of regulation is "not more extensive than necessary" to serve the interest. *Ante,* at 2351. The test adopted by the Court thus elevates the protection accorded commercial speech that falls within the scope of the First Amendment to a level that is virtually indistinguishable from that of noncommercial speech. I think the Court in so doing has effectively accomplished the "devitalization" of the First Amendment that it counseled against in *Ohralik*. I think it has also, by labeling economic regulation of business conduct as a restraint on "free speech," gone far to resurrect the discredited doctrine of cases such as *Lochner* and *Tyson & Brother v. Banton*, 273 U.S. 418, 47 S.Ct. 426, 71 L.Ed. 718 (1927). New York's order here is in my view more akin to an economic regulation to which virtually complete deference should be accorded by this Court.

I doubt there would be any question as to the constitutionality of New York's conservation effort if the Public Service Commission had chosen to raise the price of electricity, see, *e. g., Sunshine Anthracite Coal Co. v. Adkins*, 310 U.S. 381, 60 S.Ct. 907, 84 L.Ed. 1263 (1940); *Old Dearborn Distributing Co. v. Seagram-Distillers Corp.*, 299 U.S. 183, 57 S.Ct. 139, 81 L.Ed. 109 (1936), to condition its sale on specified terms, see, *e. g., Nebbia v. New York, supra*, at 527–528, 54 S.Ct., at 511–512, or to restrict its production, see, *e. g., Wickard v. Filburn*, 317 U.S. 111, 63 S.Ct. 82, 87 L.Ed. 122 (1942). In terms of constitutional values, I think that such controls are virtually indistinguishable from the State's ban on promotional advertising.

An ostensible justification for striking down New York's ban on promotional advertising is that this Court has previously "rejected the 'highly paternalistic' view that government has complete power to suppress or regulate commercial speech. '[P]eople will perceive their own best interests if ***592** only they are well enough informed and . . . the best means to that end is to open the channels of communication, rather than to close them. . . .' " *Ante*, at 2349. Whatever the merits of this view, I think the Court has carried its logic too far here.

The view apparently derives from the Court's frequent reference to the "marketplace of ideas," which was deemed analogous to the commercial market in which a *laissez-faire* policy would lead to optimum economic decisionmaking under the guidance of the "invisible hand." See, *e. g.*, ****2365** Adam Smith, Wealth of Nations (1776). This notion was expressed by Mr. Justice Holmes in his dissenting opinion in *Abrams v. United States*, 250 U.S. 616, 630, 40 S.Ct. 17, 22, 63 L.Ed. 1173 (1919), wherein he stated that "the best test of truth is the power of the thought to get itself accepted in the competition of the market . . . ." See also, *e. g., Consolidated Edison v. Public Service Comm'n*, 447 U.S., at 534, 100 S.Ct., at 2331; J. Mill, On Liberty (1858); J. Milton, Areopagitica, A Speech for the Liberty of Unlicensed Printing (1644).

While it is true that an important objective of the First Amendment is to foster the free flow of information, identification of speech that falls within its protection is not aided by the metaphorical reference to a "marketplace of ideas." There is no reason for believing that the marketplace of ideas is free from market imperfections any more than there is to believe that the invisible hand will always lead to optimum economic decisions in the commercial market. See, *e. g.,* Baker, Scope of the First Amendment, Freedom of Speech, 25 UCLA L.Rev. 964, 967–981 (1978). Indeed, many types of speech have been held to fall outside the scope of the First Amendment, thereby subject to governmental regulation, despite this Court's references to a marketplace of ideas. See, *e. g., Chaplinsky v. New Hampshire*, 315 U.S. 568, 62 S.Ct. 766, 86 L.Ed. 1031 (1942) (fighting words); *Beauharnais v. Illinois*, 343 U.S. 250, 72 S.Ct. 725, 96 L.Ed. 919 (1952) (group libel); *Roth v. United States*, 354 U.S. 476, 77 S.Ct. 1304, 1 L.Ed.2d 1498 (1957) (obscenity). It also has been held that the government has ***593** a greater interest in regulating some types of protected speech than others. See, *e. g., FCC v. Pacifica Foundation*, 438 U.S. 726, 98 S.Ct. 3026, 57 L.Ed.2d 1073 (1978) (indecent speech); *Virginia Pharmacy Board v. Virginia Citizens Consumer Council, supra* (commercial speech). And as this Court stated in *Gertz*

*v. Robert Welch, Inc.*, 418 U.S. 323, 344, n. 9, 94 S.Ct. 2997, 3009, n. 9, 41 L.Ed.2d 789 (1974): "Of course, an opportunity for rebuttal seldom suffices to undo [the] harm of a defamatory falsehood. Indeed the law of defamation is rooted in our experience that the truth rarely catches up with a lie." The Court similarly has recognized that false and misleading commercial speech is not entitled to any First Amendment protection. See, *e. g., ante*, at 2351.

The above examples illustrate that in a number of instances government may constitutionally decide that societal interests justify the imposition of restrictions on the free flow of information. When the question is whether a given commercial message is protected, I do not think this Court's determination that the information will "assist" consumers justifies judicial invalidation of a reasonably drafted state restriction on such speech when the restriction is designed to promote a concededly substantial state interest. I consequently disagree with the Court's conclusion that the societal interest in the dissemination of commercial information is sufficient to justify a restriction on the State's authority to regulate promotional advertising by utilities; indeed, in the case of a regulated monopoly, it is difficult for me to distinguish "society" from the state legislature and the Public Service Commission. Nor do I think there is any basis for concluding that individual citizens of the State will recognize the need for and act to promote energy conservation to the extent the government deems appropriate, if only the channels of communication are left open.[5] Thus, even if I were ***594** to ****2366** agree that commercial speech is entitled to some First Amendment protection, I would hold here that the State's decision to ban promotional advertising, in light of the substantial state interest at stake, is a constitutionally permissible exercise of its power to adopt regulations designed to promote the interests of its citizens.

The plethora of opinions filed in this case highlights the doctrinal difficulties that emerge from this Court's decisions granting First Amendment protection to commercial speech. My Brother STEVENS, quoting Mr. Justice Brandeis in *Whitney v. California*, 274 U.S. 357, 376–377, 47 S.Ct. 641, 648–649, 71 L.Ed. 1095 (1927), includes Mr. Justice Brandeis' statement that "[t]hose who won our independence by revolution were not cowards. They did not fear political change. They did not exalt order at the cost of liberty." *Ante*, at 2359. Mr. Justice BLACKMUN, in his separate opinion, joins only in the Court's judgment because he believes that the Court's opinion "does not provide adequate protection for truthful, nonmisleading, noncoercive commercial speech." *Ante*, at 2355. Both Mr. Justice STEVENS, *ante*, at 2359, and Mr. Justice BLACKMUN, *ante*, at 2357, would apply the following formulation by Mr. Justice Brandeis of the clear-and-present-danger test to the regulation of speech at issue in this case:

> "If there be time to expose through discussion the falsehood ***595** and fallacies, to avert the evil by the processes of education, the remedy to be applied is more speech, not enforced silence. Only an emergency can justify repression." *Whitney v. California, supra*, at 377, 47 S.Ct., at 649 (concurring opinion).

Although the Court today does not go so far as to adopt this position, its reasons for invalidating New York's ban on promotional advertising make it quite difficult for a legislature to draft a statute regulating promotional advertising that will satisfy the First Amendment requirements established by the Court in this context. See Part III, *infra*.

Two ideas are here at war with one another, and their resolution, although it be on a judicial battlefield, will be a very difficult one. The sort of "advocacy" of which Mr. Justice Brandeis spoke was not the advocacy on the part of a utility to use more of its product. Nor do I think those who won our independence, while declining to "exalt order at the cost of liberty," would have viewed a merchant's unfettered freedom to advertise in hawking his wares as a "liberty" not subject to extensive regulation in light of the government's substantial interest in attaining "order" in the economic sphere.

While I agree that when the government attempts to regulate speech of those expressing views on public issues, the speech is protected by the First Amendment unless it presents "a clear and present danger" of a substantive evil that the government has a right to prohibit, see, *e. g., Schenck v. United States*, 249 U.S. 47, 52, 39 S.Ct. 247, 249, 63 L.Ed. 470 (1919), I think it is important to recognize that this test is appropriate in the political context in light of the central importance of such speech to our system of self-government. As observed in *Buckley v. Valeo*, 424 U.S. 1, 14, 96 S.Ct. 612, 632, 46 L.Ed.2d 659 (1976):

> "Discussion of public issues and debate on the qualifications of candidates are integral to the operation of the system of government established by our Constitution. The First Amendment affords the broadest protection to ***596** such political expression in order 'to assure [the] unfettered interchange of ideas for the bringing about of political and social changes desired by the people.' "

  

**2367 And in *Garrison v. Louisiana*, 379 U.S. 64, 74–75, 85 S.Ct. 209, 216, 13 L.Ed.2d 125 (1964), this Court stated that "speech concerning public affairs is more than self-expression; it is the essence of self-government."

The First Amendment, however, does not always require a clear and present danger to be present before the government may regulate speech. Although First Amendment protection is not limited to the "exposition of ideas" on public issues, see, *e. g., Winters v. New York*, 333 U.S. 507, 510, 68 S.Ct. 665, 667, 92 L.Ed. 840 (1948)—both because the line between the informing and the entertaining is elusive and because art, literature, and the like may contribute to important First Amendment interests of the individual in freedom of speech—it is well established that the government may regulate obscenity even though it does not present a clear and present danger. Compare, *e. g., Paris Adult Theatre I v. Slaton*, 413 U.S. 49, 57–58, 93 S.Ct. 2628, 2635, 37 L.Ed.2d 446 (1973), with *Brandenburg v. Ohio*, 395 U.S. 444, 447, 89 S.Ct. 1827, 1829, 23 L.Ed.2d 430 (1969). Indecent speech, at least when broadcast over the airwaves, also may be regulated absent a clear and present danger of the type described by Mr. Justice Brandeis and required by this Court in *Brandenburg. FCC v. Pacifica Foundation*, 438 U.S. 726, 98 S.Ct. 3026, 57 L.Ed.2d 1073 (1978). And in a slightly different context this Court declined to apply the clear-and-present-danger test to a conspiracy among members of the press in violation of the Sherman Act because to do so would "degrade" that doctrine. *Associated Press v. United States*, 326 U.S. 1, 7, 65 S.Ct. 1416, 1418, 89 L.Ed. 2013 (1945). Nor does the Court today apply the clear-and-present-danger test in invalidating New York's ban on promotional advertising. As noted above, in these and other contexts the Court has clearly rejected the notion that there must be a free "marketplace of ideas."

If the complaint of those who feel the Court's opinion does not go far enough is that the "only test of truth is its ability *597 to get itself accepted in the marketplace of ideas"—the test advocated by Thomas Jefferson in his first inaugural address, and by Mr. Justice Holmes in *Abrams v. United States*, 250 U.S. 616, 630, 40 S.Ct. 17, 22, 63 L.Ed. 1173 (1919) (dissenting opinion)—there is no reason whatsoever to limit the protection accorded commercial speech to "truthful, nonmisleading, noncoercive" speech. See *ante*, at 2355 (BLACKMUN, J., concurring in judgment). If the "commercial speech" is in fact misleading, the "marketplace of ideas" will in time reveal that fact. It may not reveal it sufficiently soon to avoid harm to numerous people, but if the reasoning of Brandeis and Holmes is applied in this context, that was one of the risks we took in protecting free speech in a democratic society.

Unfortunately, although the "marketplace of ideas" has a historically and sensibly defined context in the world of political speech, it has virtually none in the realm of business transactions. Even so staunch a defender of the First Amendment as Mr. Justice Black, in his dissent in *Breard v. Alexandria*, 341 U.S., at 650, n., 71 S.Ct., at 936, n., stated:

> "Of course I believe that the present ordinance could constitutionally be applied to a 'merchant' who goes from door to door 'selling pots.' "

And yet, with the change in solicitation and advertising techniques, the line between what Central Hudson did here and the peddler selling pots in Alexandria a generation ago is difficult, if not impossible to fix. Doubtless that was why Mr. Justice Black joined the unanimous opinion of the Court in *Valentine v. Chrestensen*, 316 U.S., at 54, 62 S.Ct., at 921, in which the Court stated:

> "This court has unequivocally held that the streets are proper places for the exercise of the freedom of communicating information and disseminating opinion and that, though the states and municipalities may appropriately regulate the privilege in the public interest, they may not unduly burden or proscribe its employment **2368 in these public *598 thoroughfares. *We are equally clear that the Constitution imposes no such restraint on government as respects purely commercial advertising*. Whether, and to what extent, one may promote or pursue a gainful occupation in the streets, to what extent such activity shall be adjudged a derogation of the public right of user, are matters for legislative judgment." (Emphasis added.)

I remain of the view that the Court unlocked a Pandora's Box when it "elevated" commercial speech to the level of traditional political speech by according it First Amendment protection in *Virginia Pharmacy Board v. Virginia Citizens Consumer Council*, 425 U.S. 748, 96 S.Ct. 1817, 48 L.Ed.2d 346 (1976). The line between "commercial speech," and the kind of speech that those who drafted the First Amendment had in mind, may not be a technically or intellectually easy one to draw, but it surely produced far fewer problems than has the development of judicial doctrine in this area since *Virginia Board*. For in the world of political advocacy and *its* marketplace of ideas, there is no such thing as a "fraudulent" idea: there may be useless proposals, totally unworkable schemes, as well as very sound proposals

  

that will receive the imprimatur of the "marketplace of ideas" through our majoritarian system of election and representative government. The free flow of information is important in this context not because it will lead to the discovery of any objective "truth," but because it is essential to our system of self-government.

The notion that more speech is the remedy to expose falsehood and fallacies is wholly out of place in the commercial bazaar, where if applied logically the remedy of one who was defrauded would be merely a statement, available upon request, reciting the Latin maxim "*caveat emptor*." But since "fraudulent speech" in this area is to be remediable under *Virginia Pharmacy Board, supra*, the remedy of one defrauded is a lawsuit or an agency proceeding based on common-law notions of fraud that are separated by a world of difference ***599** from the realm of politics and government. What time, legal decisions, and common sense have so widely severed, I declined to join in *Virginia Pharmacy Board*, and regret now to see the Court reaping the seeds that it there sowed. For in a democracy, the economic is subordinate to the political, a lesson that our ancestors learned long ago, and that our descendants will undoubtedly have to relearn many years hence.

III

The Court concedes that the state interest in energy conservation is plainly substantial, *ante*, at 2352, as is the State's concern that its rates be fair and efficient. *Ante*, at 2353. It also concedes that there is a direct link between the Commission's ban on promotional advertising and the State's interest in conservation. *Ibid*. The Court nonetheless strikes down the ban on promotional advertising because the Commission has failed to demonstrate, under the final part of the Court's four-part test, that its regulation is no more extensive than necessary to serve the State's interest. *Ante*, at 2353–2354. In reaching this conclusion, the Court conjures up potential advertisements that a utility might make that conceivably would result in net energy savings. The Court does not indicate that the New York Public Service Commission has in fact construed its ban on "promotional" advertising to preclude the dissemination of information that clearly would result in a net energy savings, nor does it even suggest that the Commission has been confronted with and rejected such an advertising proposal.[6] ****2369** The final part of the Court's test ***600** thus leaves room for so many hypothetical "better" ways that any ingenious lawyer will surely seize on one of them to secure the invalidation of what the state agency actually did. As Mr. Justice BLACKMUN observed in*Illinois Elections Bd. v. Socialist Workers Party*, 440 U.S. 173, 188–189, 99 S.Ct. 983, 993, 59 L.Ed.2d 230 (1979) (concurring opinion):

> "A judge would be unimaginative indeed if he could not come up with something a little less 'drastic' or a little less 'restrictive' in almost any situation, and thereby enable himself to vote to strike legislation down."

Here the Court concludes that the State's interest in energy conservation cannot justify a blanket ban on promotional advertising. In its statement of the facts, the Court observes that the Commission's ban on promotional advertising is not "a perfect vehicle for conserving energy." It states:

> "[T]he Commission's order prohibits promotional advertising to develop consumption during periods when demand for electricity is low. By limiting growth in 'off-peak' consumption, the ban limits the 'beneficial side effects' of such growth in terms of more efficient use of existing powerplants. [App. to Juris. Statement] 37a." *Ante*, at 2348.

The Court's analysis in this regard is in my view fundamentally misguided because it fails to recognize that the beneficial side effects of "more efficient use" may be inconsistent with the goal of energy conservation. Indeed, the Commission explicitly found that the promotion of off-peak consumption would impair conservation efforts.[7] The Commission stated:

> "Increased off-peak generation, . . . while conferring ***601** some beneficial side effects, also consumes valuable energy resources and, if it is the result of increased sales, necessarily creates incremental air pollution and thermal discharges to waterways. More important, any increase in off-peak generation from most of the major companies producing electricity in this State would not, at this time, be produced from coal or nuclear resources, but would require the use of oil-fired generating facilities. The increased requirement for fuel oil to serve the incremental off-peak load created by promotional advertising would aggravate the nations' already unacceptably high level of dependence on foreign sources of supply and would, in addition, frustrate rather than encourage conservation efforts." App. to Juris. Statement 37a.[8]

The Court also observes, as the Commission acknowledged, that the ban on promotional advertising can achieve only

  

"piecemeal conservationism" because oil dealers are not under the Commission's jurisdiction, and they remain free to advertise. Until I have mastered electrical engineering and marketing, I am not prepared to contradict by virtue of my judicial office those who assume that the ban will be successful in making a substantial contribution to conservation efforts. ***602** And I doubt that any of ****2370** this Court's First Amendment decisions justify striking down the Commission's order because more steps toward conservation could have been made. This is especially true when, as here, the Commission lacks authority over oil dealers.

The Court concludes that the Commission's ban on promotional advertising must be struck down because it is more extensive than necessary: it may result in the suppression of advertising by utilities that promotes the use of electrical devices or services that cause no net increase in total energy use. The Court's reasoning in this regard, however, is highly speculative. The Court provides two examples that it claims support its conclusion. It first states that both parties acknowledge that the "heat pump" will be "a major improvement in electric heating," and that but for the ban the utilities would advertise this type of "energy efficien[t]" product.[9] The New York Public Service Commission, however, considered the merits of the heat pump and concluded that it would most likely result in an overall increase in electric energy consumption. The Commission stated:

> "[I]nstallation of a heat pump means also installation of central air-conditioning. To this extent, promotion of off-peak electric space heating involves promotion of on-peak summer air-conditioning as well as on-peak usage ***603** of electricity for water heating. And the price of electricity to most consumers in the State does not now fully reflect the much higher marginal costs of on-peak consumption in summer peaking markets. In these circumstances, there would be a subsidization of consumption on-peak, and consequently, higher rates for all consumers." App. to Juris. Statement 58a.
>
> Subsidization of peak consumption not only may encourage the use of scarce energy resources during peak periods, but also may lead to larger reserve generating capacity requirements for the State.

The Court next asserts that electric heating as a backup to solar and other heat may be an efficient alternative energy source. *Ante*, at 2353. The Court fails to establish, however, that an advertising proposal of this sort was properly presented to the Commission. Indeed, the Court's concession that the Commission did not make findings on this issue suggests that the Commission did not even consider it. Nor does the Court rely on any support for its assertion other than the assertion of appellant. Rather, it speculates that "[i]n the absence of authoritative findings to the contrary, we must credit as within the realm of possibility the claim that electric heat can be an efficient alternative in some circumstances." *Ibid.*[10]

Ordinarily it is the role of the State Public Service Commission to make factual determinations concerning whether a device or service will result in a net energy savings and, if so, whether and to what extent state law permits dissemination of information about the device or service. Otherwise, ***604** as here, this Court will have no factual basis for its assertions. And the State will never have an opportunity to consider the issue ****2371** and thus to construe its law in a manner consistent with the Federal Constitution. As stated in *Barrows v. Jackson*, 346 U.S. 249, 256–257, 73 S.Ct. 1031, 1035, 97 L.Ed. 1586 (1953):

> It would indeed be undesirable for this Court to consider every conceivable situation which might possibly arise in the application of complex and comprehensive legislation. Nor are we so ready to frustrate the expressed will of Congress or that of the state legislatures. Cf. *Southern Pacific Co. v. Gallagher*, 306 U.S. 167, 172 [, 59 S.Ct. 389, 391, 83 L.Ed. 586]."

I think the Court would do well to heed the admonition in *Barrows* here. The terms of the order of the New York Public Service Commission in my view indicate that advertising designed to promote net savings in energy use does not fall within the scope of the ban. The order prohibits electric corporations "from *promoting the use of electricity* through the use of advertising subsidy payments . . ., or employee incentives." App. to Juris. Statement 31a (emphasis added). It is not clear to me that advertising that is likely to result in net savings of energy is advertising that "promot[es] the use of electricity," nor does the Court point to any language in the Commission order that suggests it has adopted this construction. Rather, it would seem more accurate to characterize such advertising as designed to "discourage" the use of electricity.[11] Indeed, I think it is quite likely that the Commission ***605** would view advertising that would clearly result in a net savings in energy as consistent with the objectives of its order and therefore permissible.[12] The Commission, for example, has authorized the dissemination of information that would result in *shifts* in electrical energy

  

demand, thereby reducing the demand for electricity during peak periods. *Id.*, at 37a.[13] It has also indicated a willingness to consider at least some other types of "specific proposals" submitted by utilities. *Id.*, at 37a–38a. And it clearly permits informational as opposed to promotional dissemination of information. *Id.*, at 43a–46a. Even if the Commission were ultimately to reject the view that its ban on promotional advertising does not include advertising that results in net energy savings, I think the Commission should at least be given an opportunity to consider it.

It is in my view inappropriate for the Court to invalidate the State's ban on commercial advertising here, based on its speculation that in some cases the advertising may result in a net savings in electrical energy use, and in the cases in which it is clear a net energy savings would result from utility advertising, the Public Service Commission would apply its ***606** ban so as to proscribe such advertising. Even assuming ****2372** that the Court's speculation is correct, I do not think it follows that facial invalidation of the ban is the appropriate course. As stated in *Parker v. Levy*, 417 U.S. 733, 760, 94 S.Ct. 2547, 2563, 41 L.Ed.2d 439 (1974), "even if there are marginal applications in which a statute would infringe on First Amendment values, facial invalidation is inappropriate if the 'remainder of the statute . . . covers a whole range of easily identifiable and constitutionally proscribable . . . conduct. . . .' *CSC v. Letter Carriers*, 413 U.S. 548, 580–581, 93 S.Ct. 2880, 2898, 37 L.Ed.2d 796 (1973)." This is clearly the case here.

For the foregoing reasons, I would affirm the judgment of the New York Court of Appeals.

**All Citations**

447 U.S. 557, 100 S.Ct. 2343, 65 L.Ed.2d 341, 34 P.U.R.4th 178, 6 Media L. Rep. 1497

Footnotes

* The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See *United States v. Detroit Lumber Co.*, 200 U.S. 321, 337, 26 S.Ct. 282, 287, 50 L.Ed. 499.

1 The dissenting opinion attempts to construe the Policy Statement to authorize advertising that would result "in a net energy savings" even if the advertising encouraged consumption of additional electricity. *Post*, at 2371. The attempted construction fails, however, since the Policy Statement is phrased only in terms of advertising that promotes "the purchase of utility services" and "sales" of electricity. Plainly, the Commission did not intend to permit advertising that would enhance net energy efficiency by increasing consumption of electrical services.

2 "Marginal cost" has been defined as the "*extra* or incremental cost of producing an *extra* unit of output." P. Samuelson, Economics 463 (10th ed. 1976) (emphasis in original).

3 Central Hudson also alleged that the Commission's order reaches beyond the agency's statutory powers. This argument was rejected by the New York Court of Appeals, *Consolidated Edison Co. v. Public Service Comm'n*, 47 N.Y.2d 94, 102–104, 417 N.Y.S.2d 30, 33–35, 390 N.E.2d 749, 752–754 (1979), and was not argued to this Court.

4 *Consolidated Edison Co. v. Public Service Comm'n*, 63 A.D.2d 364, 407 N.Y.S.2d 735, (1978); App. to Juris. Statement 22a (N.Y.Sup.Ct., Feb. 17, 1978).

5 In an opinion concurring in the judgment, Mr. Justice STEVENS suggests that the Commission's order reaches beyond commercial speech to suppress expression that is entitled to the full protection of the First Amendment. See *post*, at 2359. We find no support for this claim in the record of this case. The Commission's Policy Statement excluded "institutional and informational" messages from the advertising ban, which was restricted to all advertising "clearly intended to promote sales." App. to Juris. Statement 35a. The complaint alleged only that the "prohibition of promotional advertising by Petitioner is not reasonable regulation of Petitioner's commercial speech. . . ." *Id.*, at 70a. Moreover, the state-court opinions and the arguments of the parties before this Court also viewed this litigation as involving only commercial speech. Nevertheless, the concurring opinion of Mr. Justice STEVENS views the Commission's order as suppressing more than commercial speech because it would outlaw, for example, advertising that promoted electricity consumption by touting the environmental benefits of such uses. See *post*, at 2359. Apparently the concurring opinion would accord full First Amendment protection to all promotional advertising that includes claims "relating to . . . questions frequently discussed and debated by our political leaders." *Ibid*.

Although this approach responds to the serious issues surrounding our national energy policy as raised in this case, we think it would blur further the line the Court has sought to draw in commercial speech cases. It would grant broad constitutional protection to any advertising that links a product to a current public debate. But many, if not most, products

  

may be tied to public concerns with the environment, energy, economic policy, or individual health and safety. We rule today in *Consolidated Edison Co. v. Public Service Comm'n of New York*, 447 U.S. 530, 100 S.Ct. 2326, 65 L.Ed.2d 319, that utilities enjoy the full panoply of First Amendment protections for their direct comments on public issues. There is no reason for providing similar constitutional protection when such statements are made only in the context of commercial transactions. In that context, for example, the State retains the power to "insur[e] that the stream of commercial information flow[s] cleanly as well as freely." *Virginia Pharmacy Board v. Virginia Citizens Consumer Council*, 425 U.S. 748, 772, 96 S.Ct. 1817, 1831, 48 L.Ed.2d 346 (1976). This Court's decisions on commercial expression have rested on the premise that such speech, although meriting some protection, is of less constitutional moment than other forms of speech. As we stated in *Ohralik*, the failure to distinguish between commercial and noncommercial speech "could invite dilution, simply by a leveling process, of the force of the [First] Amendment's guarantee with respect to the latter kind of speech." 436 U.S., at 456, 98 S.Ct., at 1918.

6 In most other contexts, the First Amendment prohibits regulation based on the content of the message. *Consolidated Edison Co. v. Public Service Comm'n of New York*, 447 U.S., at 537–540, 100 S.Ct., at 2333–2334. Two features of commercial speech permit regulation of its content. First, commercial speakers have extensive knowledge of both the market and their products. Thus, they are well situated to evaluate the accuracy of their messages and the lawfulness of the underlying activity. *Bates v. State Bar of Arizona*, 433 U.S. 350, 381, 97 S.Ct. 2691, 2708, 53 L.Ed.2d 810 (1977). In addition, commercial speech, the offspring of economic self-interest, is a hardy breed of expression that is not "particularly susceptible to being crushed by overbroad regulation." *Ibid.*

7 In *Linmark Associates, Inc. v. Willingboro*, 431 U.S. 85, 95–96, 97 S.Ct. 1614, 1619–1620, 52 L.Ed.2d 155 (1977), we observed that there was no definite connection between the township's goal of integrated housing and its ban on the use of "For Sale" signs in front of houses.

8 This analysis is not an application of the "overbreadth" doctrine. The latter theory permits the invalidation of regulations on First Amendment grounds even when the litigant challenging the regulation has engaged in no constitutionally protected activity. *E. g., Kunz v. New York*, 340 U.S. 290, 71 S.Ct. 312, 95 L.Ed. 280 (1951). The overbreadth doctrine derives from the recognition that unconstitutional restriction of expression may deter protected speech by parties not before the court and thereby escape judicial review. *Broadrick v. Oklahoma*, 413 U.S. 601, 612–613, 93 S.Ct. 2908, 2915–2916, 37 L.Ed.2d 830 (1973); see Note, The First Amendment Overbreadth Doctrine, 83 Harv.L.Rev. 844, 853–858 (1970). This restraint is less likely where the expression is linked to "commercial well-being" and therefore is not easily deterred by "overbroad regulation." *Bates v. State Bar of Arizona, supra*, at 381, 97 S.Ct., at 2707.

In this case, the Commission's prohibition acts directly against the promotional activities of Central Hudson, and to the extent the limitations are unnecessary to serve the State's interest, they are invalid.

9 We review with special care regulations that entirely suppress commercial speech in order to pursue a nonspeech-related policy. In those circumstances, a ban on speech could screen from public view the underlying governmental policy. See *Virginia Pharmacy Board*, 425 U.S., at 780, n. 8, 96 S.Ct., at 1835, n. 8 (STEWART, J., concurring). Indeed, in recent years this Court has not approved a blanket ban on commercial speech unless the expression itself was flawed in some way, either because it was deceptive or related to unlawful activity.

10 Several commercial speech decisions have involved enterprises subject to extensive state regulation. *E. g., Friedman v. Rogers*, 440 U.S. 1, 4–5, 99 S.Ct. 887, 891, 59 L.Ed.2d 100 (1979) (optometrists); *Bates v. State Bar of Arizona*, 433 U.S. 350, 97 S.Ct. 2691, 53 L.Ed.2d 810 (1977) (lawyers); *Virginia Pharmacy Board v. Virginia Citizens Consumer Council, supra*, at 750–752, 96 S.Ct., at 1819–1820 (pharmacists).

11 There may be a greater incentive for a utility to advertise if it can use promotional expenses in determining its rate of return, rather than pass those costs on solely to shareholders. That practice, however, hardly distorts the economic decision whether to advertise. Unregulated businesses pass on promotional costs to consumers, and this Court expressly approved the practice for utilities in *West Ohio Gas Co. v. Public Utilities Comm'n*, 294 U.S. 63, 72, 55 S.Ct. 316, 321, 79 L.Ed. 761 (1935).

12 See W. Jones, Regulated Industries 191–287 (2d ed. 1976).

13 The Commission also might consider a system of previewing advertising campaigns to insure that they will not defeat conservation policy. It has instituted such a program for approving "informational" advertising under the Policy Statement challenged in this case. See *supra*, at 2348. We have observed that commercial speech is such a sturdy brand of expression that traditional prior restraint doctrine may not apply to it. *Virginia Pharmacy Board v. Virginia Citizens Consumer Council*, 425 U.S., at 771–772, n. 24, 96 S.Ct., at 1830, n. 24. And in other areas of speech regulation, such as obscenity, we have recognized that a prescreening arrangement can pass constitutional muster if it includes adequate procedural safeguards. *Freedman v. Maryland*, 380 U.S. 51, 85 S.Ct. 734, 13 L.Ed.2d 649 (1965).

14 In view of our conclusion that the Commission's advertising policy violates the First and Fourteenth Amendments, we do not reach appellant's claims that the agency's order also violated the Equal Protection Clause of the Fourteenth Amendment, and that it is both overbroad and vague.

15 The Commission order at issue here was not promulgated in response to an emergency situation. Although the advertising ban initially was prompted by critical fuel shortage in 1973, the Commission makes no claim that an emergency now exists. We do not consider the powers that the State might have over utility advertising in emergency circumstances. See *State v. Oklahoma Gas & Electric Co.*, 536 P.2d 887, 895–896 (Okl.1975).

1 See *Friedman v. Rogers*, 440 U.S. 1, 10, 99 S.Ct. 887, 894, 59 L.Ed.2d 100 (1979) (Court upheld a ban on practice of optometry under a trade name as a permissible requirement that commercial information " 'appear in such a form . . . as [is] necessary to prevent its being deceptive,' " quoting from *Virginia Pharmacy Board v. Virginia COnsumer Council*, 425 U.S. 748, 772, n. 24, 96 S.Ct. 1817, 1830, n. 24, 48 L.Ed.2d 346 (1976)); *Ohralik v. Ohio State Bar Assn.*, 436 U.S. 447, 98 S.Ct. 1912, 56 L.Ed.2d 444 (1978).

2 See *Bates v. State Bar of Arizona*, 433 U.S. 350, 97 S.Ct. 2691, 53 L.Ed.2d 810 (1977); *Carey v. Population Services International*, 431 U.S. 678, 700–702, 97 S.Ct. 2010, 2024–2025, 52 L.Ed.2d 675 (1977); *Linmark Associates, Inc. v. Willingboro*, 431 U.S. 85, 97 S.Ct. 1614, 50 L.Ed.2d 155 (1977); *Virginia Pharmacy Board v. Virginia Consumer Council*, 425 U.S. 748, 96 S.Ct. 1817, 48 L.Ed.2d 346 (1976); *Bigelow v. Virginia*, 421 U.S. 809, 95 S.Ct. 2222, 44 L.Ed.2d 600 (1975).

3 In my view, the Court today misconstrues the holdings of both *Virginia Pharmacy Board* and *Linmark Associates* by implying that those decisions were based on the fact that the restraints were not closely enough related to the governmental interests asserted. See *ante*, at 2350, and n. 7. Although the Court noted the lack of substantial relationship between the restraint and the governmental interest in each of those cases, the holding of each clearly rested on a much broader principle.

1 See *Ohralik v. Ohio State Bar Assn.*, 436 U.S. 447, 456, 98 S.Ct. 1912, 1918, 56 L.Ed.2d 444, quoted *ante*, at 2350, n. 5. Cf. *Smith v. United States*, 431 U.S. 291, 318, 97 S.Ct. 1756, 1772, 52 L.Ed.2d 324 (STEVENS, J., dissenting).

2 See Farber, Commercial Speech and First Amendment Theory, 74 Nw.U.L.Rev. 372, 382–383 (1979):
"Economic motivation could not be made a disqualifying factor [from maximum protection] without enormous damage to the first amendment. Little purpose would be served by a first amendment which failed to protect newspapers, paid public speakers, political candidates with partially economic motives and professional authors." (Footnotes omitted.)

3 See *id.*, at 386–387.

4 The utility's characterization of the Commission's ban in its complaint as involving commercial speech clearly does not bind this Court's consideration of the First Amendment issues in this new and evolving area of constitutional law.
Nor does the Commission's intention not to suppress "institutional and informational" speech insure that only "commercial speech" will be suppressed. The blurry line between the two categories of speech has the practical effect of requiring that the utilities either refrain from speech that is close to the line, or seek advice from the Public Service Commission. But the Commission does not possess the necessary expertise in dealing with these sensitive free speech questions; and, in any event, ordinarily speech entitled to maximum First Amendment protection may not be subjected to a prior clearance procedure with a government agency.

5 Mr. Justice Brandeis quoted Lord Justice Scrutton's comment in *King v. Secretary of State for Home Affairs ex parte O'Brien*, [1923] 2 K.B. 361, 382:
" 'You really believe in freedom of speech, if you are willing to allow it to men whose opinions seem to you wrong and even dangerous. . . .' " 274 U.S., at 377, n. 4, 47 S.Ct., at 648, n. 4.
See also *Young v. American Mini Theatres, Inc.*, 427 U.S. 50, 63, 96 S.Ct. 2440, 2448, 49 L.Ed.2d 310 (opinion of STEVENS, J.).

1 The New York Court of Appeals stated:
"In light of current exigencies, one of the policies of any public service legislation must be the conservation of our vital and irreplaceable resources. The Legislature has but recently imposed upon the commission a duty 'to encourage all persons and corporations . . . to formulate and carry out long-range programs . . . [for] the preservation of environmental values and the conservation of natural resources' (Public Service Law, § 5, subd. 2). Implicit in this amendment is a legislative recognition of the serious situation which confronts our State and Nation. More important, conservation of resources has become an avowed legislative policy embodied in the commission's enabling act (see also, *Matter of New York State Council of Retail Merchants v. Public Serv. Comm. of State of N. Y.*, 45 N.Y.2d 661, 673–674 [412 N.Y.S.2d 358, 384 N.E.2d 1282])." *Consolidated Edison Co. v. Public Service Comm'n*, 47 N.Y.2d 94, 102–103, 417 N.Y.S.2d 30, 34, 390 N.E.2d 749, 753 (1979).

  

2 In *Brown v. Glines*, 444 U.S. 348, 100 S.Ct. 594, 62 L.Ed.2d 540 (1980), for example, we recently upheld Air Force regulations that imposed restrictions on the free speech and petition rights of Air Force personnel. See also, *e. g., Parker v. Levy*, 417 U.S. 733, 94 S.Ct. 2547, 41 L.Ed.2d 439 (1974) (commissioned officer may be prohibited from publicly urging enlisted personnel to disobey orders that might send them into combat); *Snepp v. United States*, 444 U.S. 507, 100 S.Ct. 763, 62 L.Ed.2d 704 (1980) (employees of intelligence agency may be required to submit publications relating to agency activity for prepublication review by the agency).

3 In this regard the New York Court of Appeals stated:

"Public utilities, from the earliest days in this State, have been regulated and franchised to serve the commonweal. Our policy is 'to withdraw the unrestricted right of competition between corporations occupying . . . the public streets . . . and supplying the public with their products or utilities which are well nigh necessities' (*People ex rel. New York Edison Co. v. Willcox*, 207 N.Y. 86, 99, [100 N.E. 705], *Matter of New York Elec. Lines Co.*, 201 N.Y. 321, [94 N.E. 1056]). The realities of the situation all but dictate that a utility be granted monopoly status (see *People ex rel. New York Elec. Lines Co. v. Squire*, 107 N.Y. 593, 603–605, [14 N.E. 820]). To protect against abuse of this superior economic position extensive governmental regulation has been deemed a necessary coordinate (see *People ex rel. New York Edison Co. v. Willcox, supra*, [207 N.Y.] at pp. 93–94 [100 N.E. 705]." 47 N.Y.2d, at 109–110, 417 N.Y.S.2d, at 38–39, 390 N.E.2d, at 757.

4 The Commission's restrictions on promotional advertising are grounded in its concern that electric utilities fulfill their obligation under the New York Public Service Law to provide "adequate" service at "just and reasonable" rates. N.Y.Pub.Serv.Law § 65(1) (McKinney 1955). The Commission, under state law, is required to set reasonable rates. N.Y.Pub.Serv.Law §§ 66(2) and 72 (McKinney 1955); § 66(12) (McKinney Supp.1979). The Commission has also been authorized by the legislature to prescribe "such reasonable improvements [in electric utilities' practices] as will best promote the public interest . . .." § 66(2). And in the performance of its duties the Commission is required to "encourage all persons and corporations subject to its jurisdiction to formulate and carry out long-range programs, individually or cooperatively, for the performance of their public service responsibilities with economy, efficiency, and care for the public safety, the preservation of environmental values, and the conservation of natural resources." N.Y.Pub.Serv.Law § 5(2) (McKinney Supp.1979). Here I think it was quite reasonable for the State Public Service Commission to conclude that the ban on promotional advertising was necessary to prevent utilities from using their broad state-conferred monopoly power to promote their own economic well-being at the expense of the state interest in energy conservation—an interest that could reasonably be found to be inconsistent with the promotion of greater profits for utilities.

5 Although the Constitution attaches great importance to freedom of speech under the First Amendment so that individuals will be better informed and their thoughts and ideas will be uninhibited, it does not follow that "people will perceive their own best interests," or that if they do they will act to promote them. With respect to governmental policies that do not offer immediate tangible benefits and the success of which depends on incremental contributions by all members of society, such as would seem to be the case with energy conservation, a strong argument can be made that while a policy may be in the longrun interest of all members of society, some rational individuals will perceive it to their own shortrun advantage to not act in accordance with that policy. When the regulation of commercial speech is at issue, I think this is a consideration that the government may properly take into account. As was observed in *Townsend v. Yeomans*, 301 U.S. 441, 451, 57 S.Ct. 842, 847, 81 L.Ed. 1210 (1937), "the Legislature, acting within its sphere, is presumed to know the needs of the people of the state." This observation in my view is applicable to the determination of the State Public Service Commission here.

6 Indeed appellee in its brief states:

"[N]either Central Hudson nor any other party made an attempt before the Commission to demonstrate or argue for a specific advertising strategy that would avoid the difficulties that the Commission found inherent in electric utility promotional advertising. The Commission, therefore continued to enforce its ban on promotion which it had instituted in 1973." Brief for Appellee 15.

The Court makes no attempt to address this statement, or to explain why, when no state body has addressed the issue, the Court should nonetheless resolve it by invalidating the state regulation.

7 In making this finding, the Commission distinguished "between promotional advertising designed to shift existing consumption from peak to off-peak hours and advertising designed to promote additional consumption during off-peak hours." App. to Juris. Statement 58a, n. 2. It proscribed only the latter. *Ibid.*

8 And in denying appellant's petition for rehearing, the Commission again stated:

"While promotion of off-peak usage, particularly electric space heating, is touted by some as desirable because it might increase off-peak usage and thereby improve a summer-peaking company's load factor, we are convinced that off-peak promotion, especially in the context of imperfectly structured electric rates, is inconsistent with the public interest, even if

  

it could be divorced in the public mind from promoting electric usage generally. As we pointed out in our Policy Statement, increases in generation, even off-peak generation, at this time, requires the burning of scarce oil resources. This increased requirement for fuel oil aggravates the nation's already high level of dependence on foreign sources of supply." *Id.*, at 58a (footnotes omitted).

9 As previously discussed, however, it does not follow that because a product is "energy efficient" it is also consistent with the goal of energy conservation. Thus, with regard to the heat pump, counsel for appellees stated at oral argument that "Central Hudson says there are some [heat pumps] without air conditioning, but . . . they have never advised us of that." Tr. of Oral Arg. 32–33. The electric heat pump, he continued, "normally carr[ies] with it air conditioning in the summer, and the commission found that this would result in air conditioning that would not otherwise happen." *Id.*, at 33. This is but one example of the veritable Sargasso Sea of difficult nonlegal issues that we wade into by adopting a rule that requires judges to evaluate highly complex and often controversial questions arising in disciplines quite foreign to ours.

10 Even assuming the Court's speculation is correct, it has shown too little. For the regulation to truly be "no more extensive than necessary," it must be established that a more efficient energy source will serve only as a means for saving energy, rather than as an inducement to consume more energy because the cost has decreased or because other energy using products will be used in conjunction with the more efficient one.

11 This characterization is supported by the reasoning of the New York Court of Appeals, which stated:
"[P]romotional advertising . . . seeks . . . to encourage the increased consumption of electricity, whether during peak hours or off-peak hours. Thus, not only does such communication lack any beneficial informative content, but it may be affirmatively detrimental to the society. . . . Conserving diminishing resources is a matter of vital State concern and increased use of electrical energy is inimical to our interests. Promotional advertising, if permitted, would only serve to exacerbate the crisis." 47 N.Y.2d, at 110, 417 N.Y.S.2d, at 39, 390 N.E.2d, at 757–758.

12 At oral argument counsel for appellant conceded that the ban would not apply to utility advertising promoting the nonuse of electricity. Tr. of Oral Arg. 6. Indeed, counsel stated: "If the use reduces the amount of electricity used, it is not within the ban. The promotional ban is defined as anything which might be expected to increase the use of electricity." *Ibid*. And counsel for appellee stated that "the only thing that is involved here is the promotion by advertising of electric usage." *Id.*, at 30. "And if a showing can be made that promotion in fact is going to conserve energy," counsel for appellee continued, "which . . . has never been made to us, the commission's order says we are ready to relax our ban, we're not interested in banning for the sake of banning it. We think that is basically a bad idea, if we can avoid it. In gas, we have been relaxing it as more gas has become available." *Id.*, at 40.

13 By contrast, as previously discussed, the Public Service Commission does not permit the promotion of off-peak consumption alone. *Supra*, at 2369, and n. 8.

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Declined to Extend by Wagner v. Federal Election Commission, D.C.Cir., July 7, 2015

114 S.Ct. 2038
Supreme Court of the United States

CITY OF LADUE, et al., Petitioners
v.
Margaret P. GILLEO.

No. 92–1856.
|
Argued Feb. 23, 1994.
|
Decided June 13, 1994.

**Synopsis**

Resident sued city for permanent injunction to prohibit city from enforcing ordinance that banned all residential signs but those falling within one of ten exemptions. The United States District Court for the Eastern District of Missouri, 774 F.Supp. 1564, granted resident's motion for summary judgment. Following denial of city's motion to alter or amend judgment, 791 F.Supp. 240, resident filed application for prevailing party attorney fees and expenses. The District Court, 791 F.Supp. 238, granted motion. City appealed. The Court of Appeals, 986 F.2d 1180, affirmed as modified. Certiorari was granted. The Supreme Court, Justice Stevens, held that ordinance violated resident's free speech rights.

Affirmed.

Justice O'Connor filed concurring opinion.

West Headnotes (6)

[1] **Constitutional Law** Signs

There are two analytically distinct grounds for challenging constitutionality of municipal ordinance regulating display of signs: one is that measure in effect restricts too little speech because its exemptions discriminate on basis of signs' messages; alternatively, such provisions are subject to attack on ground that they simply prohibit too much protected speech. U.S.C.A. Const.Amend. 1.

123 Cases that cite this headnote

[2] **Constitutional Law** Content-Based Regulations or Restrictions

Regulation of speech may be impermissibly underinclusive: thus, exemption from otherwise permissible regulation of speech may represent governmental attempt to give one side of debatable public question advantage in expressing its views to people; alternatively, through combined operation of general speech restriction and its exemptions, government might seek to select permissible subjects for public debate and thereby to control search for political truth. U.S.C.A. Const.Amend. 1.

146 Cases that cite this headnote

[3] **Constitutional Law** Residential Signs

**Municipal Corporations** Billboards, Signs, and Other Structures or Devices for Advertising Purposes

City ordinance banning all residential signs but those falling within one of ten exemptions violated homeowner's right to free speech; although city had concededly valid interest in minimizing visible clutter, it had totally foreclosed venerable means of communication to political, religious, or personal messages. U.S.C.A. Const.Amend. 1.

111 Cases that cite this headnote

[4] **Constitutional Law** Press in General

Although prohibitions foreclosing entire media may be completely free of content or viewpoint discrimination, danger they pose to freedom of speech is readily apparent; by eliminating common means of speaking, such measures can suppress too much speech. U.S.C.A. Const.Amend. 1.

32 Cases that cite this headnote

  

**[5]** **Constitutional Law** Residential Signs

**Municipal Corporations** Billboards, Signs, and Other Structures or Devices for Advertising Purposes

City ordinance banning all residential signs but those falling within one of ten exemptions could not be justified as "time, place, or manner restriction," as alternatives such as handbills or newspaper advertisements were inadequate substitutes for important medium that city had closed off; displaying sign from ones' own residence carries message quite distinct from displaying same sign someplace else, residential signs are unusually cheap and convenient form of communication, and audience intended to be reached by residential sign, i.e., neighbors, could not be reached nearly as well by other means. U.S.C.A. Const.Amend. 1.

161 Cases that cite this headnote

**[6]** **Constitutional Law** Private Property

Special respect for individual liberty in home has long been part of our culture and our law; that principle has special resonance when government seeks to constrain person's ability to speak there. U.S.C.A. Const.Amend. 1.

28 Cases that cite this headnote

****2039** *Syllabus*[*]

An ordinance of petitioner City of Ladue bans all residential signs but those falling within 1 of 10 exemptions, for the principal purpose of minimizing the visual clutter associated with such signs. Respondent Gilleo filed this action, alleging that the ordinance violated her right to free speech by prohibiting her from displaying a sign stating, "For Peace in the Gulf," from her home. The District Court found the ordinance unconstitutional, and the Court of Appeals affirmed, holding that the ordinance was a "content based" regulation, and that Ladue's substantial interests in enacting it were not sufficiently compelling to support such a restriction.

*Held:* The ordinance violates a Ladue resident's right to free speech. Pp. 2041–2047.

(a) While signs pose distinctive problems and thus are subject to municipalities' police powers, measures regulating them inevitably affect communication itself. Such a regulation may be challenged on the ground that it restricts too little speech because its exemptions discriminate on the basis of signs' messages, or on the ground that it prohibits too much protected speech. For purposes of this case, the validity of Ladue's submission that its ordinance's various exemptions are free of impermissible content or viewpoint discrimination is assumed. Pp. 2041–2044.

(b) Although Ladue has a concededly valid interest in minimizing visual clutter, it has almost completely foreclosed an important and distinct medium of expression to political, religious, or personal messages. Prohibitions foreclosing entire media may be completely free of content or viewpoint discrimination, but such measures can suppress too much speech by eliminating a common means of speaking. Pp. 2044–2045.

(c) Ladue's attempt to justify the ordinance as a "time, place, or manner" restriction fails because alternatives such as handbills and newspaper advertisements are inadequate substitutes for the important medium that Ladue has closed off. Displaying a sign from one's own residence carries a message quite distinct from placing the same sign someplace else, or conveying the same text or picture by other means, for it provides information about the speaker's identity, an important component of many attempts to persuade. Residential signs are also ***44** an unusually cheap and convenient form of communication. Furthermore, the audience intended to be reached by a residential sign—neighbors— ****2040** could not be reached nearly as well by other means. P. 2046.

(d) A special respect for individual liberty in the home has long been part of this Nation's culture and law and has a special resonance when the government seeks to constrain a person's ability to speak there. The decision reached here does not leave Ladue powerless to address the ills that may be associated with residential signs. In addition, residents' self-interest in maintaining their own property values and preventing "visual clutter" in their yards and neighborhoods diminishes the danger of an "unlimited" proliferation of signs. P. 2047.

  

986 F.2d 1180 (CA8 1993), affirmed.

STEVENS, J., delivered the opinion for a unanimous Court. O'CONNOR, J., filed a concurring opinion, *post,* p. 2047.

**Attorneys and Law Firms**

Jordan B. Cherrick, for petitioners.

Gerald P. Greiman, for respondent.

Paul Bender, for the United States as amicus curiae, by special leave of the Court.

**Opinion**

***45** Justice STEVENS delivered the opinion of the Court.

An ordinance of the City of Ladue prohibits homeowners from displaying any signs on their property except "residence identification" signs, "for sale" signs, and signs warning of safety hazards. The ordinance permits commercial establishments, churches, and nonprofit organizations to erect certain signs that are not allowed at residences. The question presented is whether the ordinance violates a Ladue resident's right to free speech.[1]

I

Respondent Margaret P. Gilleo owns one of the 57 single-family homes in the Willow Hill subdivision of Ladue.[2] On December 8, 1990, she placed on her front lawn a 24–by 36–inch sign printed with the words, "Say No to War in the Persian Gulf, Call Congress Now." After that sign disappeared, Gilleo put up another but it was knocked to the ground. When Gilleo reported these incidents to the police, they advised her that such signs were prohibited in Ladue. The city council denied her petition for a variance.[3] Gilleo then filed this action under 42 U.S.C. § 1983 against the City, the mayor, and members of the city council, alleging that ***46** Ladue's sign ordinance violated her First Amendment right of free speech.

The District Court issued a preliminary injunction against enforcement of the ordinance. 774 F.Supp. 1559 (E.D.Mo.1991). Gilleo then placed an 8.5– by 11–inch sign in the second story window of her home stating, "For Peace in the Gulf." The Ladue City Council responded to the injunction by repealing its ordinance and enacting a replacement.[4] Like its predecessor, the new ordinance contains a general prohibition of "signs" and defines that term broadly.[5] The ****2041** ordinance prohibits all signs except those that fall within 1 of 10 exemptions. Thus, "residential identification signs" no larger than one square foot are allowed, as are signs advertising "that the property is for sale, lease or exchange" and identifying the owner or agent. § 35–10, App. to Pet. for Cert. 45a. Also exempted are signs "for churches, religious institutions, and schools," § 35–5, *id.,* at 41a, "[c]ommercial signs in commercially zoned or industrial zoned districts," § 35–4, *ibid.,* and on-site signs advertising "gasoline filling ***47** stations,"[6] § 35–6, *id.,* at 42a. Unlike its predecessor, the new ordinance contains a lengthy "Declaration of Findings, Policies, Interests, and Purposes," part of which recites that the

> "proliferation of an unlimited number of signs in private, residential, commercial, industrial, and public areas of the City of Ladue would create ugliness, visual blight and clutter, tarnish the natural beauty of the landscape as well as the residential and commercial architecture, impair property values, substantially impinge upon the privacy and special ambience of the community, and may cause safety and traffic hazards to motorists, pedestrians, and children." *Id.,* at 36a.

Gilleo amended her complaint to challenge the new ordinance, which explicitly prohibits window signs like hers. The District Court held the ordinance unconstitutional, 774 F.Supp. 1559 (ED Mo.1991), and the Court of Appeals affirmed, 986 F.2d 1180 (CA8 1993). Relying on the plurality opinion in *Metromedia, Inc. v. San Diego,* 453 U.S. 490, 101 S.Ct. 2882, 69 L.Ed.2d 800 (1981), the Court of Appeals held the ordinance invalid as a "content based" regulation because the City treated commercial speech more favorably than noncommercial speech and favored some kinds of noncommercial speech over others. ***48** 986 F.2d, at 1182. Acknowledging that "Ladue's interests in enacting its ordinance are substantial," the Court of Appeals nevertheless concluded that those interests were "not sufficiently 'compelling' to support a content-based restriction." *Id.,* at 1183–1184 (citing *Simon & Schuster, Inc. v. Members of N.Y. State Crime Victims Bd.,* 502 U.S. 105, 118, 112 S.Ct. 501, 509, 116 L.Ed.2d 476 (1991)).

We granted the City of Ladue's petition for certiorari, 510 U.S. 809, 114 S.Ct. 55, 126 L.Ed.2d 24 (1993), and now affirm.

  

II

While signs are a form of expression protected by the Free Speech Clause, they pose distinctive problems that are subject to municipalities' police powers. Unlike oral speech, signs take up space and may obstruct views, distract motorists, displace alternative uses for land, and pose other problems that legitimately call for regulation. It is common ground that governments may regulate the physical characteristics of signs—just as they can, within reasonable bounds and absent censorial purpose, regulate audible expression in its capacity as noise. See, *e.g.,* ****2042** *Ward v. Rock Against Racism,* 491 U.S. 781, 109 S.Ct. 2746, 105 L.Ed.2d 661 (1989); *Kovacs v. Cooper,* 336 U.S. 77, 69 S.Ct. 448, 93 L.Ed. 513 (1949). However, because regulation of a medium inevitably affects communication itself, it is not surprising that we have had occasion to review the constitutionality of municipal ordinances prohibiting the display of certain outdoor signs.

In *Linmark Associates, Inc. v. Willingboro,* 431 U.S. 85, 97 S.Ct. 1614, 52 L.Ed.2d 155 (1977), we addressed an ordinance that sought to maintain stable, integrated neighborhoods by prohibiting homeowners from placing "For Sale" or "Sold" signs on their property. Although we recognized the importance of Willingboro's objective, we held that the First Amendment prevented the township from "achieving its goal by restricting the free flow of truthful information." *Id.,* at 95, 97 S.Ct., at 1619. In some respects *Linmark* is the mirror image of this case. For instead of prohibiting "For Sale" signs without banning any other ***49** signs, Ladue has exempted such signs from an otherwise virtually complete ban. Moreover, whereas in *Linmark* we noted that the ordinance was not concerned with the promotion of esthetic values unrelated to the content of the prohibited speech, *id.,* at 93–94, 97 S.Ct., at 1618–1619, here Ladue relies squarely on that content-neutral justification for its ordinance.

In *Metromedia,* we reviewed an ordinance imposing substantial prohibitions on outdoor advertising displays within the city of San Diego in the interest of traffic safety and esthetics. The ordinance generally banned all except those advertising "on-site" activities.[7] The Court concluded that the city's interest in traffic safety and its esthetic interest in preventing "visual clutter" could justify a prohibition of off-site commercial billboards even though similar on-site signs were allowed. 453 U.S., at 511–512, 101 S.Ct., at 2894–2895.[8] Nevertheless, the Court's judgment in *Metromedia,* supported by two different lines of reasoning, invalidated the San Diego ordinance in its entirety. According to Justice White's plurality opinion, the ordinance impermissibly discriminated on the basis of content by permitting on-site commercial speech while broadly prohibiting noncommercial messages. *Id.,* at 514–515, 101 S.Ct., at 2896–2897. On ***50** the other hand, Justice Brennan, joined by Justice BLACKMUN, concluded that "the *practical* effect of the San Diego ordinance [was] to eliminate the billboard as an effective medium of communication" for noncommercial messages, and that the city had failed to make the strong showing needed to justify such "content-neutral prohibitions of particular media of communication." *Id.,* at 525–527, 101 S.Ct., at 2902. The three dissenters also viewed San Diego's ordinance as tantamount to a blanket prohibition of billboards, but would have upheld it because they did not perceive "even a hint of bias or censorship in the city's actions" nor "any reason to believe that the overall communications market in San Diego is inadequate." *Id.,* at 552–553, 101 S.Ct., at 2915–2916 (STEVENS, J., dissenting in part). See also ****2043** *id.,* at 563, 566, 101 S.Ct., at 2921, 2922–2923 (Burger, C.J., dissenting); *id.,* at 569–570, 101 S.Ct., at 2924–2925 (REHNQUIST, J., dissenting).

In *Members of City Council of Los Angeles v. Taxpayers for Vincent,* 466 U.S. 789, 104 S.Ct. 2118, 80 L.Ed.2d 772 (1984), we upheld a Los Angeles ordinance that prohibited the posting of signs on public property. Noting the conclusion shared by seven Justices in *Metromedia* that San Diego's "interest in avoiding visual clutter" was sufficient to justify a prohibition of commercial billboards, 466 U.S., at 806–807, 104 S.Ct., at 2130 in *Vincent* we upheld the Los Angeles ordinance, which was justified on the same grounds. We rejected the argument that the validity of the city's esthetic interest had been compromised by failing to extend the ban to private property, reasoning that the "private citizen's interest in controlling the use of his own property justifies the disparate treatment." *Id.,* at 811, 104 S.Ct., at 2132. We also rejected as "misplaced" respondents' reliance on public forum principles, for they had "fail[ed] to demonstrate the existence of a traditional right of access respecting such items as utility poles ... comparable to that recognized for public streets and parks." *Id.,* at 814, 104 S.Ct., at 2133.

**[1]** These decisions identify two analytically distinct grounds for challenging the constitutionality of a municipal ordinance regulating the display of signs. One is that the measure in ***51** effect restricts too little speech because its exemptions discriminate on the basis of the signs' messages.

  

See *Metromedia,* 453 U.S., at 512–517, 101 S.Ct., at 2895–2897 (opinion of White, J.). Alternatively, such provisions are subject to attack on the ground that they simply prohibit too much protected speech. See *id.,* at 525–534, 101 S.Ct., at 2901–2906 (Brennan, J., concurring in judgment). The City of Ladue contends, first, that the Court of Appeals' reliance on the former rationale was misplaced because the City's regulatory purposes are content neutral, and, second, that those purposes justify the comprehensiveness of the sign prohibition. A comment on the former contention will help explain why we ultimately base our decision on a rejection of the latter.

III

**[2]** While surprising at first glance, the notion that a regulation of speech may be impermissibly *underinclusive* is firmly grounded in basic First Amendment principles.[9] Thus, an exemption from an otherwise permissible regulation of speech may represent a governmental "attempt to give one side of a debatable public question an advantage in expressing its views to the people." *First Nat. Bank of Boston v. Bellotti,* 435 U.S. 765, 785–786, 98 S.Ct. 1407, 1420–1421, 55 L.Ed.2d 707 (1978). Alternatively, through the combined operation of a general speech restriction and its exemptions, the government might seek to select the "permissible subjects for public debate" and thereby to "control ... the search for political truth." *Consolidated Edison Co. of N.Y. v. Public Serv. Comm'n of N.Y.,* 447 U.S. 530, 538, 100 S.Ct. 2326, 2333, 65 L.Ed.2d 319 (1980).[10]

***52** The City argues that its sign ordinance implicates neither of these concerns, and that the Court of Appeals therefore erred in demanding a "compelling" justification for the exemptions. The mix of prohibitions and exemptions in the ordinance, Ladue maintains, reflects legitimate differences among ****2044** the side effects of various kinds of signs. These differences are only adventitiously connected with content, and supply a sufficient justification, unrelated to the City's approval or disapproval of specific messages, for carving out the specified categories from the general ban. See Brief for Petitioners 18–23. Thus, according to the Declaration of Findings, Policies, Interests, and Purposes supporting the ordinance, the permitted signs, unlike the prohibited signs, are unlikely to contribute to the dangers of "unlimited proliferation" associated with categories of signs that are not inherently limited in number. App. to Pet. for Cert. 37a. Because only a few residents will need to display "for sale" or "for rent" signs at any given time, permitting one such sign per marketed house does not threaten visual clutter. *Ibid.* Because the City has only a few businesses, churches, and schools, the same rationale explains the exemption for on-site commercial and organizational signs. *Ibid.* Moreover, some of the exempted categories (*e.g.,* danger signs) respond to unique public needs to permit certain kinds of speech. *Ibid.* Even if we assume the validity of these arguments, the exemptions in Ladue's ordinance nevertheless shed light on the separate question whether the ordinance prohibits too much speech.

Exemptions from an otherwise legitimate regulation of a medium of speech may be noteworthy for a reason quite apart from the risks of viewpoint and content discrimination: They may diminish the credibility of the government's rationale for restricting speech in the first place. See, *e.g.,* ***53** *Cincinnati v. Discovery Network, Inc.,* 507 U.S. 410, 424–426, 113 S.Ct. 1505, 1514–1515, 123 L.Ed.2d 99 (1993). In this case, at the very least, the exemptions from Ladue's ordinance demonstrate that Ladue has concluded that the interest in allowing certain messages to be conveyed by means of residential signs outweighs the City's esthetic interest in eliminating outdoor signs. Ladue has not imposed a flat ban on signs because it has determined that at least some of them are too vital to be banned.

Under the Court of Appeals' content discrimination rationale, the City might theoretically remove the defects in its ordinance by simply repealing all of the exemptions. If, however, the ordinance is also vulnerable because it prohibits too much speech, that solution would not save it. Moreover, if the prohibitions in Ladue's ordinance are impermissible, resting our decision on its exemptions would afford scant relief for respondent Gilleo. She is primarily concerned not with the scope of the exemptions available in other locations, such as commercial areas and on church property; she asserts a constitutional right to display an antiwar sign at her own home. Therefore, we first ask whether Ladue may properly *prohibit* Gilleo from displaying her sign, and then, only if necessary, consider the separate question whether it was improper for the City simultaneously to *permit* certain other signs. In examining the propriety of Ladue's near-total prohibition of residential signs, we will assume, *arguendo,* the validity of the City's submission that the various exemptions are free of impermissible content or viewpoint discrimination.[11]

  

***54** IV

**[3]** In *Linmark* we held that the city's interest in maintaining a stable, racially integrated neighborhood was not sufficient to support a prohibition of residential "For Sale" signs. We recognized that even such a narrow sign prohibition would have a deleterious effect on residents' ability to convey important information because alternatives were "far from satisfactory." 431 U.S., at 93, 97 S.Ct., at 1618. Ladue's sign ordinance is supported principally by the City's interest in ****2045** minimizing the visual clutter associated with signs, an interest that is concededly valid but certainly no more compelling than the interests at stake in *Linmark.* Moreover, whereas the ordinance in *Linmark* applied only to a form of commercial speech, Ladue's ordinance covers even such absolutely pivotal speech as a sign protesting an imminent governmental decision to go to war.

The impact on free communication of Ladue's broad sign prohibition, moreover, is manifestly greater than in *Linmark.* Gilleo and other residents of Ladue are forbidden to display virtually any "sign" on their property. The ordinance defines that term sweepingly. A prohibition is not always invalid merely because it applies to a sizeable category of speech; the sign ban we upheld in *Vincent,* for example, was quite broad. But in *Vincent* we specifically noted that the category of speech in question—signs placed on public property—was not a "uniquely valuable or important mode of communication," and that there was no evidence that "appellees' ability to communicate effectively is threatened by ever-increasing restrictions on expression." 466 U.S., at 812, 104 S.Ct., at 2133.

Here, in contrast, Ladue has almost completely foreclosed a venerable means of communication that is both unique and important. It has totally foreclosed that medium to political, religious, or personal messages. Signs that react to a local happening or express a view on a controversial issue both reflect and animate change in the life of a community. ***55** Often placed on lawns or in windows, residential signs play an important part in political campaigns, during which they are displayed to signal the resident's support for particular candidates, parties, or causes.[12] They may not afford the same opportunities for conveying complex ideas as do other media, but residential signs have long been an important and distinct medium of expression.

**[4]** Our prior decisions have voiced particular concern with laws that foreclose an entire medium of expression. Thus, we have held invalid ordinances that completely banned the distribution of pamphlets within the municipality, *Lovell v. City of Griffin,* 303 U.S. 444, 451–452, 58 S.Ct. 666, 669, 82 L.Ed. 949 (1938); handbills on the public streets, *Jamison v. Texas,* 318 U.S. 413, 416, 63 S.Ct. 669, 672, 87 L.Ed. 869 (1943); the door-to-door distribution of literature, *Martin v. City of Struthers,* 319 U.S. 141, 145–149, 63 S.Ct. 862, 864–866, 87 L.Ed. 1313 (1943); *Schneider v. State (Town of Irvington),* 308 U.S. 147, 164–165, 60 S.Ct. 146, 152, 84 L.Ed. 155 (1939), and live entertainment, *Schad v. Mount Ephraim,* 452 U.S. 61, 75–76, 101 S.Ct. 2176, 2186, 68 L.Ed.2d 671 (1981). See also *Frisby v. Schultz,* 487 U.S. 474, 486, 108 S.Ct. 2495, 2503, 101 L.Ed.2d 420 (1988) (picketing focused upon individual residence is "fundamentally different from more generally directed means of communication that may not be completely banned in residential areas"). Although prohibitions foreclosing entire media may be completely free of content or viewpoint discrimination, the danger they pose to the freedom of speech is readily apparent—by eliminating a common means of speaking, such measures can suppress too much speech.[13]

****2046** **[5]** ***56** Ladue contends, however, that its ordinance is a mere regulation of the "time, place, or manner" of speech because residents remain free to convey their desired messages by other means, such as *hand-held* signs, "letters, handbills, flyers, telephone calls, newspaper advertisements, bumper stickers, speeches, and neighborhood or community meetings." Brief for Petitioners 41. However, even regulations that do not foreclose an entire medium of expression, but merely shift the time, place, or manner of its use, must "leave open ample alternative channels for communication." *Clark v. Community for Creative Non–Violence,* 468 U.S. 288, 293, 104 S.Ct. 3065, 3069, 82 L.Ed.2d 221 (1984). In this case, we are not persuaded that adequate substitutes exist for the important medium of speech that Ladue has closed off.

Displaying a sign from one's own residence often carries a message quite distinct from placing the same sign someplace else, or conveying the same text or picture by other means. Precisely because of their location, such signs provide information about the identity of the "speaker." As an early and eminent student of rhetoric observed, the identity of the speaker is an important component of many attempts to persuade.[14] A sign advocating "Peace in the Gulf" in the front lawn of a retired general or decorated war veteran may

  

provoke a different reaction than the same sign in a 10–year–old child's bedroom window or the same message on a bumper sticker of a passing automobile. An espousal of socialism may carry different implications when displayed ***57** on the grounds of a stately mansion than when pasted on a factory wall or an ambulatory sandwich board.

Residential signs are an unusually cheap and convenient form of communication. Especially for persons of modest means or limited mobility, a yard or window sign may have no practical substitute. Cf. *Vincent,* 466 U.S., at 812–813, n. 30, 104 S.Ct., at 2132–2133, n. 30; *Anderson v. Celebrezze,* 460 U.S. 780, 793–794, 103 S.Ct. 1564, 1572–1573, 75 L.Ed.2d 547 (1983); *Martin v. City of Struthers,* 319 U.S., at 146, 63 S.Ct., at 865; *Milk Wagon Drivers v. Meadowmoor Dairies, Inc.,* 312 U.S. 287, 293, 61 S.Ct. 552, 555, 85 L.Ed. 836 (1941). Even for the affluent, the added costs in money or time of taking out a newspaper advertisement, handing out leaflets on the street, or standing in front of one's house with a handheld sign may make the difference between participating and not participating in some public debate.[15] Furthermore, a person who puts up a sign at her residence often intends to reach *neighbors,* an audience that could not be reached nearly as well by other means.[16]

****2047** **[6]** ***58** A special respect for individual liberty in the home has long been part of our culture and our law, see, *e.g., Payton v. New York,* 445 U.S. 573, 596–597, and nn. 44–45, 100 S.Ct. 1371, 1385–1386, and nn. 44–45, 63 L.Ed.2d 639 (1980); that principle has special resonance when the government seeks to constrain a person's ability to *speak* there. See *Spence v. Washington,* 418 U.S. 405, 406, 409, 411, 94 S.Ct. 2727, 2728, 2729–2730, 41 L.Ed.2d 842 (1974) (*per curiam* ). Most Americans would be understandably dismayed, given that tradition, to learn that it was illegal to display from their window an 8– by 11–inch sign expressing their political views. Whereas the government's need to mediate among various competing uses, including expressive ones, for public streets and facilities is constant and unavoidable, see *Cox v. New Hampshire,* 312 U.S. 569, 574, 576, 61 S.Ct. 762, 765, 765, 85 L.Ed. 1049 (1941); see also *Widmar v. Vincent,* 454 U.S. 263, 278, 102 S.Ct. 269, 278–279, 70 L.Ed.2d 440 (1981) (STEVENS, J., concurring in judgment), its need to regulate temperate speech from the home is surely much less pressing, see *Spence,* 418 U.S., at 409, 94 S.Ct., at 2729–2730.

Our decision that Ladue's ban on almost all residential signs violates the First Amendment by no means leaves the City powerless to address the ills that may be associated with residential signs.[17] It bears mentioning that individual residents themselves have strong incentives to keep their own property values up and to prevent "visual clutter" in their own yards and neighborhoods—incentives markedly different from those of persons who erect signs on others' land, in others' neighborhoods, or on public property. Residents' self-interest diminishes the danger of the "unlimited" proliferation of residential signs that concerns the City of Ladue. We are confident that more temperate measures could in large part satisfy Ladue's stated regulatory needs ***59** without harm to the First Amendment rights of its citizens. As currently framed, however, the ordinance abridges those rights.

Accordingly, the judgment of the Court of Appeals is

*Affirmed.*

Justice O'CONNOR, concurring.

It is unusual for us, when faced with a regulation that on its face draws content distinctions, to "assume, *arguendo,* the validity of the City's submission that the various exemptions are free of impermissible content or viewpoint discrimination." *Ante,* at 2044. With rare exceptions, content discrimination in regulations of the speech of private citizens on private property or in a traditional public forum is presumptively impermissible, and this presumption is a very strong one. *Simon & Schuster, Inc. v. Members of N.Y. State Crime Victims Bd.,* 502 U.S. 105, 115–116, 112 S.Ct. 501, 507–508, 116 L.Ed.2d 476 (1991). The normal inquiry that our doctrine dictates is, first, to determine whether a regulation is content based or content neutral, and then, based on the answer to that question, to apply the proper level of scrutiny. See, *e.g., Burson v. Freeman,* 504 U.S. 191, 197–198, 112 S.Ct. 1846, 1850–1851, 119 L.Ed.2d 5 (1992) (plurality opinion); *Forsyth County, Ga. v. Nationalist Movement,* 505 U.S. 123, 133–135, 112 S.Ct. 2395, 2403–2404, 120 L.Ed.2d 101 (1992); *Simon & Schuster, supra,* at 115–116, 112 S.Ct., at 507–508; *Boos v. Barry,* 485 U.S. 312, 318–321, 108 S.Ct. 1157, 1162–1164, 99 L.Ed.2d 333 (1988) (plurality opinion); *Arkansas Writers' Project, Inc. v. Ragland,* 481 U.S. 221, 229–231, 107 S.Ct. 1722, 1727–1729, 95 L.Ed.2d 209 (1987); *Carey v. Brown,* 447 U.S. 455, 461–463, 100 S.Ct. 2286, 2290–2291, 65 L.Ed.2d 263 (1980); *Police Dept. of Chicago v. Mosley,* 408 U.S. 92, 95, 98–99, 92 S.Ct. 2286, 2289–2290, 2291–2292, 33 L.Ed.2d 212 (1972).

  

Over the years, some cogent criticisms have been leveled at our approach. See, *e.g.,* ****2048** *R.A.V. v. St. Paul,* 505 U.S. 377, 420–422, 112 S.Ct. 2538, 2563–2564, 120 L.Ed.2d 305 (1992) (STEVENS, J., concurring in judgment); *Consolidated Edison Co. of N.Y. v. Public Serv. Comm'n of N.Y.,* 447 U.S. 530, 544–548, 100 S.Ct. 2326, 2337–2339, 65 L.Ed.2d 319 (1980) (STEVENS, J., concurring in judgment); Farber, Content Regulation and the First Amendment: A Revisionist View, 68 Geo.L.J. 727 (1980); ***60** Stephan, The First Amendment and Content Discrimination, 68 Va.L.Rev. 203 (1982). And it is quite true that regulations are occasionally struck down because of their content-based nature, even though common sense may suggest that they are entirely reasonable. The content distinctions present in this ordinance may, to some, be a good example of this.

But though our rule has flaws, it has substantial merit as well. It is a rule, in an area where fairly precise rules are better than more discretionary and more subjective balancing tests. See *Hustler Magazine, Inc. v. Falwell,* 485 U.S. 46, 52–53, 108 S.Ct. 876, 880–881, 99 L.Ed.2d 41 (1988). On a theoretical level, it reflects important insights into the meaning of the free speech principle—for instance, that content-based speech restrictions are especially likely to be improper attempts to value some forms of speech over others, or are particularly susceptible to being used by the government to distort public debate. See, *e.g., ante,* at 2043–2044; *Mosley, supra,* 408 U.S., at 95, 92 S.Ct., at 2289–2290; Stone, Content Regulation and the First Amendment, 25 Wm. & Mary L.Rev. 189 (1983). On a practical level, it has in application generally led to seemingly sensible results. And, perhaps most importantly, no better alternative has yet come to light.

I would have preferred to apply our normal analytical structure in this case, which may well have required us to examine this law with the scrutiny appropriate to content-based regulations. Perhaps this would have forced us to confront some of the difficulties with the existing doctrine; perhaps it would have shown weaknesses in the rule, and led us to modify it to take into account the special factors this case presents. But such reexamination is part of the process by which our rules evolve and improve.

Nonetheless, I join the Court's opinion, because I agree with its conclusion in Part IV that even if the restriction were content neutral, it would still be invalid, and because I do not think Part III casts any doubt on the propriety of our normal content discrimination inquiry.

**All Citations**

512 U.S. 43, 114 S.Ct. 2038, 129 L.Ed.2d 36, 62 USLW 4477

Footnotes

* The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See *United States v. Detroit Lumber Co.,* 200 U.S. 321, 337, 26 S.Ct. 282, 287, 50 L.Ed. 499.

1 The First Amendment provides: “Congress shall make no law ... abridging the freedom of speech, or of the press ....” The Fourteenth Amendment makes this limitation applicable to the States, see *Gitlow v. New York,* 268 U.S. 652, 45 S.Ct. 625, 69 L.Ed. 1138 (1925), and to their political subdivisions, see *Lovell v. City of Griffin,* 303 U.S. 444, 58 S.Ct. 666, 82 L.Ed. 949 (1938).

2 Ladue is a suburb of St. Louis, Missouri. It has a population of almost 9,000, and an area of about 8.5 square miles, of which only 3% is zoned for commercial or industrial use.

3 The ordinance then in effect gave the city council the authority to “permit a variation in the strict application of the provisions and requirements of this chapter ... where the public interest will be best served by permitting such variation.” App. 72.

4 The new ordinance eliminates the provision allowing for variances and contains a grandfather clause exempting signs already lawfully in place.

5 Section 35–2 of the ordinance declares that “No sign shall be erected [or] maintained” in the City except in conformity with the ordinance; § 35–3 authorizes the City to remove nonconforming signs. App. to Pet. for Cert. 40a. Section 35–1 defines “sign” as:

“A name, word, letter, writing, identification, description, or illustration which is erected, placed upon, affixed to, painted or represented upon a building or structure, or any part thereof, or in any manner upon a parcel of land or lot, and which publicizes an object, product, place, activity, opinion, person, institution, organization or place of business, or which is used to advertise or promote the interests of any person. The word ‘sign’ shall also include ‘banners', ‘pennants', ‘insignia’, ‘bulletin boards', ‘ground signs', ‘billboard’, ‘poster billboards', ‘illuminated signs', ‘projecting signs', ‘temporary signs',

  

'marquees', 'roof signs', 'yard signs', 'electric signs', 'wall signs', and 'window signs', wherever placed out of doors in view of the general public or wherever placed indoors as a window sign." *Id.,* at 39a.

6 The full catalog of exceptions, each subject to special size limitations, is as follows: "[M]unicipal signs"; "[s]ubdivision and residence identification" signs; "[r]oad signs and driveway signs for danger, direction, or identification"; "[h]ealth inspection signs"; "[s]igns for churches, religious institutions, and schools" (subject to regulations set forth in § 35–5); "identification signs" for other not-for-profit organizations; signs "identifying the location of public transportation stops"; "[g]round signs advertising the sale or rental of real property," subject to the conditions, set forth in § 35–10, that such signs may "not be attached to any tree, fence or utility pole" and may contain only the fact of proposed sale or rental and the seller or agent's name and address or telephone number; "[c]ommercial signs in commercially zoned or industrial zoned districts," subject to restrictions set out elsewhere in the ordinance; and signs that "identif[y] safety hazards." § 35–4, *id.,* at 41a, 45a.

7 The San Diego ordinance defined "on-site signs" as "those 'designating the name of the owner or occupant of the premises upon which such signs are placed, or identifying such premises; or signs advertising goods manufactured or produced or services rendered on the premises upon which such signs are placed.' " *Metromedia, Inc. v. San Diego,* 453 U.S., at 494, 101 S.Ct., at 2885. The plurality read the "on-site" exemption of the San Diego ordinance as inapplicable to non-commercial messages. See *id.,* at 513, 101 S.Ct., at 2895. Cf. *id.,* at 535–536, 101 S.Ct., at 2906–2907 (Brennan, J., concurring in judgment). The ordinance also exempted 12 categories of displays, including religious signs; for sale signs; signs on public and commercial vehicles; and " '[t]emporary political campaign signs.' " *Id.,* at 495, n. 3, 101 S.Ct., at 2886, n. 3

8 Five Members of the Court joined Part IV of Justice White's opinion, which approved of the city's decision to prohibit off-site commercial billboards while permitting on-site billboards. None of the three dissenters disagreed with Part IV. See *id.,* at 541, 101 S.Ct., at 2909–2910 (STEVENS, J., dissenting in part) (joining Part IV); *id.,* at 564–565, 101 S.Ct., at 2921–2922 (Burger, C.J., dissenting); *id.,* at 570, 101 S.Ct., at 2924–2925 (REHNQUIST, J., dissenting).

9 Like other classifications, regulatory distinctions among different kinds of speech may fall afoul of the Equal Protection Clause. See, *e.g., Carey v. Brown,* 447 U.S. 455, 459–471, 100 S.Ct. 2286, 2289–2296, 65 L.Ed.2d 263 (1980) (ordinance that forbade certain kinds of picketing but exempted labor picketing violated Clause); *Police Dept. of Chicago v. Mosley,* 408 U.S. 92, 98–102, 92 S.Ct. 2286, 2291–2294, 33 L.Ed.2d 212 (1972) (same).

10 Of course, not every law that turns on the content of speech is invalid. See generally Stone, Restrictions of Speech Because of its Content: The Peculiar Case of Subject–Matter Restrictions, 46 U.Chi.L.Rev. 79 (1978). See also *Consolidated Edison Co. of N.Y. v. Public Serv. Comm'n of N.Y.,* 447 U.S., at 545, and n. 2, 100 S.Ct., at 2237 and n. 2 (STEVENS, J., concurring in judgment).

11 Because we set to one side the content discrimination question, we need not address the City's argument that the ordinance, although speaking in subject-matter terms, merely targets the "undesirable secondary effects" associated with certain kinds of signs. See *Renton v. Playtime Theatres, Inc.,* 475 U.S. 41, 49, 106 S.Ct. 925, 930, 89 L.Ed.2d 29 (1986). The inquiry we undertake below into the adequacy of alternative channels of communication would also apply to a provision justified on those grounds. See *id.,* at 50, 106 S.Ct., at 930.

12 "[S]mall [political campaign] posters have maximum effect when they go up in the windows of homes, for this demonstrates that citizens of the district are supporting your candidate—an impact that money can't buy." D. Simpson, Winning Elections: A Handbook in Participatory Politics 87 (rev. ed. 1981).

13 See Stone, Content–Neutral Restrictions, 54 U.Chi.L.Rev. 46, 57–58 (1987):
"[T]he Court long has recognized that by limiting the availability of particular means of communication, content-neutral restrictions can significantly impair the ability of individuals to communicate their views to others.... To ensure 'the widest possible dissemination of information [,]' [*Associated Press v. United States,* 326 U.S. 1, 20, 65 S.Ct. 1416, 1424, 89 L.Ed. 2013 (1945),] and the 'unfettered interchange of ideas,' [*Roth v. United States,* 354 U.S. 476, 484, 77 S.Ct. 1304, 1308, 1 L.Ed.2d 1498 (1957),] the first amendment prohibits not only content-based restrictions that censor particular points of view, but also content-neutral restrictions that unduly constrict the opportunities for free expression."

14 See Aristotle 2, Rhetoric, Book 1, ch. 2, in 8 Great Books of the Western World, Encyclopedia Brittanica 595 (M. Adler ed., 2d ed. 1990) ("We believe good men more fully and more readily than others: this is true generally whatever the question is, and absolutely true where exact certainty is impossible and opinions are divided").

15 The precise location of many other kinds of signs (aside from "on-site" signs) is of lesser communicative importance. For example, assuming the audience is similar, a commercial advertiser or campaign publicist is likely to be relatively indifferent between one sign site and another. The elimination of a cheap and handy medium of expression is especially apt to deter *individuals* from communicating their views to the public, for unlike businesses (and even political organizations) individuals generally realize few tangible benefits from such communication. Cf. *Virginia Bd. of Pharmacy*

*v. Virginia Citizens Consumer Council, Inc.*, 425 U.S. 748, 772, n. 24, 96 S.Ct. 1817, 1831, n. 24, 48 L.Ed.2d 346 (1976) ("Since advertising is the *sine qua non* of commercial profits, there is little likelihood of its being chilled by proper regulation and forgone entirely").

16 Counsel for Ladue has also cited flags as a viable alternative to signs. Counsel observed that the ordinance does not restrict flags of any stripe, including flags bearing written messages. See Tr. of Oral Arg. 16, 21 (noting that rectangular flags, unlike "pennants" and "banners," are not prohibited by the ordinance). Even assuming that flags are nearly as affordable and legible as signs, we do not think the mere possibility that another medium could be used in an unconventional manner to carry the same messages alters the fact that Ladue has banned a distinct and traditionally important medium of expression. See, *e.g.*, *Schneider v. State (Town of Irvington)*, 308 U.S. 147, 163, 60 S.Ct. 146, 151–152, 84 L.Ed. 155 (1939).

17 Nor do we hold that every kind of sign must be permitted in residential areas. Different considerations might well apply, for example, in the case of signs (whether political or otherwise) displayed by residents for a fee, or in the case of off-site commercial advertisements on residential property. We also are not confronted here with mere regulations short of a ban.

End of Document

KeyCite Yellow Flag - Negative Treatment
Declined to Extend by Excalibur Group, Inc. v. City of Minneapolis, 8th Cir. (Minn.), June 24, 1997

97 S.Ct. 1614
Supreme Court of the United States

LINMARK ASSOCIATES, INC.
and William Mellman, Petitioners,
v.
TOWNSHIP OF WILLINGBORO
and Gerald Daly.

No. 76-357.
|
Argued March 2, 1977.
|
Decided May 2, 1977.

**Synopsis**
Owner of residential property brought suit challenging a township ordinance banning "For Sale" and "Sold" signs from residential property. The District Court for the District of New Jersey granted a declaration of unconstitutionality, but the United States Court of Appeals for the Third Circuit, 535 F.2d 786, reversed. Certiorari was granted. The Supreme Court, Mr. Justice Marshall, held that a township ordinance prohibiting the posting of real estate "For Sale" and "Sold" signs for the purpose of stemming what the township perceived as the flight of white homeowners from a racially integrated community violated the First Amendment.

Reversed.

West Headnotes (3)

[1] **Constitutional Law** Commercial Speech in General

Commercial speech cannot be banned because of unsubstantiated belief that its impact is "detrimental." U.S.C.A.Const. Amend. 1.

31 Cases that cite this headnote

[2] **Constitutional Law** Residential Signs

**Municipal Corporations** Ordinances and Regulations in General

Township ordinance prohibiting posting of real estate "For Sale" and "Sold" signs for purpose of stemming what township perceived as flight of white homeowners from racially integrated community violated First Amendment, in that alternative methods of communication, which involved more cost and less autonomy than signs and were less likely to reach persons not deliberately seeking sales information, were far from satisfactory and ordinance was not needed to achieve objective of stemming flight of white homeowners. U.S.C.A.Const. Amend. 1.

222 Cases that cite this headnote

[3] **Constitutional Law** Commercial Speech in General

Government may not achieve important objective by restricting free flow of truthful commercial information. U.S.C.A.Const. Amend. 1.

93 Cases that cite this headnote

****1614** Syllabus*

***85** A township ordinance prohibiting the posting of real estate "For Sale" and "Sold" signs for the purpose of stemming what the township perceived as the flight of white homeowners from a racially integrated community held to violate the First Amendment. Virginia Pharmacy Bd. v. Virginia Citizens Consumer Council, 425 U.S. 748, 96 S.Ct. 1817, 48 L.Ed.2d 346. Pp. 1617-1621.

(a) The ordinance cannot be sustained on the ground that it restricts only one method of communication while leaving ample alternative communication channels open. The alternatives (primarily newspaper advertising and listing with real estate agents, which involve more cost and less autonomy than signs, are less likely to reach persons not deliberately seeking sales information, and may be less effective) are far from satisfactory. And the ordinance is not genuinely concerned with the place (front lawns) or the manner (signs) of the speech, but rather proscribes particular types of signs

  

based on their content because the township fears their "primary" effect that they will cause those receiving the information to act upon it. Pp. 1618-1619.

(b) Moreover, despite the importance of achieving the asserted goal of promoting stable, integrated housing, the ordinance cannot be upheld on the ground that it promotes an important governmental objective, since it does not appear that the ordinance **1615 was needed to achieve that objective and, in any event, the First Amendment disables the township from achieving that objective by restricting the free flow of truthful commercial information. Pp. 1619-1621.

3 Cir., 535 F.2d 786, reversed.

**Attorneys and Law Firms**

John P. Hauch, Jr., Haddonfield, N. J., for petitioners.

*86 Myron H. Gottlieb, Bordentown, N. J., for respondents.

**Opinion**

Mr. Justice MARSHALL delivered the opinion of the Court.

This case presents the question whether the First Amendment permits a municipality to prohibit the posting of "For Sale" or "Sold" signs when the municipality acts to stem what it perceives as the flight of white homeowners from a racially integrated community.

Petitioner Linmark Associates, a New Jersey corporation, owned a piece of realty in the township of Willingboro, N. J. Petitioner decided to sell its property, and on March 26, 1974, listed it with petitioner Mellman, a real estate agent. To attract interest in the property, petitioners desired to place a "For Sale" sign on the lawn. Willingboro, however, narrowly limits the types of signs that can be erected on land in the township. Although prior to March 1974 "For Sale" and "Sold" signs were permitted subject to certain restrictions not at issue here, on March 18, 1974, the Township Council enacted Ordinance 5-1974, repealing the statutory authorization for such signs on all but model homes. Petitioners brought this action against both the township and the building inspector charged with enforcing the ban on "For Sale" signs, seeking declaratory and injunctive relief.[1] The District *87 Court granted a declaration of unconstitutionality, but a divided Court of Appeals reversed, 535 F.2d 786 (CA3 1976). We granted certiorari, 429 U.S. 938, 97 S.Ct. 351, 50 L.Ed.2d 307 (1976), and reverse the judgment of the Court of Appeals.

I

The township of Willingboro is a residential community located in southern New Jersey near Fort Dix, McGuire Air Force Base, and offices of several national corporations. The township was developed as a middle-income community by Levitt & Sons, beginning in the late 1950's. It is served by over 80 real estate agents.

During the 1960's Willingboro underwent rapid growth. The white population increased by almost 350%, and the nonwhite population rose from 60 to over 5,000, or from .005% of the population to 11.7%. As of the 1970 census, almost 44,000 people resided in Willingboro. In the 1970's, however, the population growth slowed; from 1970 to 1973, the latest year for which figures were available at the time of trial, Willingboro's population rose by only 3%. More significantly, the white population actually declined by almost 2,000 in this interval, a drop of over 5%, while the nonwhite population grew by more than 3,000, an increase of approximately 60%. By 1973, nonwhites constituted 18.2% of the township's population.

At the trial in this case respondents presented testimony from two real estate agents, two members of the Township Council, and three members of the Human Relations Commission, all of whom agreed that a major cause in the decline in *88 the **1616 white population was "panic selling" that is, selling by whites who feared that the township was becoming all black, and that property values would decline. One real estate agent estimated that the reason 80% of the sellers gave for their decision to sell was that "the whole town was for sale, and they didn't want to be caught in any bind." App. in No. 75-144 (CA3), pp. 219a-220a. Respondents' witnesses also testified that in their view "For Sale" and "Sold" signs were a major catalyst of these fears.

William Kearns, the Mayor of Willingboro during the year preceding enactment of the ordinance and a member of the Council when the ordinance was enacted, testified concerning the events leading up to its passage. Id., at 183a-186 a. According to Kearns, beginning at least in 1973 the community became concerned about the changing population. At a town meeting in February 1973, called to discuss "Willingboro, to sell or not to sell," a member of the community suggested that real estate signs be banned. The suggestion received the overwhelming support of those attending the meeting. Kearns brought the proposal to the Township Council, which requested the Township Solicitor

to study it. The Council also contacted National Neighbors, a nationwide organization promoting integrated housing, and obtained the names of other communities that had prohibited "For Sale" signs. After obtaining a favorable report from Shaker Heights, Ohio, on its ordinance, and after receiving an endorsement of the proposed ban from the Willingboro Human Relations Commission, the Council began drafting legislation.

Rather than following its usual procedure of conducting a public hearing only after the proposed law had received preliminary Council approval, the Council scheduled two public meetings on Ordinance 5-1974. The first took place in February 1974, before the initial Council vote, and the second in March 1974, after the vote. At the conclusion of the second hearing, the ordinance was approved unanimously.

***89** The transcripts of the Council hearings were introduced into evidence at trial. They reveal that at the hearings the Council received important information bearing on the need for and likely impact of the ordinance. With respect to the justification for the ordinance, the Council was told (a) that a study of Willingboro home sales in 1973 revealed that the turnover rate was roughly 11%, App. in No. 75-144 (CA3), p. 89a;[2] (b) that in February 1974 a typical month 230 "For Sale" signs were posted among the 11,000 houses in the community, id., at 94a, 37a;[3] and (c) that the Willingboro Tax Assessor had reported that "by and large the increased value of Willingboro properties was way ahead of ... comparable communities." Id., at 106a. With respect to the projected effect of the ordinance, several real estate agents reported that 30%-35% of their purchaser-clients came to them because they had seen one of the agent's "For Sale" or "Sold" signs, id., at 33a, 47a, 49a, 57a,[4] and one agent estimated, based on his experience in a neighboring community that had already banned signs, that selling realty without signs takes twice as long as selling with signs, id., at 42a.

The transcripts of the Council hearings also reveal that the hearings provided useful barometers of public sentiment toward the proposed ordinance. The Council was ****1617** told, for ***90** example, that surveys in two areas of the township found overwhelming support for the law, id., at 29a, 84a.[5] In addition, at least at the second meeting, the citizens, who were not real estate agents and who spoke, favored the proposed ordinance by a sizable margin. Interestingly, however, at both meetings those defending the ordinance focused primarily on aesthetic considerations and on the effect of signs and transiency generally on property values. Few speakers directly referred to the changing racial composition of Willingboro in supporting the proposed law.

Although the ordinance had been in effect for nine months prior to trial, no statistical data were presented concerning its impact. Respondents' witnesses all agreed, however, that the number of persons selling or considering selling their houses because of racial fears had declined sharply. But several of these witnesses also testified that the number of sales in Willingboro had not declined since the ordinance was enacted. Moreover, respondents' real-estate-agent witnesses both stated that their business had increased by 25% since the ordinance was enacted, id., at 164a, 226a, and one of these agents reported that the racial composition of his clientele remained unchanged, id., at 160a.

The District Court did not make specific findings of fact. In the course of its opinion, however, the court stated that Willingboro "is to a large extent a transient community, partly due to its proximity to the military facility at Fort Dix and in part due to the numerous transfers of real estate." The court also stated that there was "no evidence" that whites were leaving Willingboro en masse as "For Sale" signs appeared, but "merely an indication that its residents are concerned that there may be a large influx of minority groups moving in to the town with the resultant effect being a reduction ***91** in property values." The Court of Appeals essentially accepted these "findings," although it found that Willingboro was experiencing "incipient" panic selling, 535 F.2d, at 799, and that a "fear psychology (had) developed," id., at 790.

II

A

The starting point for analysis of petitioners' First Amendment claim must be the two recent decisions in which this Court has eroded the "commercial speech" exception to the First Amendment. In Bigelow v. Virginia, 421 U.S. 809, 95 S.Ct. 2222, 44 L.Ed.2d 600 (1975), decided less than two years ago, this Court for the first time expressed its dissatisfaction with the then-prevalent approach of resolving a class of First Amendment claims simply by categorizing the speech as "commercial." Id., at 826, 95 S.Ct. at 2235. "Regardless of the particular label," we stated, "a court may not escape the task of assessing the First Amendment interest at stake and weighing it against the public interest allegedly served by the regulation." Ibid. After conducting such an analysis in Bigelow we concluded that Virginia

  

could not constitutionally punish the publisher of a newspaper for printing an abortion referral agency's paid advertisement which not only promoted the agency's services but also contained information about the availability of abortions.

**[1]** (1) One year later, in Virginia Pharmacy Bd. v. Virginia Citizens Consumer Council, 425 U.S. 748, 96 S.Ct. 1817, 48 L.Ed.2d 346 (1976), we went further. Conceding that "(s)ome fragment of hope for the continuing validity of a 'commercial speech' exception arguably might have persisted because of the subject matter of the advertisement in Bigelow," id., at 760, 96 S.Ct., at 1825, we held quite simply, that commercial speech is not "wholly outside the protection of the First Amendment," id., at 761, 96 S.Ct., at 1805. Although recognizing that ****1618** "(s)ome forms of commercial speech regulation" such as regulation of false or misleading speech "are surely permissible," ***92** id., at 770, 96 S.Ct., at 1830, we had little difficulty in finding that Virginia's ban on the advertising of prescription drug prices by pharmacists was unconstitutional.[6]

Respondents contend, as they must, that the "For Sale" signs banned in Willingboro are constitutionally distinguishable from the abortion and drug advertisements we have previously considered. It is to the distinctions respondents advance that we now turn.

B

**[2]** (2) If the Willingboro law is to be treated differently from those invalidated in Bigelow and Virginia Pharmacy Bd., it cannot be because the speakers or listeners have a lesser First Amendment interest in the subject matter of the speech that is regulated here. Persons desiring to sell their homes are just as interested in communicating that fact as are sellers of other goods and services. Similarly, would-be purchasers of realty are no less interested in receiving information about available property than are purchasers of other commodities in receiving like information about those commodities. And the societal interest in "the free flow of commercial information," Virginia Pharmacy Bd., supra, at 764, 96 S.Ct., at 1826, is in no way lessened by the fact that the subject of the commercial information here is realty rather than abortions or drugs.

***93** Respondents nevertheless argue that First Amendment concerns are less directly implicated by Willingboro's ordinance because it restricts only one method of communication. This distinction is not without significance to First Amendment analysis, since laws regulating the time, place, or manner of speech stand on a different footing from laws prohibiting speech altogether. Cf., e. g., Kovacs v. Cooper, 336 U.S. 77, 69 S.Ct. 448, 93 L.Ed. 513 (1949); Adderley v. Florida, 385 U.S. 39, 87 S.Ct. 242, 17 L.Ed.2d 149 (1966); Grayned v. City of Rockford, 408 U.S. 104, 92 S.Ct. 2294, 33 L.Ed.2d 222 (1972). Respondents' effort to defend the ordinance on this ground is unpersuasive, however, for two reasons.

First, serious questions exist as to whether the ordinance "leave(s) open ample alternative channels for communication," Virginia Pharmacy Bd., supra, 425 U.S., at 771, 96 S.Ct., at 1830. Although in theory sellers remain free to employ a number of different alternatives, in practice realty is not marketed through leaflets, sound trucks, demonstrations, or the like. The options to which sellers realistically are relegated primarily newspaper advertising and listing with real estate agents involve more cost and less autonomy than "For Sale" signs; cf. Martin v. City of Struthers, 319 U.S. 141, 146, 63 S.Ct. 862, 865, 87 L.Ed. 1313 (1943); Kovacs v. Cooper, supra, 336 U.S., at 102-103, 69 S.Ct., at 461-462 (Black, J., dissenting); are less likely to reach persons not deliberately seeking sales information, cf. United States v. O'Brien, 391 U.S. 367, 388-389, 88 S.Ct. 1673, 1685-1686, 20 L.Ed.2d 672 (1968) (Harlan, J., concurring); and may be less effective media for communicating the message that is conveyed by a "For Sale" sign in front of the house to be sold, cf. Cohen v. California, 403 U.S. 15, 25-26, 91 S.Ct. 1780, 1788-1789, 29 L.Ed.2d 284 (1971). The alternatives, then, are far from satisfactory.

****1619** Second, the Willingboro ordinance is not genuinely concerned with the place of the speech front lawns or the manner of the speech signs. The township has not prohibited all lawn signs or all lawn signs of a particular size or shape in order to promote aesthetic values or any other value "unrelated to the suppression of free expression," ***94** United States v. O'Brien, supra, 391 U.S., at 377, 88 S.Ct., at 1679, 20 L.Ed.2d 672.[7] Nor has it acted to restrict a mode of communication that "intrudes on the privacy of the home, . . . makes it impractical for the unwilling viewer or auditor to avoid exposure," Erznoznik v. City of Jacksonville, 422 U.S. 205, 209, 95 S.Ct. 2268, 2272, 45 L.Ed.2d 125 (1975), or otherwise reaches a group the township has a right to protect.[8] And respondents have not demonstrated that the place or manner of the speech produces a detrimental "secondary effect" on society, Young v. American Mini Theatres, 427

  

U.S. 50, 71 n. 34, 96 S.Ct. 2440, 2452, 49 L.Ed.2d 310 (1976). Rather, Willingboro has proscribed particular types of signs based on their content because it fears their "primary" effect that they will cause those receiving the information to act upon it. That the proscription applies only to one mode of communication, therefore, does not transform this into a "time, place, or manner" case. See, e. g., Erznoznik v. City of Jacksonville, supra; Police Department of Chicago v. Mosley, 408 U.S. 92, 92 S.Ct. 2286, 33 L.Ed.2d 212 (1972); Tinker v. Des Moines School Dist., 393 U.S. 503, 510, 89 S.Ct. 733, 738, 21 L.Ed.2d 731 (1969). If the ordinance is to be sustained, it must be on the basis of the township's interest in regulating the content of the communication, and not on any interest in regulating the form.

C

Respondents do seek to distinguish Bigelow and Virginia Pharmacy Bd. by relying on the vital goal this ordinance serves: namely, promoting stable, racially integrated housing. There can be no question about the importance of achieving this goal. This Court has expressly recognized that substantial benefits flow to both whites and blacks from interracial ***95** association and that Congress has made a strong national commitment to promote integrated housing. Trafficante v. Metropolitan Life Ins. Co., 409 U.S. 205, 93 S.Ct. 364, 34 L.Ed.2d 415 (1972).

That this ordinance was enacted to achieve an important governmental objective, however, does not distinguish the case from Virginia Pharmacy Bd. In that case the State argued that its prohibition on prescription drug price advertising furthered the health and safety of state residents by preventing low cost, low quality pharmacists from driving reputable pharmacists out of business. We expressly recognized the "strong interest" of a State in maintaining "professionalism on the part of licensed pharmacists." 425 U.S., at 766, 96 S.Ct., at 1828. But we nevertheless found the Virginia law unconstitutional because we were unpersuaded that the law was necessary to achieve this objective, and were convinced that in any event, the First Amendment disabled the State from achieving its goal by restricting the free flow of truthful information. For the same reasons we conclude that the Willingboro ordinance at issue here is also constitutionally infirm.

The record here demonstrates that respondents failed to establish that this ordinance is needed to assure that Willingboro remains an integrated community.[9] As the ****1620** District Court concluded, the evidence does not support the Council's apparent fears that Willingboro was experiencing a substantial incidence of panic selling by white homeowners. A fortiori, the evidence does not establish that "For Sale" signs in front of 2% of Willingboro homes were a major cause of panic selling. And the record does not confirm the township's ***96** assumption that proscribing such signs will reduce public awareness of realty sales and thereby decrease public concern over selling.[10]

**[3]** (3) The constitutional defect in this ordinance, however, is far more basic. The Township Council here, like the Virginia Assembly in Virginia Pharmacy Bd. acted to prevent its residents from obtaining certain information. That information, which pertains to sales activity in Willingboro, is of vital interest to Willingboro residents, since it may bear on one of the most important decisions they have a right to make: where to live and raise their families. The Council has sought to restrict the free flow of these data because it fears that otherwise homeowners will make decisions inimical to what the Council views as the homeowners' self-interest and the corporate interest of the township: they will choose to leave town. The Council's concern, then, was not with any commercial aspect of "For Sale" signs with offerors communicating offers to offerees but with the substance of the information communicated to Willingboro citizens. If dissemination of this information can be restricted, then every locality in the country can suppress any facts that reflect poorly on the locality, so long as a plausible claim can be made that disclosure would cause the recipients of the information to act "irrationally." Virginia Pharmacy Bd. denies government such sweeping ***97** powers. As we said there in rejecting Virginia's claim that the only way it could enable its citizens to find their self-interest was to deny them information that is neither false nor misleading:

"There is . . . an alternative to this highly paternalistic approach. That alternative is to assume that this information is not in itself harmful, that people will perceive their own best interests if only they are well enough informed, and that the best means to that end is to open the channels of communication rather than to close them. . . . But the choice among these alternative approaches is not ours to make or the Virginia General Assembly's. It is precisely this kind of choice, between the dangers of suppressing information, and the dangers of its misuse if it is freely available, that the First Amendment makes for us." 425 U.S., at 770, 96 S.Ct., at 1829.

Or as Mr. Justice Brandeis put it: "If there be time to expose through discussion the falsehood and fallacies, to avert the evil by the processes of education, the remedy to be applied

  

is more speech, not enforced silence. Only an emergency can justify repression." Whitney v. California, 274 U.S. 357, 377, 47 S.Ct. 641, 649, 71 L.Ed. 1095 (1927) (concurring opinion).

Since we can find no meaningful distinction between Ordinance 5-1974 and the statute overturned in Virginia Pharmacy **1621 Bd., we must conclude that this ordinance violates the First Amendment.

III

In invalidating this law, we by no means leave Willingboro defenseless in its effort to promote integrated housing. The township obviously remains free to continue "the process of education" it has already begun. It can give widespread publicity through "Not for Sale" signs or other methods to the number of whites remaining in Willingboro. And it surely can endeavor to create inducements to retain individuals who are considering selling their homes.

*98 Beyond this, we reaffirm our statement in Virginia Pharmacy Bd. that the "commonsense differences between speech that does 'no more than propose a commercial transaction,' Pittsburgh Press Co. v. Human Relations Comm'n, 413 U.S. (376,) 385 (, 93 S.Ct. 2553, 2558, 37 L.Ed.2d 669, 676-677) ((1973))), and other varieties . . . suggest that a different degree of protection is necessary to insure that the flow of truthful and legitimate commercial information is unimpaired." 425 U.S., at 771-772, 96 S.Ct., at 1830 n. 24. Laws dealing with false or misleading signs, and laws requiring such signs to "appear in such a form, or include such additional information . . . as (is) necessary to prevent (their) being deceptive," ibid., therefore, would raise very different constitutional questions. We leave those questions for another day, and simply hold that the ordinance under review here, which impairs "the flow of truthful and legitimate commercial information" is constitutionally infirm.

Reversed.

Mr. Justice REHNQUIST took no part in the consideration or decision of this case.

**All Citations**

431 U.S. 85, 97 S.Ct. 1614, 52 L.Ed.2d 155

Footnotes

* The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See United States v. Detroit Timber & Lumber Co., 200 U.S. 321, 337, 26 S.Ct. 282, 287, 50 L.Ed. 499.

1 Respondents report that according to a deed on file in Burlington County, N. J., petitioner Linmark Associates' property was sold on April 21, 1976, while this case was pending in the Court of Appeals. Brief for Respondents 8 n. 2. This does not moot this case, however, since at least as to petitioner Mellman, the real estate agent, there plainly is an "immediate prospect," Steffel v. Thompson, 415 U.S. 452, 459-460, 94 S.Ct. 1209, 1215-1216, 39 L.Ed.2d 505 (1974), that he will desire to place "For Sale" signs on other property in Willingboro, and thus there remains a controversy "of sufficient immediacy and reality to warrant the issuance of a declaratory judgment." Maryland Cas. Co. v. Pacific Coal & Oil Co., 312 U.S. 270, 273, 61 S.Ct. 510, 512, 85 L.Ed. 826 (1941).

2 At the beginning of the first hearing, the then Mayor estimated that 1,100 houses are sold each year, a 10% turnover rate. App. in No. 75-1488 (CA3), p. 37a.

3 Another real estate agent reported that on January 7, 1974, in the Twin Hills section of Willingboro, 32 signs were posted among the 920 houses. He further stated that during the preceding year, the highest number of signs in Twin Hills at any one time was 62. Id., at 77a-78a.
At trial, one of respondents' real-estate-agent witnesses testified that he had surveyed the number of signs in August, 1973 and found more than 230; he did not recall, however, how many signs were standing at that time. Id., at 225a.

4 At trial, petitioner Mellman corroborated this figure based on his own business. Id., at 135a.

5 One of the two "surveys" took the form of an effort by citizens in the Rittenhouse Park section of Willingboro to ban "For Sale" signs. That effort attracted the support of 70% of the homeowners in the section.

6 The Court of Appeals did not have the benefit of Virginia Pharmacy Bd. when it issued its decision in this case. To some extent the court anticipated that decision, recognizing that the fact that "a communication is commercial in nature does not ipso facto strip the communication of its First Amendment protections." 535 F.2d 786, 795 (CA3 1976). But the court premised its analysis on a sharp dichotomy between commercial and "pure" or noncommercial speech, id., at 794, and

  

concluded that commercial speech may be restricted if its "impact be found detrimental" by a municipality, and if "the limitation on any pure speech element (is) minimal," id., at 795. After Virginia Pharmacy Bd. it is clear that commercial speech cannot be banned because of an unsubstantiated belief that its impact is "detrimental."

7 Accordingly, we do not decide whether a ban on signs or a limitation on the number of signs could survive constitutional scrutiny if it were unrelated to the suppression of free expression. See Baldwin v. Redwood City, 540 F.2d 1360, 1368-1369 (CA9 1976); cf. Markham Advertising Co. v. State, 73 Wash.2d 405, 439 P.2d 248 (1968), appeal dismissed, 393 U.S. 316, 89 S.Ct. 553, 21 L.Ed.2d 512 (1969).

8 Cf. Capital Broadcasting Co. v. Mitchell, 333 F.Supp. 582, 585-586 (DC 1971), summarily aff'd, 405 U.S. 1000, 92 S.Ct. 1289, 31 L.Ed.2d 472 (1972).

9 As the District Court itself observed, its finding concerning the lack of panic selling distinguishes this case from Barrick Realty, Inc. v. City of Gary, 491 F.2d 161 (CA7 1974), in which Gary, Indiana's prohibition on "For Sale" signs was upheld on a record indicating that such signs were causing "whites to move en masse and blacks to replace them." Id., at 163-164. We express no view as to whether Barrick Realty can survive Bigelow and Virginia Pharmacy Bd.

10 While this assumption is certainly plausible, it is also possible that eliminating signs will cause homeowners to turn to other sources for information, so that their awareness of and concern over selling will be unaffected. Indeed, banning signs actually may fuel public anxiety over sales activity by increasing homeowners' dependence on rumor and surmise. See Laska & Hewitt, Are Laws Against "For Sale" Signs Constitutional? Substantive Due Process Revisited, 4 Real Estate L.J. 153, 160-162 (1975) (reporting on a study finding such an adverse effect from a ban on "For Sale" signs).
The fact that sales volume remained unchanged in Willingboro in the first nine months after the ordinance was enacted suggests that it did not affect public concern over selling, if that concern was a significant cause of housing turnover.

End of Document

KeyCite Yellow Flag - Negative Treatment
Called into Doubt by Cincinnati v. Thompson, Ohio App. 1 Dist., June 30, 1994

104 S.Ct. 2118
Supreme Court of the United States

MEMBERS OF the CITY COUNCIL
OF the CITY OF LOS ANGELES et al.
v.
TAXPAYERS FOR VINCENT, et al.

No. 82-975.
|
Argued Oct. 12, 1983.
|
Decided May 15, 1984.

**Synopsis**
Action was brought seeking an injunction against enforcement of ordinance prohibiting posting of signs on public property as well as compensatory and punitive damages. The United States District Court for the Central District of California concluded that the ordinance was constitutional, and appeal was taken. The United States Court of Appeals for the Ninth Circuit, 682 F.2d 847, reversed, and further review was sought. After noting probable jurisdiction, 103 S.Ct. 1180, the Supreme Court, Justice Stevens, held that ordinance prohibiting posting of signs on public property was not unconstitutional as applied to expressive activities of a group of supporters of a political candidate.

Reversed and remanded.

Justice Brennan filed a dissenting opinion in which Justice Marshall and Justice Blackmun joined.

West Headnotes (14)

[1] **Constitutional Law** Facial invalidity
**Constitutional Law** Overbreadth in General
**Municipal Corporations** Conformity to constitutional and statutory provisions in general

There are two different ways in which a statute or ordinance may be considered invalid "on its face," either because it is unconstitutional in every conceivable application, or because it seeks to prohibit such a broad range of protected conduct that it is unconstitutionally overbroad. U.S.C.A. Const.Amend. 1.

230 Cases that cite this headnote

[2] **Constitutional Law** Overbreadth in General

Mere fact that one can conceive of some impermissible applications of a statute is not sufficient to render it susceptible to an overbreadth challenge. U.S.C.A. Const.Amend. 1.

247 Cases that cite this headnote

[3] **Constitutional Law** Overbreadth in General

There must be a realistic danger that the statute itself will significantly compromise recognized First Amendment protections of parties not before the court for it to be facially challenged on overbreadth grounds. U.S.C.A. Const.Amend. 1.

465 Cases that cite this headnote

[4] **Constitutional Law** Signs

Where there was nothing in the record to indicate that challenged ordinance would have any different impact on any third parties' interests in free speech than it had on appellees' interests, and where appellees failed to identify any significant difference between their claim that ordinance prohibiting posting of signs on public property was invalid on overbreadth grounds and their claim that it was unconstitutional when applied to their signs during a political campaign, it was inappropriate to entertain an overbreadth challenge to the ordinance. U.S.C.A. Const.Amend. 1.

306 Cases that cite this headnote

  

[5] **Constitutional Law** Exercise of police power; relationship to governmental interest or public welfare

State may sometimes curtail speech when necessary to advance a significant and legitimate state interest. U.S.C.A. Const.Amend. 1.

105 Cases that cite this headnote

[6] **Constitutional Law** Viewpoint or idea discrimination

First Amendment forbids government from regulating speech in ways that favor some view points or ideas at expense of others. U.S.C.A. Const.Amend. 1.

124 Cases that cite this headnote

[7] **States** Police power

State may legitimately exercise its police powers to advance esthetic values.

54 Cases that cite this headnote

[8] **Zoning and Planning** Signs and billboards

Visual assault on citizens of Los Angeles presented by an accumulation of signs posted on public property constituted a significant substantial evil within city's power to prohibit.

54 Cases that cite this headnote

[9] **Constitutional Law** Streets and highways

Ordinance prohibiting posting of signs on public property curtailed no more speech than was necessary to accomplish its purpose of eliminating visual clutter. U.S.C.A. Const.Amend. 1.

133 Cases that cite this headnote

[10] **Constitutional Law** Time, Place, or Manner Restrictions

While First Amendment does not guarantee right to employ every conceivable method of communication at all times and in all places, a restriction on expressive activity may be invalid if the remaining modes of communication are inadequate. U.S.C.A. Const.Amend. 1.

98 Cases that cite this headnote

[11] **Constitutional Law** Traditional Public Forum in General

Traditional public forum of property occupies a special position in terms of First Amendment protection. U.S.C.A. Const.Amend. 1.

21 Cases that cite this headnote

[12] **Constitutional Law** Streets and highways
**Constitutional Law** Sidewalks

Property covered by ordinance, which prohibited posting of signs on any sidewalk, crosswalk, curb, curbstone, street lamppost, hydrant, tree, shrub, or certain other public property, was not a "public forum" subject to special First Amendment protection. U.S.C.A. Const.Amend. 1.

58 Cases that cite this headnote

[13] **Constitutional Law** Justification for exclusion or limitation

Public property which is not by tradition or designation a forum for public communication may be reserved by the state for its intended purposes, communicative or otherwise, as long as the regulation on speech is reasonable and not an effort to suppress expression merely because public officials oppose the speaker's view. U.S.C.A. Const.Amend. 1.

49 Cases that cite this headnote

[14] **Zoning and Planning** Signs and billboards

City's esthetic interests were sufficiently substantial to justify content neutral, impartially administered prohibition against posting on public property of temporary signs of group of supporters of a political candidate. U.S.C.A. Const.Amend. 1.

  

103 Cases that cite this headnote

*Syllabus*[a1]

Section 28.04 of the Los Angeles Municipal Code prohibits the posting of signs on public property. Appellee Taxpayers for Vincent, a group of supporters of a candidate for election to the Los Angeles City Council, entered into a contract with appellee Candidates' Outdoor Graphics Service (COGS) to fabricate and post signs with the candidate's name on them. COGS produced cardboard signs and attached them to utility pole crosswires at various locations. Acting under § 28.04, city employees routinely removed all posters (including the COGS signs) attached to utility poles and similar objects covered by the ordinance. Appellees then filed suit in Federal District Court against appellants, the city and various city officials (hereafter City), alleging that § 28.04 abridged appellees' freedom of speech within the meaning of the First Amendment, and seeking damages and injunctive relief. The District Court entered findings of fact, concluded that § 28.04 was constitutional, and granted the City's motion for summary judgment. The Court of Appeals reversed, reasoning that the ordinance was presumptively unconstitutional because significant First Amendment interests were involved, and that the City had not justified its total ban on all signs on the basis of its asserted interests in preventing visual clutter, minimizing traffic hazards, and preventing interference with the intended use of public property.

Held:

1. The "overbreadth" doctrine is not applicable here. There is nothing in the record to indicate that § 28.04 will have any different impact on any third parties' interests in free speech than it has on appellees' interests, and appellees have failed to identify any significant difference between their claim that § 28.04 is invalid on overbreadth grounds and their claim that it is unconstitutional when applied to their signs during a political campaign. Thus, it is inappropriate to entertain an overbreadth challenge to § 28.04. Pp. 2124–2128.

2. Section 28.04 is not unconstitutional as applied to appellees' expressive activity. Pp. 2128–2136.

(a) The general principle that the First Amendment forbids the government to regulate speech in ways that favor some viewpoints or ideas ***790** at the expense of others is not applicable here. Section 28.04's text is neutral—indeed it is silent—concerning any speaker's point of view, and the District Court's findings indicate that it has been applied to appellees and others in an evenhanded manner. It is within the City's constitutional power to attempt to improve its appearance, and this interest is basically unrelated to the suppression of ideas. Cf. United States v. O'Brien, 391 U.S. 367, 377, 88 S.Ct. 1673, 1679, 20 L.Ed.2d 672. Pp. 2128–2129.

(b) Municipalities have a weighty, essentially esthetic interest in proscribing intrusive and unpleasant formats for expression. The problem addressed by § 28.04—the visual assault on the citizens of Los Angeles presented by an accumulation of ****2121** signs posted on public property—constitutes a significant substantive evil within the City's power to prohibit. Metromedia, Inc. v. San Diego, 453 U.S. 490, 101 S.Ct. 2882, 69 L.Ed.2d 800. Pp. 2129–2130.

(c) Section 28.04 curtails no more speech than is necessary to accomplish its purpose of eliminating visual clutter. By banning posted signs, the City did no more than eliminate the exact source of the evil it sought to remedy. The rationale of Schneider v. State, 308 U.S. 147, 60 S.Ct. 146, 84 L.Ed. 155 which held that ordinances that absolutely prohibited handbilling on public streets and sidewalks were invalid, is inapposite in the context of the instant case. Pp. 2130–2132.

(d) The validity of the City's esthetic interest in the elimination of signs on public property is not compromised by failing to extend the ban to private property. The private citizen's interest in controlling the use of his own property justifies the disparate treatment, and there is no predicate in the District Court's findings for the conclusion that the prohibition against the posting of appellees' signs fails to advance the City's esthetic interest. P. 2132.

(e) While a restriction on expressive activity may be invalid if the remaining modes of communication are inadequate, § 28.04 does not affect any individual's freedom to exercise the right to speak and to distribute literature in the same place where the posting of signs on public property is prohibited. The District Court's findings indicate that there are ample alternative modes of communication in Los Angeles. Pp. 2132–2133.

(f) There is no merit in appellees' suggestion that the property covered by § 28.04 either is itself a "public forum" subject

  

to special First Amendment protection, or at least should be treated in the same respect as the "public forum" in which the property is located. The mere fact that government property can be used as a vehicle for communication—such as the use of lampposts as signposts—does not mean that the Constitution requires such use to be permitted. Public property which is not by tradition or designation a forum for public communication may be reserved by the government for its intended purposes, communicative or otherwise, if the regulation on speech (as here) is reasonable and not an ***791** effort to suppress expression merely because public officials oppose the speaker's view. Pp. 2133–2134.

(g) Although plausible policy arguments might well be made in support of appellees' suggestion that the City could have written an ordinance that would have had a less severe effect on expressive activity like theirs—such as by providing an exception for political campaign signs—it does not follow that such an exception is constitutionally mandated, nor is it clear that some of the suggested exceptions would even be constitutionally permissible. To create an exception for appellees' political speech and not other types of protected speech might create a risk of engaging in constitutionally forbidden content discrimination. The City may properly decide that the esthetic interest in avoiding visual clutter justifies a removal of all signs creating or increasing that clutter. Pp. 2134–2136.

682 F.2d 847, reversed and remanded.

**Attorneys and Law Firms**

*Anthony Saul Alperin* argued the cause for appellants. With him on the briefs were *Ira Reiner* and *Gary R. Netzer.*

*Wayne S. Canterbury* argued the cause and filed a brief for appellees.*

* Briefs of *amici curiae* urging reversal were filed for the City of Antioch by *William R. Galstan;* and for the National Institute of Municipal Law Officers by *J. Lamar Shelley, John W. Witt, Henry W. Underhill, Jr., Benjamin L. Brown, Roy D. Bates, James B. Brennan, Roger F. Cutler, Clifford D. Pierce, Jr., Walter M. Powell, Frederick A.O. Schwarz, Jr., William H. Taube, William I. Thornton, Jr., Max P. Zall,* and *Charles S. Rhyne.*

A brief of *amici curiae* urging affirmance was filed by *Alan L. Schlosser, Amitai Schwartz, Fred Okrand,* and *Neil H. O'Donnell* for the American Civil Liberties Union et al.

**Opinion**

Justice STEVENS delivered the opinion of the Court.

Section 28.04 of the Los Angeles Municipal Code prohibits the posting of signs on public property.[1] The question presented ***792** is whether that prohibition abridges ****2122** appellees' freedom of speech within the meaning of the First Amendment.[2]

In March 1979, Roland Vincent was a candidate for election to the Los Angeles City Council. A group of his supporters known as Taxpayers for Vincent (Taxpayers) entered into a contract with a political sign service company known as Candidates' Outdoor Graphics Service (COGS) to fabricate and post signs with Vincent's name on them. COGS produced 15 by 44–inch cardboard signs and attached them to utility poles at various locations by draping them over crosswires ***793** which support the poles and stapling the cardboard together at the bottom. The signs' message was: "Roland Vincent—City Council."

Acting under the authority of § 28.04 of the Municipal Code, employees of the city's Bureau of Street Maintenance routinely removed all posters attached to utility poles and similar objects covered by the ordinance, including the COGS signs. The weekly sign removal report covering the period March 1–March 7, 1979, indicated that among the 1,207 signs removed from public property during that week, 48 were identified as "Roland Vincent" signs. Most of the other signs identified in that report were apparently commercial in character.[3]

On March 12, 1979, Taxpayers and COGS filed this action in the United States District Court for the Central District of California, naming the city, the Director of the Bureau of Street Maintenance, and members of the City Council as defendants.[4] They sought an injunction against enforcement of the ordinance as well as compensatory and punitive damages. After engaging in discovery, the parties filed cross-motions for summary judgment on the issue of liability. The District Court entered findings of fact, concluded that the ordinance was constitutional, and granted the City's motion.

The District Court's findings do not purport to resolve any disputed issue of fact; instead, they summarize material in the record that appears to be uncontroverted. The findings recite that the principal responsibility ****2123** for locating and removing ***794** signs and handbills posted in violation

  

§ 28.04 is assigned to the Street Use Inspection Division of the city's Bureau of Street Maintenance. The court found that both political and nonpolitical signs are illegally posted and that they are removed "without regard to their content."[5]

After explaining the purposes for which the City's zoning code had been enacted, and noting that the prohibition in § 28.04 furthered those purposes, the District Court found that the large number of illegally posted signs "constitute a clutter and visual blight."[6] With specific reference to the posting of the COGS signs on utility pole crosswires, the District Court found that such posting "would add somewhat to the blight and inevitably would encourage greatly increased posting in other unauthorized and unsightly places...."[7]

In addition, the District Court found that placing signs on utility poles creates a potential safety hazard, and that other violations of § 28.04 "block views and otherwise cause traffic hazards."[8] Finally, the District Court concluded that the sign prohibition does not prevent taxpayers or COGS "from ***795** exercising their free speech rights on the public streets and in other public places; they remain free to picket and parade, to distribute handbills, to carry signs and to post their signs and handbills on their automobiles and on private property with the permission of the owners thereof."[9]

In its conclusions of law the District Court characterized the esthetic and economic interests in improving the beauty of the City "by eliminating clutter and visual blight" as "legitimate and compelling."[10] Those interests, together with the interest in protecting the safety of workmen who must scale utility poles and the interest in eliminating traffic hazards, adequately supported the sign prohibition as a reasonable regulation affecting the time, place, and manner of expression.

The Court of Appeals did not question any of the District Court's findings of fact, but it rejected some of its conclusions of law. The Court of Appeals reasoned that the ordinance was presumptively unconstitutional because significant First Amendment interests were involved. It noted that the City had advanced three separate justifications for the ordinance, but concluded that none of them was sufficient. The Court of Appeals held that the City had failed to make a sufficient showing that its asserted interests in esthetics and preventing visual clutter were substantial because it had not offered to demonstrate that the City was engaged in a comprehensive effort to remove other contributions to an unattractive environment in commercial and industrial areas. The City's interest in minimizing traffic hazards was rejected because it was readily apparent that no substantial traffic problems would result from permitting the posting of certain kinds of signs on many of the publicly owned objects ****2124** covered by the ordinance. Finally, while acknowledging that a flat prohibition against signs on certain objects such as fire hydrants and traffic signals would be a permissible method of preventing ***796** interference with the intended use of public property, and that regulation of the size, design, and construction of posters, or of the method of removing them, might be reasonable, the Court of Appeals concluded that the City had not justified its total ban.[11]

**[1]** In its appeal to this Court the City challenges the Court of Appeals' holding that § 28.04 is unconstitutional on its face. Taxpayers and COGS defend that holding and also contend that the ordinance is unconstitutional as applied to their posting of political campaign signs on the crossarms of utility poles. There are two quite different ways in which a statute or ordinance may be considered invalid "on its face"—either because it is unconstitutional in every conceivable application, or because it seeks to prohibit such a broad range of protected conduct that it is unconstitutionally "overbroad." We shall analyze the "facial" challenges to the ordinance, and then address its specific application to appellees.

## I

The seminal cases in which the Court held state legislation unconstitutional "on its face" did not involve any departure from the general rule that a litigant only has standing to vindicate his own constitutional rights. In Stromberg v. California, 283 U.S. 359, 51 S.Ct. 532, 75 L.Ed. 1117 (1931),[12] and ***797** Lovell v. Griffin, 303 U.S. 444, 58 S.Ct. 666, 82 L.Ed. 949 (1938),[13] the statutes were unconstitutional as applied to the defendants' conduct, but they were also unconstitutional on their face because it was apparent that any attempt to enforce such legislation would create an unacceptable risk of the suppression of ideas.[14] In cases of this character a holding ****2125** of facial invalidity expresses the conclusion that the statute ***798** could never be applied in a valid manner. Such holdings[15] invalidated entire statutes, but did not create any exception from the general rule that constitutional adjudication requires a review of the application of a statute to the conduct of the party before the Court.

  

Subsequently, however, the Court did recognize an exception to this general rule for laws that are written so broadly that they may inhibit the constitutionally protected speech of third parties. This "overbreadth" doctrine has its source in Thornhill v. Alabama, 310 U.S. 88, 60 S.Ct. 736, 84 L.Ed. 1093 (1940). In that case the Court concluded that the very existence of some broadly written statutes may have such a deterrent effect on free expression that they should be subject to challenge even by a party whose own conduct may be unprotected.[16] The Court ***799** has repeatedly held that such a statute may be challenged on its face even though a more narrowly drawn statute would be valid as applied to the party in the case before it.[17] This exception from the general rule is predicated on "a judicial prediction or assumption that the statute's very existence may cause others not before the court to refrain from constitutionally protected speech or expression." Broadrick v. Oklahoma, 413 U.S. 601, 612, 93 S.Ct. 2908, 2916, 37 L.Ed.2d 830 (1973).

In the development of the overbreadth doctrine the Court has been sensitive to the ****2126** risk that the doctrine itself might sweep so broadly that the exception to ordinary standing requirements would swallow the general rule. In order to decide whether the overbreadth exception is applicable in a particular case, we have weighed the likelihood that the statute's very existence will inhibit free expression.

"[T]here comes a point where that effect—at best a prediction—cannot, with confidence, justify invalidating a statute on its face and so prohibiting a State from enforcing the statute against conduct that is admittedly within its power to proscribe. To put the matter another way, particularly where conduct and not merely speech is involved, we believe that the overbreadth of a ***800** statute must not only be real, but substantial as well, judged in relation to the statute's plainly legitimate sweep." Broadrick v. Oklahoma, 413 U.S., at 615, 93 S.Ct., at 2917–2918 (citation omitted).[18]

**[2]** **[3]** The concept of "substantial overbreadth" is not readily reduced to an exact definition. It is clear, however, that the mere fact that one can conceive of some impermissible applications of a statute is not sufficient to render it susceptible to an overbreadth challenge.[19] On the contrary, the requirement of substantial overbreadth stems from the underlying justification for the overbreadth exception itself—the interest in preventing an invalid statute from inhibiting the speech of third parties who are not before the Court.

"The requirement of substantial overbreadth is directly derived from the purpose and nature of the doctrine. While a sweeping statute, or one incapable of limitation, ***801** has the potential to repeatedly chill the exercise of expressive activity by many individuals, the extent of deterrence of protected speech can be expected to decrease with the declining reach of the regulation." New York v. Ferber, 458 U.S. 747, 772, 102 S.Ct. 3348, 3362, 73 L.Ed.2d 1113 (1982) (footnote omitted).

In short, there must be a realistic danger that the statute itself will significantly compromise recognized First Amendment protections of parties not before the Court for it to be facially challenged on overbreadth grounds. See Erznoznik v. City of Jacksonville, 422 U.S. 205, 216, 95 S.Ct. 2268, 2276, 45 L.Ed.2d 125 (1975). See also Ohralik v. Ohio State Bar Assn., 436 U.S. 447, 462, n. 20, 98 S.Ct. 1912, 1922 n. 20, 56 L.Ed.2d 444 (1978); Parker v. Levy, 417 U.S. 733, 760–761, 94 S.Ct. 2547, 2563–2564, 41 L.Ed.2d 439 (1974).

**[4]** The Court of Appeals concluded that the ordinance was vulnerable to an overbreadth challenge because it was an "overinclusive" response to traffic concerns and not the "least drastic means" of preventing interference with the normal use of public property. This conclusion ****2127** rested on an evaluation of the assumed effect of the ordinance on third parties, rather than on any specific consideration of the impact of the ordinance on the parties before the court. This is not, however, an appropriate case to entertain a facial challenge based on overbreadth. For we have found nothing in the record to indicate that the ordinance will have any different impact on any third parties' interests in free speech than it has on Taxpayers and COGS.

Taxpayers and COGS apparently would agree that the prohibition against posting signs on most of the publicly owned objects mentioned in the ordinance is perfectly reasonable. Thus, they do not dispute the City's power to proscribe the attachment of any handbill or sign to any sidewalk, crosswalk, curb, lamppost, hydrant, or lifesaving equipment.[20] Their ***802** position with respect to utility poles is not entirely clear, but they do contend that it is unconstitutional to prohibit the attachment of their cardboard signs to the horizontal crosswires supporting utility poles during a political campaign. They have, in short, failed to identify any significant difference between their claim that the ordinance is invalid on overbreadth grounds and their claim that it is unconstitutional when applied to their political signs. Specifically, Taxpayers and COGS have not attempted

  

to demonstrate that the ordinance applies to any conduct more likely to be protected by the First Amendment than their own crosswires signs. Indeed, the record suggests that many of the signs posted in violation of the ordinance are posted in such a way that they may create safety or traffic problems that COGS has tried to avoid. Accordingly, on this record it appears that if the ordinance may be validly applied to COGS, it can be validly applied to most if not all of the signs of parties not before the Court. Appellees have simply failed to demonstrate a realistic danger that the ordinance will significantly compromise recognized First Amendment protections of individuals not before the Court. It would therefore be inappropriate in this case to entertain an overbreadth challenge to the ordinance.

Taxpayers and COGS do argue generally that the City's interest in eliminating visual blight is not sufficiently weighty to justify an abridgment of speech. If that were the only interest the ordinance advanced, then this argument would be analogous to the facial challenges involved in cases like Stromberg and Lovell. But as previously observed, appellees acknowledge that the ordinance serves safety interests in many of its applications, and hence do not argue that the ordinance can never be validly applied. Instead, appellees argue that they have placed their signs in locations where only the esthetic interest is implicated. In addition, they argue that they have developed an expertise in not "placing signs in offensive manners which will alienate its own clientele ***803** or their constituencies,"[21] and emphasize the special value of free communication during political campaigns, see Metromedia, Inc. v. San Diego, 453 U.S. 490, 555, 101 S.Ct., at 2917 (1981) (STEVENS, J., dissenting in part); id., at 550, 101 S.Ct., at 2914 (REHNQUIST, J., dissenting). In light of these arguments, appellees' attack on the ordinance is basically a challenge to the ordinance as applied to their activities. We therefore limit our analysis of the constitutionality of the ordinance to the concrete case before us, and now turn to the arguments that it is invalid as applied to the expressive activity of Taxpayers and COGS.[22]

****2128** II

**[5]** The ordinance prohibits appellees from communicating with the public in a certain manner, and presumably diminishes the total quantity of their communication in the City.[23] The application of the ordinance to appellees' expressive activities surely raises the question whether the ordinance abridges their "freedom of speech" within the meaning of the First Amendment, and appellees certainly have standing to challenge the application of the ordinance to their own expressive activities. "But to say the ordinance presents a ***804** First Amendment issue is not necessarily to say that it constitutes a First Amendment violation." Metromedia, Inc. v. San Diego, 453 U.S., at 561, 101 S.Ct., at 2920, 69 L.Ed.2d 800 (BURGER, C.J., dissenting). It has been clear since this Court's earliest decisions concerning the freedom of speech that the state may sometimes curtail speech when necessary to advance a significant and legitimate state interest. Schenck v. United States, 249 U.S. 47, 52, 39 S.Ct. 247, 249, 63 L.Ed. 470 (1919).

**[6]** As Stromberg and Lovell demonstrate, there are some purported interests—such as a desire to suppress support for a minority party or an unpopular cause, or to exclude the expression of certain points of view from the marketplace of ideas—that are so plainly illegitimate that they would immediately invalidate the rule. The general principle that has emerged from this line of cases is that the First Amendment forbids the government to regulate speech in ways that favor some viewpoints or ideas at the expense of others. See Bolger v. Youngs Drug Products Corp., 463 U.S. 60, 65, 72, 103 S.Ct. 2875, 2879, 2883, 77 L.Ed.2d 469 (1983); Consolidated Edison Co. v. Public Service Comm'n, 447 U.S. 530, 535–536, 100 S.Ct. 2326, 2332, 65 L.Ed.2d 319 (1980); Carey v. Brown, 447 U.S. 455, 462–463, 100 S.Ct. 2286, 2291, 65 L.Ed.2d 263 (1980); Young v. American Mini Theatres, Inc., 427 U.S. 50, 63–65, 67–68, 96 S.Ct. 2440, 2448–2450, 2451, 49 L.Ed.2d 310 (1976) (plurality opinion); Police Department of Chicago v. Mosley, 408 U.S. 92, 95–96, 92 S.Ct. 2286, 2289–2290, 33 L.Ed.2d 212 (1972).

That general rule has no application to this case. For there is not even a hint of bias or censorship in the City's enactment or enforcement of this ordinance. There is no claim that the ordinance was designed to suppress certain ideas that the City finds distasteful or that it has been applied to appellees because of the views that they express. The text of the ordinance is neutral—indeed it is silent—concerning any speaker's point of view, and the District Court's findings indicate that it has been applied to appellees and others in an evenhanded manner.

In United States v. O'Brien, 391 U.S. 367, 88 S.Ct. 1673, 20 L.Ed.2d 672 (1968), the Court set forth the appropriate framework for reviewing a viewpoint-neutral regulation of this kind:

***805** "[A] government regulation is sufficiently justified if it is within the constitutional power of the Government; if

it furthers an important or substantial governmental interest; if the governmental **2129 interest is unrelated to the suppression of free expression; and if the incidental restriction on alleged First Amendment freedoms is no greater than is essential to the furtherance of that interest." Id., at 377, 88 S.Ct., at 1679.

[7] It is well settled that the state may legitimately exercise its police powers to advance esthetic values. Thus, in Berman v. Parker, 348 U.S. 26, 32–33, 75 S.Ct. 98, 102–103, 99 L.Ed. 27 (1954), in referring to the power of the legislature to remove blighted housing, this Court observed that such housing may be "an ugly sore, a blight on the community which robs it of charm, which makes it a place from which men turn." Ibid. We concluded: "The concept of the public welfare is broad and inclusive. The values it represents are spiritual as well as physical, aesthetic as well as monetary." Id., at 33, 75 S.Ct., at 102 (citation omitted). See also Penn Central Transportation Co. v. New York City, 438 U.S. 104, 129, 98 S.Ct. 2646, 2661, 57 L.Ed.2d 631 (1978); Village of Belle Terre v. Boraas, 416 U.S. 1, 9, 94 S.Ct. 1536, 1541, 39 L.Ed.2d 797 (1974); Euclid v. Ambler Co., 272 U.S. 365, 387–388, 47 S.Ct. 114, 118, 71 L.Ed. 303 (1926); Welch v. Swasey, 214 U.S. 91, 108, 29 S.Ct. 567, 571, 53 L.Ed. 923 (1909).

In this case, taxpayers and COGS do not dispute that it is within the constitutional power of the City to attempt to improve its appearance, or that this interest is basically unrelated to the suppression of ideas. Therefore the critical inquiries are whether that interest is sufficiently substantial to justify the effect of the ordinance on appellees' expression, and whether that effect is no greater than necessary to accomplish the City's purpose.

III

In Kovacs v. Cooper, 336 U.S. 77, 69 S.Ct. 448, 93 L.Ed. 513 (1949), the Court rejected the notion that a city is powerless to protect its citizens from unwanted exposure to certain methods of expression which may legitimately be deemed a public nuisance. *806 In upholding an ordinance that prohibited loud and raucous sound trucks, the Court held that the State had a substantial interest in protecting its citizens from unwelcome noise.[24] In Lehman v. City of Shaker Heights, 418 U.S. 298, 94 S.Ct. 2714, 41 L.Ed.2d 770 (1974), the Court upheld the city's prohibition of political advertising on its buses, stating that the city was entitled to protect unwilling viewers against intrusive advertising that may interfere with the city's goal of making its buses "rapid, convenient, pleasant, and inexpensive," id., at 302–303, 94 S.Ct., at 2717 (plurality opinion). See also id., at 307, 94 S.Ct., at 2719 (Douglas, J., concurring in judgment); Erznoznik v. City of Jacksonville, 422 U.S., at 209, and n. 5, 95 S.Ct., at 2273 and n. 5. These cases indicate that the municipalities have a weighty, essentially esthetic interest in proscribing intrusive and unpleasant formats for expression.

**2130 Metromedia, Inc. v. San Diego, supra, dealt with San Diego's prohibition of certain forms of outdoor billboards. There the Court considered the city's interest in avoiding visual clutter, and seven Justices explicitly concluded *807 that this interest was sufficient to justify a prohibition of billboards, see id., at 507–508, 510, 101 S.Ct., at 2892–2893, 2894 (opinion of WHITE, J., joined by Stewart, MARSHALL, and POWELL, JJ.); id., at 552, 101 S.Ct., at 2915 (STEVENS, J., dissenting in part); id., at 559–561, 101 S.Ct., at 2919–2921 (BURGER, C.J., dissenting); id., at 570, 101 S.Ct., at 2924–2925 (REHNQUIST, J., dissenting).[25] Justice WHITE, writing for the plurality, expressly concluded that the city's esthetic interests were sufficiently substantial to provide an acceptable justification for a content-neutral prohibition against the use of billboards; San Diego's interest in its appearance was undoubtedly a substantial governmental goal. Id., at 507–508, 101 S.Ct., at 2892–2893.[26]

[8] We reaffirm the conclusion of the majority in Metromedia. The problem addressed by this ordinance—the visual assault on the citizens of Los Angeles presented by an accumulation of signs posted on public property—constitutes a significant substantive evil within the City's power to prohibit. "[T]he city's interest in attempting to preserve [or improve] the quality of urban life is one that must be accorded high respect." Young v. American Mini Theatres, Inc., 427 U.S., at 71, 96 S.Ct., at 2453 (plurality opinion).

*808 IV

[9] We turn to the question whether the scope of the restriction on appellees' expressive activity is substantially broader than necessary to protect the City's interest in eliminating visual clutter. The incidental restriction on expression which results from the City's attempt to accomplish such a purpose is considered justified as a reasonable regulation of the time, place, or manner of expression if it is narrowly tailored to serve that interest. See, e.g., Heffron v. International Society for Krishna

Consciousness, Inc., 452 U.S. 640, 647–648, 101 S.Ct. 2559, 2563–2564, 69 L.Ed.2d 298 (1981); Schad v. Mount Ephraim, 452 U.S. 61, 68–71, 101 S.Ct. 2176, 2182–2183, 68 L.Ed.2d 671 (1981); Carey v. Brown, 447 U.S., at 470–471, 100 S.Ct., at 2295–2296, 65 L.Ed.2d 263 (1980); Grayned v. City of Rockford, 408 U.S. 104, 115–117, 92 S.Ct. 2294, 2302–2303, 33 L.Ed.2d 222 (1972); Police Department of Chicago v. Mosley, 408 U.S., at 98, 92 S.Ct., at 2291. The District Court found that the signs prohibited by the ordinance do constitute visual clutter and blight. By banning these signs, the City did no more than eliminate the exact source of the evil it sought to remedy.[27] ****2131** The plurality wrote in Metromedia: "It is not speculative to recognize that billboards by their very nature, wherever located and however constructed, can be perceived as an 'esthetic harm.' " 453 U.S., at 510, 101 S.Ct., at 2893–2894. The same is true of posted signs.

It is true that the esthetic interest in preventing the kind of litter that may result from the distribution of leaflets on the public streets and sidewalks cannot support a prophylactic prohibition against the citizen's exercise of that method of expressing his views. In Schneider v. State, 308 U.S. 147, 60 S.Ct. 146, 84 L.Ed. 155 (1939), the Court held that ordinances that absolutely prohibited handbilling on the streets were invalid. The Court explained that cities could adequately protect the esthetic interest ***809** in avoiding litter without abridging protected expression merely by penalizing those who actually litter. See id., at 162, 60 S.Ct., at 151. Taxpayers contend that their interest in supporting Vincent's political campaign, which affords them a constitutional right to distribute brochures and leaflets on the public streets of Los Angeles, provides equal support for their asserted right to post temporary signs on objects adjacent to the streets and sidewalks. They argue that the mere fact that their temporary signs "add somewhat" to the city's visual clutter is entitled to no more weight than the temporary unsightliness of discarded handbills and the additional street-cleaning burden that were insufficient to justify the ordinances reviewed in Schneider.

The rationale of Schneider is inapposite in the context of the instant case. There, individual citizens were actively exercising their right to communicate directly with potential recipients of their message. The conduct continued only while the speakers or distributors remained on the scene. In this case, appellees posted dozens of temporary signs throughout an area where they would remain unattended until removed. As the Court expressly noted in Schneider, the First Amendment does not "deprive a municipality of power to enact regulations against throwing literature broadcast in the streets. Prohibition of such conduct would not abridge the constitutional liberty since such activity bears no necessary relationship to the freedom to speak, write, print or distribute information or opinion." 308 U.S., at 160–161, 60 S.Ct., at 150. In short, there is no constitutional impediment to "the punishment of those who actually throw papers on the streets." Id., at 162, 60 S.Ct., at 151. A distributor of leaflets has no right simply to scatter his pamphlets in the air—or to toss large quantities of paper from the window of a tall building or a low flying airplane. Characterizing such an activity as a separate means of communication does not diminish the State's power to condemn it as a public nuisance. The right recognized in ***810** Schneider is to tender the written material to the passerby who may reject it or accept it, and who thereafter may keep it, dispose of it properly, or incur the risk of punishment if he lets it fall to the ground. One who is rightfully on a street open to the public "carries with him there as elsewhere the constitutional right to express his views in an orderly fashion. This right extends to the communication of ideas by handbills and literature as well as by the spoken word." Jamison v. Texas, 318 U.S. 413, 416, 63 S.Ct. 669, 672, 87 L.Ed. 869 (1943); see also Cox v. Louisiana, 379 U.S. 559, 578, 85 S.Ct. 476, 478, 13 L.Ed.2d 487 (1965) (Black, J., dissenting in part).

With respect to signs posted by appellees, however, it is the tangible medium of expressing the message that has the adverse impact on the appearance of the landscape. In Schneider, an antilittering statute could have addressed the substantive evil without prohibiting expressive activity, whereas application of the prophylactic rule actually employed gratuitously infringed upon the right of an individual to communicate directly with a willing listener. Here, the substantive evil—visual blight—is not merely a possible by-product of the activity, but is created by the medium of expression itself. In contrast to ****2132** Schneider, therefore, the application of the ordinance in this case responds precisely to the substantive problem which legitimately concerns the City. The ordinance curtails no more speech than is necessary to accomplish its purpose.

V

The Court of Appeals accepted the argument that a prohibition against the use of unattractive signs cannot be justified on esthetic grounds if it fails to apply to all equally unattractive signs wherever they might be located. A comparable argument was categorically rejected in Metromedia. In that case it was argued that the city could not simultaneously

permit billboards to be used for onsite advertising and also justify the prohibition against offsite advertising on esthetic grounds, since both types of advertising were equally unattractive. ***811** The Court held, however, that the city could reasonably conclude that the esthetic interest was outweighed by the countervailing interest in one kind of advertising even though it was not outweighed by the other.[28] So here, the validity of the esthetic interest in the elimination of signs on public property is not compromised by failing to extend the ban to private property. The private citizen's interest in controlling the use of his own property justifies the disparate treatment. Moreover, by not extending the ban to all locations, a significant opportunity to communicate by means of temporary signs is preserved, and private property owners' esthetic concerns will keep the posting of signs on their property within reasonable bounds. Even if some visual blight remains, a partial, content-neutral ban may nevertheless enhance the City's appearance.

Furthermore, there is no finding that in any area where appellees seek to place signs, there are already so many signs posted on adjacent private property that the elimination of appellees' signs would have an inconsequential effect on the esthetic values with which the City is concerned. There is simply no predicate in the findings of the District Court for ***812** the conclusion that the prohibition against the posting of appellees' signs fails to advance the City's esthetic interest.

VI

**[10]** While the First Amendment does not guarantee the right to employ every conceivable method of communication at all times and in all places, Heffron v. International Society for Krishna Consciousness, Inc., 452 U.S., at 647, 101 S.Ct., at 2563–2564, a restriction on expressive activity may be invalid if the remaining modes of communication are inadequate. See, e.g., United States v. Grace, 461 U.S. 171, 177, 103 S.Ct. 1702, 1707, 75 L.Ed.2d 736 (1983); Heffron v. International Society for Krishna Consciousness, Inc., 452 U.S., at 654–655, 101 S.Ct., at 2567–2568; Consolidated Edison Co. v. Public Service Comm'n, 447 U.S., at 535, 100 S.Ct., at 2332; Linmark Associates, Inc. v. Willingboro, 431 U.S. 85, 93, 97 S.Ct. 1614, 1618, 52 L.Ed.2d 155 (1977). The Los Angeles ordinance does not affect any individual's freedom to exercise the right to speak and to distribute literature in the same place where the posting of signs on public ****2133** property is prohibited.[29] To the extent that the posting of signs on public property has advantages over these forms of expression, see, e.g., Talley v. California, 362 U.S. 60, 64–65, 80 S.Ct. 536, 538–539, 4 L.Ed.2d 559 (1960), there is no reason to believe that these same advantages cannot be obtained through other means. To the contrary, the findings of the District Court indicate that there are ample alternative modes of communication in Los Angeles. Notwithstanding appellees' general assertions in their brief concerning the utility of political posters, nothing in the findings indicates that the posting of political posters on public property is a uniquely valuable or important mode of communication, or that appellees' ability to communicate effectively is threatened by ever-increasing restrictions on expression.[30]

***813** VII

**[11]** **[12]** Appellees suggest that the public property covered by the ordinance either is itself a "public forum" for First Amendment purposes, or at least should be treated in the same respect as the "public forum" in which the property is located. "Traditional public forum property occupies a special position in terms of First Amendment protection," United States v. Grace, 461 U.S., at 180, 103 S.Ct., at 1708, and appellees maintain that their sign-posting activities are entitled to this protection.

In Hague v. CIO, 307 U.S. 496, 515–516, 59 S.Ct. 954, 964, 83 L.Ed. 1423 (1939) (opinion of Roberts, J.), it was recognized:

"Wherever the title of streets and parks may rest, they have immemorially been held in trust for the use of the public, and, time out of mind, have been used for purposes of assembly, communicating thoughts between citizens, and discussing public questions. Such use of the streets and public places has, from ancient times, been a part of the privileges, immunities, rights, and liberties of citizens. The privilege of a citizen of the United States to use the streets and parks for communication of views on national questions may be regulated in the interest of all; it is not absolute, but relative, and must be exercised in subordination to the general comfort and convenience, and in consonance with peace and ***814** good order; but it must not, in the guise of regulation, be abridged or denied."

See also Grayned v. City of Rockford, 408 U.S., at 115, 92 S.Ct., at 2302; Shuttlesworth v. City of Birmingham, 394 U.S. 147, 152, 89 S.Ct. 935, 939, 22 L.Ed.2d 162 (1969); Kunz v. New York, 340 U.S. 290, 293, 71 S.Ct. 312, 314, 95 L.Ed. 280 (1951); Schneider v. State, 308 U.S., at 163, 60 S.Ct., at 152.

  

Appellees' reliance on the public forum doctrine is misplaced. They fail to demonstrate the existence of a traditional right of access respecting such items as utility poles for purposes of their communication comparable to that recognized for public streets and parks, and it is clear that "the First Amendment does not guarantee access to government property simply because it is owned or controlled by the government." **2134 United States Postal Service v. Greenburgh Civic Assns., 453 U.S. 114, 129, 101 S.Ct. 2676, 2685, 69 L.Ed.2d 517 (1981). Rather, the "existence of a right of access to public property and the standard by which limitations upon such a right must be evaluated differ depending on the character of the property at issue." Perry Education Assn. v. Perry Local Educators' Assn., 460 U.S. 37, 44, 103 S.Ct. 948, 954, 74 L.Ed.2d 794 (1983).

[13] Lampposts can of course be used as signposts, but the mere fact that government property can be used as a vehicle for communication does not mean that the Constitution requires such uses to be permitted. Cf. United States Postal Service v. Greenburgh Civic Assn., 453 U.S., at 131, 101 S.Ct. 2676, 2686, 69 L.Ed.2d 517.[31] Public property which is not by tradition or designation a forum for *815 public communication may be reserved by the State "for its intended purposes, communicative or otherwise, as long as the regulation on speech is reasonable and not an effort to suppress expression merely because public officials oppose the speaker's view." Perry Education Assn. v. Perry Local Educators' Ass'n, 460 U.S., at 46, 103 S.Ct., at 955. Given our analysis of the legitimate interest served by the ordinance, its viewpoint neutrality, and the availability of alternative channels of communication, the ordinance is certainly constitutional as applied to appellees under this standard.[32]

VIII

[14] Finally, Taxpayers and COGS argue that Los Angeles could have written an ordinance that would have had a less severe effect on expressive activity such as theirs, by permitting the posting of any kind of sign at any time on some types of public property, or by making a variety of other more specific exceptions to the ordinance: for signs carrying certain types of messages (such as political campaign signs), for signs posted during specific time periods (perhaps during political campaigns), for particular locations (perhaps for areas already cluttered by an excessive number of signs on adjacent private property), or for signs meeting design specifications (such as size or color). Plausible public policy arguments *816 might well be made in support of any such exception, but it by no means follows that it is therefore constitutionally mandated, cf. Singer v. United States, 380 U.S. 24, 34–35, 85 S.Ct. 783, 789–790, 13 L.Ed.2d 630 (1965), nor is it clear that some of the suggested exceptions would even be constitutionally permissible. For example, even though political speech is entitled to the fullest possible measure of constitutional protection, there are a host of other communications that command the same respect. An assertion that "Jesus Saves," that "Abortion is Murder," that every woman has the "Right to **2135 Choose," or that "Alcohol Kills," may have a claim to a constitutional exemption from the ordinance that is just as strong as "Roland Vincent—City Council." See Abood v. Detroit Board of Education, 431 U.S. 209, 231–232, 97 S.Ct. 1782, 1797–1798, 52 L.Ed.2d 261 (1977).[33] To create an exception for appellees' political speech and not these other types of speech might create a risk of engaging in constitutionally forbidden content discrimination. See, e.g., Carey v. Brown, 447 U.S. 455, 100 S.Ct. 2286, 65 L.Ed.2d 263 (1980); Police Department of Chicago v. Mosley, 408 U.S. 92, 92 S.Ct. 2286, 33 L.Ed.2d 212 (1972). Moreover, the volume of permissible postings under such a mandated exemption might so limit the ordinance's effect as to defeat its aim of combating visual blight.

Any constitutionally mandated exception to the City's total prohibition against temporary signs on public property would necessarily rest on a judicial determination that the City's traffic control and safety interests had little or no applicability within the excepted category, and that the City's interests in esthetics are not sufficiently important to justify the prohibition in that category. But the findings of the District Court provide no basis for questioning the substantiality of the esthetic interest at stake, or for believing that a uniquely important form of communication has been abridged for the categories of expression engaged in by Taxpayers and COGS. Therefore, we accept the City's position that it may decide that the esthetic interest in avoiding "visual clutter" justifies *817 a removal of signs creating or increasing that clutter. The findings of the District Court that COGS signs add to the problems addressed by the ordinance and, if permitted to remain, would encourage others to post additional signs, are sufficient to justify application of the ordinance to these appellees.

As recognized in Metromedia, if the city has a sufficient basis for believing that billboards are traffic hazards and are unattractive, "then obviously the most direct and perhaps the

  

only effective approach to solving the problems they create is to prohibit them." 453 U.S., at 508, 101 S.Ct., at 2893. As is true of billboards, the esthetic interests that are implicated by temporary signs are presumptively at work in all parts of the city, including those where appellees posted their signs, and there is no basis in the record in this case upon which to rebut that presumption. These interests are both psychological and economic. The character of the environment affects the quality of life and the value of property in both residential and commercial areas. We hold that on this record these interests are sufficiently substantial to justify this content-neutral, impartially administered prohibition against the posting of appellees' temporary signs on public property and that such an application of the ordinance does not create an unacceptable threat to the "profound national commitment to the principle that debate on public issues should be uninhibited, robust, and wide-open." New York Times Co. v. Sullivan, 376 U.S. 254, 270, 84 S.Ct. 710, 720–721, 11 L.Ed.2d 686 (1964).[34]

The judgment of the Court of Appeals is reversed, and the case is remanded to that Court.

It is so ordered.

***818** Justice BRENNAN, with whom Justice MARSHALL and Justice BLACKMUN join, dissenting.

The plurality opinion in ****2136** Metromedia, Inc. v. San Diego, 453 U.S. 490, 101 S.Ct. 2882, 69 L.Ed.2d 800 (1981), concluded that the City of San Diego could, consistently with the First Amendment, restrict the commercial use of billboards in order to "preserve and improve the appearance of the City." Id., at 493, 101 S.Ct., at 2885. Today, the Court sustains the constitutionality of Los Angeles' similarly motivated ban on the posting of political signs on public property. Because the Court's lenient approach towards the restriction of speech for reasons of aesthetics threatens seriously to undermine the protections of the First Amendment, I dissent.

The Court finds that the City's "interest [in eliminating visual clutter] is sufficiently substantial to justify the effect of the ordinance on appellees' expression" and that the effect of the ordinance on speech is "no greater than necessary to accomplish the City's purpose." Ante, at 2129. These are the right questions to consider when analyzing the constitutionality of the challenged ordinance, see Metromedia, supra, at 525–527, 101 S.Ct., at 2901–2902 (BRENNAN, J., concurring in judgment); Heffron v. International Society for Krishna Consciousness, Inc., 452 U.S. 640, 656, 101 S.Ct. 2559, 2568, 69 L.Ed.2d 298 (1981) (BRENNAN, J., concurring in part and dissenting in part), but the answers that the Court provides reflect a startling insensitivity to the principles embodied in the First Amendment. In my view, the City of Los Angeles has not shown that its interest in eliminating "visual clutter" justifies its restriction of appellees' ability to communicate with the local electorate.

I

The Court recognizes that each medium for communicating ideas and information presents its own particular problems. Our analysis of the First Amendment concerns implicated by a given medium must therefore be sensitive to these particular problems and characteristics. The posting of signs is, ***819** of course, a time-honored means of communicating a broad range of ideas and information, particularly in our cities and towns. At the same time, the unfettered proliferation of signs on public fixtures may offend the public's legitimate desire to preserve an orderly and aesthetically pleasing urban environment. In this case, as in Metromedia, we are called upon to adjudge the constitutionality under the First Amendment of a local government's response to this recurring dilemma—namely, the clash between the public's aesthetic interest in controlling the use of billboards, signs, handbills, and other similar means of communication, and the First Amendment interest of those who wish to use these media to express their views, or to learn the views of others, on matters of importance to the community.

In deciding this First Amendment question, the critical importance of the posting of signs as a means of communication must not be overlooked. Use of this medium of communication is particularly valuable in part because it entails a relatively small expense in reaching a wide audience, allows flexibility in accommodating various formats, typographies, and graphics, and conveys its message in a manner that is easily read and understood by its reader or viewer. There may be alternative channels of communication, but the prevalence of a large number of signs in Los Angeles[1] is a strong indication that, for many speakers, those alternatives are far less satisfactory. Cf. Southeastern Promotions, Ltd. v. Conrad, 420 U.S. 546, 556, 95 S.Ct. 1239, 1245, 43 L.Ed.2d 448 (1975).

Nevertheless, the City of Los Angeles asserts that ample alternative avenues of communication are available. The City notes that, although the posting of signs on public property

  

is prohibited, the posting of signs on private property and the distribution of handbills are not. Brief for Appellants ***820** 25–26. But there is no showing ****2137** that either of these alternatives would serve appellees' needs nearly as well as would the posting of signs on public property. First, there is no proof that a sufficient number of private parties would allow the posting of signs on their property. Indeed, common sense suggests the contrary at least in some instances. A speaker with a message that is generally unpopular or simply unpopular among property owners is hardly likely to get his message across if forced to rely on this medium. It is difficult to believe, for example, that a group advocating an increase in the rate of a property tax would succeed in persuading private property owners to accept its signs.

Similarly, the adequacy of distributing handbills is dubious, despite certain advantages of handbills over signs. See Martin v. Struthers, 319 U.S. 141, 145–146, 63 S.Ct. 862, 864–865, 87 L.Ed. 1313 (1943). Particularly when the message to be carried is best expressed by a few words or a graphic image, a message on a sign will typically reach far more people than one on a handbill. The message on a posted sign remains to be seen by passersby as long as it is posted, while a handbill is typically read by a single reader and discarded. Thus, not only must handbills be printed in large quantity, but many hours must be spent distributing them. The average cost of communicating by handbill is therefore likely to be far higher than the average cost of communicating by poster. For that reason, signs posted on public property are doubtless "essential to the poorly financed causes of little people," id., at 146, 63 S.Ct., at 865, and their prohibition constitutes a total ban on an important medium of communication. Cf. Stone, Fora Americana: Speech in Public Places, 1974 S.Ct.Rev. 233, 257. Because the City has completely banned the use of this particular medium of communication, and because, given the circumstances, there are no equivalent alternative media that provide an adequate substitute, the Court must examine with particular care the justifications that the City proffers for its ban. See Metromedia, supra, 453 U.S., at 525–527, 101 S.Ct., at 2901–2902 (BRENNAN, J., concurring ***821** in judgment); Linmark Associates, Inc. v. Willingboro, 431 U.S. 85, 93, 97 S.Ct. 1614, 1618, 52 L.Ed.2d 155 (1977).

II

As the Court acknowledges, ante, at 2129, when an ordinance significantly limits communicative activity, "the delicate and difficult task falls upon the courts to weigh the circumstances and to appraise the substantiality of the reasons advanced in support of the regulation." Schneider v. State, 308 U.S. 147, 161, 60 S.Ct. 146, 151, 84 L.Ed. 155 (1939). The Court's first task is to determine whether the ordinance is aimed at suppressing the content of speech, and, if it is, whether a compelling state interest justifies the suppression. Consolidated Edison Co. v. Public Service Comm'n, 447 U.S. 530, 540, 100 S.Ct. 2326, 2334, 65 L.Ed.2d 319 (1980); Police Department of Chicago v. Mosley, 408 U.S. 92, 99, 92 S.Ct. 2286, 2292, 33 L.Ed.2d 212 (1972). If the restriction is content-neutral, the court's task is to determine (1) whether the governmental objective advanced by the restriction is substantial, and (2) whether the restriction imposed on speech is no greater than is essential to further that objective. Unless both conditions are met the restriction must be invalidated. See ante, at 2128, 2130–2132.[2]

My suggestion in Metromedia was that courts should exercise special care in addressing these questions when a purely aesthetic objective is asserted to justify a restriction of speech. Specifically, "before deferring to a city's judgment, a court must be convinced that the city is seriously and comprehensively addressing aesthetic concerns with respect to its environment." 453 U.S., at 531, 101 S.Ct., at 2905. I ****2138** adhere to that view. Its correctness—premised largely on my concern that aesthetic interests are easy for a city to assert and difficult for a court to evaluate—is, for me, reaffirmed by this case.

The fundamental problem in this kind of case is that a purely aesthetic state interest offered to justify a restriction on speech—that is, a governmental objective justified solely ***822** in terms like "proscribing intrusive and unpleasant formats for expression," ante, at 2130 creates difficulties for a reviewing court in fulfilling its obligation to ensure that government regulation does not trespass upon protections secured by the First Amendment. The source of those difficulties is the unavoidable subjectivity of aesthetic judgments—the fact that "beauty is in the eye of the beholder." As a consequence of this subjectivity, laws defended on aesthetic grounds raise problems for judicial review that are not presented by laws defended on more objective grounds—such as national security, public health, or public safety.[3] In practice, therefore, the inherent subjectivity of aesthetic judgments makes it all too easy for the government to fashion its justification for a law in a manner that impairs the ability of a reviewing court meaningfully to make the required inquiries.[4]

A

  

Initially, a reviewing court faces substantial difficulties determining whether the actual objective is related to the suppression of speech. The asserted interest in aesthetics may be only a facade for content-based suppression. Of course, all would agree that the improvement and preservation ***823** of the aesthetic environment are important governmental functions, and that some restrictions on speech may be necessary to carry out these functions. Metromedia, supra, at 530, 101 S.Ct., at 2904. But a governmental interest in aesthetics cannot be regarded as sufficiently compelling to justify a restriction of speech based on an assertion that the content of the speech is, in itself, aesthetically displeasing. Cohen v. California, 403 U.S. 15, 91 S.Ct. 1780, 29 L.Ed.2d 284 (1971). Because aesthetic judgments are so subjective, however, it is too easy for government to enact restrictions on speech for just such illegitimate reasons and to evade effective judicial review by asserting that the restriction is aimed at some displeasing aspect of the speech that is not solely communicative—for example, its sound, its appearance, or its location. An objective standard for evaluating claimed aesthetic judgments is therefore essential; for without one, courts have no reliable means of assessing the genuineness of such claims.

For example, in evaluating the ordinance before us in this case, the City might be pursuing either of two objectives, motivated by two very different judgments. One objective might be the elimination of "visual clutter," attributable in whole or in part to signs posted on public property. The aesthetic judgment underlying this objective would be that the clutter created by these signs offends the community's desire for an orderly, visually pleasing environment. ****2139** A second objective might simply be the elimination of the messages typically carried by the signs.[5] In that case, the aesthetic judgment would be that the signs' messages are themselves displeasing. The first objective is lawful, of course, but the second is not. Yet the City might easily mask the second ***824** objective by asserting the first and declaring that signs constitute visual clutter. In short, we must avoid unquestioned acceptance of the City's bare declaration of an aesthetic objective lest we fail in our duty to prevent unlawful trespasses upon First Amendment protections.

B

A total ban on an important medium of communication may be upheld only if the government proves that the ban (1) furthers a substantial government objective, and (2) constitutes the least speech-restrictive means of achieving that objective. Schad v. Mount Ephraim, 452 U.S. 61, 101 S.Ct. 2176, 68 L.Ed.2d 671 (1981). Here too, however, meaningful judicial application of these standards is seriously frustrated.

(1)

No one doubts the importance of a general governmental interest in aesthetics, but in order to justify a restriction of speech, the particular objective behind the restriction must be substantial. E.g. United States v. Grace, 461 U.S. 171, 177, 103 S.Ct. 1702, 1709, 75 L.Ed.2d 736 (1983); Perry Education Assn. v. Perry Local Educators' Assn., 460 U.S. 37, 45, 103 S.Ct. 948, 955, 74 L.Ed.2d 794 (1983); United States v. O'Brien, 391 U.S. 367, 377, 88 S.Ct. 1673, 1679, 20 L.Ed.2d 672 (1968). Therefore, in order to uphold a restriction of speech imposed to further an aesthetic objective, a court must ascertain the substantiality of the specific objective pursued. Although courts ordinarily defer to the government's assertion that its objective is substantial, that assertion is not immune from critical examination. See, e.g., Schad v. Mount Ephraim, supra, 452 U.S., at 72–73, 101 S.Ct., at 2184–2185. This is particularly true when aesthetic objectives underlie the restrictions. But in such cases independent judicial assessment of the substantiality of the government's interest is difficult. Because aesthetic judgments are entirely subjective, the government may too easily overstate the substantiality of its goals. Accordingly, unless courts carefully scrutinize ***825** aesthetics-based restrictions of speech, they risk standing idly by while important media of communication are foreclosed for the sake of insubstantial governmental objectives.

(2)

Similarly, when a total ban is justified solely in terms of aesthetics, the means inquiry necessary to evaluate the constitutionality of the ban may be impeded by deliberate or unintended government manipulation. Governmental objectives that are purely aesthetic can usually be expressed in a virtually limitless variety of ways. Consequently, objectives can be tailored to fit whatever program the government devises to promote its general aesthetic interests. Once the government has identified a substantial aesthetic objective and has selected a preferred means of achieving its objective, it will be possible for the government to correct any mismatch between means and ends by redefining the ends to conform with the means.

  

In this case, for example, any of several objectives might be the City's actual substantial **2140 goal in banning temporary signs: (1) the elimination of all signs throughout the City, (2) the elimination of all signs in certain parts of the City, or (3) a reduction of the density of signs. Although a total ban on the posting of signs on public property would be the least restrictive means of achieving only the first objective, it would be a very effective means of achieving the other two as well. It is quite possible, therefore, that the City might select such a ban as the means by which to further its general interest in solving its sign problem, without explicitly considering which of the three specific objectives is really substantial. Then, having selected the total ban as its preferred means, the City would be strongly inclined to characterize the first objective as the substantial one. This might be done purposefully in order to conform the ban to the least-restrictive-means requirement, or it might be done inadvertently as a natural *826 concomitant of considering means and ends together. But regardless of why it is done, a reviewing court will be confronted with a statement of substantiality the subjectivity of which makes it impossible to question on its face.

This possibility of interdependence between means and ends in the development of policies to promote aesthetics poses a major obstacle to judicial review of the availability of alternative means that are less restrictive of speech. Indeed, when a court reviews a restriction of speech imposed in order to promote an aesthetic objective, there is a significant possibility that the court will be able to do little more than pay lipservice to the First Amendment inquiry into the availability of less restrictive alternatives. The means may fit the ends only because the ends were defined with the means in mind. In this case, for example, the City has expressed an aesthetic judgment that signs on public property constitute visual clutter throughout the City and that its objective is to eliminate visual clutter. We are then asked to determine whether that objective could have been achieved with less restriction of speech. But to ask the question is to highlight the circularity of the inquiry. Since the goal, at least as currently expressed, is essentially to eliminate all signs, the only available means of achieving that goal is to eliminate all signs.

The ease with which means can be equated with aesthetic ends only confirms the importance of close judicial scrutiny of the substantiality of such ends. See supra, at 2139–2140. In this case, for example, it is essential that the Court assess the City's ban on signs by evaluating whether the City has a substantial interest in eliminating the visual clutter caused by all posted signs throughout the City—as distinguished from an interest in banning signs in some areas or in preventing densely packed signs. If, in fact, either of the latter two objectives constitute the substantial interest underlying this ordinance, they could be achieved by means far less restrictive *827 of speech than a total ban on signs, and the ban, therefore, would be invalid.

C

Regrettably, the Court's analysis is seriously inadequate. Because the Court has failed to develop a reliable means of gauging the nature or depth of the City's commitment to pursuing the goal of eradicating "visual clutter," it simply approves the ordinance with only the most cursory degree of judicial oversight. Without stopping to consider carefully whether this supposed commitment is genuine or substantial, the Court essentially defers to the City's aesthetic judgment and in so doing precludes serious assessment of the availability of alternative means.

The Court begins by simply affirming that "[t]he problem addressed by this ordinance—the visual assault on the citizens of **2141 Los Angeles presented by an accumulation of signs posted on public property—constitutes a significant substantive end within the City's power to prohibit." Ante, at 2130. Then, addressing the availability of less restrictive alternatives, the Court can do little more than state the unsurprising conclusion that "[b]y banning these signs, the City did no more than eliminate the exact source of the evil it sought to remedy." Ante, at 2131. Finally, as if to explain the ease with which it reaches its conclusion, the Court notes that "[w]ith respect to signs posted by appellees ... it is the tangible medium of expressing the message that has adverse impact on the appearance of the landscape." Ante, at 2132. But, as I have demonstrated, it is precisely the ability of the State to make this judgment that should lead us to approach these cases with more caution.

III

The fact that there are difficulties inherent in judicial review of aesthetics-based restrictions of speech does not imply *828 that government may not engage in such activities. As I have said, improvement and preservation of the aesthetic environment are often legitimate and important governmental functions. But because the implementation of these functions creates special dangers to our First Amendment freedoms,

  

there is a need for more stringent judicial scrutiny than the Court seems willing to exercise.

In cases like this, where a total ban is imposed on a particularly valuable method of communication, a court should require the government to provide tangible proof of the legitimacy and substantiality of its aesthetic objective. Justifications for such restrictions articulated by the government should be critically examined to determine whether the government has committed itself to addressing the identified aesthetic problem.

In my view, such statements of aesthetic objectives should be accepted as substantial and unrelated to the suppression of speech only if the government demonstrates that it is pursuing an identified objective seriously and comprehensively and in ways that are unrelated to the restriction of speech. Metromedia, 453 U.S., at 531, 101 S.Ct., at 2904 (BRENNAN, J., concurring in judgment). Without such a demonstration, I would invalidate the restriction as violative of the First Amendment. By requiring this type of showing, courts can ensure that governmental regulation of the aesthetic environment remains within the constraints established by the First Amendment. First, we would have a reasonably reliable indication that it is not the content or communicative aspect of speech that the government finds unaesthetic. Second, when a restriction of speech is part of a comprehensive and seriously pursued program to promote an aesthetic objective, we have a more reliable indication of the government's own assessment of the substantiality of its objective. And finally, when an aesthetic objective is pursued on more than one front, we have a better basis upon which to ascertain its precise nature ***829** and thereby determine whether the means selected are the least restrictive ones for achieving the objective.[6]

****2142** This does not mean that a government must address all aesthetic problems at one time or that a government should hesitate to pursue aesthetic objectives. What it does mean, however, is that when such an objective is pursued, it may not be pursued solely at the expense of First Amendment freedoms, nor may it be pursued by arbitrarily discriminating against a form of speech that has the same aesthetic characteristics as other forms of speech that are also present in the community. See Metromedia, supra, at 531–534, 101 S.Ct., at 2904–2906 (BRENNAN, J., concurring in judgment).

Accordingly, in order for Los Angeles to succeed in defending its total ban on the posting of signs, the City would have to demonstrate that it is pursuing its goal of eliminating visual clutter in a serious and comprehensive manner. Most importantly, the City would have to show that it is pursuing its goal through programs other than its ban on signs, that at least some of those programs address the visual clutter problem through means that do not entail the restriction of speech, and that the programs parallel the ban in their stringency, geographical scope, and aesthetic focus. In this case, however, as the Court of Appeals found, there is no indication that the City has addressed its visual clutter problem in any way other than by prohibiting the posting of signs— ***830** throughout the City and without regard to the density of their presence. 682 F.2d 847, 852 (CA9 1982). Therefore, I would hold that the prohibition violates appellees' First Amendment rights.

In light of the extreme stringency of Los Angeles' ban —barring all signs from being posted—and its wide geographical scope—covering the entire City—it might be difficult for Los Angeles to make the type of showing I have suggested. Cf. Metromedia, supra 453 U.S., at 533–534, 101 S.Ct., at 2905–2906. A more limited approach to the visual clutter problem, however, might well pass constitutional muster. I have no doubt that signs posted on public property in certain areas—including, perhaps, parts of Los Angeles—could contribute to the type of eyesore that a city would genuinely have a substantial interest in eliminating. These areas might include parts of the City that are particularly pristine, reserved for certain uses, designated to reflect certain themes, or so blighted that broad-gauged renovation is necessary. Presumably, in these types of areas, the City would also regulate the aesthetic environment in ways other than the banning of temporary signs. The City might zone such areas for a particular type of development or lack of development; it might actively create a particular type of environment; it might be especially vigilant in keeping the area clean; it might regulate the size and location of permanent signs; or it might reserve particular locations, such as kiosks, for the posting of temporary signs. Similarly, Los Angeles might be able to attack its visual clutter problem in more areas of the City by reducing the stringency of the ban, perhaps by regulating the density of temporary signs, and coupling that approach with additional measures designed to reduce other forms of visual clutter. There are a variety of ways that the aesthetic environment can be regulated, some restrictive of speech and others not, but it is only when aesthetic regulation is addressed in a comprehensive and focused manner that we can ensure that the ***831** goals pursued are substantial and that the manner in which they are pursued is no more restrictive of speech than is necessary.

  

In the absence of such a showing in this case, I believe that Los Angeles' total ban **2143 sweeps so broadly and trenches so completely on appellees' use of an important medium of political expression that it must be struck down as violative of the First Amendment.[7]

I therefore dissent.

**All Citations**

466 U.S. 789, 104 S.Ct. 2118, 80 L.Ed.2d 772

Footnotes

a1 The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See United States v. Detroit Lumber Co., 200 U.S. 321, 337, 26 S.Ct. 282, 287, 50 L.Ed. 499.

1 The ordinance reads as follows:
"Sec. 28.04. Hand-bills, signs-public places and objects:
"(a) No person shall paint, mark or write on, or post or otherwise affix, any hand-bill or sign to or upon any sidewalk, crosswalk, curb, curbstone, street lamp post, hydrant, tree, shrub, tree stake or guard, railroad trestle, electric light or power or telephone or telegraph or trolley wire pole, or wire appurtenance thereof or upon any fixture of the fire alarm or police telegraph system or upon any lighting system, public bridge, drinking fountain, life buoy, life preserver, life boat or other life saving equipment, street sign or traffic sign.
"(b) Nothing in this section contained shall apply to the installation of terrazzo sidewalks or sidewalks of similar construction, sidewalks permanently colored by an admixture in the material of which the same are constructed, and for which the Board of Public Works has granted a written permit.
"(c) Any hand-bill or sign found posted, or otherwise affixed upon any public property contrary to the provisions of this section may be removed by the Police Department or the Department of Public Works. The person responsible for any such illegal posting shall be liable for the cost incurred in the removal thereof and the Department of Public Works is authorized to effect the collection of said cost.
"(d) Nothing in this section shall apply to the installation of a metal plaque or plate or individual letters or figures in a sidewalk commemorating an historical, cultural, or artistic event, location or personality for which the Board of Public Works, with the approval of the Council, has granted a written permit.
"(e) Nothing in this section shall apply to the painting of house numbers upon curbs done under permits issued by the Board of Public Works under and in accordance with the provisions of Section 62.96 of this Code."

2 The First Amendment provides: "Congress shall make no law ... abridging the freedom of speech, or of the press...." Under the Fourteenth Amendment, city ordinances are within the scope of this limitation on governmental authority. Lovell v. Griffin, 303 U.S. 444, 58 S.Ct. 666, 82 L.Ed. 949 (1938).

3 The first 10 signs identified on the March 9 weekly report were:

| | |
|---|---|
| "Leonard's Nite Club | 11 |
| Alamar Travel Bureau Inc. | 5 |
| The Item—Madam Wongs | 13 |
| Salon Broadway | 14 |
| Vernon Auditorium—Apache Jupiter | 20 |
| Raul Palomo, Jr. | 12 |
| Roland Vincent | 48 |
| The American Club | 2 |
| Rose Royce | 11 |
| Total Experience | 13" |

App. 73.

4 For convenience we shall refer to these parties as simply as the "City."

5 App. to Juris. Statement 17a.

6 Id., at 18a.
"The Los Angeles Planning and Zoning Code was enacted in part to encourage the most appropriate use of land; to conserve and stabilize the value of property; to provide adequate open spaces for light and air; to prevent and fight fire; to lessen congestion on streets; to facilitate adequate provisions for community utilities and facilities and to promote health, safety, and the general welfare, all in accordance with a comprehensive plan." Finding 11, App. to Juris. Statement 17a.

7 App. to Juris. Statement 18a. The District Court's Finding 14 reads, in full, as follows:

  

"The large number of signs illegally posted on the items of public and utility property enumerated in Section 28.04 constitute a clutter and visual blight. The posting of signs on utility pole cross wires for which the plaintiffs [seek] authorization would add somewhat to the blight and inevitably would encourage greatly increased posting in other unauthorized and unsightly places by people not aware of the distinction the plaintiffs seek to make."

8 Finding 17, App. to Juris. Statement 18a.

9 Finding 18, App. to Juris. Statement 18a.

10 Conclusion of Law No. 5, App. to Juris. Statement 19a.

11 Nevertheless, the court acknowledged that should subsequent experience with a less comprehensive prohibition prove ineffective in achieving the City's goals, it might reenact the very ordinance the court had just struck down. As authority for this procedure, the court cited Ratner, The Function of the Due Process Clause, 116 U.Pa.L.Rev. 1048, 1110–1111 (1968).

12 The question before the Court was whether Stromberg could constitutionally be convicted for displaying a red flag as a symbol of opposition to organized government. Stromberg was a supervisor at a summer camp for children. The camp's curriculum stressed class consciousness and the solidarity of workers. Each morning at the camp a red flag was raised and the children recited a pledge of allegiance to the "workers' flag." The statute under which Stromberg was convicted prohibited peaceful display of a symbol of opposition to organized government. The Court wrote:

"The maintenance of the opportunity for free political discussion to the end that government may be responsive to the will of the people and that changes may be obtained by lawful means, an opportunity essential to the security of the Republic, is a fundamental principle of our constitutional system. A statute which upon its face, and as authoritatively construed, is so vague and indefinite as to permit the punishment of the fair use of this opportunity is repugnant to the guaranty of liberty contained in the Fourteenth Amendment. The ... statute being invalid upon its face, the conviction of the appellant ... must be set aside." 283 U.S., at 369–370, 51 S.Ct., at 536.

13 Lovell was convicted of distributing religious pamphlets without a license. A local ordinance required a license to distribute any literature, and gave the chief of police the power to deny a license in order to abate anything he considered to be a "nuisance." The Court wrote:

"We think that the ordinance is invalid on its face. Whatever the motive which induced its adoption, its character is such that it strikes at the very foundation of the freedom of the press by subjecting it to license and censorship. The struggle for the freedom of the press was primarily directed against the power of the licensor. It was against that power that John Milton directed his assault by his 'Appeal for the Liberty of Unlicensed Printing.' And the liberty of the press became initially a right to publish 'without a license what formerly could be published only with one.' While this freedom from previous restraint upon publication cannot be regarded as exhausting the guaranty of liberty, the prevention of that restraint was a leading purpose in the adoption of the constitutional provision." 303 U.S., at 451–452, 58 S.Ct., at 669 (footnote omitted).

14 In Stromberg, the only justification for the statute was the suppression of ideas. In Lovell, since no attempt was made to tailor the licensing requirement to a substantive evil unrelated to the suppression of ideas, the statute created an unacceptable risk that it would be used to suppress. Under such statutes, any enforcement carries with it the risk that the enforcement is being used merely to suppress speech, since the statute is not aimed at a substantive evil within the power of the government to prohibit.

15 Subsequent cases have continued to employ facial invalidation where it was found that every application of the statute created an impermissible risk of suppression of ideas. See Saia v. New York, 334 U.S. 558, 68 S.Ct. 1148, 92 L.Ed. 1574 (1948) (ordinance prohibited use of loudspeaker in public places without permission of the chief of police whose discretion was unlimited); Cantwell v. Connecticut, 310 U.S. 296, 60 S.Ct. 900, 84 L.Ed. 1213 (1940) (ordinance required license to distribute religious literature without standards for the exercising of licensing discretion); Schneider v. State, 308 U.S. 147, 60 S.Ct. 146, 84 L.Ed. 155 (1939) (ordinances prohibited distributing leaflets without a license and provided no standards for issuance of licenses); Hague v. CIO, 307 U.S. 496, 516, 59 S.Ct. 954, 964, 83 L.Ed. 1423 (1939) (plurality opinion) (statute permitted city to deny permit for a public demonstration subject only to the uncontrolled discretion of the director of public safety).

16 "It is not merely the sporadic abuse of power by the censor but the pervasive threat inherent in its very existence that constitutes the danger to freedom of discussion. One who might have had a license for the asking may therefor call into question the whole scheme of licensing when he is prosecuted for failure to procure it. A like threat is inherent in a penal statute, like that in question here, which does not aim specifically at evils within the allowable area of state control but, on the contrary, sweeps within its ambit other activities that in ordinary circumstances constitute an exercise of freedom of speech or of the press. The existence of such a statute, which readily lends itself to harsh and discriminatory enforcement by local prosecuting officials, against particular groups deemed to merit their displeasure, results in a continuous and

  

pervasive restraint on all freedom of discussion that might reasonably be regarded as within its purview." 310 U.S., at 97–98, 60 S.Ct., at 742 (citation omitted).

17 A representative statement of the doctrine is found in Gooding v. Wilson, 405 U.S. 518, 92 S.Ct. 1103, 31 L.Ed.2d 408 (1972).

"At least when statutes regulate or proscribe speech and when 'no readily apparent construction suggests itself as a vehicle for rehabilitating the statutes in a single prosecution,' Dombrowski v. Pfister, 380 U.S. 479, 491, 85 S.Ct. 1116, 1123, 14 L.Ed.2d 22 (1965), the transcendent value to all society of constitutionally protected expression is deemed to justify allowing 'attacks on overly broad statutes with no requirement that the person making the attack demonstrate that his own conduct could not be regulated by a statute drawn with the requisite narrow specificity,' id., at 486, 85 S.Ct., at 1121. This is deemed necessary because persons whose expression is constitutionally protected may well refrain from exercising their rights for fear of criminal sanctions provided by a statute susceptible of application to protected expression." Id., 405 U.S., at 520–521, 92 S.Ct., at 1105 (citations omitted).

See also, e.g., Dombrowski v. Pfister, 380 U.S. 479, 494, 85 S.Ct. 1116, 1125, 14 L.Ed.2d 22 (1965).

18 See also CSC v. Letter Carriers, 413 U.S. 548, 580–581, 93 S.Ct. 2880, 2897–2898, 37 L.Ed.2d 796 (1973).

19 "We have never held that a statute should be held invalid on its face merely because it is possible to conceive of a single impermissible application, and in that sense a requirement of substantial overbreadth is already implicit in the doctrine." Broadrick, 413 U.S., at 630, 93 S.Ct., at 2925 (BRENNAN, J., dissenting).

"Simply put, the doctrine asserts that an overbroad regulation of speech or publication may be subject to facial review and invalidation, even though its application in the instant case is constitutionally unobjectionable. Thus, a person whose activity could validly be suppressed under a more narrowly drawn law is allowed to challenge an overbroad law because of its application to others. The bare possibility of unconstitutional application is not enough; the law is unconstitutionally overbroad only if it reaches substantially beyond the permissible scope of legislative regulation. Thus, the issue under the overbreadth doctrine is whether a government restriction of speech that is arguably valid as applied to the case at hand should nevertheless be invalidated to avoid the substantial prospect of unconstitutional application elsewhere." Jeffries, Rethinking Prior Restraint, 92 Yale L.J. 409, 425 (1983) (emphasis supplied).

However, where the statute unquestionably attaches sanctions to protected conduct, the likelihood that the statute will deter that conduct is ordinarily sufficiently great to justify an overbreadth attack. Erznoznik v. City of Jacksonville, 422 U.S. 205, 217, 95 S.Ct. 2268, 2276–2277, 45 L.Ed.2d 125 (1975).

20 Brief for Appellees 22, n. 16. In his affidavit in support of the motion for partial summary judgment, the president of COGS stated:

"No COGS signs are posted on sidewalk surfaces, streetlamp posts, hydrants, trees, shrubs, treestacks or guards, vertical utility poles, fire alarm or police telegraph systems, drinking fountains, lifebuoys, life preservers, lifesaving equipment or street or traffic signs."

21 See App. 148.

22 The fact that the ordinance is capable of valid applications does not necessarily mean that it is valid as applied to these litigants. We may not simply assume that the ordinance will always advance the asserted state interests sufficiently to justify its abridgment of expressive activity. Landmark Communications, Inc. v. Virginia, 435 U.S. 829, 844, 98 S.Ct. 1535, 1544, 56 L.Ed.2d 1 (1978). See also Brown v. Socialist Workers '74 Campaign Committee, 459 U.S. 87, 95–98, 103 S.Ct. 416, 421–423, 74 L.Ed.2d 250 (1983); In re Primus, 436 U.S. 412, 433–438, 98 S.Ct. 1893, 1905–1908, 56 L.Ed.2d 417 (1978); Buckley v. Valeo, 424 U.S. 1, 45–48, 68–74, 96 S.Ct. 612, 647–649, 658–661, 46 L.Ed.2d 659 (1976) (per curiam); Police Department of Chicago v. Mosley, 408 U.S. 92, 100–101, 92 S.Ct. 2286, 2292–2293, 33 L.Ed.2d 212 (1972); Stanley v. Georgia, 394 U.S. 557, 566–567, 89 S.Ct. 1243, 1248–1249, 22 L.Ed.2d 542 (1969); United States v. Robel, 389 U.S. 258, 264, 267, 88 S.Ct. 419, 423–424, 425, 19 L.Ed.2d 508 (1967); Mine Workers v. Illinois Bar Assn., 389 U.S. 217, 222–223, 88 S.Ct. 353, 356–357, 19 L.Ed.2d 426 (1967); NAACP v. Alabama ex rel. Patterson, 357 U.S. 449, 462–465, 78 S.Ct. 1163, 1171–1173, 2 L.Ed.2d 1488 (1958).

23 Although Taxpayers would presumably devote the resources now expended on posting political signs on public property to other forms of communication if they complied with the ordinance, we shall assume that the ordinance diminishes the total quantity of their speech.

24 Justice Reed wrote:

"The unwilling listener is not like the passer-by who may be offered a pamphlet in the street but cannot be made to take it. In his home or on the street he is practically helpless to escape this interference with his privacy by loud speakers except through the protection of the municipality.

  

"City streets are recognized as a normal place for the exchange of ideas by speech or paper. But this does not mean the freedom is beyond all control. We think it is a permissible exercise of legislative discretion to bar sound trucks with broadcasts of public interest, amplified to a loud and raucous volume, from the public ways of municipalities. On the business streets of cities like Trenton, with its more than 125,000 people, such distractions would be dangerous to traffic at all hours useful for the dissemination of information, and in the residential thoroughfares the quiet and tranquility so desirable for city dwellers would likewise be at the mercy of advocates of particular religious, social or political persuasions. We cannot believe that rights of free speech compel a municipality to allow such mechanical voice amplification on any of its streets." 336 U.S., at 86–87, 69 S.Ct., at 453–454 (plurality opinion).

A majority of the Court agreed with this analysis. See id., at 96–97, 69 S.Ct., at 458–459 (Frankfurter, J., concurring); id., at 97–98, 69 S.Ct., at 458–459 (Jackson, J., concurring).

25 The Court of Appeals relied on Justice BRENNAN's opinion concurring in the judgment in Metromedia to support its conclusion that the City's interest in esthetics was not sufficiently substantial to outweigh the constitutional interest in free expression unless the City proved that it had undertaken a comprehensive and coordinated effort to remove other elements of visual clutter within San Diego. This reliance was misplaced because Justice BRENNAN's analysis was expressly rejected by a majority of the Court. Moreover, Justice BRENNAN was concerned that the San Diego ordinance might not in fact have a substantial salutary effect on the appearance of the city because it did not ameliorate other types of visual clutter beside billboards, see 453 U.S., at 530–534, 101 S.Ct., at 2904–2906, thus suggesting that in fact it had been applied to areas where it did not advance the interest in esthetics sufficiently to justify an abridgment of speech.

26 Similarly, THE CHIEF JUSTICE wrote that a city has the power to regulate visual clutter in much the same manner that it can regulate any other feature of its environment: "Pollution is not limited to the air we breathe and the water we drink; it can equally offend the eye and ear." Id., at 561, 101 S.Ct., at 2920 (dissenting opinion).

27 In Metromedia, a majority of the Court concluded that a prohibition on billboards was narrowly tailored to the visual evil San Diego sought to correct. See 453 U.S., at 510–512, 101 S.Ct., at 2893–2895 (plurality opinion); id., at 549–553, 101 S.Ct., at 2913–2916 (STEVENS, J., dissenting in part); id., at 560–561, 101 S.Ct., at 2919–2920 (BURGER, C.J., dissenting); id., at 570, 101 S.Ct., at 2924–2925 (REHNQUIST, J., dissenting).

28 "In the first place, whether onsite advertising is permitted or not, the prohibition of offsite advertising is directly related to the stated objectives of traffic safety and esthetics. This is not altered by the fact that the ordinance is underinclusive because it permits onsite advertising." 453 U.S., at 511, 101 S.Ct., at 2894.

"Third, San Diego has obviously chosen to value one kind of commercial speech—onsite advertising—more than another kind of commercial speech—offsite advertising. The ordinance reflects a decision by the city that the former interest, but not the latter, is stronger than the city's interests in traffic safety and esthetics. The city has decided that in a limited instance—onsite commercial advertising—its interests should yield. We do not reject that judgment." Id., at 512, 101 S.Ct., at 2895.

THE CHIEF JUSTICE, Justice REHNQUIST, and Justice STEVENS agreed with the plurality on this point. Id., at 541, 101 S.Ct., at 2909–2910 (STEVENS, J., dissenting in part); id., at 563–564, 101 S.Ct., at 2921–2922 (BURGER, C.J., dissenting); id., at 570, 101 S.Ct., at 2924–2925 (REHNQUIST, J., dissenting).

29 Cf. Schneider v. State, 308 U.S., at 163, 60 S.Ct., at 151–152 ("[O]ne is not to have the exercise of his liberty of expression in appropriate places abridged on the plea that it may be exercised in some other place").

30 Although the Court has shown special solicitude for forms of expression that are much less expensive than feasible alternatives and hence may be important to a large segment of the citizenry, see, e.g., Martin v. Struthers, 319 U.S. 141, 146, 63 S.Ct. 862, 865, 87 L.Ed. 1313 (1943) ("Door to door distribution of circulars is essential to the poorly financed causes of little people"), this solicitude has practical boundaries, see, e.g., Kovacs v. Cooper, 336 U.S. 77, 88–89, 69 S.Ct. 448, 454, 93 L.Ed. 514 (1949) ("That more people may be more easily and cheaply reached by sounds trucks ..., is not enough to call forth constitutional protection for what those charged with public welfare reasonably think is a nuisance when easy means of publicity are open"). See also Metromedia, Inc. v. San Diego, 453 U.S., at 549–550, 101 S.Ct., at 2913–2914 (STEVENS, J., dissenting in part) (ban on graffiti constitutionally permissible even though some creators of graffiti may have no equally effective alternative means of public expression).

31 Any tangible property owned by the government could be used to communicate—bumper stickers may be placed on official automobiles—and yet appellees could not seriously claim the right to attach "Taxpayer for Vincent" bumper stickers to city-owned automobiles. At some point, the government's relationship to things under its dominion and control is virtually identical to a private owner's property interest in the same kinds of things, and in such circumstances, the State, "no less than a private owner of property, has power to preserve the property under its control for the use to which it is lawfully dedicated." Adderley v. Florida, 385 U.S. 39, 47, 87 S.Ct. 242, 247, 17 L.Ed.2d 149 (1966).

  

32 Just as it is not dispositive to label the posting of signs on public property as a discrete medium of expression, it is also of limited utility in the context of this case to focus on whether the tangible property itself should be deemed a public forum. Generally an analysis of whether property is a public forum provides a workable analytical tool. However, "the analytical line between a regulation of the 'time, place, and manner' in which First Amendment rights may be exercised in a traditional public forum, and the question of whether a particular piece of personal or real property owned or controlled by the government is in fact a 'public forum' may blur at the edges," United States Postal Service v. Greenburgh Civic Assn., 453 U.S. 114, 132, 101 S.Ct. 2676, 2686, 69 L.Ed.2d 517 (1981), and this is particularly true in cases falling between the paradigms of government property interests essentially mirroring analogous private interests and those clearly held in trust, either by tradition or recent convention, for the use of citizens at large.

33 See generally Mine Workers v. Illinois State Bar Assn., 389 U.S. 217, 223, 88 S.Ct. 353, 356–357, 19 L.Ed.2d 426 (1967).

34 Taxpayers and COGS also argue that the ordinance violates the Equal Protection Clause of the Fourteenth Amendment because (1) it contains certain exceptions for street banners and certain permanent signs such as commemorative plaques, and (2) it gives property owners, who may authorize the posting of signs on their own premises, an advantage over nonproperty owners in political campaigns. These arguments do not appear to have been addressed by the Court of Appeals.

1 According to the Court of Appeals, street inspection personnel removed 51,662 illegally posted signs between January 1, 1980, and May 24, 1980. 682 F.2d 847, 853, n. 6 (1982).

2 Of course, a content-neutral restriction must also leave open ample alternative avenues of communication. See supra, at 2122–2123.

3 Safety, health, and national security have their subjective aspects as well, but they are not wholly subjective. When these objectives are invoked to justify a restriction of speech, courts can broadly judge their plausibility. This is not true of aesthetics.

4 As one scholar has stated:
"Aesthetic policy, as currently formulated and implemented at the federal, state, and local levels, often partakes more of high farce than of the rule of law. Its purposes are seldom accurately or candidly portrayed, let alone understood, by its most vehement champions. Its diversion to dubious or flatly deplorable social ends undermines the credit that it may merit when soundly conceived and executed. Its indiscriminate, often quixotic demands have overwhelmed legal institutions, which all too frequently have compromised the integrity of legislative, administrative, and judicial processes in the name of 'beauty.' " Costonis, Law and Aesthetics: A Critique and A Reformation of the Dilemmas, 80 Mich.L.Rev. 355 (1982).

5 The fact that a ban on temporary signs applies to all signs does not necessarily imply content-neutrality. Because particular media are often used disproportionately for certain types of messages, a restriction that is content-neutral on its face may, in fact, be content-hostile. Cf. Stone, Fora Americana: Speech in Public Places, 1974 S.Ct.Rev. 233, 257.

6 It is theoretically, though remotely, possible that a form of speech could be so distinctively unaesthetic that a comprehensive program aimed at eliminating the eyesore it causes would apply only to the unpleasant form of speech. Under the approach I suggest, such a program would be invalid because it would only restrict speech, and the community, therefore, would have to tolerate the displeasing form of speech. This is no doubt a disadvantage of the approach. But at least when the form of speech that is restricted constitutes an important medium of communication and when the restriction would effect a total ban on the use of that medium, that is the price we must pay to protect our First Amendment liberties from those who would use aesthetics alone as a cloak to abridge them.

7 Although the Court does not reach the question, appellants argue that the City's interest in traffic safety provides an independent and significant justification for its ban on signs. As the Court of Appeals concluded, however, "[t]he City has not offered to prove facts that raise any genuine issue regarding traffic safety hazards with respect to the posting of signs on many of the objects covered by the ordinance." 682 F.2d, at 852.

End of Document

101 S.Ct. 2882
Supreme Court of the United States

# METROMEDIA, INC., et al., Appellants,

v.

# CITY OF SAN DIEGO et al.

No. 80–195.
|
Argued Feb. 25, 1981.
|
Decided July 2, 1981.

**Synopsis**

Billboard owners brought action to enjoin a city's enforcement of a billboard ordinance. The California Supreme Court, 26 Cal.3d 848, 164 Cal.Rptr. 510, 610 P.2d 407, reversed a judgment enjoining enforcement. The Supreme Court noted probable jurisdiction of appeal. The Supreme Court, Justice White, held that: (1) goals sought to be furthered by the ordinance, i. e., traffic safety and appearance of city, were substantial governmental goals, and ordinance, which did not prohibit all billboards but allowed onsite advertising and some other specifically exempted signs, was not broader then necessary; (2) judgments of local lawmakers and of many reviewing courts that billboards are real and substantial hazards to traffic safety are not unreasonable; (3) city could perceive billboards, by their very nature and wherever located and however constructed, as "esthetic harm"; and (4) in pursuing goals of esthetics and traffic safety, city could reasonably distinguish between onsite and offsite advertising on same property; but (5) absent any explanation why noncommercial billboards located in places where commercial billboards were permitted would be more threatening to safe driving or would detract more from beauty of city, city could not by ordinance choose to limit contents of billboards to commercial messages; and (6) the ordinance insofar as permitting various kinds of noncommercial signs but not other noncommercial signs infringed upon free speech rights.

Reversed and remanded.

Justice Brennan filed an opinion, in which Justice Blackmun joined, concurring in the judgment.

Justice Stevens dissented in part and filed opinion.

Chief Justice Burger dissented and filed opinion.

Justice Rehnquist dissented and filed opinion.

Opinion on remand, 32 Cal.3d 180, 185 Cal.Rptr. 260, 649 P.2d 902.

West Headnotes (10)

[1] **Courts** Operation and effect in general

Summary actions do not have same authority in the United States Supreme Court as do decisions rendered after plenary consideration, and do not present same justification for declining to reconsider prior decision as do decisions rendered after argument and with full opinion.

25 Cases that cite this headnote

[2] **Constitutional Law** Billboards

**Constitutional Law** Signs and billboards

As with other media, government has legitimate interests in controlling noncommunicative aspects of the billboard medium, but First and Fourteenth Amendments foreclose similar interest in controlling the communicative aspects. U.S.C.A.Const. Amends. 1, 14.

136 Cases that cite this headnote

[3] **Constitutional Law** Billboards

Goals sought to be furthered by billboard-regulating ordinance, i. e., traffic safety and appearance of city, were substantial governmental goals, and ordinance, which did not prohibit all billboards but allowed onsite advertising and some other specifically exempted signs, was not broader than necessary. U.S.C.A.Const. Amend. 1.

  

433 Cases that cite this headnote

[4] **Highways** Billboards and highway beautification in general

Judgments of local lawmakers and of many reviewing courts that billboards are real and substantial hazards to traffic safety are not unreasonable. U.S.C.A.Const. Amend. 1.

62 Cases that cite this headnote

[5] **Zoning and Planning** Signs and billboards

City could perceive billboards, by their very nature and wherever located and however constructed, as "esthetic harm." U.S.C.A.Const. Amend. 1.

30 Cases that cite this headnote

[6] **Zoning and Planning** Signs and billboards

In pursuing goals of esthetics and traffic safety, city could reasonably distinguish between onsite and offsite advertising on same property, in view of fact that city could believe that offsite advertising presented more acute problem and that commercial enterprise as well as interested public had stronger interest in identifying place of business and advertising products or services available there than in using or leasing available space to advertise commercial enterprises located elsewhere. U.S.C.A.Const. Amend. 1.

196 Cases that cite this headnote

[7] **Constitutional Law** Billboards

Absent any explanation why noncommercial billboards located in places where commercial billboards were permitted would be more threatening to safe driving or would detract more from beauty of city, city could not by ordinance choose to limit content of billboards to commercial messages. (Per Justice White with three Justices concurring, with two Justices concurring in the judgment and one Justice concurring in part in the opinion but dissenting in part therefrom and from the judgment.) U.S.C.A.Const. Amend. 1.

241 Cases that cite this headnote

[8] **Constitutional Law** Billboards

City may distinguish between relative value of different categories of commercial speech, but does not have same range of choice in area of noncommercial speech to evaluate strength of, or distinguish between, various communicative interests, and, as to noncommercial speech, city may not choose appropriate subjects for public discourse, and thus billboard ordinance, insofar as containing exceptions that permitted various kinds of noncommercial signs, infringed upon constitutional rights of speech. (Per Justice White with three Justices concurring, two Justices concurring in the judgment and one Justice concurring in part in the opinion but dissenting in part therefrom and from the judgment.) U.S.C.A.Const. Amend. 1.

326 Cases that cite this headnote

[9] **Constitutional Law** Signs and billboards

Where First Amendment interests and commercial speech were not sufficient to prevent city from prohibiting offsite commercial advertisements, no different result would be reached under due process clause. (Per Justice White with three Justices concurring, two Justices concurring in the judgment and one Justice concurring in part in the opinion but dissenting in part therefrom and from the judgment.) U.S.C.A.Const. Amends. 1, 5, 14.

75 Cases that cite this headnote

[10] **Federal Courts** Review of State Courts

Though United States Supreme Court found that billboard ordinance was unconstitutional, it was responsibility of state court to determine meaning and application of severability clause of ordinance. (Per Justice White with three Justices concurring, two Justices concurring in the judgment and one Justice concurring in part

  

in the opinion but dissenting in part therefrom and from the judgment.)

12 Cases that cite this headnote

**2883 *Syllabus*[*]

*490 Appellee city of San Diego enacted an ordinance which imposes substantial prohibitions on the erection of outdoor advertising displays within the city. The stated purpose of the ordinance is "to eliminate hazards to pedestrians and motorists brought about by distracting sign displays" and "to preserve and improve the appearance of the City." The ordinance permits onsite commercial advertising (a sign advertising goods or services available on the property where the sign is located), but forbids other commercial advertising and noncommercial advertising using fixed-structure signs, unless permitted by 1 of the ordinance's 12 specified exceptions, such as temporary political campaign signs. Appellants, companies that were engaged in the outdoor advertising business in the city when the ordinance was passed, brought suit in state court to enjoin enforcement of **2884 the ordinance. The trial court held that the ordinance was an unconstitutional exercise of the city's police power and an abridgment of appellants' First Amendment rights. The California Court of Appeal affirmed on the first ground alone, but the California Supreme Court reversed, holding, *inter alia*, that the ordinance was not facially invalid under the First Amendment.

*Held*: The judgment is reversed, and the case is remanded. Pp. 2887–2899; 2902–2909.

26 Cal.3d 848, 164 Cal.Rptr. 510, 610 P.2d 407, reversed and remanded.

Justice WHITE, joined by Justice STEWART, Justice MARSHALL, and Justice POWELL, concluded that the ordinance is unconstitutional on its face. Pp. 2887–2899.

(a) As with other media of communication, the government has legitimate interests in controlling the noncommunicative aspects of billboards, but the First and Fourteenth Amendments foreclose similar interests in controlling the communicative aspects of billboards. Because regulation of the noncommunicative aspects of a medium often impinges to some degree on the communicative aspects, the courts must reconcile the government's regulatory interests with the individual's right to expression. Pp. 2889–2890.

(b) Insofar as it regulates commercial speech, the ordinance meets the constitutional requirements of *491 *Central Hudson Gas & Electric Corp. v. Public Service Comm'n*, 447 U.S. 557, 100 S.Ct. 2343, 65 L.Ed.2d 341. Improving traffic safety and the appearance of the city are substantial governmental goals. The ordinance directly serves these goals and is no broader than necessary to accomplish such ends. Pp. 2890–2895.

(c) However, the city's general ban on signs carrying noncommercial advertising is invalid under the First and Fourteenth Amendments. The fact that the city may value commercial messages relating to onsite goods and services more than it values commercial communications relating to offsite goods and services does not justify prohibiting an occupant from displaying his own ideas or those of others. Furthermore, because under the ordinance's specified exceptions some noncommercial messages may be conveyed on billboards throughout the commercial and industrial zones, the city must allow billboards conveying other noncommercial messages throughout those zones. The ordinance cannot be characterized as a reasonable "time, place, and manner" restriction. Pp. 2895–2897.

(d) Government restrictions on protected speech are not permissible merely because the government does not favor one side over another on a subject of public controversy. Nor can a prohibition of all messages carried by a particular mode of communication be upheld merely because the prohibition is rationally related to a nonspeech interest. Courts must protect First Amendment interests against legislative intrusion, rather than defer to merely rational legislative judgments in this area. Since the city has concluded that its official interests are not as strong as private interests in onsite commercial advertising, it may not claim that those same official interests outweigh private interests in noncommercial communications. Pp. 2897–2899.

Justice BRENNAN, joined by Justice BLACKMUN, concluded that in practical effect the city's ordinance constitutes a total ban on the use of billboards to communicate to the public messages of general applicability, whether commercial or noncommercial, and that under the appropriate First Amendment analysis a city may totally ban billboards only if it can show that a sufficiently substantial governmental interest is directly furthered thereby and that any more

narrowly drawn restriction would promote less well the achievement of that goal. Under this test, San Diego's ordinance is invalid since (1) the city failed to produce evidence demonstrating that billboards actually impair traffic safety in San Diego, (2) the ordinance is not narrowly drawn to accomplish the traffic safety goal, **2885 and (3) the city failed to show that its asserted interest in esthetics was sufficiently substantial in its commercial and industrial areas. Nor would an ordinance totally banning commercial billboards but allowing noncommercial billboards be constitutional, since *492 it would give city officials the discretion to determine in the first instance whether a proposed message is "commercial" or "noncommercial." Pp. 2902–2909.

**Attorneys and Law Firms**

Floyd Abrams, New York City, for appellants.

C. Alan Sumption, San Diego, Cal., for appellees.

**Opinion**

*493 Justice WHITE announced the judgment of the Court and delivered an opinion, in which Justice STEWART, Justice MARSHALL, and Justice POWELL joined.

This case involves the validity of an ordinance of the city of San Diego, Cal., imposing substantial prohibitions on the erection of outdoor advertising displays within the city.

I

Stating that its purpose was "to eliminate hazards to pedestrians and motorists brought about by distracting sign displays" and "to preserve and improve the appearance of the City," San Diego enacted an ordinance to prohibit "outdoor advertising display signs."[1] The California Supreme Court subsequently defined the term "advertising display sign" as "a rigidly assembled sign, display, or device permanently affixed to the ground or permanently attached to a building or other inherently permanent structure constituting, or used for the display of, a commercial or other advertisement to the public." *494 26 Cal.3d 848, 856, n. 2, 164 Cal.Rptr. 510, 513, n. 2, 610 P.2d, 410, n. 2 (1980). "Advertising display signs" include any sign that "directs attention to a product, service or activity, event, person, institution or business."[2]

The ordinance provides two kinds of exceptions to the general prohibition: onsite signs and signs falling within 12 specified **2886 categories. Onsite signs are defined as those

> "designating the name of the owner or occupant of the premises upon which such signs are placed, or identifying such premises; or signs advertising goods manufactured or produced or services rendered on the premises upon which such signs are placed."

The specific categories exempted from the prohibition include: government signs; signs located at public bus stops; signs manufactured, transported, or stored within the city, if not used for advertising purposes; commemorative historical plaques; religious symbols; signs within shopping malls; for sale and for lease signs; signs on public and commercial *495 vehicles; signs depicting time, temperature, and news; approved temporary, off-premises, subdivision directional signs; and "[t]emporary political campaign signs."[3] Under this scheme, on-site commercial advertising is permitted, *496 but other commercial advertising and noncommercial communications using fixed-structure signs are everywhere forbidden unless permitted by one of the specified exceptions.

Appellants are companies that were engaged in the outdoor advertising business in San Diego at the time the ordinance was passed. Each owns a substantial number of outdoor advertising displays (approximately 500 to 800) within the city. These signs are all located in areas zoned for commercial and industrial purposes, most of them on property leased by the owners to appellants for the purpose of maintaining billboards. Each sign has a remaining useful income-producing life of over 25 years, and each sign has a fair market value of between $2,500 and $25,000. Space on the signs was made available to "all comers" and the copy on each sign changed regularly, usually monthly.[4] The nature of the outdoor advertising business was described by the parties as follows:

> "Outdoor advertising is customarily purchased on the basis of a presentation or campaign requiring multiple exposure. Usually a large number of signs in a variety of locations are utilized to communicate a particular advertiser's message. An advertiser will generally purchase **2887 a 'showing' which would involve the utilization of a specific number of signs advertising the same message in a variety of locations throughout a metropolitan area."[5]

Although the purchasers of advertising space on appellants' signs usually seek to convey a commercial message, their

billboards have also been used to convey a broad range of noncommercial political and social messages.

***497** Appellants brought suit in state court to enjoin enforcement of the ordinance. After extensive discovery, the parties filed a stipulation of facts, including:

> "2. If enforced as written, Ordinance No. 10795 will eliminate the outdoor advertising business in the City of San Diego.
>
> —
>
> "28. Outdoor advertising increases the sales of products and produces numerous direct and indirect benefits to the public. Valuable commercial, political and social information is communicated to the public through the use of outdoor advertising. Many businesses and politicians and other persons rely upon outdoor advertising because other forms of advertising are insufficient, inappropriate and prohibitively expensive." Joint Stipulation of Facts Nos. 2, 28, App. 42a, 48a.

On cross-motions for summary judgment, the trial court held that the ordinance was an unconstitutional exercise of the city's police power and an abridgment of appellants' First Amendment rights. The California Court of Appeal affirmed on the first ground alone and did not reach the First Amendment argument. Without questioning any of the stipulated facts, including the fact that enforcement of the ordinance would "eliminate the outdoor advertising business in the City of San Diego," the California Supreme Court reversed. It held that the two purposes of the ordinance were within the city's legitimate interests and that the ordinance was "a proper application of municipal authority over zoning and land use for the purpose of promoting the public safety and welfare." 26 Cal.3d, at 858, 164 Cal.Rptr., at 514, 610 P.2d, at 411 (footnote omitted). The court rejected appellants' argument that the ordinance was facially invalid under the First Amendment. It relied on certain summary actions of this Court, dismissing for want of a substantial federal question appeals from several state-court decisions sustaining governmental restrictions ***498** on outdoor sign displays.[6] Appellants sought review in this Court, arguing that the ordinance was facially invalid on First Amendment grounds and that the city's threatened destruction of the outdoor advertising business was prohibited by the Due Process Clause of the Fourteenth Amendment. We noted probable jurisdiction. 449 U.S. 897, 101 S.Ct. 265, 66 L.Ed.2d 127.

II

Early cases in this Court sustaining regulation of and prohibitions aimed at billboards did not involve First Amendment considerations. See *Packer Corp. v. Utah*, 285 U.S. 105, 52 S.Ct. 273, 76 L.Ed. 643 (1932); *St. Louis Poster Advertising Co. v. St. Louis*, 249 U.S. 269, 39 S.Ct. 274, 63 L.Ed. 599 (1919); *Thomas Cusack Co. v. City of Chicago*, 242 U.S. 526, 37 S.Ct. 190, 61 L.Ed. 472 (1917).[7] Since those decisions, we have not given plenary consideration to ****2888** cases involving First Amendment challenges to statutes or ordinances limiting the use of billboards, preferring on several occasions summarily to affirm decisions sustaining state or local legislation directed at billboards.

*Suffolk Outdoor Advertising Co. v. Hulse*, 439 U.S. 808, 99 S.Ct. 66, 58 L.Ed.2d 101 (1978), involved a municipal ordinance that distinguished between offsite and onsite billboard advertising, prohibiting the former and permitting the latter. We summarily dismissed as not presenting a substantial federal question an appeal from a judgment sustaining the ordinance, thereby rejecting the submission, repeated in this case, that prohibiting ***499** offsite commercial advertising violates the First Amendment. The definition of "billboard," however, was considerably narrower in *Suffolk* than it is here: "A sign which directs attention to a business, commodity, service, entertainment, or attraction sold, offered or existing elsewhere than upon the same lot where such sign is displayed." This definition did not sweep within its scope the broad range of noncommercial speech admittedly prohibited by the San Diego ordinance. Furthermore, the Southampton, N.Y., ordinance, unlike that in San Diego, contained a provision permitting the establishment of public information centers in which approved directional signs for businesses could be located. This Court has repeatedly stated that although summary dispositions are decisions on the merits, the decisions extend only to "the precise issues presented and necessarily decided by those actions." *Mandel v. Bradley*, 432 U.S. 173, 176, 97 S.Ct. 2238, 2240, 53 L.Ed.2d 199 (1977); see also *Hicks v. Miranda*, 422 U.S. 332, 345, n. 14, 95 S.Ct. 2281, 2290, 45 L.Ed.2d 223 (1975); *Edelman v. Jordan*, 415 U.S. 651, 671, 94 S.Ct. 1347, 1359, 39 L.Ed.2d 662 (1974). Insofar as the San Diego ordinance is challenged on the ground that it prohibits noncommercial speech, the *Suffolk* case does not directly support the decision below.

  

The Court has summarily disposed of appeals from state-court decisions upholding state restrictions on billboards on several other occasions. *Markham Advertising Co. v. Washington*, 393 U.S. 316, 89 S.Ct. 553, 21 L.Ed.2d 512 (1969), and *Newman Signs, Inc. v. Hjelle*, 440 U.S. 901, 99 S.Ct. 1205, 59 L.Ed.2d 449 (1979), both involved the facial validity of state billboard prohibitions that extended only to certain designated roadways or to areas zoned for certain uses. The statutes in both instances distinguished between onsite commercial billboards and offsite billboards within the protected areas. Our most recent summary action was *Lotze v. Washington*, 444 U.S. 921, 100 S.Ct. 257, 62 L.Ed.2d 177 (1979), which involved an "as applied" challenge to a Washington prohibition on offsite signs. In that case, appellants erected, on their own property, billboards expressing their political and social views. Although billboards conveying information relating to the commercial ***500** use of the property would have been permitted, appellants' billboards were prohibited, and the state courts ordered their removal. We dismissed as not raising a substantial federal question an appeal from a judgment rejecting the First Amendment challenge to the statute.

**[1]** Insofar as our holdings were pertinent, the California Supreme Court was quite right in relying on our summary decisions as authority for sustaining the San Diego ordinance against First Amendment attack. *Hicks v. Miranda, supra*. As we have pointed out, however, summary actions do not have the same authority in this Court as do decisions rendered after plenary consideration, *Illinois State Board of Elections v. Socialist Workers Party*, 440 U.S. 173, 180–181, 99 S.Ct. 983, 988–989, 59 L.Ed.2d 230 (1979); *Edelman v. Jordan, supra*, 415 U.S. at 671, 94 S.Ct. at 1359; see also *Fusari v. Steinberg*, 419 U.S. 379, 392, 95 S.Ct. 533, 541, 42 L.Ed.2d 521 (1975) (BURGER, C. J., concurring). They do not present the same justification for declining to reconsider a prior decision as do decisions rendered after argument and with full opinion. "It is not at all unusual for the Court to find it appropriate to give full ****2889** consideration to a question that has been the subject of previous summary action." *Washington v. Yakima Indian Nation*, 439 U.S. 463, 477, n. 20, 99 S.Ct. 740, 749, n. 20, 58 L.Ed.2d 740 (1979); see also *Tully v. Griffin, Inc.*, 429 U.S. 68, 74–75, 97 S.Ct. 219, 223–224, 50 L.Ed.2d 227 (1976); *Usery v. Turner Elkhorn Mining Co.*, 428 U.S. 1, 14, 96 S.Ct. 2882, 2891, 49 L.Ed.2d 752 (1976). Probable jurisdiction having been noted to consider the constitutionality of the San Diego ordinance, we proceed to do so.

III

This Court has often faced the problem of applying the broad principles of the First Amendment to unique forums of expression. See, *e. g., Consolidated Edison Co. v. Public Service Comm'n*, 447 U.S. 530, 100 S.Ct. 2326, 65 L.Ed.2d 319 (1980) (billing envelope inserts); *Carey v. Brown*, 447 U.S. 455, 100 S.Ct. 2286, 65 L.Ed.2d 263 (1980) (picketing in residential areas); *Schaumburg v. Citizens for a Better Environment*, 444 U.S. 620, 100 S.Ct. 826, 63 L.Ed.2d 73 (1980) (door-to-door and on-street ***501** solicitation); *Greer v. Spock*, 424 U.S. 828, 96 S.Ct. 1211, 47 L.Ed.2d 505 (1976) (Army bases); *Erznoznik v. City of Jacksonville*, 422 U.S. 205, 95 S.Ct. 2268, 45 L.Ed.2d 125 (1975) (outdoor movie theaters); *Lehman v. City of Shaker Heights*, 418 U.S. 298, 94 S.Ct. 2714, 41 L.Ed.2d 770 (1974) (advertising space within city-owned transit system). Even a cursory reading of these opinions reveals that at times First Amendment values must yield to other societal interests. These cases support the cogency of Justice Jackson's remark in *Kovacs v. Cooper*, 336 U.S. 77, 97, 69 S.Ct. 448, 458, 93 L.Ed. 513 (1949): Each method of communicating ideas is "a law unto itself" and that law must reflect the "differing natures, values, abuses and dangers" of each method.[8] We deal here with the law of billboards.

Billboards are a well-established medium of communication, used to convey a broad range of different kinds of messages.[9] As Justice Clark noted in his dissent below:

> "The outdoor sign or symbol is a venerable medium for expressing political, social and commercial ideas. From the poster or 'broadside' to the billboard, outdoor signs have placed a prominent role throughout American history, rallying support for political and social causes." 26 Cal.3d, at 888, 164 Cal.Rptr., at 533–534, 610 P.2d, at 430–431.

***502** The record in this case indicates that besides the typical commercial uses, San Diego billboards have been used

> > "to publicize the 'City in motion' campaign of the City of San Diego, to communicate messages from candidates for municipal, state and national offices, including candidates for judicial office, to propose marriage, to seek employment, to encourage the use of seat belts, to denounce the United Nations, to seek support for Prisoners of War and Missing in Action, to promote the

> United Crusade and a variety of other charitable and socially-related endeavors and to provide directions to the traveling public."[10]

But whatever its communicative function, the billboard remains a "large, immobile, ****2890** and permanent structure which like other structures is subject to ... regulation." *Id.*, at 870, 164 Cal.Rptr., at 522, 610 P.2d, at 419. Moreover, because it is designed to stand out and apart from its surroundings, the billboard creates a unique set of problems for land-use planning and development.

**[2]** Billboards, then, like other media of communication, combine communicative and noncommunicative aspects. As with other media, the government has legitimate interests in controlling the noncommunicative aspects of the medium, *Kovacs v. Cooper, supra*, but the First and Fourteenth Amendments foreclose a similar interest in controlling the communicative aspects. Because regulation of the noncommunicative aspects of a medium often impinges to some degree on the communicative aspects, it has been necessary for the courts to reconcile the government's regulatory interests with the individual's right to expression. " '[A] court may not escape the task of assessing the First Amendment interest at stake and weighing it against the public interest allegedly served by the regulation.' " *Linmark Associates, Inc. v. Willingboro*, 431 U.S. 85, 91, 97 S.Ct. 1614, 1617, 52 L.Ed.2d 155 (1977), quoting ***503** *Bigelow v. Virginia*, 421 U.S. 809, 826, 95 S.Ct. 2222, 2234, 44 L.Ed.2d 600 (1975). Performance of this task requires a particularized inquiry into the nature of the conflicting interests at stake here, beginning with a precise appraisal of the character of the ordinance as it affects communication.

As construed by the California Supreme Court, the ordinance restricts the use of certain kinds of outdoor signs. That restriction is defined in two ways: first, by reference to the structural characteristics of the sign; second, by reference to the content, or message, of the sign. Thus, the regulation only applies to a "permanent structure constituting, or used for the display of, a commercial or other advertisement to the public." 26 Cal.3d, at 856, n. 2, 164 Cal.Rptr., at 513, n. 2, 610 P.2d, at 410, n. 2. Within that class, the only permitted signs are those (1) identifying the premises on which the sign is located, or its owner or occupant, or advertising the goods produced or services rendered on such property and (2) those within one of the specified exemptions to the general prohibition, such as temporary political campaign signs. To determine if any billboard is prohibited by the ordinance, one must determine how it is constructed, where it is located, and what message it carries.

Thus, under the ordinance (1) a sign advertising goods or services available on the property where the sign is located is allowed; (2) a sign on a building or other property advertising goods or services produced or offered elsewhere is barred; (3) noncommercial advertising, unless within one of the specific exceptions, is everywhere prohibited. The occupant of property may advertise his own goods or services; he may not advertise the goods or services of others, nor may he display most noncommercial messages.

## IV

Appellants' principal submission is that enforcement of the ordinance will eliminate the outdoor advertising business in San Diego and that the First and Fourteenth Amendments ***504** prohibit the elimination of this medium of communication. Appellants contend that the city may bar neither all offsite commercial signs nor all noncommercial advertisements and that even if it may bar the former, it may not bar the latter. Appellants may raise both arguments in their own right because, although the bulk of their business consists of offsite signs carrying commercial advertisements, their billboards also convey a substantial amount of noncommercial advertising.[11] Because ****2891** our cases have consistently distinguished between the constitutional protection afforded commercial as ***505** opposed to noncommercial speech, in evaluating appellants' contention we consider separately the effect of the ordinance on commercial and noncommercial speech.

The extension of First Amendment protections to purely commercial speech is a relatively recent development in First Amendment jurisprudence. Prior to 1975, purely commercial advertisements of services or goods for sale were considered to be outside the protection of the First Amendment. *Valentine v. Chrestensen*, 316 U.S. 52, 62 S.Ct. 920, 86 L.Ed. 1262 (1942). That construction of the First Amendment was severely cut back in *Bigelow v. Virginia, supra*. In *Virginia Pharmacy Board v. Virginia Citizens Consumer Council*, 425 U.S. 748, 96 S.Ct. 1817, 48 L.Ed.2d 346 (1976), we plainly held that speech proposing no more than a commercial transaction enjoys a substantial degree of First Amendment protection: A State may not completely suppress the dissemination of truthful information about an entirely lawful activity merely because it is fearful

  

of that information's effect upon its disseminators and its recipients. That decision, however, did not equate commercial and noncommercial speech for First Amendment purposes; indeed, it expressly indicated the contrary. See *id.*, at 770–773, and n. 24, 96 S.Ct., at 1830–1831. See also *id.*, at 779–781, 96 S.Ct., at 1834–1835 (STEWART, J., concurring).[12]

***506** Although the protection extended to commercial speech has continued to develop, commercial and noncommercial communications, ****2892** in the context of the First Amendment, have been treated differently. *Bates v. State Bar of Arizona*, 433 U.S. 350, 97 S.Ct. 2691, 53 L.Ed.2d 810 (1977), held that advertising by attorneys may not be subjected to blanket suppression and that the specific advertisement at issue there was constitutionally protected. However, we continue to observe the distinction between commercial and noncommercial speech, indicating that the former could be forbidden and regulated in situations where the latter could not be. *Id.*, at 379–381, 383–384, 97 S.Ct., at 2706–2708, 2708–2709. In *Ohralik v. Ohio State Bar Assn.*, 436 U.S. 447, 98 S.Ct. 1912, 56 L.Ed.2d 444 (1978), the Court refused ot invalidate on First Amendment grounds a lawyer's suspension from practice for face-to-face solicitation of business for pecuniary gain. In the course of doing so, we again recognized the common-sense and legal distinction between speech proposing a commercial transaction and other varieties of speech:

> "To require a parity of constitutional protection for commercial and noncommercial speech alike could invite dilution, simply by a leveling process, of the force of the Amendment's guarantee with respect to the latter kind of speech. Rather than subject the First Amendment to such a devitalization, we instead have afforded commercial speech a limited measure of protection, commensurate with its subordinate position in the scale of First Amendment values, while allowing modes of regulation that might be impermissible in the realm of noncommercial expression." *Id.*, at 456, 98 S.Ct., at 1918.

In ***507** *Young v. American Mini Theatres, Inc.*, 427 U.S. 50, 69, n. 32, 96 S.Ct. 2440, 2452, 49 L.Ed.2d 310 (1976), Justice STEVENS stated that the difference between commercial price and product advertising and ideological communication permits regulation of the former "that the First Amendment would not tolerate with respect to the latter." See also *Linmark Associates, Inc. v. Willingboro*, 431 U.S., at 91–92, 97 S.Ct., at 1617–1618, and *Friedman v. Rogers*, 440 U.S. 1, 8–10, 99 S.Ct. 887, 893, 59 L.Ed.2d 100 (1979).

Finally, in *Central Hudson Gas & Electric Corp. v. Public Service Comm'n*, 447 U.S. 557, 100 S.Ct. 2343, 65 L.Ed.2d 341 (1980), we held: "The Constitution ... accords a lesser protection to commercial speech than to other constitutionally guaranteed expression. The protection available for a particular commercial expression turns on the nature both of the expression and of the governmental interests served by its regulation." *Id.*, at 562–563, 100 S.Ct., at 2349–2350 (citation omitted). We then adopted a four-part test for determinating the validity of government restrictions on commercial speech as distinguished from more fully protected speech. (1) The First Amendment protects commercial speech only if that speech concerns lawful activity and is not misleading. A restriction on otherwise protected commercial speech is valid only if it (2) seeks to implement a substantial governmental interest, (3) directly advances that interest, and (4) reaches no further than necessary to accomplish the given objective. *Id.*, at 563–566, 100 S.Ct., at 2350–2351.

Appellants agree that the proper approach to be taken in determining the validity of the restrictions on commercial speech is that which was articulated in *Central Hudson*, but assert that the San Diego ordinance fails that test. We do not agree.

**[3]** There can be little controversy over the application of the first, second, and fourth criteria. There is no suggestion that the commercial advertising at issue here involves unlawful activity or is misleading. Nor can there be substantial doubt that the twin goals that the ordinance seeks to further—traffic safety and the appearance of the city—are substantialgovernmental ***508** goals.[13] It is far too late to contend otherwise ****2893** with respect to either traffic safety, *Railway Express Agency, Inc. v. New York*, 336 U.S. 106, 69 S.Ct. 463, 93 L.Ed. 533 (1949), or esthetics, see *Penn Central Transportation Co. v. New York City*, 438 U.S. 104, 98 S.Ct. 2646, 57 L.Ed.2d 631 (1978); *Village of Belle Terre v. Boraas*, 416 U.S. 1, 94 S.Ct. 1536, 39 L.Ed.2d 797 (1974); *Berman v. Parker*, 348 U.S. 26, 33, 75 S.Ct. 98, 102, 99 L.Ed. 27 (1954). Similarly, we reject appellants' claim that the ordinance is broader than necessary and, therefore, fails the fourth part of the *Central Hudson* test. If the city has a sufficient basis for believing that billboards are traffic hazards and are unattractive, then obviously the most direct and perhaps the only effective approach to solving the problems they create is to prohibit them. The city has gone no further than necessary in seeking to meet its ends. Indeed, it has stopped short of fully accomplishing its ends: It has not

prohibited all billboards, but allows onsite advertising and some other specifically exempted signs.

**[4]** The more serious question, then, concerns the third of the *Central Hudson* criteria: Does the ordinance "directly advance" governmental interests in traffic safety and in the appearance of the city? It is asserted that the record is inadequate to show any connection between billboards and traffic safety. The California Supreme Court noted the meager record on this point but held "as a matter of law that an ordinance which eliminates billboards designed to be viewed from streets and highways reasonably relates to traffic safety." 26 Cal.3d, at 859, 164 Cal.Rptr., at 515, 610 P.2d, at 412. Noting that "[b]illboards are intended to, and undoubtedly do, divert a driver's attention from the roadway," *ibid.*, and that ***509** whether the "distracting effect contributes to traffic accidents invokes an issue of continuing controversy," *ibid.*, the California Supreme Court agreed with many other courts that a legislative judgment that billboards are traffic hazards is not manifestly unreasonable and should not be set aside. We likewise hesitate to disagree with the accumulated, common-sense judgments of local lawmakers and of the many reviewing courts that billboards are real and substantial hazards to traffic safety.[14] There is nothing here to suggest that these judgments are unreasonable. As we said in a different context, *Railway Express Agency, Inc. v. New York, supra*, at 109, 69 S.Ct., at 465:

> "We would be trespassing on one of the most intensely local and specialized of all municipal problems if we held that this regulation had no relation to the traffic problem of New York City. It is the judgment of the local authorities that it does have such a relation. And nothing has been advanced which shows that to be palpably false."

***510** **[5]** We reach a similar result with respect to the second asserted justification for the ordinance—advancement of the city's esthetic interests. It is not speculative to recognize that billboards by their very nature, ****2894** wherever located and however constructed, can be perceived as an "esthetic harm."[15] San Diego, like many States and other municipalities, has chosen to minimize the presence of such structures.[16] Such esthetic judgments are necessarily subjective, defying objective evaluation, and for that reason must be carefully scrutinized to determine if they are only a public rationalization of an impermissible purpose. But there is no claim in this case that San Diego has as an ulterior motive the suppression of speech, and the judgment involved here is not so unusual as to raise suspicions in itself.

**[6]** It is nevertheless argued that the city denigrates its interestin ***511** traffic safety and beauty and defeats its own case by permitting onsite advertising and other specified signs. Appellants question whether the distinction between onsite and offsite advertising on the same property is justifiable in terms of either esthetics or traffic safety. The ordinance permits the occupant of property to use billboards located on that property to advertise goods and services offered at that location; identical billboards, equally distracting and unattractive, that advertise goods or services available elsewhere are prohibited even if permitting the latter would not multiply the number of billboards. Despite the apparent incongruity, this argument has been rejected, at least implicitly, in all of the cases sustaining the distinction between offsite and onsite commercial advertising.[17] We agree with those cases and with our own decisions in *Suffolk Outdoor Advertising Co. v. Hulse*, 439 U.S. 808, 99 S.Ct. 66, 58 L.Ed.2d 101 (1978); *Markham Advertising Co. v. Washington*, 393 U.S. 316, 89 S.Ct. 553, 21 L.Ed.2d 512 (1969); and *Newman Signs, Inc. v. Hjelle*, 440 U.S. 901, 99 S.Ct. 1205, 59 L.Ed.2d 449 (1979).

In the first place, whether onsite advertising is permitted or not, the prohibition of offsite advertising is directly related to the stated objectives of traffic safety and esthetics. This is not altered by the fact that the ordinance is underinclusive because it permits onsite advertising. Second, the city may believe that offsite advertising, with is periodically changing content, presents a more acute problem than does onsite advertising. See *Railway Express*, 336 U.S., at 110, 69 S.Ct., at 465. ***512** Third, San Diego has obviously chosen to value one kind of commercial ****2895** speech—onsite advertising—more than another kind of commercial speech—offsite advertising. The ordinance reflects a decision by the city that the former interest, but not the latter, is stronger than the city's interests in traffic safety and esthetics. The city has decided that in a limited instance—onsite commercial advertising—its interests should yield. We do not reject that judgment. As we see it, the city could reasonably conclude that a commercial enterprise—as well as the interested public—has a stronger interest in identifying its place of business and advertising the products or services available there than it has in using or leasing its available space for the purpose of advertising commercial enterprises located elsewhere. See *Railway Express, supra*, at 116, 69 S.Ct., at 468 (JACKSON, J., concurring); *Bradley v. Public Utilities Comm'n*, 289 U.S. 92, 97, 53 S.Ct. 577, 579, 77 L.Ed. 1053 (1933). It does not follow from the fact that the city has concluded that

  

some commercial interests outweigh its municipal interests in this context that it must give similar weight to all other commercial advertising. Thus, offsite commercial billboards may be prohibited while onsite commercial billboards are permitted.

The constitutional problem in this area requires resolution of the conflict between the city's land-use interests and the commercial interests of those seeking to purvey goods and services within the city. In light of the above analysis, we cannot conclude that the city has drawn an ordinance broader than is necessary to meet its interests, or that it fails directly to advance substantial government interests. In sum, insofar as it regulates commercial speech the San Diego ordinance meets the constitutional requirements of *Central Hudson, supra*.

V

**[7]** It does not follow, however, that San Diego's general ban on signs carrying noncommercial advertising is also valid ***513** under the First and Fourteenth Amendments. The fact that the city may value commercial messages relating to onsite goods and services more than it values commercial communications relating to offsite goods and services does not justify prohibiting an occupant from displaying its own ideas or those of others.

As indicated above, our recent commercial speech cases have consistently accorded noncommercial speech a greater degree of protection than commercial speech. San Diego effectively inverts this judgment, by affording a greater degree of protection to commercial than to noncommercial speech. There is a broad exception for onsite commercial advertisements, but there is no similar exception for noncommercial speech. The use of onsite billboards to carry commercial messages related to the commercial use of the premises is freely permitted, but the use of otherwise identical billboards to carry noncommercial messages is generally prohibited. The city does not explain how or why noncommercial billboards located in places where commercial billboards are permitted would be more threatening to safe driving or would detract more from the beauty of the city. Insofar as the city tolerates billboards at all, it cannot choose to limit their content to commercial messages; the city may not conclude that the communication of commercial information concerning goods and services connected with a particular site is of greater value than the communication of noncommercial messages.[18]

***514** ****2896** Furthermore, the ordinance contains exceptions that permit various kinds of noncommercial signs, whether on property where goods and services are offered or not, that would otherwise be within the general ban. A fixed sign may be used to identify any piece of property and its owner. Any piece of property may carry or display religious symbols, commemorative plaques of recognized historical societies and organizations, signs carrying news items or telling the time or temperature, signs erected in discharge of any governmental function, or temporary political campaign signs.[19] No other noncommercial or ideological signs meeting the structural definition are permitted, regardless of their effect on traffic safety or esthetics.

**[8]** Although the city may distinguish between the relative value of different categories of commercial speech, the city does not have the same range of choice in the area of noncommercial speech to evaluate the strength of, or distinguish between, various communicative interests. See *Carey v. Brown*, 447 U.S., at 462, 100 S.Ct., at 2291; ***515** *Police Dept. of Chicago v. Mosley*, 408 U.S. 92, 96, 92 S.Ct. 2286, 2290, 33 L.Ed.2d 212 (1972). With respect to noncommercial speech, the city may not choose the appropriate subjects for public discourse: "To allow a government the choice of permissible subjects for public debate would be to allow that government control over the search for political truth." *Consolidated Edison Co.*, 447 U.S., at 538, 100 S.Ct., at 2333. Because some noncommercial messages may be conveyed on billboards throughout the commercial and industrial zones, San Diego must similarly allow billboards conveying other noncommercial messages throughout those zones.[20]

Finally, we reject appellees' suggestion that the ordinance may be appropriately characterized as a reasonable "time, place, ****2897** and manner" restriction. The ordinance does not generally ***516** ban billboard advertising as an unacceptable "manner" of communicating information or ideas; rather, it permits various kinds of signs. Signs that are banned are banned everywhere and at all times. We have observed that time, place, and manner restrictions are permissible if "they are justified without reference to the content of the regulated speech, ... serve a significant governmental interest, and ... leave open ample alternative channels for communication of the information." *Virginia Pharmacy Board v. Virginia Citizens Consumer Council*, 425 U.S., at 771, 96 S.Ct., at 1830. Here, it cannot be assumed that "alternative channels" are available, for the parties stipulated to just the opposite:

  

"Many businesses and politicians and other persons rely upon outdoor advertising because other forms of advertising are insufficient, inappropriate and prohibitively expensive."[21] A similar argument was made with respect to a prohibition on real estate "For Sale" signs in *Linmark Associates, Inc. v. Willingboro*, 431 U.S. 85, 97 S.Ct. 1614, 52 L.Ed.2d 155 (1977), and what we said there is equally applicable here:

> "Although in theory sellers remain free to employ a number of different alternatives, in practice [certain products are] not marketed through leaflets, sound trucks, demonstrations, or the like. The options to which sellers realistically are relegated ... involved more cost and less autonomy than ... signs[,] ... are less likely to reach persons not deliberately seeking sales information[,] ... and may be less effective media for communicating the message that is conveyed by a ... sign.... The alternatives, then, are far from satisfactory." *Id.*, at 93, 97 S.Ct., at 1618.
>
> It is apparent as well that the ordinance distinguishes in several ways between permissible and impermissible signs at a particular location by reference to their content. ***517** Whether or not these distinctions are themselves constitutional, they take the regulation out of the domain of time, place, and manner restrictions. See *Consolidated Edison Co. v. Public Service Comm'n, supra*.

VI

Despite the rhetorical hyperbole of THE CHIEF JUSTICE's dissent, there is a considerable amount of common ground between the approach taken in this opinion and that suggested by his dissent. Both recognize that each medium of communication creates a unique set of First Amendment problems, both recognize that the city has a legitimate interest in regulating the noncommunicative aspects of a medium of expression, and both recognize that the proper judicial role is to conduct " 'a careful inquiry into the competing concerns of the State and the interests protected by the guarantee of free expression.' " *Post*, at 2917. Our principal difference with his dissent is that it gives so little weight to the latter half of this inquiry.[22]

The Chief Justice writes that

> "[a]lthough we must ensure that any regulation of speech 'further[s] a sufficiently substantial government interest' ... given a reasonable approach to a perceived problem, this Court's duty ... is to determine whether the legislative approach is essentially neutral to the messages conveyed and leaves open other adequate means of conveying those messages." *Post*, at 2920.[23]

***518** ****2898** Despite his belief that this is "the essence of ... democracy," this has never been the approach of this Court when a legislative judgment is challenged as an unconstitutional infringement of First Amendment rights.[24]

By "essentially neutral," THE CHIEF JUSTICE may mean either or both of two things. He may mean that government restrictions on protected speech are permissible so long as the government does not favor one side over another on a subject of public controversy. This concept of neutrality was specifically rejected by the Court last Term in *Consolidated Edison Co. v. Public Service Comm'n*, 447 U.S., at 537, 100 S.Ct., at 2333. There, the Court dismissed the Commission's contention that a prohibition of all discussion, regardless of the viewpoint expressed, on controversial issues of public policy does not ***519** unconstitutionally suppress freedom of speech. "The First Amendment's hostility to content-based regulation extends not only to restrictions on particular viewpoints, but also to prohibition of public discussion of an entire topic." *Ibid.* On the other hand, THE CHIEF JUSTICE may mean by neutrality that government restrictions on speech cannot favor certain communicative contents over others. As a general rule, this, of course, is correct, see, *e. g., Police Dept. of Chicago v. Mosley,* 408 U.S. 92, 92 S.Ct. 2286, 33 L.Ed.2d 212 (1972); *Carey v. Brown*, 447 U.S. 455, 100 S.Ct. 2286, 65 L.Ed.2d 263 (1980). The general rule, in fact, is applicable to the facts of this case: San Diego has chosen to favor certain kinds of messages—such as onsite commercial advertising, and temporary political campaign advertisements—over others. Except to imply that the favored categories are for some reason *de minimis* in a constitutional sense, his dissent fails to explain why San Diego should not be held to have violated this concept of First Amendment neutrality.

Taken literally THE CHIEF JUSTICE's approach would require reversal of the many cases striking down antisolicitation statutes on First Amendment grounds: In each of them the city would argue that preventing distribution of leaflets rationally furthered the city's interest in limiting litter, applied to all kinds of leaflets and hence did not violate the principle of government neutrality, and left open alternative means of communication. See, *e. g., Martin v. Struthers*, 319 U.S. 141, 63 S.Ct. 862, 87 L.Ed. 1313 (1943); *Schneider v. State*, 308 U.S. 147, 60 S.Ct. 146, 84 L.Ed. 155 (1939). Despite the dissent's assertion to the contrary, however, it has

  

been this Court's consistent position that democracy stands on a stronger footing when courts protect First Amendment interests against legislative intrusion, rather than deferring to merely rational legislative judgments in this area:

> ****2899** "Mere legislative preferences or beliefs respecting matters of public convenience may well support regulation directed at other personal activities, but be insufficient to justify such as diminishes the exercise of rights so ***520** vital to the maintenance of democratic institutions. And so, as cases arise, the delicate and difficult task falls upon the courts to weigh the circumstances and to appraise the substantiality of the reasons advanced in support of the regulation of the free enjoyment of the rights." *Id.*, at 161, 60 S.Ct., at 151.

Because THE CHIEF JUSTICE misconceives the nature of the judicial function in this situation, he misunderstands the significance of the city's extensive exceptions to its billboard prohibition. He characterizes these exceptions as "essentially negligible," *post*, at 2920, and then opines that it borders on the frivolous to suggest that in "allowing such signs but forbidding noncommercial billboards, the city has infringed freedom of speech." *Post*, at 2922. That, of course, is not the nature of this argument.

There can be no question that a prohibition on the erection of billboards infringes freedom of speech: The exceptions do not create the infringement, rather the general prohibition does. But the exceptions to the general prohibition are of great significance in assessing the strength of the city's interest in prohibiting billboards. We conclude that by allowing commercial establishments to use billboards to advertise the products and services they offer, the city necessarily has conceded that some communicative interests, *e. g.*, onsite commercial advertising, are stronger than its competing interests in esthetics and traffic safety. It has nevertheless banned all noncommercial signs except those specifically excepted.

THE CHIEF JUSTICE agrees that in allowing the exceptions to the rule the city has balanced the competing interests, but he argues that we transgress the judicial role by independently reviewing the relative values the city has assigned to various communicative interests. He seems to argue that although the Constitution affords a greater degree of protection to noncommercial than to commercial speech, a legislature ***521** need not make the same choices. *Post*, at 2923. This position makes little sense even abstractly, and it surely is not consistent with our cases or with THE CHIEF JUSTICE's own argument that statutes challenged on First Amendment grounds must be evaluated in light of the unique facts and circumstances of the case. Governmental interests are only revealed and given concrete force by the steps taken to meet those interests. If the city has concluded that its official interests are not as strong as private interests in commercial communications, may it nevertheless claim that those same official interests outweigh private interests in noncommercial communications? Our answer, which is consistent with our cases, is in the negative.

VII

**[9]** **[10]** Because the San Diego ordinance reaches too far into the realm of protected speech, we conclude that it is unconstitutional on its face.[25] The judgment of the California Supreme Court is reversed, and the case is remanded to that court.[26]

*It is so ordered.*

****2900** Justice BRENNAN, with whom Justice BLACKMUN joins, concurring in the judgment.

Believing that "a total prohibition of outdoor advertising is not before us," *ante*, at 2896, n. 20, the plurality does not decide ***522** "whether such a ban would be consistent with the First Amendment," *ibid.* Instead, it concludes that San Diego may ban all billboards containing commercial speech messages without violating the First Amendment, thereby sending the signal to municipalities that bifurcated billboard regulations prohibiting commercial messages but allowing noncommercial messages would pass constitutional muster. *Ante*, at 2899, n. 25. I write separately because I believe this case in effect presents the total ban question, and because I believe the plurality's bifurcated approach itself raises serious First Amendment problems and relies on a distinction between commercial and noncommercial speech unanticipated by our prior cases.

I

As construed by the California Supreme Court, a billboard subject to San Diego's regulation is "a rigidly assembled sign, ***523** display, or device permanently affixed to the ground or permanently attached to a building or other inherently permanent structure constituting, or used for the display of, a

  

commercial or other advertisement to the public." 26 Cal.3d 848, 856, n. 2, 164 Cal.Rptr. 510, 513, 610 P.2d 407, 410, n. 2 (1980), quoting Cal.Rev. & Tex.Code Ann. § 18090.2 (West Supp.1970–1980).[1] San Diego's billboard regulation bans all commercial and noncommercial billboard advertising[2] with a few limited exceptions. The largest of these exceptions is for on-premises identification signs, defined as

> "signs designating the name of the owner or occupant of the premises upon which such signs are placed, or identifying such premises; or signs advertising goods manufactured or produced or services ****2901** rendered on the premises upon which such signs are placed." App. to Juris. Statement 107a.
>
> Other exceptions permit signs for governmental functions, signs on benches at bus stops, commemorative plaques for ***524** historical sites, religious symbol signs, for sale signs, time/weather/news public service signs, and temporary political campaign signs erected for no longer than 90 days and removed within 10 days after the election to which they pertain. *Id.*, at 111a–112a; *ante*, at 2886, n. 3.[3]

II

Let me first state the common ground that I share with the plurality. The plurality and I agree that billboards are a medium of communication warranting First Amendment protection. The plurality observes that "[b]illboards are a well-established medium of communication, used to convey a broad range of different kinds of messages." *Ante*, at 2889. See generally Tocker, Standardized Outdoor Advertising: History, Economics and Self-Regulation, in Outdoor Advertising: History and Regulation 11, 11–56 (J. Houck ed. 1969); F. Presbrey, The History and Development of Advertising 497–511 (1929). As the parties have stipulated, billboards in San Diego have been used

> "to advertise national and local products, goods and services, new products being introduced to the consuming public, to publicize the 'City in Motion' campaign of the City of San Diego, to communicate messages from candidates for municipal, state and national offices, including candidates for judicial office, to propose marriage, to seek employment, to encourage the use of seat belts, to denounce the United Nations, to seek support for Prisoners of War and Missing in Action, to promote the United Crusade and a variety of other charitable and ***525** socially-related endeavors and to provide directions to the traveling public." Joint Stipulation of Facts No. 23, App. 46a–47a.[4]

Although there are alternative channels for communication of messages appearing on billboards, such as newspapers, television, and radio, these alternatives have never dissuaded active and continued use of billboards as a medium of expression and appear to be less satisfactory. See *Linmark Associates, Inc. v. Willingboro*, 431 U.S. 85, 93, 97 S.Ct. 1614, 1618, 52 L.Ed.2d 155 (1977). Indeed the parties expressly stipulated that "[m]any businesses and politicians and other persons rely upon outdoor advertising because other forms of advertising are insufficient, inappropriate and prohibitively expensive." Joint Stipulation of Facts No. 28, App. 48a. Justice Black said it well when he stated the First Amendment's presumption that "all present instruments of communication, as well as others that inventive genius may bring into being, shall be free from governmental censorship or prohibition." *Kovacs v. Cooper*, 336 U.S. 77, 102, 69 S.Ct. 448, 461, 93 L.Ed. 513 (1949) (dissenting opinion).

Where the plurality and I disagree is in the characterization of the San Diego ordinance and thus in the appropriate analytical framework to apply. The plurality believes that the question of a total ban is not presented in this case, *ante*, at 2896, n. 20, because the ordinance contains exceptions to its general prohibition. In contrast, my ****2902** view is that the *practical* effect of the San Diego ordinance is to eliminate the billboard as an effective medium of communication for the ***526** speaker who wants to express the sorts of messages described Joint Stipulation of Facts No. 23, and that the exceptions do not alter the overall character of the ban. Unlike the on-premises sign, the off-premises billboard "is, generally speaking, made available to 'all-comers', in a fashion similar to newspaper or broadcasting advertising. It is a forum for the communication of messages to the public." Joint Stipulation of Facts No. 22(c), App. 46a.[5] Speakers in San Diego no longer have the opportunity to communicate their messages of general applicability to the public through billboards. None of the exceptions provides a practical alternative for the general commercial or noncommercial billboard advertiser. Indeed, unless the advertiser chooses to buy or lease premises in the city, or unless his message falls within one of the narrow exempted categories, he is foreclosed from announcing either commercial or noncommercial ideas through a billboard.

The characterization of the San Diego regulation as a total ban of a medium of communication has more than semantic

implications, for it suggests a First Amendment analysis quite different from the plurality's. Instead of relying on the exceptions to the ban to invalidate the ordinance, I would apply the tests this Court has developed to analyze content-neutral ***527** prohibitions of particular media of communication.[6] Most recently, in *Schad v. Mount Ephraim*, 452 U.S. 61, 101 S.Ct. 2176, 68 L.Ed.2d 671 (1981), this Court assessed "the substantiality of the governmental interests asserted" and "whether those interests could be served by means that would be less intrusive on activity protected by the First Amendment," in striking down the borough's total ban on live commercial entertainment. *Id.*, at 70, 101 S.Ct., at 2183. *Schad* merely articulated an analysis applied in previous cases concerning total bans of media of expression. For example, in *Schneider v. State*, 308 U.S. 147, 60 S.Ct. 146, 84 L.Ed. 155 (1939), the Court struck down total bans on handbill leafletting because there were less restrictive alternatives to achieve the goal of prevention of litter, in fact alternatives that did not infringe at all on that important First Amendment privilege. *Id.*, at 162, 60 S.Ct., at 151. In *Martin v. City of Struthers*, 319 U.S. 141, 63 S.Ct. 862, 87 L.Ed. 1313 (1943), the Court invalidated a municipal ordinance that forbade persons from engaging in the time-honored activity of door-to-door solicitation. See also *Jamison v. Texas*, 318 U.S. 413, 416–417, 63 S.Ct. 669, 671–672, 87 L.Ed. 869 (1943) (distribution of handbills); *Hague v. CIO*, 307 U.S. 496, 518, 59 S.Ct. 954, 965, 83 L.Ed. 1423 (1939) (opinion of Roberts, J.) (distribution of pamphlets). See generally Ely, Legislative and Administrative Motivation in Constitutional Law, 79 Yale L.J. 1205, 1335–1336 (1970).

Of course, as the plurality notes, "[e]ach method of communicating ideas is 'a law unto itself' and that law must reflect the 'differing natures, values, abuses and dangers' ****2903** of each method." *Ante*, at 2889, quoting *Kovacs v. Cooper, supra*, at 97, 69 S.Ct., at 458 (Jackson, J., concurring). Similarly, in*Southeastern Promotions, Ltd. v. Conrad*, 420 U.S. 546, 557, 95 S.Ct. 1239, 1246, 43 L.Ed.2d 448 (1975), this Court observed: "Each medium of expression, of course, must be assessed for First Amendment purposes by standards suited ***528** to it, for each may present its own problems." It is obvious that billboards do present their own unique problems: they are large immobile structures that depend on eye-catching visibility for their value. At the same time, the special problems associated with billboards are not of a different genus than those associated with commercial live entertainment in the borough of Mount Ephraim, or with door-to-door literature distribution in the city of Struthers. In the case of billboards, I would hold that a city may totally ban them if it can show that a sufficiently substantial governmental interest is directly furthered by the total ban, and that any more narrowly drawn restriction, *i. e.*, anything less than a total ban, would promote less well the achievement of that goal.

Applying that test to the instant case, I would invalidate the San Diego ordinance. The city has failed to provide adequate justification for its substantial restriction on protected activity. See *Schad v. Mount Ephraim, supra*, at 72, 101 S.Ct., at 2184. First, although I have no quarrel with the substantiality of the city's interest in traffic safety, the city has failed to come forward with evidence demonstrating that billboards actually impair traffic safety in San Diego. Indeed, the joint stipulation of facts is completely silent on this issue. Although the plurality hesitates "to disagree with the accumulated, common-sense judgments of local lawmakers and of the many reviewing courts that billboards are real and substantial hazards to traffic safety," *ante*, at 2893, I would not be so quick to accept legal conclusions in other cases as an adequate substitute for evidence *in this case* that banning billboards directly furthers traffic safety.[7] Moreover, the ordinance is not ***529** ****2904** narrowly drawn to accomplish the traffic safety goal. Although it contains an exception for signs "not visible from any point on the boundary of the premises," App. to Juris. ***530** Statement 111a, billboards not visible from the street but nevertheless visible from the "boundary of the premises" are not exempted from the regulation's prohibition.

Second, I think that the city has failed to show that its asserted interest in aesthetics is sufficiently substantial in the commercial and industrial areas of San Diego. I do not doubt that "[i]t is within the power of the [city] to determine that the community should be beautiful," *Berman v. Parker*, 348 U.S. 26, 33, 75 S.Ct. 98, 102, 99 L.Ed. 27 (1954), but that power may not be exercised in contravention of the First Amendment. This Court noted in *Schad* that "[t]he [city] has presented no evidence, and it is not immediately apparent as a matter of experience, that live entertainment poses problems ... more significant than those associated with various permitted uses; nor does it appear that the [city] has arrived at a defensible conclusion that unusual problems are presented by live entertainment." 452 U.S., at 73, 101 S.Ct., at 2185. Substitute the word "billboards" for the words "live entertainment," and that sentence would equally apply to this case.

It is no doubt true that the appearance of certain areas of the city would be enhanced by the elimination of billboards, but

  

"it is not immediately apparent as a matter of experience" that their elimination in all other areas as well would ***531** have more than a negligible impact on aesthetics. See *John Donnelly & Sons v. Campbell*, 639 F.2d 6, 23 (C.A.1 1980) (Pettine, J., concurring in judgment), summarily aff'd, 453 U.S. 916, 101 S.Ct. 3151, 69 L.Ed.2d 999.[8] The joint stipulation reveals that

> "[s]ome sections of the City of San Diego are scenic, some blighted, some containing strips of vehicle related commercial uses, some contain new and attractive office buildings, some functional industrial development and some areas contain older but useful commercial establishments." Joint Stipulation of Facts No. 8, App. 43a.

A billboard is not *necessarily* inconsistent with oil storage tanks, blighted areas, or strip development. Of course, it is not for a court to impose its own notion of beauty on ****2905** San Diego. But before deferring to a city's judgment, a court must be convinced that the city is seriously and comprehensively addressing aesthetic concerns with respect to its environment. Here, San Diego has failed to demonstrate a comprehensive coordinated effort in its commercial and industrial areas to address other obvious contributors to an unattractive environment. In this sense the ordinance is underinclusive. See *Erznoznik v. City of Jacksonville*, 422 U.S. 205, 214, 95 S.Ct. 2268, 2275, 45 L.Ed.2d 125 (1975). Of course, this is not to say that the city must address all aesthetic problems at the same time, or none at all. Indeed, from a planning point of view, attacking the problem ***532** incrementally and sequentially may represent the most sensible solution. On the other hand, if billboards alone are banned and no further steps are contemplated or likely, the commitment of the city to improving its physical environment is placed in doubt. By showing a comprehensive commitment to making its physical environment in commercial and industrial areas more attractive,[9] and by allowing only narrowly tailored exceptions, if any,[10] San Diego could demonstrate ***533** that its interest in ****2906** creating an aesthetically pleasing environment is genuine and substantial. This is a requirement where, as here, there is an infringement of important constitutional consequence.

I have little doubt that some jurisdictions will easily carry the burden of proving the substantiality of their interest in ***534** aesthetics. For example, the parties acknowledge that a historical community such as Williamsburg, Va. should be able to prove that its interest in aesthetics and historical authenticity are sufficiently important that the First Amendment value attached to billboards must yield. See Tr. of Oral Arg., 22–25. And I would be surprised if the Federal Government had much trouble making the argument that billboards could be entirely banned in Yellowstone National Park, where their very existence would so obviously be inconsistent with the surrounding landscape. I express no view on whether San Diego or other large urban areas will be able to meet the burden.[11] See *Schad v. Mount Ephraim, supra*, 452 U.S., at 77, 101 S.Ct., at 2187 (BLACKMUN, J., concurring). But San Diego failed to do so here, and for that reason I would strike down its ordinance.

III

The plurality's treatment of the commercial-noncommercial distinction in this case is mistaken in its factual analysis of the San Diego ordinance, and departs from this Court's precedents. In Part IV of its opinion, the plurality concludes that the San Diego ordinance is constitutional insofar as it regulates commercial speech. Under its view, a city with merely a reasonable justification could pick and choose between those commercial billboards it would allow and those it would not, or could totally ban all commercial billboards.[12] In Part V, ***535** the plurality concludes, however, that the San Diego ordinance as a whole is unconstitutional because, *inter alia*, it affords a greater degree of protection to commercial than to noncommercial speech:

> "The use of onsite billboards to carry commercial messages related to the commercial use of the premises is freely permitted, but the use of otherwise identical billboards to carry noncommercial messages is generally prohibited.... Insofar as the city tolerates billboards at all, it cannot choose to limit their content to commercial messages; the city may not conclude that the communication of commercial information concerning goods and services connected with a particular site is of greater value than the communication of noncommercial messages." *Ante*, at 2895.

The plurality apparently reads the onsite premises exception as limited solely to commercial ****2907** speech. I find no such limitation in the ordinance. As noted*supra*, the onsite exception allows "signs designating the name of the owner or occupant of the premises upon which such signs are placed, or identifying such premises; or signs advertising goods manufactured or produced or services rendered on the premises upon which such signs are placed." App. to

  

Juris. Statement 107a. As I read the ordinance, the content of the sign depends strictly on the identity of the owner or occupant of the premises. If the occupant is a commercial enterprise, the substance of a permissible identifying sign would be ***536** commercial. If the occupant is an enterprise usually associated with noncommercial speech, the substance of the identifying sign would be noncommercial. Just as a supermarket or barbershop could identify itself by name, so too could a political campaign headquarters or a public interest group. I would also presume that, if a barbershop could advertise haircuts, a political campaign headquarters could advertise "Vote for Brown," or "Vote for Proposition 13."

More importantly, I cannot agree with the plurality's view that an ordinance totally banning commercial billboards but allowing noncommercial billboards would be constitutional.[13] For me, such an ordinance raises First Amendment problems at least as serious as those raised by a total ban, for it gives city officials the right—before approving a billboard—to determine whether the proposed message is "commercial" or "noncommercial." Of course the plurality is correct when it observes that "our cases have consistently distinguished between the constitutional protection afforded commercial as opposed to noncommercial speech," *ante*, at 2891, but it errs in assuming that a *governmental unit* may be put in the position in the first instance of deciding whether the proposed speech is commercial or noncommercial. In individual cases, this distinction is anything but clear. Because making such determinations would entail a substantial exercise of discretion by a city's officials, it presents a real danger of curtailing ***537** noncommercial speech in the guise of regulating commercial speech.

In *Cantwell v. Connecticut*, 310 U.S. 296, 60 S.Ct. 900, 84 L.Ed. 1213 (1940), the Court reviewed a statute prohibiting solicitation of money by religious groups unless such solicitation was approved in advance by the Secretary of the Public Welfare Council. The statute provided in relevant part:

> "Upon application of any person in behalf of such [solicitation], the secretary shall determine whether such cause is a religious one ... and conforms to reasonable standards of efficiency and integrity, and, if he shall so find, shall approve the same and issue to the authority in charge a certificate to that effect." *Id.*, at 302, 60 S.Ct., at 902.

The Court held that conditioning the ability to solicit on a license, "the grant of which rests in the exercise of a determination by state authority as to what is a religious cause, is to lay a forbidden burden upon the exercise of liberty protected by the Constitution." *Id.*, at 307, 60 S.Ct., at 904–905. Specifically rejecting the State's argument that arbitrary and capricious acts of a state officer would be subject to judicial review, the Court observed:

> "Upon [the state official's] decision as to the nature of the cause, the right to solicit funds depends.... [T]he availability of a judicial remedy for abuses in ****2908** the system of licensing still leaves that system one of previous restraint which, in the field of free speech and press, we have held inadmissible." *Id.*, at 306, 60 S.Ct., at 904.

See *Saia v. New York*, 334 U.S. 558, 560, 68 S.Ct. 1148, 1149, 92 L.Ed. 1574 (1948). As Justice Frankfurter subsequently characterized *Cantwell* : "To determine whether a cause is, or is not, 'religious' opens too wide a field of personal judgment to be left to the mere discretion of an official." 334 U.S., at 564, 68 S.Ct., at 1152 (dissenting opinion).

According such wide discretion to city officials to control the free exercise of First Amendment rights is precisely what ***538** has consistently troubled this Court in a long line of cases starting with *Lovell v. Griffin*, 303 U.S. 444, 451, 58 S.Ct. 666, 668, 82 L.Ed. 949 (1938). See, *e. g., Southeastern Promotions, Ltd. v. Conrad*, 420 U.S., at 552–553, 95 S.Ct., at 1243–1244 (theatrical performance in city-owned auditorium); *Shuttlesworth v. Birmingham*, 394 U.S. 147, 150–153, 89 S.Ct. 935, 938–940, 22 L.Ed.2d 162 (1969) (picketing and parading); *Staub v. City of Baxley*, 355 U.S. 313, 321–325, 78 S.Ct. 277, 281–284, 2 L.Ed.2d 302 (1958) (solicitation); *Kunz v. New York*, 340 U.S. 290, 294, 71 S.Ct. 312, 315, 95 L.Ed. 280 (1951) (public meetings); *Saia v. New York, supra*, 334 U.S., at 560–562, 68 S.Ct., at 1149–1151 (sound trucks); *Cantwell v. Connecticut, supra*, 310 U.S., at 307, 60 S.Ct., at 904 (solicitation); *Schneider v. State*, 308 U.S., at 163–164, 60 S.Ct., at 151–152 (handbills); *Hague v. CIO*, 307 U.S., at 516, 59 S.Ct., at 964 (handbills). See also *Young v. American Mini Theatres, Inc.*, 427 U.S. 50, 93, 96 S.Ct. 2440, 2463, 49 L.Ed.2d 310 (1976) (BLACKMUN, J., dissenting); *Hynes v. Mayor and Council of Oradell*, 425 U.S. 610, 617, 96 S.Ct. 1755, 1759, 48 L.Ed.2d 243 (1976); *Police Dept. of City of Chicago v. Mosley*, 408 U.S. 92, 97, 92 S.Ct. 2286, 2291, 33 L.Ed.2d 212 (1972). The plurality's bifurcated approach, I fear, will generate billboard ordinances providing the grist for future additions to this list, for it creates discretion where none previously existed.

It is one thing for a court to classify in specific cases whether commercial or noncommercial speech is involved, but quite

  

another—and for me dispositively so—for a city to do so regularly for the purpose of deciding what messages may be communicated by way of billboards. Cities are equipped to make traditional police power decisions, see *Saia v. New York, supra*, 334 U.S., at 564–565, 68 S.Ct., at 1151–1152 (FRANKFURTER, J., dissenting), not decisions based on the content of speech. I would be unhappy to see city officials dealing with the following series of billboards and deciding which ones to permit: the first billboard contains the message "Visit Joe's Ice Cream Shoppe"; the second, "Joe's Ice Cream Shoppe uses only the highest quality dairy products"; the third, "Because Joe thinks that dairy products are good for you, please shop at Joe's Shoppe"; and the fourth, "Joe says to support dairy price supports; they mean lower prices for you at his Shoppe." Or how about some San Diego Padres baseball fans—with no connection to ***539** the team—who together rent a billboard and communicate the message "Support the San Diego Padres, a great baseball team." May the city decide that a United Automobile Workers billboard with the message "Be a patriot—do not buy Japanese-manufactured cars" is "commercial" and therefore forbid it? What if the same sign is placed by Chrysler?[14]

I do not read our recent line of commercial cases as authorizing this sort of regular and immediate line-drawing by governmental entities. If anything, our cases recognize the difficulty in making a determination that speech is either "commercial" or "noncommercial." In *Virginia Pharmacy Board v. Virginia Citizens Consumer Council,* ****2909** *Inc.*, 425 U.S. 748, 764, 96 S.Ct. 1817, 1827, 48 L.Ed.2d 346 (1976), after noting that "not all commercial messages contain ... a very great public interest element," the Court suggested that "[t]here are few to which such an element, however, could not be added." The Court continued: "Our pharmacist, for example, could cast himself as a commentator on store-to-store disparities in drug prices, giving his own and those of a competitor as proof. We see little point in requiring him to do so, and little difference if he does not." *Id.*, at 764–765, 96 S.Ct., at 1827. Cf. *Murdock v. Pennsylvania*, 319 U.S. 105, 111, 63 S.Ct. 870, 874, 87 L.Ed. 1292 (1943). In *Bigelow v. Virginia*, 421 U.S. 809, 822, 95 S.Ct. 2222, 2232, 44 L.Ed.2d 600 (1975), the Court observed that the advertisement of abortion services placed by a New York clinic in a Virginia weekly newspaper—although in part a commercial advertisement—was far more than that:

> "Viewed in its entirety, the advertisement conveyed information of potential interest and value to a diverse audience—not only to readers possibly in need of the services offered, but also to those with a general curiosityabout, ***540** or genuine interest in, the subject matter or the law of another State and its development, and to readers seeking reform in Virginia. The mere existence of the Women's Pavilion in New York City, with the possibility of its being typical of other organizations there, and the availability of the services offered, were not unnewsworthy."

"The line between ideological and nonideological speech is impossible to draw with accuracy." *Lehman v. City of Shaker Heights*, 418 U.S. 298, 319, 94 S.Ct. 2714, 2725, 41 L.Ed.2d 770 (1974) (BRENNAN, J., dissenting). I have no doubt that those who seek to convey commercial messages will engage in the most imaginative of exercises to place themselves within the safe haven of noncommercial speech, while at the same time conveying their commercial message. Encouraging such behavior can only make the job of city officials—who already are inclined to ban billboards—that much more difficult and potentially intrusive upon legitimate noncommercial expression.

Accordingly, I would reverse the decision of the California Supreme Court upholding the San Diego billboard ordinance.

Justice STEVENS, dissenting in part.

If enforced as written, the ordinance at issue in this case will eliminate the outdoor advertising business in the city of San Diego.[1] The principal question presented is, therefore, whether a city may prohibit this medium of communication. Instead of answering that question, the plurality focuses its attention on the exceptions from the total ban and, somewhat ironically, concludes that the ordinance is an unconstitutional abridgment of speech because it does not abridge enough speech.[2]

***541** The plurality first holds that a total prohibition of the use of "outdoor advertising display signs"[3] for commercial messages, other than those identifying or promoting a business located on the same premises as the sign, is permissible. I agree with the conclusion that the constitutionality of this prohibition is not undercut by the distinction ****2910** San Diego has drawn between onsite and offsite commercial signs, see *ante*, at 2895 (plurality opinion), and I therefore join Parts I through IV of Justice WHITE's opinion. I do not, however, agree with the reasoning which leads the plurality to invalidate the ordinance because San

Diego failed to include a total ban on the use of billboards for both commercial and noncommercial messages. While leaving open the possibility that a total ban on billboards would be permissible, see *ante*, at 2896, n. 20,[4] the plurality finds two flaws in the ordinance. First, because the ordinance permits commercial, but not noncommercial, use of onsite signs, it improperly "afford[s] a greater degree of protection to commercial than to noncommercial speech." *Ante*, at 2895. And, second, because the ordinance excepts certain limited categories of noncommercial signs from the prohibition, the city is guilty of "choos[ing] the appropriate subjects for public discourse." *Ante*, at 2896.

***542** Although it is possible that some future applications of the San Diego ordinance may violate the First Amendment, I am satisfied that the ordinance survives the challenges that these appellants have standing to raise. Unlike the plurality, I do not believe that this case requires us to decide any question concerning the kind of signs a property owner may display on his own premises. I do, however, believe that it is necessary to confront the important question, reserved by the plurality, whether a city may entirely ban one medium of communication. My affirmative answer to that question leads me to the conclusion that the San Diego ordinance should be upheld; that conclusion is not affected by the content-neutral exceptions that are the principal subject of the debate between the plurality and THE CHIEF JUSTICE.

I

Appellants are engaged in the outdoor advertising business. The parties stipulated that there are critical differences between that business and so-called "onsite" or business signs.[5] ***543** Outdoor advertising is presented on large, standardized billboards which display a variety of commercial and noncommercial messages that change periodically.[6] The only information in the record ****2911** about onsite signs is that they "advertise businesses, goods or services available on the property on which the sign is located." Joint Stipulation of Facts No. 22, App. 45a. There is no evidence that any onsite signs in San Diego of the permanent character covered by the ordinance[7] have ever been used for noncommercial messages.

If the ordinance is enforced, two consequences are predictable. Appellants' large and profitable outdoor advertising businesses will be destroyed.[8] Moreover, many persons who ***544** now rent billboards to convey both commercial and noncommercial messages to the public will not have access to an equally effective means of communication.[9] There is no evidence, however, that enforcement of the ordinance will have any effect whatsoever upon any property owner's use of onsite advertising signs.[10] Nor is there anything in the record to suggest that the use of onsite signs has had any effect on the outdoor advertising business or on any of the consumers of offsite billboard space.

Appellants, of course, have standing to challenge the ordinance because of its impact on their own commercial operations. Because this challenge is predicated in part on the First Amendment, I agree with the plurality and Justice BRENNAN that they also have standing to argue that the ordinance is invalid because of its impact on their customers —the persons who use their billboards to communicate with the public. See *ante*, at 2890–2891, n. 11 (plurality opinion). I do not agree, however, that they have any standing to assert the purely hypothetical claims of property owners whose on-site advertising is entirely unaffected by the application of the ordinance at issue in this case.

***545** This case involves only the use of permanent signs in areas zoned for commercial and industrial purposes.[11] It is conceivable that some public-spirited or eccentric businessman ****2912** might want to use a permanent sign on his commercial property to display a noncommercial message. The record, however, discloses no such use in the past, and it seems safe to assume that such uses in the future will be at best infrequent. Rather than speculate about hypothetical cases that may be presented by property owners not now before the Court, I would judge this ordinance on the basis of its effect on the outdoor advertising market and save for another day any questions concerning its possible effect in an entirely separate market.

The few situations in which constitutional rights may be asserted vicariously represent exceptions from one of the Court's most fundamental principles of constitutional adjudication.[12] Our explanation of that principle in *Broadrick v. Oklahoma*, 413 U.S. 601, 610–611, 93 S.Ct. 2908, 2915, 37 L.Ed.2d 830 (footnote omitted), merits emphasis and repetition:

> "Embedded in the traditional rules governing constitutional adjudication is the principle that a person to whom a statute may constitutionally be applied will not be heard to challenge that statute on the ground that it may conceivably

  

be applied unconstitutionally to others, ***546** in other situations not before the Court. See, *e. g., Austin v. The Aldermen*, 7 Wall. 694, 698–699 [19 L.Ed. 224] (1869); *Supervisors v. Stanley*, 105 U.S. 305, 311–315 [26 L.Ed. 1044] (1882); *Hatch v. Reardon*, 204 U.S. 152, 160–161 [27 S.Ct. 188, 190–191, 51 L.Ed. 415] (1907); *Yazoo & M. V. R. Co. v. Jackson Vinegar Co.*, 226 U.S. 217, 219–220 [33 S.Ct. 40, 41, 57 L.Ed. 193] (1912); *United States v. Wurzbach*, [280 U.S.], at 399 [50 S.Ct., at 169]; *Carmichael v. Southern Coal & Coke Co.*, 301 U.S. 495, 513 [57 S.Ct. 868, 874, 81 L.Ed. 1245] (1937); *United States v. Raines*, 362 U.S. 17 [80 S.Ct. 519, 4 L.Ed.2d 524] (1960). A closely related principle is that constitutional rights are personal and may not be asserted vicariously. See *McGowan v. Maryland*, 366 U.S. 420, 429–430 [81 S.Ct. 1101, 1106–1107, 6 L.Ed.2d 393] (1961). These principles rest on more than the fussiness of judges. They reflect the conviction that under our constitutional system courts are not roving commissions assigned to pass judgment on the validity of the Nation's laws. See *Younger v. Harris*, 401 U.S. 37, 52 [91 S.Ct. 746, 754, 27 L.Ed.2d 669] (1971). Constitutional judgments, as Mr. Chief Justice Marshall recognized, are justified only out of the necessity of adjudicating rights in particular cases between the litigants brought before the Court:

> " 'So if a law be in opposition to the constitution; if both the law and the constitution apply to a particular case, so that the court must either decide that case conformably to the law, disregarding the constitution; or conformably to the constitution, disregarding the law; the court must determine which of these conflicting rules governs the case. This is of the very essence of judicial duty.' *Marbury v. Madison*, 1 Cranch 137, 178 [2 L.Ed. 60] (1803).
>
> "In the past, the Court has recognized some limited exceptions to these principles, but only because of the most 'weighty countervailing policies.' *United States v. Raines*, 362 U.S., at 22–23 [80 S.Ct., at 523–524]."

The most important exception to this standing doctrine permits some litigants to challenge on First Amendment grounds laws that may validly be applied against them but ***547** which may, because of their unnecessarily broad reach, inhibit the protected speech of third parties. That exception plays a vital role in our First Amendment jurisprudence.[13] But it is nonetheless a limited ****2913** exception. Because "[a]pplication of the overbreadth doctrine ... is, manifestly, strong medicine," it is employed "sparingly and only as a last resort." *Broadrick*, 413 U.S., at 613, 93 S.Ct., at 2916. As the Court explained in *Broadrick*, the doctrine will be applied only if the overbreadth of a statute is substantial in relation to its "plainly legitimate sweep":

> "Although such laws, if too broadly worded, may deter protected speech to some unknown extent, there comes a point where that effect—at best a prediction—cannot, with confidence, justify invalidating a statute on its face and so prohibiting a State from enforcing the statute against conduct that is admittedly within its power to proscribe. Cf. *Alderman v. United States*, 394 U.S. 165, 174–175 [89 S.Ct. 961, 966–967, 22 L.Ed.2d 176] (1969). To put the matter another way, particularly where conduct and not merely speech is involved, we believe that the overbreadth of a statute must not only be real, but substantial as well, judged in relation to the statute's plainly legitimate sweep. It is our view that § 818 is not substantially overbroad and that whatever overbreadth may exist should be cured through case-by-case analysis of the fact situations to which its sanctions, assertedly, may not be applied." *Id.*, at 615–616, 93 S.Ct., at 2917–2918 (footnote omitted).[14]

***548** In my judgment, the likelihood that the San Diego ordinance will have a significant adverse impact on the users of onsite signs is sufficiently speculative and remote that I would not attempt to adjudicate the hypothetical claims of such parties on this record. Surely the interests of such parties do not necessarily parallel the interests of these appellants.[15] Moreover, changes in the provisions of the ordinance concerning onsite advertising would not avoid the central question that is presented by appellants' frontal attack on the application of the ordinance to their own businesses and to their customers.[16] I believe the Court should decide that question and put the hypothetical claims of onsite advertisers entirely to one side.

II

Just as the regulation of an economic market may either enhance or curtail the free exchange of goods and services,[17] so may regulation of the communications market sometimes facilitate and sometimes inhibit the exchange of information ideas, and impressions. Procedural rules in a deliberative body are designed to improve the quality of debate. Our ***549** cases upholding regulation of the time, place, or manner of communication have been decided on the ****2914** implicit assumption that the net effect of the regulation on free

expression would not be adverse. In this case, however, that assumption cannot be indulged.

The parties have stipulated, correctly in my view,[18] that the net effect of the city's ban on billboards will be a reduction in the total quantity of communication in San Diego. If the ban is enforced, some present users of billboards will not be able to communicate in the future as effectively as they do now.[19] This ordinance cannot, therefore, be sustained on the assumption that the remaining channels of communication will be just as effective for all persons as a communications marketplace which includes a thousand or more large billboards available for hire.

The unequivocal language of the First Amendment prohibits any law "abridging the freedom of speech." That language could surely be read to foreclose any law reducing the quantity of communication within a jurisdiction. I am convinced, however, that such a reading would be incorrect. My conviction is supported by a hypothetical example, by the Court's prior cases, and by an appraisal of the healthy character of the communications market.

Archaeologists use the term "graffiti" to describe informal inscriptions on tombs and ancient monuments. The graffito was familiar in the culture of Egypt and Greece, in the Italian decorative art of the 15th century, and it survives today in some subways and on the walls of public buildings.[20] It is ***550** an inexpensive means of communicating political, commercial, and frivolous messages to large numbers of people; some creators of graffiti have no effective alternative means of publicly expressing themselves. Nevertheless, I believe a community has the right to decide that its interests in protecting property from damaging trespasses and in securing beautiful surroundings outweigh the countervailing interest in uninhibited expression by means of words and pictures in public places. If the First Amendment categorically protected the marketplace of ideas from any quantitative restraint, a municipality could not outlaw graffiti.

Our prior decisions are not inconsistent with this proposition. Whether one interprets the Court's decision in *Kovacs v. Cooper*, 336 U.S. 77, 69 S.Ct. 448, 93 L.Ed. 513, as upholding a total ban on the use of sound trucks, or merely a ban on the "loud and raucous" use of amplifiers, the case at least stands for the proposition that a municipality may enforce a rule that curtails the effectiveness of a particular means of communication.[21] Even the dissenting Justices in that case thought it obvious that "cities may restrict or absolutely ban the use of amplifiers on busy streets in the business area." *Id.*, at 104, 69 S.Ct., at 462 (Black, J., joined by Douglas and Rutledge, JJ., dissenting).[22] *Kovacs*, I believe, ***551** forecloses any claim that a prohibition of billboards ****2915** must fall simply because it has some limitating effect on the communications market.[23]

***552** I therefore assume that some total prohibitions may be permissible. It seems to be accepted by all that a zoning regulation excluding billboards from residential neighborhoods is justified by the interest in maintaining pleasant surroundings and enhancing property values. The same interests are at work in commercial and industrial zones. Reasonable men may assign different weights to the conflicting interests, but in constitutional terms I believe the essential inquiry is the same throughout the city. For whether the ban is limited to residential areas, to the entire city except its most unsightly sections, or is citywide, it unquestionably will limit the quantity of communication. Moreover, the interests served by the ban are equally legitimate and substantial in all parts of the city. Those interests are both psychological and economic. The character of the environment affects property values and the quality of life not only for the suburban resident but equally so for the individual who toils in a factory or invests his capital in industrial properties.

Because the legitimacy of the interests supporting a city-wide zoning plan designed to improve the entire municipality are beyond dispute, in my judgment the constitutionality of the prohibition of outdoor advertising involves two separate questions. First, is there any reason to believe that the regulation is biased in favor of one point of view or another, or that it is a subtle method of regulating the controversial subjects that may be placed on the agenda for public debate? Second, is it fair to conclude that the market which remains open for the communication of both popular and unpopular ideas is ample and not threatened with gradually increasing restraints?

In this case, there is not even a hint of bias or censorship in the city's actions. Nor ****2916** is there any reason to believe that the overall communications market in San Diego is inadequate. ***553** Indeed, it may well be true in San Diego as in other metropolitan areas that the volume of communication is excessive and that the public is presented with too many words and pictures to recognize those that are most worthy of attention. In any event, I agree with THE CHIEF JUSTICE

  

that nothing in this record suggests that the ordinance poses a threat to the interests protected by the First Amendment.

III

If one is persuaded, as I am, that a wholly impartial total ban on billboards would be permissible,[24] it is difficult to understand why the exceptions in San Diego's ordinance present any additional threat to the interests protected by the First Amendment. The plurarity suggests that, because the exceptions are based in part on the subject matter of noncommercial speech, the city somehow is choosing the permissible subjects for public debate. See *ante*, at 2896. While this suggestion is consistent with some of the broad dictum in *Consolidated Edison Co. v. Public Service Comm'n,* 447 U.S. 530, 100 S.Ct. 2326, 65 L.Ed.2d 319, it does not withstand analysis in this case.

The essential concern embodied in the First Amendment is that government not impose its viewpoint on the public or select the topics on which public debate is permissible. The San Diego ordinance simply does not implicate this concern. Although *Consolidated Edison* broadly identified regulations based on the subject matter of speech as impermissible content-based regulations, essential First Amendment concerns ***554** were implicated in that case because the government was attempting to limit discussion of controversial topics, see *id.*, at 533, 100 S.Ct., at 2330, and thus was shaping the agenda for public debate. The neutral exceptions in the San Diego ordinance do not present this danger.

To the extent that the exceptions relate to subject matter at all,[25] I can find no suggestion on the face of the ordinance that San Diego is attempting to influence public opinion or to limit public debate on particular issues. Except for the provision allowing signs to be used for political campaign purposes for limited periods, see § 101.0700(F)(12), none of the exceptions even arguably relates to any controversial subject matter. As a whole they allow a greater dissemination of information than could occur under a total plan. Moreover, it was surely reasonable for the city to conclude that exceptions for clocks, thermometers, historic plaques, and the like, would have a ****2917** lesser impact on the appearance of the city than the typical large billboards.

The exception for political campaign signs presents a different question. For I must assume that these signs may be ***555** just as unsightly and hazardous as other offsite billboards. Nevertheless, the fact that the community places a special value on allowing additional communication to occur during political campaigns is surely consistent with the interests the First Amendment was designed to protect. Of course, if there were reason to believe that billboards were especially useful to one political party or candidate, this exception would be suspect. But nothing of that sort is suggested by this record. In the aggregate, therefore, it seems to me that the exceptions in this ordinance cause it to have a less serious effect on the communications market than would a total ban.

In sum, I agree with THE CHIEF JUSTICE that nothing more than a rather doctrinaire application of broad statements that were made in other contexts may support a conclusion that this ordinance is unconstitutional because it includes a limited group of exceptions that neither separately nor in the aggregate compromise "our zealous adherence to the principle that the government may not tell the citizen what he may or may not say." *Young v. American Mini Theatres, Inc.*, 427 U.S. 50, 63, 96 S.Ct. 2440, 2448, 49 L.Ed.2d 310 (opinion of STEVENS, J.). None of the exceptions is even arguably "conditioned upon the sovereign's agreement with what a speaker may intend to say." *Ibid.* Accordingly, and for the reasons stated in greater detail by THE CHIEF JUSTICE, I respectfully dissent.

Chief Justice BURGER, dissenting.

Today the Court takes an extraordinary—even a bizarre—step by severely limiting the power of a city to act on risks it perceives to traffic safety and the environment posed by large, permanent billboards. Those joining the plurality opinion invalidate a city's effort to minimize these traffic hazards and eyesores simply because, in exercising rational legislative judgment, it has chosen to permit a narrow class of signs that serve special needs.

Relying on simplistic platitudes about content, subject matter, and the dearth of other means to communicate, the ***556** billboard industry attempts to escape the real and growing problems every municipality faces in protecting safety and preserving the environment in an urban area. The Court's disposition of the serious issues involved exhibits insensitivity to the impact of these billboards on those who must live with them and the delicacy of the legislative judgments involved in regulating them. American cities desiring to mitigate the dangers mentioned must, as a matter of *federal constitutional law*, elect between two

  

unsatisfactory options: (a) allowing all "noncommercial" signs, no matter how many, how dangerous, or how damaging to the environment; or (b) forbidding signs altogether. Indeed, lurking in the recesses of today's opinions is a not-so-veiled threat that the second option, too, may soon be withdrawn. This is the long arm and voracious appetite of federal power—this time judicial power—with a vengeance, reaching and absorbing traditional concepts of local authority.

(1)

This case presents the Court with its first occasion to address the constitutionality of billboard regulation by local government. I fear that those joining in today's disposition have become mesmerized with broad, but not controlling, language appearing in our prior opinions but now torn from its original setting. They overlook a cogent admonition to avoid

> "mechanically apply[ing] the doctrines developed in other contexts.... The unique situation presented by this ordinance calls, as cases in this area so often do, for a careful inquiry into the competing concerns of the State and the interests protected by the guarantee of free expression." *Young v. American Mini Theatres, Inc.*, 427 U.S. 50, 76, 96 S.Ct. 2440, 2455, 49 L.Ed.2d 310 (1976) (POWELL, J., concurring).

****2918** See *Columbia Broadcasting System, Inc. v. Democratic National Committee*, 412 U.S. 94, 134, 93 S.Ct. 2080, 2102, 36 L.Ed.2d 772 (1973) (STEWART, J., concurring).

***557** It is not really relevant whether the San Diego ordinance is viewed as a regulation regarding time, place, and manner, or as a total prohibition on a medium with some exceptions defined, in part, by content. Regardless of the label we give it, we are discussing a very simple and basic question: the authority of local government to protect its citizens' legitimate interests in traffic safety and the environment by eliminating distracting and ugly structures from its buildings and roadways, to define which billboards actually pose that danger, and to decide whether, in certain instances, the public's need for information outweighs the dangers perceived. The billboard industry's superficial sloganeering is no substitute for analysis, and the plurality opinion and the opinion concurring in the judgment adopt much of that approach uncritically. General constitutional principles indeed apply, but "each case ultimately must depend on its own specific facts ...." *Erznoznick v. City of Jacksonville*, 422 U.S. 205, 209, 95 S.Ct. 2268, 2272, 45 L.Ed.2d 125 (1975).

(2)

(a)

As all those joining in today's disposition necessarily recognize, " '[e]ach medium of expression ... must be assessed for First Amendment purposes by standards suited to it, for each may present its own problems.' " *Ante*, at 2889, n.8 (plurality opinion); *ante*, at 2902 (BRENNAN, J., concurring in judgment) (quoting *Southeastern Promotions, Ltd., v. Conrad*, 420 U.S. 546, 557, 95 S.Ct. 1239, 1245, 43 L.Ed.2d 448 (1975)). Accord, *California v. LaRue*, 409 U.S. 109, 117, 93 S.Ct. 390, 396, 34 L.Ed.2d 342 (1972); *Red Lion Broadcasting Co. v. FCC*, 395 U.S. 367, 386, 89 S.Ct. 1794, 1804 (1969); *Joseph Burstyn, Inc. v. Wilson*, 343 U.S. 495, 503, 23 L.Ed.2d 371 (1952); *Kovacs v. Cooper*, 336 U.S. 77, 97, 69 S.Ct. 448, 458, 93 L.Ed. 513 (1949) (Jackson, J., concurring).[1] The uniqueness of ***558** the medium, the availability of alternative means of communication, and the public interest the regulation serves are important factors to be weighed; and the balance very well may shift when attention is turned from one medium to another. *Heffron v. International Society for Krishna Consciousness, Inc.*, 452 U.S. 640, 101 S.Ct. 2559, 69 L.Ed.2d 298 (1981). Regulating newspapers, for example, is vastly different from regulating billboards.

Some level of protection is generally afforded to the medium a speaker chooses, but as we have held just this past week in *Heffron*, "the First Amendment does not guarantee the right to communicate one's views at all times and places or *in any manner* that may be desired." *Id.*, at 647, 101 S.Ct., at 2563 (emphasis added). Justice Black, speaking for the Court in *Adderley v. Florida*, 385 U.S. 39, 48, 87 S.Ct. 242, 247, 17 L.Ed.2d 149 (1966) (emphasis added), "vigorously and forthrightly rejected" the notion that "people who want to propagandize protests or views have a constitution right to do so whenever and *however* and wherever they please."

In *Kovacs v. Cooper, supra*, the Court upheld a municipal ordinance that totally banned sound trucks from a town's borders; other media were available. The Court had no difficulty distinguishing *Saia v. New York*, 334 U.S. 558, 68 S.Ct. 1148, 92 L.Ed. 1574 (1948), decided seven

  

months earlier, **2919 where the Court had invalidated an ordinance requiring a permit from the local police chief before using a sound truck. The danger seen in *Saia* was in allowing a single government official to regulate a medium of communication with the attendant risk that the decision would be based on the message, not the medium. *Id.*, at 560–561, 68 S.Ct., at 1149–1150.

The ordinance in *Kovacs*, however, did not afford that kind of potential for censorship and was held not to violate the First Amendment. *559 336 U.S., at 82–83, 69 S.Ct., at 451 (plurality opinion of Reed, J.). Justice Frankfurter, concurring, expressed this point more broadly:

> "So long as a legislature does not prescribe what ideas may be noisily expressed and what may not be, nor discriminate among those who would make inroads upon the public peace, it is not for us to supervise the limits the legislature may impose in safeguarding the steadily narrowing opportunities for serenity and reflection." *Id.*, at 97, 69 S.Ct., at 458.

Justice Jackson, also concurring separately, agreed with this core proposition, writing that the *Kovacs* type of regulation would not infringe freedoms of speech "unless such regulation or prohibition undertakes to censor the contents of the broadcasting." *Ibid.*

Later, Chief Justice Warren, speaking for the Court in *United States v. O'Brien*, 391 U.S. 367, 376, 88 S.Ct. 1673, 1678, 20 L.Ed.2d 672 (1968), observed:

> "[W]hen 'speech' and 'nonspeech' elements are combined in the same course of conduct, a sufficiently important governmental interest in regulating the nonspeech element can justify incidental limitations on First Amendment freedoms."

In the 1979 Term, we once again reaffirmed that restrictions are valid if they "serve a significant governmental interest and leave ample alternative channels for communication." *Consolidated Edison Co. v. Public Service Comm'n*, 447 U.S. 530, 535, 100 S.Ct. 2326, 2332, 65 L.Ed.2d 319 (1980). The Court has continued to apply this same standard almost literally to this day in *Heffron v. International Society for Krishna Consciousness, Inc., supra*, at 647–648, 101 S.Ct., at 2564. Accord, *Schad v. Mount Ephraim*, 452 U.S. 61, 75–76, 101 S.Ct. 2176, 2186, 68 L.Ed.2d 671 (1981).

(b)

San Diego adopted its ordinance to eradicate what it perceives —and what it has a right to perceive—as ugly and dangerous eyesores thrust upon its citizens. This was done *560 with two objectives in mind: the disfigurement of the surroundings and the elimination of the danger posed by these large, eye-catching signs that divert the attention of motorists.[2] The plurality acknowledges—as they must—that promoting traffic safety and preserving scenic beauty "are substantial governmental goals." *Ante*, at 2892. See also *ante*, at 2903 (BRENNAN, J., concurring in judgment) (traffic safety). But, having acknowledged the legitimacy of local governmental authority, the plurality largely ignores it.

As the plurality also recognizes, *ante*, at 2893–2894, the means the city has selected to advance these goals are sensible and do **2920 not exceed what is necessary to eradicate the dangers seen. When distraction of motorists is the perceived harm, the authorities reasonably can conclude that each billboard adds to the dangers in moving traffic; obviously, the billboard industry does not erect message carriers that do not catch the eye of the traveler.[3] In addition, a legislative body reasonably can conclude that every large billboard adversely *561 affects the environment, for each destroys a unique perspective on the landscape and adds to the visual pollution of the city.[4] Pollution is not limited to the air we breath and the water we drink; it can equally offend the eye and the ear.

The means chosen to effectuate legitimate governmental interests are not for this Court to select. "These are matters for the legislative judgment controlled by public opinion." *Kovacs v. Cooper*, 336 U.S., at 96–97, 69 S.Ct., at 458. (Frankfurter, J., concurring). The plurality ignores this Court's seminal opinions in *Kovacs* by substituting its judgment for that of city officials and disallowing a ban on one offensive and intrusive means of communication when other means are available. Although we must ensure that any regulation of speech "further[s] a sufficiently substantial government interest," *Schad v. Mount Ephraim, supra*, at 68, 101 S.Ct., at 2183, given a reasonable approach to a perceived problem, this Court's duty is not to make the primary policy decisions but instead is to determine whether the legislative approach is essentially neutral to the messages conveyed and leaves open other adequate means of conveying those messages. This is the essence of both democracy and federalism, and we gravely damage both when we undertake to throttle legislative discretion and judgment at the "grass roots" of our system.

  

(c)

The plurality, in a remarkable *ipse dixit*, states that "[t]here can be no question that a prohibition on the erection of billboards infringes freedom of speech ...." *Ante*, at 2899. Of course the city has restricted one form of communication, and this action implicates the First Amendment. But to say the ordinance presents a First Amendment *issue* is not necessarily to say that it constitutes a First Amendment *violation.* ***562** The plurality confuses the Amendment's coverage with the scope of its protection. See generally Schauer, Categories and the First Amendment: A Play in Three Acts, 34 Vand.L.Rev. 265, 270, 275–276 (1981).

In the process of eradicating the perceived harms, the ordinance here in no sense suppresses freedom of expression, either by discriminating among ideas or topics or by suppressing discussion generally. San Diego has not attempted to suppress any particular point of view or any category of messages; it has not censored any information; it has not banned any thought. See *Police Dept. of Chicago v. Mosley*, 408 U.S. 92, 96, 92 S.Ct. 2286, 2290, 33 L.Ed.2d 212 (1972). It has not "attempt[ed] to give one side of a debatable public question an advantage in expressing its view to the people ...." *First National Bank of Boston v. Bellotti*, 435 U.S. 765, 785, 98 S.Ct. 1407, 1420, 55 L.Ed.2d 707 (1978) (footnote omitted). See *Madison School District v. Wisconsin Employment Relations Comm'n*, 429 U.S. 167, 175–176, 97 S.Ct. 421, 426, 50 L.Ed.2d 376 (1976). There is no suggestion or danger that the city has permitted these narrow categories of signs but forbidden the vast majority "merely because public officials disapprove of the speaker's view." *Niemotko v. Maryland*, 340 U.S. 268, 282, 71 S.Ct. 325, 333, 95 L.Ed. 267 (1951) (FRANKFURTER, J., concurring in result). Moreover, aside from a few ****2921** narrow and essentially negligible exceptions, see *infra*, at 2922–2923, San Diego has not differentiated with regard to topic. See *Consolidated Edison Co. v. Public Service Comm'n*, 447 U.S., at 537–538, 100 S.Ct., at 2333; *Carey v. Brown*, 447 U.S. 455, 462, n. 6, 463, 100 S.Ct. 2286, 2291, n. 6, 2291, 65 L.Ed.2d 263 (1980); *First National Bank v. Bellotti, supra*, 435 U.S., at 784–785, 98 S.Ct., at 1420; *Police Dept. of Chicago v. Mosley, supra*, 408 U.S., at 96, 92 S.Ct., at 2290. The city has not undertaken to determine, paternalistically, " 'what information is relevant to self-government.' " *Gertz v. Robert Welch, Inc.*, 418 U.S. 323, 339, 94 S.Ct. 2997, 3005, 41 L.Ed.2d 789 (1974) (quoting *Rosenbloom v. Metromedia, Inc.*, 403 U.S. 29, 79, 91 S.Ct. 1811, 1837, 29 L.Ed.2d 296 (1971) (MARSHALL, J., dissenting)).

The messages conveyed on San Diego billboards—whether commercial, political, social, or religious—are not inseparable from the billboards that carry them. These same messages ***563** can reach an equally large audience through a variety of other media: newspapers, television, radio, magazines, direct mail, pamphlets, etc. True, these other methods may not be so "eye-catching"—or so cheap—as billboards,[5] but there has been no suggestion that billboards heretofore have advanced any particular viewpoint or issue disproportionately to advertising generally. Thus, the ideas billboard advertisers have been presenting are not *relatively* disadvantaged vis-à-vis the messages of those who heretofore have chosen other methods of spreading their views. See *First National Bank v. Bellotti, supra*, at 789, 98 S.Ct., at 1422. See also *Martin v. City of Struthers*, 319 U.S. 141, 146, 63 S.Ct. 862, 864, 87 L.Ed. 1313 (1943). It borders on the frivolous to suggest that the San Diego ordinance infringes on freedom of expression, given the wide range of alternative means available.

(3)

(a)

The plurality concludes that a city may constitutionally exercise its police power by eliminating offsite *commercial* billboards; they reach this result by following our recent cases holding that commercial speech, while protected by the Constitution, receives less protection than "noncommercial"—*i. e.*, political, religious, social—speech. See, *e. g., Central Hudson Gas & Electric Corp. v. Public Service Comm'n*, 447 U.S. 557, 100 S.Ct. 2343, 65 L.Ed.2d 341 (1980); *Ohralik v. Ohio State Bar Assn.*, 436 U.S. 447, 98 S.Ct. 1912, 56 L.Ed.2d 444 (1978); *Bates v. State Bar of Arizona*, 433 U.S. 350, 97 S.Ct. 2691, 53 L.Ed.2d 810 (1977). But as the plurality giveth, they also taketh away—and, in the process take away virtually everything.

***564** In a bizarre twist of logic, the plurality seems to hold that *because* San Diego has recognized the hardships of its ordinance on certain special needs of citizens and, therefore, exempted a few narrowly defined classes of signs from the ordinance's scope—for example, onsite signs identifying places of business, time-and-temperature signs,

  

commemorative and historic plaques—the ordinance violates the First Amendment. From these dubious premises, the plurality has given every city, town, and village in this country desiring to respond to the hazards posed by billboards a choice as previously noted, between two equally unsatisfactory alternatives:

(a) banning all signs of any kind whatsoever, or

(b) permitting all "noncommercial" signs, no matter how numerous, how large, how damaging to the environment, or how dangerous to motorists and pedestrians.

**2922 Otherwise, the municipality must give up and do nothing in the face of an ever-increasing menace to the urban environment. Indeed, the plurality hints—and not too subtly—that the first option might be withdrawn if any city attempts to invoke it. See, *ante*, at 2896, n. 20. This result is insensitive to the needs of the modern urban dweller and devoid of valid constitutional foundations.

(b)

The exceptions San Diego has provided—the presence of which is the plurality's sole ground for invalidating the ordinance—are few in number, are narrowly tailored to peculiar public needs, and do not remotely endanger freedom of speech. Indeed, the plurality concludes that the distinctions among commercial signs are valid. *Ante*, at 2895. More generally, as stated *supra*, at 2920–2921, San Diego has not preferred any viewpoint and, aside from these limited exceptions, has not allowed some subjects while forbidding others.

Where the ordinance does differentiate among topics, it simply allows such noncontroversial things as conventional *565 signs identifying a business enterprise, time-and-temperature signs, historical markers, and for sale signs. It borders—if not trespasses—on the frivolous to suggest that, by allowing such signs but forbidding noncommercial billboards, the city has infringed freedom of speech. This ignores what we recognized in *Police Dept. of Chicago v. Mosley*, 408 U.S., at 98, 92 S.Ct., at 2291, that "there may be sufficient regulatory interests justifying selective exclusions or distinctions...." For each exception, the city is either acknowledging the unique connection between the medium and the message conveyed, see, *e. g., Linmark Associates, Inc. v. Willingboro*, 431 U.S. 85, 97 S.Ct. 1614, 52 L.Ed.2d 155 (1977) (for sale signs), or promoting a legitimate public interest in information. Similarly, in each instance, the city reasonably could conclude that the balance between safety and aesthetic concerns on the one hand and the need to communicate on the other has tipped the opposite way.[6] More important, in no instance is the exempted topic controversial; there can be no rational debate over, for example, the time, the temperature, the existence of an offer of sale, or the identity of a business establishment. The danger of San Diego's setting the agenda of public discussion is not simply *de minimis*; it is nonexistent. The plurality today trivializes genuine First Amendment values by hinging its holding on the city's decision to allow some signs while preventing others that constitute the vast majority of the genre.

*566 Thus, despite the plurality's unique focus, we are not confronted with an ordinance like the one in *Saia v. New York*, which vested in a single official—the local police chief—an unlimited discretion to grant or to deny licenses for sound trucks. "Annoyance at ideas can be cloaked in annoyance at sound. The power of censorship inherent in this type of ordinance reveals its vice." 334 U.S., at 562, 68 S.Ct., at 1150. Accord, *Shuttlesworth v. Birmingham*, 394 U.S. 147, 150–151, 89 S.Ct. 935, 938, 22 L.Ed.2d 162 (1969); *Staub v. City of Baxley*, 355 U.S. 313, 322–325, 78 S.Ct. 277, 282–284, 2 L.Ed.2d 302 (1958); *Lovell v. Griffin*, 303 U.S. 444, 451–452, 58 S.Ct. 666, 668–669, 82 L.Ed. 949 (1938). See also *Consolidated Edison Co. v. Public Service Comm'n*, 447 U.S., at 546–548, 100 S.Ct., at 2338–2339 (STEVENS, J., concurring in judgment). But here we have no allegation and no danger that San Diego is using its billboard ordinance **2923 as a mask for promoting or deterring any viewpoint or issue of public debate. This ordinance, is precisely the same sense as the regulation we upheld last week in *Heffron v. International Society for Krishna Consciousness, Inc.*, "is not open to the kind of arbitrary application that this Court has condemned ... because such discretion has the potential for becoming a means of suppressing a particular point of view." 452 U.S., at 649, 101 S.Ct., at 2564.[7]

San Diego simply is exercising its police power to provide an environment of tranquility, safety, and as much residual beauty as a modern metropolitan area can achieve. A city's simultaneous recognition of the need for certain exceptions permitting limited forms of communication, purely factual in nature and neutral as to the speaker, should not wholly deprive the city of its ability to address the balance of the problem. There is no threat here to our "profound national commitment to the principle that debate on public issues should be uninhibited, robust, and wide-open ...." *New York Times Co. v. Sullivan*, 376 U.S. 254, 270, 84 S.Ct. 710, 720, 11 L.Ed.2d 686 (1964).

  

***567** (c)

The fatal flaw in the plurality's logic comes when it concludes that San Diego, by exempting on-site commercial signs, thereby has "afford[ed] a greater degree of protection to commercial than to noncommercial speech." *Ante*, at 2895. The "greater degree of protection" our cases have given noncommercial speech establishes a narrow range of constitutionally permissible regulation. To say noncommercial speech receives a greater degree of *constitutional* protection, however, does not mean that a legislature is forbidden to afford differing degrees of *statutory* protection when the restrictions on each form of speech—commercial and noncommercial—otherwise pass constitutional muster under the standards respectively applicable.

No case in this Court creates, as the plurality suggests, a hierarchy of types of speech in which, if one type is actually protected through legislative judgment, the Constitution compels that that judgment be exercised in favor of all types ranking higher on the list. When a city chooses to impose looser restrictions in one area than it does in another analogous area—even one in which the Constitution more narrowly constrains legislative discretion—it neither undermines the constitutionality of its regulatory scheme nor renders its legislative choices *ipso facto* irrational. A city does not thereby "conced [e] that some communicative interests ... are stronger than its competing interests in esthetics and traffic safety," *ante*, at 2899; it has only declined, in one area, to exercise its powers to the full extent the Constitution permits. The Constitution does not require any governmental entity to reach the limit of permissible regulation solely because it has chosen to do so in a related area. Cf. *Williamson v. Lee Optical Co.*, 348 U.S. 483, 489, 75 S.Ct. 461, 465, 99 L.Ed. 563 (1955) (a "legislature may select one phase of one field and apply a remedy there, neglecting the others"). The plurality today confuses the degree of constitutional protection—*i. e.*, the strictness of the test applied—with the outcome of legislative judgment.

***568** By allowing communication of certain commercial ideas via billboards, but forbidding noncommercial signs altogether, a city does not necessarily place a greater "value" on commercial speech.[8] In these situations, ****2924** the city is simply recognizing that it has greater latitude to distinguish among various forms of commercial communication when the same distinctions would be impermissible if undertaken with regard to noncommercial speech. Indeed, when adequate alternative channels of communication are readily available so that the message may be freely conveyed through other means, a city arguably is more faithful to the Constitution by treating all noncommercial speech the same than by attempting to impose the same classifications in noncommercial as it has in commercial areas. To undertake the same kind of balancing and content judgment with noncommercial speech that is permitted with commercial speech is far more likely to run afoul of the First Amendment.[9]

Thus, we may, consistent with the First Amendment, hold that a city may—and perhaps must—take an all-or-nothing approach with noncommercial speech yet remain free to adopt selective exceptions for commercial speech, as long as the latter advance legitimate governmental interests. Indeed, ***569** it is precisely *because* "the city does not have the same range of choice in the area of noncommercial speech to evaluate the strength of, or distinguish between, various communicative interests," *ante*, at 2896, that a city should be commended, not condemned, for treating all noncommercial speech the same.

(4)

The Court today unleashes a novel principle, unnecessary and, indeed, alien to First Amendment doctrine announced in our earlier cases. As Justice STEVENS cogently observes, the plurality, "somewhat ironically, concludes that the ordinance is an unconstitutional abridgment of speech *because it does not abridge enough speech*." *Ante*, at 2909 (emphasis added). The plurality gravely misconstrues the commercial-noncommercial distinction of earlier cases when it holds that the preferred position of noncommercial speech compels a city to impose the same or greater limits on commercial as on noncommercial speech. The Court today leaves the modern metropolis with a series of Hobson's choices and rejects basic concepts of federalism by denying to every community the important powers reserved to the people and the States by the Constitution. This is indeed "an exercise of raw judicial power," *Doe v. Bolton*, 410 U.S. 179, 222, 93 S.Ct. 739, 763, 35 L.Ed.2d 201 (1973) (WHITE, J., dissenting), and is far removed from the high purposes of the First Amendment.

  

Justice REHNQUIST, dissenting.

I agree substantially with the views expressed in the dissenting opinions of THE CHIEF JUSTICE and Justice STEVENS and make only these two additional observations: (1) In a case where city planning commissions and zoning boards must regularly confront constitutional claims of this sort, it is a genuine misfortune to have the Court's treatment of the subject be a virtual Tower of Babel, from which no definitive principles can be clearly drawn; and (2) I regret even more ***570** keenly my contribution to this judicial clangor, but find that none of the views expressed in the other opinions written in the case come close enough to mine to warrant the necessary compromise to obtain a Court opinion.

In my view, the aesthetic justification alone is sufficient to sustain a total prohibition of billboards within a community, see *Berman v. Parker*, 348 U.S. 26, 32-33, 75 S.Ct. 98, 102-103, 99 L.Ed. 27 (1954), regardless of whether the particular community is "a historical community such as Williamsburg' or one as unsightly as the older ****2925** parts of many of our major metropolitan areas. Such areas should not be prevented from taking steps to correct, as best they may, mistakes of their predecessors. Nor do I believe that the limited exceptions contained in the San Diego ordinance are the types which render this statute unconstitutional. The closest one is the exception permitting billboards during political campaigns, but I would treat this as a virtually self-limiting exception which will have an effect on the aesthetics of the city only during the periods immediately prior to a campaign. As such, it seems to me a reasonable outlet, limited as to time, for the free expression which the First and Fourteenth Amendments were designed to protect.

Unlike Justice BRENNAN, I do not think a city should be put to the task of convincing a local judge that the elimination of billboards would have more than a negligible impact on aesthetics. Nothing in my experience on the bench has led me to believe that a judge is in any better position than a city or county commission to make decisions in an area such as aesthetics. Therefore, little can be gained in the area of constitutional law, and much lost in the process of democratic decisionmaking, by allowing individual judges in city after city to second-guess such legislative or administrative determinations.

**All Citations**

453 U.S. 490, 101 S.Ct. 2882, 69 L.Ed.2d 800, 16 ERC 1057, 11 Envtl. L. Rep. 20,600

Footnotes

* The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See *United States v. Detroit Lumber Co.*, 200 U.S. 321, 337, 26 S.Ct. 282, 287, 50 L.Ed. 499.

1 San Diego Ordinance No. 10795 (New Series), enacted March 14, 1972. The general prohibition of the ordinance reads as follows:

"B. OFF–PREMISE OUTDOOR ADVERTISING DISPLAY SIGNS PROHIBITED

"Only those outdoor advertising display signs, hereinafter referred to as signs in this Division, which are either signs designating the name of the owner or occupant of the premises upon which such signs are placed, or identifying such premises; or signs advertising goods manufactured or produced or services rendered on the premises upon which such signs are placed shall be permitted. The following signs shall be prohibited:

"1. Any sign identifying a use, facility or service which is not located on the premises.

"2. Any sign identifying a product which is not produced, sold or manufactured on the premises.

"3. Any sign which advertises or otherwise directs attention to a product, service or activity, event, person, institution or business which may or may not be identified by a brand name and which occurs or is generally conducted, sold, manufactured, produced or offered elsewhere than on the premises where such sign is located."

2 The California Supreme Court noted that the ordinance as written might be interpreted "to apply to signs of a character very different from commercial billboards—for example, to a picket sign announcing a labor dispute or a small sign placed in one's front yard proclaiming a political or religious message." 26 Cal.3d, at 856, n.2, 164 Cal.Rptr., at 513, n.2, 610 P.2d, at 410, n.2. For this reason the court adopted the narrowing definition (quoted in the text). That definition, however, focused on the structure not the content of the billboard: It excluded "picket signs" but not billboards used to convey a noncommercial message. Cf. *State ex rel. Dept. of Transportation v. Pile*, 603 P.2d 337 (1979) (Oklahoma Supreme Court construed a state statute prohibiting outdoor advertising signs as not covering noncommercial speech in order to avoid constitutional problems). The court explicitly recognized this continuing burden on noncommercial speech: "The

  

relatively few non-commercial advertisers who would be restricted by the San Diego ordinance ... possess a great variety of alternative means of communication." 26 Cal.3d, at 869, 164 Cal.Rptr., at 521–522, 610 P.2d, at 418–419. Furthermore, the city continues to contend that the ordinance prohibits the use of billboards to convey a noncommercial message, unless that message falls within one of the specified exemptions contained in the ordinance. Brief for Appellees 6.

3 Section 101.0700(F) provides as follows:

"The following types of signs shall be exempt from the provisions of these regulations:

"1. Any sign erected and maintained pursuant to and in discharge of any governmental function or required by any law, ordinance or governmental regulation.

"2. Bench signs located at designated public transit bus stops; provided, however, that such signs shall have any necessary permits required by Sections 62.0501 and 62.0502 of this Code.

"3. Signs being manufactured, transported and/or stored within the City limits of the city of San Diego shall be exempt; provided, however, that such signs are not used, in any manner or form, for purposes of advertising at the place or places of manufacture or storage.

"4. Commemorative plaques of recognized historical societies and organizations.

"5. Religious symbols, legal holiday decorations and identification emblems of religious orders or historical societies.

"6. Signs located within malls, courts, arcades, porches, patios and similar areas where such signs are not visible from any point on the boundary of the premises.

"7. Signs designating the premises for sale, rent or lease; provided, however, that any such sign shall conform to all regulations of the particular zone in which it is located.

"8. Public service signs limited to the depiction of time, temperature or news; provided, however, that any such sign shall conform to all regulations of the particular zone in which it is located.

"9. Signs on vehicles regulated by the City that provide public transportation including, but not limited to, buses and taxicabs.

"10. Signs on licensed commercial vehicles, including trailers; provided, however, that such vehicles shall not be utilized as parked or stationary outdoor display signs.

"11. Temporary off-premise subdivision directional signs if permitted by a conditional use permit granted by the Zoning Administrator.

"12. Temporary political campaign signs, including their supporting structures, which are erected or maintained for no longer than 90 days and which are removed within 10 days after election to which they pertain."

4 This account of appellants' businesses is taken from the joint stipulation of facts entered into by the parties and filed with their cross-motions for summary judgment in the California Superior Court. See Joint Stipulation of Facts Nos. 12–20, App. 44a–45a.

5 Joint Stipulation of Facts No. 24, App. 47a.

6 *Suffolk Outdoor Advertising Co. v. Hulse*, 439 U.S. 808, 99 S.Ct. 66, 58 L.Ed.2d 101 (1978); *Newman Signs, Inc. v. Hjelle*, 440 U.S. 901, 99 S.Ct. 1205, 59 L.Ed.2d 449 (1979); *Lotze v. Washington*, 444 U.S. 921, 100 S.Ct. 257, 62 L.Ed.2d 177 (1979).

7 These cases primarily involved due process and equal protection challenges to municipal regulations directed at billboards. The plaintiffs claimed that their method of advertising was improperly distinguished from other methods that were not similarly regulated and that the ordinances resulted in takings of property without due process. The Court rejected these claims, holding that the regulation of billboards fell within the legitimate police powers of local government.

8 The uniqueness of each medium of expression has been a frequent refrain: See, *e. g., Southeastern Promotions, Ltd. v. Conrad*, 420 U.S. 546, 557, 95 S.Ct. 1239, 1246, 43 L.Ed.2d 448 (1975) ("Each medium of expression ... must be assessed for First Amendment purposes by standards suited to it, for each may present its own problems"); *FCC v. Pacifica Foundation*, 438 U.S. 726, 748, 98 S.Ct. 3026, 3040, 57 L.Ed.2d 1073 (1978) ("We have long recognized that each medium of expression presents special First Amendment problems"); *Joseph Burstyn, Inc. v. Wilson*, 343 U.S. 495, 503, 72 S.Ct. 777, 781, 96 L.Ed. 1098 (1952) ("Each method tends to present its own peculiar problems").

9 For a description of the history of the use of outdoor advertising in this country and the use of billboards within that history, see F. Presbrey, The History and Development of Advertising 497–511 (1929); Tocker, Standardized Outdoor Advertising: History, Economics and Self-Regulation, in Outdoor Advertising: History and Regulation 11, 29 (J. Houck ed. 1969).

10 Joint Stipulation of Facts No. 23, App. 46a–47a.

11 The California Supreme Court suggested that appellants, owners of billboard businesses, did not have standing to raise the argument that billboards may, for some individuals or groups, be the only affordable method of communicating to

  

a large audience. 26 Cal.3d, at 869, n. 14, 164 Cal.Rptr., at 522, n. 14, 610 P.2d, at 419, n. 14. In so holding, the California court seems to have confused the category of "commercial speech" with the category of individuals who have a "commercial interest" in protected speech. We have held that the overbreadth doctrine, under which a party whose own activities are unprotected may challenge a statute by showing that it substantially abridges the First Amendment rights of parties not before the court, will not be applied in cases involving "commercial speech." *Bates v. State Bar of Arizona*, 433 U.S. 350, 381, 97 S.Ct. 2691, 2707, 53 L.Ed.2d 810 (1977). However, we have never held that one with a "commercial interest" in speech also cannot challenge the facial validity of a statute on the grounds of its substantial infringement of the First Amendment interests of others. Were it otherwise, newspapers, radio stations, movie theaters and producers—often those with the highest interest and the largest stake in a First Amendment controversy—would not be able to challenge government limitations on speech as substantially overbroad. As the opinion in *Bates* observed, *id.*, at 363, 97 S.Ct., at 2698–2699:

"[O]ur cases long have protected speech even though it is in the form of a paid advertisement, *Buckley v. Valeo*, 424 U.S. 1 [96 S.Ct. 612, 46 L.Ed.2d 659] (1976); *New York Times Co. v. Sullivan*, 376 U.S. 254 [84 S.Ct. 710, 11 L.Ed.2d 686] (1964); in a form that is sold for profit, *Smith v. California*, 361 U.S. 147 [80 S.Ct. 215, 4 L.Ed.2d 205] (1959); *Murdock v. Pennsylvania*, 319 U.S. 105 [63 S.Ct. 870, 87 L.Ed. 1292] (1943); or in the form of a solicitation to pay or contribute money, *New York Times Co. v. Sullivan, supra; Cantwell v. Connecticut*, 310 U.S. 296 [60 S.Ct. 900, 84 L.Ed. 1213] (1940). If commercial speech is to be distinguished, it 'must be distinguished by its content.' [*Virginia Pharmacy Board v. Virginia Consumer Council*, 425 U.S. 748, 96 S.Ct. 1817, 48 L.Ed.2d 346] 425 U.S., at 761 [96 S.Ct., at 1825]." See also *Virginia Pharmacy Board v. Virginia Citizens Consumer Council*, 425 U.S. 748, 761, 96 S.Ct. 1817, 1825, 48 L.Ed.2d 346 (1976).

12 Justice STEWART'S comments in *Virginia Pharmacy Board* are worth quoting here:

"The Court's determination that commercial advertising of the kind at issue here is not 'wholly outside the protection of' the First Amendment indicates by its very phrasing that there are important differences between commercial price and product advertising, on the one hand, and ideological communication on the other. Ideological expression, be it oral, literary, pictorial, or theatrical, is integrally related to the exposition of thought—thought that may shape our concepts of the whole universe of man. Although such expression may convey factual information relevant to social and individual decisionmaking, it is protected by the Constitution, whether or not it contains factual representations and even if it includes inaccurate assertions of fact....

"Commercial price and product advertising differs markedly from ideological expression because it is confined to the promotion of specific goods or services. The First Amendment protects the advertisement because of the 'information of potential interest and value' conveyed, rather than because of any direct contribution to the interchange of ideas." *Id.*, at 779–780, 96 S.Ct., at 1834–1835 (references and footnotes omitted).

13 The California Supreme Court had held in *Varney & Green v. Williams*, 155 Cal. 318, 100 P. 867 (1909), that a municipal ordinance prohibiting all advertising billboards purely for esthetic reasons was an unconstitutional exercise of municipal police power. The court specifically overruled *Varney* in upholding the San Diego ordinance at issue here. California's current position is in accord with that of most other jurisdictions. See n. 15, *infra.*

14 See *E. B. Elliott Advertising Co. v. Metropolitan Dade County*, 425 F.2d 1141, 1152 (CA 5 1970); *Markham Advertising Co. v. Washington*, 73 Wash.2d 405, 420–421, 439 P.2d 248, 258 (1968); *New York State Thruway Authority v. Ashley Motor Court, Inc.*, 10 N.Y.2d 151, 155–156, 218 N.Y.S.2d 640, 642, 176 N.E.2d 566, 568 (1961); *Ghaster Properties, Inc. v. Preston*, 176 Ohio St. 425, 438, 200 N.E.2d 328, 337 (1964); *Newman Signs, Inc. v. Hjelle*, 268 N.W.2d 741, 757 (N.D.1978); *Lubbock Poster Co. v. City of Lubbock*, 569 S.W.2d 935, 939 (Tex.Civ.App.1978); *State v. Lotze*, 92 Wash.2d 52, 59, 593 P.2d 811, 814 (1979); *Inhabitants, Town of Boothbay v. National Advertising Co.*, 347 A.2d 419, 422 (Me.1975); *Stuckey's Stores, Inc. v. O'Cheskey*, 93 N.M. 312, 321, 600 P.2d 258, 267 (1979); *In re Opinion of the Justices*, 103 N.H. 268, 270, 169 A.2d 762, 764 (1961); *General Outdoor Advertising Co. v. Department of Public Works*, 289 Mass. 149, 180–181, 193 N.E. 799, 813–814 (1935). But see *John Donnelly & Sons v. Campbell*, 639 F.2d 6, 11 (C.A.1 1980); *State ex rel. Dept. of Transportation v. Pile*, 603 P.2d, at 343; *Metromedia, Inc. v. City of Des Plaines*, 26 Ill.App.3d 942, 946, 326 N.E.2d 59, 62 (1975).

15 See *John Donnelly & Sons v. Campbell, supra*, at 11–12; *E. B. Elliott Advertising Co. v. Metropolitan Dade County, supra*, at 1152; *Newman Signs, Inc. v. Hjelle, supra*, at 757; *Markham Advertising Co. v. Washington, supra*, at 422–423, 439 P.2d, at 259; *Stuckey's Stores, Inc. v. O'Cheskey, supra*, at 321, 600 P.2d, at 267; *Suffolk Outdoor Advertising Co. v. Hulse*, 43 N.Y.2d 483, 489, 402 N.Y.S.2d 368, 370, 373 N.E.2d 263, 265 (1977); *John Donnelly & Sons, Inc. v. Outdoor Advertising Bd.*, 369 Mass. 206, 219, 339 N.E.2d 709, 717 (1975); *Cromwell v. Ferrier*, 19 N.Y.2d 263, 269, 279 N.Y.S.2d 22, 26, 225 N.E.2d 749, 753 (1967); *State v. Diamond Motors, Inc.*, 50 Haw. 33, 35–36, 429 P.2d 825, 827 (1967); *United*

  

*Advertising Corp. v. Metuchen*, 42 N.J. 1, 6, 198 A.2d 447, 449 (1964); *In re Opinion of the Justices, supra*, at 270–271, 169 A.2d, at 764. But see *State ex rel. Dept. of Transportation v. Pile, supra*, at 342; *Sunad, Inc. v. Sarasota*, 122 So.2d 611, 614–615 (Fla.1960).

16 The federal Highway Beautification Act of 1965, Pub.L. 89–285, 79 Stat. 1028, as amended, 23 U.S.C. § 131 (1976 ed. and Supp.III), requires that States eliminate billboards from areas adjacent to certain highways constructed with federal funds. The Federal Government, also prohibits billboards on federal lands. 43 CFR § 2921.0–6(a) (1980). Three States have enacted statewide bans on billboards. Maine, Me.Rev.Stat.Ann., Tit. 23, § 1901 *et seq.* (1980); Hawaii, Haw.Rev.Stat. § 264–71 *et seq.*, § 445–111 *et seq.* (1976); Vermont, Vt.Stat.Ann., Tit. 10, § 488 *et seq.* (1973).

17 See *Howard v. State Department of Highways of Colorado*, 478 F.2d 581 (C.A.10 1973); *John Donnelly & Sons v. Campbell, supra; John Donnelly & Sons, Inc. v. Outdoor Advertising Bd., supra; Donnelly Advertising Corp. v. City of Baltimore*, 279 Md. 660, 668, 370 A.2d 1127, 1132 (1977); *Modjeska Sign Studios, Inc. v. Berle*, 43 N.Y.2d 468, 402 N.Y.S.2d 359, 373 N.E.2d 255 (1977); *Suffolk Outdoor Advertising Co. v. Hulse, supra; Ghaster Properties, Inc. v. Preston, supra; Newman Signs, Inc. v. Hjelle, supra; United Advertising Corp. v. Borough of Raritan*, 11 N.J. 144, 93 A.2d 362 (1952) (Brennan, J.); *United Advertising Corp. v. Metuchen, supra; Stuckey's Stores, Inc. v. O'Cheskey, supra*.

18 In *John Donnelly & Sons v. Campbell*, 639 F.2d 6 (1980), the Court of Appeals for the First Circuit considered a statewide limitation on billboards, which similarly afforded a greater degree of protection to commercial than to noncommercial messages. That court took a position very similar to the one that we take today: it sustained the regulation insofar as it restricted commercial advertising, but held unconstitutional its more intrusive restrictions on noncommercial speech. The court stated: "The law thus impacts more heavily on ideological than on commercial speech—a peculiar inversion of First Amendment values. The statute ... provides greater restrictions—and fewer alternatives, the other side of the coin—for ideological than for commercial speech.... In short, the statute's impositions are both legally and practically the most burdensome on ideological speech, where they should be the least." 639 F.2d, at 15–16. Other courts, however, have failed to give adequate weight to the distinction between commercial and noncommercial speech and to the higher level of protection to be afforded the latter. See *Donnelly Advertising Corp. v. City of Baltimore*, 279 Md. 660, 370 A.2d 1127 (1977); *State v. Lotze*, 92 Wash.2d 52, 593 P.2d 811 (1979). To the extent that this decision is not consistent with the conclusion reached in *Lotze*, we overruled our prior summary approval of that decision in 444 U.S. 921, 100 S.Ct. 257, 62 L.Ed.2d 177 (1979).

19 In this sense, this case presents the opposite situation from that in *Lehman v. City of Shaker Heights*, 418 U.S. 298, 94 S.Ct. 2714, 41 L.Ed.2d 770 (1974), and *Greer v. Spock*, 424 U.S. 828, 96 S.Ct. 1211, 47 L.Ed.2d 505 (1976). In both of those cases a government agency had chosen to prohibit from a certain forum speech relating to political campaigns, while other kinds of speech were permitted. In both cases this Court upheld the prohibition, but both cases turned on unique fact situations involving government-created forums and have no application here.

20 Because a total prohibition of outdoor advertising is not before us, we do not indicate whether such a ban would be consistent with the First Amendment. But see *Schad v. Mount Ephraim*, 452 U.S. 61, 101 S.Ct. 2176, 68 L.Ed.2d 671 (1981), on the constitutional problems created by a total prohibition of a particular expressive forum, live entertainment in that case. Despite Justice STEVENS' insistence to the contrary, *post*, at 2909, 2910, and 2913, n. 16, we do not imply that the ordinance is unconstitutional *because* it "does not abridge enough speech."

Similarly, we need not reach any decision in this case as to the constitutionality of the federal Highway Beautification Act of 1965. That Act, like the San Diego ordinance, permits on-site commercial billboards in areas in which it does not permit billboards with noncommercial messages. 23 U.S.C. § 131(c) (1976 ed., Supp.III). However, unlike the San Diego ordinance, which prohibits billboards conveying noncommercial messages throughout the city, the federal law does not contain a total prohibition of such billboards in areas adjacent to the interstate and primary highway systems. As far as the Federal Government is concerned, such billboards are permitted adjacent to the highways in areas zoned industrial or commercial under state law or in unzoned commercial or industrial areas. 23 U.S.C. § 131(d). Regulation of billboards in those areas is left primarily to the States. For this reason, the decision today does not determine the constitutionality of the federal statute. Whether, in fact, the distinction is constitutionally significant can only be determined on the basis of a record establishing the actual effect of the Act on billboards conveying noncommercial messages.

21 See Joint Stipulation of Facts No. 28, App. 48a.

22 Justice STEVENS' suggested standard seems to go even further than THE CHIEF JUSTICE in ignoring the private interests protected by the First Amendment. He suggests that regulation of speech is permissible so long as it is not biased in favor of a particular position and leaves open "ample" means of communication. *Post*, at 2915. Nowhere does he suggest that the strength or weakness of the government's interests is a factor in the analysis.

  

23 THE CHIEF JUSTICE correctly notes that traditional labels should not be substituted for analysis and, therefore, he correctly rejects any simple classification of the San Diego ordinance as either a "prohibition" or a "time, place, and manner restriction." These "labels" or "categories," however, have played an important role in this Court's analysis of First Amendment problems in the past. The standard THE CHIEF JUSTICE himself adopts appears to be based almost exclusively on prior discussions of time, place, and manner restrictions. See *Heffron v. International Society for Krishna Consciousness, Inc.*, 452 U.S. 640, 101 S.Ct. 2559, 69 L.Ed.2d 298 (1981); *Consolidated Edison Co. v. Public Service Comm'n*, 447 U.S. 530, 535, 100 S.Ct. 2326, 2332, 65 L.Ed.2d 319 (1980); *California v. LaRue*, 409 U.S. 109, 117, n. 4, 93 S.Ct. 390, 396, n. 4, 34 L.Ed.2d 342 (1972); *Adderley v. Florida*, 385 U.S. 39 (1966); *Kovacs v. Cooper*, 336 U.S. 77, 69 S.Ct. 448, 93 L.Ed. 513 (1949). But this Court has never held that the less strict standard of review applied to time, place, and manner restrictions is appropriately used in every First Amendment case, or that it is the most that the First Amendment requires of government legislation which infringes on protected speech. If this were the case, there would be no need for the detailed inquiry this Court consistently pursues in order to answer the question of whether a challenged restriction is in fact a time, place, and manner restriction—the same standard of review would apply regardless of the outcome of that inquiry. As we demonstrated above, the San Diego ordinance is not such a restriction and there is, therefore, no excuse for applying a lower standard of First Amendment review to that ordinance.

24 Nor has this Court ever accepted the view that it must defer to a legislative judgment that a particular medium of communication is "offensive" and "intrusive," merely because "other means [of communication] are available." *Post*, at 2920.

25 Appellants contend that the ordinance will effectively eliminate their businesses and that this violates the Due Process Clause. We do not know, however, what kind of ordinance, if any, San Diego will seek to enforce in place of that which we invalidate today. In any case, any question of unconstitutional "takings" aside, the Due Process Clause does not afford a greater degree of protection to appellants' business than does the First Amendment. Since we hold that the First Amendment interests in commercial speech are not sufficient to prevent the city from prohibiting offsite commercial advertisements, no different result should be reached under the Due Process Clause.

26 Although the ordinance contains a severability clause, determining the meaning and application of that clause is properly the responsibility of the state courts. See *Dombrowski v. Pfister*, 380 U.S. 479, 497, 85 S.Ct. 1116, 1126, 14 L.Ed.2d 22 (1965) ("The record suffices ... to permit this Court to hold that, without the benefit of limiting construction, the statutory provisions on which the indictments are founded are void on their face; until an acceptable limiting construction is obtained, the provisions cannot be applied"); *Liggett Co. v. Lee*, 288 U.S. 517, 541, 53 S.Ct. 481, 487, 77 L.Ed. 929 (1933) ("The operation of this [severability clause] consequent on our decision is a matter of state law. While we have jurisdiction of the issue, we deem it appropriate that we should leave the determination of the question to the state court"); *Dorchy v. Kansas*, 264 U.S. 286, 291, 44 S.Ct. 323, 325, 68 L.Ed. 686 ("In cases coming from the state courts, this Court, in the absence of a controlling state decision may, in passing upon the claim under the federal law, decide, also, the question of severability. But it is not obliged to do so. The situation may be such as to make it appropriate to leave the determination of the question to the state court"). This rule is reflected in the different approaches this Court has taken to statutory construction of federal and state statutes infringing on protected speech. Compare *United States v. Thirty-seven Photographs*, 402 U.S. 363, 91 S.Ct. 1400, 28 L.Ed.2d 822 (1971), with *Freedman v. Maryland*, 380 U.S. 51, 60, 85 S.Ct. 734, 739, 13 L.Ed.2d 649 (1965). Since our judgment is based essentially on the inclusion of noncommercial speech within the prohibitions of the ordinance, the California courts may sustain the ordinance by limiting its reach to commercial speech, assuming the ordinance is susceptible to this treatment.

1 According to Joint Stipulation of Facts No. 25 entered into by the parties for purposes of cross-motions for summary judgment:

> "Outdoor advertising is presented in two basic standardized forms. A 'poster panel' is a 12-foot by 24-foot sign on which a pre-printed message is posted, in sheets. A 'painted bulletin' is generally a 14-foot by 48-foot sign which contains a hand painted message. The message will remain in one place for a period of time, usually a month, and will then be disassembled and replaced by another message while the first message is moved to another sign. In this way, the same hand painted message will be moved throughout a metropolitan area over a six-month or twelve-month period." App. 47a.
>
> The ordinance does not apply to such signs as "a picket sign announcing a labor dispute or a small sign placed in one's front yard proclaiming a political or religious message." 26 Cal.3d 848, 856, n. 2, 164 Cal.Rptr. 510, 513, 610 P.2d 407, 410, n. 2 (1980).

2 I will sometimes refer to billboards containing commercial speech messages as "commercial billboards," and billboards containing noncommercial speech messages as "noncommercial billboards."

  

3 Additional exceptions include signs manufactured, transported, or stored in San Diego so long as they are not used for advertising purposes; signs located within areas where such signs are not visible from the boundary of the premises; signs on vehicles such as buses and taxicabs; signs on other licensed commercial vehicles; and temporary off-premises subdivision directional signs. App. to Juris. Statement 111a–112a.

4 Perusal of the photographs of billboards included in the appendix to the jurisdictional statement filed in this Court reveals the wide range of noncommercial messages communicated through billboards, including the following: "Welcome to San Diego[:] Home of 1,100 Underpaid Cops"; "Support San Diego's No-Growth Policy[:] Spend Your Money in Los Angeles!"; "Voluntary Integration. Better Education By Choice"; "Support America's First Environment Strike. Don't Buy Shell!"; and "Get US out! of the United Nations."

5 Outdoor advertising traditionally has been classified into two categories: "on-premises" and "off-premises." One commentator describes:

> "The on-premise classification of outdoor advertising is referred to as the sign industry, in that signs are custom-made and are manufactured by a sign contractor on premises *not* owned, leased or controlled by the sign contractor or his agent. Such signs are used primarily for the purpose of identifying a business, its products or its services at the point of manufacture, distribution or sale, hence on-premise.
>
> —
>
> "Off-premise advertising is an advertising service for others which erects and maintains outdoor advertising displays on premises owned, leased or controlled by the producer of the advertising service." Tocker, Standardized Outdoor Advertising: History, Economics and Self-Regulation, in Outdoor Advertising: History and Regulation 11, 15, 18 (J. Houck ed. 1969).

6 Different factors come into play when the challenged legislation is simply a time, place, or manner regulation rather than a total ban of a particular medium of expression.

7 Not 1 of the 11 cases cited by the plurality in its footnote 14 stands for the proposition that reviewing courts have determined that "billboards are real and substantial hazards to traffic safety." These 11 cases merely apply the minimal scrutiny rational relationship test and the presumption of legislative validity to hold that it would not be *unreasonable* or *inconceivable* for a legislature or city government to conclude that billboards are traffic hazards. For example, in *New York State Thruway Authority v. Ashley Motor Court, Inc.*, 10 N.Y.2d 151, 156, 218 N.Y.S.2d 640, 642, 176 N.E.2d 566, 568 (1961), the court held:

> "There are some, perhaps, who may dispute whether billboards and other advertising devices interfere with safe driving and constitute a traffic hazard ..., but mere disagreement may not cast doubt on the statute's validity. Matters such as these are reserved for legislative judgment, and the legislative determination, here expressly announced, will not be disturbed unless manifestly unreasonable."
>
> Only 5 of the 11 cases even discuss the First Amendment. See *Stuckey's Stores, Inc. v. O'Cheskey*, 93 N.M. 312, 600 P.2d 258 (1979), appeal dism'd, 446 U.S. 930, 100 S.Ct. 2145, 64 L.Ed.2d 783 (1980); *State v. Lotze*, 92 Wash.2d 52, 593 P.2d 811, appeal dism'd, 444 U.S. 921, 100 S.Ct. 257, 62 L.Ed.2d 177 (1979); *Lubbock Poster Co. v. City of Lubbock*, 569 S.W.2d 935 (Tex.Civ.App.1978), cert. denied, 444 U.S. 833, 100 S.Ct. 63, 62 L.Ed.2d 42 (1979); *Newman Signs, Inc. v. Hjelle*, 268 N.W.2d 741 (N.D.1978), appeal dism'd, 440 U.S. 901, 99 S.Ct. 1205, 59 L.Ed.2d 449 (1979); *Markham Advertising Co. v. Washington*, 73 Wash.2d 405, 439 P.2d 248 (1968), appeal dism'd, 393 U.S. 316, 89 S.Ct. 553, 21 L.Ed.2d 512 (1969). Therefore, when the plurality states that "[t]here is nothing here to suggest that these judgments are unreasonable," *ante*, at 2893, it is really saying that there is nothing unreasonable about other courts finding that there is nothing unreasonable about a legislative judgment. This is hardly a sufficient finding under the heightened scrutiny appropriate for this case. It is not surprising that, of the three cases cited in the plurality's footnote 14 that declined to accept the traffic safety rationale, two *were* decided under heightened scrutiny.
>
> There is another reason why I would hesitate to accept the purported judgment of lawmakers that billboards are traffic hazards. Until recently, it was thought that aesthetics *alone* could never be a sufficient justification to support an exercise of the police power, and that aesthetics would have to be accompanied by a more traditional health, safety, morals, or welfare justification. Indeed, the California Supreme Court decision below explicitly repudiated the holding of a prior case, *Varney & Green v. Williams*, 155 Cal. 318, 100 P. 867 (1909), that held aesthetics to be an insufficient predicate for police power action. 26 Cal.3d, at 860–861, 164 Cal.Rptr., at 516, 610 P.2d, at 413. Therefore, in the case of billboard regulations, many cities may have used the justification of traffic safety in order to sustain ordinances where their true motivation was aesthetics. As the Hawaii Supreme Court commented in *State v. Diamond Motors, Inc.*, 50 Haw. 33, 36, 429 P.2d 825, 827 (1967), in upholding a comprehensive sign ordinance:

  

"[The City's] answering brief admittedly 'does not extend to supporting the proposition that aesthetics alone is a proper objective for the exercise of the City's police power.' Perhaps, the 'weight of authority' in other jurisdictions persuaded the City to present the more traditional arguments because it felt that it was safer to do so. However, the brief of The Outdoor Circle as amicus curiae presents, as we think, a more modern and forthright position ....

"... We are mindful of the reasoning of most courts that have upheld the validity of ordinances regulating outdoor advertising and of the need felt by them to find some basis in economics, health, safety, or even morality.... We do not feel so constrained." (Footnote omitted.)

See also C. Haar, Land-Use Planning 403–408 (3d ed. 1976).

8 Judge Pettine comments on Maine's statewide ban:

"Even assuming that a total ban on billboards will produce some aesthetic gain in all highway areas, the quantum of improvement will obviously vary with the site involved. In undeveloped areas, it may very well be that signs and billboards are the principal eyesores; here, the benefit will be great, for their removal would return the landscape to its pristine beauty. In industrial and commercial areas, however, signs and billboards are but one of countless types of manmade intrusions on the natural landscape. Without denying that some perceptible change for the better would occur even here, I question whether the margin of improvement obtained in these areas can really justify the state's decision to virtually eradicate commercial speech by sign and billboard." 639 F.2d, at 23.

9 For example, Williamsburg, Va., requires that any building newly constructed or altered in the city "shall have such design and character as not to detract from the value and general harmony of design of buildings already existing in the surrounding area in which the building is located or is to be located." Williamsburg City Code § 30–80 (1979).

10 Appellants argue that the exceptions to the total ban, such as for on-premises signs, undercut the very goals of traffic safety and aesthetics that the city claims as paramount, and therefore invalidate the whole ordinance. Brief for Appellants 42–43. But obviously, a city can have special goals the accomplishment of which would conflict with the overall goals addressed by the total billboard ban. It would make little sense to say that a city has an all-or-nothing proposition—either ban all billboards or none at all. Because I conclude that the San Diego ordinance impermissibly infringes First Amendment rights in that the city has failed to justify the ordinance sufficiently in light of substantial governmental interests, I need not decide, as the plurality does in Part V of its opinion, whether the exceptions to the total ban constitute independent grounds for invalidating the regulation. However, if a city can justify a total ban, I would allow an exception only if it directly furthers an interest that is at least as important as the interest underlying the total ban, if the exception is no broader than necessary to advance the special goal, and if the exception is narrowly drawn so as to impinge as little as possible on the overall goal. To the extent that exceptions rely on content-based distinctions, they must be scrutinized with special care.

The San Diego billboard ordinance is a classic example of conflicting interests. In its section entitled "Purpose and Intent," the ordinance states:

"It is the purpose of these regulations to eliminate excessive and confusing sign displays which do not relate to the premises on which they are located; to eliminate hazards to pedestrians and motorists brought about by distracting sign displays; to ensure that signing is used as identification and not as advertisement; and to preserve and improve the appearance of the City as a place in which to live and work.

"It is the intent of these regulations to protect an important aspect of the economic base of the City by preventing the destruction of the natural beauty and environment of the City, which is instrumental in attracting nonresidents who come to visit, trade, vacation or attend conventions; to safeguard and enhance property values; to protect public and private investment in buildings and open spaces; and to protect the public health, safety and general welfare." App. to Juris. Statement 106a–107a.

To achieve these purposes, the ordinance effects a general ban on billboards, but with an exception for on-premises identification signs. Of course, each on-premises sign detracts from achieving the city's goals of traffic safety and aesthetics, but contributes to the alternative goal of identification. In this way San Diego seeks to achieve the best compromise between the goals of traffic safety and aesthetics on the one hand, and convenience for the public on the other.

San Diego has shown itself fully capable of drafting narrow exceptions to the general ban. For example, the city has promulgated special regulations for sign control in the La Jolla sign control district:

"The Sign Control District is intended to maintain the unique, distinctive character and economic value of the La Jolla area in the City of San Diego and to regulate advertising of commercial enterprises ....

—

"One sign shall be permitted on each lot or parcel of real estate, ... provided ... :

  

—

"Such sign shall not exceed 5#' x 8#' in size and no part of such sign shall extend more than four feet above the surface of the ground upon which it is erected." *Id.*, at 113a–115a.

My views in this case make it unnecessary to decide the permissibility of the on-premise exception, but it is not inconceivable that San Diego could incorporate an exception to its overall ban to serve the identification interest without violating the Constitution. I also do not decide the validity of the other exceptions to the San Diego regulation.

11 Likewise, I express no view on the constitutionality of the Highway Beautification Act of 1965, 23 U.S.C. § 131 (1976 ed. and Supp.III).

12 The plurality comments that "the city *could reasonably conclude* that a commercial enterprise—as well as the interested public—has a stronger interest in identifying its place of business and advertising the products or services available there than it has in using or leasing its available space for the purpose of advertising commercial enterprises located elsewhere." *Ante*, at 2894 (emphasis added). But *Central Hudson Gas & Electric Corp. v. Public Service Comm'n*, 447 U.S. 557, 100 S.Ct. 2343, 65 L.Ed.2d 341 (1980), demands more than a rational basis for preferring one kind of commercial speech over another. Moreover, this case does not present legislation implicating the "common-sense differences" between commercial and noncommercial speech that " 'suggest that a different degree of protection is necessary to insure that the flow of truthful and legitimate commercial information is unimpaired.' " *Linmark Associates, Inc. v. Willingboro*, 431 U.S. 85, 98, 97 S.Ct. 1614, 1621, 52 L.Ed.2d 155 (1977), quoting *Virginia Pharmacy Board v. Virginia Citizens Consumers Council, Inc.*, 425 U.S. 748, 771–772, n.24, 96 S.Ct. 1817, 1830–1831, 48 L.Ed.2d 346 (1976). There is no suggestion that San Diego's billboard ordinance is designed to deal with "false or misleading signs." *Linmark Associates, Inc. v. Willingboro, supra*, at 98, 97 S.Ct., at 1621.

13 Of course, as a matter of marketplace economics, such an ordinance may prove the undoing of *all* billboard advertising, both commercial and noncommercial. It may well be that no company would be able to make a profit maintaining billboards used solely for noncommercial messages. Although the record does not indicate how much of appellants' income is produced by noncommercial communicators, it would not be unreasonable to assume that the bulk of their customers advertise commercial messages. Therefore, noncommercial users may represent such a small percentage of the billboard business that it would be impossible to stay in business based upon their patronage alone. Therefore, the plurality's prescription may represent a *de facto* ban on both commercial and noncommercial billboards. This is another reason to analyze this case as a "total ban" case.

14 These are not mere hypotheticals that can never occur. The Oil, Chemical and Atomic Workers International Union, AFL–CIO, actually placed a billboard advertisement stating: "Support America's First Environment Strike. Don't Buy Shell!" App. to Juris. Statement; see n. 4, *supra*. What if Exxon had placed the advertisement? Could Shell respond in kind?

1 The parties so stipulated. See Joint Stipulation of Facts No. 2, App. 42a, quoted in n. 8, *infra*.

2 That is the effect of both Justice WHITE's reaction to the exceptions from a total ban and Justice BRENNAN's concern about the city's attempt to differentiate between commercial and noncommercial messages, although both of their conclusions purportedly rest on the character of the abridgment rather than simply its quantity.

3 The ordinance does not define the term "outdoor advertising display signs." The California Supreme Court adopted the following definition to avoid overbreadth problems:

" '[A] rigidly assembled sign, display, or device permanently affixed to the ground or permanently attached to a building or other inherently permanent structure constituting, or used for the display of, a commercial or other advertisement to the public.' " 26 Cal.3d 848, 856, n. 2, 164 Cal.Rptr. 510, 513, n. 2, 610 P.2d 407, 410, n. 2 (1980).

4 As a practical matter, the plurality may well be approving a total ban on billboards, or at least on offsite billboards. For it seems unlikely that the outdoor advertising industry will be able to survive if its only customers are those persons and organizations who wish to use billboards to convey noncommercial messages. See *ante*, at 2907, n. 13 (BRENNAN, J., concurring in judgment).

5 The parties' stipulation described these differences:

"There is a difference between the outdoor advertising business and 'on-site' or business signs. On-site signs advertise businesses, goods or services available on the property on which the sign is located. On the other hand, the outdoor advertising businesses lease real property and erect signs thereon which are made available to national and local advertisers for commercial, political and social messages. Outdoor advertising is different from on-site advertising in that:

"(a) The outdoor advertising sign seldom advertises goods or services sold or made available on the premises on which the sign is located.

  

"(b) The outdoor advertising sign seldom advertises products or services sold or made available by the owner of the sign.

"(c) The outdoor advertising sign is, generally speaking, made available to 'all-comers', in a fashion similar to newspaper or broadcasting advertising. It is a forum for the communication of messages to the public.

"(d) The copy of the outdoor advertising sign changes, usually monthly. For example, a particular sign may advertise a local savings and loan association one month, a candidate for mayor the next month, the San Diego Zoo the third month, a new car the fourth month, and a union grievance the fifth month." Joint Stipulation of Facts No. 22, App. 45a–46a.

The importance of the distinction between the outdoor advertising business in which appellants are engaged and the use of "onsite" signs is supported by the fact that the respective kinds of signs are produced by different manufacturers. See Justice BRENNAN's opinion concurring in the judgment, *ante*, at 2902, n. 5.

6 The physical characteristics of outdoor advertising signs were established by stipulation:

"Outdoor advertising is presented in two basic standardized forms. A 'poster panel' is a 12-foot by 24-foot sign on which a pre-printed message is posted, in sheets. A 'painted bulletin' is generally a 14-foot by 48-foot sign which contains a hand painted message." Joint Stipulation of Facts No. 25, App. 47a.

7 The California Supreme Court's narrowing construction of the ordinance, see n. 3, *supra*, makes it applicable only to rigidly assembled permanent signs. For that reason, the plurality is able to state that it deals only "with the law of billboards." *Ante*, at 2889.

8 The parties stipulated to the economic effects of the ordinance:

"If enforced as written, Ordinance No. 10795 will eliminate the outdoor advertising business in the City of San Diego.

—

"Plaintiffs' outdoor advertising displays produce substantial gross annual income.

—

"Enforcement of Ordinance No. 10795 will prevent plaintiffs from engaging in the outdoor advertising business in the City of San Diego and will cause plaintiffs to suffer substantial monetary losses." Joint Stipulation of Facts Nos. 2, 26, 32, App. 42a, 48a, 49a.

9 By stipulation, the parties agreed that the San Diego ordinance will limit the ability of some billboard users to communicate their messages to the public:

"Outdoor advertising increases the sales of products and produces numerous direct and indirect benefits to the public. Valuable commercial, political and social information is communicated to the public through the use of outdoor advertising. Many businesses and politicians and other persons rely upon outdoor advertising because other forms of advertising are insufficient, inappropriate and prohibitively expensive." Joint Stipulation of Facts No. 28, App. 48a.

10 Nor is there any evidence that the total elimination of the outdoor advertising business will have any economic effect on manufacturers of onsite signs. See Justice BRENNAN's opinion concurring in the judgment, *ante*, at 2902, n. 5.

11 Appellants each own between 500 and 800 outdoor advertising displays in San Diego. See Joint Stipulation of Facts No. 13, App. 44a. All of their signs are located in areas zoned for commercial and industrial uses. Joint Stipulation of Facts No. 20, App. 45a.

The California Supreme Court's narrowing construction of the ordinance was specifically intended to exclude from the coverage of the ordinance signs very different from commercial billboards, such as "a picket sign announcing a labor dispute or a small sign placed in one's front yard proclaiming a political or religious message." 26 Cal.3d, at 856, n. 2, 164 Cal.Rptr., at 513, n. 2, 610 P.2d, at 410, n. 2.

12 See, *e. g., McGowan v. Maryland*, 366 U.S. 420, 429, 81 S.Ct. 1101, 1106, 6 L.Ed.2d 393: "[T]he general rule is that 'a litigant may only assert his own constitutional rights or immunities' ...."

13 See, *e. g., Dombrowski v. Pfister*, 380 U.S. 479, 85 S.Ct. 1116, 14 L.Ed.2d 22; *Gooding v. Wilson*, 405 U.S. 518, 92 S.Ct. 1103, 31 L.Ed.2d 408; *Keyishian v. Board of Regents*, 385 U.S. 589, 87 S.Ct. 675, 17 L.Ed.2d 629; *Shuttlesworth v. Birmingham*, 394 U.S. 147, 89 S.Ct. 935, 22 L.Ed.2d 162.

14 Even the dissenting Justices in *Broadrick*, although they disagreed with the Court's refusal to apply the overbreadth doctrine in that case, acknowledged that an overbreadth challenge should not be entertained in every case raising First Amendment issues:

"We have never held that a statute should be held invalid on its face merely because it is possible to conceive of a single impermissible application, and in that sense a requirement of substantial overbreadth is already implicit in the doctrine." 413 U.S., at 630, 93 S.Ct., at 2925 (BRENNAN, J., joined by STEWART and MARSHALL, JJ., dissenting).

15 Indeed, the parties stipulated that onsite advertising differs in significant respects from the outdoor advertising business in which appellants are engaged. See n.5, *supra.*

  

16 Ironically, today the plurality invalidates this ordinance—not because it is too broad—but rather because it is not broad enough. It assumes for the purpose of decision that a repeal of all exceptions, including the exception for onsite advertising, would cure the defects it finds in the present ordinance. See *ante*, at 2896, n.20. However, because neither the appellants nor the onsite advertisers would derive any benefits from a repeal of the exception for onsite commercial signs, the plurality's reliance on the overbreadth doctrine to support vicarious standing in this case is curious indeed.

17 Compare *Chicago Board of Trade v. United States*, 246 U.S. 231, 38 S.Ct. 242, 62 L.Ed. 683 with *United States v. Trenton Potteries Co.*, 273 U.S. 392, 47 S.Ct. 377, 71 L.Ed. 700.

18 Because the record makes it clear that the business of operating billboards has prospered in San Diego, it is obvious that this medium is more effective than others for some forms of communication. See n.8, *supra.*

19 See nn.8, 9, *supra.*

20 See generally A. Read Classic American Graffiti (1977); R. Reisner, Graffiti: Two Thousand Years of Wall Writing (1971); V. Pritchard, English Medieval Graffiti (1967).

21 In his opinion announcing the judgment of the Court, Justice Reed wrote:

> "That more people may be more easily and cheaply reached by sound trucks, perhaps borrowed without cost from some zealous supporter, is not enough to call forth constitutional protection for what those charged with public welfare reasonably think is a nuisance when easy means of publicity are open." 336 U.S., at 88–89, 69 S.Ct., at 454.

22 That excerpt from Justice Black's dissent is not, of course, sufficient evidence to tell us whether or not he would have upheld a city's total ban on billboards. It does seem clear, however, that he did not adopt the absolute position that any reduction in the quantity of effective communication is categorically prohibited by the First Amendment. The full paragraph in which the quoted phrase appears reads:

> "I am aware that the 'blare' of this new method of carrying ideas is susceptible of abuse and may under certain circumstances constitute an intolerable nuisance. But ordinances can be drawn which adequately protect a community from unreasonable use of public speaking devices without absolutely denying to the community's citizens all information that may be disseminated or received through this new avenue for trade in ideas. I would agree without reservation to the sentiment that 'unrestrained use throughout a municipality of all sound amplifying devices would be intolerable.' And of course cities may restrict or absolutely ban the use of amplifiers on busy streets in the business area. A city ordinance that reasonably restricts the volume of sound, or the hours during which an amplifer may be used, does not, in my mind, infringe the constitutionality protected area of free speech. It is because this ordinance does none of these things, but is instead an absolute prohibition of all uses of an amplifier on any streets of Trenton at any time that I must dissent." *Id.*, at 104, 69 S.Ct., at 462.

23 Our decisions invalidating ordinances prohibiting or regulating door-to-door solicitation and leafletting are not to the contrary. In those cases, the state interests the ordinances purported to serve—for instance, the prevention of littering or fraud—were only indirectly furthered by the regulation of communicative activity. See, *e. g., Schneider v. State*, 308 U.S. 147, 162, 164, 60 S.Ct. 146, 151, 152, 84 L.Ed. 155; *Martin v. City of Struthers*, 319 U.S. 141, 147–148, 63 S.Ct. 862, 865, 87 L.Ed. 1313; *Cantwell v. Connecticut*, 310 U.S. 296, 306, 60 S.Ct. 900, 904, 84 L.Ed. 1213; *Schaumburg v. Citizens for a Better Environment*, 444 U.S. 620, 636–639, 100 S.Ct. 826, 834–836, 63 L.Ed.2d 73. In many of the cases the ordinances provided for a licensing scheme, rather than a blanket prohibition. The discretion thus placed in the hands of municipal officials was found constitutionally offensive because of the risk of censorship. See, *e. g., Schneider, supra*, at 163–164, 60 S.Ct., at 151–152; *Hague v. CIO*, 307 U.S. 496, 516, 59 S.Ct. 954, 964, 83 L.Ed. 1423 (opinion of Roberts, J.); *Lovell v. Griffin*, 303 U.S. 444, 451–452, 58 S.Ct. 666, 668–669, 82 L.Ed. 949; *Cantwell, supra*, at 305–307, 60 S.Ct., at 904. In addition, because many of these cases involved the solicitation efforts of the Jehovah's Witnesses, see, *e. g., Lovell, supra*, at 448, 58 S.Ct., at 667; *Jamison v. Texas*, 318 U.S. 413, 413–414, 63 S.Ct. 669, 670, 87 L.Ed. 869; *Schneider, supra*, at 158, 60 S.Ct., at 149; *Martin, supra*, at 142, 63 S.Ct., at 862; *Cantwell, supra*, at 300, 60 S.Ct., at 901, the Court was properly sensitive to the risk that the ordinances could be used to suppress unpopular viewpoints.

> In this case, as the plurality acknowledges, the ban on billboards directly serves, and indeed is necessary to further, the city's legitimate interests in traffic safety and aesthetics. See *ante*, at 2892–2894, 2894. San Diego's ordinance places no discretion in any municipal officials, and there is no reason to suspect that the ordinance was designed or is being applied to suppress unpopular viewpoints.

24 It seems fair to infer that Justice Douglas, who cast the deciding vote in *Lehman v. City of Shaker Heights*, 418 U.S. 298, 94 S.Ct. 2714, 41 L.Ed.2d 770, would have approved of a prohibition on billboards. See his opinion concurring in the judgment, *id.*, at 306–308, 94 S.Ct., at 2718–2719. After drawing an analogy between billboards and advertising on municipal vehicles, Justice Douglas noted:

  

"In my view the right of the commuters to be free from forced intrusions on their privacy precludes the city from transforming its vehicles of public transportation into forums for the dissemination of ideas upon this captive audience." *Id.*, at 307, 94 S.Ct., at 2719.

25 Most of the ordinance's 12 exceptions, quoted *ante*, at 2886, n. 3 (opinion of WHITE, J.), are not based on the subject matter of speech. Several exceptions can be disregarded because they pertain to signs that are not within the coverage of the ordinance at any rate, in light of the California Supreme Court's limiting construction. See n. 3, *supra.* The exceptions relating to vehicular signs fall into this category, see §§ 101.0700(F)(9), (10), as do the exceptions for signs in transit and storage, see § 101.0700(F)(3), and for temporary subdivision directional signs, see § 101.0700(F)(11). The exception for "for sale" signs also appears to describe signs not covered by the ordinance since such signs ordinarily are not "permanently affixed to the ground or permanently attached to a building." Of the remaining exceptions, two are based on the location, rather than content, of the signs, see §§ 101.0700(F)(2), (6), and a third permits signs required by law or otherwise erected in discharge of governmental functions, see § 101.0700(F)(1). Thus, only four exceptions are actually based in any way on the subject matter of the signs at issue. See §§ 101.0700(F)(4), (5), (8), (12).

1 For example, because of the limited spectrum available and the peculiar intrusiveness of the medium, broadcasting is subject to limitations that would be intolerable if applied to other forms of communication. *FCC v. Pacifica Foundation*, 438 U.S. 726, 748–749, 98 S.Ct. 3026, 3039–3040, 57 L.Ed.2d 1073 (1978). Compare *Red Lion Broadcasting Co. v. FCC*, 395 U.S. 367, 89 S.Ct. 1794, 23 L.Ed.2d 371 (1969), with *Miami Herald Publishing Co. v. Tornillo*, 418 U.S. 241, 94 S.Ct. 2831, 41 L.Ed.2d 730 (1974). For the same reason, certain media may mix the form with the substance of the communication and the permissible range of regulation is correspondingly narrower than when the message is completely separable from the medium used to convey it.

2 Congress, too, has recognized the dangers to safety and the environment posed by billboards. The Highway Beautification Act of 1965 provides in part:

"The Congress hereby finds and declares that the erection and maintenance of outdoor advertising signs, displays, and devices in areas adjacent to the Interstate System and the primary system should be controlled in order to protect the public investment in such highways, *to promote the safety and recreational value of public travel, and to preserve natural beauty.*" 23 U.S.C. § 131(a) (emphasis added).

If San Diego, through its duly constituted legislative body, may not guard against the defacing of its environs and the risks to the movement of traffic by eliminating billboards, the authority of Congress to limit billboards adjacent to federally funded highways is called into question as well. See *ante*, at 2896, n. 20 (plurality opinion); *ante*, at 2906, n. 11 (BRENNAN, J., concurring in judgment). Surely, the legislative powers of a municipality over its own affairs cannot be less than those of the Congress of the United States in its area of authority.

3 The parties have stipulated that billboards come in "two basic standardized forms," 12 ft. by 24 ft. and 14 ft. by 48 ft. Joint Stipulation of Facts No. 25, App. 47a.

4 Indeed, streets themselves may be places of tranquility. *Heffron v. International Society for Krishna Consciousness, Inc.*, 452 U.S. 640, 651, 101 S.Ct. 2559, 2565, 69 L.Ed.2d 298 (1981).

5 Before trial, the parties stipulated: "Many businesses and politicians and other persons rely upon outdoor advertising because other forms of advertising are insufficient, inappropriate and prohibitively expensive." Joint Stipulation of Facts No. 28, App. 48a. This sweeping, conclusory, and rather vague generalization does nothing to explain how other media are insufficient, inappropriate, or too expensive. More important, the stipulation does not suggest that any particular point of view or issue will be suppressed by the elimination of billboards.

6 Indeed, the plurality acknowledges that a city may undertake this kind of balancing:

"As we see it, the city could reasonably conclude that a commercial enterprise—as well as the interested public—has a stronger interest in identifying its place of business and advertising the products or services available there than it has in using or leasing its available space for the purpose of advertising commercial enterprises located elsewhere." *Ante*, at 2894–2895.

A city reasonably may decide that onsite signs, by identifying the premises (even if in the process of advertising), actually promote traffic safety. Prohibiting them would require motorists to pay more attention to street numbers and less to traffic.

7 As Justice BRENNAN recognizes, *ante*, at 2907–2909, the plurality's treatment of the ordinance may well create this very danger, for the plurality appears willing to allow municipal officials to determine what is and is not noncommercial speech.

8 Indeed, in *Lehman v. City of Shaker Heights*, 418 U.S. 298, 94 S.Ct. 2714, 41 L.Ed.2d 770 (1974), we upheld a municipal policy allowing commercial but not political advertising on city buses. I cannot agree with the plurality that *Lehman* "ha[s] no application here." *Ante*, at 2896, n. 19. Although *Lehman* dealt with limited space leased by the city and this case

deals with municipal regulation of privately leased space, the constitutional principle is the same: a city may forgo the "lurking doubts about favoritism" in granting space to some, but necessarily not all, political advertisers. 418 U.S., at 304, 94 S.Ct., at 2717 (plurality opinion of BLACKMUN, J.). The same constitutional dangers do not arise in allocating space among commercial advertisers.

9 See n. 8, *supra.* If a city were to permit onsite noncommercial billboards, one can imagine a challenge based on the argument that this favors the views of persons who can afford to own property in commercial districts. See *supra*, at 2921. I intimate no view on whether I would accept such an argument should that case ever arise.

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KeyCite Yellow Flag - Negative Treatment
Not Followed as Dicta Harbourside Place, LLC v. Town of Jupiter, Florida, 11th Cir.(Fla.), May 14, 2020

135 S.Ct. 2218
Supreme Court of the United States

Clyde REED, et al., Petitioners
v.
TOWN OF GILBERT, ARIZONA, et al.

No. 13–502.
|
Argued Jan. 12, 2015.
|
Decided June 18, 2015.

**Synopsis**

**Background:** Church and pastor seeking to place temporary signs announcing services filed suit claiming that town's sign ordinance, restricting size, duration, and location of temporary directional signs violated the right to free speech. The United States District Court for the District of Arizona, Susan R. Bolton, J., denied church's motion for preliminary injunction barring enforcement of ordinance. Church appealed. The United States Court of Appeals for the Ninth Circuit, M. Margaret McKeown, Circuit Judge, 587 F.3d 966, affirmed in part and remanded in part.On remand, the District Court, Bolton, J., 832 F.Supp.2d 1070, granted town summary judgment. Church and pastor appealed. The Court of Appeals, Callahan, Circuit Judge, 707 F.3d 1057, affirmed. Certiorari was granted.

**Holdings:** The Supreme Court, Justice Thomas, held that:

[1] sign code was subject to strict scrutiny, and

[2] sign code violated free speech guarantees.

Reversed and remanded.

Justice Alito filed concurring opinion in which Justices Kennedy and Sotomayor joined.

Justice Breyer filed opinion concurring in the judgment.

Justice Kagan filed opinion concurring in the judgment, in which Justices Ginsburg and Breyer joined.

West Headnotes (21)

[1] **Constitutional Law** Viewpoint or idea discrimination

**Constitutional Law** Content-Based Regulations or Restrictions

Under the First Amendment, a government, including a municipal government vested with state authority, has no power to restrict expression because of its message, its ideas, its subject matter, or its content. U.S.C.A. Const.Amend. 1.

33 Cases that cite this headnote

[2] **Constitutional Law** Content-Based Regulations or Restrictions

**Constitutional Law** Strict or exacting scrutiny; compelling interest test

Content-based laws, that is, those that target speech based on its communicative content, are presumptively unconstitutional and may be justified only if the government proves that they are narrowly tailored to serve compelling state interests. U.S.C.A. Const.Amend. 1.

231 Cases that cite this headnote

[3] **Constitutional Law** Content-Based Regulations or Restrictions

Government regulation of speech is "content based," and thus presumptively unconstitutional, if a law applies to particular speech because of the topic discussed or the idea or message expressed, and this commonsense meaning of the phrase "content based" requires a court to consider whether a regulation of speech on its face draws distinctions based on the message a speaker conveys. U.S.C.A. Const.Amend. 1.

325 Cases that cite this headnote

  

[4] **Constitutional Law** Strict or exacting scrutiny; compelling interest test

**Constitutional Law** Strict or exacting scrutiny; compelling interest test

Some facial distinctions based on a message are obvious, defining regulated speech by particular subject matter, and others are more subtle, defining regulated speech by its function or purpose, but both are distinctions drawn based on the message a speaker conveys, and, therefore, are subject to strict scrutiny. U.S.C.A. Const.Amend. 1.

52 Cases that cite this headnote

[5] **Constitutional Law** Governmental disagreement with message conveyed

**Constitutional Law** Strict or exacting scrutiny; compelling interest test

Laws that, though facially content neutral, cannot be justified without reference to the content of the regulated speech, or that were adopted by the government because of disagreement with the message the speech conveys, like those laws that are content based on their face, must satisfy strict scrutiny. U.S.C.A. Const.Amend. 1.

197 Cases that cite this headnote

[6] **Constitutional Law** Temporary signs

Town's sign code, which subjected ideological signs to certain restrictions, subjected political signs to greater restrictions, and subjected temporary directional signs relating to events to even greater restrictions, was content based on its face, and thus was subject to strict scrutiny in free speech challenge by church seeking to place temporary signs announcing its services; any innocent motives on part of town did not eliminate danger of censorship, sign code singled out specific subject matter for differential treatment even if it did not target viewpoints within that subject matter, and sign code singled out signs bearing a particular message, i.e., the time and location of a particular event. U.S.C.A. Const.Amend. 1.

22 Cases that cite this headnote

[7] **Constitutional Law** Content-Neutral Regulations or Restrictions

The crucial first step in the content-neutrality analysis in a free speech challenge is determining whether the law is content neutral on its face. U.S.C.A. Const.Amend. 1.

13 Cases that cite this headnote

[8] **Constitutional Law** Strict or exacting scrutiny; compelling interest test

A law that is content based on its face is subject to strict scrutiny regardless of the government's benign motive, content-neutral justification, or lack of animus toward the ideas contained in the regulated speech. U.S.C.A. Const.Amend. 1.

57 Cases that cite this headnote

[9] **Constitutional Law** Freedom of Speech, Expression, and Press

**Constitutional Law** Censorship

Illicit legislative intent is not the sine qua non of a violation of the First Amendment's free speech guarantee, and a party opposing the government need adduce no evidence of an improper censorial motive. U.S.C.A. Const.Amend. 1.

5 Cases that cite this headnote

[10] **Constitutional Law** Strict or exacting scrutiny; compelling interest test

Although a content-based purpose may be sufficient in certain circumstances to show that a regulation of speech is content based and thus subject to strict scrutiny, it is not necessary. U.S.C.A. Const.Amend. 1.

78 Cases that cite this headnote

[11] **Constitutional Law** Strict or exacting scrutiny; compelling interest test

An innocuous justification cannot transform a facially content-based law regulating speech into

  

one that is content neutral and thus subject to a lower level of scrutiny than strict scrutiny. U.S.C.A. Const.Amend. 1.

189 Cases that cite this headnote

[12] **Constitutional Law** Content-Neutral Regulations or Restrictions

**Constitutional Law** Strict or exacting scrutiny; compelling interest test

Because strict scrutiny applies either when a law is content based on its face or when the purpose and justification for the law are content based, a court must evaluate each question before it concludes that the law is content neutral and thus subject to a lower level of scrutiny in a free speech challenge. U.S.C.A. Const.Amend. 1.

53 Cases that cite this headnote

[13] **Constitutional Law** Content-Based Regulations or Restrictions

Government discrimination among viewpoints, or the regulation of speech based on the specific motivating ideology or the opinion or perspective of the speaker, is a more blatant and egregious form of content discrimination, but the First Amendment's hostility to content-based regulation extends not only to restrictions on particular viewpoints, but also to prohibition of public discussion of an entire topic. U.S.C.A. Const.Amend. 1.

69 Cases that cite this headnote

[14] **Constitutional Law** Strict or exacting scrutiny; compelling interest test

A speech regulation targeted at specific subject matter is content based, and thus subject to strict scrutiny, even if it does not discriminate among viewpoints within that subject matter. U.S.C.A. Const.Amend. 1.

54 Cases that cite this headnote

[15] **Constitutional Law** Content-Neutral Regulations or Restrictions

The fact that a speech-related distinction is speaker based does not automatically render the distinction content neutral and thus subject to a lower level of scrutiny than strict scrutiny. U.S.C.A. Const.Amend. 1.

6 Cases that cite this headnote

[16] **Constitutional Law** Strict or exacting scrutiny; compelling interest test

Because speech restrictions based on the identity of the speaker are all too often simply a means to control content, laws favoring some speakers over others demand strict scrutiny when the legislature's speaker preference reflects a content preference. U.S.C.A. Const.Amend. 1.

15 Cases that cite this headnote

[17] **Constitutional Law** Content-Neutral Regulations or Restrictions

The fact that a speech-related distinction is event based does not render it content neutral and thus subject to a lower level of scrutiny than strict scrutiny. U.S.C.A. Const.Amend. 1.

7 Cases that cite this headnote

[18] **Constitutional Law** Strict or exacting scrutiny; compelling interest test

Strict scrutiny requires the Government to prove that a restriction on speech furthers a compelling interest and is narrowly tailored to achieve that interest. U.S.C.A. Const.Amend. 1.

92 Cases that cite this headnote

[19] **Constitutional Law** Temporary signs

**Municipal Corporations** Billboards, signs, and other structures or devices for advertising purposes

Town's content-based sign code, which subjected ideological signs to certain restrictions, subjected political signs to greater restrictions, and subjected temporary directional signs relating to events to even greater restrictions, did not survive strict scrutiny, and thus violated

  

free speech guarantees; even if town had compelling government interests in preserving town's aesthetic appeal and traffic safety, sign code's distinctions were underinclusive, and thus were not narrowly tailored to achieve that end, in that temporary directional signs were no greater an eyesore than ideological or political ones, and there was no reason to believe that directional signs posed a greater threat to safety than ideological or political signs. U.S.C.A. Const.Amend. 1.

22 Cases that cite this headnote

**[20]** **Constitutional Law** Freedom of Speech, Expression, and Press

A law cannot be regarded as protecting an interest of the highest order, and thus as justifying a restriction on truthful speech, when it leaves appreciable damage to that supposedly vital interest unprohibited. U.S.C.A. Const.Amend. 1.

8 Cases that cite this headnote

**[21]** **Constitutional Law** Strict or exacting scrutiny; compelling interest test

**Constitutional Law** Content-Neutral Regulations or Restrictions

**Constitutional Law** Strict or exacting scrutiny; compelling interest test

Not all speech-related distinctions are subject to strict scrutiny, only content-based ones are; laws that are content neutral are instead subject to lesser scrutiny. U.S.C.A. Const.Amend. 1.

70 Cases that cite this headnote

****2221** *Syllabus* [*]

***155** Gilbert, Arizona (Town), has a comprehensive code (Sign Code or Code) that prohibits the display of outdoor signs without a permit, but exempts 23 categories of signs, including three relevant here. "Ideological Signs," defined as signs "communicating a message or ideas" that do not fit in any other Sign Code category, may be up to 20 square feet and have no placement or time restrictions. "Political Signs," defined as signs "designed to influence the outcome of an election," may be up to 32 square feet and may only be displayed during an election season. "Temporary Directional Signs," defined as signs directing the public to a church or other "qualifying event," have even greater restrictions: No more than four of the signs, limited to six square feet, may be on a single property at any time, and signs may be displayed no more than 12 hours before the "qualifying event" and 1 hour after.

Petitioners, Good News Community Church (Church) and its pastor, Clyde Reed, whose Sunday church services are held at various temporary locations in and near the Town, posted signs early each Saturday bearing the Church name and the time and location of the next service and did not remove the signs until around ****2222** midday Sunday. The Church was cited for exceeding the time limits for displaying temporary directional signs and for failing to include an event date on the signs. Unable to reach an accommodation with the Town, petitioners filed suit, claiming that the Code abridged their freedom of speech. The District Court denied their motion for a preliminary injunction, and the Ninth Circuit affirmed, ultimately concluding that the Code's sign categories were content neutral, and that the Code satisfied the intermediate scrutiny accorded to content-neutral regulations of speech.

*Held* : The Sign Code's provisions are content-based regulations of speech that do not survive strict scrutiny. Pp. 2226 – 2233.

(a) Because content-based laws target speech based on its communicative content, they are presumptively unconstitutional and may be justified only if the government proves that they are narrowly tailored to serve compelling state interests. *E.g., R.A.V. v. St. Paul,* 505 U.S. 377, 395, 112 S.Ct. 2538, 120 L.Ed.2d 305. Speech regulation is content based if a law applies to particular speech because of the topic discussed or the idea or message expressed. *E.g., Sorrell v. IMS Health, Inc.,* 564 U.S. ——, —— – ——, 131 S.Ct. 2653, 2663–2664, 180 L.Ed.2d 544. ***156** And courts are required to consider whether a regulation of speech "on its face" draws distinctions based on the message a speaker conveys. *Id.,* at ——, 131 S.Ct., at 2664. Whether laws define regulated speech by particular subject matter or by its function or purpose, they are subject to strict scrutiny. The same is true for laws that, though facially content neutral, cannot be " 'justified without reference to the content of the regulated

  

speech,' " or were adopted by the government " because of disagreement with the message" conveyed. *Ward v. Rock Against Racism,* 491 U.S. 781, 791, 109 S.Ct. 2746, 105 L.Ed.2d 661. Pp. 2226 – 2227.

(b) The Sign Code is content based on its face. It defines the categories of temporary, political, and ideological signs on the basis of their messages and then subjects each category to different restrictions. The restrictions applied thus depend entirely on the sign's communicative content. Because the Code, on its face, is a content-based regulation of speech, there is no need to consider the government's justifications or purposes for enacting the Code to determine whether it is subject to strict scrutiny. P. 2227.

(c) None of the Ninth Circuit's theories for its contrary holding is persuasive. Its conclusion that the Town's regulation was not based on a disagreement with the message conveyed skips the crucial first step in the content-neutrality analysis: determining whether the law is content neutral on its face. A law that is content based on its face is subject to strict scrutiny regardless of the government's benign motive, content-neutral justification, or lack of "animus toward the ideas contained" in the regulated speech. *Cincinnati v. Discovery Network, Inc.,* 507 U.S. 410, 429, 113 S.Ct. 1505, 123 L.Ed.2d 99. Thus, an innocuous justification cannot transform a facially content-based law into one that is content neutral. A court must evaluate each question—whether a law is content based on its face and whether the purpose and justification for the law are content based—before concluding that a law is content neutral. *Ward* does not require otherwise, for its framework applies only to a content-neutral statute.

The Ninth Circuit's conclusion that the Sign Code does not single out any idea or viewpoint for discrimination conflates two distinct but related limitations that the First Amendment places on government ****2223** regulation of speech. Government discrimination among viewpoints is a "more blatant" and "egregious form of content discrimination," *Rosenberger v. Rector and Visitors of Univ. of Va.,* 515 U.S. 819, 829, 115 S.Ct. 2510, 132 L.Ed.2d 700, but "[t]he First Amendment's hostility to content-based regulation [also] extends ... to prohibition of public discussion of an entire topic," *Consolidated Edison Co. of N.Y. v. Public Serv. Comm'n of N. Y.,* 447 U.S. 530, 537, 100 S.Ct. 2326, 65 L.Ed.2d 319. The Sign Code, a paradigmatic example of content-based discrimination, singles out specific subject matter for differential treatment, even if it does not target viewpoints within that subject matter.

***157** The Ninth Circuit also erred in concluding that the Sign Code was not content based because it made only speaker-based and event-based distinctions. The Code's categories are not speaker-based—the restrictions for political, ideological, and temporary event signs apply equally no matter who sponsors them. And even if the sign categories were speaker based, that would not automatically render the law content neutral. Rather, "laws favoring some speakers over others demand strict scrutiny when the legislature's speaker preference reflects a content preference." *Turner Broadcasting System, Inc. v. FCC,* 512 U.S. 622, 658, 114 S.Ct. 2445, 129 L.Ed.2d 497. This same analysis applies to event-based distinctions. Pp. 2227 – 2231.

(d) The Sign Code's content-based restrictions do not survive strict scrutiny because the Town has not demonstrated that the Code's differentiation between temporary directional signs and other types of signs furthers a compelling governmental interest and is narrowly tailored to that end. See *Arizona Free Enterprise Club's Freedom Club PAC v. Bennett,* 564 U.S. ——, ——, 131 S.Ct. 2806, 2817, 180 L.Ed.2d 664. Assuming that the Town has a compelling interest in preserving its aesthetic appeal and traffic safety, the Code's distinctions are highly underinclusive. The Town cannot claim that placing strict limits on temporary directional signs is necessary to beautify the Town when other types of signs create the same problem. See *Discovery Network, supra,* at 425, 113 S.Ct. 1505. Nor has it shown that temporary directional signs pose a greater threat to public safety than ideological or political signs. Pp. 2231 – 2232.

(e) This decision will not prevent governments from enacting effective sign laws. The Town has ample content-neutral options available to resolve problems with safety and aesthetics, including regulating size, building materials, lighting, moving parts, and portability. And the Town may be able to forbid postings on public property, so long as it does so in an evenhanded, content-neutral manner. See *Members of City Council of Los Angeles v. Taxpayers for Vincent,* 466 U.S. 789, 817, 104 S.Ct. 2118, 80 L.Ed.2d 772. An ordinance narrowly tailored to the challenges of protecting the safety of pedestrians, drivers, and passengers—*e.g.,* warning signs marking hazards on private property or signs directing traffic —might also survive strict scrutiny. Pp. 2232 – 2233.

707 F.3d 1057, reversed and remanded.

THOMAS, J., delivered the opinion of the Court, in which ROBERTS, C.J., and SCALIA, KENNEDY, ALITO, and SOTOMAYOR, JJ., joined. ALITO, J., filed a concurring opinion, in which KENNEDY and SOTOMAYOR, JJ., joined. BREYER, J., filed an opinion concurring in the judgment. KAGAN, J., filed an opinion concurring in the judgment, in which GINSBURG and BREYER, JJ., joined.

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David A. Cortman, Lawrenceville, GA, for Petitioners.

****2224** Eric J. Feigin, Washington, DC, for the United States as amicus curiae, by special leave of the Court, supporting neither party.

Philip W. Savrin, Atlanta, GA, for Respondents.

Kevin H. Theriot, Jeremy D. Tedesco, Alliance Defending Freedom, Scottsdale, AZ, David A. Cortman, Counsel of Record, Rory T. Gray, Alliance Defending Freedom, Lawrenceville, GA, for Petitioner.

Philip W. Savrin, Counsel of Record, Dana K. Maine, William H. Buechner, Jr., Freeman Mathis & Gary, LLP, Atlanta, GA, for Respondents.

**Opinion**

Justice THOMAS delivered the opinion of the Court.

***159** The town of Gilbert, Arizona (or Town), has adopted a comprehensive code governing the manner in which people may display outdoor signs. Gilbert, Ariz., Land Development Code (Sign Code or Code), ch. 1, § 4.402 (2005).[1] The Sign Code identifies various categories of signs based on the type of information they convey, then subjects each category to different restrictions. One of the categories is "Temporary Directional Signs Relating to a Qualifying Event," loosely defined as signs directing the public to a meeting of a nonprofit group. § 4.402(P). The Code imposes more stringent restrictions on these signs than it does on signs conveying other messages. We hold that these provisions are content-based regulations of speech that cannot survive strict scrutiny.

I

A

The Sign Code prohibits the display of outdoor signs anywhere within the Town without a permit, but it then exempts 23 categories of signs from that requirement. These exemptions include everything from bazaar signs to flying banners. Three categories of exempt signs are particularly relevant here.

The first is "Ideological Sign[s]." This category includes any "sign communicating a message or ideas for noncommercial purposes that is not a Construction Sign, Directional Sign, Temporary Directional Sign Relating to a Qualifying Event, Political Sign, Garage Sale Sign, or a sign owned or required by a governmental agency." Sign Code, Glossary of General Terms (Glossary), p. 23 (emphasis deleted). Of the three categories discussed here, the Code treats ideological signs most favorably, allowing them to be up to 20 ***160** square feet in area and to be placed in all "zoning districts" without time limits. § 4.402(J).

The second category is "Political Sign[s]." This includes any "temporary sign designed to influence the outcome of an election called by a public body." Glossary 23.[2] The Code treats these signs less favorably than ideological signs. The Code allows the placement of political signs up to 16 square feet on residential property and up to 32 square feet on nonresidential property, undeveloped municipal property, and "rights-of-way." ****2225** § 4.402(I).[3] These signs may be displayed up to 60 days before a primary election and up to 15 days following a general election. *Ibid.*

The third category is "Temporary Directional Signs Relating to a Qualifying Event." This includes any "Temporary Sign intended to direct pedestrians, motorists, and other passersby to a 'qualifying event.' " Glossary 25 (emphasis deleted). A "qualifying event" is defined as any "assembly, gathering, activity, or meeting sponsored, arranged, or promoted by a religious, charitable, community service, educational, or other similar non-profit organization." *Ibid.* The Code treats temporary directional signs even less favorably than political signs.[4] Temporary directional signs may be ***161** no larger than six square feet. § 4.402(P). They may be placed on private property or on a public right-of-way, but no more than four signs may be placed on a single property at any time. *Ibid.* And, they may be displayed no more than 12 hours before the "qualifying event" and no more than 1 hour afterward. *Ibid.*

B

Petitioners Good News Community Church (Church) and its pastor, Clyde Reed, wish to advertise the time and location of their Sunday church services. The Church is a small, cash-strapped entity that owns no building, so it holds its services at elementary schools or other locations in or near the Town. In order to inform the public about its services, which are held in a variety of different locations, the Church began placing 15 to 20 temporary signs around the Town, frequently in the public right-of-way abutting the street. The signs typically displayed the Church's name, along with the time and location of the upcoming service. Church members would post the signs early in the day on Saturday and then remove them around midday on Sunday. The display of these signs requires little money and manpower, and thus has proved to be an economical and effective way for the Church to let the community know where its services are being held each week.

This practice caught the attention of the Town's Sign Code compliance manager, who twice cited the Church for violating the Code. The first citation noted that the Church exceeded the time limits for displaying its temporary directional signs. The second citation referred to the same problem, along with the Church's failure to include the date of the event on the signs. Town officials even confiscated one of the Church's signs, which Reed had to retrieve from the municipal offices.

Reed contacted the Sign Code Compliance Department in an attempt to reach an accommodation. His efforts proved unsuccessful. The Town's Code compliance manager informed the Church that there ****2226** would be "no leniency under the Code" and promised to punish any future violations.

***162** Shortly thereafter, petitioners filed a complaint in the United States District Court for the District of Arizona, arguing that the Sign Code abridged their freedom of speech in violation of the First and Fourteenth Amendments. The District Court denied the petitioners' motion for a preliminary injunction. The Court of Appeals for the Ninth Circuit affirmed, holding that the Sign Code's provision regulating temporary directional signs did not regulate speech on the basis of content. 587 F.3d 966, 979 (2009). It reasoned that, even though an enforcement officer would have to read the sign to determine what provisions of the Sign Code applied to it, the " 'kind of cursory examination' " that would be necessary for an officer to classify it as a temporary directional sign was "not akin to an officer synthesizing the expressive content of the sign." *Id.,* at 978. It then remanded for the District Court to determine in the first instance whether the Sign Code's distinctions among temporary directional signs, political signs, and ideological signs nevertheless constituted a content-based regulation of speech.

On remand, the District Court granted summary judgment in favor of the Town. The Court of Appeals again affirmed, holding that the Code's sign categories were content neutral. The court concluded that "the distinctions between Temporary Directional Signs, Ideological Signs, and Political Signs ... are based on objective factors relevant to Gilbert's creation of the specific exemption from the permit requirement and do not otherwise consider the substance of the sign." 707 F.3d 1057, 1069 (C.A.9 2013). Relying on this Court's decision in *Hill v. Colorado,* 530 U.S. 703, 120 S.Ct. 2480, 147 L.Ed.2d 597 (2000), the Court of Appeals concluded that the Sign Code is content neutral. 707 F.3d, at 1071–1072. As the court explained, "Gilbert did not adopt its regulation of speech because it disagreed with the message conveyed" and its "interests in regulat[ing] temporary signs are unrelated to the content of the sign." *Ibid.* Accordingly, the court believed that the Code was ***163** "content-neutral as that term [has been] defined by the Supreme Court." *Id.,* at 1071. In light of that determination, it applied a lower level of scrutiny to the Sign Code and concluded that the law did not violate the First Amendment. *Id.,* at 1073–1076.

We granted certiorari, 573 U.S. ——, 134 S.Ct. 2900, 189 L.Ed.2d 854 (2014), and now reverse.

II

A

**[1]** **[2]** The First Amendment, applicable to the States through the Fourteenth Amendment, prohibits the enactment of laws "abridging the freedom of speech." U.S. Const., Amdt. 1. Under that Clause, a government, including a municipal government vested with state authority, "has no power to restrict expression because of its message, its ideas, its subject matter, or its content." *Police Dept. of Chicago v. Mosley,* 408 U.S. 92, 95, 92 S.Ct. 2286, 33 L.Ed.2d 212 (1972). Content-based laws—those that target speech based on its communicative content—are presumptively

  

unconstitutional and may be justified only if the government proves that they are narrowly tailored to serve compelling state interests. *R.A.V. v. St. Paul,* 505 U.S. 377, 395, 112 S.Ct. 2538, 120 L.Ed.2d 305 (1992); *Simon & Schuster, Inc. v. Members of N.Y. State Crime Victims Bd.,* 502 U.S. 105, 115, 118, 112 S.Ct. 501, 116 L.Ed.2d 476 (1991).

**2227 [3] [4] Government regulation of speech is content based if a law applies to particular speech because of the topic discussed or the idea or message expressed. *E.g., Sorrell v. IMS Health, Inc.,* 564 U.S. ——, —— – ——, 131 S.Ct. 2653, 2663–2664, 180 L.Ed.2d 544 (2011); *Carey v. Brown,* 447 U.S. 455, 462, 100 S.Ct. 2286, 65 L.Ed.2d 263 (1980); *Mosley, supra,* at 95, 92 S.Ct. 2286. This commonsense meaning of the phrase "content based" requires a court to consider whether a regulation of speech "on its face" draws distinctions based on the message a speaker conveys. *Sorrell, supra,* at ——, 131 S.Ct., at 2664. Some facial distinctions based on a message are obvious, defining regulated speech by particular subject matter, and others are more subtle, defining regulated speech by its function or purpose. Both are distinctions *164 drawn based on the message a speaker conveys, and, therefore, are subject to strict scrutiny.

[5] Our precedents have also recognized a separate and additional category of laws that, though facially content neutral, will be considered content-based regulations of speech: laws that cannot be " 'justified without reference to the content of the regulated speech,' " or that were adopted by the government "because of disagreement with the message [the speech] conveys," *Ward v. Rock Against Racism,* 491 U.S. 781, 791, 109 S.Ct. 2746, 105 L.Ed.2d 661 (1989). Those laws, like those that are content based on their face, must also satisfy strict scrutiny.

B

[6] The Town's Sign Code is content based on its face. It defines "Temporary Directional Signs" on the basis of whether a sign conveys the message of directing the public to church or some other "qualifying event." Glossary 25. It defines "Political Signs" on the basis of whether a sign's message is "designed to influence the outcome of an election." *Id.,* at 24. And it defines "Ideological Signs" on the basis of whether a sign "communicat [es] a message or ideas" that do not fit within the Code's other categories. *Id.,* at 23. It then subjects each of these categories to different restrictions. The restrictions in the Sign Code that apply to any given sign thus depend entirely on the communicative content of the sign. If a sign informs its reader of the time and place a book club will discuss John Locke's Two Treatises of Government, that sign will be treated differently from a sign expressing the view that one should vote for one of Locke's followers in an upcoming election, and both signs will be treated differently from a sign expressing an ideological view rooted in Locke's theory of government. More to the point, the Church's signs inviting people to attend its worship services are treated differently from signs conveying other types of ideas. On its face, the Sign Code is a content-based regulation of speech. We thus have no need to consider *165 the government's justifications or purposes for enacting the Code to determine whether it is subject to strict scrutiny.

C

In reaching the contrary conclusion, the Court of Appeals offered several theories to explain why the Town's Sign Code should be deemed content neutral. None is persuasive.

1

The Court of Appeals first determined that the Sign Code was content neutral because the Town "did not adopt its regulation of speech [based on] disagree [ment] with the message conveyed," and its justifications for regulating temporary directional signs were "unrelated to the content of the sign." 707 F.3d, at 1071–1072. **2228 In its brief to this Court, the United States similarly contends that a sign regulation is content neutral—even if it expressly draws distinctions based on the sign's communicative content—if those distinctions can be " 'justified without reference to the content of the regulated speech.' " Brief for United States as *Amicus Curiae* 20, 24 (quoting *Ward, supra,* at 791, 109 S.Ct. 2746; emphasis deleted).

[7] [8] [9] [10] [11] But this analysis skips the crucial first step in the content-neutrality analysis: determining whether the law is content neutral on its face. A law that is content based on its face is subject to strict scrutiny regardless of the government's benign motive, content-neutral justification, or lack of "animus toward the ideas contained" in the regulated speech. *Cincinnati v. Discovery Network, Inc.,* 507 U.S. 410, 429, 113 S.Ct. 1505, 123 L.Ed.2d 99

(1993). We have thus made clear that " '[i]llicit legislative intent is not the *sine qua non* of a violation of the First Amendment,' " and a party opposing the government "need adduce 'no evidence of an improper censorial motive.' " *Simon & Schuster, supra,* at 117, 112 S.Ct. 501. Although "a content-based purpose may be sufficient in certain circumstances to show that a regulation is content based, it is not necessary." ***166** *Turner Broadcasting System, Inc. v. FCC,* 512 U.S. 622, 642, 114 S.Ct. 2445, 129 L.Ed.2d 497 (1994). In other words, an innocuous justification cannot transform a facially content-based law into one that is content neutral.

**[12]** That is why we have repeatedly considered whether a law is content neutral on its face *before* turning to the law's justification or purpose. See, *e.g., Sorrell, supra,* at ——— – ———, 131 S.Ct., at 2663–2664 (statute was content based "on its face," and there was also evidence of an impermissible legislative motive); *United States v. Eichman,* 496 U.S. 310, 315, 110 S.Ct. 2404, 110 L.Ed.2d 287 (1990) ("Although the [statute] contains no explicit content-based limitation on the scope of prohibited conduct, it is nevertheless clear that the Government's asserted *interest* is related to the suppression of free expression" (internal quotation marks omitted)); *Members of City Council of Los Angeles v. Taxpayers for Vincent,* 466 U.S. 789, 804, 104 S.Ct. 2118, 80 L.Ed.2d 772 (1984) ("The text of the ordinance is neutral," and "there is not even a hint of bias or censorship in the City's enactment or enforcement of this ordinance"); *Clark v. Community for Creative Non–Violence,* 468 U.S. 288, 293, 104 S.Ct. 3065, 82 L.Ed.2d 221 (1984) (requiring that a facially content-neutral ban on camping must be "justified without reference to the content of the regulated speech"); *United States v. O'Brien,* 391 U.S. 367, 375, 377, 88 S.Ct. 1673, 20 L.Ed.2d 672 (1968) (noting that the statute "on its face deals with conduct having no connection with speech," but examining whether the "the governmental interest is unrelated to the suppression of free expression"). Because strict scrutiny applies either when a law is content based on its face or when the purpose and justification for the law are content based, a court must evaluate each question before it concludes that the law is content neutral and thus subject to a lower level of scrutiny.

The Court of Appeals and the United States misunderstand our decision in *Ward* as suggesting that a government's purpose is relevant even when a law is content based on its face. That is incorrect. *Ward* had nothing to say about facially content-based restrictions because it involved ***167** a facially content-*neutral* ban on the use, in a city-owned music venue, of sound amplification systems not provided by the city. 491 U.S., at 787, and n. 2, 109 S.Ct. 2746. In that context, we looked to ****2229** governmental motive, including whether the government had regulated speech "because of disagreement" with its message, and whether the regulation was " 'justified without reference to the content of the speech.' " *Id.,* at 791, 109 S.Ct. 2746. But *Ward* 's framework "applies only if a statute is content neutral." *Hill,* 530 U.S., at 766, 120 S.Ct. 2480 (KENNEDY, J., dissenting). Its rules thus operate "to protect speech," not "to restrict it." *Id.,* at 765, 120 S.Ct. 2480.

The First Amendment requires no less. Innocent motives do not eliminate the danger of censorship presented by a facially content-based statute, as future government officials may one day wield such statutes to suppress disfavored speech. That is why the First Amendment expressly targets the operation of the laws—*i.e.,* the "abridg[ement] of speech"—rather than merely the motives of those who enacted them. U.S. Const., Amdt. 1. " 'The vice of content-based legislation ... is not that it is always used for invidious, thought-control purposes, but that it lends itself to use for those purposes.' " *Hill, supra,* at 743, 120 S.Ct. 2480 (SCALIA, J., dissenting).

For instance, in *NAACP v. Button,* 371 U.S. 415, 83 S.Ct. 328, 9 L.Ed.2d 405 (1963), the Court encountered a State's attempt to use a statute prohibiting " 'improper solicitation' " by attorneys to outlaw litigation-related speech of the National Association for the Advancement of Colored People. *Id.,* at 438, 83 S.Ct. 328. Although *Button* predated our more recent formulations of strict scrutiny, the Court rightly rejected the State's claim that its interest in the "regulation of professional conduct" rendered the statute consistent with the First Amendment, observing that "it is no answer ... to say ... that the purpose of these regulations was merely to insure high professional standards and not to curtail free expression." *Id.,* at 438–439, 83 S.Ct. 328. Likewise, one could easily imagine a Sign Code compliance manager ***168** who disliked the Church's substantive teachings deploying the Sign Code to make it more difficult for the Church to inform the public of the location of its services. Accordingly, we have repeatedly "rejected the argument that 'discriminatory ... treatment is suspect under the First Amendment only when the legislature intends to suppress certain ideas.' " *Discovery Network,* 507 U.S., at 429, 113 S.Ct. 1505. We do so again today.

2

The Court of Appeals next reasoned that the Sign Code was content neutral because it "does not mention any idea or viewpoint, let alone single one out for differential treatment." 587 F.3d, at 977. It reasoned that, for the purpose of the Code provisions, "[i]t makes no difference which candidate is supported, who sponsors the event, or what ideological perspective is asserted." 707 F.3d, at 1069.

The Town seizes on this reasoning, insisting that "content based" is a term of art that "should be applied flexibly" with the goal of protecting "viewpoints and ideas from government censorship or favoritism." Brief for Respondents 22. In the Town's view, a sign regulation that "does not censor or favor particular viewpoints or ideas" cannot be content based. *Ibid.* The Sign Code allegedly passes this test because its treatment of temporary directional signs does not raise any concerns that the government is "endorsing or suppressing 'ideas or viewpoints,' " *id.,* at 27, and the provisions for political signs and ideological signs "are neutral as to particular ideas or viewpoints" within those categories. *Id.,* at 37.

**[13]** This analysis conflates two distinct but related limitations that the First ****2230** Amendment places on government regulation of speech. Government discrimination among viewpoints—or the regulation of speech based on "the specific motivating ideology or the opinion or perspective of the speaker"—is a "more blatant" and "egregious form of content discrimination." ***169** *Rosenberger v. Rector and Visitors of Univ. of Va.,* 515 U.S. 819, 829, 115 S.Ct. 2510, 132 L.Ed.2d 700 (1995). But it is well established that "[t]he First Amendment's hostility to content-based regulation extends not only to restrictions on particular viewpoints, but also to prohibition of public discussion of an entire topic." *Consolidated Edison Co. of N.Y. v. Public Serv. Comm'n of N. Y.,* 447 U.S. 530, 537, 100 S.Ct. 2326, 65 L.Ed.2d 319 (1980).

**[14]** Thus, a speech regulation targeted at specific subject matter is content based even if it does not discriminate among viewpoints within that subject matter. *Ibid.* For example, a law banning the use of sound trucks for political speech—and only political speech—would be a content-based regulation, even if it imposed no limits on the political viewpoints that could be expressed. See *Discovery Network, supra,* at 428, 113 S.Ct. 1505. The Town's Sign Code likewise singles out specific subject matter for differential treatment, even if it does not target viewpoints within that subject matter. Ideological messages are given more favorable treatment than messages concerning a political candidate, which are themselves given more favorable treatment than messages announcing an assembly of like-minded individuals. That is a paradigmatic example of content-based discrimination.

3

Finally, the Court of Appeals characterized the Sign Code's distinctions as turning on " 'the content-neutral elements of who is speaking through the sign and whether and when an event is occurring.' " 707 F.3d, at 1069. That analysis is mistaken on both factual and legal grounds.

To start, the Sign Code's distinctions are not speaker based. The restrictions for political, ideological, and temporary event signs apply equally no matter who sponsors them. If a local business, for example, sought to put up signs advertising the Church's meetings, those signs would be subject to the same limitations as such signs placed by the Church. And if Reed had decided to display signs in support of a particular candidate, he could have made those signs far ***170** larger—and kept them up for far longer—than signs inviting people to attend his church services. If the Code's distinctions were truly speaker based, both types of signs would receive the same treatment.

**[15]** **[16]** In any case, the fact that a distinction is speaker based does not, as the Court of Appeals seemed to believe, automatically render the distinction content neutral. Because "[s]peech restrictions based on the identity of the speaker are all too often simply a means to control content," *Citizens United v. Federal Election Comm'n,* 558 U.S. 310, 340, 130 S.Ct. 876, 175 L.Ed.2d 753 (2010), we have insisted that "laws favoring some speakers over others demand strict scrutiny when the legislature's speaker preference reflects a content preference," *Turner,* 512 U.S., at 658, 114 S.Ct. 2445. Thus, a law limiting the content of newspapers, but only newspapers, could not evade strict scrutiny simply because it could be characterized as speaker based. Likewise, a content-based law that restricted the political speech of all corporations would not become content neutral just because it singled out corporations as a class of speakers. See *Citizens United, supra,* at 340–341, 130 S.Ct. 876. Characterizing a distinction ****2231** as speaker based is only the beginning—not the end—of the inquiry.

Nor do the Sign Code's distinctions hinge on "whether and when an event is occurring." The Code does not permit citizens to post signs on any topic whatsoever within a set period leading up to an election, for example. Instead,

  

come election time, it requires Town officials to determine whether a sign is "designed to influence the outcome of an election" (and thus "political") or merely "communicating a message or ideas for noncommercial purposes" (and thus "ideological"). Glossary 24. That obvious content-based inquiry does not evade strict scrutiny review simply because an event (*i.e.,* an election) is involved.

**[17]** And, just as with speaker-based laws, the fact that a distinction is event based does not render it content neutral. The Court of Appeals cited no precedent from this Court ***171** supporting its novel theory of an exception from the content-neutrality requirement for event-based laws. As we have explained, a speech regulation is content based if the law applies to particular speech because of the topic discussed or the idea or message expressed. *Supra,* at 2226 – 2227. A regulation that targets a sign because it conveys an idea about a specific event is no less content based than a regulation that targets a sign because it conveys some other idea. Here, the Code singles out signs bearing a particular message: the time and location of a specific event. This type of ordinance may seem like a perfectly rational way to regulate signs, but a clear and firm rule governing content neutrality is an essential means of protecting the freedom of speech, even if laws that might seem "entirely reasonable" will sometimes be "struck down because of their content-based nature." *City of Ladue v. Gilleo,* 512 U.S. 43, 60, 114 S.Ct. 2038, 129 L.Ed.2d 36 (1994) (O'Connor, J., concurring).

III

**[18]** **[19]** Because the Town's Sign Code imposes content-based restrictions on speech, those provisions can stand only if they survive strict scrutiny, " 'which requires the Government to prove that the restriction furthers a compelling interest and is narrowly tailored to achieve that interest,' " *Arizona Free Enterprise Club's Freedom Club PAC v. Bennett,* 564 U.S. ——, ——, 131 S.Ct. 2806, 2817, 180 L.Ed.2d 664 (2011) (quoting *Citizens United,* 558 U.S., at 340, 130 S.Ct. 876). Thus, it is the Town's burden to demonstrate that the Code's differentiation between temporary directional signs and other types of signs, such as political signs and ideological signs, furthers a compelling governmental interest and is narrowly tailored to that end. See *ibid*.

The Town cannot do so. It has offered only two governmental interests in support of the distinctions the Sign Code draws: preserving the Town's aesthetic appeal and traffic safety. Assuming for the sake of argument that those are compelling governmental interests, the Code's distinctions fail as hopelessly underinclusive.

***172** Starting with the preservation of aesthetics, temporary directional signs are "no greater an eyesore," *Discovery Network,* 507 U.S., at 425, 113 S.Ct. 1505, than ideological or political ones. Yet the Code allows unlimited proliferation of larger ideological signs while strictly limiting the number, size, and duration of smaller directional ones. The Town cannot claim that placing strict limits on temporary directional signs is necessary to beautify the Town while at the same time allowing unlimited numbers of other types of signs that create the same problem.

****2232** The Town similarly has not shown that limiting temporary directional signs is necessary to eliminate threats to traffic safety, but that limiting other types of signs is not. The Town has offered no reason to believe that directional signs pose a greater threat to safety than do ideological or political signs. If anything, a sharply worded ideological sign seems more likely to distract a driver than a sign directing the public to a nearby church meeting.

**[20]** In light of this underinclusiveness, the Town has not met its burden to prove that its Sign Code is narrowly tailored to further a compelling government interest. Because a " 'law cannot be regarded as protecting an interest of the highest order, and thus as justifying a restriction on truthful speech, when it leaves appreciable damage to that supposedly vital interest unprohibited,' " *Republican Party of Minn. v. White,* 536 U.S. 765, 780, 122 S.Ct. 2528, 153 L.Ed.2d 694 (2002), the Sign Code fails strict scrutiny.

IV

**[21]** Our decision today will not prevent governments from enacting effective sign laws. The Town asserts that an " 'absolutist' " content-neutrality rule would render "virtually all distinctions in sign laws ... subject to strict scrutiny," Brief for Respondents 34–35, but that is not the case. Not "all distinctions" are subject to strict scrutiny, only *content-based* ones are. Laws that are *content neutral* are instead subject to lesser scrutiny. See *Clark,* 468 U.S., at 295, 104 S.Ct. 3065.

***173** The Town has ample content-neutral options available to resolve problems with safety and aesthetics. For example, its current Code regulates many aspects of signs that have

  

nothing to do with a sign's message: size, building materials, lighting, moving parts, and portability. See, *e.g.,* § 4.402(R). And on public property, the Town may go a long way toward entirely forbidding the posting of signs, so long as it does so in an evenhanded, content-neutral manner. See *Taxpayers for Vincent,* 466 U.S., at 817, 104 S.Ct. 2118 (upholding content-neutral ban against posting signs on public property). Indeed, some lower courts have long held that similar content-based sign laws receive strict scrutiny, but there is no evidence that towns in those jurisdictions have suffered catastrophic effects. See, *e.g., Solantic, LLC v. Neptune Beach,* 410 F.3d 1250, 1264–1269 (C.A.11 2005) (sign categories similar to the town of Gilbert's were content based and subject to strict scrutiny); *Matthews v. Needham,* 764 F.2d 58, 59–60 (C.A.1 1985) (law banning political signs but not commercial signs was content based and subject to strict scrutiny).

We acknowledge that a city might reasonably view the general regulation of signs as necessary because signs "take up space and may obstruct views, distract motorists, displace alternative uses for land, and pose other problems that legitimately call for regulation." *City of Ladue,* 512 U.S., at 48, 114 S.Ct. 2038. At the same time, the presence of certain signs may be essential, both for vehicles and pedestrians, to guide traffic or to identify hazards and ensure safety. A sign ordinance narrowly tailored to the challenges of protecting the safety of pedestrians, drivers, and passengers—such as warning signs marking hazards on private property, signs directing traffic, or street numbers associated with private houses—well might survive strict scrutiny. The signs at issue in this case, including political and ideological signs and signs for events, are far removed from those purposes. As discussed above, they are facially content based and are neither justified by traditional safety concerns nor narrowly tailored.

* * *

****2233** ***174** We reverse the judgment of the Court of Appeals and remand the case for proceedings consistent with this opinion.

*It is so ordered.*

Justice ALITO, with whom Justice KENNEDY and Justice SOTOMAYOR join, concurring.

I join the opinion of the Court but add a few words of further explanation.

As the Court holds, what we have termed "content-based" laws must satisfy strict scrutiny. Content-based laws merit this protection because they present, albeit sometimes in a subtler form, the same dangers as laws that regulate speech based on viewpoint. Limiting speech based on its "topic" or "subject" favors those who do not want to disturb the status quo. Such regulations may interfere with democratic self-government and the search for truth. See *Consolidated Edison Co. of N.Y. v. Public Serv. Comm'n of N. Y.,* 447 U.S. 530, 537, 100 S.Ct. 2326, 65 L.Ed.2d 319 (1980).

As the Court shows, the regulations at issue in this case are replete with content-based distinctions, and as a result they must satisfy strict scrutiny. This does not mean, however, that municipalities are powerless to enact and enforce reasonable sign regulations. I will not attempt to provide anything like a comprehensive list, but here are some rules that would not be content based:

Rules regulating the size of signs. These rules may distinguish among signs based on any content-neutral criteria, including any relevant criteria listed below.

Rules regulating the locations in which signs may be placed. These rules may distinguish between free-standing signs and those attached to buildings.

Rules distinguishing between lighted and unlighted signs.

Rules distinguishing between signs with fixed messages and electronic signs with messages that change.

***175** Rules that distinguish between the placement of signs on private and public property.

Rules distinguishing between the placement of signs on commercial and residential property.

Rules distinguishing between on-premises and off-premises signs.

Rules restricting the total number of signs allowed per mile of roadway.

Rules imposing time restrictions on signs advertising a one-time event. Rules of this nature do not discriminate based on topic or subject and are akin to rules restricting the times within which oral speech or music is allowed.*

  

In addition to regulating signs put up by private actors, government entities may also erect their own signs consistent with the principles that allow governmental speech. See *Pleasant Grove City v. Summum,* 555 U.S. 460, 467–469, 129 S.Ct. 1125, 172 L.Ed.2d 853 (2009). They may put up all manner of signs to promote safety, as well as directional signs and signs pointing out historic sites and scenic spots.

Properly understood, today's decision will not prevent cities from regulating signs in a way that fully protects public ****2234** safety and serves legitimate esthetic objectives.

Justice BREYER, concurring in the judgment.

I join Justice KAGAN's separate opinion. Like Justice KAGAN I believe that categories alone cannot satisfactorily resolve the legal problem before us. The First Amendment requires greater judicial sensitivity both to the Amendment's expressive objectives and to the public's legitimate need for regulation than a simple recitation of categories, such as ***176** "content discrimination" and "strict scrutiny," would permit. In my view, the category "content discrimination" is better considered in many contexts, including here, as a rule of thumb, rather than as an automatic "strict scrutiny" trigger, leading to almost certain legal condemnation.

To use content discrimination to trigger strict scrutiny sometimes makes perfect sense. There are cases in which the Court has found content discrimination an unconstitutional method for suppressing a viewpoint. *E.g., Rosenberger v. Rector and Visitors of Univ. of Va.,* 515 U.S. 819, 828–829, 115 S.Ct. 2510, 132 L.Ed.2d 700 (1995); see also *Boos v. Barry,* 485 U.S. 312, 318–319, 108 S.Ct. 1157, 99 L.Ed.2d 333 (1988) (plurality opinion) (applying strict scrutiny where the line between subject matter and viewpoint was not obvious). And there are cases where the Court has found content discrimination to reveal that rules governing a traditional public forum are, in fact, not a neutral way of fairly managing the forum in the interest of all speakers. *Police Dept. of Chicago v. Mosley,* 408 U.S. 92, 96, 92 S.Ct. 2286, 33 L.Ed.2d 212 (1972) ("Once a forum is opened up to assembly or speaking by some groups, government may not prohibit others from assembling or speaking on the basis of what they intend to say"). In these types of cases, strict scrutiny is often appropriate, and content discrimination has thus served a useful purpose.

But content discrimination, while helping courts to identify unconstitutional suppression of expression, cannot and should not *always* trigger strict scrutiny. To say that it is not an automatic "strict scrutiny" trigger is not to argue against that concept's use. I readily concede, for example, that content discrimination, as a conceptual tool, can sometimes reveal weaknesses in the government's rationale for a rule that limits speech. If, for example, a city looks to litter prevention as the rationale for a prohibition against placing newsracks dispensing free advertisements on public property, why does it exempt other newsracks causing similar litter? Cf. *Cincinnati v. Discovery Network, Inc.,* 507 U.S. 410, 113 S.Ct. 1505, 123 L.Ed.2d 99 (1993). I also concede that, whenever government disfavors ***177** one kind of speech, it places that speech at a disadvantage, potentially interfering with the free marketplace of ideas and with an individual's ability to express thoughts and ideas that can help that individual determine the kind of society in which he wishes to live, help shape that society, and help define his place within it.

Nonetheless, in these latter instances to use the presence of content discrimination automatically to trigger strict scrutiny and thereby call into play a strong presumption against constitutionality goes too far. That is because virtually all government activities involve speech, many of which involve the regulation of speech. Regulatory programs almost always require content discrimination. And to hold that such content discrimination triggers strict scrutiny is to write a recipe for judicial management of ordinary government regulatory activity.

Consider a few examples of speech regulated by government that inevitably involve ****2235** content discrimination, but where a strong presumption against constitutionality has no place. Consider governmental regulation of securities, *e.g.,* 15 U.S.C. § 78*l* (requirements for content that must be included in a registration statement); of energy conservation labeling-practices, *e.g.,* 42 U.S.C. § 6294 (requirements for content that must be included on labels of certain consumer electronics); of prescription drugs, *e.g.,* 21 U.S.C. § 353(b)(4)(A) (requiring a prescription drug label to bear the symbol "Rx only"); of doctor-patient confidentiality, *e.g.,* 38 U.S.C. § 7332 (requiring confidentiality of certain medical records, but allowing a physician to disclose that the patient has HIV to the patient's spouse or sexual partner); of income tax statements, *e.g.,* 26 U.S.C. § 6039F (requiring taxpayers to furnish information about foreign gifts received if the aggregate amount exceeds $10,000); of commercial airplane briefings, *e.g.,* 14 CFR § 136.7 (2015) (requiring pilots to ensure that each passenger has been briefed on flight procedures, such as seatbelt fastening); of signs at petting zoos, ***178** *e.g.,* N.Y. Gen. Bus. Law Ann. § 399–ff(3) (West Cum. Supp. 2015)

  

(requiring petting zoos to post a sign at every exit " 'strongly recommend[ing] that persons wash their hands upon exiting the petting zoo area' "); and so on.

Nor can the majority avoid the application of strict scrutiny to all sorts of justifiable governmental regulations by relying on this Court's many subcategories and exceptions to the rule. The Court has said, for example, that we should apply less strict standards to "commercial speech." *Central Hudson Gas & Elec. Corp. v. Public Service Comm'n of N. Y.,* 447 U.S. 557, 562–563, 100 S.Ct. 2343, 65 L.Ed.2d 341 (1980). But I have great concern that many justifiable instances of "content-based" regulation are noncommercial. And, worse than that, the Court has applied the heightened "strict scrutiny" standard even in cases where the less stringent "commercial speech" standard was appropriate. See *Sorrell v. IMS Health Inc.,* 564 U.S. ——, ——, 131 S.Ct. 2653, 2664, 180 L.Ed.2d 544 (2011) (BREYER, J., dissenting). The Court has also said that "government speech" escapes First Amendment strictures. See *Rust v. Sullivan,* 500 U.S. 173, 193–194, 111 S.Ct. 1759, 114 L.Ed.2d 233 (1991). But regulated speech is typically private speech, not government speech. Further, the Court has said that, "[w]hen the basis for the content discrimination consists entirely of the very reason the entire class of speech at issue is proscribable, no significant danger of idea or viewpoint discrimination exists." *R.A.V. v. St. Paul,* 505 U.S. 377, 388, 112 S.Ct. 2538, 120 L.Ed.2d 305 (1992). But this exception accounts for only a few of the instances in which content discrimination is readily justifiable.

I recognize that the Court could escape the problem by watering down the force of the presumption against constitutionality that "strict scrutiny" normally carries with it. But, in my view, doing so will weaken the First Amendment's protection in instances where "strict scrutiny" should apply in full force.

The better approach is to generally treat content discrimination as a strong reason weighing against the constitutionality of a rule where a traditional public forum, or where ***179** viewpoint discrimination, is threatened, but elsewhere treat it as a rule of thumb, finding it a helpful, but not determinative legal tool, in an appropriate case, to determine the strength of a justification. I would use content discrimination as a supplement to a more basic analysis, which, tracking most of our First Amendment cases, asks whether the regulation at issue works harm to First Amendment interests that is disproportionate in light of ****2236** the relevant regulatory objectives. Answering this question requires examining the seriousness of the harm to speech, the importance of the countervailing objectives, the extent to which the law will achieve those objectives, and whether there are other, less restrictive ways of doing so. See, *e.g., United States v. Alvarez,* 567 U.S. ——, —— – ——, 132 S.Ct. 2537, 2551–2553, 183 L.Ed.2d 574 (2012) (BREYER, J., concurring in judgment); *Nixon v. Shrink Missouri Government PAC,* 528 U.S. 377, 400–403, 120 S.Ct. 897, 145 L.Ed.2d 886 (2000) (BREYER, J., concurring). Admittedly, this approach does not have the simplicity of a mechanical use of categories. But it does permit the government to regulate speech in numerous instances where the voters have authorized the government to regulate and where courts should hesitate to substitute judicial judgment for that of administrators.

Here, regulation of signage along the roadside, for purposes of safety and beautification is at issue. There is no traditional public forum nor do I find any general effort to censor a particular viewpoint. Consequently, the specific regulation at issue does not warrant "strict scrutiny." Nonetheless, for the reasons that Justice KAGAN sets forth, I believe that the Town of Gilbert's regulatory rules violate the First Amendment. I consequently concur in the Court's judgment only.

Justice KAGAN, with whom Justice GINSBURG and Justice BREYER join, concurring in the judgment.

Countless cities and towns across America have adopted ordinances regulating the posting of signs, while exempting ***180** certain categories of signs based on their subject matter. For example, some municipalities generally prohibit illuminated signs in residential neighborhoods, but lift that ban for signs that identify the address of a home or the name of its owner or occupant. See, *e.g.,* City of Truth or Consequences, N. M., Code of Ordinances, ch. 16, Art. XIII, §§ 11–13–2.3, 11–13–2.9(H)(4) (2014). In other municipalities, safety signs such as "Blind Pedestrian Crossing" and "Hidden Driveway" can be posted without a permit, even as other permanent signs require one. See, *e.g.,* Code of Athens–Clarke County, Ga., Pt. III, § 7–4–7(1) (1993). Elsewhere, historic site markers—for example, "George Washington Slept Here"—are also exempt from general regulations. See, *e.g.,* Dover, Del., Code of Ordinances, Pt. II, App. B, Art. 5, § 4.5(F) (2012). And similarly, the federal Highway Beautification Act limits signs along interstate highways unless, for instance, they direct travelers to "scenic and historical attractions" or advertise free coffee. See 23 U.S.C. §§ 131(b), (c)(1), (c)(5).

  

Given the Court's analysis, many sign ordinances of that kind are now in jeopardy. See *ante,* at 2231 (acknowledging that "entirely reasonable" sign laws "will sometimes be struck down" under its approach (internal quotation marks omitted)). Says the majority: When laws "single[ ] out specific subject matter," they are "facially content based"; and when they are facially content based, they are automatically subject to strict scrutiny. *Ante,* at 2230, 2232 – 2233. And although the majority holds out hope that some sign laws with subject-matter exemptions "might survive" that stringent review, *ante,* at 2232 – 2233, the likelihood is that most will be struck down. After all, it is the "rare case[ ] in which a speech restriction withstands strict scrutiny." *Williams–Yulee v. Florida Bar,* 575 U.S. ——, ——, 135 S.Ct. 1656, 1666, ——L.Ed.2d —— (2015). To clear that high bar, the government must show that a content-based distinction "is necessary to serve a compelling state interest and is narrowly drawn to achieve that end." *Arkansas Writers'* ***181** *Project, Inc.* ****2237** *v. Ragland,* 481 U.S. 221, 231, 107 S.Ct. 1722, 95 L.Ed.2d 209 (1987). So on the majority's view, courts would have to determine that a town has a compelling interest in informing passersby where George Washington slept. And likewise, courts would have to find that a town has no other way to prevent hidden-driveway mishaps than by specially treating hidden-driveway signs. (Well-placed speed bumps? Lower speed limits? Or how about just a ban on hidden driveways?) The consequence—unless courts water down strict scrutiny to something unrecognizable—is that our communities will find themselves in an unenviable bind: They will have to either repeal the exemptions that allow for helpful signs on streets and sidewalks, or else lift their sign restrictions altogether and resign themselves to the resulting clutter.[*]

Although the majority insists that applying strict scrutiny to all such ordinances is "essential" to protecting First Amendment freedoms, *ante,* at 2231, I find it challenging to understand why that is so. This Court's decisions articulate two important and related reasons for subjecting content-based speech regulations to the most exacting standard of review. The first is "to preserve an uninhibited marketplace of ideas in which truth will ultimately prevail." *McCullen v. Coakley,* 573 U.S. ——, —— – ——, 134 S.Ct. 2518, 2529, 189 L.Ed.2d 502 (2014) (internal quotation marks omitted). The second is to ensure that the government has not regulated speech "based on hostility—or favoritism—towards the underlying message expressed." *R.A.V. v. St. Paul,* 505 U.S. 377, 386, 112 S.Ct. 2538, 120 L.Ed.2d 305 (1992). Yet the ***182** subject-matter exemptions included in many sign ordinances do not implicate those concerns. Allowing residents, say, to install a light bulb over "name and address" signs but no others does not distort the marketplace of ideas. Nor does that different treatment give rise to an inference of impermissible government motive.

We apply strict scrutiny to facially content-based regulations of speech, in keeping with the rationales just described, when there is any "realistic possibility that official suppression of ideas is afoot." *Davenport v. Washington Ed. Assn.,* 551 U.S. 177, 189, 127 S.Ct. 2372, 168 L.Ed.2d 71 (2007) (quoting *R.A.V.,* 505 U.S., at 390, 112 S.Ct. 2538). That is always the case when the regulation facially differentiates on the basis of viewpoint. See *Rosenberger v. Rector and Visitors of Univ. of Va.,* 515 U.S. 819, 829, 115 S.Ct. 2510, 132 L.Ed.2d 700 (1995). It is also the case (except in non-public or limited public forums) when a law restricts "discussion of an entire topic" in public debate. *Consolidated Edison Co. of N.Y. v. Public Serv. Comm'n of N. Y.,* 447 U.S. 530, 537, 539–540, 100 S.Ct. 2326, 65 L.Ed.2d 319 (1980) (invalidating a limitation on speech about nuclear power). We have stated that "[i]f the marketplace of ideas is to remain free and open, governments must not be allowed to choose 'which issues are worth discussing or debating.' " *Id.,* at 537–538, 100 S.Ct. 2326 (quoting *Police Dept. of* ****2238** *Chicago v. Mosley,* 408 U.S. 92, 96, 92 S.Ct. 2286, 33 L.Ed.2d 212 (1972)). And we have recognized that such subject-matter restrictions, even though viewpoint-neutral on their face, may "suggest[ ] an attempt to give one side of a debatable public question an advantage in expressing its views to the people." *First Nat. Bank of Boston v. Bellotti,* 435 U.S. 765, 785, 98 S.Ct. 1407, 55 L.Ed.2d 707 (1978); accord, *ante,* at 2233 (ALITO, J., concurring) (limiting all speech on one topic "favors those who do not want to disturb the status quo"). Subject-matter regulation, in other words, may have the intent or effect of favoring some ideas over others. When that is realistically possible—when the restriction "raises the specter that the Government may effectively drive certain ideas or viewpoints from the marketplace"—we insist that the law pass the most demanding ***183** constitutional test. *R.A.V.,* 505 U.S., at 387, 112 S.Ct. 2538 (quoting *Simon & Schuster, Inc. v. Members of N.Y. State Crime Victims Bd.,* 502 U.S. 105, 116, 112 S.Ct. 501, 116 L.Ed.2d 476 (1991)).

But when that is not realistically possible, we may do well to relax our guard so that "entirely reasonable" laws imperiled by strict scrutiny can survive. *Ante,* at 2231. This point is by no means new. Our concern with content-based regulation

  

arises from the fear that the government will skew the public's debate of ideas—so when "that risk is inconsequential, ... strict scrutiny is unwarranted." *Davenport,* 551 U.S., at 188, 127 S.Ct. 2372; see *R.A.V.,* 505 U.S., at 388, 112 S.Ct. 2538 (approving certain content-based distinctions when there is "no significant danger of idea or viewpoint discrimination"). To do its intended work, of course, the category of content-based regulation triggering strict scrutiny must sweep more broadly than the actual harm; that category exists to create a buffer zone guaranteeing that the government cannot favor or disfavor certain viewpoints. But that buffer zone need not extend forever. We can administer our content-regulation doctrine with a dose of common sense, so as to leave standing laws that in no way implicate its intended function.

And indeed we have done just that: Our cases have been far less rigid than the majority admits in applying strict scrutiny to facially content-based laws—including in cases just like this one. See *Davenport,* 551 U.S., at 188, 127 S.Ct. 2372 (noting that "we have identified numerous situations in which [the] risk" attached to content-based laws is "attenuated"). In *Members of City Council of Los Angeles v. Taxpayers for Vincent,* 466 U.S. 789, 104 S.Ct. 2118, 80 L.Ed.2d 772 (1984), the Court declined to apply strict scrutiny to a municipal ordinance that exempted address numbers and markers commemorating "historical, cultural, or artistic event[s]" from a generally applicable limit on sidewalk signs. *Id.,* at 792, n. 1, 104 S.Ct. 2118 (listing exemptions); see *id.,* at 804–810, 104 S.Ct. 2118 (upholding ordinance under intermediate scrutiny). After all, we explained, the law's enactment and enforcement revealed "not even a hint of bias or censorship." ***184** *Id.,* at 804, 104 S.Ct. 2118; see also *Renton v. Playtime Theatres, Inc.,* 475 U.S. 41, 48, 106 S.Ct. 925, 89 L.Ed.2d 29 (1986) (applying intermediate scrutiny to a zoning law that facially distinguished among movie theaters based on content because it was "designed to prevent crime, protect the city's retail trade, [and] maintain property values ..., not to suppress the expression of unpopular views"). And another decision involving a similar law provides an alternative model. In *City of Ladue v. Gilleo,* 512 U.S. 43, 114 S.Ct. 2038, 129 L.Ed.2d 36 (1994), the Court assumed *arguendo* that a sign ordinance's exceptions for address ****2239** signs, safety signs, and for-sale signs in residential areas did not trigger strict scrutiny. See *id.,* at 46–47, and n. 6, 114 S.Ct. 2038 (listing exemptions); *id.,* at 53, 114 S.Ct. 2038 (noting this assumption). We did not need to, and so did not, decide the level-of-scrutiny question because the law's breadth made it unconstitutional under any standard.

The majority could easily have taken *Ladue* 's tack here. The Town of Gilbert's defense of its sign ordinance—most notably, the law's distinctions between directional signs and others—does not pass strict scrutiny, or intermediate scrutiny, or even the laugh test. See *ante,* at 2231 – 2232 (discussing those distinctions). The Town, for example, provides no reason at all for prohibiting more than four directional signs on a property while placing no limits on the number of other types of signs. See Gilbert, Ariz., Land Development Code, ch. I, §§ 4.402(J), (P)(2) (2014). Similarly, the Town offers no coherent justification for restricting the size of directional signs to 6 square feet while allowing other signs to reach 20 square feet. See §§ 4.402(J), (P)(1). The best the Town could come up with at oral argument was that directional signs "need to be smaller because they need to guide travelers along a route." Tr. of Oral Arg. 40. Why exactly a smaller sign better helps travelers get to where they are going is left a mystery. The absence of any sensible basis for these and other distinctions dooms the Town's ordinance under even the intermediate scrutiny that the Court typically applies to "time, place, or manner" speech regulations. ***185** Accordingly, there is no need to decide in this case whether strict scrutiny applies to every sign ordinance in every town across this country containing a subject-matter exemption.

I suspect this Court and others will regret the majority's insistence today on answering that question in the affirmative. As the years go by, courts will discover that thousands of towns have such ordinances, many of them "entirely reasonable." *Ante,* at 2231. And as the challenges to them mount, courts will have to invalidate one after the other. (This Court may soon find itself a veritable Supreme Board of Sign Review.) And courts will strike down those democratically enacted local laws even though no one—certainly not the majority—has ever explained why the vindication of First Amendment values requires that result. Because I see no reason why such an easy case calls for us to cast a constitutional pall on reasonable regulations quite unlike the law before us, I concur only in the judgment.

**All Citations**

576 U.S. 155, 135 S.Ct. 2218, 192 L.Ed.2d 236, 83 USLW 4444, 15 Cal. Daily Op. Serv. 6239, 2015 Daily Journal D.A.R. 6831, 25 Fla. L. Weekly Fed. S 383

  

Footnotes

* The syllabus constitutes no part of the opinion of the Court but has been prepared by the Reporter of Decisions for the convenience of the reader. See *United States v. Detroit Timber & Lumber Co.,* 200 U.S. 321, 337, 26 S.Ct. 282, 50 L.Ed. 499.

1 The Town's Sign Code is available online at http://www. gilbertaz.gov/departments/development-service/planning-development/land-development-code (as visited June 16, 2015, and available in Clerk of Court's case file).

2 A "Temporary Sign" is a "sign not permanently attached to the ground, a wall or a building, and not designed or intended for permanent display." Glossary 25.

3 The Code defines "Right–of–Way" as a "strip of publicly owned land occupied by or planned for a street, utilities, landscaping, sidewalks, trails, and similar facilities." *Id.,* at 18.

4 The Sign Code has been amended twice during the pendency of this case. When litigation began in 2007, the Code defined the signs at issue as "Religious Assembly Temporary Direction Signs." App. 75. The Code entirely prohibited placement of those signs in the public right-of-way, and it forbade posting them in any location for more than two hours before the religious assembly or more than one hour afterward. *Id.,* at 75–76. In 2008, the Town redefined the category as "Temporary Directional Signs Related to a Qualifying Event," and it expanded the time limit to 12 hours before and 1 hour after the "qualifying event." *Ibid.* In 2011, the Town amended the Code to authorize placement of temporary directional signs in the public right-of-way. *Id.,* at 89.

* Of course, content-neutral restrictions on speech are not necessarily consistent with the First Amendment. Time, place, and manner restrictions "must be narrowly tailored to serve the government's legitimate, content-neutral interests." *Ward v. Rock Against Racism,* 491 U.S. 781, 798, 109 S.Ct. 2746, 105 L.Ed.2d 661 (1989). But they need not meet the high standard imposed on viewpoint- and content-based restrictions.

* Even in trying (commendably) to limit today's decision, Justice ALITO's concurrence highlights its far-reaching effects. According to Justice ALITO, the majority does not subject to strict scrutiny regulations of "signs advertising a one-time event." *Ante,* at 2233 (ALITO, J., concurring). But of course it does. On the majority's view, a law with an exception for such signs "singles out specific subject matter for differential treatment" and "defin[es] regulated speech by particular subject matter." *Ante,* at 2227, 2230 (majority opinion). Indeed, the precise reason the majority applies strict scrutiny here is that "the Code singles out signs bearing a particular message: the time and location of a specific event." *Ante,* at 2231.

# Compendium of Recent Research Studies on Distraction from Commercial Electronic Variable Message Signs (CEVMS)

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## Background

This is the second in a series of brief updates based upon this author's 2009 report for AASHTO through NCHRP Project 20-7/256,[1] which was a comprehensive and critical review of research that had been undertaken, and guidelines that had been developed up to that time that addressed the potential consequences for driver distraction from Commercial Electronic Variable Message Signs (CEVMS) along the roadside.

We critically reviewed all of the research papers (more than 40) that had been published or presented within the prior 30 years. These papers represented the work of academic, industry, and government researchers in many countries (including, but not limited to: Sweden, Denmark, Israel, Canada, US, England, and Australia), and which followed many different research protocols. Whereas earlier studies (primarily those from the 1990s and prior) often suffered from limitations in equipment, methodology, or statistical rigor, leaving their conclusions open to question and controversy, those performed in the more recent past were generally more robust, and tended to reach similar conclusions to each other.

The previous update was done in June, 2013 and presented at a joint meeting of AASHTO's traffic engineering and highway safety subcommittees. The new material in this update includes nine studies in five countries.

Broadly summarized, the more recent studies have tended to find that outdoor advertising signs, particularly CEVMS, attract drivers' attention, and that more dramatic and salient signs attract longer and more frequent glances. This attention is often captured through a "bottom up" physiological process, in which the driver attends to the sign unintentionally and unconsciously, with the eyes captured involuntarily by the sign's changing imagery, brightness, conspicuity, and/or movement.

Several of the reported studies suggested that the distraction caused by outdoor advertising signs could be tolerated by experienced drivers and when attentional or cognitive demands of the driving task were low, but that the risk increased when such signs competed for the driver's visual attention with more demanding road, traffic, and weather conditions, when travel speeds were higher, or when an unanticipated event or action (such as a sudden lane change or hard braking by a lead vehicle) occurred to which the driver had to respond quickly and correctly.

In addition, the more recent research continues to show that the drivers most susceptible to unsafe levels of distraction from roadside billboards are the young (who are more prone to distraction and less adept at emergency vehicle response) and the elderly (who have more difficulty with rapidly shifting attention, poorer night vision and glare susceptibility, and slower mental processing time). As will be seen in this Compendium, these concerns are heightened today, with our elderly driver population growing quickly, traffic

[1] Wachtel, J. (2009). "Safety Impacts of the Emerging Digital Display Technology for Outdoor Advertising Signs: Final Report. NCHRP Report 20-7/256. Available at: http://rightofway.transportation.org/Documents/NCHRP%20Reports/20-7(256)%20digital%20outdoor%20advertising_aashto.pdf

increasingly dense, more roads under maintenance or repair (construction and work zones create added risks), and larger, brighter digital and video roadside advertising signs competing for the driver's attention.

Finally, the most recent epidemiological studies (dating from 2014 and 2015) have begun to demonstrate what has long been suspected but not proven – that roadside billboards are associated with increases in crash rates where such billboards are located.

The research and guidelines reviewed in our 2009 report set the stage for the 21 research articles and guidelines that are reviewed and summarized in this compendium.

**While employing a broad array of approaches and methodologies, the common theme clearly indicates that the more that commercial digital signs succeed in attracting the attention of motorists that render them a worthwhile investment for owners and advertisers, the more they represent a threat to safety along our busiest streets and highways, where these signs tend to be located.**

The long awaited study by the Federal Highway Administration (FHWA), announced on the agency's website on December 30, 2014, is an outlier in this group of recent studies (except for those sponsored by the outdoor advertising industry[2]), in that it found no relationship

[2] In 2007, two studies sponsored by the outdoor advertising industry (the Outdoor Advertising Association of America [OAAA] and its research arm, the Foundation for Outdoor Advertising Research and Education [FOARE]) were submitted through the peer review process to the Transportation Research Board of The National Academies. Both reports, one a human factors study by the Virginia Tech Transportation Institute (VTTI), and the other an epidemiological study by Tantala and Tantala, received overall negative reviews from peer reviewers, and were therefore rejected by TRB both for presentation and publication. Although Virginia Tech has not performed subsequent work in this field, Tantala and Tantala have continued to perform research under the sponsorship of OAAA/FOARE. However, for whatever reasons, FOARE and OAAA have not made the subsequent studies available to the public, so they could not be addressed in this Compendium of research.

The Tantala and Tantala 2007 study was an epidemiological analyses of crash rates, but the authors established data collection parameters that led them to exclude from examination the very driver cohorts (older drivers) and road locations (interchange areas) known to be at greatest risk for distraction. Subsequent comments from the senior author of these studies, to the effect that their subsequent studies follow the same basic methodology as the one performed in 2007 (with the exception of a more robust statistical technique to analyze the data), remains a cause for concern because of these methodological biases. The other industry study released by FOARE in 2007, the human factors analysis performed by VTTI, actually found that digital signs were associated with more long-duration glances away from the forward roadway than other types of signs, and further found that the problem was considerably worse at night. However, the authors edited their final report to make it seem as if these adverse consequences did not exist, and their industry sponsors terminated the nighttime research after the pilot data had been collected and reviewed. At that time, many experts considered an "eyes-off-road" duration of two seconds or longer to be the threshold for a substantially higher level of crash risk, and the Virginia Tech team actually found a number of instances in which digital signs caused participating drivers to take their eyes off the road for two and three seconds or longer, whereas the other test conditions (areas with traditional billboards and roadway sections devoid of billboards) did not produce this result to the same extent.

between digital billboards and adverse driver scanning behavior. The FHWA study, however, has been severely criticized for faulty methods and analyses in a peer-reviewed critique by the present author[3]. The FHWA study remains available on the agency's website, but has never been formally published.

It has been shown that road environments cluttered with driving-irrelevant material (often called visual complexity) make it difficult to extract critical information necessary for safe driving in a timely manner, a particular problem for older drivers. In addition, with the growing proliferation of CEVMS, ever-newer technology that renders them more compelling, the expansion of on-premise signs using this technology, and several States considering the use of such signs within the right-of-way, it was deemed appropriate to provide an up-to-date review of the most recent research and guidelines.

The next section of this report provides a brief summary of each of the studies. The following section, the Compendium itself, provides further details about each study, including its sponsorship, research protocol, strengths and weaknesses, and source identification. This document concludes with a complete list of references as cited.

[3] Wachtel, Jerry (2015). "A Peer-Reviewed Critique of the Federal Highway Administration (FHWA) Report Titled: "Driver Visual Behavior in the Presence of Commercial Electronic Variable Message Signs (CEVMS)." Available at: http://nebula.wsimg.com/722c5bb9d76d4b10b6d7add54d962329?AccessKeyId=388DC3CA49BF0BEF098B&disposition=0&alloworigin=1

## Summary of Findings

This section summarizes the major findings of each of the 22 studies discussed in the Compendium. Key conclusions are highlighted in **bold**. The subsequent section of this report, the Compendium itself, provides additional detail about each study, and information about how to access the study, where available.

The studies are cited here, and in the Compendium, in generally chronological order.

### *Chan, et al., 2008 – USA, Amherst, MA*

The researchers compared susceptibility to distraction from sources inside the vehicle (e.g. phone dialing, map reading) to those outside the vehicle (e.g. billboards) for both young novice drivers and experienced drivers. As predicted, for the in-vehicle distractors, the young drivers looked away from the roadway for extended periods (2 seconds or longer) more than twice as often as the experienced drivers. Surprisingly, however, results showed that: (a) external distractors were even more distracting, and (b) the experienced drivers were just as distracted as the newly-licensed drivers on this critical measure of distraction when they performed the outside-the-vehicle tasks. The authors had assumed that experienced drivers would exercise the same degree of caution with the external distractors as they did with the internal ones. Instead, "the experienced drivers showed little concern for the effect that diverting their attention to the side of the roadway might have had on their ability to perceive potential risks immediately in front." In some 81% of the external tasks, older drivers glanced for longer than 2s away from the forward roadway. The authors concluded by saying**: "...we think that our drivers engaged in the external search task were truly distracted with potentially serious consequences."**

### *Young, et al., 2009 - England*

In this driving simulator study, participants drove rural, urban, and highway routes in the presence and absence of roadside billboards, while their driving performance was measured. Billboards had a detrimental effect on lateral control, and appeared to increase crash risk. Longitudinal control was not affected. The most striking effects were found for driver attention. Driver mental workload (using the NASA developed TLX scale) significantly increased in the presence of billboards. On rural roads and motorways, results showed that billboards were consciously attended to at the cost of more relevant road signs. The authors reached a **"persuasive overall conclusion that advertising has adverse effects on driving performance and driver attention**. Whilst there are sometimes conflicts of interest at Local Authority level when authorizing billboards (since Councils often take a share of the profit from roadside advertising), these data could and should be used to redress the balance in favour of road safety."

### *Backer-Grøndahl, & Sagberg, 2009 - Norway*

The authors asked drivers who had actually been involved in a crash to identify, from a list, what they believed were the causes of distraction for that crash. (Cell phone use was excluded). The most frequently reported sources of distraction were: (1)

conversations with passengers, and (2) attending to children in the back seat. However, **when the researchers applied the statistical method known as quasi-induced exposure, they found that distractions with the "highest relative risk" were: (1) billboards outside the vehicle, and, (2) searching for addresses. The authors note that both of the highest risk distractors were *visual* distractions, rather than physical, auditory, or cognitive ones.**

### *Chattington, et al., 2009 - England*

The researchers found "significant effects on both drivers' visual behavior and driving performance" in the presence of both static and video billboards. As expected, the video signs were seen as more potent distractors than similarly placed static signs. The authors state that their results "support and extend (the findings of) other studies of driver distraction by advertising," citing studies by Crundall, et al, and of Young and Mahfoud (both of which were extensively reviewed in the Wachtel 2009 report for AASHTO). The study showed that **several aspects of driving performance were adversely affected by both video and static billboards, with the video signs generally more harmful to such performance than the static signs. The authors list these effects as: speed control, braking, and lane position maintenance.**

### *Horberry, et al., 2009 - Australia*

Road authorities may be justified in using the best research information available, even if incomplete, coupled with engineering judgment, for the development of billboard guidelines**. The authors recommend that their client (Queensland, Australia) adopt advertising restrictions at known areas of high driver workload, including "locations with high accident rates, lane merges, curves/bends, hills and road/works/abnormal traffic flows."** (They state that) "this is broadly in line with Wachtel who recommended a restriction of advertisements at times when driver decision, action points and cognitive demand are greatest – such as at freeway exits/entrances, lane reductions, merges and curves. Although useful for all road users, such restrictions would be of specific benefit to older drivers."

### *Gitelman, et al., 2010 - Israel*

The authors studied crashes at two highway locations along the same heavily traveled freeway – a "treatment" section in which previously visible billboards were covered as part of a trial period, and a "control" section in which the billboards remained visible. At the control sites, crashes remained essentially the same throughout the 3-year study period; at the treatment sites, crashes declined dramatically after the billboards were covered. The results were similar for injury and fatal crashes. After adjusting for traffic volume**, crashes were reduced at the treatment sites (where billboards had been covered) by the following percentages: all crashes by 60%; injury/fatal crashes by 39%; property damage crashes by 72%.**

### *Bendak & Al-Saleh, 2010 - Saudi Arabia*

The authors used a driving simulator in which test subjects drove on two similar roads, one with advertising signs and one without. Twelve male volunteers, ages 23-28,

participated in the study. Driver opinions about billboards were also sought using a simple questionnaire distributed to male drivers at random in the city of Riyadh, Saudi Arabia. 160 questionnaires were returned. Results of the simulator study showed that **the driving speed of participants was not affected by the presence of advertising signs. However, two of the five indicators were statistically significant. Both "drifting unnecessarily from (the) lane" and "recklessly crossing dangerous intersections" were significantly more prevalent in the presence of billboards**. Although not reaching statistical significance, each of the other three measures, tailgating, speeding, and failure to signal, were all worse in the presence of billboards. Half of the respondents to the questionnaire indicated that they had been distracted by a billboard, and 22% indicated that they had been put in a dangerous situation due to distraction from billboards.

### *Milloy & Caird, 2011 - Canada*

This was a driving simulator study that looked at distraction effects of a video billboard and a wind turbine. **The results demonstrated a *causal* (italics original) relationship between the presence of a video billboard and collisions with, and delays in responding to, the lead vehicle.**

### *Edquist, et al., 2011 - Australia*

**"The finding that the presence of billboards increases time to detect changes is an important one." Billboards can automatically attract attention when drivers are engaged in other tasks, delaying their responses to other aspects in the environment. The effect of billboards was particularly strong in scenes where response times are already lengthened by high levels of visual clutter.** This is of particular concern because roads with high levels of clutter are the very kind of busy, commercial, high traffic environments where billboards are most often erected."

The results are consistent with growing evidence suggesting that billboards impair aspects of driving performance such as visual search and the detection of hazards, and therefore should be more precisely regulated.

### *Dukic, et al., 2012 - Sweden*

In this on-road, instrumented vehicle study**, drivers had a significantly longer dwell time (time looking at the billboards), a greater number of fixations, and a longer maximum fixation duration when driving past digital billboards compared to other signs along the same road sections.**

### *Perez, et al., 2012 – USA, Washington, DC*

The authors of this Federal Highway Administration (FHWA) sponsored study used an instrumented vehicle that recorded volunteer drivers' eye glances as they drove along pre-determined routes in Reading, Pennsylvania and Richmond, Virginia. The routes included digital as well as static billboards, undefined on-premise signs, and areas free of commercial signage. The routes were driven during daylight and at night, and the report found that **digital billboards "were not associated with 'unacceptably long glances away from the road'." As noted above, however, the draft report of this**

**study was strongly criticized by the agency's selected peer reviewers, particularly with regard to the efficacy of the obtained eye glance data. Indeed, the participants in the study did gaze more often to digital billboards than to other signs, in some cases more than twice as much**. (For example 71% vs. 29% at night in Richmond). As a result of the critical peer reviews, the authors took 33 months to revise the study, which, although dated September 2012, was released on the agency's website on December 30, 2013. This revised report, in turn, was reviewed by the present author, whose critical report was reviewed and agreed-to by 14 independent expert peer reviewers. To our knowledge, the revised FHWA report was not subjected to peer review by the agency prior to its issuance on the agency website, and it has never been given an official agency report number, putting it in a state of uncertainty with regard to its publication.

### *Divekar, et al., 2013 – USA, Amherst, MA*

Experienced drivers are far less likely to be distracted by inside-the-vehicle tasks (e.g. cell phone, map display, entertainment system) than novice drivers. However, the researchers were surprised to find that **experienced and novice drivers are at an equal and elevated risk of getting into a crash when they are performing a secondary task outside the vehicle such as looking at billboards**

### *Roberts, et al., 2013 - Australia*

**The appearance of movement or changes in luminance can involuntarily capture attention, and engaging information can capture attention to the detriment of driving performance, particularly in inexperienced drivers. Where this happens in a driving situation that is also cognitively demanding, the consequences for driving performance are likely to be significant.** Further, if this results in a situation where a driver's eyes are off the forward roadway for 2 seconds or longer, this will further reduce safety. Additionally, road environments cluttered with driving-irrelevant material may make it difficult to extract information that is necessary for safe driving, particularly for older drivers. The studies that have been conducted show convincingly that roadside advertising is distracting and that it may lead to poorer vehicle control.

### *Herrstedt, et al., 2013 - Denmark*

The authors studied drivers using an instrumented car equipped with an eye-tracking system, a GPS system for registering the vehicle's speed, and a laser scanner for measurement of following distances to other road users. The overall findings of the studies demonstrate that **"advertising signs do affect driver attention to the extent that road safety is compromised."** In 69% of all drives past advertising signs, the driver glanced at least once at the sign; in almost half of all drives, the driver glanced twice or more at the same sign. For 22% of all drives, the total glance duration of successive glances was two (2) seconds or longer. In 18% of all drives, glance durations of one (1) second or longer was recorded. In approximately 25% of all glances, the safety buffer to the vehicle ahead was less than two (2) seconds, and in 20% of the glances, the safety buffer was less than 1.5 seconds. This study has been praised in independent peer review by Dr. Richard Pain, Transportation Research Board Senior Program Officer, retired. Dr. Pain considered this study to be the best designed and

conducted on-road study in this field, the conclusions of which, he believes, were far more valid and robust than those of the FHWA study (discussed above).

### *Hawkins, et al., 2014 – USA, College Station, TX*

This study, sponsored by the on-premise signage industry, was a statistical (epidemiological) analysis of crash rates in the vicinity of on-premise digital signs that had been first installed in 2006-07. On premise signs differ from billboards in several ways. Per the common meaning of the term, on-premise signs must advertise only a business or service that is available on the property on which the sign is located. Because of that, on-premise signs typically function to identify the business and, as such, they may have little text or imagery other than that required for such identification. On the other hand, they are often closer to the road than billboards are permitted to be, and it is often possible for them to be larger than billboards and to feature motion or the appearance of motion. This study employed an analysis methodology known as *empirical Bayes* (or EB) to look at before-and-after crash data in four states. A total of 135 sign locations and 1,301 control sites were used, and the researchers found **"no evidence the installation of on-premise signs at these locations led to an automatic increase in the number of crashes."**

### *Schieber, et al., 2014 – USA, Vermillion, SD*

In this simulator study the authors varied message length (4, 8, or 12 words) on digital billboards that participants drove past at either 25 or 50 MPH. Although there was no decrement in lane keeping or billboard reading performance at the lower speed on straight roads**, "clear evidence of impaired performance became apparent at the higher (50 MPH) driving speed." The analysis revealed that, rather than weaving in and out of lane while reading the billboards with longer messages, participants tended to slowly drift away from the lane center and then execute a large amplitude corrective steering input about eight (8) seconds *after* passing the billboard.** Eye gaze analysis showed that information processing overload began to emerge with a message length of eight (8) words, and was clearly present with twelve (12) word messages under the 50 MPH condition.

### *Gitelman, et al., 2014 - Israel*

In 2014, these authors had the opportunity to add an additional data set to that in their 2010 study (discussed above), and to reanalyze the data from the original study. This was because the road authorities issued a decision to reauthorize the display of billboards that they had previously had ordered covered. In other words, the authors had the opportunity to study traffic crashes on a single roadway when billboards were: (a) visible, then (b) covered, then (c) visible again. The 2010 study examined conditions (a) and (b), and the 2014 supplement added condition (c) and a reanalysis of (a) and (b). They found that**: "The results support and strengthen the previous findings." Removal/covering of the billboards from the highway (condition [b]) was associated with a 30-40% reduction in injury crashes from condition (a) according to two different databases, whereas the reintroduction/uncovering of the billboards (condition [c]) was associated with a 40-50% or 18-45% increase in such crashes, depending on the database cited. The trends were similar and**

**consistent across damage-only, injury, and total accidents as well as nighttime vs. daytime injury accidents.**

### *Sisiopiku, et al., 2015 – USA, AL, FL*

The authors analyzed crashes from eight (8) digital billboard locations in Alabama and ten (10) in Florida. All sites were on high speed, limited access highways. A total of 377 crashes in Florida and 77 in Alabama were used in the analysis. Actual traffic collision reports were used since the authors discovered numerous errors in coding in the summary crash databases that they initially examined. Although the data set was too small to employ statistical analyses, the authors found that **"the presence of digital billboards increased the overall crash rates in areas of billboard influence compared to control areas downstream of the digital billboard locations. The increase was 25% in Florida and 29% in Alabama."** The predominant crash types that were overrepresented at billboard locations were rear-end and sideswipe collisions, both typical of driver distraction.

### *Rempel, et al., 2015 - Canada*

These authors, working on behalf of the Transport Association of Canada, developed a set of guidelines for the control of digital and projected advertising signs. The resultant guidelines are based on a comprehensive literature review, a survey of Canadian governmental jurisdictions, a review of existing sign regulations, interviews with international Governmental agencies, discussions with sign industry representatives, and the application of human factors and traffic engineering principles. **The key principle documented in the Guidelines is that they "provide recommendations designed to control (digital billboards) *such that they emulate static advertising signs* (italics added), and therefore result in a similar distracting and road safety effect as static advertisements."**

### *Samsa & Phillips, 2015 - Australia*

These authors, working on behalf of the Outdoor Media Association of Australia, studied 29 participants, ages 25-54 in an instrumented vehicle. The participants were fitted with "eye tracking glasses" and their eye fixations and driving performance was assessed as they drove a 14.6 km route in Brisbane, Queensland**. The route took them past a "number" of advertising signs, including static, digital, and on-premise signs. The results showed that fixation durations "were well below" 0.75 seconds, and that there were no significant differences in vehicle headways between the three types of signage. One statistically significant finding was that lateral deviation was poorer when billboards were present.** (Note that, at present, only an Abstract of this industry-sponsored study is available).

### *Belyusar, et al., 2016 – USA, Cambridge, MA*

In this on-road study, data was collected from 123 subjects, nearly equally divided between males (63) and females (60) and between young (age 20-29, N = 63) and older (age 60-69, N = 60). These volunteers drove an instrumented vehicle under normal driving conditions (with no specific tasks to perform) past a digital billboard on a

posted 65 MPH roadway with four travel lanes in each direction. Data was collected during late morning and early afternoon to avoid commuter traffic. The authors state: **"In contrast to the recent FHWA report (Perez, et al., 2012), the findings revealed statistically significant changes in total number of glances and, depending upon the direction of travel, moderate-to-long duration glances in the direction of the billboard." Older drivers were thought to be particularly affected. The authors also found that: "Drivers glanced more at the time of a switch to a new advertisement display than during a comparable section of roadway when the billboard was simply visible and stable."** Given typical billboard dwell (cycle) times of six (6) or eight (8) seconds, these findings add to the argument the dwell times for such signs should be considerably longer.

### *Mollu, 2018 - Belgium*

Per a 2015 European Commission report, distraction accounts for 10-30% of all European road accidents. Although there is no consistent definition of distraction, most definitions describe a *diversion* of attention away from the driving task, and *toward a competing activity* inside or outside the vehicle. This diversion of attention may be visual and/or cognitive. The author and his colleagues sought to study whether the glance behavior of road users was influenced by advertising signs, whether such signs lead to changes in driving behavior and whether there were notable effects on road safety as a result. Thirty-five test subjects (age range 20-69; 54% male) completed the protocol and drove a simulator past LED billboards with 3, 6, and 15-second dwell times, and at 41 and 65-meter distances from pedestrian crossings. The signs were placed in a road segment with a retail zone and in one transitioning to a built-up area. All other characteristics of the sign (size, placement, illumination, etc., were held constant. At the shortest display times and the closest distance to the pedestrian crossing the study showed significantly higher mental demands and lower performance. The longer the message display time, the fewer glances were made to the sign. The signs also contributed to higher approach speeds to pedestrian crossings and delayed slowing upon approach to the crossing. There was also an indication, although not statistically significant, of increased swerving behavior (change in lateral position) in the presence of the billboards.

## *Compendium of Recent Research Studies on Commercial Electronic Variable Message Signs (CEVMS)*

### Key to Codes Used in Tables:

*Type of Study:

N = on-road, naturalistic
Q = on-road, quasi-naturalistic
C = on-road, controlled
S = lab, simulator
L = lab, other
E = epidemiological, crash data
R = review of other work
CR = critical review of other work
D = discussion /consultation with experts
G = guidelines or regulations development
QI = questionnaires, interviews, surveys, focus groups, etc.

**Type of Signs Studied:

O = On-premise
C = Conventional billboard
D = Digital billboard
V = Sign contains video or animation
H = Official highway sign
U = Unknown

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|---|---|
| Date 1st published/presented | 2008 |
| Location | U.S. (Massachusetts) |
| Author(s)<br>Title<br>Affiliation | Chan, E., Pradhan, AK, Knodler, MA, Jr., Pollatsek, A. & Fisher, DL<br>Empirical Evaluation on a Driving Simulator of the Effect of Distractions Inside and Outside the Vehicle on Drivers' Eye Behaviors |
| Forum | TRB – presentation and CD ROM |
| Peer Reviewed? | Yes |
| Sponsor/funding source | National Science Foundation; National Highway Traffic Safety Administration (NHTSA) |
| Type of Study* | S |
| Type of Signs Studied** | C (simulated) |
| Brief Description of Method | Young, novice drivers (age 16-17) are at greatly elevated risk of crashing, and it is believed that distraction plays a large role in such crashes. More experienced, older teen drivers (age 18-19) have also been shown to look away from the forward roadway for extended periods of time. This simulator study compared such extended, off-roadway glance durations of newly licensed drivers to those of older, experienced drivers, using eye movement recordings as participants drove along a simulated roadway and engaged in distracting tasks both inside and outside the vehicle. |
| Summary of Findings | The researchers compared the average maximum duration of an *episode*, (the maximum time that drivers spent continuously looking away from the forward roadway). For the in-vehicle distractors, the average was 1.63s for the experienced drivers, and 2.76s for the younger drivers. Another measure, the percentage of scenarios in which the maximum duration of an episode was greater than 2s, yielded similar findings. The results were statistically significant between the two groups. As predicted for in-vehicle distractors, the young drivers looked away from the roadway for extended periods (2s or longer) more than twice as often as the experienced drivers while engaged in inside-the-vehicle distractors (such as phone dialing, map reading, and CD searching). Surprisingly, however, results showed that: (a) external distractors were even more distracting, and (b) there was no difference between newly-licensed and experienced drivers on this critical measure of distraction when the drivers performed outside-the-vehicle tasks, specifically, searching for a target letter in a 5x5 grid representative of a billboard. The authors had assumed that experienced drivers would exercise the same degree of caution with the external distractors as they did with the internal ones. Instead, "the experienced drivers showed little concern for the effect that diverting their attention to the side of the roadway might have had on their ability to perceive potential risks immediately in front. In fact, in 81% of the external tasks, older drivers glanced for longer than 2s away from the forward roadway. The authors conclude: "…we think that our drivers engaged in the external search task were truly distracted with potential serous consequences." |
| Strengths | The study is the first to directly compare the susceptibility to distraction from internal and external tasks between newly licensed and experienced drivers. |
| Weaknesses/Limitations | Older drivers were not included in this study. The representativeness of the outside-the vehicle task is questionable. |
| Availability/Accessibility | TRB 2008 Annual Meeting CD-ROM |

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|---|---|
| Date 1st published/presented | 2009 |
| Location | UK (England, London) |
| Author(s)<br>Title<br>Affiliation | Young, MS, Mahfoud, JM, Stanton, N. Salmon, PM, Jenkins, DP & Walker, GH.<br>"Conflicts of Interest: The implications of roadside advertising for driver attention."<br>Brunel University, West London, England |
| Forum | Transportation Research Part F: Traffic Psychology and Behaviour, Vol. 12(5), September 2009, 381-388. |
| Peer Reviewed? | Yes |
| Sponsor/funding source | Insurance company – The Rees Jeffreys Road Fund |
| Type of Study* | S |
| Type of Signs Studied** | C, H |
| Brief Description of Method | The study was conducted in the University's driving simulator. 48 drivers drove urban, rural, and motorway routes in the presence and absence of billboards. Dependent variables included measures of speed and lateral control, and driver attention (mental workload, eye movements, and recall of signs and billboards). |
| Summary of Findings | The presence of billboards had a detrimental effect on lateral control, and appeared to increase crash risk. Longitudinal control was not affected. More striking effects were found for driver attention. Driver mental workload significantly increased in the presence of billboards. On rural roads and motorways, results showed that billboards were consciously attended to at the cost of more relevant road signs. "We must once again emphasize the persuasive overall conclusion that advertising has adverse effects on driving performance and driver attention. Whilst there are sometimes conflicts of interest at Local Authority level when authorizing billboards (since Councils often take a share of the profit from roadside advertising), these data could and should be used to redress the balance in favour of road safety." |
| Strengths | A fully interactive high fidelity simulator was used. The use of the NASA-TLX instrument for measuring subjective mental workload was a useful tool that is used too infrequently in studies of driver performance. All participants experienced identical road and sign condition the only manipulation being the presence or absence of billboards. |
| Weaknesses/Limitations | The sample of participants did not include either older or younger drivers – the age groups thought to be at greatest risk for adverse consequences of billboard distraction. Measures of lateral and longitudinal variability were constrained by the study design and were not fully representative of the measures of these variables used most commonly in the US. |
| Availability/Accessibility | Journal is available online. |

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|---|---|
| Date 1st published/presented | 2009 |
| Location | Norway |
| Author(s)<br>Title;<br>Affiliation | Backer-Grøndahl, A., & Sagberg, F.<br>"Relative crash involvement risk associated with different sources of driver distraction."<br>Institute of Transport Economics, Norway |
| Forum | First International Conference on Driver Distraction and Inattention |
| Peer Reviewed? | Yes |
| Sponsor/funding source | Unknown |
| Type of Study* | E, QI |
| Type of Signs Studied** | C |
| Brief description of method | Used web- and paper-based questionnaire to ask 4300+ drivers who had been in a crash to identify from a list of possible choices the cause of their crash. Separated those at fault from those not at fault. Relative crash risk of each factor was estimated using the quasi-induced exposure method. |
| Summary of Findings | The most *frequent* sources of distraction were: (1) conversations with passengers, and (2) attending to children in the back seat. When the statistical method was applied to the data, it was found that distractions with the "*highest relative risk*" were: (1) billboards outside the vehicle, and, (2) searching for addresses. The authors note that both of the highest risk distractors were *visual* distractions, vs. physical, auditory, or cognitive. |
| Strengths | Authors controlled for possible confounding variables (such as age, gender, driving experience [years] and annual mileage driven) using logistical regression with culpability as the dependent variable. |
| Weaknesses/Limitations | Some researchers question the viability of the quasi-induced exposure method; cell phone use was (intentionally) excluded from the questionnaire. (It likely would have proven to be the highest risk factor). Confidence intervals were quite large. |
| Availability/Accessibility | Presented at large international conference; published in conference proceedings. |

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|---|---|
| Date 1st published/presented | 2009 |
| Location | UK - England |
| Author(s)<br>Title<br>Affiliation | Chattington, M., Reed, N., Basacik, D., Flint, A., & Parkes, A.<br>"Investigating Driver Distraction: The Effects of Video and Static Advertising:<br>Transport Research Laboratory |
| Forum | Report |
| Peer Reviewed? | Yes |
| Sponsor/funding source | Transport for London |
| Type of Study* | S |
| Type of Signs Studied** | C, V |
| Brief Description of Method | Used the high fidelity TRL driving simulator, with a specifically designed urban/suburban database typical of the area around London. 48 participants drove 4 different routes, each of which required about 15 minutes. Participants did not know the purpose of the study. Their eye movements were unobtrusively recorded. Roadside advertising was designed to vary by: location (placement within the scene); type (static or video); and exposure duration (at 30 MPH, drivers could see at least 50% of the advertisement for either 2, 4, or 6+ seconds. Video ads ran in a 6-second loop. |
| Summary of Findings | "The report has found significant effects on both drivers' visual behavior and driving performance when static and video adverts are present and that the video adverts seem more potent distractors than similarly placed static adverts. The results support and extend (the findings of) other studies of driver distraction by advertising." (Here, the authors cite the work of Crundall, et al, and of Young and Mahfoud, both of which were extensively reviewed in the Wachtel 2009 report for AASHTO).<br><br>The study showed that several different aspects of driving performance were adversely affected both video and static billboards, with the video signs generally more harmful to such performance than the static signs. The authors describe these effects as being "fundamental to the safe control of the vehicle." The effects include: speed control, braking, and the variability of each of these measures, as well as drivers showing that they are "less able to maintain a consistent lane position" |
| Strengths | A very comprehensive and sophisticated simulation study. The researchers went so far as to pre-screen the content of the simulated advertisements to ensure that they were of equivalent interest to the different age groups in their participant population. |
| Weaknesses/Limitations | It is important to note that this study compared digital video billboards to traditional static billboards (i.e. it did not examine digital billboards with intermittent displays (i.e. those that change their message every 6-8 seconds) that are typical in the U.S. Although the authors state that their participants represented a "wide range of ages," it is not known how well young and old drivers were represented in the study. This is of concern because these two age groups at the ends of the driving population distribution are known to have the greatest degree of difficulty with attention and distraction. |
| Availability/Accessibility | TRL Report Number RPN256. |

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| Date 1st published/presented | 2009 |
| Location | Australia, Queensland |
| Author(s)<br>Title<br>Affiliation | Horberry, T., Regan, MA, & Edquist, J.<br>Driver Distraction from Roadside Advertising: The clash of road safety evidence, highway authority guidelines, and commercial advertising pressure.<br>University of Queensland (Australia), INRETS (France), Monash University (Australia). |
| Forum | Unknown |
| Peer Reviewed? | Yes |
| Sponsor/funding source | Swedish National Road and Transport Institute, VTI |
| Type of Study* | CR, D, G |
| Type of Signs Studied** | C, D |
| Brief Description of Method | Critical review of the research, worldwide, as well as existing guidelines and regulations. |
| Summary of Findings | "Road authorities around the world may … be justified in using the best research information available (albeit incomplete) coupled with engineering judgment for the development of 3rd party advertising guidelines." The authors recommend that Main Roads Queensland adopt advertising restrictions at known areas of high driver workload including "locations with high accident rates, non-junction related lane merges, curves/bends, hills and road/works/abnormal traffic flows. This is broadly in line with Wachtel who recommended a restriction of advertisements at times when driver decision, action points and cognitive demand are greatest – such as at freeway exits/entrances, lane reductions, merges and curves. Although useful for all road users, such restrictions would be of specific benefit to older drivers." The authors correctly point out the flaw in arguments that suggest that guidance or regulatory controls are premature because there is a lack of data showing a causal relationship between billboards and accidents |
| Strengths | The study examined in detail the existing (2002) guidelines that seek to "minimize the possibility for 3rd party roadside advertisements to distract drivers…" with an intent toward developing upgraded guidelines. |
| Weaknesses/Limitations | The review of current guidelines, worldwide, is somewhat superficial. |
| Availability/Accessibility | https://document.chalmers.se/download?docid=653291678 |

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|---|---|
| Date 1st published/presented | 2010 |
| Location | Israel (Tel Aviv) |
| Author(s)<br>Title<br>Affiliation | Gitelman, V., Zaidel, D., & Doveh, E.<br>"Influence of Billboards on Driving Behavior and Road Safety," |
| Forum | Presented at: Fifth International Conference on Traffic and Transportation Psychology (2012); and at Annual Meeting of Transportation Research Board of the National Academies (2013) |
| Peer Reviewed? | Yes |
| Sponsor/funding source | Israel National Roads Authority |
| Type of Study* | E |
| Study Design | Quasi-experimental: Before and after crash date with controls – Crash data with DBBs present (2006-7) and absent (2008), with and without signs that were covered. Dependent measure – crashes and injuries. Control variable – traffic volume. Study sites – 8 treatment and 6 control. |
| Type of Signs Studied** | C |
| Brief Description of Method | Because of complaints, Israel's Supreme Court ruled that a series of billboards on an urban freeway near Tel Aviv had to be removed for 1 year while an evaluation took place. At control sites, the billboards remained visible throughout the study period. At treatment sites, billboards were visible in the "before" period (2006-7), and were covered during the "after" period (2008). Crashes were recorded and categorized (property damage only, injury or fatality) under four conditions: (a) at treatment sites while signs were visible; (b) at treatment sites after signs were covered; (c) at control sites where signs were visible; and (d) at the same control sites while signs were still visible but signs were covered at the treatment sites. |
| Summary of Findings | At control sites, crashes remained essentially the same throughout the 3-year study period; at the treatment sites, crashes declined dramatically after the billboards were covered. The results were the same for injury and fatal crashes. After adjusting for traffic volume, crashes were reduced at the treatment sites (where billboards were visible in the "before" period but covered during the "after" period) by the following percentages: all crashes by 60%; injury/fatal crashes by 39%; property damage crashes by 72%. |
| Strengths | For a field study, this used a well-controlled research design. Before-and-after measures were obtained both for sites where the billboards were covered during the study, and for the sites where the billboards remained visible during this same time period. Road sections were in close proximity, on the same highway, ensuring that traffic speeds and volumes, as well as weather conditions, law enforcement activity, etc. were comparable. |
| Weaknesses/Limitations | There might have been differences in certain roadway characteristics between the treatment and control sites (e.g. curves, merges, etc.) that were not identified. |
| Availability/Accessibility | Findings available as PowerPoint from either conference; original study is in Hebrew only; English translation not yet available. |

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|---|---|
| Date 1st published/presented | 2010 |
| Location | Saudi Arabia |
| Author(s)<br>Title<br>Affiliation | Bendak, S., & Al-Saleh, K.<br>"The Role of Roadside Advertising Signs in Distracting Drivers."<br>King Saud University |
| Forum | *International Journal of Industrial Ergonomics, 40,* 233-236. |
| Peer Reviewed? | Yes |
| Sponsor/funding source | Research Centre of the College of Engineering, King Saud University |
| Type of Study* | S, QI |
| Study Design | |
| Type of Signs Studied** | O, C, D, V |
| Brief Description of Method | Twelve male drivers, age 23-28, drove a simulator consisting of two urban roadways, each 9.3-km long, and matched for physical, environmental and traffic characteristics. One road contained advertising signs; the other was devoid of advertisements. |
| Summary of Findings | The average driving duration was 12.83 minutes for each route showing that the presence of advertising signs did not materially affect driving speed. There were no accidents. Lane placement and position maintenance suffered significantly in the presence of advertising signs. According to the authors: "swinging and drifting from lane in the presence of advertising signs is a strong indication of how such signs distract drivers and affect their performance." A second finding was that "recklessly crossing dangerous intersections" was also significantly and adversely affected by the presence of advertising signs. This finding, according to the authors "indicates the loss of this fine coordination between paying attention and driving. … This can reasonably attributed… to the longer reaction time needed in the presence of hazards due to being distracted." All three of the other measures: tailgating, "overspeeding," and failure to signal, were poorer in the presence of advertising signs, but these were not statistically significant. In response to the questionnaire, 50% of the 160 respondents said they had been distracted by advertising signs, and 22% reported having been in a dangerous situation at least once due to being distracted by advertising signs. |
| Strengths | The two simulated routes driven were matched for key characteristics; the differences between them were essentially only in the presence or absence of advertising signs. |
| Weaknesses/Limitations | No females and no drivers older than 28 were included. "Advertising" signs of many different types were comingled, so it was impossible to identify the effects of any one category of signs, such as billboards. No definition is provided of the behavior identified as "recklessly crossing dangerous intersections." The authors attribute poorer performance in this measure to longer reaction time in the presence of the advertising signs, but there is no indication that they measured this response. The questionnaire completed by 160 respondents was not included in the paper. |
| Availability/Accessibility | www.elsevier.com/locate.ergon |

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|---|---|
| Date 1st published/presented | 2011 |
| Location | Canada (Calgary, Alberta) |
| Author(s)<br>Title<br>Affiliation | Milloy, SL; and Caird, JK.<br>"External Driver Distractions: The Effects of Video Billboards and Wind Farms on Driver Performance."<br>University of Calgary |
| Forum | Book chapter |
| Peer Reviewed? | Yes |
| Sponsor/funding source | Unspecified |
| Type of Study* | S |
| Type of Signs Studied** | V (simulated) |
| Brief Description of Method | The contribution to driver distraction from in-vehicle technologies such as cell phones, I-Pods, and navigation systems have been studied extensively. But it is external distractions that compose the single largest category of distraction-related crashes. The least is known about such crashes, possibly because the variety of people, objects and events that make up external distractions are very difficult to study in a controlled empirical fashion. In theory, drivers often have spare cognitive capacity that they can allocate toward distractors such as billboards. The question asked here was: what happens when an unlikely but totally plausible emergency event takes place – can the driver "reallocate" his or her attention so as to respond to the event in a timely manner. In this "event-based" scenario, either the driver responds adequately or not. In this simulator study, drivers on a freeway moving at 80 km/h (50 mph) in an industrial environment passed a video billboard at the same time that a lead vehicle suddenly braked hard. |
| Summary of Findings | The results found a *causal* (italics original) relationship between the presence of the video billboard and collisions with, and delays in responding to, the lead vehicle. The authors note that the billboards in this study were less able to capture the drivers' attention than video billboards in the real world because the simulated billboards were not as bright as actual billboards, and because the study was not conducted at night, where the distracting effects were believed to be greater. The implication is that real world safety problems may be more significant than those indicated by the study. |
| Strengths | A high fidelity, interactive driving simulator with a 150-degree forward field of view was used. All 21 subjects made three drives, and viewed two static and two video billboards in each. The images on the billboards were different in each presentation. A lead vehicle appeared intermittently, and, twice during each presentation, braked suddenly so that the subject had to respond quickly to avoid a collision |
| Weaknesses/Limitations | Younger and older drivers, those believed to be most susceptible to such distractions, were not included in the study. Learning may have occurred from earlier drives, and subjects may have come to use the appearance of billboards as a visual cue to prepare to brake for the lead vehicle. |
| Availability/Accessibility | Published in: "Handbook of Driving Simulation for Engineering, Medicine and Psychology." Edited by: D.L. Fisher, M. Rizzo, J.K. Caird, & J.D. Lee. Boca Raton: CRC Press. |

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| Date 1st published/presented | 2011 |
| Location | Australia, Perth |
| Author(s)<br>Title<br>Affiliation | Edquist, J., Horberry, T., Hosking, S. & Johnston, I<br>"Advertising billboards impair change detection in road scenes"<br>Monash University Accident Research Centre |
| Forum | 2011 Australasian Road Safety Research, Education & Policing Conference |
| Peer Reviewed? | Yes |
| Sponsor/funding source | Unknown |
| Type of Study* | L |
| Type of Signs Studied** | C, H |
| Brief Description of Method | The authors used a "change detection" paradigm to study how billboards affect visual search and situation awareness in road scenes. Change detection time has been shown to correlate with at-fault errors in a simulated driving task. In a controlled experiment, inexperienced (mean age 19.3), older (73.0), and comparison (34.8) drivers searched for changes to road signs and vehicle locations in static photographs of road scenes. The road scenes ranged from suburban main streets to multilane highways to provide varying levels of background clutter. The actual experimental protocol is too complex to include in this summary, but may be found in the original article. |
| Summary of Findings | "The finding that the presence of billboards increases time to detect changes is an important one. This result lends support to the idea that billboards can automatically attract attention when drivers are engaged in other tasks, delaying their responses to other aspects in the environment The effect of billboards was particularly strong in scenes where response times are already lengthened by high levels of built or designed clutter. This is particularly concerning, as road scenes with high levels of built and/or designed clutter are just the sort of busy, commercial, high traffic environments where billboards are most often erected." Participants took longer to detect changes in road scenes that contained advertising billboards. This finding was especially true when the roadway background was more cluttered, when the change was to an official road sign, and for older drivers. The results are consistent with the small but growing body of evidence suggesting that roadside billboards impair aspects of driving performance such as visual search and the detection of hazards, and therefore should be more precisely regulated in order to ensure a safe road system. |
| Strengths | The change detection task has been shown to be relevant to safe driving performance, but has been underutilized in research. The inclusion of three diverse age cohorts addresses limitations in many other studies. |
| Weaknesses/Limitations | The study did not include an actual, or simulated driving task; rather a surrogate measure for visual subtasks required during driving. (However, the results are consistent with mounting evidence showing that roadside billboards impair key aspects of driving performance). Horberry, et al., (2009) argue that: "rather than waiting until it can be proven beyond doubt that roadside advertising is responsible for a particular collision, road authorities should regulate billboards to minimize the probability of interference with driving." |
| Availability/Accessibility | http://casr.adelaide.edu.au/rsr/RSR2011/4CPaper%20166%20Edquist.pdf |

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| Date 1st published/presented | 2012 |
| Location | Sweden (Stockholm) |
| Author(s)<br>Title<br>Affiliation | Dukic, T., Ahlstrom, C., Patten, C., Kettwich, C., & Kircher, K.<br>"Effects of Electronic Billboards on Driver Distraction."<br>Swedish National Road and Transport Research Institute, and Karlsruhe Institute of Technology |
| Forum | Journal of Traffic Injury Prevention |
| Peer Reviewed? | Y |
| Sponsor/funding source | Swedish Transport Administration |
| Type of Study* | Q |
| Type of Signs Studied** | D |
| Brief Description of Method | The Swedish government allowed 12 digital billboards to be erected along highways near Stockholm for a trial period during which this, and related research was conducted. 41 volunteers drove an instrumented vehicle past 4 of the billboards in both day (N = 20) and night (N = 21) conditions. Eye movements (and other measures) were recorded. "A driver (was) considered to be visually distracted when looking at a billboard continuously for more than two seconds with a single long glance, or if the driver looked away from the road for a 'high percentage of time'." (This is defined in the study based on prior research, but is too complex for inclusion in this brief summary). Dependent measures were eye tracking and driving performance measures. |
| Summary of Findings | Drivers had a significantly longer dwell time (time looking at the billboards), a greater number of fixations, and a longer maximum fixation duration when driving past a DBB compared to other signs along the same road sections. No differences were found for day-night, or for specific driver performance variables. |
| Strengths | Excellent review of the relevant literature and explanation of the psycho-physiological processes involved |
| Weaknesses/Limitations | It is known from other research that younger drivers (e.g. those under age 25) and older drivers (e.g. those over age 65) are more likely to be distracted by roadside stimuli that are irrelevant to the driving task; this study was limited to drivers between the ages of 35 and 55. |
| Availability/Accessibility | http://www.tandfonline.com/doi/abs/10.1080/15389588.2012.731546 |

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| Date 1st published/presented | 2012 |
| Location | USA |
| Author(s)<br>Title<br><br>Affiliation | Perez, WA, Bertola, MA, Kennedy, JF, & Molino, JA<br>"Driver Visual Behavior in the Presence of Commercial Electronic Variable Message Signs (CEVMS)."<br>SAIC (now Leidos) |
| Forum | Unnumbered FHWA Report |
| Peer Reviewed? | N[4] |
| Sponsor/funding source | Federal Highway Administration |
| Type of Study* | C |
| Type of Signs Studied** | O, C, D, H |
| Brief Description of Method | FHWA contractor used instrumented vehicle with on-board eye glance data recording as participant drivers drove along predetermined routes in Reading, PA and Richmond, VA. Each route took the participants past a series of on-premise and off-premise (billboard) signs, apparently both conventional and digital, during daytime and at night. |
| Summary of Findings | Gazes to the road ahead were high across all test conditions; however, in three of the four test conditions digital and conventional billboards resulted in a lower probability of gazes to the road ahead as compared to the control conditions in which billboards were not present (although on-premise signs, including, potentially, electronic signs, might have been present). In Richmond, drivers gazed more at the digital than standard billboards at night, but this difference was not found in Reading. |
| Strengths | The study used state-of-the-art eye glance recording equipment. The study route had drivers pass signs on rural and urban routes, and surroundings that differed in visual complexity. |
| Weaknesses/Limitations | Numerous critical discrepancies between draft and final reports; errors in identifying billboard locations including size, distance from road edge, side of road; both far and near distances at which eye glances to billboards were recorded were artificially truncated; two experimenters sat in the vehicle with the participant driver; data overload required experimental vehicle to pull off road for resets; inappropriate recordation of billboard luminance levels; confounding of billboards with on-premise signs. |
| Availability/Accessibility | Report is available on the FHWA website at http://www.fhwa.dot.gov/real_estate/oac/visual_behavior_report/final/cevmsfinal.pdf |

[4]In March 2011, FHWA released a draft version of the report to three pre-selected peer reviewers. The reviewers were not identified and the draft report was not made available to the public. The comments of two of the three reviewers (the third did not provide meaningful or comprehensive comments) were so critical of the draft report (stating, in essence, that the report's findings about eye glance durations to billboards were not credible) that FHWA spent the next 33 months revising and rewriting the report. A final report, which was *not* peer reviewed, was released on the agency's website on December 30, 2013, although the report was dated September 2012. Although the unreleased draft report was given the official agency report number FHWA-HEP-11-014, the final report remains unnumbered and unpublished.

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| Date 1st published/presented | 2013 |
| Location | U.S. (Massachusetts, Amherst) |
| Author(s)<br>Title<br>Affiliation | Divekar, G., Pradhan, AK, Pollatsek, A., & Fisher, DL;<br>"Effects of External Distractions"<br>University of Massachusetts, Amherst |
| Forum | Journal |
| Peer Reviewed? | Yes |
| Sponsor/funding source | National Institutes of Health, National Science Foundation, Arbella Insurance Group Charitable Foundation |
| Type of Study* | S |
| Type of Signs Studied** | D (simulated) |
| Brief Description of Method | Following previous research in the same lab, the authors sought to understand: (a) why experienced drivers were taking such long glances at external distractions (simulated billboards) when they were unwilling to do so for distractors inside the vehicle, and (b) if these experienced drivers were sacrificing some of their ability to monitor visible hazards in the roadway ahead of their vehicle, are they sacrificing even more of their ability to anticipate unseen hazards. Novice and experienced drivers performed an external search task (reading a simulated billboard) while driving in a simulator. Eye movements were recorded, as were vehicle performance. |
| Summary of Findings | Distractions are a major contributor to crashes, and almost one-third of such distractions are caused by sources external to the vehicle. Of these, digital billboards stand out because of their brightness and changing imagery. Recent research indicates that such billboards may attract attention away from the forward roadway for extended periods of time, and converging evidence shows that looking away from the forward roadway for such extended periods is associated with elevated crash risk. The external tasks in this study were designed to be similar to scanning a sign dense with information in the real world, such as a digital billboard that changed message every few seconds. "This study provides clear evidence that external tasks are distracting not only for novice drivers, but also for more experienced drivers." For both groups, external distractions significantly affect the drivers' anticipation of hazards. Overall the study showed that experienced as well as novice drivers are at an elevated risk of getting into a crash when they are performing a secondary task such as looking at a billboard. |
| Strengths | Sophisticated driving simulator with realistic hazard scenarios. |
| Weaknesses/Limitations | The simulated billboards, although requiring an external, visual distraction task, were not very representative of roadside billboards. There was no effort to study the effects of such external distractions on older drivers, a group known to be at high risk for such distraction |
| Availability/Accessibility | Transportation Research Record, Journal of the Transportation Research Board No. 2321. |

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| Date 1st published/presented | 2013 |
| Location | Australia |
| Author(s)<br>Title<br>Affiliation | Roberts, P., Boddington, K., & Rodwell, L.<br>"Impact of Roadside Advertising on Road Safety"<br>ARRB Group (formerly Australian Road Research Board) |
| Forum | Austroads Road Research Report: Publication No. AP-R420-13 |
| Peer Reviewed? | Unknown |
| Sponsor/funding source | Austroads (The Association of Australian and New Zealand Road Transport and Traffic Authorities) |
| Type of Study* | CR, G |
| Type of Signs Studied** | O, C, D, V |
| Brief Description of Method | (a) A critical review of existing literature to study the risk of distraction from roadside advertising, and to communicate these findings; (b) document and review existing guidelines across different highway agencies to identify gaps and inconsistencies; (c) develop guiding principles and make guidance recommendations that could be used to create guidelines and to harmonize guidelines across diverse agencies. |
| Summary of Findings | Most drivers, under most conditions, most of the time, probably possess sufficient spare cognitive capacity that they can tolerate driving-irrelevant information. The problem comes in some driving situations where it becomes likely that (the appearance of) movement or changes in luminance will involuntarily capture attention and that particularly salient emotional or engaging information will capture attention to the detriment of driving performance, particularly in inexperienced drivers. Where this happens in a driving situation that is also cognitively demanding, the consequences for driving performance are likely to be significant. Further, if this attentional capture also results in a situation where a driver's eyes are off the forward roadway for a significant amount of time (i.e. 2 seconds or longer) this will further reduce safety. Additionally, road environments cluttered with driving-irrelevant material may make it difficult to extract information that is necessary for safe driving, particularly for older drivers. The studies that have been conducted show convincingly that roadside advertising is distracting and that it may lead to poorer vehicle control. Results from the Klauer, et al (2006) studies show that looking at an external object increased the crash risk by nearly four times, nonetheless the number of crashes resulting from such distraction is probably quite small. This suggests that the contribution of roadside advertising to crashes is likely to be relatively minor. Nonetheless, from the Safe System perspective it would be difficult to justify adding any infrastructure to the road environment that could result in increased distraction for drivers. The exception to this may be in the case long drives on monotonous roads where drivers are likely to suffer the effects of passive fatigue. |
| Strengths | A comprehensive review, not only of existing research, but also of relevant human factors principles, advertising sign technology, and best practices. |
| Weaknesses/Limitations | Although the authors extensively review and comment on existing regulations and guidelines, only brief mention is made of guidelines in the U.S. |
| Availability/Accessibility | Available on the Austroads website |

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| Date 1st published/presented | 2013 |
| Location | Denmark |
| Author(s)<br>Title<br>Affiliation | Herrstedt, L., Greibe, P., & Andersson, P.<br>"Roadside Advertising Affects Driver Attention and Road Safety."<br>Trafitec, Denmark |
| Forum | International Conference |
| Peer Reviewed? | Yes |
| Sponsor/funding source | Unknown |
| Type of Study* | Q |
| Type of Signs Studied** | C, D |
| Brief Description of Method | 32 drivers, both men and women between the ages of 23 and 70, drove an instrumented vehicle on one of several comparable routes. Drivers had to have a current license and not require eyeglasses while driving. Drivers were not informed in advance of the purpose of the drive. The car's instruments recorded eye movements, vehicle speed and position, and proximity to vehicles ahead of the test vehicle. A "safety buffer" was calculated which reflected the time available for the driver to respond to a sudden critical situation requiring immediate action to avoid an accident. |
| Summary of Findings | A total of 109 drives past advertising signs were completed, and a total of 233 glances to the 16 roadside advertising signs were recorded. Results showed that, in 69% of all drives, the driver glanced at the advertisement at least once. In nearly half of all drives, the driver glanced two or more times to the same billboard. 18% of all glances lasted for 1 second or longer, and the total duration of successive glances on a single drive was 1.5 seconds or longer in 29% of trials, 2.0 seconds or longer in 22% of trials, and 3.0 seconds or longer in 10% of trials. In 65 of the 233 glances (28%), a vehicle ahead was present within a time gap of less than 3.0 seconds. In 59 cases (25%) the safety buffer was less than 2.0 seconds, and in 20% of all cases, the safety buffer was as low as 1.5 seconds. The authors conclude that, in 25% of all cases, driving safety was reduced because the safety buffer was less than 2 seconds to the lead vehicle. Further, in 16% of all drives (17 out of 109), the sum of cumulative glances to the same billboard resulted in visual distraction using the method developed by VTTI (2.0 seconds or more within a 6.0 second window). In other words, the authors state: "In more than every sixth drive past, visual distraction occurs as a result of the advertising sign." Their overall conclusion was that "the investigated advertising signs do capture drivers' attention to the extent that it impacts road safety." |
| Strengths | This is one of only two known on-road studies to combine measures of driver glance behavior (number and duration of glances to billboards) with the simultaneous measure of following distance to a vehicle ahead, and the only one to (apparently) calculate such following distances via laser scanner for accuracy. Older drivers were included in the participant group. |
| Weaknesses/Limitations | More details about the specific billboards studied would have been helpful. |
| Availability/Accessibility | *Proceedings of the 3rd International Conference on Driver Distraction and Inattention.* |

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| Date 1st published/presented | 2014 |
| Location | US |
| Author(s)<br>Title<br>Affiliation | Hawkins, HG, Jr., Kuo, P-F, & Lord, D.<br>"Statistical Analysis of the Traffic Safety Impacts of On-Premise Digital Signs"<br>Texas A&M University |
| Forum | 93rd Annual Meeting of the Transportation Research Board |
| Peer Reviewed? | Yes |
| Sponsor/funding source | On-premise sign industry (Signage Foundation, Inc.) |
| Type of Study* | E |
| Type of Signs Studied** | O |
| Brief Description of Method | 135 sites in four states, where on premise signs had been installed in 2006-07, were compared to 1,301 control sites using the Empirical Bayes (EB) statistical methodology. |
| Summary of Findings | There were no statistically significant changes in crash frequency associated with the installation of the on-premise digital signs studied. A calculated safety effectiveness index was equal to 1.00, with the 95 percent confidence interval between 0.93 and 1.07. The findings were similar for each of the four investigated States. The researchers concluded that "there is no evidence (that) the installation of on-premise signs at the locations (studied) led to an automatic increase in the number of crashes." The authors point out in their conclusions that it might be of interest to examine whether or not the index varies as a function of sign design and operation or characteristics of the crashes themselves. |
| Strengths | The study employed a large database and a robust statistical analysis procedure. |
| Weaknesses/Limitations | The on-premise signs to be studied were chosen by the sponsor and individual sign companies rather than by the authors or at random. It is possible that the selection criteria included a bias toward the least potentially distracting signs (in terms of size, color, contrast, animation, video, etc.). |
| Availability/Accessibility | Paper No.: 14-2772 of the 93rd Annual Meeting of the Transportation Research Board. |

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| Date 1st published/presented | 2014 |
| Location | USA |
| Author(s)<br>Title<br>Affiliation | Schieber, F., Limrick, K., McCall, R., & Beck, A.<br>"Evaluation of the Visual Demands of Digital Billboards Using a Hybrid Driving Simulator"<br>University of South Dakota |
| Forum | Journal |
| Peer Reviewed? | Yes |
| Sponsor/funding source | Unknown |
| Type of Study* | S |
| Type of Signs Studied** | D (Simulated) |
| Brief Description of Method | The authors used a purpose-built hybrid driving simulator designed "for investigating the limits of sign reading performance while driving." The driving task and the view of the road ahead used a validated, commercial simulator; but the digital billboard stimulus was implemented on a separate 20:1 scaled LCD display mounted on a linear actuator rail that could move the simulated sign toward the observer at angular velocities simulating speeds up to 55 mph. 18 university undergraduates participated. Gaze direction (road ahead vs. billboard) was captured by a video recording of each participant's face as they drove– this technique was previously demonstrated by the senior author. Participants drove once at 25 and again at 50 mph. Digital billboard stimuli were presented at predetermined random intervals, and contained either 4, 8, or 12 frequently used English words, also displayed at random. |
| Summary of Findings | The authors state: "Although little or no decrement in lane keeping or reading performance was observed at slow speed (25 MPH) on straight roads, clear evidence of impaired performance became apparent at the higher driving speed (50 MPH). Lane keeping performance was significantly degraded when participants were required to read digital billboards with 8 or more words at the higher speed. This decrement became greater when the sign contained 12 words. Surprisingly, the decrements in lane keeping performance emerged *after* the participants had finished reading the sign. The participants tended to slowly drift away from the center of the lane, and then executed a large amplitude corrective steering input during the 8-second interval after encountering the digital billboard. Eye gaze statistics and reading performance showed that information processing overload began to emerge at a message length of 8 words and was clearly present when 12 words were displayed. |
| Strengths | Sophisticated, hybrid driving simulator with a custom built zoomed image sign projector designed to overcome traditional simulator constraints on sign legibility at realistic distances. Simulated digital billboards contained different, common words of 4-5 letters each, and each was presented in the same size and location on the billboard. |
| Weaknesses/Limitations | No older drivers were studied. There is no discussion of the validity of the hybrid driving simulator for this specific application. The simulated billboards were only 10 ft. in width, only about one-fifth the width of typical highway billboards. |
| Availability/Accessibility | *Proceedings of the Human Factors and Ergonomics Society 58th Annual Meeting,* 2214-2218. |

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| Date 1st published/presented | 2014 |
| Location | Israel (Tel Aviv) |
| Author(s)<br>Title<br>Affiliation | Gitelman, V., Zaidel, D., Doveh, E., & Silberstein, R.<br>"Accidents on Ayalon Highway - Three Periods Comparison: Billboards Present, Removed, and Returned" |
| Forum | |
| Peer Reviewed? | Yes |
| Sponsor/funding source | Israel National Roads Authority |
| Type of Study* | E |
| Study Design | Quasi-experimental: Billboards present (2006-07), absent (2008), present again (2009-12) with controls. Dependent measure – property damage and injury crashes. Control variable – traffic volume. Study sites – 8 treatment and 6 control. |
| Type of Signs Studied** | C |
| Brief Description of Method | Because of complaints, Israel's Supreme Court ruled that a series of billboards on an urban freeway near Tel Aviv had to be removed, i.e. covered, for one year while an evaluation took place. At the end of the experimental period, the billboards were uncovered such that they were again visible to motorists. At control sites, the billboards remained visible throughout the study period. At treatment sites, billboards were visible in the "present" period (2006-7), covered during the "removed" period (2008), and visible again in the "returned" period (2009-12). Crashes were recorded and categorized (property damage only, injury or fatality) under six conditions: (a) at treatment sites while signs were visible; (b) at treatment sites after signs were covered; (c) at treatment sites where signs were visible again after having been uncovered; (d) at control sites where signs were visible; and (e) at the same control sites while signs were still visible but signs were covered at the treatment sites; and (f) at control sites while signs were again visible at the treatment sites. |
| Summary of Findings | At control sites, crashes remained essentially the same throughout the 6-year study period; at the treatment sites, crashes declined dramatically after the billboards were covered, and returned just as dramatically once the billboards were uncovered and therefore again visible. The results were the same for injury and fatal crashes. After adjusting for traffic volume, crashes were reduced at the treatment sites (where billboards were visible in the "before" period but covered during the "after" period) by the following percentages: all crashes by 60%; injury/fatal crashes by 39%; property damage crashes by 72%. |
| Strengths | For a field study, this used a well-controlled research design. Before-and-after measures were obtained both for sites where the billboards were covered during the study, and for the sites where the billboards remained visible during this same time period. Road sections were in close proximity, on the same highway, ensuring that traffic speeds and volumes, as well as weather conditions, law enforcement activity, etc. were comparable. |
| Weaknesses/Limitations | There might have been differences in certain roadway characteristics between the treatment and control sites (e.g. curves, merges, etc.) that were not identified. |
| Availability/Accessibility | Complete study is in Hebrew only; English translation is available for the Executive Summary only. |

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| Date 1st published/presented | 2015 |
| Location | USA |
| Author(s)<br>Title<br>Affiliation | Sisiopiku, VP, Islam, M., Haleem, K., Alluri, P. & Gan, A.<br>"Investigation of the Potential Relationship between Crash Occurrences and the Presence of Digital Billboards in Alabama and Florida" |
| Forum | Conference Paper |
| Peer Reviewed? | Yes |
| Sponsor/funding source | U.S. Department of Transportation/RITA, Alabama Department of Transportation, Florida Department of Transportation |
| Type of Study* | E |
| Type of Signs Studied** | D |
| Brief Description of Method | The authors analyzed historical crash records from the states of Alabama and Florida. They identified locations of digital billboards along major limited-access roadways and chose 18 suitable sites for analysis, each with its own control site. Crash records were obtained for a five-year period from a centralized database in Alabama, and crash rates were determined per million vehicle miles travelled at each site. The procedure was similar in Florida, although only three years were studied. Because many crashes in the vicinity of the billboards were found to be located incorrectly, the authors retrieved the actual police traffic collision reports for 783 crashes. Of these, 406 had to be eliminated due to coding errors in the original summary reports, leaving a total of 377 crashes for the safety assessment. |
| Summary of Findings | The authors state: "The overall results were consistent between the two states. The presence of digital billboards increased the overall crash rates at "digital advertising billboard influence zones" by 25% in Florida and 29% in Alabama, compared to control sites. In addition, sideswipe and rear-end crashes were overrepresented at digital billboard influence zones compared to control sites. |
| Strengths | Included in their influence zone was a short distance (minimum 0.05 mile) downstream of each billboard. This is in keeping with the findings of Schieber, et al., discussed elsewhere in the present document. The influence zone and associated control zone for each billboard were matched for traffic and roadway conditions. |
| Weaknesses/Limitations | The authors provide no explanation for how the specific billboard locations were chosen out of all possibilities that they identified. Apparently, they identified "influence zones" by calculating the distances upstream of each digital billboard from which the sign could be seen, using Google Street View. There seems to have been no effort to relate sight distance in the real world to that shown in the Google Street View images. It is unclear whether their 5 years of data (AL) and 3 years (FL) correspond to periods when the billboards studied were actually in place, given that the authors seem to have selected sites from Google Street View. |
| Availability/Accessibility | *Proceedings of the Human Factors and Ergonomics Society 58th Annual Meeting,* 2214-2218. |

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| Date 1st published/presented | 2015 |
| Location | Canada |
| Author(s)<br>Title<br>Affiliation | Rempel, G., Montufar, J., Forbes, G., & Dewar, R.<br>"Digital and projected advertising Displays: Regulatory and Road Safety Assessment Guidelines."<br>MORR Transportation Consulting, Ltd., Intus Road Safety Engineering, Inc.., Western Ergonomics, Inc. |
| Forum | Transportation Association of Canada Report |
| Peer Reviewed? | Yes |
| Sponsor/funding source | Transportation Association of Canada |
| Type of Study* | CR |
| Type of Signs Studied** | O, D |
| Brief Description of Method | The authors performed a critical literature review, met with representatives of Canadian government agencies and outdoor advertising companies, investigated practices and regulations/guidelines in other countries, and applied human factors principles toward the development of guidelines for Canada. |
| Summary of Findings | The resultant guidelines are specific to traffic safety issues – they do not address the aesthetic, "nuisance," or economic factors of such signs. Guidance is developed for sign density, spacing, dwell time (which they call "frame duration"), illuminance (which they authors call "brightness"), proximity to traffic control devices and driver decision points, message sequencing and text scrolling, animation, and transition time between messages. The overriding principle proposed in this report is that digital advertising signs should "emulate" traditional signs. |
| Strengths | A comprehensive review, not only of existing research, but also of relevant human factors principles, advertising sign technology, and best practices. |
| Weaknesses/Limitations | Accepted industry practices regarding DBB lighting rather than getting the views of lighting experts or undertaking their own independent evaluation. |
| Availability/Accessibility | Available for purchase from Transportation Association of Canada at http://tac-atc.ca/en/digital-and-projected-advertising-displays-publication-now-available |

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|---|---|
| Date 1st published/presented | 2015[2] |
| Location | Australia |
| Author(s)<br>Title<br>Affiliation | Samsa, C., & Phillips, T.<br>"Digital Billboards 'Down Under': Are they Distracting to Drivers and can Industry and Regulators Work Together for a Successful Road Safety Outcome?"<br>Samsa Consulting, Outdoor Media Association of Australia |
| Forum | *4th International Conference on Driver Distraction and Inattention* |
| Peer Reviewed? | Yes |
| Sponsor/funding source | Outdoor Media Association of Australia |
| Type of Study* | C |
| Type of Signs Studied** | C, D, O |
| Brief Description of Method | 29 participants, ages 25-54, drove an instrumented vehicle along a 14.6 km route in Brisbane, Queensland. Drivers were fitted with "eye tracking glasses." |
| Summary of Findings | Average fixation durations were "well below 0.75 s". There were no significant differences in average vehicle headway between the three signage types. There was a statistically significant difference in lateral deviation when billboards were present. |
| Strengths | The data showing significant differences in lateral deviation in the presence of billboards is in accord with findings from other recent studies. |
| Weaknesses/Limitations | No older drivers were studied. There is little description of the eye tracking glasses used, but this apparatus is not known to provide the precision necessary to determine exactly where the wearer is looking. No information is provided to enable the reader to determine how vehicle headways were measured; as such it is not possible to compare this study to the one conducted in Denmark, where headway measurement was clearly described. |
| Availability/Accessibility | https://www.ivvy.com/event/DD2015 |

[2]At the present time, this paper is available only as an Abstract. Our comments might change once we are able to review the complete paper.

| | |
|---|---|
| Date 1st published/presented | 2016 |
| Location | USA |
| Author(s)<br>Title<br>Affiliation | Belyusar, D., Reimer, B. Mehler B., & Coughlin, JF.<br>"A Field Study on the Effects of Digital Billboards on Glance Behavior During Highway Driving."<br>New England University Transportation Center & MIT Age Lab |
| Forum | Accident Analysis and Prevention, 88, 88-96 |
| Peer Reviewed? | Yes |
| Sponsor/funding source | US Department of Transportation, Region 1 New England, University Transportation Center at MIT, and the Toyota Class Action Settlement Safety Research and Education Program. |
| Type of Study* | Q |
| Type of Signs Studied** | D |
| Brief Description of Method | This on-road study had 123 subjects, nearly equally divided between males and females and between young and old. Participants drove an instrumented vehicle under normal driving conditions, with no specific tasks to perform, past a digital billboard on a highway with a speed limit of 65 MPH. |
| Summary of Findings | The authors found statistically significant changes in total number of glances and, depending upon the direction of travel, moderate-to-long duration glances in the direction of the billboard as compared to sections of the roadway in which the billboard was not visible. Older drivers were particularly affected. The authors also found that: "Drivers glanced more at the time of a switch to a new advertisement display than during a comparable section of roadway when the billboard was simply visible and stable." They concluded: "Given typical billboard dwell (cycle) times of six (6) or eight (8) seconds, these findings add to the argument the dwell times for such signs should be considerably longer." |
| Strengths | The driving task was quasi naturalistic; both young and old drivers, and both males and females, were equally represented. |
| Weaknesses/Limitations | Only one billboard, with two faces, was used in the analysis. There could be characteristics of that sign, or its location, which make the results not generalizable to other billboards. |
| Availability/Accessibility | http://www.sciencedirect.com/science/article/pii/S0001457515301664 |

| | |
|---|---|
| Date 1st published/presented | 2018 |
| Location | Belgium, Flanders |
| Author(s)<br>Title<br>Affiliation | Mollu, K.<br>"Influence of an Illuminated Digital Billboard on Driving Behavior with a Focus on Variable Display Time and Distance from a Pedestrian Crossing."<br>Hasselt University and Flanders Agency for Roads and Traffic |
| Forum | TRB Subcommittee on Digital Billboards |
| Peer Reviewed? | Yes |
| Sponsor/funding source | Flanders Agency for Roads and Traffic |
| Type of Study* | N |
| Type of Signs Studied** | D (simulated) |
| Brief Description of Method | Using a driving simulator, investigators compared subjective workload and responses of drivers to pedestrians crossing in crosswalks. Subjects included 35 persons, age 20-60, with 54% male. Signs varied in dwell time and location in retail zones or in transitions to built-up areas. |
| Summary of Findings | Study participants rated their mental demand significantly higher and their own performance lower when a digital billboard was present. The minimum speed upon approach to the pedestrian was higher and was reached closer when a DBB was present. Although not statistically significant, lateral displacement was higher in the presence of the DBB. Brake-reaction time (perception reaction time) to the pedestrian was approximately 1.5 times higher in the presence of the DBB – and there was no effect of dwell time or distance to the sign. |
| Strengths | High definition driving simulator; roads agency sponsored; reasonably large number of subjects. A large number of billboards and road settings were used. |
| Weaknesses/Limitations | None of the display times matched those in most common use; simulated digital billboards were smaller than those in common use in the U.S. |
| Availability/Accessibility | Author |

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# Expert Report of Jerry Wachtel, CPE in the matter of: Adams Outdoor Advertising Limited Partnership v. City of Madison, et al.

## INTRODUCTION.

My name is Jerry Wachtel. I am a Certified Professional Ergonomist (CPE) and the founder and President of The Veridian Group, Inc., a C-Corporation in Berkeley, California. I am an expert in the field of human factors and ergonomics. During the past 40 years, I have testified as an expert witness in eleven States and have never been denied qualification as an expert.

I have particular expertise in the matter of roadside billboards, including digital billboards, and driver distraction, inattention, and performance. My work in this field has been widely published and broadly cited by others. I chair the Digital Billboards Subcommittee for the Transportation Research Board of The National Academies. My services have been retained by the billboard industry, individual billboard operating companies, and stakeholders such as concerned community organizations and Government agencies seeking to regulate and control billboards. A report of which I was the senior author was submitted by the U.S. Department of Justice as evidence in a case heard before the U.S. Supreme Court, *MetroMedia v. City of San Diego.*

A true and correct copy of my *curriculum vitae* is shown at Attachment 1 to this report. This document includes my qualifications and a representative list of publications that I have authored, including all those within the past ten years.

A list of those cases in which I have testified as an expert at trial or by deposition in the past four years is shown at Attachment 2 to this report.

## COMPENSATION.

I am being compensated for my work and testimony in this matter in the amount of $425.00 per hour plus incurred expenses.

## MY RETENTION IN THIS MATTER.

I was initially retained in this matter on April 16, 2018 by Sarah A. Zylstra of Boardman & Clark LLP on behalf of the City of Madison.

Since the date of my retention, I have reviewed certain materials provided (see next section of this report for details).

## MATERIALS PROVIDED AND REVIEWED.

I have been provided with, and relied upon, the following materials:

1. Chapter 31 – Sign Control Ordinance of the Madison, WI Code of Ordinances
2. Draft Amended Complaint by Adams Outdoor Advertising Limited Partnership

## SCOPE OF MY INVOLVEMENT IN THIS MATTER.

I was informed by Ms. Zylstra that she represents the city of Madison in a federal lawsuit initiated by an outdoor advertising company, which challenges the City's sign ordinance. I was asked to review the City's Sign Control Ordinance, and Adams Outdoor Advertising's (Adams) Amended Complaint regarding this ordinance, and to offer my opinions as more fully described below. My opinions to date are reflected in this Preliminary Report. As I anticipate the review of further documents, discovery, and testimony in this matter, I reserve the right to supplement and modify my report if necessary.

## MY HISTORY AND EXPERIENCE WITH DIGITAL BILLBOARDS.

In 1978, I was the Director of the Highway Aesthetics Laboratory in the Office of Research of the Federal Highway Administration (FHWA). Digital billboards were a new technology at that time, and FHWA was unsure how they should be regulated within the mandate of the Highway Beautification Act. Because the technology was so new, there was relatively little known about how they might affect traffic safety and driver behavior, among other issues. I was assigned, together with a colleague, to investigate all that was known at that point about digital billboards. The result of our study was the publication, in 1980, of the report titled: "Safety and Environmental Design Considerations in the Use of Commercial Electronic Variable-Message Signage." The report was published as FHWA/RD-80/051. Immediately after publication of that report, my services were requested by representatives of the billboard industry and by State and local government agencies alike, to assist them with the development or clarification of ordinances that addressed these signs. After taking early retirement from the Federal Government in 2000, I have continued, through my consulting practice, to advise parties on both sides of this issue, and I have continued with research, review, writing and presentation on this subject.

## REVIEW OF THE RESEARCH LITERATURE.

Since digital sign technology first became available in the 1970s, there has been considerable research performed, worldwide, to address the aesthetic and safety issues presented by such signs.

- A report by and for the Federal Highway Administration (FHWA) of the U.S. Department of Transportation (DOT), for which I was the senior author, was the first known peer reviewed report on the topic of safety and aesthetic issues of digital roadside signs, which were then in their infancy. This report was judged the outstanding technical achievement of the year by FHWA's Office of Research and was subsequently used by the U.S. Department of Justice (DOJ) as evidence in the

landmark U.S. Supreme Court Case *Metromedia v. City of San Diego.*

- The FHWA report reviewed *all* of the research literature in the public domain that had been conducted to that point, and two subsequent reports by me have reviewed all of the publicly available literature conducted from that time to the present. These subsequent reports are discussed below.

- In 2009, I published a peer reviewed report on behalf of the American Association of State Highway and Transportation Officials (AASHTO), through the National Cooperative Highway Research Program (NCHRP). This report reviewed the publicly available research literature conducted subsequent to my 1980 report, presented the human factors issues associated with digital billboards (which had developed dramatically improved technology in the nearly 30 years since the initial report), and provided an outline for regulation and control of such signs.

- In 2013 I began the development of a "Compendium" of publicly available research studies in the field of digital billboards. This document included brief reviews of the cited studies and information for the reader to be able to access them. The report was intended to be a "living document," updated periodically as new studies became available. The latest version was issued this year.

- Although the earliest studies reviewed and discussed in the 1980 report were quite variable in their findings, due, essentially, to weak data collection or statistical methods, those studies conducted in the past decade have been far more consistent, and have, almost universally, found adverse safety consequences of roadside digital billboards.

- The only exceptions to these consistent findings have been one non-peer reviewed report by the FHWA, a study that has been heavily criticized in a peer reviewed report that I authored, and a series of studies performed by Tantala Associates and by the Virginia Tech Transportation Institute (VTTI), all conducted on behalf of the billboard industry. The first two of these studies were submitted for presentation and publication to the prestigious Transportation Research Board (TRB). Both were rejected for presentation and publication due to serious flaws in their research methods and evidence of bias in the conduct of the research. These studies were subsequently made available to the public and were then peer reviewed and criticized by me for their serious statistical and methodological flaws sufficient to render their conclusions invalid, in a report requested by the Office of Traffic Safety of the Maryland State Highway Administration (SHA) and in my 2009 report for AASHTO. Although, as discussed in the reports, a short letter from Tantala Associates to the Texas Department of Transportation "briefly rebutted" my critical review, the letter did not challenge my basic criticisms, including the fact that the highway segments chosen for study, and the cohort of drivers whose traffic collisions were reviewed, eliminated from consideration the very individuals (older drivers) and roadway conditions (the vicinity of interchanges) where such digital billboards would be most likely to cause unsafe levels of driver distraction. More recent reports by the Tantala group have been secured behind a firewall on the website of the Outdoor Advertising Association of America (OAAA) and made available only to OAAA members. Therefore, they have not been subject to

independent peer review. The Virginia group has not conducted any further research in this field.

- According to Tantala Associates, their newer studies are far briefer than their 2007 study cited above, and the authors have stated that, with the exception of a more robust statistical analysis tool, the research methodology remains essentially the same as that of the earlier study. Therefore, it can be stated, whereas each subsequent study apparently reports similar results (i.e. that digital billboards are no more likely to cause traffic collisions than conventional billboards), the same biases in the studies are apparent, leading to similarly invalid results. Because they cannot be independently peer reviewed, however, this cannot be verified.

## SUMMARY OF THE CURRENT STATE OF THE RESEARCH ABOUT BILLBOARDS.

Research about billboards in general, with specific concern for driver performance in their presence, has been undertaken in countries around the world since the 1950s. As digital technology matured, of course, the research became more focused on digital billboards, officially known as Commercial Electronic Variable Message Signs, or CEVMS. My 1980 report, cited above, critically reviewed all of the research up to that date. My 2009 AASHTO report brought the review of the literature up to that time, and my "Compendium of Recent Research Studies on Distraction from Digital Signs – Updated," has brought the critical review of this research up to the present day. The research in general, and, in particular the most recent research, is in strong agreement that digital billboards have an adverse effect on traffic safety.

The bottom line has become increasingly clear. All billboards may distract drivers, but digital billboards are worse. With the exception of those studies paid for and sponsored by the billboard industry, an FHWA study shown to be seriously lacking in statistical and methodological rigor, and a small number of other studies that find no differences between digital and conventional billboards, the vast majority of research studies, conducted worldwide over the past ten years or so, have found that digital billboards lead to more driver distraction, poorer lane positioning, unsafe following distances, and more crashes than conventional billboards. Those characteristics of digital billboards most to blame for these differences are the characteristics of the message change itself (the sudden change of brightness, color, contrast, and content), and the excessive levels of luminance (apparent brightness) of these signs at night.

## REVIEW OF THE MADISON SIGN CONTROL ORDINANCE.

I reviewed the Madison Sign Control Ordinance, and have the following comments:

- The Ordinance clearly sets out its goal of a "substantial government interest in promoting public safety and aesthetic values through the regulation of signs…" Section 31.02(1) further states that "sign regulations, including but not limited to those which control the type, design, size, location and maintenance of signs, are hereby established to further the goals of safety and aesthetics…"

- The ordinance seeks to achieve specific purposes, including:
    - "To enable the public to located goods, services, and facilities without difficulty or confusion;" – this provides an appropriate distinction between on-premise and off-premise signs.
    - "To protect property values, public investment and overall neighborhood character by … preventing conditions which have undesirable impacts on surrounding properties;" – this is supported by a Scenic America report on property values near digital billboards and my 1980 report on environmental design considerations with CEVMS.
    - "To protect the public and promote safety, including but not limited to traffic and pedestrian safety, and to minimize effects of signs which may distract or obstruct visibility of official traffic signals or other safety or informational devices…" – this is supported by research that says that digital advertising signs at street level cause more distraction than signs elevated above street level; in addition, research shows that even static billboards can block or be confused with official traffic control devices.
    - "To protect scenic views and the visual environment along city streets, highways and rights-of-way and to promote overall aesthetics, avoid clutter and avoid inappropriate scale…" This is supported by research for my 1980 report as well as research on visual clutter conducted in Australia. That work found that: (a) advertising signs can contribute to visual clutter, and (b) visual clutter leads to motorist confusion and delay in responding to unfolding events in traffic.
- The ordinance restricts illumination from external lighting to 40 footcandles (fc) average for signs less than 300 square feet (sq. ft) in size, and to 70 fc average for signs greater than 300 sq. ft. This demonstrates a concern for traffic safety and the avoidance of glare.
- The ordinance states that internally illuminated signs displaying illuminated copy shall be designed so that, when illuminated, the sign appears to have light-colored copy on a dark or non-illuminated background. This statement shows concern for traffic safety. Such "positive contrast" reduces blooming; makes sign easier to read; reduces glare. This is the practice always followed in the design of official traffic control signs.
- The ordinance discusses restrictions such that signs "will not cause aesthetic blight or traffic hazards of the sort unacceptable to the community," and that the City's "substantial governmental interests in preserving traffic and pedestrian safety will be furthered by providing easy-to-see directional and wayfinding information…" Thus, these statements recognize the concern for traffic safety, the fact that all signs distract but there is a minimal level of unavoidable distraction that is not "unacceptable to the community," and that easy-to-see signs are conducive to traffic and pedestrian safety by demanding the least time and attention from the viewer to

read and understand the message presented by the sign.

- Section 31.045(3)(b) specifically discusses "signs not to constitute a traffic hazard" by stating: No sign regulated by this ordinance shall be erected at the intersection of any streets in such a manner as to obstruct free and clear vision as further delineated in other sections of this ordinance; or at any location where, by reason of the position, shape or color, it may interfere with, obstruct the view of or be confused with any authorized traffic sign, signal or device; or that makes use of the words STOP, LOOK, DRIVE-IN, DANGER or any other word, phrase, symbol, or character in such manner as to interfere with, mislead or confuse traffic. This is a clear and correct recognition of the importance of traffic safety to this ordinance.

- That "all Motion signs … are prohibited" 31.045(3)(g) is based on the extensive body of research that demonstrates that such motion is detrimental to traffic safety.

- That "all Flashing signs … are prohibited" 31.045(3)(h) is a correct application of research, especially that conducted at MIT, that it is the change of brightness that causes the appearance of a flash, and that most distracts the driver. This section correctly exempts official traffic control devices from this prohibition, by recognizing that it is the characteristic of flashing that most attracts driver attention, and that it is sometimes necessary to capture such attention to convey critical information on an official traffic control device.

- That "Digital Image Signs, … whether static or animated, are prohibited" 31.045(3)(i) correctly and appropriately follows the extensive research literature that demonstrates that digital signs cause significant amounts of motorist distraction.

- Section 31.046(1) sets a minimum time for message/image change on electronic changeable copy signs. This again recognizes that it is the moment of message change that most distracts the driver, and increasing this message change interval enhances traffic safety.

- Section 31.046(2)(c) provides for the placement of portable signs on public property "through a permit system with clear placement and construction regulations," which "improves safety and aesthetics for all users of the sidewalk and decreases distractions to vehicle operators." This is a sound statement that recognizes the need for sign control for both traffic and pedestrian safety reasons.

- Section 31.046(2)(c)(7)(f) establishes "vision clearance triangles" that assures that such portable signs shall not obstruct any other applicable traffic visibility area required by ordinance or by the City Traffic Engineer. This again demonstrates an appropriate regulation focused on traffic safety.

- Section 31.046(2)(c)(8)(p) states that signs shall not direct traffic nor mimic official traffic control devices as prohibited by Sec. 31.045(3)(b). This statement again places a priority on traffic safety and reflects research at the University of Texas at Austin that shows the hazards of mimicking official traffic control signs.

- Section 31.046(3) prohibits inflatable signs because "they are generally more distracting and hazardous to pedestrian and traffic safety." This is another explicit reference to the consideration for traffic safety embodied in the ordinance.

- Section 31.11 makes advertising signs nonconforming and prohibits new advertising signs. The purpose of this section is to stop the proliferation of billboards within the City because, the greater number of billboards, the greater are the traffic safety concerns. In addition, this Section makes a reasonable and appropriate distinction between on- and off-premise signs, because off-premise signs do not serve the same function and purpose as on-premise signs. Thus, this section provides a good fit of the regulation to its stated objectives.

## COMMENTS TO ADAMS AMENDED COMPLAINT.

Para. 23 makes erroneous statements. Digital billboards (DBBs) are NOT the only type of sign technology that allows AMBER Alerts (note the word AMBER is an acronym and is written in all upper case) and other time-sensitive emergency messages. In fact, they are not the best type. Most State and local jurisdictions and highway or transportation agencies maintain a series of electronic signs on their highways whose sole function is to broadcast such alerts, and they do so far more effectively than DBBs because: (a) DBBs only have the message appear for a 6- or 8-second window in a sequence of other messages whereas official changeable message signs (CMS) can and do keep an emergency message on the display continuously until it is no longer needed; (b) an emergency message on an official sign can be presented immediately upon the government authority learning of the issue, whereas a DBB operator must process the message through its system before display; (c) official CMS are placed strategically along roads and highways (e.g. in advance of exits) such that a displayed message can be acted upon by the motorist quickly and efficiently, whereas DBBs are located where they earn the most revenue for the operator without regard for the possible safety implications of a displayed message; and (d) the display of emergency messages on official CMS can be read more quickly and easily by the motorist because these signs were designed with a typeface intended for quick, effortless reading, whereas the message on a DBB is often cluttered with irrelevant information, and displayed in difficult to read colors and typefaces.

Para. 24 is misleading in that it fails to note that messages on official CMS, which are designed, located, and operated to convey such emergency messages, may well be as effective, or more effective than DBBs at this function, but I am not aware that any Government agency has ever sought the "kudos" of the FBI for successfully performing their critical function.

Para. 26 actually presents an argument against the use of DBBs. It is well understood that all signs visible to motorists distract their attention from their primary (driving) task. Official signs, such as Warning, Regulatory, and Advisory signs, are a "necessary evil" in that the distraction that they cause is a result of their fulfilling a required and necessary purpose. They are specifically designed based on continuous research to convey their message quickly, clearly, and efficiently, to communicate the necessary information while minimizing the extent of the distraction. Commercial signs, including on- and off-premise signs, do not contribute to driving safety by providing necessary warning, regulatory, or advisory messages, and thus the distraction that they cause cannot be "offset" by the same need that

these official signs fulfill. In addition, advertising signs are typically not designed to convey their message quickly, clearly, and efficiently – in fact such signs often present messages with difficult to read text or script, color combinations and contrasts that make easy reading difficult, and too much information for simple reading. They operate this way to keep the motorist's eyes on the sign for an extended period of time. Many jurisdictions, worldwide, place limitations on the time, place, and manner of display by outdoor advertising signs because of the excessive demands on the driver's attention that they present. That Adams uses its digital billboards for displays of information such as "election results and messages furthering the mission of certain non-profit organizations," and "notification of community events" points to a display that may have all of the negative characteristics discussed above, without a contribution to communicating necessary roadway and safety information.

Para 43. Owners of billboards, and particularly DBBs, often seek to raise the structure or build a new structure to unnecessary heights because they want their sign to be visible to motorists from greater distances, and, therefore, for a longer time. But this adds to driver inattentiveness to the driving task. In the case of DBBs, which change their display (typically) every 6-8 seconds, additional height adds to the distraction by presenting the motorist with additional changes of brightness, color, and message; and by contributing to the Zeigarnik effect, in which the motorist remains fixated on the billboard to learn what the next message will be, to a greater extent than would be the case if the sign were not so tall.

Para. 80. "Advertising Signs" in the Ordinance and its December 2017 amendment may display commercial or non-commercial messages, AMBER Alerts and other emergency communications, community and non-profit organization messages, etc. The Ordinance's restriction on Advertising signs serves the City's stated interest, that of traffic safety, and this is supported by the preponderance of peer-reviewed research studies conducted during the last decade.

Para. 84 –Regulations regarding size, setbacks, height, and location are independent of content and have been an accepted means of regulating sign for decades.

Para. 86 – There is a clear, justifiable reason in the Ordinance as amended for the strict regulation of "Advertising Signs." This reason is the promotion of traffic safety.

Para. 89. There is a compelling interest behind the amended Ordinance's regulations regarding "Advertising Signs" and "signs containing commercial messages," and that compelling interest is the promotion of traffic safety.

## CONCLUSIONS

In conclusion, based on my experience and the research that I have reviewed and conducted, it is my opinion that signs addressed in the Sign Control Ordinance, particularly Advertising Signs, and Digital Image Signs, but also including, but not limited to Portable Signs and Inflatable Signs present traffic and pedestrian safety concerns that are currently being reduced through regulation. Such concerns include pedestrian and driver inattention and distraction, visual glare and difficulty reading due to image blooming, and mimicking and blocking the view of official traffic control devices.

As summarized in the bullet points above, it is my opinion that the City's Sign Control Ordinance directly and appropriately addresses the City's stated purposes with regard to pedestrian and vehicular safety.

It is also my opinion that, as expressed in the bullet points above, there is a good and appropriate fit between the manner in which the City regulates, not only Advertising Signs and Digital Image Signs, but also Portable Signs and Inflatable signs, and the purposes the City seeks to achieve of furthering the goals of vehicular and pedestrian safety.

# Empirical Evaluation on Driving Simulator of Effect of Distractions Inside and Outside the Vehicle on Drivers' Eye Behavior

Drivers between the ages of 16 and 17 who have held their intermediate license for six months or less are at a greatly elevated risk of crashing. Distraction is thought to be a major cause of this increased risk. Recent naturalistic and field studies of more experienced, older teen drivers (18 and 19) indicate that they are more likely to glance away from the forward roadway for an extended period of time than more experienced drivers. However, no studies have directly compared the extended glance durations away from the forward roadway of newly-licensed and older drivers when performing distracting tasks inside and outside of the vehicle. In order to understand the effect that in-vehicle and outside-the-vehicle distractions have on the glance durations away from the forward roadway of newly-licensed drivers, both newly-licensed and experienced drivers were asked to navigate a virtual roadway and at various points perform tasks inside and outside the vehicle. All drivers' eye movements were tracked. Several measures indicated that the newly-licensed drivers looked away from the road for extended periods of time much more than the experienced drivers when performing the in-vehicle tasks. For example, in 55% of the in-vehicle tasks, the newly-licensed drivers looked away at least once for more than two seconds, whereas the experienced drivers did so in only 23% of such tasks. However, there was virtually no difference between the newly-licensed and experienced drivers on this and other measures during the outside-the-vehicle tasks.

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# Conflicts of interest: The implications of roadside advertising for driver attention

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## Abstract

There is growing concern that roadside advertising presents a real risk to driving safety, with conservative estimates putting external distractors responsible for up to 10% of all road traffic accidents. In this report, we present a simulator study quantifying the effects of billboards on driver attention, mental workload and performance in Urban, Motorway and Rural environments. The results demonstrate that roadside advertising has clear adverse effects on lateral control and driver attention, in terms of mental workload. Whilst the methodological limitations of the study are acknowledged, the overriding conclusion is that prudence should be exercised when authorising or placing roadside advertising. The findings are discussed with respect to governmental policy and guidelines.

## Keywords

Driving; Distraction; Attention; Mental workload; Advertising; Simulator

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# Influence of Billboards on Driving Behaviour and Road Safety

Gitelman V., Zaidel D., Doveh E.

Haifa, April 2010

## ABSTRACT

Advertising billboards placed at roadsides are designed to draw drivers' attention, and therefore might distract drivers' from the primary driving task, detract from their vehicle control performance and, consequently, lead to road crashes. In recent years the issue of roadside advertising has gained headlines in Israel, because of the increasing prevalence of billboards and due to the public debate with respect to the proposed signposting law of 2006. Following discussions in the Israeli parliament and the decision of the Court in 2008, the placement of billboards adjacent to the Ayalon Highway was forbidden (and existing billboards had to be covered or removed). Therefore, a rare research opportunity presented itself, namely, a comparison of road crashes in two periods – with and without roadside advertising billboards.

The present study includes two parts. A literature review focusing on a quantitative summary of previous studies on the effect of roadside advertising and road safety, and an analysis of the impact of advertising billboards adjacent to the Ayalon Highway on the occurrence of crashes on that highway. A third part of the research program was to develop a real-time measurement method for assessing the impact of billboards on traffic and driver behavior. A field test of the method at a signalized junction encountered technical difficulties and was not completed.

The literature survey shows that both early and recent studies found a negative impact of advertising billboards on safety. However, a critical analysis of the studies reveals that many studies were not methodologically adequate. Recent studies were more rigorous, and while the findings were also in the same direction, the results were often not statistically significant.

Quantitative weighted estimates of the impact of billboards on road accidents (meta-analysis) agreed with previous findings of a generally negative impact. However, the values of the estimated impacts should not be taken at face value. It is advisable not to use them as firm estimates of the expected percentage change in road accidents as a result of placing billboards.

The behavioural research on billboards is more conclusive. Advertising billboards have a negative effect on road safety, as they interfere and distract drivers' attention from the primary task of driving. Laboratory experiments, including simulator studies, have shown deteriorating driving performance in the presence of advertising billboards and messages, especially dynamic advertising media. However, the findings of field studies do not provide consistent evidence for the negative effects of billboards on driver behavior.

Nevertheless, quantitative findings such increased frequency and duration of glances in the direction of dynamic billboards, support the possibility that such attention demanding advertising might, in complex or unexpected traffic situations, prolong drivers' response time, cause drivers to miss an event requiring a response, or cause a reaction that is not appropriate to the situation.

Reviews of billboard advertising were conducted in many countries in support of setting policies about roadside advertising. Our review of policies found that most of the rules and regulations on the subject function to limit the use of advertising signs (including billboards), essentially in two ways: (a) restriction / prohibition of the use of advanced advertising media that attract significant driver attention; (b) the prohibition / restriction of posting advertising signs at critical roadway locations, such as in the branching / weaving areas where advertising signs would harm visibility / conspicuity of critical traffic control devices.

The accident analysis in this study examined the influence of billboards on accidents occurrence on the Ayalon Highway in Tel Aviv metropolitan area. Two periods were compared: "before" - when the billboards were present along the roadside (years 2006-2007) and "after" - when the billboards were covered (2008). The accident database that was used in the analysis was derived from the “Incidence Logbook” maintained by the Traffic Control Center of Ayalon. This digital record contains all crashes (with and without injury) taking place on the highway, regardless of police involvement. Therefore, the accident database is much larger than he corresponding “official record” based on police reported injury crashes. The Ayalon TCC also monitors traffic volumes, data we used in the analysis.

The analyses compared the number of accidents at treatment sections, where billboards were posted adjacent to the road, with a control group that included the remaining road sections. Interchange (exit & entry) areas were excluded as billboards are not allowed there. The analyses considered various accident classes, including: (1) All accidents at all levels of severity; (2) Damage Only accidents; (3) Injury accidents, including fatal; (4-5) Accidents with casualties by day and night; (6-7) Accidents with casualties on weekdays and on weekends. Two types of models were fitted to the accident series: model 1 with traffic volumes as an explanatory variable, and model 2 without traffic volumes.

The results indicated a general reduction in accidents on the Ayalon Highway following the removal of billboards. In most comparisons the downward trend was larger in the Treatment sites compared with Control sites sections. Significant effects were found for All crashes and for Injury accidents. The effects for Damage accidents were not significant. The models with traffic volumes and without it gave similar results.

Due to reservations which are noted in the report regarding the data, the uniqueness of the Ayalon Highway and the Treatment characteristics, it is recommended not to attach undue weight to the (relative large) derived statistical value for the percentage reduction in accidents following the removal / cover of advertising billboards. However, the downward trend in accidents in the “after“ period was robust and consistent, in all examinations, particularly for injury crashes. Therefore we can conclude that under Israeli road conditions, there is empirical evidence of a link between the removal of advertising signs and the improvement of road safety on an urban / suburban highway.

Since the completion of the study, the moratorium on displaying advertising billboards on the Ayalon Highway was lifted. This new situation provides another research opportunity, to compare a set of three periods- the same road sections ‘with billboards’, ‘without’, and ‘with’ again.

Table shows Database of crashes for model testing.

| | | | Controls, inter-changes | | Control sections away from interchange | | | | Low density treatment sections | | | M density treatment sections | | H sign density treatment sections | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Grand Total | Total control group | **Total treatm't group** | C6 | C5 | C4 | C3 | C2 | C1 | DE_S | CD_S | BC_S | JY_N | EF_N | DE_N | CD_N | BC_N | Crash type | year |
| 955 | 849 | **106** | 65 | 417 | 57 | 66 | 130 | 114 | 13 | 8 | 3 | 10 | 8 | 40 | 21 | 3 | All | 2006 |
| 952 | 857 | **95** | 77 | 461 | 55 | 58 | 100 | 106 | 8 | 10 | 6 | 16 | 8 | 17 | 25 | 5 | crashes | 2007 |
| 890 | 825 | **65** | 48 | 367 | 88 | 69 | 149 | 104 | 7 | 7 | 3 | 3 | 7 | 12 | 20 | 6 | | 2008 |
| 670 | 605 | **65** | 41 | 304 | 37 | 45 | 98 | 80 | 7 | 3 | 0 | 4 | 8 | 26 | 16 | 1 | DMO | 2006 |
| 650 | 591 | **59** | 48 | 319 | 37 | 47 | 66 | 74 | 5 | 6 | 3 | 10 | 6 | 11 | 15 | 3 | | 2007 |
| 615 | 567 | **48** | 32 | 251 | 57 | 51 | 102 | 74 | 6 | 5 | 3 | 3 | 4 | 10 | 13 | 4 | | 2008 |
| 280 | 240 | **40** | 23 | 110 | 20 | 21 | 32 | 34 | 6 | 5 | 2 | 6 | 0 | 14 | 5 | 2 | Injury | 2006 |
| 297 | 262 | **35** | 28 | 140 | 18 | 11 | 33 | 32 | 3 | 4 | 3 | 5 | 2 | 6 | 10 | 2 | crashes | 2007 |
| 272 | 255 | **17** | 16 | 114 | 30 | 18 | 47 | 30 | 1 | 2 | 0 | 0 | 3 | 2 | 7 | 2 | | 2008 |
| 5 | 4 | **1** | 1 | 3 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 0 | Fatal | 2006 |
| 5 | 4 | **1** | 1 | 2 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | 1 | 0 | 0 | 0 | 0 | crashes | 2007 |
| 3 | 3 | **0** | 0 | 2 | 1 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | | 2008 |

Treatment effect (removing billboards during 2008) was assessed by comparing crash numbers “after” and “before” while considering changes in the control sites, which provide estimate for the expected changes in the treatment group even without the intervention of removing the billboards. Other variables considered in the models were monthly traffic volumes at sites, seasonal effects, day / night, week / w-e, and billboard density.

The analysis is essentially fitting regression models to explain differences in monthly series of crashes at treatment and control sites.

Billboard density level, day /night, week / weekend had no significant effect in models. Model 2 without traffic volumes gave similar results as model 1 that included volumes. Below translated excerpt from the 20 pp + appendix, of stat analysis.

[Recently (end of 2012) we were asked by the Road Safety Authority to propose a re-evaluation of the impact of Billboards along the Ayalon with the added condition of the “return of the billboards”, which occurred overnight in August 2009. The proposal is still under consideration.]

Results of Model1 for all crashes

| Solutions for Fixed Effects | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Effect | y8 | t_c | mon | Estimate | Standard Error | DF | t Value | Pr > \|t\| |
| Intercept | | | | -14.2301 | 2.9570 | 100.4 | -4.81 | <.0001 |
| Lv | | | | 1.1848 | 0.2606 | 100.3 | 4.55 | <.0001 |
| y8 | 0 | | | 0.3834 | 0.1907 | 115.1 | 2.01 | 0.0467 |
| y8 | 1 | | | 0 | . | . | . | . |
| t_c | | 0 | | 0.7449 | 0.2112 | 108.6 | 3.53 | 0.0006 |
| t_c | | 1 | | 0 | . | . | . | . |
| y8*t_c | 0 | 0 | | -0.5152 | 0.2177 | 115.4 | -2.37 | 0.0196 |
| y8*t_c | 0 | 1 | | 0 | . | . | . | . |
| y8*t_c | 1 | 0 | | 0 | . | . | . | . |
| y8*t_c | 1 | 1 | | 0 | . | . | . | . |
| mon | | | 1 | 0.1318 | 0.1679 | 305.2 | 0.78 | 0.4332 |
| mon | | | 2 | -0.02079 | 0.1816 | 342.9 | -0.11 | 0.9089 |
| mon | | | 3 | 0.009715 | 0.1806 | 335.1 | 0.05 | 0.9571 |
| mon | | | 4 | -0.3138 | 0.1972 | 332.3 | -1.59 | 0.1126 |
| mon | | | 5 | -0.09891 | 0.1857 | 332 | -0.53 | 0.5946 |
| mon | | | 6 | -0.2591 | 0.1939 | 331.8 | -1.34 | 0.1824 |
| mon | | | 7 | -0.2057 | 0.1904 | 331.7 | -1.08 | 0.2807 |
| mon | | | 8 | -0.1252 | 0.1869 | 332.7 | -0.67 | 0.5034 |
| mon | | | 9 | -0.03311 | 0.1830 | 336.5 | -0.18 | 0.8566 |
| mon | | | 10 | -0.3614 | 0.1990 | 344 | -1.82 | 0.0703 |
| mon | | | 11 | 0.1878 | 0.1619 | 245.3 | 1.16 | 0.2472 |
| mon | | | 12 | 0 | . | . | . | . |

estimates

| Label | Estimate | Standard Error | DF | t Value | Pr > \|t\| | Alpha | Lower | Upper |
|---|---|---|---|---|---|---|---|---|
| Model coeffi $\beta_{Y8\_t\_c}$ | -0.5152 | 0.2177 | 115.4 | -2.37 | 0.0196 | 0.05 | -0.9464 | -0.08388 |

| statistic | Mean % | Confidence range at 95% |
|---|---|---|

| *statistic* | *Mean %* | *Confidence range at 95%* | |
|---|---|---|---|
| *Net % change in crashes at treatment section after controlling for change at control sites* 1 | 60 | 39 | 92 |

Estimates for # crash savings at treatment sites

| # | section | mean | Confidence range at 95% | |
|---|---|---|---|---|
| 1 | BC_N | 4.2 | 0.8 | 6.3 |
| 2 | BC_S | 2.0 | 0.4 | 3.1 |
| 3 | CD_N | 10.5 | 2.1 | 15.9 |
| 4 | CD_S | 10.2 | 2.0 | 15.5 |
| 5 | DE_N | 10.7 | 2.1 | 16.2 |
| 6 | DE_S | 9.6 | 1.9 | 14.6 |
| 7 | EF_N | 4.3 | 0.9 | 6.5 |
| 8 | JY_N | 3.7 | 0.7 | 5.7 |

Overall crash savings for all sites

| *statistic* | *value* |
|---|---|
| Mean # | 55.2 |
| lower limit | 11.0 |
| upper limit | 83.8 |

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# The role of roadside advertising signs in distracting drivers

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ABSTRACT

Driving is getting more complex by the time due to distraction factors inside and outside the motor vehicle. One of the major external distraction causes is roadside advertising signs. This study aims at assessing the effects of these signs on driving performance on a simulator and drivers' opinion on the distraction caused by such signs using a questionnaire. Twelve volunteers participated in the driving simulator part of this study on two identical paths with one difference. One had roadside advertising signs and one had none. Driving simulator results revealed that two driving performance indicators, drifting from lane and recklessly crossing dangerous intersections, were significantly worse in the path with advertising signs as compared with performance on the other path. The other three performance indicators (number of tailgating times, over-speeding and turning or changing lanes without signaling) were also worse in the presence of advertising signs but the difference was not statistically significant. 160 drivers responded to the questionnaire. Half of the respondents indicated being distracted at least once by roadside advertising signs. Moreover, 22% of them indicated being put in a dangerous situation due to distraction caused by such signs.

*Relevance to industry:* In light of the results, practical suggestions are made as to the positioning of these advertising signs and the need for more research in this area.



## 1. Introduction and background

Driving is becoming more and more complex with the advancement of electronic equipment found in the car like mobile phones, radios, CD players and GPS devices. Other voluntary tasks like eating, drinking and talking to passengers while driving also add to this complexity. All of these distraction factors add to the cognitive load exerted on drivers inside the car.

One of the objectives of ergonomics is to ensure that the design of a human-machine system does not exceed the information processing capacity of human beings (Kolich and Wong-Reiger, 1999). Accordingly and optimally, the amount of information presented to drivers, including all distractions, should not exceed their information processing capacity. Driver distraction is not just related to what is happening inside the vehicle. Distraction caused by aspects of the road environment is also a major issue. In a worldwide trend, the amount of visual information presented to drivers is increasing and roadside advertising signs are a major source of that information overflow (Birdsall, 2008).

In this current study, roadside advertising signs refer specifically to electric signs (which are illuminated by internal lights), animated signs (which refer to any sign that moves or gives the effect of a moving display), banners (which are portable signs usually made of fabric), shop fronts, billboards (that consist of a number of standard-sized poster panels) and changing message signs (which are animated signs consisting of messages changing in sequence). These signs can be located within the road boundaries, on private property near the road or mounted on vehicles. Roadside advertising signs do not include road signs aiming to give drivers information or warnings about road status or directions.

Roadside advertising signs can affect drivers by:

- Directly distracting or confusing them while driving.
- Indirectly distracting drivers from the driving task by moving or giving the appearance of motion.
- Taking drivers' eyes off the road, which will give them a slower reaction time to road hazards.
- Obstructing visibility, e.g. at intersections or driveways.
- Presenting a physical obstruction to vehicles moving (Andreassen, 1990; Wallace, 2003).
- Diverting their attention from important roadside warning signs (Lehto, 1992) which might, in turn, put them and other road users at risk.

Distraction caused by these signs have the potential to disturb drivers' eye fixation on the road, lead to deterioration in driving

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performance, affect drivers' reaction time and quality and diminish their ability to make the right decision when faced with driving hazards (Birdsall, 2008; Wallace, 2003).

The optimum positioning of roadside advertisements is recognized by the advertising industry as an important factor in attracting the attention of passing drivers. This industry kept improving its techniques aiming for grapping driver's attention with no care for advertisement signs potential role in distracting drivers (Birdsall, 2008; Crundall et al., 2006; Underwood, 2007).

In a comprehensive study, Stutts et al. (2001) assessed official accident data published in the USA between 1995 and 1999. The authors found a strong correlation between distraction and advertisement signs. Out of drivers who were involved in crashes in these five years, 48.6% indicated that they were paying attention to driving at the time of their crash, 8.3% said they were distracted by foreign objects (including signs), 5.4% said that they "looked but did not see" and 1.8% were identified as sleepy or asleep.

Smiley et al. (2005) assessed traffic safety impact of video advertising signs in a series of studies involving three Toronto downtown intersections and an urban expressway site. An on-road eye fixation study was conducted to determine if drivers look at video advertising signs and a conflict study was conducted to determine if there were more conflicts on intersection approaches with visible video advertising signs than on those without such signs. Also, a before-and-after sign installation study of headways and speeds on an urban expressway was carried out and accidents before and after sign installation at the expressway and the three intersection sites were compared. Finally, a survey was conducted to assess drivers' perception of any effect of roadside video advertising on traffic safety. The eye fixation study and the public survey data showed that video advertising signs can distract drivers and lead to traffic accidents. However, evidence from other studies was inconsistent and indicated that for the particular signs studied, overall impact on traffic safety were small. Finally, the authors suggested that further studies are required to determine factors that minimise driver distraction.

Crundall et al. (2006) compared two different advertisement types in different conditions and measured eye movement and eye fixation of drivers through driving videos. This was done by measuring how long the eye was fixed on a certain advertisement sign which participate in distracting them from hazards. The two types of advertisement were SLA (short level advertisement) and RLA (raised level advertisement). There was also one test with no signs. An eye movement was recorded at 250 Hz using SMI eyelink system which counts the eye fixation spot and time. The authors found out that SLAs received most fixations when participants were solely looking for hazards, and the fewest fixations when primed to look for advertisements. SLAs also had longer fixations than the RLAs.

In a similar study, Beijer et al. (2004) assessed the difference in glance behaviour of drivers between active (i.e. with movable displays) and passive signs. The authors found that active signs attracted significantly more glances from drivers and for significantly longer durations.

Results of studies mentioned earlier strengthen the argument that advertising signs have the potential in distracting drivers and affecting their driving performance. A great amount of information presented to drivers is anticipated to lead to slower comprehension of important road signs and warning. This in turn may jeopardise driving safety (Liu, 2005). However, not enough research has been done up to date that assessed specifically the possible effects of all roadside advertising signs on drivers' attention (Birdsall, 2008; Wallace, 2003). This study aims to determine if the existence of roadside advertising signs constitute a road hazard by assessing any possible effects of such signs on driving performance on two simulated paths, one with advertising signs and one without. It also aims at exploring drivers' opinion on this issue using a questionnaire. It is anticipated that findings of this study will help in determining ways to minimise the risk of sings in distracting drivers.

## 2. Methodology

Distraction issues are blurry and cannot be directly measured. What is apparent in distraction is the effect of distraction on driving performance. One of the ways to measure this performance is by simulating driving and assessing drivers' performance on a driving simulator (Horberry et al., 2006; Ting et al., 2008) which constitutes the first part of this study. Another way is to explore drivers' opinion on this issue through a questionnaire which constitutes the second part of the study.

### 2.1. Driving simulator

#### 2.1.1. Technical information

The driving simulator used in this study is a new SSI S-2300 Interactive Modular Driving Simulator. It consists of three large 1024 × 768 pixels screens that give a 175° virtual driving environment, a real-life steering wheel and real-time brake and gas pedals. The simulator has both manual and automatic transmission options. The latter one was used in this study.

The driving environment and driving conditions are predetermined by the researcher with many driving scenarios and hazards (including advertisement signs) to choose from. After the setup is done, the screen is programmed to follow the driver's orders. The simulator follows real-life traffic laws and allows choosing among the following environmental and traffic conditions:

1. Rain: no rain, rain, heavy rain
2. Fog: no fog, medium fog, heavy fog
3. Time: day, night
4. Traffic volume: no, low, medium, heavy traffic
5. Road type: lighted road, highway (without traffic lights)

After the driving session finishes, the simulator gives information on the session like session duration, occurrence of accidents (if the driver crashes into any surrounding object) and the following driving performance indicators:

1. Number of tailgating times
2. Number of overspeeding occurrences
3. Number of times the car drifted from lane
4. Number of times of not signaling when passing other cars or turning
5. Number of times of crossing recklessly dangerous intersections

#### 2.1.2. Participants

Twelve male volunteers between the age of 23 and 28 years participated in this study. As participation rate of male drivers in accidents is significantly more than female drivers (Salminen, 2000), it was thought that choosing only male participants would reflect real-life scenarios in a better way.

All of the participants indicated having more than five years of driving experience and that they drive their cars on a daily basis. These conditions for inclusion in this study were put in order to minimise differences between subjects. All of them were either university graduates or finishing a university degree soon. As was the case in other laboratory-based experiments (see, for example, Lai and Huang (2008)) and to prevent the results from being

affected by abnormal visual acuity, the participants were required to have good eye sight or to wear glasses if they were shortsighted.

Each one of the participants took part in this study alone over two consecutive workdays. As a result, the data collection process took 24 workdays to finish. Subjects were not given any information on the specific aim of the study because telling them ahead might have let them to pay more attention to advertising signs.

On the first day, the participant was briefed about the simulator and was asked to test drive the simulator for at least 1 h. On the second day, he was asked to drive on two simulated driving conditions, one with roadside advertising signs and one without such signs. Participants were given a 15-min rest break between the two sessions. The sequence of this condition (i.e. with or without signs) was chosen randomly. Driving performance indicators were recorded in both conditions.

#### 2.1.3. Data collection

Two 9.3-km long paths have been carefully chosen for this study. Both were 3 lanes wide and had 6 intersections. Both paths also had similar external conditions in terms of daytime, number of bends, road width, medium traffic volume, with traffic lights and with no rain or fog. One path had no advertisement signs and the other had advertisement signs. To determine the density of advertising signs on the simulator, a pilot study was done on five randomly chosen roads in commercial/residential suburbs of the city of Riyadh (with a population of 5 million) to determine their advertising sign density. The average sign density on these five roads was found to be 49 signs/km. Then the path with advertising signs on the simulator was chosen with a more conservative sign rate of 36 signs/km. Both paths had regular road signs and real-life traffic regulations (like stopping on red lights, abiding by speed limits, etc.) applied in any urban road.

Both temperature and humidity were kept constant at 23 °C and 15% respectively throughout all driving sessions on the simulator. This was necessary in order to minimise any effects of environmental factors on the performance of participants.

#### 2.1.4. Data analysis

The hypotheses to be tested for each of the five performance indicators were as follows:

$$H_0 : \mu_1 = \mu_2$$

$$H_1 : \mu_1 > \mu_2$$

where $\mu_1$ is the average performance indicator in the path with advertisement signs, and $\mu_2$ is the average performance indicator in the path without advertisement signs.

To test $H_0$ for each performance indicator, a paired $t$-test was done. A significance level of $\alpha = 0.05$ was employed in this study.

### 2.2. Questionnaire

#### 2.2.1. Contents

Roadside advertising signs issue has been studied in a simulated environment in the first part of this study. Nevertheless, it is important to explore the public's experience and opinion on this issue and if drivers perceive such signs to be a form of distraction on the road.

The questionnaire consisted of four simple questions enquiring about the age of the respondent (driver), if the respondent pays attention to roadside advertisement signs, if these signs distract respondent's attention and if such signs have ever put the respondent in a dangerous situation by distraction.

As driving experience was found to have very high correlation (0.87) with age among 1248 drivers in Riyadh in a study by Bendak (2007), the number of years of driving experience was not asked in the questionnaire.

#### 2.2.2. Data collection and analysis

The questionnaire was distributed randomly in the city of Riyadh to male drivers approached in public places (like shopping centres, universities, sports venues, etc.). Only drivers who reported driving on a daily basis were asked to respond to the questionnaire. A total of 160 valid questionnaires were returned. Simple comparative statistics and cross-tabulations were generated from questionnaire answers.

## 3. Results and discussion

### 3.1. Simulator study

In Table 1, the mean and standard deviation of the five performance indicators are given for both driving sessions (with and without advertising signs) as well as the $p$-value of paired $t$-test done on each performance indicator. Average driving session duration was 12.83 min in both cases meaning that the presence of advertising signs did not affect the driving speed of participants. There were no accidents recorded on any path.

As can be seen in Table 1, two out of the five indicators were statistically significant. Both drifting unnecessarily from lane and recklessly crossing dangerous intersections were statistically significant with $p < 0.01$.

Driving in lane (between the two lines) and not drifting from lane requires continuous eye-hand steering coordination. In this current study, swinging and drifting from lane in the presence of advertising signs is a strong indication of how such signs distract drivers and affect their performance.

The other significantly affected indicator (recklessly crossing dangerous intersections) also indicates the loss of this fine coordination between paying attention and driving. This can be reasonably attributed, as indicated by Birdsall (2008) and Wallace (2003), to the longer reaction time needed in the presence of hazards due to being distracted.

Moreover and as also can be seen in Table 1, drivers' performance on all of the remaining three indicators were worse with the presence of advertising signs. Number of tailgating times, overspeeding and turning or changing lanes without signaling were more with the presence of advertising signs than when no such signs were present. However, these differences were not statistically significant.

**Table 1**
Results of performance indicators and the corresponding $t$-test results.

| | | Tailgating times | Overspeeding occurrences | Drifting from lane | Not signaling | Recklessly crossing dangerous intersections |
|---|---|---|---|---|---|---|
| Without advertising signs | Mean | 1.08 | 1.25 | 1.08 | 0.75 | 1 |
| | St dev | 0.79 | 0.76 | 0.67 | 0.75 | 0.52 |
| With advertising signs | Mean | 1.33 | 1.5 | 2.17 | 1 | 1.58 |
| | St dev | 0.88 | 0.90 | 0.91 | 0.61 | 0.9 |
| $p$-value | | 0.14 | 0.19 | 0.00 | 0.21 | 0.00 |

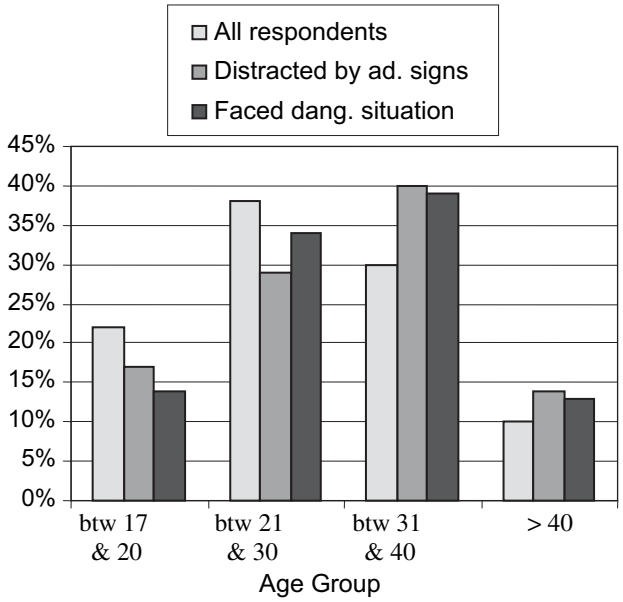


**Fig. 1.** Age distribution of all respondents (total = 160), of those who indicated being distracted by advertising signs (total = 80) and those who faced a dangerous situation due to these signs (total = 35).

Overall, results of the simulator study indicate that advertisement signs create a potential risk factor by distracting drivers off their original task which is driving. This can be seen in the consistent drop in performance in all indicators with the presence of advertising signs.

### 3.2. Questionnaire

The average age of respondents was 27.8 years with a standard deviation of 7.3. Those between the ages of 17 and 20 years constituted 22% of respondents, between 21 and 30 constituted 38%, between 31 and 40 constituted 30% while those more than 40 years old were 10% of respondents.

Out of the 160 respondents to the questionnaire, 124 respondents (77.5%) indicated paying attention to advertising signs and 80 respondents (50%) said they have been distracted at least once by these signs. Finally, 35 respondents (22%) reported having been in a dangerous situation at least once due to being distracted by advertising signs.

Percentage distribution of respondents' age groups who indicated being distracted by advertising signs and those who faced a dangerous situation due to these signs are shown in Fig. 1.

As is clear in Fig. 1, respondents above the age of 30 are overrepresented among those who indicated being distracted by advertising signs as well as those who reported being in a dangerous situation due to distraction by advertising signs at least once. One possible scenario for explaining this overrepresentation of older drivers being distracted by advertising signs as compared to younger (less experienced) drivers is that younger ones try to concentrate more on the road path while more experienced drivers have higher self-confidence and feel more comfortable scanning the road. This was also highlighted by Underwood (2007) who found that older more experienced drivers have a significantly better visual scanning of roadways than younger less experienced drivers.

## 4. Conclusions and recommendations

The outcome of this study indicates that certain driving performance indicators on a driving simulator are affected by roadside advertising signs. Moreover, half of the drivers surveyed using the questionnaire reported being distracted at least once by those signs while 22% of them indicated being put in a dangerous situation at least once due to being distracted by those signs.

Results of the present study indicate clearly that advertising signs have the potential of distracting drivers. It is recommended here that relevant government agencies ban such signs in places where maximum attention is required by drivers like, for example, in dangerous bends, areas where high accident rates are recorded (i.e. black spots) and intersections. Such areas should not have advertising signs in order to allow drivers pay full attention on driving and on-road signs giving information or warnings about road status or directions, as also postulated by Leonard (1999). Finally, more research is necessary to determine reasonable position and density of advertising signs in other areas that will cause minimum interference with the driving task and less distraction.

## Acknowledgment

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# Studies Raise Safety Questions about Distractions from Digital Billboards

Highways Traffic Safety

JUNE 15, 2016 | JERRY WACHTEL

Roadside billboards have been a part of the American landscape for as long as there have been American roads. Yet today, new technology has updated these icons from static signs to bright, active, frequently-changing message boards that negatively impact traffic safety.

The evidence comes from an extensive review of research showing that digital billboards are more distracting than traditional signs, and that driver attention is particularly captured by changes between advertisements, which typically occur every six or eight seconds. For example:

- A 2015 study of eighteen digital billboard locations on highways found higher crash rates at sites near digital billboards than those further away. These sites in Florida and Alabama showed a 25 and 29 percent higher crash rate, respectively. A disproportionate number were rear-end and sideswipe collisions, both typical of crashes caused by driver distraction.

- A 2016 study from the Massachusetts Institute of Technology found that drivers may be unwittingly compelled to look at digital billboards during changes from one advertisement to the next. The report states "it is likely that drivers find it nearly impossible to avoid a glance to digital billboards during switches between advertisements."

- In Israel, a 2010 study was performed comparing crashes along a highway before and after billboards were covered (due to a court order) and found a 30-40 percent drop in injury and fatal accidents. A follow-up study (in publication) on the same highway found that such crashes increased by up to 50 percent when the billboards were exposed again.

- In Denmark, a sophisticated 2013 on-road study showed that "advertising signs affect driver attention to the extent that road safety is compromised." In 22 percent of test drives, the total glance duration to billboards was two seconds or longer, while in 20 percent of all cases, the "safety buffer" to the vehicle ahead was less than 1.5 seconds.

- Other recent studies, including an outdoor advertising industry-sponsored study in Australia, and a simulator-based study in South Dakota, have found significant problems with drivers drifting out of their lanes in the vicinity of digital billboards.

Despite this evidence, there is little attention being paid to the problem of distracted driving caused by digital billboards.

It is time to revisit a 2007 action by the Federal Highway Administration (FHWA) that first approved their use. Under this FHWA guidance, billboards changing as frequently as 20,000 times a day were declared to be not "intermittent" as long as they remained static for 4 seconds between display changes. Since this guidance was issued, approximately 7,000 digital billboards have been erected along our highways, often intentionally at the highest traffic and challenging roadway locations where such distractions can pose the greatest risks to safety.

While digital billboards may be succeeding in capturing driver attention, as they are designed to do, they represent a growing threat to traffic safety. In fact, despite the attention given to in-vehicle distractions (such as texting while driving), studies at the University of Massachusetts, Amherst suggest that outside-the-vehicle distractions such as billboards are of greater concern.

The Digital Billboards Subcommittee of the Transportation Research Board will soon issue a series of Research Needs Statements that address some of the most egregious aspects of digital billboards. But given the existing body of evidence, the U.S. Department of Transportation and state agencies should not wait to begin to work with advocates and constituency organizations on new guidance regarding the time, place, and manner of such displays.

The recent focus on the safety problems of in-vehicle driver distraction demonstrates appropriate leadership in response to a critical national problem. Let's hope that the compelling evidence from numerous studies in the U.S. and abroad about similar threats to traffic safety from digital billboard distractions will spur the federal and state governments to suspend the 2007 FHWA guidance and impose a moratorium on additional digital billboards. Doing so would be appropriate until there is sufficient evidence that restrictions on sign location, message duration,

and luminous intensity can and will be imposed on their operation to reduce the risks to traffic safety that have been indicated by so many studies.

*(Photo credit: New York Times)*

*Disclaimer: The views and opinions expressed in this article are those of the author and do not necessarily reflect the official policy or position of The Eno Center for Transportation.*

# A Peer-Reviewed Critique of the Federal Highway Administration (FHWA) Report Titled: "Driver Visual Behavior in the Presence of Commercial Electronic Variable Message Signs (CEVMS)"

**Prepared by Jerry Wachtel, President, The Veridian Group, Inc.**

**January 2015**

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## ABSTRACT.

On December 30, 2013, the Federal Highway Administration (FHWA) made available on its website, three interrelated documents concerning its recent research product about driver response to digital outdoor advertising: (1) a non-peer reviewed draft report, (2) the peer reviewers' comments to this report, and (3) a final report, described as peer reviewed, which was modified from the draft report, ostensibly to address the peer reviewers' comments. The present report, which was subjected to independent peer review, reviews these three FHWA documents, and concludes that the final report is seriously flawed due to confounding methodological issues, substantive factual discrepancies between the draft and final reports, failure to incorporate advances in the state of knowledge in the field from recent research, serious oversights in experimental procedures, and significant equipment constraints. In the opinion of the present author, the FHWA final report does not justify the conclusions as stated, and should not be accepted as an answer to the ongoing and important question of whether contemporary digital billboards contribute to driver inattention and distraction to the extent that traffic safety may be compromised. The present report calls on the FHWA authors to explain and justify their findings and conclusions, and the methods employed to achieve them; and it recommends that State and local governments, and private roadway operators, charged with regulating digital billboards within their jurisdictions, adopt a cautious and conservative approach to digital billboard control and regulation until such time as a definitive study is available.

## FORWARD.

It is not an exaggeration to state that the origins of this Federal Highway Administration (FHWA) report date back more than 30 years. In the late 1970s, the predecessors to today's digital billboards were first coming into wide-scale commercial application. Until then, changeable message signs had been largely confined to "time and temperature" messages that most commonly appeared on banks. But with the growth of color capability, remote programming, and (crude) graphical images, such signs began to appear at shopping malls, automobile dealerships, airports, and performing arts centers, to name a few. The Highway Beautification Act (HBA), when drafted in 1965, and modified some years later, had not contemplated the roadside presence of advertising signs that could quickly and effectively change their message, imagery, color, or brightness. The Office of Right-of-Way (ROW) of the FHWA was charged with regulating off-premise signage under the HBA, but was in the dark about how this new technology should be treated. Accordingly ROW turned to FHWA's Office of Research (RES) and asked for help in identifying the safety and environmental concerns, if any, that such signs posed. As the Director of FHWA's Highway Aesthetics Laboratory within RES, the task fell to me and to my colleague, the late Dr. Ross D. Netherton, to develop and conduct the requested research study. We quickly found that, because this digital billboard technology was so new, there had been little research conducted about its potential impacts. The few exceptions varied greatly in their experimental and statistical rigor and, accordingly, in their findings. As a result, we were forced to go back to *all* of the research literature that dealt with roadside advertising from the perspectives of safety, aesthetics, and highway investment. Indeed, we found and addressed relevant research dating back to 1934.

Our report (Wachtel J., & Netherton, RD, 1980) consisted of a critical review of the available literature, an assessment of the psychological, physiological, and human factors considerations posed by this technology, and an analysis of environmental, zoning, and legal practice relevant to the issue.

In the end, we concluded that although there was no consistent correlation between such signs and traffic safety, the more recent, better controlled research studies had begun to demonstrate a concern for driver inattention and distraction that could be attributed to these newer signs, which we called *Commercial Electronic Variable Message Signs,* or CEVMS. We identified a specific list of CEVMS-related issues that had the potential to cause concern, and we recommended that specific field research be undertaken to close our knowledge gap. To determine the feasibility of such field research, I led a small FHWA team that, in conjunction with the Maryland State Department of Transportation, conducted an on-road pilot test of driver and vehicle response to a typical CEVMS of the time. Our study utilized FHWA's then state-of-the-art Traffic Evaluator System (TES), and we had the luxury of designing and displaying our own messages on the sign. This pilot study proved successful, and, as a result, RES moved forward with a competitive procurement for the conduct of a full-scale study. As the designated Contract Manager (today COTR) for the research,

I prepared a Request for Proposals (RFP), chaired an FHWA-wide team that reviewed the submitted proposals, and ultimately identified the contractor of choice to conduct the research. The selected contractor was the late Prof. Helmut Zwahlen of Ohio University, one of the pioneers of in-vehicle, real-time driver eye tracking in the United States. Unfortunately, the funds for the project were cut just before the contract was to be signed, and the research was never performed.

It took 20 years for FHWA to return to the issue of CEVMS as a subject for its research, and the agency produced a report that it described as an "update" to our 1980 document (Farbry, et al, 2001). Although the technology of CEVMS had grown enormously by this time, and research was now being conducted into their safety consequences internationally, the new FHWA report again concluded that the research results were not consistent, and again recommended a series of research studies to answer the growing questions being raised about the safety of these signs. After a lapse of another six years, the agency initiated the first of what was contemplated to be a three-phase study (Molino, et al, 2009). I was brought on-board as a consultant to the study team, which was led by Dr. John Molino, of FHWA's in-house contractor, SAIC (now Leidos). This study laid the groundwork for Phase II, the actual data collection (and the subject of the present report). The research team designed a study remarkably similar to the one that had been proposed in 1980, of course with the benefit of 30 years of improvement in data collection, recording and analysis technology. The FHWA Contracting Officer's Technical Representative (COTR), Dr. Thomas Granda, described the logistical difficulties of the study by demonstrating that there were literally dozens of variables, and hundreds of combinations of sub-variables pertaining to CEVMS, *any one of which could have a measureable impact on driver response* (Granda, 2009). This list of variables was nearly identical to the one that had been defined in the 1980 report, including, but not limited to, those shown in Table 1.

**Table 1**

| |
|---|
| Billboard luminous intensity (brightness) |
| Billboard size |
| Billboard proximity to the travel lane |
| Length of message |
| Complexity of message |
| Size and font of message characters |
| Proximity to official traffic control devices |
| Proximity to roadway geometric design features (e.g. vertical and horizontal curves) |
| Proximity to other billboards |
| Complexity of the environment in which the billboard was located |
| Frequency of message change |
| Method by which message was changed |
| Traffic speed |
| Traffic density |
| Driver familiarity with the roadway and environment |

Dr. Granda pointed out a simple truth - one that was obvious to researchers, but perhaps not fully appreciated by the stakeholders interested in the outcome of this research – that it was realistically impossible to undertake a study that accounted for all of these variables, either through manipulating them, eliminating them, holding them constant, or controlling for them statistically. In short, Dr. Granda pointed out, the proposed study could address only the most basic number and level of variables, and the remainder would remain uncontrolled. It was determined by the research team that, if the Phase II study found that the basic CEVMS variables (e.g. size, luminance, placement, message change interval, etc.) could be shown to differentially impact driver response and performance, then a follow-up study (Phase III) would be done in a laboratory setting (i.e. a driving simulator) in which levels of these variables could be manipulated to learn which were the cause for concern.

Due to a series of problems with the relatively unproven vehicle-mounted eye-tracking technology being employed, actual data collection was delayed and the study ran over-budget. Because of concerns related to these issues, Dr. Molino left the project, and was replaced as Principal Investigator by Dr. William Perez, also of (then) SAIC. Soon thereafter, Dr. Granda retired from Government service, and his position as COTR was assumed by Dr. Christopher Monk, then of FHWA.

Unfortunately, for reasons never made public by FHWA, the original design intent of the study, to hold key variables (such as sign size and height, message duration, etc.) constant while carefully controlling for others, was not followed (Gramatins, 2010, Monk, 2010). The consequences of this action, and other failures discussed below, have resulted in a study final report that sheds little, if any, new light on this

important subject, and allows the reader to draw no conclusions about the potential safety impacts of these signs.

Since the report's issuance on the FHWA website on December 30, 2013, its availability has led to conflicting public statements by stakeholders, advocacy groups, and the popular press, to FHWA policy statements without scientific or research basis, and to growing legal challenges both for and against CEVMS throughout the country. The unfortunate irony of this is that State and local governments nationwide have waited anxiously for several years in the now lost expectation that the FHWA study would resolve the question of digital billboard safety for the benefit of all.

This brings us to the present report.

## ACKNOWLEDGEMENTS.

This document is my own work. No person or organization has suggested or requested that I write it. It was done on my own time, and at my own expense. It is based on my reading and interpretation of the FHWA Report titled: "*Driver Visual Behavior in the Presence of Commercial Electronic Variable Message Signs,*" dated September 2012 (unnumbered) but issued by FHWA on December 30, 2013, as well as the draft version of this report, dated March 2011 (numbered FHWA-HEP-11-014), and a summary of the peer reviewers' comments to this draft report dated May 16, 2011. All of the above materials were made available on the FHWA website on December 30, 2013, and can be accessed at: http://www.fhwa.dot.gov/real_estate/practitioners/oac/)

This report is further based on several earlier FHWA reports on this topic, as cited throughout this report.

Finally, this report is based on personal discussions that I have held with key personnel involved in several phases of the FHWA work, including: Mr. Janis Gramatins, Drs. John Molino, Thomas Granda, and Christopher Monk, and others within and outside the agency.

Although this report is my own work, and I am fully responsible for its contents and for any errors that may be present, I believe that the subject of digital billboards, and role played by the FHWA report in influencing the ongoing debate about such signs, was too important to rely upon my opinions and conclusions alone. Therefore, I reached out to professional colleagues, worldwide, all of whom have specific expertise in the fields of research needed to properly and objectively review the FHWA report (e.g. eye movement recordings, luminance measurement, instrumented vehicle studies, statistics) and asked them to review my report as well as the three FHWA documents issued by the agency in December 2013. Each of these subject matter experts performed their review on their own time and at their own expense. I gave them no guidance other than providing them with a simple suggested outline for their comments, and I promised them nothing more than that I would take their comments into account as I prepared a revised, now final, report.

I am grateful to all of the reviewers who gave of their time and effort to undertake this critical and valuable process. In Table 2 I have listed, in alphabetical order, the names, affiliations, and countries of those reviewers who provided peer review. Two reviewers asked to remain anonymous because they have, have had, or may have, relationships with FHWA that they did not want to risk. One individual declined to participate because of what he considered to be a perceived conflict of interest given ongoing work between his organization and the FHWA. In addition, one of the reviewers on this list was retained separately, and was offered an honorarium, to perform a broader independent review.

**Table 2 – Peer Reviewers of this Report**

- Anonymous, Ph.D., United Kingdom
- Anonymous, Ph.D., USA
- Christer Ahlstrom, Ph.D., The Swedish National Road and Transport Research Institute (VTI), Linkoping, Sweden
- Frank Berra, Manager, Network and Land Use Policy, VicRoads, Kew, Victoria, Australia
- John D. Bullough, Ph.D., Senior Research Scientist, Lighting Research Center, Rensselaer Polytechnic Institute, Troy, New York
- Barry A.J. Clark, Ph.D., Director, Outdoor Lighting Improvement Section, Astronomical Society of Victoria, Inc., Australia
- Jessica Edquist, Ph.D., Monash University Accident Research Center, Melbourne, Victoria, Australia
- Donald L. Fisher, Ph.D., Professor and Department Head, Mechanical and Industrial Engineering, University of Massachusetts, Amherst, Massachusetts
- Christian B. Luginbuhl, Ph.D., U.S. Naval Observatory Flagstaff Station, Flagstaff, Arizona (Retired)
- Marieke Martens, Ph.D., Professor, Centre for Transport Studies, University of Twente; Department of Traffic Behaviour, TNO Human Factors, The Netherlands
- Richard F. Pain, Ph.D., Senior Technical Coordinator, Transportation Research Board of the National Academies (Retired), Washington, DC
- Christopher Patten, Ph.D., Senior Research Fellow, Swedish Technical Research Institute (VTI), Borlang, Sweden
- Bryan Reimer, Ph.D., Research Scientist, MIT Age Lab Associate Director, New England University Transportation Center, Massachusetts Institute of Technology, Cambridge, Massachusetts
- Alison Smiley, Ph.D., President, Human Factors North, and Adjunct Professor, Department of Mechanical and Industrial Engineering, University of Toronto, Toronto, Ontario, Canada

Several additional individuals were unable to perform the requested review due to the press of other work or because they were on leave or sabbatical from their positions.

## BACKGROUND.

In 2009, nearly 30 years after a Federal Highway Administration (FHWA) report on CEVMS (Wachtel J. & Netherton, RD, 1980) recommended that the agency undertake a research study to examine the potential effects of such advertising signs on driver performance, such a study was begun by the FHWA's in-house contractor, Science Applications International Corporation (SAIC – now Leidos) (Molino, et al, 2009). In a report to the Transportation Research Board (TRB) Digital Billboards Subcommittee in January 2010, Gramatins, (2010) (the FHWA staff member who was the "customer" for the study), stated that the final report was expected to be issued three months later, by April 2010. One year later, at TRB's 2011 Annual Meeting, the FHWA COTR, who had agreed to present the final results of the study in a lectern session, was informed days prior to his scheduled talk that he could not do so, and offered instead essentially the same presentation that had been given a year earlier (Monk, 2010, 2011). As recently as May 2012, FHWA personnel publicly stated that the report was not yet available. Finally, on December 30, 2013, FHWA placed on its website (at http://www.fhwa.dot.gov/real_estate/practitioners/oac/) the final report (backdated September 2012), which the agency described as "peer reviewed," together with an unpublished draft report dated March 2011 (described as "non peer reviewed") and a document containing comments from three independent peer reviewers who had been retained to review the draft report.[1] Stakeholders and interested parties greeted the release of the final report with relief, and significant press coverage, including text quoted out of context, presentations by and for special interest groups, and press releases by advocacy groups, followed within days. After the release of the final report, FHWA was again invited to make its long-promised presentation to the TRB Digital Billboards Subcommittee at its January 2014 meeting, but declined to do so. As someone who has followed, and played a role in, the discussion and debate about the potential effects of digital billboards on driver performance for more than 30 years, I set out to review both the draft and final reports, as well as the peer review comments to the draft. This document is the result of that review.

As will become clear in the following pages, I identified numerous areas of the FHWA study that caused me concern. (By way of full disclosure, I was initially retained as a consultant by the contractor at the request of the FHWA COTR; however, my services were no longer requested after the departure of the study's initial Principal Investigator, Dr. John Molino). I have tried to identify those concerns as clearly as possible below. Where possible, I have provided references to the applicable page, figure, or table numbers in the FHWA report, so that the reader may quickly go to those sections of interest. Except where stated otherwise, these page

[1] Of concern is the fact that, nearly one year after the posting of these documents on the FHWA website, the "final report" has been given no official FHWA document number, whereas the non-peer reviewed draft report has been assigned the official FHWA report number FHWA-HEP-11-014. Thus, someone performing an online search for this report is likely to be led to the draft report, rather than the final document.

references are linked to the final (September 2012) report. It should be noted that the study was conducted in two different cities, with two different sets of participants. The two cities were Reading, Pennsylvania (Reading) and Richmond, Virginia (Richmond).

## FHWA'S DECISION TO PUBLISH BOTH DRAFT AND FINAL REPORTS, AS WELL AS REVIEWERS' COMMENTS.

It is rather unusual for an organization to make available to the public both an unreviewed draft report and the final report itself, as well as the reviewers' comments to the draft. But FHWA took this action and made available all three documents on its website on December 30, 2013. This decision enabled any conscientious or interested person to review all of these documents, to compare the final report to the draft and evaluate the changes made, and to determine whether, and to what extent, the peer reviewers' comments were addressed in the final document. Although my report might well have been justified based on a review of the final FHWA report alone, it is stronger, more detailed, and more critical due to the availability of these multiple documents from FHWA.

As one of the peer reviewers to the present report stated: "It is not usual to include a discussion of changes that were made between the draft and final report. However, given the long wait, the great interest and the public nature of the work, it would be appropriate to address the differences with (a statement such as): 'Initially we did (a) but based on feedback from reviewers that (b), we did (c), and, at a minimum, to clearly explain the methods used in the final report."

This review raises several questions about FHWA's methodology, measurement approach, reference sources, and, ultimately, the agency's findings and conclusions. Some of the concerns raised herein may seem minor to the casual reader, but all of them contributed, in a non-trivial way, to significant weaknesses in the final report, and questions about the conclusions reached in that report. Because of the implications for policy at the Federal, State, and local levels due to the FHWA final report, I believe that this review and criticism is of importance to interested parties and cognizant officials involved with influencing or implementing such policies.

Different stakeholders in the field of roadside outdoor advertising have seized on the FHWA report in support of their own aims. My report has no agenda other than to shine a light on this long-awaited FHWA research study, to allow independent readers to review the FHWA documents and this report, and to reach their own conclusions about the validity of the agency's findings. Ultimately, I believe that, far from being the definitive research report that will enable State and local governments to establish meaningful regulations about roadside digital signs (on- and off-premise), the FHWA report provides little clarity about this contentious issue. As a result, I believe that public and private road authorities should look to

the dozen or more research studies published, world-wide, in the past several years, and should err on the side of caution and traffic safety in addressing CEVMS and other commercial roadside signs.

## RED FLAGS.

As originally identified in the first FHWA report on CEVMS (Wachtel J. &., Netherton, RD, 1980), and as repeated by Dr. Granda when he served as the COTR for the most recent FHWA project (Granda, 2009), certain characteristics of CEVMS, including, but not limited to, size, height above grade, proximity to the driver's lane of travel, and side of the road on which the sign is located, can each have an important effect on a driver's response to the sign. Of course, there are many other sign characteristics that are considered to be important contributors to potential driver distraction – characteristics such as sign luminance and dwell time (frequency of message change). But sign size, height and location characteristics have been deemed sufficiently important that they have been described thoroughly in nearly every scholarly study in this subject.

It is well accepted in the scientific research community that the state of knowledge progresses both from research that confirms its hypotheses and research that fails to do so. However, a key tenet in support of the ability to move research forward is the requirement that researchers report their experimental design and methods in sufficient detail that future researchers can attempt to reproduce their study in an effort to replicate their findings. But the FHWA researchers did not identify the roads driven or the signs (CEVMS and others) used in this study, thus precluding others to attempt to repeat the study. However, the decision to not identify the signs or roadways used brought with it additional adverse consequences - specifically that apparent errors made by FHWA in the identification of important CEVMS characteristics cannot be fully understood or interpreted, leaving readers without the ability to know just how widespread and significant these errors were.

I have begun the technical discussion in this report with what I have called "red flags," discrepancies between the draft and final reports that are so central to the conclusions reached by the authors that they call into question the adequacy and accuracy of the project as a whole. These red flags require no interpretation on the part of the reader to understand the serious, unresolved errors made by FHWA and their study and internal review process.

To fully understand the significance of these Red Flags, it is useful for the reader to know that during the 31 months (May 2011 – December 2013) between the receipt of the peer reviewers' comments to the draft report and the issuance of the final report, many changes were made to the report itself, in both major and minor ways. But one thing that was *not* done by FHWA was any retesting of participants or any reanalysis of the roads or the CEVMS that were studied. We know this because the

final report makes clear that all Reading data was collected between September 18th and October 26th, 2009 (pg. 21), and all Richmond data was collected between November 20, 2009 and April 23, 2010 (pg. 43). Accordingly, a number of major discrepancies in the identification of certain key sign characteristics between the draft and final reports raise serous questions, not addressed by the researchers, about the applicability and validity of their data – specifically, the measured and analyzed eye gazes that were ostensibly made to these signs.

Both the draft and final reports contain inventories of the target billboards and control sites used in the two cities, albeit without sufficient specificity for a reader to actually identify any of these signs on the ground. The inventory for Reading appears in Table 2, pg. 21 of the draft report, and Table 2, pg. 17 of the final report. That for Richmond appears in Table 8, pg. 44 of the draft report, and Table 7, pg. 40 of the final report. All of the discrepancies discussed below were identified based strictly on the data in these tables. It is possible that additional discrepancies exist, but it was not possible to identify such discrepancies due to the lack of detail in the tables.

## NUMBER OF TARGET BILLBOARDS STUDIED.

The actual number of billboards studied decreased dramatically, in both cities, from the draft report to the final, and the authors offer no explanation for this decrease. The comparison shows that there were a total of two fewer standard, and 12 fewer digital billboards included in the final report compared to the draft:

| | DRAFT REPORT | | FINAL REPORT | |
|---|---|---|---|---|
| | CEVMS | Standard | CEVMS | Standard |
| Reading | 11 | 5 | 4 | 4 |
| Richmond | 9 | 5 | 4 | 4 |
| Total | 20 | 10 | 8 | 8 |

Since the study was conducted only once, the deletion of data for more than 50% of the CEVMS in the final report must represent a failure in either data collection or data analysis. Given that the study of driver eye glances to CEVMS was the principal purpose of the study, the elimination of more than half of these signs from the database raises serious concerns. It is noted that, as late as August 2010, FHWA personnel were reporting that there were 10-14 CEVMS studied in each of the two cities (5-7 per route; 2 routes per location) (Monk, 2010). The two (draft and final) reports provide insufficient information to identify which billboards were eliminated from consideration for the final report. We cannot, therefore, know whether there was a pattern to this process, or whether the smaller number of billboards studied for the final report resulted in some kind of bias.

## APPROACH DISTANCE TO BILLBOARDS.

Between the draft and final reports, in both cities, there is a dramatic difference in the specified approach distance to the billboards studied. (In three of the four tables [both final reports and the draft report for Richmond], there is a column titled "Approach Length (ft.)." Only for the Reading draft report is the equivalent column labeled "Data Collection Zone Length (ft.)." This is more than a simple linguistic difference, as discussed later in this report where I express concerns with how these Data Collection Zones (DCZs) were established, and the implications of these decisions. (I will refer to these as DCZs, as do the FHWA authors).

**CEVMS in Reading.** There are discrepancies in the data provided by the authors in the DCZ column between the draft and final reports. In the draft report for Reading, 10 of the 11 CEVMS signs were described as having a 960 ft. DCZ; the 11$^{th}$ had a DCZ of nearly twice that length (1860 ft.). But in the final report for Reading, of the four CEVMS reportedly still studied, the authors report DCZs of 375, 853, 537, and 991 ft. There is not a single match, and three of the four described DCZs are considerably shorter than those reported in the draft report, which, with all else held constant, would clearly result in fewer eye glances to these signs.

**Standard billboards in Reading.** In the draft report, the 5 standard billboards had approach lengths of 960, 682, 960, 547, 960 ft. In the final, the four remaining signs had approach lengths of 644, 774, 833, 770. Again, not a single match, and generally shorter DCZs in the final report compared to the draft.

**CEVMS in Richmond**. The same inconsistency occurs in Richmond. In the draft report, the six CEVMS all had DCZs of 960 ft., but by the final report, the distances for the four remaining CEVMS were 696, 602, 297, and 321 ft. In this case, not only are the DCZs described in the final report shorter than those listed in the draft, but two of them are shorter by a factor of approximately three.

**Standard billboards in Richmond**. The differences between draft and final reports are again in conflict. In the draft, there were 5 standard billboards, with approach lengths of 889, 960, 863, 960, 960. In the final, the 4 standard billboards, were at approach lengths of 857, 651, 997, and 816. Again, the majority of these discrepancies are in the same direction, with the obvious consequence of fewer glances to billboards – i.e. shorter DCZs in the final report.

It is not possible to know whether the authors intentionally labeled three of their four charts as "Approach Length," and one as "Data Collection Zone." We may assume that their use of the term approach length conforms with standard practice in this field, i.e. that it refers to the earliest distance from which an approaching motorist could see any particular billboard. "Data Collection Zone," of course, is quite different. In the FHWA study, the DCZ is that section of roadway in advance (upstream) of a billboard that begins at a distance 960 ft. away (artificially constrained, as reported by the study authors, by the eye-tracker's visual field given its 2° field of view), and ends when the billboard disappears from the scene cameras' field of view. Thus the end point of the DCZ again creates an artificial constraint because, in all cases, the driver/participant's view of a billboard continues well after the billboard is no longer visible to the scene cameras. Thus, the Data Collection Zone can never be longer than the "Approach Length," and given the eye-tracker and scene camera limitations that bound it, it is almost always shorter, sometimes significantly so. Given our knowledge that the authors did not collect on-road data a second time after the draft report was reviewed, the dramatic differences reported for approach/DCZ length between the draft and final report is both puzzling and of concern, especially given the frequency, magnitude, and consistency in direction of the discrepancies. One possible explanation is that the roadway distance in which eye-glance data to billboards was collected was curtailed by the researchers in the laboratory, after reviewing the data that went into the draft report. But if this is the case, one still must ask why this decision was made, and why there was no effort to explain it in the final report. Nonetheless, if some collected data was simply purged between the draft and final reports, the implications for the appropriateness and validity of the findings as reported in the final report must be questioned. Without an explanation from the authors, this issue cannot be put to rest.

**SIZE OF BILLBOARDS.**

There are puzzling discrepancies in the reported size of the target billboards between the draft and final reports. These differences are important because the size of the billboard affects a number of relevant driver responses, including: the distance from which the sign can be seen, the nighttime luminance, the letter and character sizes that determine legibility distances, and the length and complexity of messages displayed which can affect reading and comprehension time.

To cite a few examples, and, remembering that, in all cases, there were more billboards of each type in the draft report than in the final:

- The final report for Reading shows three standard billboards of 14x48 ft. – yet there were only two standard billboards of this size in the draft report.

- The Reading final report shows one standard billboard measuring 10'6" x 22'9", yet there is no billboard of this size in the draft report.

    - In the case of this discussion, it must also be remembered that, because the studied billboards were not identified by FHWA, and because there were several billboards listed that were of the same size, there may have been additional cases of this same type of discrepancy that cannot be identified.

## BILLBOARD SETBACK FROM ROAD.

Setback from the road is an important measure because it determines the length of time that the billboard will remain within the driver's forward field-of-view, as well as the distance to the billboard at which it will disappear from the driver's view. It is of greater importance in this study because of the limitations in the eye-tracker's resolution at distances greater than 960 ft., and because of the premature cut-off of eye-glance measurements to billboards at closer distances due to the inability of the scene camera array to capture more than a ± 40° segment of the driver's field of view. (This latter problem could have been solved with the addition of a fourth scene camera, or by using shorter focal length lenses on the scene cameras that were employed). The following paragraphs demonstrate this problem:

- In the Reading draft report, two different 14 x 48 ft. standard billboards are shown. The table shows these billboards set back from the road at 50 and 97 ft., respectively. However, in the final report, three standard billboards of this size as shown (one of which seems not to have existed in the draft report). These three are set back from the road by 10, 20, and 35 feet, respectively. The setback differences from draft to final are quite large, and the number of eye-gaze measurements made to these billboards would potentially be affected.

- Also in Reading, one of the CEVMS in the final report, which measures 10'6" x 22'9", is shown to be setback from the road by 12 ft. In the Reading draft report, however, there were 5 billboards of this size, and all of them were shown as setback from the road by at least 35 ft., ranging up to 128 ft. In other words, the draft Reading report shows the setback distance of this billboard roughly between 3 and 10 times farther from the road edge than

does the final report.

- In Richmond, there are several similar cases. For example, the draft report shows two CEVMS of 14'0" x 28'0" each. The setbacks given are 56 and 119 ft. from the road. In the final Richmond report, the (presumably same) two digital signs are shown as having setbacks of 37 ft. each.

- A CEVMS measuring 11'0" x 23'0" is shown as having a setback of 35 ft. in the draft report, and 71 ft. in the final, more than twice the distance.

### BILLBOARDS ON RIGHT OR LEFT SIDE OF ROAD.

Perhaps the greatest concern for a reader attempting to understand the findings of this study is that, between the draft and final reports, some target billboards appear to have crossed from one side of the road to the other. Three examples illustrate this concern:

- One of the standard 14'0" x 48'0" billboards in Reading is shown in the relevant table to be on the on the right side of the road in the final report; however, in the draft report, the only two standard billboards of this size are both on the left.

- In Richmond, the same 11'0" x 23'0" CEVMS discussed above is said to be on the right side of the freeway in the draft report, and on the left side in the final report. Additionally, one of the standard billboards, which measures 10'6" x 45'3", shifts from the left to the right between the draft and final reports.

- There may be several more cases of these roadside switches from draft to final. However, because there are often several target signs of the same size listed in each report, and because the authors do not provide critical sign placement information (such as GPS latitude and longitude data), it is not possible for the reader to directly compare them.

## SPECIFIC CONCERNS WITH THE FHWA REPORT.

As discussed in the sections that follow, the present report identifies several areas of concern with the FHWA study. Below, I have provided, wherever possible, references to the applicable page, figure, or table in the FHWA report so that the reader may quickly refer to the original material that led to the concerns expressed herein. Except where stated otherwise, these page references are to the final FHWA report.

### CHARACTERIZATION OF LONG GLANCES TO BILLBOARDS.

In the Executive Summary (p. 3), the authors describe four long dwell times greater than 2,000 ms (2 sec.) each that were observed to billboards in the study. They state that their review of the data showed that these billboards "were not far from the forward view while participants' gaze dwelled on them." They conclude: "Therefore, the drivers still had access to information about what was in front of them through peripheral vision."

Several of the peer reviewers to the present report expressed concern about the subjectivity of that statement. One asked: "What do they mean? How do they determine this? Are they calculating visual angles? If so, they need to state the visual angles for each glance." Another reviewer said: "I don't understand either quote." Another opined that, since the authors did not define what they mean by "not far from the forward view," the reader cannot assess the relevance of this statement.

Nonetheless, their conclusion is an empirical statement that requires testing; testing that they did not perform. Further, the statement is in direct conflict with research findings reached by Fisher and his students at the University of Massachusetts, Amherst in a series of studies spanning the past several years (e.g. Divekar GP, 2012, Chan, 2007). Their simulator-based studies have shown that looking at external distractors with peripheral vision available for the road ahead fails to provide the driver with the visual attentional resources necessary to anticipate and respond in a timely manner to hidden and emergent traffic hazards. Although publicly available, the FHWA authors did not cite the work of these researchers.

The 2-second criterion mentioned by the FHWA authors is based on work known as the "100 car study" (Klauer, 2006). As one of our peer reviewers noted, this work provides a useful, accepted definition of inattention/distraction, but one that is too limited for studying billboard distraction. The reviewer continues: "Glance duration is only one of three measures needed to characterize looking behavior away from the road and define distraction. If you only make one 2-second glance at a sign, there is a much lower risk than if you make 2, 4, or 6 glances at that sign. So, the frequency/number of glances is a partial measure of distraction. In particular a number of short glances, e.g. under 2-seconds, in fairly rapid succession may pose a risk similar to one glance of 2-seconds. Moving the eyes back and forth from the road means that the eyes may, in total, be away from the road for more than 2-seconds. The expectancy that peripheral vision will "fill in" for glances not too far off the roadway has not proven viable.

Combining the measures of glance duration and frequency provides a more complete picture of where attention is likely focused, i.e. distraction. However, to be operationally useful there needs to be some limit on the time over which these are measured. For example, two or three glances of 1-second each over a 2-minute period would not typically have the eyes off the road for enough time to create a heightened risk. However, what if the eyes were off the road, e.g. looking at a sign, for 2-seconds or more within a 6-second window? Would that not be a more meaningful measure of distraction? If your eyes are off the road for a cumulative 2

seconds during any 6-second period, then both duration and frequency are accounted for. This is the measure that was used in the Danish study (Herrstedt, 2013). It is an operational measure of distraction that is more comprehensive than any previously used measures yet can be used in both field and laboratory testing.

But there is a further concern with the use of the "2-second" glance criterion. In the FHWA report (and in other research), the researchers rely on the conclusion reported by Klauer and her colleagues that a 2-second or longer glance duration away from the forward roadway is generally considered distraction. But more recent research demonstrates, according to one of our peer reviewers, "that using 2-seconds as a criterion or threshold for distraction clearly is insufficient. Victor (2014), as well as the Danish study (Herrstedt, 2013) found that the length of glance duration defining distraction is highly situation dependent. On a clear open road with little traffic density, 2-seconds may not really be a distraction. With increasing vehicle density, especially shorter vehicle headways, and opportunities for other vehicles maneuvering in or out of the roadway/lane, glance durations under 2-seconds are, in fact, distraction with high risk consequences."

Finally, recent research (subsequent to the issuance of the FHWA report) by Victor and his colleagues, using a much larger naturalistic driving study cohort than the 100-car study, demonstrates that the majority of crash and near crash events involving distraction followed a distracted glance duration of less than 2-seconds (Victor, 2014).

In short, one of our reviewers noted, "if you redefine distraction as a function of glance duration (not using a time criterion) relative to traffic density, the FHWA conclusions about the effect of billboards on distracted driver behavior will, in all likelihood, be significantly altered."

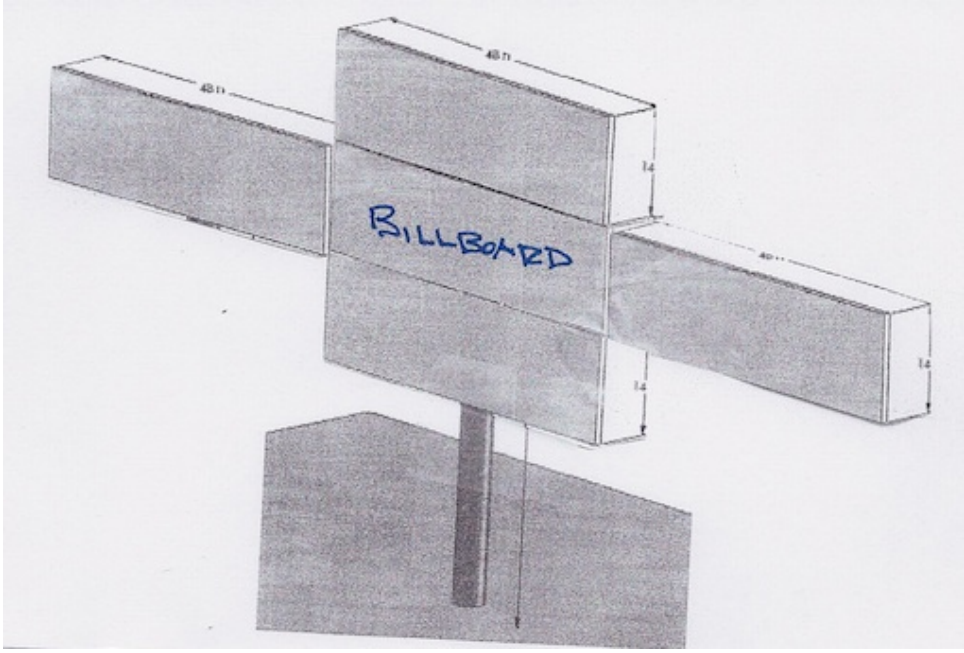
## MEASUREMENT OF SIGN LUMINANCE.

When motorists express concern about the distracting effects of digital billboards, they typically seize on two operational characteristics of such signs: the length of time that each message remains on the screen before changing to the next message (called "dwell time" in the industry), and the luminance levels at which such signs often operate at night (Wachtel J., 2011). But, despite statements made by the COTR, after all data had been collected, that dwell time was studied (Monk, 2010), the FHWA study seems to have ignored this issue (except for noting it as part of billboard inventory). In addition, the study's treatment of sign luminance, discussed immediately below, is questionable.

On pp. 19-20, the authors describe their measurement methodology for determining the luminance (day and night) of both standard and digital billboards. The description states: "Measurements were taken by centering the billboard in the photometer's field of view with approximately the equivalent of the width of the billboard on each side and the equivalent of the billboard height above and below

the sign." Although an illustration of the photometric measurement approach used was presented in the draft report [Figure 5, pg. 17], this figure appears to be erroneous in that it depicts the width, but not the height of the area that the authors say they measured. No equivalent illustration is provided in the final report. Without such an accompanying diagram, it is unclear exactly what was measured. However, taking the authors' description literally, the sketch shown below as Figure 1 provides my interpretation of the area included for measurement. If we assume the most common 14' x 48' billboard size, then the targeted measurement area would encompass an area 144 ft. wide by 42 ft. high.

**FIGURE 1**




If the above sketch accurately describes the measurement approach used by FHWA, then their approach would seem to be inappropriate, and different than other known or published approaches to the measurement of billboard luminance. Lighting experts agree that the appropriate way to measure the luminance of a billboard (day or night, digital or traditional) is to use a photometer with a narrow acceptance angle (1° and 1/3° are most often used) (Illinois Coalition for Responsible Outdoor Lighting, 2010) (Luginbuhl, 2010) (Bullough, 2011). The photometer is aimed at the billboard at a distance close enough that the sensor captures only a small, clearly defined section of the billboard presenting only a single color, and that becomes the luminance value of record. This process can be repeated to capture different colors of illumination and different LED output levels. To measure a billboard's maximum luminance level, it is generally recommended that the sign be set to display an all-white image. The method followed by the FHWA researchers, as interpreted from their narrative description, appears to have

captured the luminance of the billboard plus the luminance of the area above, below, and to both sides of the billboard. This data was then used to report an "average" luminance reading. This is not billboard luminance, but rather billboard plus background luminance. If this is in fact what was done, we would expect that billboard luminances reported in the study for nighttime measurement would be far lower than billboard luminances captured using the widely accepted method discussed above. And indeed, this is what the FHWA data show. In Table 3 on pg. 27, the authors report billboard luminances averaging 2126 cd/$m^2$ and 56.0 cd/$m^2$ for digital billboards (day and night, respectively), and 2993 cd/$m^2$ and 17.8 cd/$m^2$ for traditional billboards (day and night). These readings, especially at night, are far below typical readings obtained by researchers in the field (Bullough, 2011; Luginbuhl, 2010), (ICROL, 2010), (Wachtel, 2014) and, indeed, bear little resemblance even to recommendations for nighttime luminance promulgated by the outdoor advertising industry itself (which are invariably higher than those recommended by lighting experts).

In addition, the authors report only mean luminance values and standard deviations. Since traffic safety and lighting experts, local officials, and even the lay public are primarily concerned with maximum luminance values at night, it is surprising that the authors failed to provide this information.

Further, given the hypotheses expressed by others, and the complaints regularly mentioned by the lay public in the media that it is the maximum luminance values of digital billboards that most effectively capture visual attention and contribute to distraction (and, potentially, veiling luminance or glare), it would have been appropriate for the authors to have recorded the billboard luminance value experienced by each study participant as he/she approached and passed each billboard. This would have added little complexity to the study and would have added substantially to a reader's ability to interpret its results. But this was apparently not done, with the result that the different driver participants were likely exposed to very different levels of billboard luminance (for the digital billboards) during their drives, a factor that could well have contributed to quite different eye glance patterns.

Finally, if our interpretation of the method followed by the FHWA researchers to record luminance values is incorrect, and they actually did record values for just the billboard without the backgrounds, then the only logical conclusion that can be drawn is that the billboards studied in these two cities are substantially less bright (produce less luminous intensity) than typical billboards nationwide.

The lighting specialists who served as peer reviewers of the present report differed in their opinions about the both appropriateness of FHWA's luminance measurement methods and the clarity with which FHWA explained their methods. They all agreed, however, as one put it, that: "the luminances they measured for the billboards are anomalously low compared to expectation and other work."

## TARGET BILLBOARD CONTRAST WITH BACKGROUND.

The FHWA report discusses the authors' efforts to determine a billboard's contrast with its background, and this is, indeed, an important issue, especially at night, because higher contrast contributes to greater conspicuity and, hence, potentially more and longer eye glances. But, beyond FHWA's statements that they made such measurements, the authors appear to have done nothing with this information, and therefore the discussion is meaningless. As one of the peer reviewers to the present report stated: "The key variable apart from (luminance) range is the ratio of signal intensity (the billboard) to the background luminance, which is why I think (the authors) fell short in not considering something similar in connection with sign conspicuity." Another reviewer questioned why the authors did not perform a conspicuity measurement, for which methods are readily available. A third reviewer put it this way: "Absolute luminance tells one story. But if you don't know the contrast ratios involved you cannot predict the attention value of the sign. If, as in the FHWA study, you combine sign and background luminance, you lose the very parameter that is most prominent in determining the attention value of the sign."

Many years ago a research program studying official highway signs (i.e. not billboards) developed a model to quantify the attention value of a sign. Contrast ratios were the most significant contributor to attention value. The experiments, both field and laboratory, took into account both rural and urban (visually complex) environments (Pain, 1969).

## VISUAL COMPLEXITY.

The authors provide a lengthy discussion about "visual complexity" (pg. 20) in which they criticize the work of Regan, et al (Regan, 2009), and of Horberry and Edquist (Horberry, 2009), as not providing a "systematic or quantitative way of classifying the level of clutter or visual complexity present in a visual scene." Instead, they recommend use of a method proposed by Rozenoltz, et al (Rosenholtz, 2007). Had the authors been more diligent in their literature review, they would have found ample documentation of such a classification scheme in the work by Regan, Horberry and Edquist (Edquist, et al, 2008, Edquist, 2010).

This discussion is relevant to the main theme of the study because it has been demonstrated that roadside billboards are a component of, and contribute to, visual clutter, and it has been shown that the presence of visual clutter can cause drivers to experience greater difficulty in identifying, and consequent delays in responding to, important road and traffic information (e.g. regulatory or warning signs, emerging traffic hazards) than would be the case with reduced clutter. The discussion of visual clutter in the final report, and the measurement strategy used to assess clutter, is substantially different from that described in the draft report, and the authors offer no information about the rationale for the change or the effect of the change on their findings. In addition, in the draft report, the authors state that they captured visual images for each DCZ and analyzed it to compute its visual complexity. Despite these extensive discussions, the final report is silent on whether

or how the authors utilized this information, and why they followed such a different approach from that described in the draft report. As a result, possible contributions to the discussion of the impacts of roadside visual clutter on driver attention, and the role of billboards in contributing to such clutter, have been lost.

## EYE-TRACKER PERFORMANCE.

The authors report that, in Reading, "if the eye tracker performance became unacceptable, then the researcher in the rear asked the participant to park in a safe location so that the eye tracker could be recalibrated." In Richmond, the situation was worse. The authors report that, because the route was somewhat longer in Richmond than in Reading, the eye-tracker data collection system "had problems dealing with the large files that resulted." They go on to state: "To mitigate this technical difficulty, participants were asked to pull over in a safe location during the middle of each data collection drive so that new data files could be initiated" (p. 43). In neither case do the authors state how many such occurrences there were, although it seems as if the overload problem occurred with every Richmond participant since all drove the same route. The authors are silent on the potential impact of these interruptions on participant performance or on the otherwise continuous data collection activity.

At a more basic level, it appears that the major impetus for the withholding of the draft report and the issuance of the final report nearly two years later was the fact that the eye glance measures (durations) presented in the draft report were clearly unreasonable, as pointed out by the FHWA peer reviewers. As one of our peer reviewers stated: "It is troubling to consider that those responsible for the report could get this so wrong." Our peer reviewers also pointed out that accuracy with the SmartEye system (the system used in the FHWA study and by several of our peer reviewers) is difficult to achieve, especially in the challenging environment of a moving vehicle. One reviewer said: "Around the straight ahead position, things work well, but once the driver's gaze drifts outside the line of the outer cameras, accuracy drops off rapidly."

## SCENE CAMERA AND EYE-TRACKER FIELD OF VIEW.

The authors state that the three roof-mounted scene cameras captured an 80-degree wide field-of-view, which represented "the forward view area available to the driver through the left side of the windshield and *a portion of the right side of the windshield"* (italics added). They continue: "the area visible to the driver through the rightmost area of the windshield was not captured in the scene cameras." Of course, a typical driver has a field-of-view far wider than what was captured in the study's scene cameras. This is a serious concern because, as later described by the authors, the eye tracker did not record driver glances to the left or right of the scene camera limits, and thus the eye gaze data, central to the study, eliminated an unknown percentage of visual fixations, thus artificially understating both the number and duration of such fixations.

## EYE-TRACKER CONSTRAINED FIELD OF VIEW.

The researchers' approach to eye-glance data reduction (p. 23 ff) is critical to the understanding of the results, and raises important concerns. The authors describe static "regions of interest" (ROIs), which include eight specified data collection regions; six within the scene camera view, and two that were outside (above and below) the view of the scene cameras but still accessible to the eye tracker. Critically, as discussed immediately above, the areas to the left and right of the scene camera field of view, and glances made in these areas, despite being accessible to the eye tracker, were ignored. This is important because, as discussed above, "the area visible to the driver through the rightmost area of the windshield was not captured by the scene cameras." There is no discussion in the report about the extent to which the scene cameras cut off the drivers' view through the right side of the windshield. In addition, the scene cameras did not capture the view through either the right or left side windows – areas where drivers would likely have to look to observe their side view mirrors, and where they might look at billboards as the instrumented vehicle approached them. Because the researchers did not analyze eye gazes to the right or the left of the scene camera boundaries, the eye gazes that *were* analyzed by the system therefore represented only a subset of all relevant eye-glances that were actually made by the participants. This issue can be better understood by examining the report's Figure 9 (pg. 23). The billboard shown in this image appears in the upper right segment of the screen. Had this frame grab image been taken one or two moments later, as the instrumented vehicle got closer to this billboard, the billboard would have appeared to move to the right, outside the recording limits of the scene camera, and the researchers would have dropped from analysis any such eye gazes made to this billboard during this time. (We assume that such gazes were captured by the eye-tracker since it is independent of the scene cameras and (presumably) operated continuously during each participant's drive; but that any such gazes were not analyzed). This deletion of critical data is central to the principal purpose of the study, because the billboard in this example (as well as an unknown number of others) would still be visible to the driver through the front windshield, and then through the right side window. But this valuable and relevant eye glance data that could have shown glances to the billboard was not analyzed. Worse, since the authors report their data as probabilities of gazes to billboards vs. to the road ahead (pg. 28 ff), had there been such unanalyzed gazes, the lack of analysis would have artificially reduced the reported probabilities of both the number and duration of views to billboards vs. views to the roadway ahead.

One of the peer reviewers of the present report referred to a study by Lamble, et al (Lamble, 1999) to shed further light on this issue. This was an on-road study that addressed the drivers' ability to detect the slowing of a vehicle ahead while they attended to displays within the vehicle and at various angles off the line of sight. Although data was not collected specifically for views toward the right side of the windshield, views were made to the rear view mirror, both side view mirrors, and the right-side window. The following table, adapted from the Lamble, et al data,

shows the mean eccentricity from straight ahead to each of these targets, and the "time lost in detection, in terms of time to collision (TTC)", for each of these targets.

| | Mean angle of eccentricity from forward view (degrees) | Time lost in detection (seconds) in terms of time to collision (TTC) |
|---|---|---|
| Left side view mirror | 44 | 1.7 |
| Interior rear view mirror | 42 | 2.1 |
| Right side view mirror | 63 | 2.1 |
| Right side window | 90 | 2.8 |

Using these data, it is clear that the failure to analyze eye glances made to regions beyond the ± 40° cut-off of the scene cameras is a serious limitation to the FHWA study, especially given the fact that all on- and off-premise signs would be located within these angular regions as drivers approached them.

## BILLBOARDS WITHIN VIEW OF THE ROAD AHEAD.

The authors state that, for their analysis, the top and bottom segments of the ROIs were combined since "this additional level of analysis was not needed in order to address the research questions." This resulted in three ROIs, defined by the authors as: "LSR – Left side of road," "RA – Road Ahead," and "RSR – Right side of road;" (remembering again that both the LSR and RSR views were artificially constrained by the scene cameras' limited horizontal field of view). Again using Figure 9 (pg. 23) as an example, it can be seen that the billboard appears in the RSR sector. Had this screenshot been captured a moment or two earlier, with the instrumented vehicle farther from the billboard, it would have appeared in the RA (Road Ahead) sector. Since, as discussed above, the authors report their findings of views to billboards as probabilities that are compared to the probabilities of gazing at the road ahead, the question becomes - how did they resolve the critical issue of coding a glance at a billboard that is at the boundary of two segments, or one that shifts from one segment to another? This is discussed below.

## DYNAMIC ROIs.

The authors define "dynamic ROIs" on pg. 24. Dynamic ROIs include static objects (such as billboards) that appear to move within the video because of the movement of the instrumented vehicle through the scene, and actual dynamic objects (e.g. pedestrians or other vehicles) that move independently of the instrumented vehicle. They define four types of dynamic ROIs. Two make sense: target standard billboards, and target digital billboards. The other two, however, raise questions. One dynamic ROI is called "Other standard billboard," and is defined as "standard billboard(s) located in the DCZ, other than the target standard billboard or the target digital billboard." But an examination of the few roadside images included in the report suggests that there were many more non-target *on-premise* signs located within DCZs than there were non-target billboards, raising the question as to

whether such on-premise signs were simply ignored in the data collection. (The average motorist is not attuned to the technical and legal differences between off- and on-premise signs. In fact, in many locations, digital signs that are considered on-premise display off-premise advertising).

The fourth dynamic ROI is defined as a "driving-related safety risk." The authors' define this as a car that is either actively turning or entering the roadway or one that appeared to be in a position to enter the roadway. This raises several questions – (1) was this dynamic ROI limited to cars (at the expense of other vehicles, pedestrians, or bicyclists) and, more importantly, (2) why did the researchers exclude from this category vehicular traffic in front of the instrumented vehicle that might represent a short headway (following distance) or that might suddenly slow or stop? Recent studies of driver distraction (whether from sources inside or outside the vehicle) have increasingly and appropriately used, as dependent measures, the driver's response to sudden braking by a lead vehicle, or recognition of and response to imminent or emerging hazards, whether in high fidelity simulator environments (Milloy, 2011) or in the real world (Herrstedt, 2013). Unfortunately, such realistic and commonly employed potential hazards were not included in this study. Further, the "driving-related safety risks" that *were* used in the FHWA study are highly subjective and do not appear to rise to the level of concern that would be representative of an immediate threat or hazard (Ayres, 2005).

One of our peer reviewers discussed this concern extensively. He said, in part:

> What is the likelihood of (a driver) missing a cue or event during a glance away from the roadway? In part that is determined by how close the driver is to an object to hit. For example, driving on a four lane road with cars spaced every quarter mile suggests that there is time to make a 2-second glance off the roadway without missing a time-critical cue with immediate safety consequences. On the other hand if there are cars next to you, in front, and behind you, perhaps 1-4 seconds away from you, the risk of glancing away increases dramatically.
>
> For a measure of glancing away to have meaning, it has to be placed in the context of the traffic situation. Traffic volume, typically measured as ADT or AADT, only tells us the number of vehicles per unit of time. A much finer measure of the traffic situation (becoming known as "traffic density") provides the context for putting glance behavior into a more meaningful context. Both the Dukic, et al (2013) and Smiley, et al (2004) studies successfully employed a measure of traffic density to place the risk of glance behavior to billboards into an appropriate real-world context.

## EYE-GLANCE DATA REDUCTION/ANALYSIS METHODS.

The data reduction and analysis method used by the researchers changed significantly from the draft to the final report, presumably in response to the peer

review comments made to the draft. But the authors describe the methods used in the final report with no reference to the draft report, no reference to the concerns of the peer reviewers, and no discussion of the dramatic and potentially significant changes that took place between the draft and final reports. Was the method used in the final report subject to a separate peer review? Have the revised findings presented in the final report been vetted by independent analysis? Have the original peer reviewers been given the opportunity to review the final report before its release to the public in order to verify that their concerns were properly addressed? Given that none of these questions are addressed in the final report, one must question FHWA's statement accompanying its release that it was peer reviewed.

**CONTROL SECTIONS.**

On pg. 14, the authors provide an initial description of their roadway "control" sections, which they define as "areas without off-premise advertising." As discussed above, however, at least some of these control sections (no information is provided to enable the reader to know how many) included prominent on-premise advertising. As becomes clear later in the FHWA report, some of these sections contained no signs of any kind (which would make them appropriate as control sections), but others contained on-premise signs, some of which were possibly digital (the report provides no description of signs in the control sections, and the photographs are incomplete and of insufficient detail to support any reader determination). As discussed above, since the typical driver is unlikely to distinguish between on- and off-premise advertising, roadway areas that include on-premise advertising (particularly if such signs are similar in size, location, etc., to off-premise signs) are inappropriate choices as control sections. If we assume that areas with bright (and perhaps changing) signs will attract a driver's gaze to a greater extent than areas with no signs (especially at night), then, by selecting control sections that included advertising signs, including illuminated advertising signs, the study creates the unreasonable consequence of artificially reducing the likelihood of capturing differences in eye glance patterns between treatment sections (those with digital or conventional billboards) and control sections. This concern is exacerbated because the researchers grouped all control sections together for analysis (i.e. they did not separate those with signs from those without signs). Even the Lee, et al study (Lee, 2007), despite its flaws as pointed out by the FHWA authors and this writer (Wachtel, 2007), recognized this peril: Lee and her colleagues categorized their road sections into four subsets: (a) digital billboards; (b) traditional billboards; (c) control sections (no advertising, but possibly some official signs) and (d) comparison sections. The "comparison" sections were road sections that included no billboards (either digital or traditional), but could have included other advertising signs, particularly on-premise and digital signs. In other words, the FHWA control sections were closer in function to Lee's comparison sections than they were to Lee's control sections. And Lee, et al found longer glances to digital billboards *and* comparison sections than to either traditional billboards or control sections. (Although Lee and her colleagues did not evaluate the statistical significance of these differences, an independent, post-hoc analysis of the Lee, et al

data showed that these differences were significant) (Hurtz, 2011). As depicted in Figs. 7 and 8 of the FHWA final report (for Reading), and Figs. 29 and 30 (for Richmond) at least some of the control zones on the freeways seem to have had no visible signs of any kind (as is appropriate), whereas the control zones on the arterials had numerous on-premise signs (inappropriate). Further, in Reading, at least one control section also included two large overhead official signs, further reducing its suitability as a control zone.

One of the peer reviewers to the present report raised this question that may apply both to control sections and DCZs. "If 76% of arterial glances and 82% of freeway glances (in the CEVMS condition) were on the forward roadway, then what other objects were the participants looking at in the driving environment? Were there other billboards (or on-premise signs) in the environment that might not have been considered for analysis? If that is the case it is a major flaw in the design."

### LACK OF REPRESENTATIVENESS OF BILLBOARD SIZE.

While there are many possible sizes of billboards (traditional and digital), the most common sizes, especially on freeways, are 14'x48' (672 sq. ft.), 20'x60' (1200 sq. ft.). In the final FHWA report, however, only two of the four CEVMS in Reading were of 14'x48', the other two measuring 10'6"x22'9" (239 sq. ft.) each. In contrast, no fewer than five 14x48' digital billboards in Reading were studied in the draft report. In Richmond, none of the four CEVMS discussed in the final report were of typical dimensions, averaging 384 sq. ft., with one of the CEVMSs measuring as small as 253 sq. ft. And it's not that such typically sized CEVMS don't exist in the cities studied. In Richmond, just one of the city's several billboard operators claims two such digital sign faces, and in Reading, seven. Why did the research team select billboards to study that were not representative of the most common sizes? In all cases in which this divergence from standard size existed in this study, the billboards chosen were smaller, by as much as half, than such standard sizes. More puzzling is the fact that, in the draft report, several more billboards were included than were reported in the final report. This "loss" of studied billboards is puzzling, and no explanation is provided. Why were so many billboards that had been included in the draft report removed from the final report?

### LACK OF REPRESENTATIVENESS OF BILLBOARD LUMINANCE.

Our concerns about the study's luminance measurement methods are discussed elsewhere in this report. If, however, our understanding of the technique used is not correct, that is, if the researchers did actually measure luminance of billboards without their surroundings, then it must be concluded that the luminance values for the signs used in this study bear little resemblance to those of typical billboards (traditional and digital) nationwide. And it is luminance that draws the most criticism from the public, and that first captures the driver's eye. Recall that the FHWA study reported average luminance values for the two cities as shown in the following table. (This data is taken from the final report in Table 3, pp. 27 for

Reading, and Table 8, pp. 44 for Richmond):

| LOCATION | TME OF DAY | TYPE OF BILLBOARD | AVERAGE MEASURED LUMINANCE (cd/m$^2$) |
|---|---|---|---|
| Reading | Daylight | CEVMS | 2126 |
| | Daylight | Standard Billboard | 2993 |
| | Night | CEVMS | 56.00 |
| | Night | Standard Billboard | 17.80 |
| Richmond | Daylight | CEVMS | 2134 |
| | Daylight | Standard Billboard | 3063 |
| | Night | CEVMS | 56.44 |
| | Night | Standard | 8.00 |

Compare these luminance values to those reported elsewhere. Bullough and Skinner (Bullough, 2011) measured average daytime luminance of traditional billboards in New York State as 6,871 cd/m$^2$, with average readings at night of 123 cd/m$^2$. For digital signs, the same authors found average luminance values of 3990 cd/m$^2$ and 225 cd/m$^2$ for daylight and nighttime, respectively. The State of New York (Marocco, 2008) in promulgating regulations for CEVMS, proposed upper limits of 5,000 cd/m$^2$ for daytime use, and 280 cd/m$^2$ for nighttime use. And the government of Queensland, Australia (Douglas, 2002), in publishing its required method for measuring billboard luminance, set maximum nighttime upper limits of 300-500 cd/m$^2$ depending on the environmental zone in which the billboard was located. Other studies (Luginbuhl, 2010, ICROL, 2010, Wachtel, 2014) have found similar results and/or produced similar guidance or regulation. In short, other studies have reported daytime luminance values of digital billboards that are at least twice as high as those measured in this study, and nighttime values (the measures of greatest concern and greatest public complaint) that are five times or more higher than the luminance levels found in this study at night. Why do the FHWA's measured luminance values, particularly for CEVMS at night, differ so greatly from those found elsewhere? Why are they always lower than those measured elsewhere? Did they simply measure signs that were unusually dim, did they take their measurements during a stage of the digital display sequence that was lower than other displays in this sequence, or was their measurement methodology so different than that used by Universities, government agencies, and lighting specialists elsewhere? Since CEVMS luminance is so important to the question of attention-getting glance behavior, this substantive difference is vitally important to the understanding of the results of the FHWA study.

One of our peer reviewers, after seeing the discrepancy in luminance values between the FHWA and other studies, went back and reviewed his *own* luminance data, confirming that his measured values were correct. Another reviewer, commenting on this important discrepancy, suggested that it would be worthwhile to remeasure the signs used in the FHWA study to help determine the reason(s) why their luminance values are so low.

## INSUFFICIENT LENGTH OF DATA COLLECTION ZONES.

It appears that there are serious issues with the definition and use of Data Collection Zones (DCZs) in the FHWA report. The relevant discussion appears on pg. 16 of the final report, and pg. 27-28 of the draft report.

- In the draft report, the authors say that they chose 960 ft. as the maximum distance for the DCZ because: (a) the MUTCD recommends 1 in. of letter height for 30 ft. of legibility distance, and (b) given an average letter height of 32" for a CEVMS, this resulted in a 960 ft. upper limit to their DCZ.
    - This reasoning is disingenuous because the authors provide no basis to assume a 32" letter height for a CEVMS. Indeed, there is no evidence that they made an attempt to measure billboard letter heights. A review of industry-supplied guidelines for outdoor advertising demonstrate that letter heights of 36" to 48" and even larger are frequently recommended (Signazon.com) (Meadow Outdoor Advertising) (Elliott Sign and Design).
- The actual reason for the selection of a 960 ft. upper limit appears to be that it coincides with the 2° limit of resolution of the eye tracker used. In other words, at distances greater than 960 ft., the glance target provided by the eye tracker covers an area larger than the billboards being studied - thus the researchers cannot be sure of where drivers were actually looking. As a result, they limited the maximum DCZ distance to accommodate the limitations of the eye tracking equipment, regardless of either the sight distance or legibility distance of the billboards studied. In short, even in cases where billboards could be seen and even read at distances greater than 960 ft., any such glances were not analyzed due to resolution limits of the eye tracker. Had the researchers utilized billboards of more standard sizes, as discussed above, or eye-tracking equipment capable of finer resolution, more reasonable DCZs, greater than 960 ft., could have been used. As one of our peer reviewers commented: "The potential for distraction is not only a function of letter height and legibility. With high contrast ratios and high luminance levels, any type of sign may be seen far before it is legible. An unaddressed question is whether glancing at a commercial sign before it can be read increase or decrease the likelihood that a driver will continue to glance at it until it becomes legible."
- A similar concern exists with respect to the *minimum* distance defined for the DCZ.
    - In the draft report, the authors state that the end of the DCZ was "marked by (the) billboard" (pg. 28). Although not adequately

described, this seems to mean that the end of the DCZ was identified as the point where the instrumented vehicle passed the billboard. This is how this has been done in other studies, and is appropriate.

- However, the final report says something quite different. It defines the end of the DCZ as being "marked when the target billboard left the view of the scene camera" (p. 16). Of course, this point would occur considerably earlier than the point at which the vehicle actually passed the billboard.

- These differences in on-road location marking the end point of the DCZ are substantial, and have significant implications for the inclusion and exclusion of eye glances – not only those attributed to billboards, but for all eye glances made by participants in this study. If the definition used the final report is correct, this distance would vary depending on the size of the billboard, its setback from the road edge, and the side of the road on which it was located. Conversely, sign size, setback, or location would have no effect on the minimum distance if the definition provided in the draft report was used. This weakness is compounded by the fact that all three billboard parameters (size, setback, and location) appear to have mysteriously changed between the draft and final reports.

- Human peripheral vision extends to roughly 180° (roughly 90° on each side) with regard to looking straight ahead. Of course, if a person turns his/her head left or right, then the included angle of peripheral vision is extended accordingly. In other words, if I turn my head to look directly at an object (e.g. a billboard) that is 30° to my right, then my peripheral vision to the right extends to approximately 90°+30° = 120° (again referenced to the straight ahead position). In the draft report, the defined end of the DCZ occurs at the point when the target billboard was just about to leave the drivers' peripheral visual field, i.e. essentially 90° to the right or left of the instrumented vehicle as the vehicle came abreast of the billboard (assuming that the driver was looking straight ahead). However, using the definition in the final report, the DCZ ended when the billboard was no longer visible to the *scene camera*. The authors previously stated that the scene cameras provided a maximum view of 80° horizontal. If we assume that the center of the scene camera image was aligned with the heading of the instrumented vehicle (and this must be our assumption since: (a) the scene cameras were fixed to the roof of the vehicle, (b) it makes the most logical sense, and (c) the authors make no statement to the contrary), then the scene camera array

covers an area of 40° left and 40° right of this heading. The authors previously acknowledged that the scene cameras did not provide the full field of view to the right side of the windshield, but they did not report the key information of how much of this view was eliminated (p. 13). Nonetheless, with the end of the DCZ marked by a 90° view to the left or right in the draft report (the extent of human peripheral vision with the instrumented vehicle in line with the billboard), compared to a 40° view left and right in the final report (the limit of the roof-mounted scene cameras' field of view, and also variable based on billboard size, offset, and side of road), it is easy to see that many glances to target billboards that would have been captured and analyzed in the draft report were not analyzed (although likely captured), in the final report.

- In short, the authors eliminated from data analysis any glances toward billboards that may have been made at distances greater than 960 ft. (in both draft and final reports), and any glances toward billboards that may have been made at distances closer than the point where the billboard exited the scene cameras' field of view 40° to the left or right of straight ahead. Even if a participant driver turned his/her head to the left or right to look directly at a billboard as the vehicle got closer to it, the authors would *not* have analyzed this eye glance data if that billboard was outside the ± 40° limit of the scene camera – this is because even though the driver's eyes and head were in motion, the scene cameras were fixed – they were mounted to the roof of the vehicle and were aimed only straight ahead and captured only ±40°.

- Several peer reviewers of the present report brought up the concern about the authors' choice of a 960 ft. maximum eye glance distance. One said: "There is a very good chance that drivers scanned the billboard/CEVMS in advance of the DCZ, and a long glance/dwell to the billboard/CEVMS will be completely missed." Another cited work by Smiley and her colleagues (Smiley, 2004) that demonstrated that billboards on an expressway achieved minimum legibility distances of 410 to 1476 ft., based on the results of one test subject. In terms of legibility time, Smiley et al wrote: "The expressway sign images were first legible about 20 seconds away, but the view was interrupted several times, reducing the available time to 18 seconds (at the speed limit)." If we assume a 65 mph (95.3 fps) speed limit, the legibility distances studied by Smiley, et al reached 1906 ft. (20 seconds) or 1715 ft. (18 seconds), nearly twice the distance captured by the FHWA study's 960 ft. cutoff.

- These two constraints, on both the leading and trailing edge of the defined DCZ, potentially had the effect of reducing both the recorded number and duration of glances to target billboards on both sides of the road. Accordingly, this warrants explanation or clarification from FHWA, particularly because much more of this critical data was presumably captured and made available for analysis for the draft report.

## CODING AND ASSIGNMENT OF REGIONS OF INTEREST (ROIs).

A conflict seems to exist with regard to the coding of ROIs. The authors allude to this problem, but are silent about if or how it was addressed, and they provide no information to assist the reader with regard to understanding their coding process. The issue is this: As stated on pg. 24 of the final report, the eye tracking data reduction and analysis software (which was not used for the draft report) determined the gaze "intersection" (i.e. location) every 60 Hz, and automatically assigned each such gaze to an ROI. But, as the authors note, ROIs may overlap. Because the software allows the researcher rather than the software itself to specify the "priority" for each ROI, when this (presumably frequent) overlap occurs, whichever ROI was assigned the highest priority by the researcher will be "given" (i.e. assigned) any such overlapping glance at the expense of the "lower priority" but overlapping ROI. So, if I wanted to demonstrate that eye glances that overlap both a billboard and the road ahead are really to the road and not to the billboard, I merely assign higher priority to the RA (road ahead) segment. The authors cite this specific example on pg. 24, but provide no information about the process that they followed in such cases or how many such cases there were during the study. A look at Fig. 13, pg. 30 of the draft report shows a billboard at the intersection of what would be two ROIs (recall that the draft report used a different (manual) method for coding eye glances, and so ROIs did not exist as a paradigm until the final report). The authors do not discuss how the prioritization of ROIs would have handled this eye glance, or how many such instances actually occurred. While it is true that the authors also identified "dynamic ROIs," there is no explanation given of how such Dynamic ROIs were handled vis-a-vis the overlapping static ROIs.

One of the peer reviewers of the present report suggested that there should be no concern about allowing the researchers to assign priorities to ROIs "*as long as they were blind to the purpose of the experiment."* There is, however, no indication in the FHWA report that this was the case. Was it?

## RELEVANT RECENT RESEARCH IGNORED.

The reference list for the final report shows that the authors used the 31 months between the draft and final reports to update their literature review (the final report includes citations dated as late as June 27, 2012). One wonders, however, why they ignored a number of available, peer-reviewed research studies of direct

relevance to this project, such as: Backer-Grondahl, 2009, Dukic, 2013[2], Edquist, 2011 Gitelman, 2012; Edquist, 2008; Edquist, 2010; Milloy, 2011; Young, 2009, all of which were available during this time period or earlier. This is further troubling because they *did* include a number of billboard industry sponsored studies that received little if any peer review, and where the full studies were restricted from public access (Tantala, 2010, 2011).

## DISCUSSION OF LITERATURE REVIEWED.

In their summary of the Lee, et al (Lee, 2007) study, the FHWA researchers state: "(the authors) did not show any significant effects of CEVMS on driver glance behavior." As the FHWA researchers were aware from prior research that they reviewed in preparation of this report, the study by Lee and her colleagues was paid for and overseen by the outdoor advertising industry. Earlier reviews of the Lee, et al report, (e.g. Wachtel, 2007) have shown that these authors did not, in fact, perform tests of significance for the eye glance duration data that they had collected (despite performing such significance tests for all six other measures studied) (Wachtel, 2009). Had they done so, they would have found significant differences (Hurtz, 2011; Placeholder1). Further, as Lee and her colleagues stated, and as reported in an earlier FHWA report (Molino, et al, 2009), the participant population for their nighttime study was too small to support tests of statistical significance, but that, had their sample size been larger, some of these findings "would show statistical significance" (p. 7).

Why did the FHWA authors accept the Lee, et al data at face value, despite evidence in their possession that important, relevant findings were ignored?

## SALIENCE, ATTENTION CONSPICUITY, AND BOTTOM-UP PROCESSING.

The authors' discussion of "attention conspicuity," "salience," and "bottom-up processing" warrants clarification. On pg. 10 of the final report, the authors refer to a review by this author (Wachtel, 2009) of research done by Theeuwes. The FHWA authors state: "Wachtel leads one to consider CEVMS as stimuli in the environment where attention to them would be drawn in a bottom-up manner; that is, the salience of the billboards would make them stand out relative to other stimuli in the environment and drivers would reflexively look at these signs." They go on to state that the Theeuwes work used "simple letter stimulus arrays in a laboratory task," and continue: "Research using simple visual stimuli in a laboratory environment are (sic) very useful for testing different theories of perception, but often lack direct application to tasks such as driving." It is surprising, therefore, that, on the same page, the FHWA authors cite the work of Cole and Hughes (Cole, 1984) that reinforces the point made by Wachtel in his review of Theeuwes' work. The FHWA report states: "Standard and digital billboards are often salient stimuli in the driving environment, which may make them conspicuous. Cole and Hughes define attention conspicuity as the extent to which a stimulus is sufficiently prominent in the driving

[2] Although not published in print form until 2013, this study was made available electronically after approval for publication a year earlier.

environment to capture attention. Further, … attention conspicuity is a function of size, color, brightness, contrast relative to surroundings, and dynamic components such as movement and change. It is clear that under certain circumstances image salience or conspicuity can provide a good explanation of how humans orient their attention" (pg. 10).

Several of the peer reviewers of the present report weighed in on this issue and added their views that outdoor advertising, and particularly CEVMS, seeks driver attention through bottom-up processes by managing the visual stimuli with which drivers are presented.

## ROAD TYPE AS AN INDEPENDENT VARIABLE.

The final report lists "road type" as an independent variable. The draft report did not.

- Why was an independent variable added after the study was completed and all data collected?

- What effect did this change have on the analysis of data or results?

## FIXATION DIFFERENCES BETWEEN DRAFT AND FINAL REPORT.

On pg. 25 of the final report, the authors discuss their approach to measuring visual fixations. They do not mention the findings of the draft report, which were criticized by the independent peer reviewers for reporting gaze fixation durations (to billboards and road scenes alike) that were too brief to be reasonable.

- What was done after completion of the draft report to ensure that the results for gaze fixation as reported in the final report were valid?

- Given the major changes to the document between draft and final reports, did the authors submit for independent peer review the version of the report that was revised subsequent to receipt of peer review comments?

- If so, what were the results?

## THE ROLE OF ADVERTISING CONTENT.

It is well understood that the content displayed on outdoor advertising can have a profound effect on driver distraction. Several reviewers noted the absence of any discussion of sign content in the FHWA report. One stated: "There may be characteristic differences in the products advertised by CEVMS vs. standard billboards – products that may appeal to one demographic more than another." One reviewer noted that other studies of distraction due to billboards made a concerted effort to match, to the extent possible, the attention getting nature of the billboard stimuli across the signs to which participants were exposed to eliminate this otherwise potentially confounding variable from the study.

While a study conducted on public roads, such as this FHWA study, does not lend itself to such controls, several reviewers wished to see illustrations of the billboard images which the participant drivers faced as they drove the instrumented vehicle. Given that the scene cameras continuously recorded the drivers' view of the road, the inclusion of this data would have been straightforward.

Another reviewer noted that some of the pictures provided of the signs used in the study showed images as well as text. Images may attract attention at distances beyond those required to resolve text, but the report is silent on this issue. The

likelihood of earlier glances to imagery on a sign provides further evidence of the need for the leading edge of the DCZ to extend beyond 960 ft. from the sign.

## UNANSWERED QUESTIONS.

In addition to the concerns and questions raised above, there are a number of issues in the final report, and in its obvious differences from the draft report, about which the authors are silent. For a reader to have confidence in the conclusions reached by the final report and in the appropriateness of substantive methodological changes made between draft and final reports, it is suggested that FHWA address the following questions.

### ANALYSIS OF EYE GLANCE DATA.

The draft report makes clear (pp. 28-9) that the eye glance data was reduced manually, frame-by-frame. The final report describes a completely different, automated eye glance data reduction system (MAPPS, p. 23). Presumably, the change of eye glance analysis methods was made as a result of the peer review comments to the draft report, although the authors are silent on this issue. The following questions are suggested by this methodological change:

- When, why, and how was the decision made to scrap the system used for the draft report and replace it with another system?
- How was the accuracy/validity of the new (automated) system tested?
- How were the results determined to be valid given the failure of the earlier effort?
- Was the revised approach subject to peer review; if so, what comments were made, and how did the researchers respond?

### REGIONS OF INTEREST (ROIs) FOR DATA ANALYSIS, AND BOUNDARIES BETWEEN ADJACENT REGIONS.

The scene camera views as segmented for analysis in the final report were substantially different than those used in the draft report.

- How and why were these changed?
- How was the revised system tested for accuracy and fidelity?
- Was the revised system subject to independent peer review; if so, what were the results?

- In the system described in the final report, the scene views from the three vehicle roof-mounted cameras were divided into six "static ROIs" as well as two additional areas ("inside vehicle" and "top"), which were beyond the view of the cameras, but where, the authors state, eye tracking was still possible. It is implied, but not stated, that the study's authors were the ones who chose/identified the static ROIs and their boundaries. Is this correct? If not, how were the static ROIs determined, and by whom?

## GAZE DIRECTION PROBABILITIES.

The authors discuss the methodology they used to "analyze the probability of a participant gazing at driving related information" (which they describe as gazes at the ROIs identified as "road ahead, road ahead top, and driving-related tasks," which they also confusingly call "driving related risks" (p. 28). Their approach requires that they use only two possible outcome measures to classify a participant's gaze behavior. They state: "If the participant gazed toward the road ahead, road ahead top, or driving-related risks, then the value of 'RoadAhead' was set to 1" (which they deemed "success"). But, "If the participant gazed at any other object in the panoramic scene, then the value of "RoadAhead" was set to zero" (deemed "failure"). The authors are silent about gazes outside the limits of the scene camera views, even though, in some cases, eye tracking "was possible." In their discussion (second paragraph on pg. 28) the authors seem to conflate the terms "driving-related information" (which is presumably what they are interested in) and "road-ahead information" which is what their analysis captured. There is, of course, considerable driving-related information that is visually obtained by glances beyond the road-ahead view (especially given that the road-ahead view was artificially constrained in this study). Views to both side view mirrors, rear view mirror, and instrument panel, as well as to potential hazards such as passing or merging traffic, as well as emergent threats such as pedestrians, turning vehicles, or bicyclists, are all understood to be driving-related information, and all may require glances outside the view afforded by the scene cameras in this study. Given that the reported probabilities of gazing at the road ahead and at the specified ROIs (see tables 4 and 5, pg. 28-9) necessarily added to 100%, it must be understood that this represents 100% of only those gazes made by participants that were captured by the eye-tracker and analyzed by the researchers. In addition to these glances, there were an unknown number of instances, and an unknown percentage of time behind the wheel, when eye gazes were not recorded, simply because they fell outside the range of the limited field of view afforded by the scene cameras.

- We recommend that FHWA provide information about such unrecorded/unanalyzed eye glance events so that the reader can understand how often, and for how long, such potentially relevant eye gazes were made that were not recorded or analyzed.

## BILLBOARDS (OFF-PREMISE) vs. ON-PREMISE SIGNS.

Throughout the report, the authors refer to this as a study of "billboard" or "outdoor advertising signs." FHWA programs and policies distinguish between "billboards" and "on-premise" signs. Billboards, which are considered off-premise signs, are designed, placed, and operated for different purposes than on-premise signs - signs that FHWA does not regulate. Yet it appears from some of the photographs in the final report that some of the signs referred to as billboards are, in fact, on-premise signs. As discussed above, the average driver is not familiar with the terms "on-premise" and "off-premise" or "billboard" and, if shown examples of signs of each type, might have a difficult time distinguishing them. In other words, given equal size, luminance, etc., a driver might not be able to distinguish whether he/she was looking at a billboard or an on-premise sign. This potential conflation of billboards with on-premise signs raises three questions:

- Can FHWA confirm that all of the signs referred to in the report as "target" billboards were, in fact, off-premise signs?

- When discussing the target billboards in each of the two cities, the authors identify (Table 2, pg. 17 and Table 7, pg. 40) "other standard billboards" that were, presumably, visible to drivers at the same time and, at least to some extent, in the same location, as the target billboards. But the authors never identify the presence of on-premise signs at these locations, even though such signs are clearly visible in several of the report photographs. Is it the authors' position that there were no on-premise signs located at the same general location as target billboards, or have any such on-premise signs not been accounted for in these Tables?

- Why, when identifying "control areas" (as distinguished from areas containing billboards), did the authors accept the inclusion of on-premise signs, including, perhaps, digital signs, when to the average motorist, such "control" areas (to the extent that they contained on-premise signs) would not be distinguishable from "treatment areas," those in which "target" billboards of interest were located?

## TASK DEMANDS AND VISUAL SALIENCE.

The authors' discussion of eye gaze behavior in dynamic environments such as driving "suggests that task demands tend to override visual salience in determining attention allocation." The authors state: "When extended to driving, it would be expected that visual attention will be directed toward task relevant areas and objects (e.g. the roadway, other vehicles, speed limit signs, etc.), and other salient objects, such as billboards, will not necessarily capture attention." But the authors seem to ignore the fact that it is for this very reason that highway and traffic engineers have long recognized that there are times where they must capture the drivers' attention, to break task-driven visual attention from its common complacency, in order to communicate a timely or critical message. As a result, the

MUTCD contains numerous instances where unique colors (e.g. fluorescent yellow-green) are applied to specific signs, where high energy flashing signs, lights, and beacons are employed, and where specific pavement markings are installed – all because their visual salience is intended to command drivers' attention. Official Changeable Message Signs (CMS) are often set to flash a message of particular urgency, for the same reason. And the authors seem to ignore the fact that advertisers, seeking to capture drivers' attention, rely upon the visual capture techniques of high luminance, contrast, and frequent message change in an effort to accomplish this.

- Why has the FHWA report ignored these frequently employed examples (both by traffic officials and advertisers) of the use of visual salience to capture attention independent of task demands?

- Why have the FHWA authors ignored recent research showing that roadside advertising signs, including digital and video billboards, are able to capture the driver's attention at the expense of high levels of task demands, e.g. (Milloy, 2011), (Herrstedt, 2013)?

## OTHER EXPERIMENTAL ISSUES.

### CONTROL OF EXTRANEOUS VARIABLES.

Extraneous variables are those which are not relevant to a study's purpose but which may have an effect on the dependent variable (in this case, eye glances) and which therefore must be either eliminated or controlled. If such extraneous variables remain in the study and are not controlled they may have the effect of reducing the likelihood of finding significance in hypothesis testing, because they add to the error variance. Let us say that we want to study a driver's eye-glance response to CEVMS, and to compare that response to glances to traditional billboards and to roadway areas in which no billboards of any kind are present. The result would be a "clean" experimental design in which we examine driver glance behavior (the dependent variable) when the driver is exposed to each of the three independent variables (CEVMS, traditional billboards, and roadway areas without billboards). The FHWA authors claim that this is what they did. But, by their choice of words and by some of the photographs that accompany both the draft and final reports, the reader can see that, although they made sure that there were no other *billboards* present within the field of view at any of the three types of study sites, there were often other signs, typically on-premise signs, that were present. As discussed above, the average driver does not understand or appreciate the difference in purpose and function between billboards and on-premise signs, and may be just as likely to glance at an on-premise sign as at a billboard (CEVMS or traditional). Let's go back to our example, and discuss the situation that seems to have occurred in this study, an unknown number of times. If a target billboard happened to be located on or immediately adjacent to a property that included one

or more on-premise signs, how might the researchers have recorded and coded eye-glances made by their participant drivers when approaching such an area? We can assume that any glances that were clearly centered on the target billboard would have been properly correctly coded as a glance to that billboard. But what about glances immediately before or after the billboard glance – what if such glances were made to one or more of the on-premise signs located quite near the billboard – how would such glances be coded? (See, for example, Figures 4 and 6, pg. 18, or Figure 23, page 45, of the final report). There are three possibilities: (1) They could have been coded as glances to the target billboard – of course, this would be erroneous and there is no indication that it was done; (2) They could not be coded at all; i.e. such glances could be discarded from the data set and not analyzed – this would also be an error, and there is no indication in the report that this was done; (3) They could be coded as glances, not to the billboard, but to one of the road-related ROIs (LSR, RA, RSR) described above. The authors are silent on this issue, and thus the reader cannot know whether, or how often, this may have occurred. But if this *did* occur, any such coded glances to an extraneous variable such as an on-premise sign would compromise the study results in two ways. First, such a glance would be coded as having been made to the "road ahead" (or road left or road right) and second, such coding would eliminate from analysis the situation that actually occurred; that the glance was actually made to a roadside advertising sign, simply one that was not a "billboard." Since the authors treated the probability of glancing at the road ahead to be a zero-sum game, with "success" and "failure" that must add to 100%, *any* target billboard site where other advertising signs were proximal to the billboard may have suffered this fate. We believe that the authors should clarify their coding procedures in this regard, and identify the frequency with which such situations occurred.

## AGE RANGE OF PARTICIPANT DRIVERS.

It has been shown in studies of driver distraction that younger drivers (frequently identified as those age 25 and below), and older drivers (frequently identified as those age 65 or above [although researchers increasingly classify older drivers into the "young-old" – age 65-74, and the "old-old" – age 75 and above]) have more difficulty dealing with, and overcoming, distraction than the broad cohort of drivers between these age groups. But the FHWA researchers seem to have made no effort to recruit representatives of these two important age groups. There were no drivers included in either city who were above the age of 64; and although there were participants as young as age 18, the authors do not tell us how many. It is typical that authors of research papers that address issues of driver performance provide the mean, standard deviation, and range of ages of participants. Here, only the mean was provided. We recommend that complete data regarding participant ages be provided.

## DROPOUT RATE OF POTENTIAL PARTICIPANTS.

The participant dropout rate was quite high. The authors attribute this to the unusability of the data of certain participants either because the eye-tracking

equipment could not be calibrated to them or because of equipment failures. In Reading, 12 potential participants were excluded; in Richmond, the number was 17. This represents a loss of 24% (Reading) and 41% (Richmond) of all participants recruited. Although it is possible that the researchers intentionally and reasonably "overbooked" the number of participants in anticipation of some dropouts, there is no indication that this was done. Further, it appears that no effort was made to recruit additional participants to make up for those who were lost, and no discussion is provided to assist the reader in better understanding whether there were common characteristics among those participants who were eliminated such that the representativeness of the remaining participants might have been compromised. (Farbry, 2001) (Molino, 2009).

### INTRUSIVENESS OF EYE TRACKING SYSTEM.

In the section titled "Experimental Approach," the authors describe the eye-tracking system as "non-intrusive." This language was added subsequent to the draft report. If, by non-intrusive, they mean that it was not physically attached to the driver's head as was the case for earlier generation eye tracking systems, we agree. But when the eye tracking system includes four prominent cameras mounted to the vehicle dashboard in front of the driver, and when the duration of the average drive for each participant was only about 20-30 minutes (so that the driver could not fully acclimate to the equipment to the point of ignoring its presence) it seems inappropriate to describe this as non-intrusive. This might be seen as a minor issue, except when, as discussed below, a reader must analyze the extent to which the results of this study might be generalizable to driving in general.

### EXPERIMENTAL CONDITIONS INFLUENCE PARTICIPANTS' BEHAVIOR AND PERFORMANCE.

As discussed above, the authors describe the eye-tracking equipment as "non-intrusive." We disagree. Of equal concern, however, is the totality of the participants' experience, the question of whether the participants could be expected to perform "as they normally would," and the implications of this for the generalizability of the study. Human factors and human performance research in road safety is increasingly performed in one of two settings – either in "naturalistic" studies, or in studies conducted in advanced driving simulators. Although the discussion of these two approaches is beyond the scope of this review, it is useful to understand that these two methods, each with its own strengths and limitations, have proven to be more "generalizable" to real driving (i.e. have more applied validity to the real world) than most other forms of driving research. This FHWA study, conducted in an instrumented vehicle, provides certain key benefits in that it places participants in an actual vehicle in which they drive on actual roads under actual traffic and weather conditions, while viewing actual billboards and other signs. On the negative side, the vehicle being driven is instrumented in such a way that the participants know that they are being observed and recorded – and this fact has been shown to contribute to a likely change in participants' behavior from what might have been expected had they performed in more naturalistic setting. In addition, in

instrumented vehicle studies, there is often an experimenter (researcher) in the vehicle with the participant, and this experimenter, typically sitting in the rear seat, is likely to be recording data in a computer or on a clipboard, monitoring equipment, and/or interacting with the participant. In this study, however, there were two experimenters in the vehicle at all times. Any one of these study conditions individually (cameras or other monitoring equipment; presence of an experimenter) could have an adverse effect on the "realism" of the participant's performance. But in this study the conditions were more unrealistic due to the presence of the camera equipment, two experimenters, and the limited amount of time (20-35 minutes) that each participant spent in the vehicle. In addition, the authors discuss several situations in which the eye-tracker had to be recalibrated, and others in which overloaded data files required the researcher to initiate new files. Each of these occurrences required the researchers to instruct the participant driver to pull off the road for some period of time, interrupting the continuity of the drive and increasing the interaction between researcher and participant. In addition to the Hawthorne Effect (Landsberger, 1958) which suggests that the very fact that participants are being observed is enough to modify their behavior, often more strongly than the experimental manipulation itself, it is likely that another well known study phenomenon known as "The Good Participant" (one of three types of participant roles described under the principle of "Demand Characteristics") (Whitley, 2002) was active in this study. This is the situation in which the participant tries to help or please the researcher by performing "well," and it can alter a participant's behavior to such an extent that true differences in performance that might be due to the independent variables are overridden or masked by participant behaviors stemming from the artifice of the situation in which the participant is asked to perform. As explained by one peer reviewer with extensive experience in the conduct of driving related research: "When being involved in an experimental study, most people want to drive as well as possible. This is illustrated by the fact that people often ask: 'How did I do? How well was I driving compared to other participants?' This means that people indeed might have ignored the billboards more often than they normally would have."

Another peer reviewer looked at the issue of experimental conditions from a different perspective. He said: "We are talking about fairly fresh drivers – they had not been driving for hours, the tests were conducted in good driving conditions (i.e. apparently none of the tests were conducted in inclement weather), the driver had been prepared with a map of the route *and* a GPS device providing turn by turn directions *and* a researcher in the front passenger seat to provide route guidance… is it at all surprising that no near misses or driver errors were observed?"

## INSTRUCTIONS GIVEN TO TEST PARTICIPANTS.

On pg. 14 of the final report, the authors describe the instructions provided to drivers, which were: "to drive the routes as they normally would." In the draft report, however, the instructions provided to drivers were more specific and

comprehensive, including that they should pay attention to other traffic, speed limits, etc."

- What were the actual instructions provided to drivers, and why did the description of this change between draft and final?

One peer reviewer of the present study questioned why the researchers provided such explicit instructions to the driver participants; specifically that their eye glance behavior was being studied. He considered this to be a serious flaw, in that it could have contributed to the participants' modifying their typical behavior to pay more visual attention to the road ahead, thus contributing to "The Good Participant" phenomenon.

## POST-STUDY DEBRIEFING.

In their discussion of the post-study debriefing (pg. 22) the authors describe a process that seems to have differed from the draft report to the final. In the draft report, the participants "completed a driver feedback questionnaire." But the final report says nothing about this. In the draft report, the authors explain that the participants "were informed of the study's true purpose." Again, the final report is silent on this issue. Even though any differences in the debriefing as described in the final report vs. the draft report may have not been significant to the results of the study, the existence of such differences raises issues about the changes in the two versions of the report, and raises questions about what other changes might have been made that have not been reported.

As one of the peer reviewers of the present report put it, the post-study debriefing could be a gold mine of information. For example, this reviewer suggested that the subjective component of an advertisement is what gives it its 'value' in terms of personal interest from the driver. This *psychological effect* can be divided into valence, arousal, and motivational intensity – and the "success" (for the advertiser) is the aspect "most likely to create the extended dwell times (and eyes-off road episodes."

We recommend that FHWA address such questions as: Were the participants actually told the true purpose of the study? Were they given an opportunity to comment? What were their opinions? We further suggest that FHWA make public a copy of the "driver feedback questionnaire" that was used.

## RATER (AND INTER-RATER) RELIABILITY.

The authors report that, during data collection (i.e. during the actual participant drives), the front-seat researcher observed and recorded driver behavior using "subjective measures." Human factors and experimental psychology tells us that human raters, particularly when judging along subjective scales, are susceptible to low reliability and validity without specialized training and practice. But the report is silent on key issues including: how many researchers were used for this process,

how they were trained, how their ratings were reviewed and compared to those of other raters to measure inter-rater reliability, etc. If only one rater was used throughout this study, the question of rater bias arises. Finally, given that the front-seat researcher had other tasks to perform, there remains the important question of whether this researcher was actually able to observe and annotate driver behavior continuously. As one peer reviewer to the present report expressed concern about rater and inter-rater reliability – "what constitutes a researcher feeling 'slightly uncomfortable, but not to a significant degree'? How does one ensure the reliability of ratings when the rating criteria themselves are so subjective?" We recommend that FHWA clarify the entire issue of raters, and how reliability was assured.

## CONCLUSIONS.

This review has raised several questions and identified a number of critical concerns that, taken together, suggest important deficiencies in the FHWA final report: *Driver Visual Behavior in the Presence of Commercial Electronic Variable Message Signs (CEVMS)*. Given the lack of information provided by the study's authors about key details of their research, the apparent internal conflicts in critical data provided, and the problems with the experimental equipment, a reader is unable to assess the validity of the findings as presented. In light of the harsh criticism of the draft study report provided by FHWA's retained independent peer reviewers, and the nearly three years that elapsed between the issuance of that draft and the final report, and further given the lack of information from the authors concerning important details of what was done, and how, to address and resolve those reviewer comments, the concerns of a reader of the final report are further heightened. When evaluated against the growing number of recent research studies, conducted world-wide, that increasingly demonstrate concerns for the adverse effects of billboard distraction on driver performance, particularly under conditions in which the driver must respond to suddenly appearing or developing traffic hazards, one must question the contribution of this study and the conclusions that can be drawn from it to this important field of research. As relevant new research (Edquist J. H., 2011), (Herrstedt, 2013), (Divekar G. P., 2012), (Belyusar, 2014) continues to be published, we urge the authors of this eagerly anticipated FHWA study to clearly document their methods and results in light of the peer reviewed comments directed at the draft report, and the concerns expressed herein.

As one of our peer reviewers said: "If FHWA can't appropriately address the issues raised in this report, it owes it to both sides of this debate to fund a replication of this effort with reasonable methods and a scientific advisory committee." In the meantime, other reviewers expressed the precautionary principle. One, heavily involved in road and traffic safety, said: "if there is a lack of scientific certainty and there is a question around safety – the response should be no. In the context of (outdoor advertising sign) permits, this is particularly important as permits for signs have a minimum life of a decade.

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# Federal highway agency takes a hit over safety report on electronic billboards

floridabulldog.org/2015/02/federal-highway-agency-takes-a-hit-over-safety-report-on-electronic-billboards/
author: Fair WarningFebruary 10, 2015


**By Myron Levin, FairWarning**


Photo: Scenic America

Why did the billboard cross the road?

It sounds like the opening line of a corny joke, but it's actually a question raised by a baffling glitch in a Federal Highway Administration study on the safety of electronic billboards. Billboards that seem magically to have moved from one side of the highway to the other are part of a detailed critique by a former FHWA researcher, who says the federal report is so badly flawed that no one should rely on its conclusions.

The $859,000 FHWA study had been eagerly anticipated by local agencies across the country, including some that held up permit decisions on electronic billboards to await federal guidance. They hoped the report would shed light on whether the visually stunning digital signs, which change messages every few seconds, might pose a threat to traffic safety.

The FHWA study, performed for the agency by the consulting firm Leidos, used sophisticated eye-tracking equipment to time drivers' glances at billboards and other visual features along assigned routes in Reading, Pa., and Richmond, Va. Finally released years behind schedule, the study found that the digital signs did not prompt drivers to look away from the road long enough to increase the risk of crashes. The billboard industry, which has aggressively pushed to install more of the lucrative displays, trumpeted the results as confirmation of their safety.

But the lengthy critique issued last month by Jerry Wachtel–who worked for the highway administration in the 1970s and '80s and served as an adviser in a preliminary phase of the study—says the research is so riddled with errors and contradictions that it should be disregarded (A summary of his critique can be found on the website of the Eno Center for Transportation think-tank). His report lists experts from the U.S. and five other countries who reviewed his conclusions, including one who wrote: "It is highly disappointing, even irresponsible, that a study anticipated for so long on such an important question has been so poorly executed."

For their part, officials of the FHWA and Leidos, which formerly was known as SAIC, have refused to answer questions about the federal study. "FHWA has no additional comment beyond those made in the report itself," spokesman Doug Hecox said in an email.

Wachtel, who heads The Veridian Group, a consulting firm, says he wasn't hired to dissect the report, but decided to do it on his own. He said he was concerned that local officials lacking the technical background to analyze the FHWA study would simply read the conclusions "and begin to promulgate regulations based on this faulty data."

"The breadth and depth of the mistakes and errors were so substantial," he said, "that it was either very, very poor science, or there was something about it that they were trying to hide."

**Seizing on Safety Issue**

While billboard foes oppose digital signs mainly on aesthetic grounds, they've also seized on the safety issue, and are touting Wachtel's critique. "We know that the issue of digital billboards and traffic safety is far from settled," said Mary Tracy, president of the anti-billboard group Scenic America, in a prepared statement. "Any public agency considering allowing the bright, blinking signs on their roadsides should take this critique into account first.'' The Outdoor Advertising Assn. of America, the billboard industry trade group, did not respond to requests for comment.

It's just the latest, but most prominent, black eye for the federal research, which was announced with fanfare in 2007.

"The reported glances to billboards here are on the order of 10-times shorter than values reported elsewhere," one reviewer wrote. Said another: "The data reported as average glance durations are not plausible.''

The reviewers “have serious concerns” about glance data that “greatly undermine their confidence in the report,” former FHWA official Christopher Monk told the lead author William A. Perez in a May, 2011 email released in response to *FairWarning*’s Freedom of Information Act request.

Jerry WachtelHi

As reported by *FairWarning*, records obtained under the Freedom of Information Act show that a lengthy hold-up resulted when peer reviewers shredded a draft of the federal study in spring 2011. They said the eye-glance times recorded for the test drivers were far too brief to be credible, suggesting serious problems with the equipment or mistakes in analyzing the data.

“Suffice to say that if we cannot adequately address these concerns either through counterargument or through re-analyzing, I doubt OST [Office of the Secretary of Transportation] will let it go out and it will be perceived (correctly) as a failure on our part.”

By then, agency officials were being peppered with inquiries about the status of the overdue study. Records show that they repeatedly answered, euphemistically, that it was under review. “Have no idea when we can change that message (do you?) but we will plan to continue to sound like a broken record,” wrote one official in an email to another. “Wish we could end this.”

## Changes Not Explained

The study was finally released more than two years later, on Dec. 30, 2013. It featured major adjustments to the eye-glance data, without explaining how they were recalculated. It said the longest recorded glance at an electronic billboard was 1.34 seconds—less than the two seconds that some authorities say raises crash risks.

According to the study, “The results did not provide evidence” that electronic billboards, “as deployed and tested in the two selected cities, were associated with unacceptably long glances away from the road.”

The Outdoor Advertising Association of America quickly embraced the finding. “Studies have long shown that digital billboards do not cause distracted driving behavior,’’ said its president and CEO, Nancy Fletcher, “and this new study comes to the same conclusion.’’

Much of Wachtel’s critique is steeped in bone-dry technical argot, though some puzzling details and factual discrepancies are apparent to an ordinary reader.

It notes, for example, that the federal study did not measure glances for the entire time drivers were approaching billboards. And while the draft report had listed a combined 20 electronic and 10 standard billboards on the driving courses of the two cities, the final report included only eight signs of each type. There was no explanation for discarding the rest.

The sizes of billboards and distance of setbacks from the road were also changed from one version to the other, the critique said. It added: “Perhaps the greatest concern for a reader attempting to understand the findings of this study is that, between the draft and final reports, some target billboards appear to have crossed from one side of the road to the other.

*Myron Levin is the editor of Fair Warning: News of Safety, Health and Corporate Conduct*

# Effects of Outdoor Advertising Displays on Driver Safety

*Requested by*
Suzy Namba, Caltrans Division of Design

October 11, 2012

*The Caltrans Division of Research and Innovation (DRI) receives and evaluates numerous research problem statements for funding every year. DRI conducts Preliminary Investigations on these problem statements to better scope and prioritize the proposed research in light of existing credible work on the topics nationally and internationally. Online and print sources for Preliminary Investigations include the National Cooperative Highway Research Program (NCHRP) and other Transportation Research Board (TRB) programs, the American Association of State Highway and Transportation Officials (AASHTO), the research and practices of other transportation agencies, and related academic and industry research. The views and conclusions in cited works, while generally peer reviewed or published by authoritative sources, may not be accepted without qualification by all experts in the field.*

# Executive Summary

## Background

Digital and other outdoor advertising displays are becoming more common along California's highways, and Caltrans is considering generating income with advertisements on changeable message signs and outdoor advertising displays on state-owned rights of way outside of the operational highway. Local agencies, commercial businesses and private landowners are also looking at digital displays as a way to generate income.

However, the technology for digital displays is relatively new, and there has been little account taken of their effects on driver safety. Further, there are no regulations regarding their font size or complexity. Caltrans needed more data to determine whether digital displays and other forms of outdoor advertising constitute a safety hazard to drivers.

To conduct this investigation, CTC carried out a literature search to:

- Identify existing or in-progress research about the driver safety impacts of static signs, digital billboards and other displays, including the effects of brightness/illumination, font size and visual complexity of the signs.
- Review research on both on-premise and off-premise signage as well as the broader aspects of how guide signs (as given in the California Manual on Uniform Traffic Control Devices) affect safety.
- Investigate how other states are regulating the use of digital displays.

## Summary of Findings

We gathered information in three topic areas:

- Federal Guidance on Digital Displays
- Related Research
    - The Wachtel Report and Pre-2009 Literature on Outdoor Advertising Safety
    - Literature on Outdoor Advertising Safety Since the 2009 Wachtel Report
    - Luminance Criteria and Other Human Factors for Sign Design
- State Regulations

Following is a summary of findings by topic area.

## Federal Guidance on Digital Displays

A 2007 Federal Highway Administration (FHWA) memo makes recommendations for changeable message sign message duration (8 seconds), transition time (1 to 4 seconds), brightness, spacing and locations.

## Related Research

The most thorough review of the literature to date on digital display safety is the 2009 report Safety Impacts of the Emerging Digital Display Technology for Outdoor Advertising Signs by Jerry Wachtel. Wachtel has been the president of The Veridian Group, a California human factors research consulting firm, for 22 years and has published numerous studies on outdoor advertising safety.

We give a summary of this report and include a selection of the references cited for studies in or before 2009. (We found no relevant studies for this period not included in Wachtel's report, which covers both digital and nondigital outdoor advertising.) In a separate section, we discuss literature on outdoor advertising safety that has been published since Wachtel's report.

The Wachtel Report and Pre-2009 Literature on Outdoor Advertising Safety

Based on the literature review, Wachtel concludes that:

- Studies regularly demonstrate that roadside advertising, including digital billboards, contributes to driver distraction at levels that adversely affect safe driving performance.
- There are consistent research recommendations regarding brightness, message duration and change interval, and other factors.

Wachtel also gives a thorough survey of national and international guidelines and regulations for digital billboards, and based on these (along with the literature review) makes recommendations for digital billboard guidelines, including:

- *Message duration:* A minimum display duration of sight distance to the digital billboard (feet)/speed limit (feet/second).
- *Message interval:* An interval between successive displays that is close to instantaneous as possible.
- *Display brightness:* Brightness, luminance and illuminance limits based on the ambient lighting conditions of digital billboards.
- *Digital billboard spacing:* Spacing between digital billboards that does not face a driver with two or more displays within his field of view at the same time.
- *Other:* The prohibition of visual effects, message sequencing, and the placement of digital billboards near traffic control devices and driver decision and action points.

Wachtel concludes that there is growing evidence that digital billboards distract drivers because these signs increase driver glance duration and the driver's gaze is reflexively drawn to objects of different luminance in the visual field.

Findings from the literature support the argument that while there is no definitive research showing increased crashes due to the presence of billboards or digital billboards, there is an increased crash risk based on research on the effects of billboards on driver attention and the effects of driver distraction on safety:

- Billboards can have a significant effect on driver speed, lateral control, mental workload, ability to follow road signs, and eye movements and fixations, with older drivers particularly affected. (*The Effects of Visual Clutter on Driving Performance* and *Driven to Distraction*, *An Evaluation of the Influence of Roadside Advertising on Road Safety*, and *Review of Roadside Advertising Signs*). And visual clutter generally can distract drivers (*Driver Distraction by Advertising*).
- Digital billboards attract more attention than regular billboards, with larger number of glances and longer glances (*Driving Performance and Digital Billboards* and *Observed Driver Glance*

*Behavior at Roadside Advertising Signs*). Wachtel notes that the implication is that the shorter the message duration, the longer the driver's glance in anticipation of the next message.

- Drivers engaging in visually demanding tasks have a crash risk three times higher than attentive drivers; while brief glances do not increase risk, glances of more than two seconds at least double crash risk (*The Impact of Driver Inattention on Near-Crash/Crash Risk*).
- While studies have not been able to establish a statistical relationship between the presence of billboards and traffic safety, these studies have been flawed in design, and the use of accident data in evaluating the impacts of billboard is ill-advised (*The Impact of Roadside Advertising on Driver Distraction, A Study of the Relationship between Digital Billboards and Traffic Safety in Cuyahoga County, Ohio*, *Driving Performance and Digital Billboards*, and *Driving Performance in the Presence and Absence of Billboards*, *Effects of Roadside Advertisements on Road Safety*).
- More research is needed. A 2009 FHWA study on the effects of commercial electronic variable message signs on driver attention and safety (of which Wachtel is a co-author) proposes a three-stage program of research: an on-road instrumented vehicle study, a naturalistic driving study and an unobtrusive observation study (*The Effects of Commercial Electronic Variable Message Signs (CEVMS) on Driver Attention and Distraction*).

Literature on Outdoor Advertising Safety Since the 2009 Wachtel Report

We found a number of studies on outdoor advertising safety that have been published since the Wachtel report; but only three on digital billboard safety specifically. These studies reaffirm the negative effects of billboards on driver attention, despite the fact that no correlation can be found between the presence of billboards and increased crash rates:

- Advertising billboards affect driver's ability to detect changes in road scenes, especially when the roadway background is more cluttered (*Advertising Billboards Impair Change Detection in Road Scenes*). In general they affect lateral control and mental workload (*Conflicts of Interest*), and change drivers' pattern of visual attention, increasing the amount of time needed for drivers to respond to road signs and increasing driving errors (*Effects of Advertising Billboards during Simulated Driving*). A 2010 study concludes that among distractions external to vehicles, roadside advertisements have the strongest correlation to collision frequency (*Quantifying External Vehicle Distractions and Their Impacts at Signalized Intersections*).
- A 2011 FHWA study scans outdoor advertising control practices in Australia, Europe and Japan (*Outdoor Advertising Control Practices in Australia, Europe, and Japan*).
- A 2010 Transport Research Laboratory study concludes that video billboards draw longer and more frequent glances from drivers than static advertisements, with drivers showing greater variation in lateral lane position, driving more slowly and braking harder (*Investigating Driver Distraction*). A 2011 study shows that video billboards also lead to more rear-end collisions when there is a hard-braking lead vehicle (*External Distractions: The Effects of Video Billboards and Windfarms on Driving Performance*).
- A 2010 study showed no impact on driver performance after the installation of a digital billboard (*The Impact of Sacramento State's Electronic Billboard on Traffic and Safety*), and a 2009 study shows no correlation between hazardous intersection and the presence of digital billboards in Los Angeles (*Digital Billboard Safety amongst Motorists in Los Angeles*).
- Preventing distraction by digital billboards requires controlling lighting at nighttime, lengthening message duration time, simplifying message information and prohibiting message sequencing (*Digital Billboards, Distracted Drivers*).

Luminance Criteria and Other Human Factors for Sign Design

We also include a number of studies on human factors for the design of signs in general (including guide signs). Topics include congruent visual information, legibility, message design for variable message signs and luminance criteria for digital billboards. A 2010 study by Arizona State University (*Digital LED Billboard Luminance Recommendations*) suggests that:

… drivers should be subjected to brightness levels of no greater than 10 to 40 times the brightness level to which their eyes are adapted for the critical driving task. As roadway lighting and automobile headlights provide lighting levels of about one nit, this implies signage should appear no brighter than about 40 nits.

### State Regulations

- An undated chart from the Outdoor Advertising Association of America summarizes state regulations on changeable message advertising signs. Generally minimum message duration is between 4 and 10 seconds, with 6 and 8 seconds most common; the maximum interval between messages is 1 to 4 seconds; and spacing is most commonly 500 feet. A review of state practices is also included in Appendices B and C of the 2001 FHWA study, Research Review of Potential Safety Effects of Electronic Billboards on Driver Attention and Distraction in **Related Research**.
- We survey the digital advertising display regulations of 12 states. Of note are Massachusetts and Tennessee, which are currently updating regulations to specifically address digital billboards.

## Gaps in Findings

- While there is a significant amount of research on the effects of outdoor advertising on driver distraction, there is little research definitively showing that outdoor advertising affects crash rates, and there are a limited number of studies on digital billboards specifically.
- We found little research justifying common regulations and design recommendations for digital billboards, including brightness/illumination, font size and visual complexity. Recommendations are typically based on common state practices.
- We found little research on the safety effects of signage in general, including guide signs.
- We did not find research in progress for any areas of inquiry.

## Next Steps

- Caltrans may be able to gather additional information about current practice and regulations by surveying the other state DOTs.
- Caltrans could consider launching a multi-year research study, either by itself or with other states, aimed at measuring changes in crash rates after installation of digital displays.
- Caltrans could follow up with the Outdoor Advertising Association of America to determine the sources and dates of the data presented in their State Changeable Message Chart; OAAA may also have other unpublished research of interest.

# Federal Guidance on Digital Displays

**Guidance on Off-Premise Changeable Message Signs**, Federal Highway Administration, September 2007.
http://www.fhwa.dot.gov/realestate/offprmsgsnguid.htm
Guidance from this memorandum is as follows:

- Duration of message: Between 4 and 10 seconds; 8 seconds is recommended.
- Transition time between messages: 1 to 4 seconds.
- Brightness: Adjust brightness in response to changes in light levels so that signs are not unreasonably bright for the safety of the motoring public.
- Spacing: Not less than minimum spacing requirements for signs under the federal/state agreement (FSA), or greater if determined appropriate to ensure the safety of the motoring public.
- Locations: As where allowed by the FSA except where such locations are determined to be unsafe.

Related Resources:

**Outdoor Advertising Control**, Federal Highway Administration, January 3, 2012.
http://www.fhwa.dot.gov/realestate/out_ad.htm
This web page provides a series of links to related topics, including a history and overview of the federal outdoor advertising control program, the possible effects of commercial electronic variable message signs on driving safety, and research about the potential safety effects of electronic billboards on driver attention and distraction.

# Related Research

Studies below that are industry sponsored are preceded by an asterisk and include an indication of the sponsor.

## The Wachtel Report and Pre-2009 Literature on Outdoor Advertising Safety

**Safety Impacts of the Emerging Digital Display Technology for Outdoor Advertising Signs**, Jerry Wachtel, NCHRP Project 20-7 (256), Final Report, April 2009.
http://www.azmag.gov/Documents/pdf/cms.resource/NCHRP_Digital_Billboard_Report70216.pdf

Sections 2 and 3 of this report include the most thorough review to date of the literature on the use of digital displays for outdoor advertising signs. Summaries of a selection of the studies referenced in the report are provided on the following pages, along with Wachtel's comments on these studies, where relevant. (In the citations for this section, all references to "Wachtel" are to the 2009 report.)

Summaries of the following sections of the report are also provided:

- Conclusions from the literature.
- Section 4: Human Factors Issues.
- Section 5: Current and Proposed Guidelines and Regulations.
- Section 6: Recommendations for Guidelines.
- Section 7: Digital Billboards On-Premise and on the Right-Of-Way.
- Section 8: New Technology, New Applications, New Challenges.
- Section 9: Summary and Conclusions.

Conclusions from the Literature

This report gives an exhaustive review of the literature (Sections 2 and 3) and concludes broadly (pages 5 and 6 of the report) that:

- Studies regularly demonstrate that the presence of roadside advertising signs such as digital billboards contributes to driver distraction at levels that adversely affect safe driving performance.
- There is consistency in research recommendations regarding brightness, message duration and change interval, and billboard location with regard to official traffic control devices, roadway geometry and vehicle maneuver requirements at interchanges, lane drops, merges and diverges, as well as regarding constraints that should be placed on such signs' placement and operation.

Section 4: Human Factor Issues:

Beginning on page 115 of the report, Wachtel summarizes human factors issues related to digital billboards as follows:

- *Conspicuity:* Billboards with high levels of illumination and frequent changes can reduce the visibility of traffic control devices and other visual signs required for safety (vehicle brake lights, reflectors, etc.).
- *Distraction and inattention:* Inattention involves the failure of a driver to concentrate on the driving task for any reason, or for no known reason at all. It is distinguished from distraction in that it may have no known cause and possibly no remediation.
- *Information processing:* Billboards are often placed in ways that do not adhere to good human factors practice restricting the amount of information conveyed by signs.
- *The Zeigarnik Effect:* Discomfort related to task interruption may lead drivers to continue looking at changing messages on digital billboards to learn what comes next.
- *Brightness and glare:* The majority of public complaints about digital billboards concern their excessive brightness, particularly at night, to the extent that they become the most conspicuous item in the visual field and draw the eye away from other objects that need to be seen.
- *Legibility and readability:* Billboards may not adhere to Manual on Uniform Traffic Control Devices (MUTCD) guidelines on legibility, including font, letter size and color. Often they take more time to read than guidelines prescribe, taking multiple glances to communicate the intended message.
- *Novelty:* Novel stimuli make a greater demand on driver attention, and where drivers get used to static billboards, digital billboards have the ability to present new images to drivers every time the sign is approached.
- *Sign design, coding, redundancy:* Digital billboards lack the consistent design of traffic control devices, which is intended to assist recognition and decrease reaction time.
- *Visual attention:* Digital billboards, more than any previous technology used for roadside advertising, are capable of commanding drivers' attention by employing extremely high luminance levels; bright, rich colors; and a pattern of message display that may appear to flash.
- *Positive Guidance:* Drivers can be given sufficient information about road hazards when and where they need it, and in a form that enables them to avoid error that might result in a crash.
- *The Moth Effect:* Drivers may have the tendency to inadvertently steer in the direction of bright lights, leading to lane departures and crashes.

Section 5: Current and Proposed Guidelines and Regulations

This section reviews national and international guidelines and regulations for digital billboards.

*Queensland, Australia*

Queensland had the most comprehensive regulations, including flowcharts and tables that enable an inspector to determine exactly what types and operational characteristics of advertising signs are permissible under different road and speed conditions. Page 121 of the report describes different levels of restriction for different road categories:

For advertising devices beyond the right-of-way but visible from "motorways, freeways, or roads of similar standard," only non-illuminated signs or non-rotating static illuminated signs are permitted (p. 6-4). Where an advertising device is permitted on State-controlled roads, the same restrictions apply. Further, "variable message signs and trivision signs are not permitted on State-controlled roads" (p. 6-5). For those advertising devices that are permitted, a clear chart is provided (labeled Figure C6) that provides graphic depictions of the "device restriction area" (p. C-12).

Guidelines also establish maximum average sign luminance for zones with differing ambient street lighting. To limit the distracting potential of electronic billboards, Australia requires that digital billboards outside the boundaries of but visible from state-controlled roads (except motorways) (Category 1) be installed only where:

- There is adequate advanced visibility to read the sign.
- The environment is free from driver distraction points and there is no competition with official signs.
- The speed limit is 80km/h or less.
- The device is not a moving sign (defined elsewhere in the document).

For Category 1 digital billboards that display predominantly graphics:

- Long duration display periods are preferred in order to minimize driver distraction and reduce the amount of perceived movement. Each screen should have a minimum display period of 8 seconds.
- The time taken for consecutive displays to change should be within 0.1 seconds.
- The complete screen display should change instantly.
- Sequential message sets are not permitted.
- The time limits will be reviewed periodically.

For Category 1 digital billboards that display predominantly text:

- The number of sequential messages … may range from one to a maximum of three; in locations with high traffic volume or a high demand on driver concentration, the number of sequential messages should be limited to two.
- Where a display is part of a sequential message set, the display duration should be between 2.5 to 3.5 seconds for a corresponding message length of three to six familiar words.
- The number and complexity of words used … should be consistent with the display duration.
- The time taken for consecutive displays to change should be within 0.1 seconds.
- The complete screen display should change instantaneously.
- In a text-only display, the background color should be uniform and nonconspicuous.

Australia's regulations do not allow changeable message signs, flashing signs or digital billboards of any type if such devices would be visible by motorists traveling on motorways (Category 2). Where advertising devices are permitted within the boundaries of state-controlled roads (Category 3), such signs must be nonrotating static illuminated and nonrotating, nonilluminated signs. Neither variable message signs nor trivision signs are permitted on state-controlled roads.

*South Africa*

On page 126 of the report, Wachtel describes South Africa's regulations, which require that no advertisement may:

- Be so placed as to distract, or contain an element that distracts, the attention of drivers of vehicles in a manner likely to lead to unsafe driving conditions.
- Be illuminated to the extent that it causes discomfort to or inhibits the vision of approaching pedestrians or drivers of vehicles.

- Be attached to traffic signs, combined with traffic signs, … obscure traffic signs, create confusion with traffic signs, interfere with the functioning of traffic signs, or create road safety hazards.
- Obscure the view of pedestrians or drivers, or obscure road or rail vehicles and road, railway or sidewalk features such as junctions, bends, and changes in width.
- Be erected in the vicinity of signalized intersections which display the colours red, yellow or green if such colours will constitute a road safety hazard.
- Have light sources that are visible to vehicles traveling in either direction (p. 12).

Regulations provide guidance on advertisement size, colors, number of advertisements in the area, speed limit, quantity of information in the advertisement (measured in bits), illumination level and other factors.

*Victoria, Australia*
Regulations define the conditions under which an advertisement is a road safety hazard, including position and potential for distraction because of color or illumination. From page 130 of the report, signs must:

- Not display animated or moving images, or flashing or intermittent lights.
- Not be brighter than 0.25 candela per square metre.
- Remain unchanged for a minimum of 30 seconds.
- Not be visible from a freeway.
- Satisfy the ten point checklist.

*New South Wales, Australia*
Guidelines include recommendations for variable message signs on conventional roads, including message on- and off-time, changeover time, maximum distance to traffic signal, and minimum distances to other advertising devices or to official traffic devices. It also restricts the maximum luminance levels of advertising devices based on levels of ambient off-street lighting.

*The Netherlands*
The Netherlands has guidelines for visual distracters (including but not limited to billboards) that contain nondriving related information. Recommendations include (from page 132 of the report):

- There should be no information that actively attracts attention; this includes no moving objects, no LCD or LED screens, and no moving or changing pictures or images.
- Non-driving related information should not appear within the driver's central field-of-view (less than 10 deg from straight ahead).
- Signs should contain a maximum of five "items" (letters, numbers, symbols, etc.).
- No distractions should be permitted at merges, exits and entrances, close to road signs or in curves (specific constraints will follow).
- No telephone numbers will be permitted.
- No fluorescent colors are permitted.
- No ambiguity is permitted.
- No controversial information is permitted; examples include sex, violence, religion, nudity.
- No mixture of real and fake words is permitted.
- Commercial signs must be 90 deg to the road to minimize head turning.
- No signs will be permitted that mimic road signs in color or layout.

*Brazil*
A 1998 study proposes the following regulations (from page 134 of the report):

- Advertising signs should be located at a tangent to approaching drivers.
- Advertising signs should be no closer than 1000 m from one another on the same side of the road, and no closer than 500 m from the nearest advertising sign on the opposite side of the road.
- The display time of each image on a variable message sign should be long enough to appear static to 95% of drivers approaching it at highway speeds.

- The message change interval should not exceed 2 s.
- The displayed image should remain static from the moment it first appears until the moment it is changed.
- No animation, flashing or moving lights should be allowed.
- No message or image that could be mistaken for a traffic control signal should be displayed.
- Messages should be simple and concise.

*United States*

New York State

Regulations proposed in 2008 include:

- Minimum message duration of 62 seconds, so that no motorist would be able to see more than one message change as he or she approached any particular changeable electronic variable message sign.
- Message transition time should be instantaneous to minimize distraction.
- Minimum spacing between changeable electronic variable message sign is 5,000 feet.
- Maximum changeable electronic variable message sign brightness of 5,000 cd/$m^2$ in daylight and 280 cd/$m^2$ at night.
- Prohibited locations:
    - On interstate and controlled access highways: Within 1,100 feet of an interchange, at-grade intersection, toll plaza, signed curve or lane merge/weave area; within 5,000 feet of another changeable electronic variable message sign or official traffic device that has changeable messages.
    - On primary highways: Within 1,100 feet of an entrance or exit from a controlled access highway, a signed curve or a lane/merge area; within 5,000 feet of another changeable electronic variable message sign or official traffic control device with changeable messages.

Revised criteria made these requirements less restrictive, reducing message duration from 62 to 6 seconds and changing spacing requirements and prohibited locations. The requirements for instantaneous message transition and maximum brightness did not change.

San Antonio, TX

Regulations for a trial evaluation of 15 off-premise digital signs included a message duration time of 10 seconds; change intervals of one second or less; brightness less than or equal to 7,000 nits during the day and 2,500 nits at night; and various other regulations. (One nit = one candela per square meter.)

Flowery Branch, GA

Regulations in this community begin on page 138 of the report and include:

- Minimum message duration: to the amount of time that would result in one message per mile at the highest speed limit posted within the 5000 feet approaching the sign for the road from which the sign is to be viewed.
- Transition time: less than one-tenth of a second, with no animated transitions.
- Illumination and brightness: not greater than 12 foot-candles from the nearest point of the road.
- Freezing of the display on malfunction.
- Prohibition of message sequencing.

Oakdale, MN

Brightness is limited to 2,500 nits during the day and 500 nits at night, with adjustments for ambient light conditions and a minimum display duration of 60 seconds.

St. Croix County, WI

From page 140 of the report, signs with "external and uncolored" illumination are permitted. In addition to typical prohibitions against flashing, moving, traveling, or animated signs or sign elements, the following prohibitions apply to all signs with internal illumination:

- No illuminated off-premises sign which changes in color or intensity of artificial light at any time while the sign is illuminated shall be permitted.
- No illuminated on-premise sign which changes in color or intensity of artificial light at any time when the sign is illuminated shall be permitted, except one for which the changes are necessary for the purpose of correcting hour-and-minute, date or temperature information.
- A sign that regularly or automatically ceases illumination for the purpose of causing the color or intensity to have changed when illumination resumes (are prohibited).
- The scope of the ordinance's prohibitions include, but are not limited to, any sign face that includes a video display, LED lights that change in color or intensity, "digital ink," and any other method or technology that causes the sign face to present a series of two or more images or displays.

Outdoor Advertising Industry

The Outdoor Advertising Association of America (OAAA) publication Regulating Digital Billboards suggests that digital billboards:

- Display a message that appears for no less than four seconds.
- Have message transitions of at least one second.
- Have spacing consistent with state requirements.
- Do not include animated, flashing, scrolling, intermittent or video elements.
- Appropriately adjust display brightness as ambient light levels change.

Section 6: Recommendations for Guidelines

Wachtel makes recommendations for guidelines based on the review of literature and international, national, state and local regulations (despite the fact that "there are not yet comprehensive research-based answers to fully inform such guidance and regulation"):

- Minimum message display duration: The FHWA recommends 6 seconds, the OAAA recommends 4 seconds, and the OAAA reports that 41 states have set display minimums ranging from 4 seconds to 10 seconds. Wachtel is not aware of any research on this issue to support such guidelines, and notes that "good human factors practice would suggest that minimum display duration should differ with sight distance, prevailing speeds, and other factors." The author recommends the following formula to minimize the chance that a motorist will see more than two successive messages:

  Sight distance to the digital billboards (ft) / Speed limit (ft/sec) = Minimum display duration (sec)

- Interval between successive displays: This interval should be as close to instantaneous as possible so that a driver cannot perceive any blanking of the display screen.
- Visual effects between successive displays: Visual effects should be prohibited.
- Message sequencing: Sequencing should be prohibited.
- Amount of information displayed: To the author's knowledge, no U.S. jurisdiction places restrictions on the amount of information that may be presented on billboards, including digital billboards (although some agencies outside the United States do). There is not enough research to make recommendations, although a good starting point are guidelines for South Africa and the Netherlands (which limit information based on how much a driver can read at a given speed and while the sign is visible).
- Information presentation: Considerable guidance is available to advertisers and digital billboard owners from sources inside the outdoor advertising industry as well as human factors and traffic

safety experts, and the MUTCD itself. Digital billboards should facilitate rapid, error-free reading of roadside advertisements with lower levels of driver attentional demand and distraction. Typeface, font, color and contrast of figure and background, character size, etc., all play a role in the legibility and readability of a display.

- Digital billboard size: Recommendations for size limitations are beyond the scope of the report. The most common size for billboards of any kind is 14 feet high by 48 feet wide.
- Brightness, luminance and illuminance: Since perceived brightness can change depending on ambient light conditions, it is necessary to establish objective, measurable limits on the amount of light that such billboards actually emit, and set different upper bounds for different environmental and ambient conditions.
- Display luminance in the event of failure: Roadway authorities should incorporate into their guidelines verifiable requirements that, in the event of any failure or combination of failures that affect DBB luminance, the display will default to an output level no higher than that which has been independently determined to be the acceptable maximum under normal operation.
- Longitudinal spacing between billboards: An approaching driver should not be faced with two or more digital billboard displays within his field of view at the same time.
- Digital billboard placement with relation to traffic control devices and driver decision and action points: Prohibitions against the placement of distracting irrelevant stimuli in roadway settings where drivers must make decisions and take actions should be imposed. The guidance for Queensland, Australia, might serve as a model.
- Annual operating permits: Government agencies and roadway operating authorities might consider the practice adopted in Oakdale, MN, where owners of digital billboards are granted a permit to operate a sign for a year and must renew the permit annually.

Section 7: Digital Billboards On-Premise and on the Right-Of-Way

*On-Premise Signs*
From page 161 of the report:

> … On-premise sign regulation is typically accomplished through local zoning codes, and may, in general, be far more variable and likely less stringent with regard to the means of the display, display characteristics, or the size of the sign than comparable controls on billboards. Many such codes have changed little in recent years, despite the growth of digital technology for on-premise displays.
>
> From the traffic safety perspective, it is possible that the risk of driver inattention and distraction is higher for some on-premise signs than for some [digital billboards], because on-premise signs may be larger and closer to the road, mounted at elevations closer to the approaching driver's eye level, and placed at angles that may require excessive head movements, In addition, many such signs may display animation, full motion video, sound, and other stimuli.
>
> … Agencies might want to consider restrictions for on-premise sign operations at least as rigorous as those for billboards, as well as restrictions on size, height, proximity to the right-of-way, and angular placement with regard to the oncoming driver's line of sight. Of all of the guidelines proposed in this report for [digital billboards], there may well be an equal or greater need to consider similar controls for on-premise signs. In addition, consideration must also be given to such signs' capacity for animation, flashing lights or other special effects, and full motion video.

*Digital Billboards within the Right-of-Way*
The FHWA opposes advertising of any kind within the right of way (despite proposals for public-private partnerships in California and Nevada).

Wachtel concludes that permitting California to study its proposed exceptions to the requirements of the MUTCD and existing federal law would bring about several adverse consequences, including undermining decades of human factors research, setting a dangerous precedent and opening to challenge the entire basis of the MUTCD.

Section 8: New Technology, New Applications, New Challenges
The potential for driver distraction displaying billboards (electronic and otherwise) on moving vehicles is high, as it is for personalized and interactive billboards.

Section 9: Summary and Conclusions
From page 179 of the report:

> In short, the issue of the role of [digital billboards (DBBs)] in traffic safety is extremely complex, and there is no single research study approach that can provide answers to all of the many questions that must be raised in looking at this issue. … A small number of important research studies, all published (or to be published) within the past several years, may have opened the door to a solution to the long-standing question of whether unsafe levels of driver distraction can occur from roadside billboards. … [One study found] that a driver's eyes-off-road time due to external-to-the-vehicle distraction or inattention was estimated to cause more than 23% of all crashes and near crashes that occurred. … [Another study shows] significantly longer average glance durations to roadside digital signs than to "baseline" sites and to traditional (fixed) billboards, and the researchers suggest, *all* measures of visual glances indicative of driver distraction would prove to be significantly worse in the presence of digital signs if a full study was to be conducted at night. … [T]here is growing evidence that billboards can attract and hold a driver's attention for the extended periods of time that we now know to be unsafe.
>
> … [A]n on-road study (Lee, et al., 2007) using an instrumented vehicle found many more such long glances made to DBBs and similar "comparison sites" consisting of (among other things) on-premise digital signs, than there were to sites containing traditional, static billboards, or sites with no obvious visual elements. … From the same study, we have evidence expressed by the researchers that if we were to conduct our research at night we would find that *all* measures of eye glance behavior would demonstrate significantly greater amounts of distraction to digital advertisements than to fixed billboards or to the natural roadside environment, and that driver vehicle control behaviors such as lane-keeping and speed maintenance would also suffer in the presence of these digital signs.
>
> … When we add the results of these recent, applied research studies, to the earlier theoretical work by Theeuwes and his colleagues (1998, 1999), in which they demonstrated that our attention and our eye gaze is reflexively drawn to an object of different luminance in the visual field, that this occurs even when we are engaged in a primary task, and regardless of whether we have any interest in this irrelevant stimulus, and that we may have no recollection of having been attracted to it, we have a growing, and consistent picture of the adverse impact of irrelevant, outside-the-vehicle distracters such as DBBs on driver performance.

Note: In the citations that follow, all references to "Wachtel" are from the 2009 report citation given on page 4 of this report.

**The Effects of Commercial Electronic Variable Message Signs (CEVMS) on Driver Attention and Distraction: An Update**, Federal Highway Administration, Report No. FHWA-HRT-09-018, February 2009.
http://www.fhwa.dot.gov/realestate/cevms.pdf
*From the abstract:* The present report reviews research concerning the possible effects of Commercial Electronic Variable Message Signs (CEVMS) used for outdoor advertising on driver safety. Such CEVMS displays are alternatively known as Electronic Billboards (EBB) and Digital Billboards (DBB). The report consists of an update of earlier published work, a review of applicable research methods and techniques, recommendations for future research, and an extensive bibliography. The literature review update covers recent post-hoc crash studies, field investigations, laboratory investigations, previous literature reviews, and reviews of practice. The present report also examines the key factors or independent variables that might affect a driver's response to CEVMS, as well as the key measures or dependent variables which may serve as indicators of driver safety, especially those that might reflect attention or distraction. These key factors and measures were selected, combined, and integrated into a set of alternative research strategies. Based on these strategies, as well as on the review of the literature, a proposed three stage program of research has been developed to address the problem. The present report also addresses CEVMS programmatic and research study approaches. In terms of an initial research study, three candidate methodologies are discussed and compared. These are: (1) an on-road instrumented vehicle study, (2) a naturalistic driving study, and (3) an unobtrusive observation study. An analysis of the relative advantages and disadvantages of each study approach indicated that the on-road instrumented vehicle approach was the best choice for answering the research question at the first stage.

Wachtel notes:

> It should be noted that this project was performed essentially in parallel with the present study. Although both looked at the recent literature that addressed driver behavior and performance in the presence of DBBs, the two studies had different goals and took different approaches. The study by Molino and his colleagues was intended to identify gaps in our current knowledge and design a research strategy to begin to fill those gaps, with the ultimate goal of providing the FHWA Office of Real Estate Services with a sufficient empirical basis from which to develop or revise, if appropriate, guidance and/or regulation for the use of DBBs along the Federal Aid Highway System. These goals differed considerably from the present study, whose purpose was to review, not only the recent research literature, but also existing guidelines and/or regulations that have been developed in the U.S. and abroad to address DBBs. Finally, the ultimate goal of the present study was to take what is known from the research, combine this knowledge with what has worked for regulatory authorities, and recommend new guidelines and/or regulations that could be enacted by State and local governments, and private and toll road authorities, without the need or the ability to wait for the completion of additional research. The FHWA study had no such objective.

**The Effects of Visual Clutter on Driving Performance**, Jessica Edquist, Accident Research Centre, Monash University, February 24, 2009.
http://www.tml.org/legal_pdf/Billboard-study-article.pdf
*From the abstract:* Driving a motor vehicle is a complex activity, and errors in performing the driving task can result in crashes which cause property damage, injuries, and sometimes death. It is important that the road environment supports drivers in safe performance of the driving task. At present, increasing amounts of visual information from sources such as roadside advertising create visual clutter in the road environment. There has been little research on the effect of this visual clutter on driving performance, particularly for vulnerable groups such as novice and older drivers. The present work aims to fill this gap. Literature from a variety of relevant disciplines was surveyed and integrated, and a model of the mechanisms by which visual clutter could affect performance of the driving task was developed. To determine potential sources of clutter, focus groups with drivers were held and two studies involving subjective ratings of visual clutter in photographs and video clips of road environments were carried out. This resulted in a taxonomy of visual clutter in the road environment: "situational clutter", including

vehicles and other road users with whom drivers interact; "designed clutter", including road signs, signals, and markings used by traffic authorities to communicate with users; and "built clutter", including roadside development and any signage not originating from a road authority. The taxonomy of visual clutter was tested using the change detection paradigm. Drivers were slower to detect changes in photographs of road scenes with high levels of visual clutter than with low levels, and slower for road scenes including advertising billboards than road scenes without billboards. Finally, the effects of billboard presence and lead vehicles on vehicle control, eye movements and responses to traffic signs and signals were tested using a driving simulator. The number of vehicles included appeared to be insufficient to create situational clutter. However billboards had significant effects on driver speed (slower), ability to follow directions on road signs (slower with more errors), and eye movements (increased amount of time fixating on roadsides at the expense of scanning the road ahead). Older drivers were particularly affected by visual clutter in both the change detection and simulated driving tasks. Results are discussed in terms of implications for future research and for road safety practitioners. Visual clutter can affect driver workload as well as purely visual aspects of the driving task (such as hazard perception and search for road signs). When driver workload is increased past a certain point other driving tasks will also be performed less well (such as speed maintenance). Advertising billboards in particular cause visual distraction, and should be considered at a similar level of potential danger as visual distraction from in-vehicle devices. The consequences of roadside visual clutter are more severe for the growing demographic of older drivers. Currently, road environments do not support drivers (particularly older drivers) as well as they could. Based on the results, guidance is given for road authorities to improve this status when designing and location road signage and approving roadside advertising.

**The Impact of Roadside Advertising on Driver Distraction: Final Report**, WSP Development and Transportation, June 2008.
http://www.highways.gov.uk/knowledge_compendium/assets/documents/Portfolio/The%20impact%20of%20roadside%20advertising%20on%20the%20travelling%20public%20-%20Report%20-%201103.pdf
This report argues against the use of accident data in evaluating the impacts of billboards. Wachtel summarizes these arguments as follows:

- There could be other unknown variables that could have led to the reported accidents.
- There are many opportunities for error or omission in data entry in police accident reporting forms.
- In minor accidents, the involved vehicles may move away from the point of rest (POR) to clear traffic lanes, thus further degrading the potential accuracy of identifying the true location. The POR of the involved vehicle(s) (which is what is commonly identified in police reports) may have little relationship to the point of distraction that was the proximal cause of the crash.
- Accidents, particularly minor accidents, are underreported.
- Accident data considers only those incidents that result in an actual collision. But there are likely many more incidences of distraction that result in driver error (such as late braking, lane exceedances) without consequence, and others that result in "near misses" that might have resulted in a crash but for the evasive actions of another driver. "As no data on 'near misses' is available, it is not possible to quantify the full effect of distraction" (p. 35).

Wachtel also summarizes the reports broad conclusions as follows:

- Although it is accepted that drivers are responsible for attending to the driving task, "visual clutter is liable to overload or distract drivers" (p. 63).
- The stakeholders could not provide statistical evidence to demonstrate the presence or absence of a correlation between roadside advertising and accidents.
- There is no desire for an outright ban on roadside advertising, but there is general agreement about the need for more guidance or regulation to control the type, location and content of such advertising.
- There is a need for additional governmental powers to remove unauthorized advertising, and there is a need to make enforcement a greater priority.

***A Study of the Relationship between Digital Billboards and Traffic Safety in Cuyahoga County, Ohio**, Tantala Associates, sponsored by the OAAA, July 2007.
Citation at http://trid.trb.org/view/2007/M/1154756
This study sponsored by the Outdoor Advertising Association of America uses police reports to examine the statistical relationship between certain digital billboards and traffic safety for seven locations in Cuyahoga County. Results show no statistical relationship between the presence of digital billboards and accidents.

Wachtel notes:

> The authors performed a post-hoc accident analysis study in which they reviewed statistical summaries of traffic collision reports, the originals of which had been prepared by investigating police officers. There are serious, inherent weaknesses in the use of this technique; such weaknesses have been understood and well documented for many years (see, for example, Wachtel and Netherton, 1980; Klauer, et al., 2006b; Speirs, et al., 2008). The use of this approach to relate crashes to driver distraction from DBBs, however, raises additional concerns.

Wachtel goes on to give an extensive critique of this study (pages 89 to 101), reprising his criticisms in the following review:

> **A Critical, Comprehensive Review of Two Studies Recently Released by the Outdoor Advertising Association of America**, Jerry Wachtel, The Veridian Group, October 18, 2007.
> http://www.scenic.org/storage/documents/Wachtel_Maryland_review.pdf
> *From the report:* In July 2007, the Outdoor Advertising Association of America (OAAA) announced on its website the issuance of two "ground-breaking studies" that addressed the human factors and driver performance issues associated with real-world digital (or electronic) billboards (EBBs), and the impact of such billboards on traffic accidents (Outdoor Advertising Association of America, 2007). … As a result of the issuance of these two studies and the claims made for them, and because of the need to address this technology by Government agencies nationwide, the Maryland State Highway Administration (MDSHA) asked this reviewer to perform an independent peer review of each of the two studies. This report represents the results of that review. … Having completed this peer review, it is our opinion that acceptance of these reports as valid is inappropriate and unsupported by scientific data, and that ordinance or code changes based on their findings is ill advised.

***Driving Performance and Digital Billboards**, Suzanne E. Lee, Melinda J. McElheny, Ronald Gibbons, Center for Automotive Safety Research, Virginia Tech Transportation Institute, sponsored by the OAAA, March 22, 2007.
http://www.oaaa.org/UserFiles/File/Legislative/Digital/6.3.9b%20Driver%20Behavior%20Research.pdf
*From the abstract:* Thirty-six drivers drove an instrumented vehicle on a 50-mile loop route in the daytime along some of the interstates and surface streets in Cleveland [OH]. … The overall conclusion, supported by both the eyeglance results and the questionnaire results, is that the digital billboards seem to attract more attention than the conventional billboards and baseline sites. Because of the lack of crash causation data, no conclusions can be drawn regarding the ultimate safety of digital billboards. Although there are measurable changes in driver performance in the presence of digital billboards, in many cases these differences are on a par with those associated with everyday driving, such as the on-premises signs located at businesses.

**Driven to Distraction: Determining the Effects of Roadside Advertising on Driver Attention**, Mark S. Young, Janina M. Mahfoud, Brunel University, 2007.
http://bura.brunel.ac.uk/bitstream/2438/2229/1/Roadside%20distractions%20final%20report%20%28Brunel%29.pdf
*From the abstract:* There is growing concern that roadside advertising presents a real risk to driving safety, with conservative estimates putting external distractors responsible for up to 10% of all accidents. In this report, we present a simulator study quantifying the effects of billboards on driver attention, mental workload and performance in Urban, Motorway and Rural environments. The results demonstrate that roadside advertising has a clear detrimental effect on lateral control, increases mental workload and eye fixations, and on some roads can draw attention away from more relevant road signage. Detailed analysis of the data suggests that the effects of billboards may in fact be more consequential in scenarios which are monotonous or of lower workload. Nevertheless, the overriding conclusion is that prudence should be exercised when authorising or placing roadside advertising. The findings are discussed with respect to governmental policy and guidelines.

Wachtel gives an extensive critique of the methodology for this industry-sponsored study (pages 101 to 114).

**The Impact of Driver Inattention on Near-Crash/Crash Risk: An Analysis Using the 100-Car Naturalistic Driving Study Data**, S.G. Klauer, T.A. Dingus, V.L. Neale, J.D. Sudweeks, D.J. Ramsey, Virginia Tech Transportation Institute, April 2006.
http://www.nhtsa.gov/DOT/NHTSA/NRD/Multimedia/PDFs/Crash%20Avoidance/2006/DriverInattention.pdf
*From the abstract:* The purpose of this report was to conduct in-depth analyses of driver inattention using the driving data collected in the 100-Car Naturalistic Driving Study. An additional database of baseline epochs was reduced from the raw data and used in conjunction with the crash and near-crash data identified as part of the original 100-Car Study to account for exposure and establish near-crash/crash risk. The analyses presented in this report are able to establish direct relationships between driving behavior and crash and near-crash involvement. Risk was calculated (odds ratios) using both crash and near-crash data as well as normal baseline driving data for various sources of inattention. The corresponding population attributable risk percentages were also calculated to estimate the percentage of crashes and near-crashes occurring in the population resulting from inattention. Additional analyses involved: driver willingness to engage in distracting tasks or driving while drowsy; analyses with survey and test battery responses; and the impact of driver's eyes being off of the forward roadway. The results indicated that driving while drowsy results in a four- to six-times higher near-crash/crash risk relative to alert drivers. Drivers engaging in visually and/or manually complex tasks have a three-times higher near-crash/crash risk than drivers who are attentive. There are specific environmental conditions in which engaging in secondary tasks or driving while drowsy is more dangerous, including intersections, wet roadways, and areas of high traffic density. Short, brief glances away from the forward roadway for the purpose of scanning the driving environment are safe and actually decrease near-crash/crash risk. Even in the cases of secondary task engagement, if the task is simple and requires a single short glance, the risk is elevated only slightly, if at all. However, glances totaling more than 2 seconds for any purpose increase near-crash/crash risk by at least two times that of normal, baseline driving.

**Driving Performance in the Presence and Absence of Billboards**, Suzanne E. Lee, Erik C.B. Olsen, Maryanne C. DeHart, Virginia Polytechnic Institute and State University, February 29, 2004.
Citation at http://trid.trb.org/view/2004/M/811075
*From the abstract:* The current project was undertaken to determine whether there is any change in driving behavior in the presence or absence of billboards. Several measures of eyeglance location were used as primary measures of driver visual performance. Additional measures were included to provide further insight into driving performance—these included speed variation and lane deviation. The overall conclusion from this study is that there is no measurable evidence that billboards cause changes in driver

behavior, in terms of visual behavior, speed maintenance, and lane keeping. A rigorous examination of individual billboards that could be considered to be the most visually attention-getting demonstrated no measurable relationship between glance location and billboard location. Driving performance measures in the presence of these specific billboards generally showed less speed variation and lane deviation. Thus, even in the presence of the most visually attention-getting billboards, neither visual performance nor driving performance changes measurably. Participants in this study drove a vehicle equipped with cameras in order to capture the forward view and two views of the driver's face and eyes. The vehicle was also equipped with a data collection system that would capture vehicle information such as speed, lane deviation, GPS location, and other measures of driving performance. Thirty-six drivers participated in the study, driving a 35-mile loop route in Charlotte, North Carolina. A total of 30 billboard sites along the route were selected, along with six comparison sites and six baseline sites. Several measures were used to examine driving performance during the 7-seconds preceding the billboard or other type of site. These included measures of driver visual performance (forward, left, and right glances) and measures of driving performance (lane deviation and speed variation). With 36 participants and 42 sites, there were 1,512 events available for analysis. A small amount of data was lost due to sensor outages, sun angle, and lane changes, leaving 1,481 events for eyeglance analysis and 1,394 events for speed and lane position analysis. Altogether, 103,670 video frames were analyzed and 10,895 glances were identified. There were 97,580 data points in the speed and lane position data set. The visual performance results indicate that billboards do not differ measurably from comparison sites such as logo boards, on-premises advertisements, and other roadside items. No measurable differences were found for visual behavior in terms of side of road, age, or familiarity, while there was one difference for gender. Not surprisingly, there were significant differences for road type, with surface streets showing a more active glance pattern than interstates. There were also no measurable differences in speed variability or lane deviation in the presence of billboards as compared to baseline or comparison sites. An analysis of specific, high attention-getting billboards showed that some sites show a more active glance pattern than other sites, but the glance locations did not necessarily correspond to the side of the road where the billboards were situated. The active glance patterns are probably due more to the road type than to the billboard itself. One major finding was that significantly more time was spent with the eyes looking forward (eyes on road) for billboard and comparison sites as compared to baseline sites, providing a clue that billboards may actually improve driver visual behavior. Taken as a whole, these analyses support the overall conclusion that driving performance does not change measurably in the presence or absence of billboards.

**Effects of Roadside Advertisements on Road Safety,** Finnish Road Administration, 2004.
http://alk.tiehallinto.fi/julkaisut/pdf/4000423e-veffectsofroadside.pdf
*From the abstract:* The effects of roadside advertisements on road safety have been studied using various methods. The topic was studied in Finland especially in the 1970s and 1980s. The results of those studies can be summarised thusly:

- In general, the number of accidents occurring near roadside advertisements has not been observed to be higher than at reference sites.
- The negative effects of advertisements are, however, visible in accident statistics if they are focused on limited conditions (junctions).
- The effects of advertisements are apparent in driver behaviour, but the effects measured in normal traffic are small.
- Advertisements along main roads distract the detection of traffic signs and possibly also other objects relevant to the driver's task.

**"Observed Driver Glance Behavior at Roadside Advertising Signs,"** *Transportation Research Record 1899*, 2004: 96-103.
Citation at http://trid.trb.org/view/2004/C/749677
*From the abstract:* This study focused on the glance behavior of 25 drivers at various advertising signs along an expressway in Toronto, Ontario, Canada. The average duration of the glances for the subjects was 0.57 s [standard deviation (SD) = 0.41], and in total there was an average of 35.6 glances per subject (SD = 26.4). Active signs that contained movable displays or components made up 51% of the signs and received significantly more glances (69% of all glances and 78% of long glances). The number of glances was significantly lower for passive signs (0.64 glances per subject per sign) than for active signs (greater than 1.31 glances per subject per sign). The number of long glances was also greater for active signs than for passive signs. Sign placement in the visual field may be critical to a sign being noticed or not. Empirical information is provided to assist regulatory agencies in setting policy on commercial signing.

Wachtel notes:

> The implication for digital signs is that the shorter the period of time for which a given message is presented, and thus the more likely it is that a given approaching driver will see one or more message changes, the more likely it is that a driver will glance at such a sign for a longer period in anticipation of the next message to be displayed. Further, digital billboards display some characteristics of both fixed, traditional billboards and the types of active signs examined here. For example, a digital billboard may display a fixed image to any particular approaching driver, but depending upon its message cycle time, a driver may see one or more different displays. In this way, it is not unlike the roller signs discussed in this study, and, depending upon the display duration and change interval, digital signs may attract the same kind of attention expressed by some of the respondents in this study. Finally, a digital billboard is likely to possess image brightness, color, contrast, and image fidelity far higher than that achieved by any of the four sign types examined by the authors in this study. While the implications of these technological advances suggest that digital billboards would be more effective at capturing attention, this remains an empirical question.

**"Driver Distraction by Advertising: Genuine Risk or Urban Myth?"** Brendan Wallace, *Proceedings of the Institution of Civil Engineers*, *Municipal Engineer*, Vol. 156, Issue 3, September 2003: 185-190.
Citation at http://trid.trb.org/view/2003/C/688088
*From the abstract:* Drivers operate in an increasingly complex visual environment, and yet there has been little recent research on the effects this might have on driving ability and accident rates. This paper is based on research carried out for the Scottish Executive's Central Research Unit on the subject of external-to-vehicle driver distraction. A literature review/meta-analysis was carried out with a view to answering the following questions: is there a serious risk to safe driving caused by features in the external environment, and if there is, what can be done about it? Review of the existing literature suggests that, although the subject is under-researched, there is evidence that in some cases overcomplex visual fields can distract drivers and that it is unlikely that existing guidelines and legislation adequately regulate this. Theoretical explanations for the phenomenon are offered and areas for future research highlighted.

Wachtel summarizes the major conclusions as follows:

- The adverse effect of billboards is real, but situation specific.
- Too much visual clutter at or near intersections can interfere with drivers' visual search and lead to accidents.
- It is "probable" that isolated, illuminated billboards in an otherwise boring section of highway can create distraction through phototaxis.

**Research Review of Potential Safety Effects of Electronic Billboards on Driver Attention and Distraction**, Federal Highway Administration, September 11, 2001.
http://www.fhwa.dot.gov////realestate/elecbbrd/elecbbrd.pdf
This report reviews the literature on electronic billboards (with a focus on implications for safety) from 1980 to 2001. Based on the literature review, it identifies knowledge gaps and potential research questions categorized by roadway characteristics such as curves, interchanges and work zones; electronic billboard characteristics such as exposure time, motion and legibility; and driver characteristics such as familiarity and age. Related research findings on the legibility of changeable message signs are also included.

Wachtel gives the following overview of the report's conclusions:

> A number of the conclusions reached, while highly relevant, might be seen even more strongly in light of the observations made by other researchers. For example, the authors appropriately suggest that there may be lessons from studies into the legibility and conspicuity of official changeable message signs that could be applied to [digital billboards (DBBs)]. They further discuss the fact that low levels of illumination on official signs could lead to reduced conspicuity and, hence, reduced legibility. This difficulty might be exacerbated because DBBs typically have very high luminance levels, often leading to complaints by the traveling public as well as regulators. These high luminance levels may increase the conspicuity of the DBBs at the expense of official signs. Similarly, the authors discuss differences in response to signs by familiar vs. unfamiliar drivers, since it is understood that motorists who pass the same signs regularly become acclimated to their presence and may ignore them. Of course, one of the defining characteristics of DBBs is their ability to display a new message every few seconds, thus, in effect, presenting displays that are always new and therefore unfamiliar to all drivers.

The report also gives an overview of state regulations and practices as of 2001 (pages 5-9 and Appendices B and C) of 42 states:

- Thirty-six states had prohibitions on signs with red, flashing, intermittent or moving lights.
- Twenty-nine states prohibited signs that were so illuminated as to obscure or interfere with traffic control devices.
- Twenty-nine states prohibited signs located on Interstate or primary highway outside of the zoning authority of incorporated cities within 500 feet of an interchange or intersection at grade or safety roadside area.

**"An Evaluation of the Influence of Roadside Advertising on Road Safety in the Greater Montreal Region,"** J. Bergeron, *Proceedings of the 1997 Conference of the Northeast Association of State Transportation Officials*, 1997: 527.
Citation at http://trid.trb.org/view/1997/C/539081
Wachtel summarizes this report's conclusions as follows:

- Attentional resources needed for the driving task are diverted by the irrelevant information presented on advertising signs. This is an impact attributable to the "nature of the information" that is conveyed on such signs. This distraction leads to degradation in oculomotor performance that adversely affects reaction time and vehicle control capability.
- When the driving task imposes substantial attentional demands such as might occur on a heavily traveled, high speed urban freeway, billboards can create an attentional overload that can have an impact on micro- and macro-performance requirements of the driving task. In other words, the impact of the distraction varies according to the complexity of the driving task. The greater the driving task demands, the more obvious are the adverse effects of the distraction on driving performance.
- The difficulty of the driving task can vary in several ways. Those that relate to the physical environment (e.g., weather, roadway geometry, road conditions) are unavoidable, and drivers must adjust to them (unless they take an alternate route or wait for better conditions). Necessary

sensory information adds to the workload of the driving task, but is, of course, needed to perform safely. In addition, road signs and signals that communicate complex but necessary information contribute to the overall workload of driving. In this case, however, years of study have been directed toward making this information as clear and as easily accessible as possible.

- To some extent, the level of mental workload that impacts driving occurs at a pre-processing level. Bergeron cites, as an example, a complex or cluttered visual environment. In this case, the attentional effort that drivers expend in searching for target objects (e.g., signs and signals) will be more laborious, demand more resources, and lead to declines in performance levels.
- The presence of a billboard increases the confusion of the visual (back)ground and may lead to conflict with road signs and signals.
- Situational factors that are likely to create a heavy mental workload include: complex geometry, heavy traffic, high speeds, areas of merging and diverging traffic, areas with road signs where drivers must make decisions, roadways in poor repair, areas of reduced visibility, and adverse weather conditions.
- The very characteristics of billboards that their designers employ to enable them to draw attention are those that have the greatest impact on what Bergeron calls attentional diversion.
- Drivers must constantly carry out the work of recognizing stimuli that may not be immediately meaningful to them. This task requires time and mental resources, both of which are in limited supply.
- Attention directs perception, and vice versa. In other words, when we are looking for something, our sensory system places itself at the service of our attention. But it is also possible for a sensation to attract the attention of drivers because it may represent something that is of potential importance. For example, authorities put flashing lights on emergency vehicles because they want drivers to attend to them.

**Review of Roadside Advertising Signs**, Transportation Environment Consultants, Roads and Traffic Authority, August 1989.
Citation at http://trid.trb.org/view.aspx?id=350317
*From the abstract:* Some of the main findings are: 1) The review study did not identify any factor or experience which would substantiate, on safety grounds, the long standing policy of prohibiting the erection of advertising signs within the road reserves of declared roads, including freeways. In fact, the literature survey, embracing over 40 publications including a comprehensive safety survey as recently as 1985, did not identify any evidence to say that, in general, advertising signs are causing traffic accidents. 2) Human factors research confirms the principle of the limited processor capacity of the driver. Management of stimuli to the driver, both inherent to the driving task and from external (distractions) sources, requires scrutiny as driving performance deteriorates when high levels of attention and decision making are involved. 3) Motorists information needs systems comprise a 'navigational' and a 'services information' component. There is a strong correlation between these needs and the adequacy of display of such information by traditional forms of advertising. 4) Changing values of aesthetics and amenity have resulted from community concerns with the disorder and clutter of traditional roadside advertising; 5) Subject to specified control conditions, advertising signs may be permitted within the road reserve of declared roads, including freeways. Desirably such signs should provide directional, tourist, services and locational information.

Wachtel summarizes the report's conclusions as follows:

- Research confirms the limited processor capacity of a driver.
- It is important that management of stimuli to the driver, both inherent to the primary task of driving and external to it (distraction) must clearly aim not to exceed the optimum rate for safe and efficient driver performance.
- When these external stimuli fall significantly below optimum, driver performance may decrease (boredom), and additional external stimuli could benefit driver response.

- Additional attentional loading by advertising signs may impair driving performance when high levels of attention and decision making are required.
- Advertisements not associated with navigational and services information needs can, subject to relevant safety controls, be permitted at roadside locations where the driving task does not heavily load the attentional capacity of the driver.

Interestingly, they reported from their interview with a Dr. S. Jenkins of the ARRB, his recommendation that "changeable message signs could be used in roadside advertisements providing each message is 'static for about 5 minutes' (i.e., the message on-time) and the changeover period between messages 'does not exceed about 2 seconds'" (p. 39).

In a later chapter of the report, the authors provide a series of "definitions and technology" (p. 49) to describe the different types of advertising signs that might be considered, and how they might be used. In a section on "internally illuminated signs" the authors provide a table showing what they consider to be the maximum luminance levels of advertising signs of different sizes which may be located in different driving environments. These data are based on recommendations from the Public Lighting Engineers in the U.K. With regard to "electronic variable-message signs" the authors devote several pages to defining terminology and identifying "factors" that should be taken into account when considering their impact (pp. 56-60). This discussion is taken directly from the Wachtel and Netherton (1980) report (pp. 68-74), and need not be repeated here.

## Literature on Outdoor Advertising Safety Since the 2009 Wachtel Report

**"Advertising Billboards Impair Change Detection in Road Scenes,"** J. Edquist, T. Horberry, S. Hosking, I. Johnston, *Proceedings of the Australasian Road Safety Research, Policing and Education Conference*, November 6-9, 2011.
http://casr.adelaide.edu.au/rsr/RSR2011/4CPaper%20166%20Edquist.pdf
*From the abstract:* The present experiment used the 'change detection' paradigm to examine how billboards affect visual search and situation awareness in road scenes. In a controlled experiment, inexperienced, older, and comparison drivers searched for changes to road signs and vehicle locations in static photographs of road scenes. On average, participants took longer to detect changes in road scenes that contained advertising billboards. This finding was especially true when the roadway background was more cluttered, when the change was to a road sign, and for older drivers. The results are consistent with the small yet growing body of evidence suggesting that roadside advertising billboards impair aspects of driving performance such as visual search and the detection of hazards, and therefore should be more precisely regulated in order to ensure a safe road system.

**"Are Roadside Electronic Static Displays a Threat to Safety?"** Rena Friswell, Elia Vecellio, Raphael Grzebieta, Julie Hatfield, Lori Mooren, Murray Cleaver, Michael De Roos, *Proceedings of the Australasian Road Safety Research, Policing and Education Conference*, November 6-9, 2011.
http://casr.adelaide.edu.au/rsr/RSR2011/4CPaper%20172%20Friswell.pdf
This study reviews the literature from 2001 to 2010 on the effects of electronic static displays (ESDs) on driver distraction, driving performance and safety, and discusses the implications of the findings for research and policy. Researchers found only 11 studies that bear directly on ESDs, and created two tables summarizing them (pages 5-8). Over half of the studies were conducted by Tantala and Tantala and were commissioned by the U.S. Outdoor Advertising Association of America, and most examined crash data before and after installation of ESDs. Five of the eight crash data studies reported no adverse effect of ESD installation on crashes, but both of the studies that compared post-installation crashes with the rates predicted by the trend in pre-installation crashes found statistically significant evidence of increased crashes following installation. Studies using measures other than crashes reported mixed findings. Gaze was directed toward the sign stimuli in the simulator and on-road studies, dual task reaction time was slowed in the presence of the sign stimuli in the laboratory experiment, and lane keeping was impaired in

the simulator study but reductions in lane keeping only approached significance on-road and there was no evidence of speed disruption on-road. Researchers conclude that while the research designs for these studies are weak, there does seem to be evidence that ESDs can have a negative impact on attention, driving performance and safety.

**Outdoor Advertising Control Practices in Australia, Europe, and Japan**, Federal Highway Administration, May 2011.
http://ntl.bts.gov/lib/42000/42200/42240/FHWA-PL-11-023.pdf
This study scanned practices in Australia, Sweden, the Netherlands and the United Kingdom to learn how they regulate outdoor advertising both inside and outside the roadway right of way, and also includes a desk scan of outdoor advertising practices in Japan.

General similarities between practices in the countries visited and those of the United States include (pages 1-2):

- Inconsistent enforcement and mixed success in developing more objective criteria for decision makers.
- Interest in growing commercial advertising in transportation corridors.
- Interest in generating revenue inside the right of way and removing some of the restrictions to commercial use of the right of way.
- Common interest in regulating new technologies to minimize driver distraction, such as use of and rules to govern commercial electronic variable message signs (CEVMS). The major focus is reducing crashes and fatalities.
- Prohibitions of signs that resemble official signs.
- Interest in reliable research on the safety impacts of outdoor advertising and CEVMS.

Differences (from pages 2-3 of the report) include:

- Where outdoor advertising is allowed in the countries visited, state and federal responsibility is limited to high-level and national routes.
- For permitting purposes, on-premise and off-premise signs are regulated.
- The national/federal government has a lesser role in the state's administration and program compliance.
- Sign businesses, site owners, and sign owners can incur penalties for noncompliance.
- Agencies in the countries visited rely more on safety factors and the relationship between the sign and the road environment for permitting decisions than agencies in the United States.
- Agencies have some control over message formatting, such as specifying font size and prohibiting phone numbers and e-mail addresses, to reduce driver distraction and reading time.
- Local planning authorities had more regulatory involvement in and control of sign permits in all countries visited because all areas were under some control, designation, or zoning. There were few unzoned areas because of more rigorous, comprehensive local planning and land use management.
- Use of the right- of- way for commercial billboards is limited, but more prevalent in locally controlled urban jurisdictions. One Australian state generated AU$15 million with advertising inside the right- of- way, but most countries visited are waiting until more conclusive research is done on driver distraction. Sweden is beginning a pilot.
- Signs may be removed after permitted if safety is a concern.
- In all of the countries visited, traffic and public safety play a more critical role in the permitting process than in the United States.
- All of the countries have developed criteria to identify unacceptable signs, such as those that resemble traffic control devices, could direct traffic, or could distract or confuse drivers.
- The safety evaluation process is more comprehensive, both in the documentation and burden of proof applicants must provide that a sign will not create a safety hazard and the review process after an application is submitted.

Based on this scan, researchers suggest the following steps to enhance safety (from page 4 of the report):

- Develop criteria to evaluate permit applications to identify signs that are unacceptable from a safety perspective because they resemble traffic control devices or could distract or confuse drivers.
- Update the assessment criteria used to review permit applications to reflect design, planning, environmental, and public and traffic safety criteria used by several countries visited.
- Update permitting requirements to include an analysis of the technical feasibility, benefits, safety impacts, and other effects of a proposed outdoor advertising installation.
- Conduct research on the safety impacts of outdoor advertising, and possibly require applicants to conduct a safety analysis to demonstrate the design and safety feasibility of proposed installations. Assess whether existing traffic data from intelligent transportation systems or traffic control centers could be used to track traffic patterns and establish the potential impacts of commercial electronic variable message signs on traffic flow.
- Study the effects of full-motion video on driver attention.

**"Effects of Advertising Billboards During Simulated Driving,"** Jessica Edquist, Tim Horberry, Simon Hosking, Ian Johnston *Applied Ergonomics*, Vol. 42, Issue 4, May 2011: 619-626.
Citation at http://trid.trb.org/view/2011/C/1100574
*From the abstract:* The driving simulator experiment presented here examines the effects of billboards on drivers, including older and inexperienced drivers who may be more vulnerable to distractions. The presence of billboards changed drivers' patterns of visual attention, increased the amount of time needed for drivers to respond to road signs, and increased the number of errors in this driving task.

**"Digital Billboards, Distracted Drivers,"** Jerry Wachtel, *Planning*, Vol. 77, Issue 3, March 2011: 25-27.
Citation at http://trid.trb.org/view/2011/C/1106533
*From the abstract:* This article discusses the negative consequences of billboards, especially those that employ digital technology. … An industry study has shown that drivers take their eyes off the road for two seconds or longer twice as often when they are looking at digital advertising signs than when they are looking at traditional billboards. … The author has identified four factors that could reduce the distraction caused by digital billboards: control the lighting at nighttime; lengthen the dwell time of messages; simplify the message by limiting the number and types of words and symbols; and prohibit message sequencing (i.e., the digital equivalent of Burma Shave-type signs).

**"External Distractions: The Effects of Video Billboards and Windfarms on Driving Performance,"** *Handbook of Driving Simulation for Engineering, Medicine and Psychology*, CRC Press, 2011: 16-1 – 16-14.
Citation at http://trid.trb.org/view/2011/C/1114742
This study used a driving simulator to study driver reactions to the braking of a lead vehicle in the presence of wind turbines and digital video billboard. While perception response time was not affected by the presence of wind turbines, significantly more rear-end collisions occurred to the hard lead-vehicle braking event in the presence of video billboards than conventional billboard and control conditions.

***"An Examination of the Relationship between Digital Billboards and Traffic Safety in Reading, Pennsylvania, Using Empirical Bayes Analyses,"** *Moving Toward Zero: 2011 ITE Technical Conference and Exhibit*, sponsored by the Institute of Transportation Engineers, 2011.
Citation at http://trid.trb.org/view/2011/C/1103869
*From the abstract:* This paper examines the statistical relationship between advertising digital billboards and traffic safety using Empirical Bayes Method analyses. Specifically, this paper analyzes traffic and accident data near 26 existing, non-accessory, advertising digital billboards along routes with periods of comparison as long as 8 years in the greater Reading area, Berks County, Pennsylvania. These studied digital billboards are one type of commercial electronic variable message signs (CEVMS) which display

static messages, include no animation, flashing lights, scrolling, or full-motion video, and have duration times of 6, 8, or 10 seconds. Temporal (when and how frequently) and spatial (where and how far) statistics are summarized within multiple vicinity ranges as large as one mile near billboards. The study uses the Empirical Bayes (EB) method to predict the "expected" range of accidents at locations assuming that no digital billboard technology was introduced. The method analyzes data near 26 billboard locations, incorporates data using 51 non-digital comparison sites, and establishes a multivariate Crash Estimation Model (CEM) with a negative binomial distribution to estimate expected numbers of crashes near locations. Predictive methods in the AASHTO Highway Safety Manual are used with the Pennsylvania Department of Transportation (PennDOT) highway, geometric, and crash data.

**Investigating Driver Distraction: The Effects of Video and Static Advertising**, TRL Published Project Report, Transport Research Laboratory, 2010.
Citation at http://trid.trb.org/view/2010/M/919620
*From the abstract:* Roadside advertising is a common sight on urban roads. Previous research suggests the presence of advertising increases mental workload and changes the profile of eye fixations, drawing attention away from the driving task. This study was conducted using a driving simulator and integrated eye-tracking system to compare driving behaviour across a number of experimental advertising conditions. Forty eight participants took part in this trial, with three factors examined; Advert type, position of adverts and exposure duration to adverts. The results indicated that when passing advert positions, drivers: spent longer looking at video adverts; glanced at video adverts more frequently; tended to show greater variation in lateral lane position with video adverts; braked harder on approach to video adverts; drove more slowly past video adverts. The findings indicate that video adverts caused significantly greater impairment to driving performance when compared to static adverts. Questionnaire results support the findings of the data recorded in the driving simulator, with participants being aware their driving was more impaired by the presence of video adverts. Through analysis of the experimental data, this study has provided the most detailed insight yet into the effects of roadside billboard advertising on driver behaviour.

***"Quantifying External Vehicle Distractions and Their Impacts at Signalized Intersections,"** Raheem Dilgir, Cory Wilson, *ITE 2010 Annual Meeting and Exhibit*, sponsored by the Institute of Transportation Engineers, 2010.
http://www.ite.org/annualmeeting/compendium10/pdf/AB10H3702.pdf
This study investigated the safety impacts of visual distractions for vehicles at 28 signalized intersections in greater Vancouver, British Columbia, and Calgary, Alberta. Site visits were conducted to assess each intersection, and three years of collision data and traffic volumes were provided by road agencies. The results indicated a positive relationship between distraction score and collision rate as well as between distraction score and collision frequency. Analysis of individual distraction criteria revealed that the strongest correlation exists between roadside advertising and safety. No other specific element was significantly more influential than another regarding safety performance, suggesting that the combined effect of various distraction features is correlated to safety performance.

**The Impact of Sacramento State's Electronic Billboard on Traffic and Safety**, Mahesh Pandey, California State University, Sacramento, Summer 2010.
http://csus-dspace.calstate.edu/bitstream/handle/10211.9/282/Project%20Report10a.pdf?sequence=1
This student project evaluated the traffic and safety impact of a new electronic billboard near Sacramento State adjacent to Highway 50 by analyzing traffic flow parameters on upstream portions of electronic billboards on both directions of the highway before and after the installation. Data came from the California Freeway Performance Measurement System (PeMS) database for changes in common traffic flow parameters (speed, flow rate and lane occupancy) over a two-month period before and after the installation of the electronic billboard. This project also analyzed crash and collision data from PeMS for changes in noninjury, injury and fatal crashes over a one-year period before and a one-year period after the installation of the electronic billboard.

Results showed that the presence of the electronic billboard near Sacramento State does not appear to have a significant negative impact in traffic performance (flow, speed and lane occupancy) or incidents in the study section of the freeway. Because many of the road users at this segment are probably commuters, they may be familiar with the electronic billboard, and it does not appear to affect their driving. Even though electronic billboards are capable of displaying multiple messages/commercials at different times, the advertisements do not appear to be a major distraction to drivers at this location. No changes in measurable impact on road safety after the installation of the electronic billboard were observed. At the same time, a public opinion survey indicated that more than two-thirds of self-identified drivers through the study area who were surveyed believed that this electronic billboard does not pose a safety risk to traffic.

**"Conflicts of Interest: The Implications of Roadside Advertising for Driver Attention,"** *Transportation Research Part F: Traffic Psychology and Behaviour*, Vol. 12, Issue 5, September 2009: 381-388.
Citation at http://trid.trb.org/view/2009/C/902985
*From the abstract:* There is growing concern that roadside advertising presents a real risk to driving safety, with conservative estimates putting external distractors responsible for up to 10% of all road traffic accidents. In this report, we present a simulator study quantifying the effects of billboards on driver attention, mental workload and performance in urban, motorway and rural environments. The results demonstrate that roadside advertising has clear adverse effects on lateral control and driver attention, in terms of mental workload. Whilst the methodological limitations of the study are acknowledged, the overriding conclusion is that prudence should be exercised when authorizing or placing roadside advertising. The findings are discussed with respect to governmental policy and guidelines.

**Digital Billboard Safety Amongst Motorists in Los Angeles**, Steven Clark Henson, California State University Northridge, Spring 2009.
http://www.csun.edu/~sch60990/Geog_490_PAPER.pdf
The paper discusses the impact of digital billboards and driver safety in Los Angeles via a review of literature, driver behavior surveys and a spatial analysis of high traffic collision intersections and digital billboard locations. Of 76 intersections with digital billboards, only three (4 percent) were hazardous intersections (as defined by The 2008 California 5 Percent Report and driver surveys). However, 80 percent of drivers surveyed said they were more likely to glance at a digital billboard as opposed to a standard billboard, 42.8 percent said that digital billboards inhibited the ability of motorists to concentrate on the road, and all but two respondents said their glances are longer than two seconds.

## Luminance Criteria and Other Human Factors for Sign Design

In the following studies, "luminance" refers to luminous intensity per unity area, measured in candela per square meter (cd/$m^2$, or "nit"). Luminance differs from brightness, which measures the subjective perception caused by an object's luminance, and can differ in various contexts for an object of the same luminance.

**"Congruent Visual Information Improves Traffic Signage,"** *Transportation Research Part F: Traffic Psychology and Behaviour*, Vol. 15, Issue 4, 2012: 438-444.
Abstract at: http://trid.trb.org/view/2012/C/1141270
*From the abstract:* This study investigated the interference effect produced by the position of the sign elements in traffic signage on response accuracy and reaction time. Sixteen drivers performed a flanker interference reaction time task. Incongruent graphical/space solutions, actually used for the airport stack-type sign, [led] to increased reaction time and a reduction in the proportion of correct answers. These results suggest that incongruent visual information should be avoided, as this might impair drivers' performance. These findings provide important information for the specification of future signage design guidelines and for improving road safety.

**"A Study on Guide Sign Validity in Driving Simulator,"** Wei Zhonghua, Gong Ming, Guo Ruili, Rong Jian, *Transportation Research Board 91st Annual Meeting Compendium of Papers DVD*, Paper #12-1983, sponsored by Transportation Research Board, 2012.
Citation at http://trid.trb.org/view/2012/C/1129560
This project used a driving simulator to study guide sign legibility distance. Results indicated that legibility distance was inversely related to speed and positively related to the text height of the guide sign. When the speed is 20km/h, 30km/h or 40km/h, the magnifying power of text height is 4.3, 4.1 or 3.8, respectively.

**"Luminance Criteria and Measurement Considerations for Light-Emitting Diode Billboards,"** John Bullough, Nicholas Skinner, *Transportation Research Board 90th Annual Meeting Compendium of Papers DVD*, Paper #11-0659, sponsored by Transportation Research Board, 2011.
ftp://ftp.hsrc.unc.edu/pub/TRB2011/data/papers/11-0659.pdf
*From the abstract:* The present paper summarizes luminance measurements and calculations for advertising billboard signs located adjacent to highways. The primary purpose of the present information is to provide preliminary estimates of conventional externally-illuminated billboard panel luminances in the driving environment. These estimates could form a partial basis for maximum luminance requirements for electronic billboards adjacent to highways using self-luminous light sources such as light-emitting diodes. Also discussed are considerations when making luminance measurements of billboard signs in the field.

Table 1 on page 3 has a summary of luminance measurements:

**TABLE 1** Summary of Billboard Sign Characteristics and Luminance Measurements

| Sign location, type and color | Direction of travel facing sign | Distance of sign from roadway edge (ft) | Measurement location (and distance) | Daytime luminance (cd/m²) | Nighttime luminance (cd/m²) |
|---|---|---|---|---|---|
| I-787 conventional (white) | northbound | 125 (from southbound side) | I-787 southbound (n/a) | 23,100 | not measured |
| I-787 conventional | southbound | 280 | Erie Boulevard (340 ft away) | 1230 | 4 |
| I-90 conventional (beige) | westbound | 70 | Erie Boulevard (70 ft away) | 2880 | 160 |
| I-90 conventional (purple) | westbound | 25 (from eastbound side) | Erie Boulevard (70 ft away) | 540 | 8 |
| I-90 conventional (white) | westbound | 60 | Anderson Drive (310 ft away) | 3300 | 180 |
| I-90 conventional (white) | eastbound | 180 | Watervliet Avenue (80 ft away) | 13,100 | 240 |
| I-90 conventional (yellow) | eastbound | 75 | Westgate Plaza (150 ft away) | 3950 | 150 |
| I-90 LED (yellow) | westbound | 75 | Anderson Drive (290 ft away) | 3810 | 200 |
| | | | I-90 westbound (n/a) | not measured | 160 |
| I-90 LED (light green) | eastbound | 75 (from westbound side) | Anderson Drive (300 ft away) | 4170 | 320 |
| | | | I-90 eastbound (n/a) | not measured | 220 |

**Digital LED Billboard Luminance Recommendations: How Bright is Bright Enough?** Christian B. Luginbuhl, Howard Israel, Paul Scowen, Jennifer and Tom Polakis, Arizona State University, November 9, 2010.
http://www.illinoislighting.org/resources/DigitalBillboardLuminanceRecommendation_ver7.pdf
*From the abstract:* Careful and sensible control of the nighttime brightness of digital LED signage is critical. Unlike previous technologies, these signs are designed to produce brightness levels that are visible during the daytime; should too large a fraction of this brightness be used at night serious consequences for driver visibility and safety are possible. A review of the lighting professional literature indicates that drivers should be subjected to brightness levels of no greater than 10 to 40 times the

brightness level to which their eyes are adapted for the critical driving task. As roadway lighting and automobile headlights provide lighting levels of about one nit, this implies signage should appear no brighter than about 40 nits. Standard industry practice with previous technologies for floodlit billboards averages less than 60 nits, and rarely exceeds 100 nits. It is recommended that the new technologies should not exceed 100 nits.

**"Effect of Luminance and Text Size on Information Acquisition Time from Traffic Signs (With Discussion and Closure),"** *Transportation Research Record 2122*, 2009: 52-62.
Citation at http://trid.trb.org/view/2009/C/881884
*From the abstract:* This study investigated the effect of (legend) luminance and letter size on the information acquisition time and transfer accuracy from simulated traffic signs. Luminances ranged from 3.2 cd/m² to 80 cd/m² on positive-contrast textual traffic sign stimuli with contrast ratios of 6:1 and 10:1, positioned at 33 ft/in. and 40 ft/in. legibility indices, and viewed under conditions simulating a nighttime driving environment. The findings suggest that increasing the sign luminance significantly reduces the time to acquire information. Similarly, increasing the sign size (or reducing the legibility index) also reduces the information acquisition time. These findings suggest that larger and brighter signs are more efficient in transferring their message to the driver by reducing information acquisition time, or alternatively, by increasing the transfer accuracy. In return, reduced sign viewing durations and increased reading accuracy are likely to improve roadway safety.

Note: the "legibility index" is:

> ... a numerical value representing the distance in feet at which a sign may be read for every inch of capital letter height. For example, a sign with a Legibility Index of 30 means that it should be legible at 30 feet with one inch capital letters, or legible at 300 feet with ten inch capital letters. (See http://www.usscfoundation.org/USSCSignLegiRulesThumb.pdf)

**Driver Comprehension of Diagrammatic Freeway Guide Signs**, Susan T. Chrysler, Alicia A. Williams, Dillon S. Funkhouser, Andrew J. Holick, Marcus A. Brewer, Texas Transportation Institute, February 2007.
http://tti.tamu.edu/documents/0-5147-1.pdf
*From the abstract:* This report contains the results of a three-phase human factors study which tested driver comprehension of diagrammatic freeway guide signs and their text alternatives. Four different interchange types were tested: left optional exit, left lane drop, freeway to freeway split with optional center lane, and two lane right exits with optional lanes. Three phases of the project tested comprehension by using digitally edited photographs of advance guide signs in freeway scenes. Participants viewed a computer slideshow in which slides were shown for only three seconds to simulate a single driver eye glance at a sign. All signs were mounted overhead in the photographs. Participants were provided a route number and city name as a destination that could be reached either by the through route or the exit route. They indicated which lane or lanes they would choose to reach the given destination. The fourth phase of the study used a fixed-base driving simulator which presented full sign sequences consisting of two advance guides and one exit direction sign. Performance measures were distance from the gore at which required lane changes were made and number of unnecessary lane changes made. Results showed that for the left exits the standard text-only signs performed equal to or better than the diagrammatic signs. This performance was true for left lane drops also. For the right exit with optional lane, the standard text signs did well, as did the diagrammatic signs. For freeway-to-freeway splits, standard text signs with two arrows over the optional lane performed better than either style of diagrammatic sign. This report also contains an extensive literature review of previous work in the area, a discussion of testing methodology, and suggestions for future research.

**Enhancing Driving Safety through Proper Message Design on Variable Message Signs**, Jyh-Hone Wang, Charles E. Collyer, Chun-Ming Yang, University of Rhode Island, Kingston, September 2005. Citation at http://trid.trb.org/view/2005/M/793262

*From the abstract:* This report presents a study that assessed drivers' responses to and comprehension of variable message sign (VMS) messages displayed in different ways with the intent to help enhance message display on VMSs. Firstly, a review of literatures and current practices regarding the design and display of VMS messages is presented. Secondly, the study incorporates three approaches in the assessment. Questionnaire surveys were designed to investigate the preferences of highway drivers in regards to six message display settings, they were: number of message frames, flashing effect, color, color combinations, wording, and use of abbreviations. Lab experiments were developed to assess drivers' responses to a variety of VMS messages in a simulated driving environment. Two groups of factors, within-subject and between-subject factors, were considered in the design of experiment. Within-subject factors included message flashing and color combination. Between-subject factors were age and gender. To help validate results found from lab experiments, field studies were set up to study drivers' response to VMS in real driving environment. Thirty-six subjects, from three age populations (20-40, 40-60, above 60 years old) with balanced genders, were recruited to participate in both questionnaire surveys and lab experiments while eighteen of them participated in field studies on a voluntarily basis. The study findings suggest a specific set of VMS features that might help traffic engineers and highway management design VMS signs that could be noticed, understood and responded to in a more timely fashion. Safer and more proactive driving experiences could be achieved by adopting these suggested VMS features.

# State Regulations

## State and Local Regulation Summaries

**State Changeable Message Chart**, Outdoor Advertising Association of America, undated. http://www.superliciousdesign.com/ledmedia/State_Changeable_Message.pdf (or see Appendix A). This chart summarizes changeable message advertising sign regulations for 46 states:

- Three states (New Hampshire, North Dakota and Wyoming) do not allow these signs.
- Five states (Maryland, Massachusetts, Oregon, Texas and Washington) allow tri-action signs only.
- Thirty-eight states allow changeable message signs. Of these, 19 states (California, Colorado, Connecticut, Delaware, Florida, Georgia, Indiana, Kansas, Michigan, Minnesota, Missouri, New Jersey, New York, Ohio, Oklahoma, Tennessee, Utah, Virginia and Wisconsin) have statutes; 10 states (Arkansas, Idaho, Illinois, Iowa, Louisiana, Nebraska, Nevada, North Carolina, South Carolina and West Virginia) have regulations; seven states (Alaska, Arizona, Kentucky, Montana, New Mexico, Rhode Island and South Dakota) have interpretations of the federal/state agreement; and two states (Mississippi and Pennsylvania) have policy memoranda.

The document categorizes each of these states by regulations for minimum message duration ("dwell time"—generally from 4 to 10 seconds, with 6 or 8 seconds most common); maximum interval between messages (typically from 1 to 4 seconds), and spacing (500 feet is most common). It is unclear how up-to-date these regulations are; we were unable to determine the date for this chart or obtain the latest information from the OAAA, which requires paid registration for access.

**The Regulation of Signage: Guidelines for Local Regulation of Digital On-Premise Signs**, Menelaos Triantafillou, Alan C. Weinstein, National Signage Research and Education Conference, 2010. http://www.thesignagefoundation.org/LinkClick.aspx?fileticket=3inv%2fFyrpFk%3d&tabid=59&mid=468

*From the report:* Based on a recent survey of numerous jurisdictions by one of the authors, the most common regulatory provisions applicable to digital on-premise signs appear below:

- Require that the sign display remain static for a minimum of 5-8 seconds and require "instantaneous" change of the display; i.e., no "fading" in/out of the message.
- Prohibit scrolling and animation outside of unique—and mostly pedestrian-oriented—locations.
- Limit brightness to 5,000 nits during daylight and 500 nits at night.
- Require automatic brightness control keyed to ambient light levels.
- Require display to go dark if there is a malfunction.
- Specify distancing requirements from areas zoned for residential use and/or prohibit orientation of s sign face towards an area zoned for residential use.

See also Appendices B and C in Research Review of Potential Safety Effects of Electronic Billboards on Driver Attention and Distraction in **Related Research** for an overview of state regulations and practices as of 2001.

## Survey of Current State Regulations

We found digital display regulations for 12 states. These regulations are summarized in the following table and then detailed by state.

| State | Duration ≥ | Inter-val ≤ | Brightness/ Illumination | Font Size | Visual Effects | Sequencing | Spacing | Locations | Billboard Size |
|---|---|---|---|---|---|---|---|---|---|
| **DE** | 10s | 1s | Must appropriately adjust display brightness as ambient light levels change. | Size not specified. A sign that attempts or appears to attempt to direct the movement of traffic or which contains wording, color, shapes, or likenesses of official traffic control devices is prohibited. | May not contain or display any lights, effects, or messages that flash, move, appear to be animated or to move, scroll, or change in intensity during the fixed display period | Prohibited. | >2,500ft from another VMS<br><br>>500ft from a static sign | Permitted within 660ft of the edge of the right-of-way of any interstate or federal-aid primary highway.<br><br>> 1,000ft from an interchange, interstate junction of merging or diverging traffic, or an at-grade intersection.<br><br>May not be placed along designated Delaware byways. | Not specified. |
| **FL** | 6s | 2s | Lighting which causes glare or impairs the vision of the driver of any motor vehicle, or which otherwise interferes with any driver's operation of a motor vehicle is prohibited. A sign may not be illuminated so that it interferes with the effectiveness of, or obscures, an official traffic sign, signal or device. Lighting may not be added to or increased on a nonconforming sign. | Not specified. | Flashing, intermittent, rotating, or moving lights are prohibited.<br><br>Instantaneous transition for entire sign face required. | Not specified. | Not specified. | Not specified. | Not specified. |

| State | Duration ≥ | Inter-val ≤ | Brightness/ Illumination | Font Size | Visual Effects | Sequencing | Spacing | Locations | Billboard Size |
|---|---|---|---|---|---|---|---|---|---|
| **GA** | 10s | 3s | Must be effectively shielded so as to prevent beams or rays of light from being directed at any portion of the traveled way, which beams or rays are of such intensity or brilliance as to cause glare or to impair the vision of the driver of any motor vehicle or which otherwise interfere with the operation of a motor vehicle.<br><br>Must not obscure or interfere with the effectiveness of an official traffic sign, device, or signal. | Not specified. | May not contain flashing, intermittent, or moving light or lights except those giving public service information such as time, date, temperature, weather. | Not specified. | >5,000ft from another multiple message sign. | Not specified. | Not specified. |
| **IA** | 8s | 1s | The intensity of the illumination may not cause glare or impair the vision of the driver of any motor vehicle or otherwise interferes with any driver's operation of a motor vehicle. | Not specified. | No traveling messages (e.g., moving messages, animated messages, full-motion video, or scrolling text messages) or segmented messages are allowed. | No segmented messages allowed. | >500ft from another LED display facing the same way in cities.<br><br>>1000ft in rural areas. | Not specified. | Not specified. |
| **KS** | 8s | 2s | Must be effectively shielded so as to prevent beams or rays of light from being directed at any portion | Not specified. | Cannot contain or display flashing, intermittent or moving lights, including | Not specified. | >1000ft from another CMS. | Not specified. | Not specified. |

| State | Duration ≥ | Inter-val ≤ | Brightness/ Illumination | Font Size | Visual Effects | Sequencing | Spacing | Locations | Billboard Size |
|---|---|---|---|---|---|---|---|---|---|
| | | | of the traveled way of any interstate or primary highway and are of such intensity or brilliance as to cause glare or to impair the vision of the driver of any motor vehicle or to otherwise interfere with any driver's operation of a motor vehicle.<br><br>Must not be so illuminated that they obscure any official traffic sign, device or signal, or imitate or may be confused with any official traffic sign, device or signal. | | animated or scrolling advertising. | | | | |
| **MA** | 10s | 0s | Must automatically adjust the intensity of its display according to natural ambient light conditions.<br><br>May not cause beams or rays of light from being directed at any portion of the traveled way, which beams or rays are of such intensity or brilliance as to cause glare or to impair the vision of the driver of any motor vehicle or otherwise interfere with the operation of a motor | Not specified. | May not contain flashing, intermittent, or moving lights; or display animated, moving video, scrolling advertising; or consist of a static image projected upon a stationary object.<br><br>May not display illumination that moves, appears to move or changes in intensity during | Not specified. | >500ft from any sign.<br><br>>2000ft from another off premise electronic sign on the same side of the highway.<br><br>>1000ft from another off premise electronic sign on the opposite side of the | Not specified. | Not specified. |

| State | Duration ≥ | Inter-val ≤ | Brightness/ Illumination | Font Size | Visual Effects | Sequencing | Spacing | Locations | Billboard Size |
|---|---|---|---|---|---|---|---|---|---|
| | | | vehicle.<br><br>May not obscure or interfere with the effectiveness of an official traffic sign, device or signal, or cause an undue distraction to the traveling public | | the static display period. This does not include changes to a display for time, date and temperature. | | highway. | | |
| **NY** | 6s | 3s | Not specified. | Not specified. | Not specified. | Not specified. | Not specified. | Not specified. | Not specified. |
| **OH** | 8s | 3s | Not specified. | Not specified. | A multiple message or variable message advertising device shall not be illuminated by flashing, intermittent, or moving lights. No multiple message or variable message advertising device may include any illumination which is flashing, intermittent, or moving when the sign face is in a fixed position. | Not specified. | >1000ft from another MMS. | Not specified. | Not specified. |
| **OR** | 8s | 2s | Must operate at an intensity level of not more than 0.3 foot-candles over ambient light as measured by the distance to the sign | Not specified. | No flashing or varying intensity light; cannot create the appearance of movement. | Not specified. | Not specified. | Not specified. | Not specified. |

| State | Duration ≥ | Inter-val ≤ | Brightness/ Illumination | Font Size | Visual Effects | Sequencing | Spacing | Locations | Billboard Size |
|---|---|---|---|---|---|---|---|---|---|
| | | | depending upon its size (150 feet if the display surface of the sign is 12 feet by 25 feet, 200 feet if the display surface is 10.5 by 36 feet, and 250 feet if the display surface is 14 by 48 feet). | | | | | | |
| **TN** | 8s | 2s | Not specified. | Not specified. | Video, animation, and continuous scrolling messages are prohibited. | Not specified. | >2000ft from another CMS. | Not specified. | Not specified. |
| **WS** | A single message or a message segment must have a static display time of at least two seconds after moving onto the signboard, with all segments of the total message to be displayed within ten seconds. | 4s | No electronic sign lamp may be illuminated to a degree of brightness that is greater than necessary for adequate visibility. In no case may the brightness exceed 8,000 nits or equivalent candelas during daylight hours, or 1,000 nits or equivalent candelas between dusk and dawn. Signs found to be too bright shall be adjusted as directed by the department. | Not specified. | Displays may travel horizontally or scroll vertically onto electronic signboards, but must hold in a static position for two seconds after completing the travel or scroll.<br><br>Displays shall not appear to flash, undulate, or pulse, or portray explosions, fireworks, flashes of light, or blinking or chasing lights. Displays shall not appear to move toward or away from the viewer, | Not specified. | Not specified. | Not specified. | Not specified. |

| State | Duration ≥ | Inter-val ≤ | Brightness/ Illumination | Font Size | Visual Effects | Sequencing | Spacing | Locations | Billboard Size |
|---|---|---|---|---|---|---|---|---|---|
| | A one-segment message may remain static on the signboard with no duration limit. | | | | expand or contract, bounce, rotate, spin, twist, or otherwise portray graphics or animation as it moves onto, is displayed on, or leaves the signboard. | | | | |
| **WI** | 6s | 1s | No variable message sign lamp may be illuminated to a degree of brightness that is greater than necessary for adequate visibility. | Not specified. | No flashing, intermittent or moving light. Traveling messages prohibited. | Not specified. | Not specified. | Not specified. | Not specified. |

## Delaware

**§ 1110. Delaware Byways Program**, Chapter 11: Regulation of Outdoor Advertising, Title 17: Highways, Delaware Code, State of Delaware, 2012.
http://delcode.delaware.gov/title17/c011/sc01/index.shtml#1110
*From the code:*

(3) Lighting. -- Signs may be illuminated, subject to the following restrictions.

a. Signs which contain, include, or are illuminated by any flashing, intermittent, or moving light or lights are prohibited, except those giving public service information such as time, date, temperature, weather, or traffic conditions, or as defined in paragraph (3)e. of this section.

e. Notwithstanding the provisions of paragraphs (b)(3)a. through d. of this section, signs commonly known as variable message signs may be changed at intervals by electronic or mechanical process or remote control, and are permitted within 660 feet of the edge of the right-of-way of any interstate or federal-aid primary highway so designated as of June 1, 1991, and of the National Highway System. These variable message signs are permitted, except as prohibited by local ordinance or zoning regulation or by the Delaware federal-state outdoor advertising agreement of May 1, 1968, and are not considered to be in violation of flashing, intermittent, or moving lights criteria provided that:

1. Each message remains fixed for a minimum of at least 10 seconds.

2. When the message is changed, it must be accomplished in 1 second or less, with all moving parts or illumination changing simultaneously and in unison.

3. A variable message sign along the same roadway and facing in the same direction of travel may not be placed, as measured along the centerline of the roadway, within 2,500 feet of another variable message sign, or within 500 feet of a static billboard sign regulated by this section, or within 1,000 feet of an interchange, interstate junction of merging or diverging traffic, or an at-grade intersection.

4. A variable message sign must contain a default design that will freeze the sign in 1 position if a malfunction occurs or, in the alternative, that will shut down.

5. A variable message sign may not contain or display any lights, effects, or messages that flash, move, appear to be animated or to move, scroll, or change in intensity during the fixed display period. A variable message sign must appropriately adjust display brightness as ambient light levels change.

6. A sign that attempts or appears to attempt to direct the movement of traffic or which contains wording, color, shapes, or likenesses of official traffic control devices is prohibited.

7. A sign may not be placed along designated Delaware byways.

## Florida

**Outdoor Advertising Sign Regulation and Highway Beautification Program**, Florida Administrative Weekly & Florida Administrative Code, Florida Department of Transportation, October 3, 2010.
https://www.flrules.org/gateway/chapterhome.asp?chapter=14-10
*From the code:*

**14-10.004 Permit.**
(3) Changeable messages – A permit shall be granted for an automatic changeable facing provided:
(a) The static display time for each message is at least six seconds;

(b) The time to completely change from one message to the next is a maximum of two seconds;
(c) The change of message occurs simultaneously for the entire sign face; and
(d) The application meets all other permitting requirements.
(e) All signs with changeable messages shall contain a default design that will ensure no flashing, intermittent message, or any other apparent movement is displayed should a malfunction occur.

**Guide to Outdoor Advertising**, Florida Department of Transportation, 2012.
http://www.dot.state.fl.us/rightofway/documents/GuidetoODA.pdf
*From page 15 of the guide:*

Multiple messages: Your sign may display multiple messages, provided you do not have more than two sign faces for each direction the sign is facing. Mechanically changeable and digital display panels are allowed on conforming signs, provided the static display time is at least 6 seconds, and the time to change from one message to another is no great than 2 seconds. Scrolling or animated images are prohibited.

1. Flashing, intermittent, rotating, or moving lights are prohibited.
2. Lighting which causes glare or impairs the vision of the driver of any motor vehicle, or which otherwise interferes with any driver's operation of a motor vehicle is prohibited.
3. A sign may not be illuminated so that it interferes with the effectiveness of, or obscures, an official traffic sign, signal or device.
4. Lighting may not be added to or increased on a nonconforming sign.

## Georgia

**Article 3. Control of Signs and Signals**, Chapter 6: Regulation of Maintenance and Use of Public Roads Generally, Title 32: Highways, Bridges, and Ferries, *Georgia Code*, State of Georgia, 2008.
http://oaag.net/guidelines/documents/32-6OutdoorAdvertisingStateLaw.pdf
*From page 7 of the report:*

**32-6-75. Restrictions on outdoor advertising authorized by Code Sections 32-6-72 and 32-6-73; multiple message signs on interstate system, primary highways, and other highways.**

(a) No sign authorized by paragraphs (4) through (6) of Code Section 32-6-72 and paragraph (4) of Code Section 32-6-73 shall be erected or maintained which:

(8) If illuminated, contains, includes, or is illuminated by any flashing, intermittent, or moving light or lights except those giving public service information such as time, date, temperature, weather, or other similar information except as expressly permitted under subsection (c) of this Code section. The illumination of mechanical multiple message signs is not illumination by flashing, intermittent, or moving light or lights, except that no multiple message sign may include any illumination which is flashing, intermittent, or moving when the sign is in a fixed position;

(9) If illuminated, is not effectively shielded so as to prevent beams or rays of light from being directed at any portion of the traveled way, which beams or rays are of such intensity or brilliance as to cause glare or to impair the vision of the driver of any motor vehicle or which otherwise interfere with the operation of a motor vehicle;

(10) If illuminated, is illuminated so that it obscures or interferes with the effectiveness of an official traffic sign, device, or signal;

(c) (1) Multiple message signs shall be permitted on the interstate system, primary highways, and other highways under the following conditions:

(A) Each multiple message sign shall remain fixed for at least ten seconds;

(B) When a message is changed mechanically, it shall be accomplished in three seconds or less;

(C) No such multiple message sign shall be placed within 5,000 feet of another mechanical multiple message sign on the same side of the highway;

(D) Any such sign shall contain a default design that will freeze the sign in one position if a malfunction occurs;

(E) Any maximum size limitations shall apply independently to each side of a multiple message sign; and

(F) Nonmechanical electronic multiple message signs that are otherwise in compliance with this subsection and are illuminated entirely by the use of light emitting diodes, back lighting, or any other light source shall be permitted under the following circumstances: (i) Each transitional change occurs within two seconds; (ii) If the department finds an electronic sign or any display or effect thereon to cause glare or to impair the vision of the driver of any motor vehicle or to otherwise interfere with the safe operation of a motor vehicle, then, upon the department's request, the owner of the sign shall promptly and within not more than 48 hours reduce the intensity of the sign to a level acceptable to the department; and (iii) The owner of any existing or nonconforming electronic sign shall have until October 31, 2006, to bring the electronic sign in compliance with this subparagraph and to request a permit from the department.

## Iowa

**Guide to Iowa Outdoor Advertising Regulations for Interstate Highways**, Iowa Department of Transportation, April 2009.
http://www.iowadot.gov/iowaroadsigns/Guide_to_Outdoor_Advertising_for_Interstates.pdf
*From page 7 of the guide:*
**Light emitting diode (LED) displays**
LED displays are permitted under the following conditions:

- Adding this type of technology for an existing billboard constitutes a billboard "modification" under Iowa law. Therefore, a new permit application is required.
- Each change of message must be accomplished in one second or less.
- Each message must remain in a fixed position for at least eight seconds.
- No traveling messages (e.g., moving messages, animated messages, full-motion video, or scrolling text messages) or segmented messages are presented.
- The intensity of the illumination does not cause glare or impair the vision of the driver of any motor vehicle or otherwise interferes with any driver's operation of a motor vehicle.
- LED displays must be located a minimum of 500 feet from any other LED display facing the same direction within cities. LED displays must be located a minimum of 1000 feet from any other LED display facing the same direction in rural areas.

## Kansas

**Section 68-2234. Highway Advertising Control; Sign Standards; Zoning Requirements**, Article 22, Highway Beautification Highway Advertising Control Act of 1972 – Revised 2006, Kansas Department of Transportation, 2006.
http://www.ksdot.org/burrow/beaut/KHACARev6.pdf
*From page 5 of the report:*

(d) Lighting.

(1) Signs shall not be erected which contain, include or are illuminated by any flashing, intermittent, revolving or moving light, except those giving public service information such as, but not limited to, time, date, temperature, weather or news; steadily burning lights in configuration of letters or pictures are not prohibited;

(2) signs shall not be erected or maintained which are not effectively shielded so as to prevent beams or rays of light from being directed at any portion of the traveled way of any interstate or primary highway and are of such intensity or brilliance as to cause glare or to impair the vision of the driver of any motor vehicle or to otherwise interfere with any driver's operation of a motor vehicle; and

(3) signs shall not be erected or maintained which are so illuminated that they obscure any official traffic sign, device or signal, or imitate or may be confused with any official traffic sign, device or signal.

(e) Automatic changeable facing signs.

(1) Automatic changeable facing signs shall be permitted within adjacent or controlled areas under the following conditions:

(A) The sign does not contain or display flashing, intermittent or moving lights, including animated or scrolling advertising;

(B) the changeable facing remains in a fixed position for at least eight seconds;

(C) if a message is changed electronically, it must be accomplished within an interval of two seconds or less;

(D) the sign is not placed within 1,000 feet of another automatic changeable facing sign on the same side of the highway, with the distance being measured along the nearest edge of the pavement and between points directly opposite the signs along each side of the highway;

(E) if the sign is a legal conforming structure it may be modified to an automatic changeable facing sign upon compliance with these standards and approval by the department. A nonconforming structure shall not be modified to create an automatic changeable facing sign;

(F) if the sign contains a default design that will freeze the sign in one position if a malfunction occurs; and

(G) if the sign application meets all other permitting requirements.

(2) The outdoor advertising license shall be revoked for failure to comply with any provision in this subsection.

## Massachusetts

**Outdoor Advertising**, Office of Outdoor Advertising, Highway Division, Massachusetts Department of Transportation, 2012.
http://www.massdot.state.ma.us/highway/Departments/OutdoorAdvertising.aspx
On June 5, 2012, the Massachusetts Department of Transportation conducted a public hearing for proposed regulation changes that include provisions for electronic billboards.

**3.17: Requirements for Electronic Sign Permits**

(1) Permits for Electronic Signs require the prior approval of the municipality wherein the proposed sign will be located unless otherwise exempted by State law.

(2) Except as otherwise prohibited by Federal or Massachusetts law and regulations, or local ordinances or zoning regulations, permits for Electronic Signs may be issued provided such sign complies with all of the following:

(a) Has a static display lasting at least 10 seconds.
(b) Achieves an instant message change.
(c) Does not display illumination that moves, appears to move or changes in intensity during the static display period. This does not include changes to a display for time, date and temperature.
(d) Automatically adjusts the intensity of its display according to natural ambient light conditions.

(3) A permit issued pursuant to this section shall indicate that it is for an Electronic Sign. Any such permit is determined to not be prohibited by any agreement between the Department and the Secretary of Transportation of the United States. All regulations provided by 700 CMR 3.00 et. seq. are applicable to Electronic Signs. In the event a provision of this section conflicts with another section of 700 CMR, this section controls.

(4) A legally conforming sign or site may be modified to an Electronic Sign if a new permit for the Electronic Sign is obtained by the Department.

(5) Electronic Signs shall not:

(a) Emit or utilize in any manner any sound capable of being detected on a main traveled way by a person with normal hearing;
(b) Cause beams or rays of light from being directed at any portion of the traveled way, which beams or rays are of such intensity or brilliance as to cause glare or to impair the vision of the driver of any motor vehicle or otherwise interfere with the operation of a motor vehicle;
(c) Obscure or interfere with the effectiveness of an official traffic sign, device or signal, or cause an undue distraction to the traveling public;
(d) Contain more than one face visible from the same direction on the traveled way;
(e) Be located so as to obscure or otherwise interfere with a motor vehicle operator's view of approaching, merging or intersecting traffic;
(f) Be within 500 feet of any type of permitted sign;
(g) Be within 2000 feet of another off premise permitted Electronic Sign on the same side of the traveled way;
(h) Be within 1000 feet of another off premise permitted Electronic Sign on the opposite side of the traveled way;
(i) Face more than one direction of travel;
(j) Contain flashing, intermittent, or moving lights; or display animated, moving video, scrolling advertising; or consist of a static image projected upon a stationary object.

(6) Any such sign shall contain a default design that will freeze the sign in one position if a malfunction occurs.

(7) If the Department finds an Electronic Sign or any display or effect thereon to cause glare or to impair the vision of the driver of any motor vehicle or to otherwise interfere with the safe operation of a motor vehicle, upon request, the permit holder shall promptly and within not more than 24 hours reduce the intensity of the sign to a level acceptable to the Department.

(8) In addition to any municipal requirement the Department may impose any restriction as to the hours of operation for each Electronic Sign.

(9) The permit holder of an Electronic Sign shall coordinate with governmental authorities, through the Department's Division of Highways, to display, when appropriate, emergency information important to the traveling public, such as Amber Alerts or alerts concerning terrorist attacks, or natural disasters. Emergency information messages shall remain in the advertising rotation according to the protocols of the agency that issues the information, or protocols established by the Department's Division of Highways.

(10) The permit holder shall provide the Director with contact information for a person who is available 24 hours a day, 7 days a week to turn off the Electronic Sign promptly if a malfunction occurs. The sign shall contain a default mechanism that freezes the sign in one display in the event of a sign malfunction.

(11) The permit holder shall designate a minimum of 25 hours per month of total advertisement time per permit to the Department for Public Service Announcement (PSA) purposes. Said time shall be equally distributed throughout the hours of operation of the Electronic Sign. The permit holder shall submit a detailed proof of play report each month to the Director to verify that PSA's are being displayed. The Director shall determine the total number of PSA's to be aired each month and will coordinate with the permit holder for their sign. Detailed Proof of Play (POP) Reports are due by the 5th day of each month for the prior month of play. Failure to submit a POP report or failure to adhere to the minimum PSA requirement may result in a fine or revocation of permit/s.

*Criticism*
These regulations have been criticized for not being strong enough:

**New Rules Would Mean More Billboard Blight for Massachusetts**, Scenic America, 2012.
http://www.scenic.org/blog/144-new-rules-would-mean-more-billboard-blight-for-massachusetts
*From the web site:* A proposed set of new regulations on outdoor advertising would see Massachusetts go from having some of the strongest billboard controls in the country to some of the weakest, and result in a proliferation of signs all over the state.

**Massachusetts: Coming Billboard Regulations = Complete Deregulation**, Daily Kos Network, May 30, 2012.
http://www.dailykos.com/story/2012/05/30/1096048/-Massachusetts-Coming-Billboard-Regulations-Complete-Deregulation
*From the web site:* The strong Massachusetts billboard regulation legacy will come to a swift end if proposed new regulations by the Massachusetts Department of Transportation's Office of Outdoor Advertising (the "OOA", not to be confused with the OAAA, the Outdoor Advertising Association of America, the billboard industry lobby) are enacted.

## New York

**N.Y. HAY. LAW § 88: NY Code - Section 88: Control of Outdoor Advertising**, FindLaw, 2012.
http://codes.lp.findlaw.com/nycode/HAY/4/88
*From the web site:*

> Provided that, nothing in this section shall be construed to prohibit the erection or maintenance of outdoor advertising signs, displays and devices which include the steady illumination of sign faces, panels or slats that rotate or change to different messages in a fixed position, commonly known and referred to as changeable or multiple message signs, provided the change of one sign face to another is not more frequent than once every six seconds and the actual change process is accomplished in three seconds or less, when such signs, displays and devices are permitted or authorized pursuant to this section and by the agreement ratified and approved by this section.

## Ohio

**"Chapter 5501:2-2 – Ohio Administrative Code (OAC),"** Ohio Revised Code and Administrative Code for Advertising Device Control, Ohio Department of Transportation, November 2011.
http://www.dot.state.oh.us/Divisions/ContractAdmin/Contracts/ADC/ADC_RegBook.pdf
*From the report:*

> **5501:2-2-02 General provisions for the erection and control of outdoor advertising.**
> (A) (4) (b) A multiple message or variable message advertising device shall not be illuminated by flashing, intermittent, or moving lights. No multiple message or variable message advertising device may include any illumination which is flashing, intermittent, or moving when the sign face is in a fixed position.
>
> (B) Multiple message and variable message advertising devices: such advertising devices may be permitted on the interstate system or the primary system under the following conditions: (1) Each message or copy shall remain fixed for at least eight seconds; (2) When a message or copy changes by remote control or electronic process, it shall be accomplished in three seconds or less; (3) No such advertising device shall be placed within one thousand feet of another multiple message or variable message advertising device on the same side of the highway visible in the same direction of travel;(4) Such advertising devices shall contain a default design that will freeze the device in one position if a malfunction occurs; (5) Any maximum size limitations shall apply independently to each face of a multiple message or variable message advertising device; and (6) Only one multiple message advertising device shall be permitted at a single location facing the same direction.

## Oregon

**Chapter 377—Highway Beautification; Motorist Information Signs**, Oregon Revised Statutes, 2011 edition.
http://www.leg.state.or.us/ors/377.html
*From the web site:*

> **377.753 Permits for outdoor advertising signs; rules.** (1) Notwithstanding the provisions of ORS 377.715, 377.725 and 377.770, the Department of Transportation may issue permits for outdoor advertising signs placed on benches or shelters erected or maintained for use by customers of a mass transit district, a transportation district or other public transportation agency.
>
> (2) The department shall determine by rule the fees and criteria for the number, size, and location of such signs but the department may not issue a permit for a sign that is visible from an interstate highway. [2007 c.199 §3]

**Division 60: Signs**, Department of Transportation, Highway Division, Oregon Administrative Rules, July 13, 2012.
http://arcweb.sos.state.or.us/pages/rules/oars_700/oar_734/734_060.html
*From the web site:*

**Digital Billboard Procedures**

(1) This rule describes the process for applying for a permit for a digital billboard.

(2) Definitions for the purposes of this rule:

(a) "Sign" means the sign structure, the display surfaces of the sign, and all other component parts of the sign.

(b) "Retire" means to use a relocation credit such that it no longer exists or to remove an existing sign.

(c) "Bulletin" means an outdoor advertising sign with a display surface that is 14 feet by 48 feet.

(d) "Poster" means an outdoor advertising sign with a display surface that is 12 feet by 25 feet.

(e) "Digital Billboard" means an outdoor advertising sign that is static and changes messages by any electronic process or remote control, provided that the change from one message to another message is no more frequent than once every eight seconds and the actual change process is accomplished in two seconds or less.

(3) Qualifications for receiving a digital billboard state sign permit:

(a) The proposed site and digital billboard must meet all requirements of the OMIA including, but not limited to, the following:

(A) the digital billboard is not illuminated by a flashing or varying intensity light.

(B) the display surface of the digital billboard does not create the appearance of movement.

(C) the digital billboard must operate at an intensity level of not more than 0.3 foot-candles over ambient light as measured by the distance to the sign depending upon its size.

(D) The distance measurement for ambient light is: 150 feet if the display surface of the sign is 12 feet by 25 feet, 200 feet if the display surface is 10.5 by 36 feet, and 250 feet if the display surface is 14 by 48 feet.

(b) Applicant must submit a completed application for a digital billboard state sign permit using the approved form that may be obtained by one of the following methods:

(A) Requesting from Sign Program Staff by phone at 503-986-3656;

(B) Email: OutdoorAdvertising@odot.state.or.us;

(C) Website http://www.oregon.gov/ODOT/HWY/SIGNPROGRAM/contact_us.shtml

(c) The Department shall confirm that any existing permitted Outdoor Advertising Sign or relocation credit being retired for the purpose of receiving a new digital billboard state sign permit has been removed within the 180 days allowed to construct the new permitted sign. The Department will not charge a Banking Permit Fee for the cancellation of state sign permits retired for the purpose of receiving a new digital billboard permit.

(4) This section sets forth the criteria for determining the required relocation credits or existing permitted signs that an applicant shall retire to receive one new digital billboard state sign permit:

(a) Applicants who own 10% or less of all active relocation credits at the time the application is submitted shall either remove one existing state permitted outdoor advertising sign with a display area of at least 250 square feet or provide one active relocation credit of at least 250 square feet and retire that permit. Applicants meeting these criteria are not limited to either "Bulletin" or "Poster" billboards.

(b) Applicants who own more than 10% of all active relocations credits shall apply for a new digital billboard state sign permit as follows:

(A) For a digital billboard that is intended to be a bulletin, the applicant has three options:

(i) Remove two existing bulletins, retire the permits for those signs, and retire three relocation credits; or

(ii) Remove one existing bulletin and two existing posters, retire those permits and retire three active relocation credits; or

(iii) Remove four existing posters, retire the permits for those signs, and retire three relocation credits.

(B) For a digital billboard that is intended to be a poster, the applicant has two options:

(i) Remove two existing posters, retire the permits for those signs, and retire three relocation credits;

(ii) Remove one existing bulletin, retire the permit for that sign, and retire three relocation credits.

(c) For an active relocation credit to be eligible it must be at least 250 square feet. All permits and relocation credits submitted under these procedures will be permanently cancelled and are not eligible for renewal.

(d) Any state sign permits submitted for retirement must include the written statement notifying the Department that the "lease has been lost or cancelled."

(5) The Department will determine the percentage of relocation credits owned by an applicant by dividing the total number of unused relocation credits by the total number of unused relocation credits owned by the applicant on the day the application is received.

(6) Two digital billboard state sign permits are required for any back to back or V-type digital sign. A separate application is required for each digital sign face.

(7) The first time a digital billboard is permitted it is not subject to the 100-mile rule in ORS 377.767(4). The site of the newly permitted billboard will become the established location for future reference.

(8) Relocation of permitted digital billboards. The Department will issue one digital relocation credit for each permitted digital sign that is removed. The digital relocation credit issued will be for the same square footage as the permitted digital sign that was removed. A digital relocation credit can only be used to relocate a digital billboard. A permitted digital sign can only be reconstructed as a digital billboard.

(9) Use of renewable energy resource. The applicant must provide a statement with the application that clarifies what, if any, renewable energy resources are available at the site and are being utilized. If none, then a notarized statement to that effect must be included with the application.

(10) All permitted digital billboards must have the capacity to either freeze in a static position or display a black screen in the event of a malfunction.

(a) The applicant must provide emergency contact information that has the ability and authority to make modifications to the display and lighting levels in the event of emergencies or a malfunction.

(b) The Department will notify the sign owner of a malfunction that has been confirmed by ODOT in the following instances:

(A) The light impairs the vision of a driver of any motor vehicle; or

(B) The message is in violation of ORS 377.710(6) or 377.720(3)(d).

(11) All digital billboard signs must comply with the light intensity and sensor requirements of ORS 377.720(3)(d).

(a) The Department will take measurements of the permitted digital billboard when notified that the sign has been constructed and the permit plate has been installed.

(b) The Department will use an approved luminance meter designed for use in measuring the amount of light emitted from digital billboards using the industry standard for size and distance as follows:

(A) 150 feet for 12'x 25.'

(B) 200 feet for 10.5'x 36'.
(C) 250 feet for 14'x 48'.

## Tennessee

Control of Outdoor Advertising, Chapter 1680-2-3, Rules of Tennessee Department of Transportation Maintenance Division, Tennessee Department of Transportation, February 2003.

Current regulations do not include electronic billboards:
http://www.tdot.state.tn.us/environment/beautification/pdf/1680-02-03.pdf.

However, proposed revisions are under review that include guidance on digital displays:
http://www.tdot.state.tn.us/environment/beautification/docs/Revised-ODA-Rules-Redline.pdf.
*From the web site:*

**1680-10-01-.03 CRITERIA FOR THE CONTROL OF OUTDOOR ADVERTISING DEVICES.**

4. Spacing

(i) (IV) The minimum spacing for changeable message signs with a digital display is two thousand (2,000) feet, except as follows:

I. An outdoor advertising device that uses a digital display which does not exceed one hundred (100) square feet in total area to give public information such as time, date, temperature, or weather, or to provide the price of a product, the amount of a lottery prize or similar numerical information supplementing the content of a message otherwise displayed on the sign face shall not be subject to the two thousand (2,000) feet minimum spacing requirement in this item (IV).

5. Changeable Message Signs

Changeable message signs are permissible, subject to the following restrictions: (i) The message display time shall remain static for a minimum of eight (8) seconds with a maximum change time of two (2) seconds. (ii) Video, animation, and continuous scrolling messages are prohibited. (iii) Non-conforming devices shall not be converted to a changeable message sign. (iv) The changeable message sign shall contain a default design that will freeze the sign face to one position if a malfunction occurs. (v) The structure for a changeable message sign may contain sign faces that are in a double-faced, back-to-back, or V-type configuration. (vi) The minimum spacing for changeable message signs with a digital display is as provided in Rule 1680-10-.03(1)(a)4.(i)(IV).

## Washington

**Highway Advertising Control**, M22-95, Washington State Department of Transportation, March 2011.
http://www.wsdot.wa.gov/publications/manuals/fulltext/M22-95/HighwayAdvertisingControl.pdf
*From the report:*

**468-66-050 Sign classifications and specific provisions**

(3) Type 3 – On-premise signs.

(b) Type 3(b) – Business complex on-premise sign. A Type 3(b) business complex on-premise sign may display the name of a shopping center, mall, or business combination.

(i) Where a business complex erects a Type 3(b) on-premise sign, the sign structure may display additional individual business signs identifying each of the businesses conducted on the premises. A Type 3(b) on-premise sign structure may also have attached a display area, such as a manually changeable copy panel, reader board, or electronically changeable message center, for advertising on-premise activities and/or presenting public service information.

(g) Electronic signs may be used only as Type 3 on-premise signs and/or to present public service information, as follows:

(i) Advertising messages on electronic signboards may contain words, phrases, sentences, symbols, trademarks, and logos. A single message or a message segment must have a static display time of at least two seconds after moving onto the signboard, with all segments of the total message to be displayed within ten seconds. A one-segment message may remain static on the signboard with no duration limit.

(ii) Displays may travel horizontally or scroll vertically onto electronic signboards, but must hold in a static position for two seconds after completing the travel or scroll.

(iii) Displays shall not appear to flash, undulate, or pulse, or portray explosions, fireworks, flashes of light, or blinking or chasing lights. Displays shall not appear to move toward or away from the viewer, expand or contract, bounce, rotate, spin, twist, or otherwise portray graphics or animation as it moves onto, is displayed on, or leaves the signboard.

(iv) Electronic signs requiring more than four seconds to change from one single message display to another shall be turned off during the change interval.

(v) No electronic sign lamp may be illuminated to a degree of brightness that is greater than necessary for adequate visibility. In no case may the brightness exceed 8,000 nits or equivalent candelas during daylight hours, or 1,000 nits or equivalent candelas between dusk and dawn. Signs found to be too bright shall be adjusted as directed by the department.

(h) The act does not regulate Type 3(a), 3(b), 3(c), and 3(d) on-premise signs located along primary system highways inside an incorporated city or town or a commercial or industrial area.

## Wisconsin

**Control of Outdoor Advertising Along and Visible from Highways on the Interstate and Federal-Aid Primary Systems**, Chapter Trans 201, Wisconsin Administrative Code, February 2005.
http://docs.legis.wisconsin.gov/code/admin_code/trans/201.pdf
*From the web site:*

**Trans 201.15 – Electronic signs**

(3) Variable Message Signs.

(c) No message may be displayed for less than one-half second.

(d) No message may be repeated at intervals of less than 2 seconds.

(e) No segmented message may last longer than 10 seconds.

(f) No traveling message may travel at a rate slower than 16 light columns per second or faster than 32 columns per second.

(g) No variable message sign lamp may be illuminated to a degree of brightness that is greater than necessary for adequate visibility.

(4) Multiple Message Signs.

(a) The louver rotation time to change a message shall be one second or less.

(b) The time a message remains in a fixed position shall be 6 seconds or more.

**84.30 Regulation of Outdoor Advertising**, Wisconsin Legislative Documents, 2012.
http://docs.legis.wisconsin.gov/statutes/statutes/84/30
*From the web site:*

(3)(c)(1) Signs that contain, include or are illuminated by any flashing, intermittent or moving light or lights are prohibited, except electronic signs permitted by rule of the department.

(4)(bm) Signs may contain multiple or variable messages, including messages on louvers that are rotated and messages formed solely by use of lights or other electronic or digital displays, that may be changed by any electronic process, subject to all of the following restrictions:

1. Each change of message shall be accomplished in one second or less.
2. Each message shall remain in a fixed position for at least 6 seconds.
3. The use of traveling messages or segmented messages is prohibited.
4. The department, by rule, may prohibit or establish restrictions on the illumination of messages to a degree of brightness that is greater than necessary for adequate visibility.

# APPENDIX A

## State Changeable Message Chart
## (Source: OAAA State Statute Matrix)

| **No changeable message signs allowed:** | **Tri- action Only** | **Changeable Message /Digital Technology** |
|---|---|---|
| (3 STATES)<br>ND, NH, WY | (5 STATES)<br>MD, MA, OR,<br>TX, WA, | (38 STATES)<br>AL, AR, AZ, CA, CO, CT<br>DE, FL, GA, ID, IL, IA, IN,<br>KS, KY, LA, MI, MN, MO,<br>MS, MT, NE, NV, NJ, NM,<br>NY, NC, OH, OK, PA, RI,<br>SC, SD, TN, UT, VA, WV, WI |

**State-by-state breakdown of the 38 states allowing Changeable Message/Digital technology**

- States which have statutes (19):

CA, CO, CT, DE, FL
GA, IN, KS, MI, MO
MN, NJ, NY, OH
OK, UT, TN, VA, WI

- Regulations (10):

AR, ID, IL, IA*, LA, NE,
NV, NC, SC, WV

- States with interpretations of the federal/state agreement (7):

AL, AZ, KY, MT,
NM, RI, SD

- Policy memoranda (2):

MS approved a policy DOT memorandum
PA approved the technology through an internal PENNDOT memorandum (2002)
IA* regulations are undergoing a comment period

# OAAA Changeable Message Criteria
# Dwell Time Sequence – By State

| Dwell Time (Static Message) | State |
|---|---|
| **4 seconds** | **CA, CO, IA, VA** |
| **5 seconds** | **NM, PA** |
| **6 seconds** | **AL, AZ, CT, FL, GA, IA, MI, MN, NV, NY, SD, WI, RI (average)** |
| **8 seconds** | **AR, ID, IN, KS, LA, MO, MS, NJ, NC, OH, OK, OR, SC, TN, UT, WV, WA** |
| **10 seconds** | **DE, IL, NE, MD, TX** |
| **Other/State-Company Discretion** | **KY, MA, MT** |

## Dwell and Twirl Times for message changes and spacing criteria

**States Allowing Changeable Message/Digital Technology**

| State | Dwell time | Twirl time | Spacing *traditional 500 ft |
|---|---|---|---|
| **AL** | 6 seconds | | |
| **AR** | 8 seconds or more | 2 seconds or less | 1500 feet |
| **AZ** | 6 seconds | 1 second | * |
| **CA** | 4 seconds | 4 seconds | 1000 feet |
| **CO** | 4 seconds | 1 second | 1000 feet |
| **CT** | 6 seconds | 3 seconds | * |
| **DE** | 10 seconds | 1 second | 2500 feet |
| **FL** | 6 seconds | 2 seconds | 1000 to 1500 feet |
| **GA** | 10 seconds | 2 seconds | 5000 feet |

Dwell and Twirl Times for message changes and spacing criteria (cont'd)

**States Allowing Changeable Message Including Electronics**

| State | Dwell time | Twirl time | Spacing |
|---|---|---|---|
| **ID** | 8 seconds | 2 seconds | * |
| **IL** | 10 seconds | 3 seconds | * |
| **IN** | 8 seconds | 2 seconds | * |
| **IA** | 6 seconds | 1 second | * |
| **KS** | 8 seconds | 2 seconds | 1000 feet |
| **KY** At discretion of state DOT | | | |
| **LA** | 8 seconds | 4 seconds | * |
| **MI** | 6 seconds | 1 second | * |
| **MN** | 6 seconds | none | * |
| **MS** | 8 seconds | instantaneous | * |
| **MO** | 8 seconds | 2 seconds | 1400 feet |
| **MT** At discretion of state DOT | | | |
| **NE** | 10 seconds | 2 seconds | 5000 feet |
| **NV** | 6 seconds | 3 seconds | * |
| ***NJ** (regulatory change pending | 8 seconds | 1 second | 3000 feet |
| **NM** Company discretion | 5 seconds | 1-2 seconds | * |
| **NY** | 6 seconds | 3 seconds | * |
| **NC** | 8 seconds | 2 seconds | 1000 feet |
| **OH** | 8 seconds | 3 seconds | 1000 feet |
| **OK** | 8 seconds | 4 seconds | * |

Dwell and Twirl Times for message changes and spacing criteria (cont'd)

**States Allowing Changeable Message Including Electronics**

| State | Dwell time | Twirl time | Spacing |
|---|---|---|---|
| **PA** | 5 seconds | 1 second | * |
| **RI** | 5-7 seconds | 2-3 seconds | * |
| Company discretion | | | |
| **SD** | 6 seconds | none | * |
| **SC** | 8 seconds | 2-3 seconds | * |
| **TN** | 8 seconds | 2 seconds | 2000 feet |
| **UT** | 8 seconds | 3 seconds | * |
| **VA** | 4 seconds | none | * |
| **WV** | 8 seconds | 2 seconds | 1500 feet |
| **WI** | 6 seconds | 1 second | * |

**States Allowing Changeable Message Including Electronics**

**Tri-action Only**

| State | Dwell time | Twirl time | Spacing |
|---|---|---|---|
| **MD** | 10 seconds | 4 seconds | * |
| **MA** | none | none | * |
| **OR** | 8 seconds | 4 seconds | 1000 feet |
| **TX** | 10 seconds | 2 seconds | * |
| Rural Roads Only | | | |
| **WA** | 8 seconds | 4 seconds | * |

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# The impact of road advertising signs on driver behaviour and implications for road safety: A critical systematic review

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ABSTRACT

Driver inattention and distraction are recognised as two of the most critical factors for road safety worldwide. While roadside advertising is often identified as a potential source of distraction, it has received less attention compared to other types of distractions such as texting or calling while driving. Therefore, this study focused on the impact of roadside advertising signs on driver behaviour and road safety. To examine this, a theory-driven systematic literature review was undertaken. In total, 90 unique documents were identified and reviewed using the Task-Capability Interface (TCI) Model to explain the potential safety impact of roadside advertising. The findings confirmed that the TCI model is a useful tool for describing the relationship between roadside advertising and driver behaviour. From this perspective, roadside advertising signs can be considered environmental clutter, which adds additional demands to the driving task. In particular, roadside advertising signs impaired eye movement patterns of drivers. Additionally, it was demonstrated that the impact of roadside advertising on driving behaviour is greatly moderated by individual differences among drivers. Of great importance was that young drivers invest more attentional resources in interacting with roadside advertising, which suggests a lower capacity to discriminate between relevant and irrelevant driving information. Based on the available evidence, however, it is not possible to definitively conclude that there is a direct relationship between the driving behaviour changes attributed to roadside advertising and road crashes. Nonetheless, while most studies remain inconclusive, there is an emerging trend in the literature suggesting that roadside advertising can increase crash risk, particularly for those signs that have the capacity to frequently change (often referred to as digital billboards). Lastly, it is important to mention that most of the empirical studies undertaken to date feature strong methodological limitations. Consequently, there is an urgent need for more research in this area, given that roadside technology and the transport system are changing rapidly.

## 1. Introduction

Driving as a transport behaviour delivers important social and economic benefits, but also poses significant risks to quality of life, including injury and death. Worldwide, over 1.2 million people die each year as a result of injuries sustained from road crashes (WHO, 2015). Economically, injuries and death that result from road crashes cost governments on average 3% of their gross domestic product (WHO, 2015). Notable improvements in technologies such as cooperative intelligent transport systems and driving automation are

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expected to benefit road safety in the future. However, recent estimates suggest that large benefits are only likely to be observed in the long term—25 to 30 years—(Dia, 2015) due to numerous challenges related to infrastructure investment (Clark et al., 2016), public perception (Kyriakidis et al., 2015), and vehicle design policies (Smith, 2016). Until active safety technologies are completely accessible to all drivers, it will remain necessary to develop and implement effective road safety countermeasures to prevent road trauma.

Inappropriate or inadequate interactions between drivers and vehicles play a significant role in vehicle collisions. Driver performance is influenced by a wide range of factors, including fatigue (Filtness et al., 2012), distraction (Regan et al., 2011), mood (Rhodes et al., 2015), etc. Among these, distraction is recognised as one of the most critical factors for road safety worldwide (WHO, 2011). Conservative estimates suggest that distracted drivers are heavily overrepresented in road traffic crashes (Beanland et al., 2013). Distracted driving involves sharing attention between the primary task (driving) and a non-driving related secondary task. The non-driving related secondary task can be in-vehicle (e.g., mobile phones conversations, in-vehicle infotainment interactions, etc.) or external (e.g., reading roadside advertising signs, looking at non-related landscape elements, etc.).

Roadside advertising signs (often referred to in the literature as billboards) have become a common form of advertising around the world. As such, the impact of these signs on road safety is an area that needs a strong research focus to support policy decisions. Technology is evolving exponentially, and this extends to the technology utilised by road advertising companies. For example, an advertising company has recently created a sign that tailors its advertisements based on how heavy the traffic is (Adweek, 2018). This roadside advertising technology has been used to advertise restaurants, where simple images of food items are presented in fast-flowing traffic with the purpose of stimulating drivers' appetite. Meanwhile in heavy traffic, the advertisement changes to the words 'stuck in a jam? There's light at the end of the tunnel' with a picture of the restaurant logo. In addition, some advertising companies are considering creating personalised messages on roadside advertising signs for specific individuals via number plate recognition (Global Marketing Alliance, 2018) or new delivery modes such as turning other vehicles' windows into video billboards (Kumparak, 2018). These emerging technologies highlight the necessity of an up-to-date review of the literature in this area.

### 1.1. The interaction between driving and roadside advertising signs

Driving is a complex task that involves extensive interactions between road users and the other components of the transport system such as the driver, the vehicle, and the road traffic environment. Additionally, each component of the transport system includes various elements which can have an impact on driving performance (Rothengatter, 1997). For example, a person with 10 years' driving experience travelling at the speed limit on a clear highway is likely going to demonstrate a different level of performance than someone who has less experience and is driving on the same highway with multiple noisy passengers. Drivers' individual differences and the wide range of elements in the road traffic environment necessitate the implementation of systemic frameworks to analyse driving and manage safety risks (Scott-Parker et al., 2015; Oviedo-Trespalacios et al., 2018).

Various theoretical frameworks have been developed to conceptualise the driving task and explain safety risks. A notable framework that has the ultimate goal of explaining crash risk is the Task-Capability Interface (TCI) model developed by Fuller (2000). Using a driver-centred approach, the TCI model focuses on two key elements relating to the driving task: (i) the task demands experienced by drivers, and (ii) the driver's capability. The driving task requires the driver to successfully travel from one location and arrive at another while also avoiding safety-threatening events (Oviedo-Trespalacios et al., 2016). The difficulty of completing this task is affected by a number of factors including the environment, control characteristics of the vehicle such as speed or trajectory, the driving behaviour of others, and the communication between drivers on the road. The resulting difficulty of the task is what is referred to as task demands (Fuller, 2000). The ability to successfully meet these task demands and complete a successful trip is dependent on the driver's capability. Within the TCI model, a driver's level of competence (skills and knowledge) interacts with human factors (fatigue, emotions, substances, distraction, etc.) to determine the driver's capability. The model explains how human factors can influence a driver's capability but do not influence the task demands. Using these definitions, the TCI model provides a simple conceptualisation of how task demands and driver capability can explain the interactions between the driver, the vehicle, and the environment, which will lead to either positive or negative driving outcomes. Roadside advertising signs are part of the road traffic environment and, therefore, serve to modify the driving task demands (see Fig. 1). This could be problematic because drivers' attentional resources (drivers' capability) might not be sufficient to both safely drive and interact with the roadside advertising sign.

More specifically, the balance of capability and task demands impacts on the perceived difficulty of the task and the task outcome. In other words, in any given situation a matrix of competence and task demands will exist such that if the task demands are low, then the task is perceived as not difficult for drivers with low and high capability. However, if the task demands are high, then those with low capability will find the task more difficult than those with high capability. Similarly, if a driver's capability is impaired, a task can quickly become more difficult than it was previously perceived. In the same way that the balance of capability and task demands impacts perception, it also relates directly to the driving outcomes. As shown in Fig. 1, when the capability is higher than task demands, the driver can maintain control. However, if the task demands exceed the driver's current capabilities, the driver would potentially lose control. This loss of control will likely lead to a crash unless action is taken to ensure safety. Applications of the TCI model have demonstrated its usefulness in explaining speed selection (Fuller, 2011), mobile phone use while driving (Oviedo-Trespalacios et al., 2017a,b), and other driving behaviours.

### 1.2. Current study

Despite the relatively widespread use of roadside advertising, scientific understanding about its impact on task demands is limited. Firstly, the available literature is disorganised and limited compared to other road safety concerns such as mobile phone distracted driving, fatigue, speeding, etc. Secondly, roadside advertising signs are continuing to evolve technologically, creating the

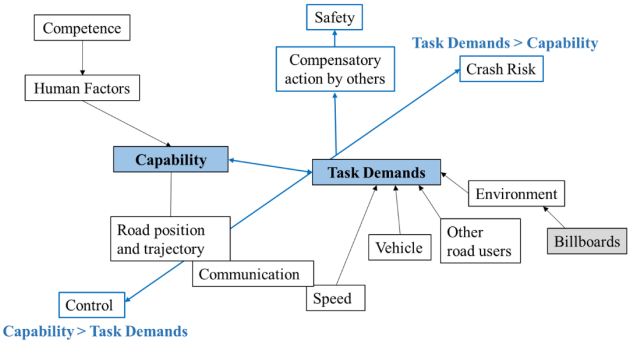


**Fig. 1.** Modification of the task capability interface model.

need for ongoing research to address recent technological advancements. For example, over the last 50 years, roadside advertising signs have evolved from static images to incorporate digital displays and changing pictures/videos designed to capture drivers' attention. Therefore, these technological differences are likely to influence driving task demands in different ways. To close this gap, we conducted a comprehensive systematic literature review informed by the TCI model.

## 2. Method

A literature review was selected as the most appropriate method of research to address the question of whether roadside advertising signs impact on driver behaviour and crash risk. Given the number of components and causal mechanisms theoretically described in the TCI model, a systematic classification scheme (SCS) was developed to guide and assist in synthesising the available literature. As described in the introduction, the TCI model proposes that crashes are a result of impaired driver behaviour (i.e., longitudinal and lateral vehicle control including eye movements) which is a function of driving demands exceeding driver capability. The SCS adopted in this study consists of the following four questions:

- What was the study design (e.g., simulator studies, naturalistic studies)?
- What variations in driving demands were considered (e.g., presence of roadside advertising, vehicle type, road traffic environment, etc.)?
- What variations in the driver's capability (e.g., driver demographics, driving experience, etc.) were included?
- What safety performance metrics (e.g., crashes, near-misses, etc.) were investigated?

The retrieved documents were also analysed based on the type of publication (e.g., journal article, conference paper, report etc.).

### 2.1. Search strategy

All searches included the words "driving" as mandatory, followed by the terms "advertising" or "billboard" and were conducted in February 2018. These terms were sought in the full text of the references. The search of academic references and grey literature was conducted in Google scholar and academic databases, i.e., PROQUEST, SCOPUS, TRID, EBSCO, and Web of Science. No time frame was specified in the searches. Besides, a request was sent to the Department of Transport and Main Roads (Queensland, Australia) to obtain access to the literature utilised in their policymaking. With regards to exclusion criteria, studies explaining roadside characteristics without considering road users' behaviour were excluded as well as road authorities communicating driving-related information (e.g., directions or work zones) to drivers.

## 3. Results

A total of 90 unique documents were identified and reviewed using the SCS. The process to identify the articles followed a PRISMA methodology (Moher et al., 2009) as described in Fig. 2. These studies were divided in two groups: (i) documents including original research data (n = 60) and (ii) documents including reviews or position papers (n = 31). The number of references in this list is 91 because the conference paper by Herrstedt et al. (2013) was counted twice as it included original research and a literature review. The final studies included in the synthesis consisted of 28 journal articles, 24 literature reviews (published in the form of journal articles, reports, conference papers, and book chapters), 15 conference papers, 12 reports, 4 theses, 1 handbook chapter, 2 letters to the editor, 3 opinion/position papers and 2 paper critiques. The literature review findings are presented in the Appendix.

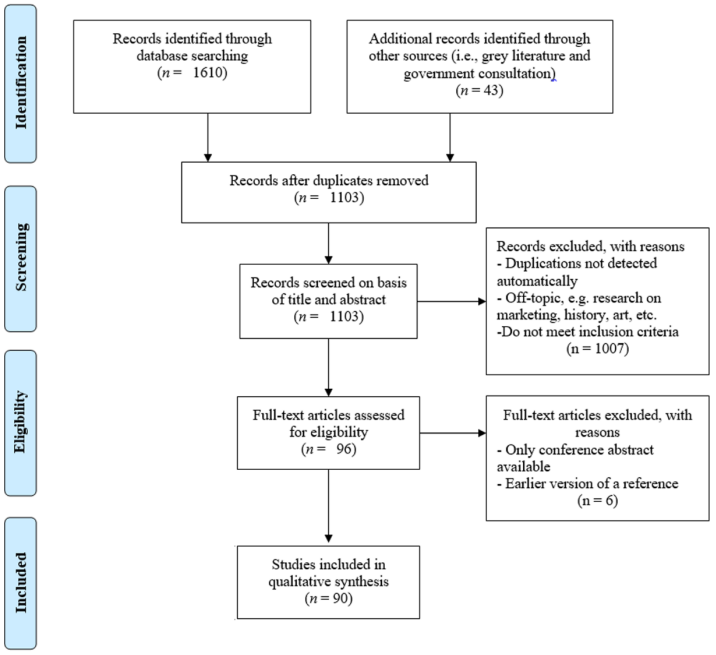


**Fig. 2.** PRISMA flow diagram.

## 4. Discussion

The discussion section is divided into four sections, corresponding to the questions identified in the SCS.

### *4.1. Methodological approaches and issues*

The main approaches utilised in the available literature to study the effects of roadside advertising on driver behaviour and safety included: crash data analyses; on-road studies; laboratory observations; and self-report studies. Crash data analysis involves studying patterns in police or medical records to identify the potential effects of roadside advertising on crash involvement at particular places and times. On-road observations comprise naturalistic and quasi-naturalistic studies that involve observing the driver's behaviour, in uncontrolled or controlled environments. Laboratory observations, which include high-fidelity and desktop driving simulators, have been utilised extensively in road safety research, as they are a low risk and low cost option for studying driving behaviours while controlling for different factors. Self-report studies include questionnaires regarding drivers' perception of the impact that roadside advertising signs have on driving behaviour.

In the context of distracted driving, crash data is acknowledged as the key performance measure for safety (Oviedo-Trespalacios et al., 2016). However, only 15% of the references with new data (i.e., excluding reviews and opinion pieces) use crash data to study the effects of roadside advertising. Some examples of roadside advertising safety research using crash data include Yannis et al. (2013) and Izadpanah et al. (2014). The provision of ongoing and reliable crash data is a critical component of evidence-based road safety practice and research. Crash data is usually provided by government-related entities; with the most common source being crash reports (e.g. police or health-care providers). However, there are several limitations associated with crash data from police or hospital sources. These include the under-reporting of low severity crashes, low occurrence of crashes linked to distraction, and lack of detail about the behaviour preceding the crash. Therefore, it is reasonable to argue that crash data, albeit a critical indicator, should not serve as a unique and standalone tool for informing evidence-led initiatives in roadside advertising safety.

Various authors have developed important safety evaluation methods based on naturalistic and simulated driving behaviour observations. These result in the predominant forms of evidence relating to the safety effects of roadside advertising. With new technological developments in in-vehicle driving monitoring, naturalistic studies have become more common in the distracted driving literature. Examples of roadside advertising research that used naturalistic or simulated driving methods include Perez et al. (2012), Rasdorf et al. (2017) and Zalesinska (2018). Traditionally, driving simulators are considered the principal tool for road safety laboratory research. Driving simulators have been developed using advances in computer technology and are nowadays cheaper and safer than in-vehicle or on-road testing. Generally, in simulator studies, it is possible to observe driving behaviour, near-misses, and crashes. Although intuitively, the best option for studying crashes would be in a controlled environment such as a simulator, difficulties arise because crashes are rare events (Svensson and Hydén, 2006). The lack of crashes limits the identification of patterns, the generalizability of results, and subsequent external validity of the finding. To overcome these limitations, the use of surrogate safety measurements as a way of studying driving performance has been a frequent practice in the distracted driving literature. These surrogate measures include: acceleration, headway distance, lane position, speed, among others. Yan et al. (2008) validated a set of surrogate measures for evaluating safety in signalised intersections through a comparison of crash reports and simulator data. As a result, risky driving parameters such as levels of speed, acceleration, and headway are accepted as surrogate measures of safety. Nonetheless, driving simulators are often questioned concerning their resemblance to real-world driving and vehicle motion. Even the most sophisticated driving simulators do not provide all of the visual, vestibular, and proprioceptive changes that occur when driving. Validation studies of high-fidelity simulators conducted by Meuleners and Fraser (2015) and Larue et al. (2018) have demonstrated the relative validity of driving simulators compared to real-world driving. Therefore, simulators could potentially be utilised to study driving behaviour in the presence of roadside advertising while ensuring external validity.

The number of studies using self-reported data was relatively low (less than 10%). Examples of roadside advertising studies that used self-reported data include Hasan (2015) and Olejniczak-Serowiec et al. (2017). Self-reported data, including questionnaires or interviews, could explain crash circumstances and conflicts with roadside advertising. Although self-reported data suffers from several drawbacks related to human factors such as memory or social desirability bias, it could help to triangulate findings and inform potential risks. Qualitative or mixed research methods can provide valuable insight into road users conflicts with roadside advertising, which are not detected in controlled studies.

### 4.2. Impacts on driving task demands

Driving task demands are a function of the elements within the traffic system external to the driver, including the road traffic environment, road furniture, vehicle, weather, etc. The task-capability interface model (Fuller, 2000) suggests that an understanding of the determinants of road demands would help to support safe driving. The main driving task demands variables considered in the reviewed literature are discussed below.

#### 4.2.1. Demands of the road traffic environment

The road traffic environment moderates the impact that roadside advertising has on driving. A consistent finding in the literature is that the presence of roadside advertising seems to be correlated with road crashes (Sisiopiku et al., 2015; Wallace, 2003). Authors such as Molino et al. (2009) advise that commercial signs should be completely avoided at intersections (or nearby). Notwithstanding this finding, there is very little information in the literature on the impact that roadside advertising signs have on secondary roads or rural areas.

Studies involving the impact of speed limits on drivers' roadside advertising interactions (e.g. reading, thinking about or avoiding the sign) have been limited. Misokefalou et al. (2016) reported a non-significant difference in the duration of engagements with roadside advertising signs and other non-related roadside objects between speeds over and under 80 km/h. Additionally, most of the empirical and observational studies have been undertaken during the day. An exception is an on-road study conducted by Dukic et al. (2013) which included night and day driving. The results showed that there are no significant differences between day time and night time attention to electronic roadside advertising signs. There is a need to undertake more systematic evaluations examining the impact of these signs in a broader range of traffic environments.

#### 4.2.2. Roadside advertising sign type

The references reviewed confirmed that there is a wide range of roadside advertising sign types. The two types most frequently cited in the literature are static and changeable (also known as digital, electronic or roller bar). Additionally, some studies have specialised in emergent or currently less common road advertising technologies such as video-based signs, business logo signs, LED signs, tri-vision signs etc. Roadside advertising technologies are continuously evolving. Emergent roadside advertising technology includes advertisements which target specific individuals via number plate recognition (Global Marketing Alliance, 2018), as well as advertisements which change based on the traffic conditions (Adweek, 2018). As these are new technologies, they have not been studied or included in any study. Given that road advertising technologies are constantly changing, there is a need for ongoing monitoring of the risks associated with emergent technologies.

At this point, the broad diversity of technologies limits our capacity to generalise findings about the impact of advertising on road safety. On the one hand, there is insufficient evidence regarding the impact of each type of roadside advertising on road safety. A clear example of this is that less than 5% of reviewed references included video-based advertising. On the other hand, the available evidence needs to be evaluated with consideration of the socio-technical factors that may have varied from one location to another. For example, the impact of a roadside advertisement located in Southeast Europe may well be different to the road safety outcomes of

the same roadside advertisement in Australia, given the inherent differences across the regions concerning road standards, driver behaviour, road traffic composition, weather, etc.

Notwithstanding the limitations of the current literature, the degree of changeability in the information conveyed by the roadside advertising signs appears to have a persistent adverse effect on driver behaviour. The degree of changeability refers to the amount of information displayed by the roadside advertisement and can vary considerably from static signs to those that can display video or multiple images successively. Static roadside advertisements are passive in nature, since they convey a single image. In contrast, changeable signs are more active since they convey a collection of images that change at predetermined times. The most active form of changeable signs is video advertising signs, which can show multiple images at high speed. It is important to consider that changeable signs (including digital, electronic or roller bar signs) are simplified versions of video advertising signs as they present a limited number of images that change at specified times (remaining in passive mode the majority of the time).

When comparing the effect of different types of roadside advertising signs on driver task demands, it has been demonstrated that changeable (i.e., digital with multiple advertising signs) roadside advertising signs represent a greater distraction to drivers than static (i.e., single advertising sign) roadside advertising signs (Beijer et al., 2004; Decker et al., 2015; Herrstedt et al., 2013; Missokefalou and Eliou, 2012). Indeed, a recent study demonstrated that static roadside advertising does not affect situation awareness of drivers (Young et al., 2017). This has been primarily attributed to the movement involved in changeable roadside advertising signs, which is more likely to capture the attention of the driver (Missokefalou and Eliou, 2012). A recent study using on-road testing suggested that rapid light onsets of changeable roadside advertising signs could result in a sudden shift of visual attention (Belyusar et al., 2016). Additionally, it has been found that a driver's gaze duration is longer and occurs more often when looking at changeable signs compared to static signs (Chattington et al., 2009; Dukic et al., 2013; Belyusar et al., 2016; Decker et al., 2015). A potential explanation for this is that drivers might anticipate the change. When drivers' opinions of this distraction have been investigated, it has also been found that drivers perceive videos, special effects and animation on roadside advertising, to be more distracting (Yellappan et al., 2016; Smiley et al., 2005). Therefore, changeable roadside advertising (i.e., active) has been shown to have a stronger effect on driver distraction compared to static roadside advertising (i.e., passive).

The location and physical attributes of the roadside advertising are associated with the level of attention given by drivers. As described by Wilson and Casper (2016), the proximity to the driver's window of attention and location of the roadside advertising are the most important variables for predicting attention, i.e., roadside advertising signs are more likely to be noticed if they are closer to the road, have a centre approach, have a longer amount of time in which it is visible to those who pass by it, and are larger in size.

The impact of business logo signs on motorways has been an emergent topic in the scientific literature. Generally, supplementary signs do not seem to reduce safety (Metz and Krüger, 2014). A simulator study conducted by Rasdorf et al. (2017) confirmed that six- and nine-panel signs did not result in glances larger than 2 s. Typically, off-road glances longer than 2 s have been found to increase near-crash and crash risks by at least two times that of normal baseline driving (Klauer et al., 2006). However, using the two-second guideline is problematic because drivers might not instantly recover their performance on safety-critical driving tasks such as hazard perception (Borowsky et al., 2016). On the other hand, Zahabi et al. (2017) reported that a nine-panel roadside advertisement resulted in a larger reduction in driving speed in comparison to six panels. Although visual allocation of attention does not seem impaired, there could be a risk of traffic conflicts due to the reduced speed. More research is necessary to confirm this.

#### 4.2.3. Roadside advertising sign level of illumination

The literature reviewed supports the conclusion that the level of brightness and illumination of roadside advertising has an important effect on driver behaviour. Changing luminance within a visual field will reflexively attract a driver's gaze (CTC, 2012; Roberts et al., 2013). As such, many researchers have claimed that digital roadside advertising signs present a higher safety risk for the general public as the changes in luminance are more likely to catch a driver's attention than traditional static signs (CTC, 2012; Herrstedt et al., 2017; Roberts, 2013). Furthermore, digital roadside advertising signs also hold a driver's attention for longer than standard floodlit signs (Birdsall, 2008; CTC, 2012). Herrstedt et al. (2017) conducted a simulation experiment investigating how LED-advertising signs impacted the driver's attention. The researchers found that average glance duration at LED signs was longer when compared to other types of objects (i.e. anything the driver looked at for more than one second, including static, non-LED advertisements, spectacular objects, and driving relating objects such as road signs, road users, mirror/speedometer etc.).

While research demonstrates that changing luminance is more likely to attract and hold a driver's attention, limited experimental research is available to show that this distraction will lead to a greater risk of safety-threatening events. Indeed, some correlational studies investigating how the introduction of a digital advertising sign impacts crash rates have failed to find a significant effect (Hawkins et al., 2012; Izadpanah et al., 2014; Yannis et al., 2013). Despite limited research connecting luminance to crash risk, Zhang et al. (2017) have reported that over-bright highway roadside advertising signs can cause visual discomfort, further increasing associated risks.

A number of recommendations and regulations are set in place to minimise risk for drivers. Australia currently regulates luminance changes for digital roadside advertising signs, and within the states of Queensland and New South Wales, moving images are not permitted (OMA, 2013). Roberts (2013) argues that luminance levels of digital roadside advertising signs should be equal to the brightness of static signs in the same ambient lighting condition. Other sources recommend that luminance should be within 10 to 40 times the brightness of objects (e.g. headlights) within the driving environment to allow for transient adaptation effects (CTC, 2012). Zalesinska's (2018) recent study indicated that areas with a size of over 0.58 m × 0.38 m and luminance of more than 400 cd/m$^2$ were associated with deteriorations in visual performance of the observers. Finally, the recommended change in luminance between day and night also varies from 20 to 50% (Jenkins, 2016).

#### 4.2.4. Roadside advertising sign content

The content of roadside advertising signs has been found to have features that influence driver behaviour. The features that have been more thoroughly investigated include the number of words, emotional valence, human representation, and design characteristics. Studies have shown decreased lane keeping and longer gaze durations when participants are presented with roadside advertising signs that have a larger number of words to read (Schieber et al., 2014). Schieber et al. (2014) proposed that processing overload emerged when participants were presented with eight or more words on a digital roadside advertising sign.

Drivers' responses are also influenced by the emotional or arousal content of the roadside advertising signs. A driver's sensitivity to sexualised or attractive static images has been found to increase their level of gaze distraction (Targosiński, 2017). Additionally, the presence of negative emotional content on roadside advertising signs is associated with an increase in drivers' reaction time and steering variations (Rodd, 2017). Chan and Singhal (2013) found that negative and positive valence words impaired driving speed. Likewise, it was also reported that taboo words (taboo-related arousal) seem to enhance attentional focus (Chan et al., 2016). The interactions between drivers and textual content need to be considered in future risk assessments.

Human representation on roadside advertising signs also appears to influence drivers' behaviour. Tarnowski et al. (2017) found that drivers were more distracted by roadside advertising signs where humans were represented than by signs where humans were not present.

The design characteristics of the roadside advertising have also been found to affect driving performance. Based on an analysis of drivers' perceptions using data mining techniques, Marciano and Setter (2017) proposed that roadside advertising signs can be classified into at least three groups:

- Loaded roadside advertising signs are characterised as colourful, containing proportionately small quantities of graphic elements and large quantities of text. The text itself consists of many letters of all sizes. Also, these roadside advertising signs contain many logos and many information items.
- Graphical roadside advertising signs are characterised as colourful, containing large quantities of graphic elements and small quantities of text.
- Minimal roadside advertising signs are characterised by few or no graphic elements, few colours, and a small amount of text with mainly large letters.

Marciano and Setter (2017) found that loaded roadside advertising signs seem to interfere more with drivers' tracking performance and continuous motor performance than graphical and minimal signs. Indeed, minimal roadside advertising signs do not seem to interfere with any of the experimental tasks explored in their study.

#### 4.2.5. Vehicle type

Vehicle type of the driver is one of the variables that has had limited consideration. Cars are the most frequent vehicles analysed in most studies. There is, however, one study (see Megías et al., 2011) that involved a motorcycle simulator. The results showed that motorcycle riders also experience impaired reaction time in the presence of static roadside advertising signs with negative valence.

### 4.3. Impacts on driver capability

A driver's capability is a function of a plethora of human factor variables, including personal characteristics, physiological characteristics, personal experiences, psychological resources, etc. Although accounting for all these variables would be ideal, the large number of these human factors makes it difficult to study them systematically. Nonetheless, key human factor variables have been explored in relation to roadside advertising signs, as outlined below.

#### 4.3.1. Age and driving experience

Age and driver experience are associated with the different outcomes in the interactions between drivers and roadside advertising signs. Research has consistently found that older drivers (generally aged 65 years or older) are negatively impacted by the presence of roadside advertising signs. Edquist et al. (2011) found that older drivers made more lane change errors, particularly in the presence of static roadside advertising signs, than drivers in other age groups (18–25 or 26–55). This is not surprising since research has suggested that age-related medical conditions and declining of functional/cognitive abilities often contribute to higher crash risk among senior drivers (Asbridge et al., 2017). Research in traffic psychology has consistently reported that older drivers engaging in secondary tasks while driving are typically more affected than young drivers (Fofanova and Vollrath, 2011).

Teens and young drivers seem to give significantly more attention to roadside advertising. A study conducted by Stavrinos et al. (2016) found that drivers aged 16–19 years give longer glances to roadside advertising signs (digital or static) compared to drivers aged 35+ years. Roadside advertising signs appear to have an effect on the driving performance of young adults, as the age group (16–24) shows a slower reaction time to hazards (Farbry et al., 2001); greater levels of distraction to both digital and static signs (Stavrinos et al., 2016); and self-reported agreement that both static and digital signs create distraction when driving (Sisiopiku et al., 2015). In contrast, other studies have shown no age differences in the detection of static roadside advertisements (Topolšek et al., 2016) or eye glance behaviour in response to static and digital roadside advertising signs (Lee et al., 2004). More research is needed to fully determine the effect of roadside advertising on young drivers.

#### 4.3.2. Gender

Research also suggests that gender can have an impact on responses to static roadside advertising sign content, with women showing greater distraction in response to advertisements evoking negative emotions, and men showing greater distraction to advertisements with sexual content (Olejniczak-Serowiec et al., 2017). Overall, men appear to be more likely to read digital roadside advertising signs than women (Islam, 2015); however, women appear to have longer gaze duration than men, meaning that they were distracted for a longer time period (Lee et al., 2004). It is important to emphasise that research into gender differences is limited, and the significant results only displayed small effect sizes. As such, these findings should be treated with caution.

#### 4.3.3. Other personal characteristics

The level of distraction an individual may experience when driving past a roadside advertising sign may also differ according to transient factors such as fatigue and motivations (Horberry and Edquist, 2008). Also, it has been suggested that a driver's level of distraction might increase depending on whether the content of the sign is appealing to an individual or not (Chattington et al., 2009). While these factors have been identified as important, their effect on a driver's level of distraction when driving past roadside advertising signs has not yet been examined. It is also possible that more permanent personal characteristics such as beliefs towards safety or personality could influence this distraction; however, research is yet to explore this.

### 4.4. Safety implications of roadside advertising signs

Analysis of crash data has suggested a link between roadside advertising signs and safety (Cairney and Gunatillake, 2000; Sisiopiku et al., 2015). Research suggests that crash risk increases by approximately 25–29% in the presence of digital roadside advertising signs compared to control areas (Islam, 2015; Sisiopiku et al., 2015). On the other hand, static roadside advertising signs have not been linked with differences in the crash count (Yannis et al., 2013). However, this finding is contrary to previous research that suggests differences in crash counts exist in the presence of static roadside advertising, see Staffeld (1953) and Ady (1967). The quantity and quality of available evidence limit our conclusion.

Fixed object, side swipe and rear end crashes are the most common types of crashes in the presence of roadside advertising signs (Islam, 2015; Sisiopiku et al., 2015). In addition, drivers showed increased eye fixations and increased drifting between lanes on the road (Sisiopiku et al., 2015; Young and Mahfoud, 2007). In their meta-analysis of existing studies investigating digital roadside advertising signs; Sisiopiku et al. (2015) found an increased crash risk as a result of digital signs, however, the effect was exclusive to sections of road with intersections.

Studies into the before-and-after effects of the installation or removal of roadside advertising signs did not find a significant difference in crash prevalence when the sign was present on the road compared to when the sign was not present (Hawkins et al., 2012; Izadpanah et al., 2014; Yannis et al., 2013). These findings may demonstrate that drivers can self-regulate their interactions with roadside advertising (as they do with other distractions, see Oviedo-Trespalacios (2018)) and, therefore, it could be problematic if the roadside advertising design prevents self-regulation among drivers. For example, a roadside advertising sign can capture drivers' attention in moments of high driving demands such as heavy traffic or potential road hazards. As such, drivers would not be able to safely manage the additional workload.

## 5. Conclusion

### 5.1. Key findings

The evidence regarding roadside advertising safety has been widely scattered with little attempt to explore systemic patterns. This has hindered effective risk characterisation and an understanding of the mechanisms through which certain roadside advertising characteristics contribute to road crashes. To address this gap in the literature, the current study revised literature using a systematic approach informed by the Task-Capability Interface (TCI) model (Fuller, 2000). The TCI model is a seminal theoretical framework that explains determinants of driving behaviour and crash risk. To ensure a structured and efficient approach, the PRISMA framework (Preferred Reporting Items for Systematic Reviews and Meta-analysis) was used to guide this process (Moher et al., 2009).

A total of 90 unique documents were identified and reviewed using the Task-Capability Interface (TCI) Model. Overall, the findings show that the TCI model is useful in explaining the relationship between roadside advertising and driver behaviour. Roadside advertising signs were considered to be environmental clutter, which adds additional demands to the driving task. For example, some features of roadside advertising such as the changeability level have been consistently linked with changes in eye scanning behaviour of drivers (Beijer et al., 2004). Additionally, it seems that the impact that roadside advertising has on driving behaviour is greatly moderated by individual differences among drivers. Of great importance was that young drivers seem to invest more resources interacting with roadside advertising, suggesting a lower capacity to discriminate between relevant and irrelevant driving information (Stavrinos et al., 2016).

Based on the available evidence, it is not possible to conclude that there is a direct relationship between the driving behaviour changes that can be attributed to roadside advertising and subsequent road crashes. Most of the results in this respect remain inconclusive. However, there is an emerging trend in the literature suggesting that roadside advertising, particularly those signs with changeable messages, can increase crash risk (Cairney and Gunatillake, 2000; Sisiopiku et al., 2015). It is important to bear in mind that most of the empirical studies undertaken to date feature strong methodological limitations. Finally, roadside advertising technology is continually evolving, so there is a need for further research to ensure the recent technological advancements are addressed.

### 5.2. Policy implications

Advertising signs directed at road users are designed to communicate messages to the driving public. For the advertising industry, roadsides are sought-after, well established and increasingly profitable locations for advertising signs. Although the industry acknowledges the importance of safety, advertisers are not accountable for road safety and efficiency or the prevention of road trauma. Notably, government road agencies work to minimise driver distraction potential while advertisers seek to optimise it (Horberry et al., 2013). In this review, it is suggested that roadside advertising signs are associated with changes in crash risk. Unfortunately, findings from this review also revealed that research is not always conclusive regarding the mechanisms of these changes in crash risk. The lack of conclusive evidence limits the ability of policy-makers to apply risk-minimisation strategies. Nonetheless, roadside advertising is a legitimate business and public policy needs to manage the risks, not prohibit the activity. Commercial and community interest in roadside advertising is growing. Government road agencies also use roadside advertising signs for road safety campaigns and to communicate information about severe weather events and critical safety alerts (for example, child abductions). Given this demand trajectory, comprehensive empirical research will enable road regulators to develop robust technical standards that can be reliably and consistently applied across road agencies.

When setting public policy and technical standards, road agencies are reluctant to adopt subjective and qualitative guidelines, preferring to rely on defensible criteria drawn from independent evidence-based research. Without unequivocal evidence, some government road agencies develop technical criteria based on risk management and engineering principles substantiated by human factors, safety-in-design or driver-centred design approaches (Horberry et al., 2013). While these methods are reasonable, businesses and industries are challenging the legitimacy of road agencies' technical criteria citing the absence of systematic and supporting empirical data. Private sector practitioners are engaged to produce reports and make submissions outlining the rationale for why an advertising sign should be approved, despite its non-compliance with regulators' requirements or sufficient regard for human factors or ergonomic principles. In some instances, when applications for advertising signs are rejected on road safety grounds, applicants pursue their cases through the courts (Dulebenets et al., 2018; Sharpe, 2011).

As roadside advertising technologies are continually changing, there is a need for ongoing monitoring of the risks associated with emergent technologies. Therefore, continued monitoring of roadside advertising technologies and generation of safety data is necessary. Legislation in some jurisdictions such as the US has not progressed as fast as the roadside advertising technology (Sharpe, 2011). Likewise, although roadside advertising should naturally be driven by road safety concerns, some other policy considerations should be weighted as well e.g., scenic beauty (Sharpe, 2011) and clutter (Beijer et al., 2004). Sharpe (2011) explains that if left effectively unregulated, current technologies of roadside advertising would destroy the scenic vistas and put drivers (and other road users) at risk.

### 5.3. Practical recommendations

Some considerations also need to be made for the types of roadside advertising allowed and roadside advertising management. Concerning dwell time and transition, the following recommendations were defined based on current evidence:

- The message dwell time should be designed to expose drivers to only one image per interaction with a roadside advertising sign. Evidence from on-road studies has confirmed that dwell times of 7 sec in a motorway (more than 100 kph) (Dukic et al., 2013) or 7–10 sec in a 104 kph road (Belyusar et al., 2016) attract more glances. At the moment, there is insufficient information on the right dwell time duration, but a reduction in the number of drivers seeing changes would suggest that a number larger than 10 sec would be a conservative approach.
- Stavrinos et al. (2016) documented that when a changeable roadside advertising sign transitioned to another image, there was an increase in glances longer than two seconds. Transitions that occur less than 154 m distance could result in fewer glances that last longer than two seconds.
- Transition duration is particularly problematic. Belyusar et al. (2016) explained that drivers are neurophysiologically predisposed to orient to motion and sudden change in the periphery. We recommend increasing the transition duration to avoid sudden motion or change. Design features and illumination guidelines could be utilised to mitigate these risks.

About location, the following recommendations were defined based on current evidence:

- Roadside advertising should not be located in complex driving locations where the traffic conditions are likely to change rapidly, or in the centre of drivers' field of view (i.e., viewable from the centre of the windshield at any point during viewing) (Wilson and Casper, 2016).
- Drivers seem to display performance decrements even after their interaction with the roadside advertising sign is finished. A "recovery zone" (road segment with low driving demands and lack of unexpected risks) of at least 8 sec should be considered after digital roadside advertising signs (Schieber et al., 2014).

Two key findings about illumination should be considered:

- The illumination of roadside advertising is an important issue that needs to be regulated. Road advertisements should not be overbright, with the luminance of digital signs not exceeding that of static signs (Roberts, 2013).

- Additionally, luminance should be within 10–40 times the brightness of objects (e.g. headlights) within the driving environment to allow for transient adaptation effects (CTC, 2012).

It is important to note that the practice recommendations are likely only to apply to passenger car drivers, given the limited amount of research conducted using other road users. Evidence from the literature review suggests that motorcycle riders directly modify their vision towards billboards (their average fixation duration when viewing billboards was 339.33 ms), as well as their reaction time, with motorcyclists showing a significantly faster reaction time after viewing negative roadside advertisements than after viewing positive and neutral advertisements (Megías et al., 2011). Likewise, other studies have found that bicycle riders report that billboards can result in distraction from the driving task (Useche et al., 2018). There is a need to investigate the full impact of billboards on road safety, and this research needs to consider the wide range of road users and their interactions.

Finally, one of the issues that emerged from this review is the need for a better understanding of the role of the roadside advertising content. The results showed that both the appearance of billboards (graphics vs. text, text size, colours, etc.) and the content itself (taboos, negative vs positive/neutral contents, etc.) interact with driving behaviour.

### 5.4. Future research

As roadside advertising technology and the transport system is constantly changing, continued monitoring of roadside technologies and generation of safety data is necessary. Additionally, regulators should consider a general human-factors metric (e.g., the amount of attention required to process the roadside advertising sign using eye movements or driving performance) to regulate permitted technologies and road traffic design recommendations. Furthermore, the concept of the 'recovery zone', in which it was concluded that roadside advertising sign effects could migrate to the 8 sec of travel beyond the sign (Schieber et al., 2014) is an important concern that needs further study. There is also a need to empirically assess the most appropriate dwell time for changeable roadside advertising signs. Importantly, the full impact of roadside advertising signs on road safety requires further investigation, and this research needs to consider the wide range of road users, including motorcycle riders and pedestrians, and their interactions.

Future studies also need to consider including a wider range of participants, as most studies have involved healthy participants with perfect vision and considerable driving experience. As studies in the U.S. have found young and senior drivers are more likely to be affected by roadside advertising, focusing on these age groups is also an important area to consider for future research. Finally, qualitative research approaches also need to be considered, as this type of research can be beneficial in defining optimal research questions and identifying emergent issues.

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## Appendix A. Supplementary material

Supplementary data to this article can be found online at https://doi.org/10.1016/j.tra.2019.01.012.

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# Effect of External Distractions

## Behavior and Vehicle Control of Novice and Experienced Drivers Evaluated

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**Distractions are a major contributor to automobile crashes, almost one-third of which are thought to be caused by distractions external to the vehicle. Increasingly, external distractions include video billboards, marquees, and variable message signs placed above and beside the highway. It is known that distractions outside the vehicle, especially video billboards, have effects on various vehicle control measures, such as the minimum headway distance to a braking lead vehicle, and that novice drivers and experienced drivers spend equally long times looking at distractions outside the vehicle. In contrast, experienced drivers are much less likely than novice drivers to take long glances at distractions inside the vehicle. This finding raises two questions. First, why are experienced drivers taking such long glances at an external distraction when they are not willing do so when a secondary task arises inside the vehicle? Second, if experienced drivers are sacrificing some of their ability to monitor visible hazards in the roadway ahead, are they sacrificing even more of their ability to anticipate unseen hazards? An experiment to evaluate these two questions had novice and experienced drivers perform an external search task (similar to reading a digital billboard) while driving in a simulator. Monitored throughout were eye movements of the participants and measures of the vehicle, such as lane position and speed. The major finding was that the long glances of both experienced and novice drivers came at the cost of identifying potential hidden hazards and seeing exposed moving threats.**

Distractions outside the vehicle, such as an object, person, or event, were contributing factors in 29.4% of the reported traffic crashes that were attributed to distracted driving between 1995 and 1999 (*1*). These results are from a decade ago; however, from the increasing number of billboards, cars, shopping malls, and a host of other distractions outside the vehicle, it is likely that the driving environment is more visually complex now and has even more potential for distraction than a decade ago. Thus, it is important to study the effects that distractions outside the vehicle have on driver safety.

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Within these visually complex driving environments, digital billboards usually stand out because of their brightness and the motion in the display that may capture the driver's attention. Recent research indicates that such digital billboards may attract drivers' attention away from the forward roadway for extended periods of time (*2–5*). This finding is troublesome because there is converging evidence from police crash reports, naturalistic studies, and simulator studies that looking away from the forward roadway for extended periods of time is associated with an elevated crash risk (*6–10*). A recent naturalistic study found that glances away from the forward roadway that were 2 s or longer contributed to 23% of crashes and near crashes (*8*). A separate simulator study by Horrey and Wickens (*9*) found that the longest 22% of the in-vehicle glances (greater than 1.6 s) contributed to 86% of the crashes. Most of these findings are from research on in-vehicle distractions. Little is known about how extended glances away from the forward roadway at an external distraction affect the safety of the driver.

In recent years, there have been several attempts to evaluate the effects of different kinds of external distractions, such as video billboards, digital billboards, and wind farms on driver behavior and vehicle control (*2, 5, 10*). A recent simulator study by Chan et al. (*10*) found that both novice and experienced drivers took equally long glances away from the forward roadway when they performed a secondary external task. The average maximum glance durations on the external task for novice and experienced drivers were 3.75 s and 3.42 s, respectively. The authors also reported the percentage of glances over a threshold for both groups and found no significant difference between the groups: 81.9% (novice) versus 81.0% (experienced), 71.3% versus 65.3%, and 58.5% versus 56.9% for thresholds of 2 s, 2.5 s, and 3 s, respectively. Because the study did not report any vehicle control performance measure, it is difficult to know whether these long glances at the external task had a differential effect on novice and experienced drivers' ability to control the vehicle. Because no hazards (or potential hazards) appeared in the roadway ahead while drivers were glancing to the side at the billboard, it is not possible to know whether the long glances had a differential effect on novice and experienced drivers' ability to anticipate hazards.

However, from other studies, researchers do know something about the effect of external distractions on experienced drivers' ability to control the vehicle. In particular, two other simulator studies done by Milloy and Caird (*5*), investigated the effect of external distractions (billboards and wind farms) on experienced drivers' ability to control the vehicle and monitor for visible hazards in the immediate roadway ahead. In the first study, the external distractions were digital and video billboards, and in the second study, the distractions

were billboards and wind farms. In the first study, the researchers measured the drivers' reaction time to a braking lead vehicle and their ability to maintain minimum headway distance. In the second study, the researchers also measured speed and lane maintenance. There was no effect of external distractions on lane maintenance (as measured by the standard deviation of lane position). However, the results of the studies indicated that (*a*) participants drove at slower speeds in the presence of external distractions; (*b*) drivers maintained a shorter following distance in the presence of external distractions; (*c*) drivers' reaction times to braking lead vehicles were slower in the presence of external distractions; and (*d*) there were more rear-end collisions in the presence of external distractions. However, because the first study did not report any eye movement data, it is difficult to conclude that the drivers were looking at external distractions when the crashes occurred. In the second study, there was only one collision. The driver was looking at the speedometer immediately before the collision.

In the second study, the researchers also looked at age as a factor and evaluated younger, middle-aged, and older drivers. The authors found significant main effects of age and treatment (billboards, wind farms, baseline) on the time to respond to a braking lead vehicle (younger and middle-aged drivers were faster than older drivers) and speed (older drivers' average speeds were slower than younger and middle-aged drivers). There were no other effects of age on any of the other dependent variables.

A field study by Smiley et al. (*3*) done in Toronto, Ontario, Canada, also provides evidence of the negative impacts that external distractions (video billboards) can have on traffic safety. The video billboards evaluated in this study were similar to on-premise signs that are encountered in the United States. An on-premise sign is a free-standing sign identifying or advertising a business, person, or activity, and installed and maintained on the same premises as the business, person, or activity (*11*). The study was divided into five parts, with each part associated with one of the following measures: eye fixations, conflicts, headway, speeds, and crash rate. The measures were recorded before and after billboards were installed. Two notable results of the study were that in 38% of the cases in which drivers glanced at video billboards, their time headways were less than 1 s and that there were 60% more incidents of drivers applying their brakes for no apparent reason on roads that had video billboards as compared with roads that did not have video billboards. Individual instances of unsafe driving in the presence of video billboards were also recorded. In one case, a driver looked 31 degrees to her left at a sign as the driver entered a downtown intersection. In another case, a driver glanced for a full 1.47 s at a billboard in heavy traffic as a car merged in front of the driver. The researchers did not find any significant effects of billboards on the measures of speed and crashes before and after installation of video billboards.

In summary, external distractions prove to have effects on the eye and vehicle control behaviors of drivers. What was not expected was the similarity of the novice and experienced drivers' eye behaviors while the drivers performed an external distraction task. In particular, the lack of a difference in the eye movement behaviors of novice and experienced drivers is surprising because from previous research on in-vehicle distractions (*10, 12*), one would not have expected experienced drivers to be taking such long glances away from the forward roadway. Perhaps experienced drivers allow themselves such long glances because they think that they can get critical driving-related information from the forward roadway because they are able to maintain their lane position using their periphery when their glance is not too eccentric (*12, 13*). This situation differs from a situation in which they are glancing inside the vehicle and are well aware that they can't see the road. In addition, experienced drivers may think that they are able to analyze the traffic scene ahead while glancing at an external distraction when that scene contains only potential hazards. The driver would have no feedback about whether he or she had failed to recognize a potential threat because, by definition, a potential threat never materializes.

## METHOD

A simulator study was conducted to compare the eye behavior and vehicle control abilities of novice and experienced drivers as they performed external tasks. The drivers were asked to navigate the virtual world while undertaking a secondary search task outside the vehicle at various points. The search task was similar to scanning a sign on the side of the road for some information relevant to a particular trip. To evaluate whether the experienced drivers could be deceived into thinking that their vehicle control was adequate, measures were taken of lane exceedances in both the presence and the absence of an external distraction. To evaluate whether the drivers performing the external tasks were doing so safely or were compromising their ability to predict and avoid hazards when they were taking long glances at the external task, the virtual drive was populated with scenarios in which the driver should give evidence of anticipating a hazard; these scenarios were presented once in the presence of an external task and once when it was not present. The participant's eye movements and the vehicle control movements (lane exceedance and speed) were recorded throughout the study.

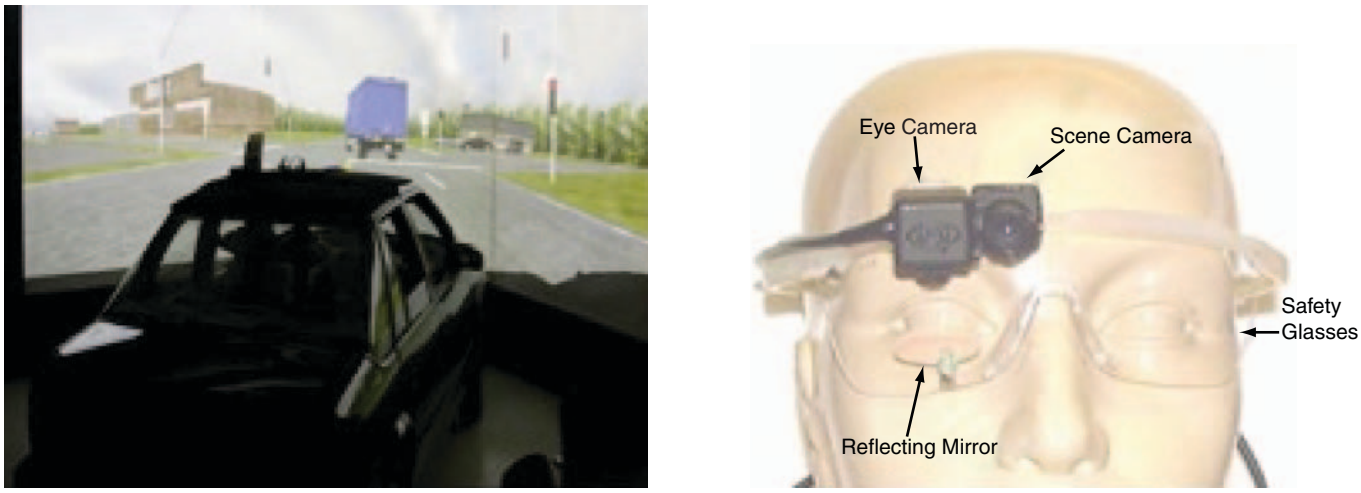
### Participants

There were 48 subjects, 24 novice and 24 experienced drivers. The participants in the younger group were between the ages of 16 and 18 years (mean = 16.5, standard deviation = 0.589) and had either their junior operator's license with 6 or fewer months of driving experience or a learner's permit with a minimum of 5 h of on-road driving experience. The drivers in the experienced group were 21 years or older (mean = 23.5, standard deviation = 3.379) with at least 5 years of driving experience. All the drivers in the experienced group were males. The novice group had seven female drivers (mean = 16.42, standard deviation = 0.534) and 17 male drivers (mean = 16.52, standard deviation = 0.624). Both groups had participants with either normal vision or vision corrected to normal.

### Apparatus

The Arbella Insurance Human Performance Laboratory driving simulator is a fixed-base Realtime Technologies simulator. The vehicle cab is a 1995 Saturn sedan that is placed in front of three screens that display the visuals (see Figure 1*a*). The three screens subtend an angle of 135 degrees horizontally, and the resolution of the projected environment on each screen is 1,400 × 1,050 pixels with a refresh rate of 60 Hz. This system provides realistic road, wind, and vehicle noises with appropriate direction, intensity, and Doppler shift.

A mobile eye system developed by Applied Science Laboratories is a lightweight portable optical system that consists of an eye camera




(a) (b)

FIGURE 1 Apparatus: (*a*) Arbella Insurance Human Performance Laboratory driving simulator and (*b*) ASL Mobile Eye tracker.

that records the reflection of the eye through a reflecting mirror and a color scene camera mounted on a pair of safety goggles that records the scene in front (see Figure 1*b*). The participants' eye movements are converted to a crosshair, representing a driver's point of gaze, which is superimposed upon the scene video recorded during the drive. For more details regarding the driving simulator and the eye tracker, please refer to the articles by Chan et al. (*10*) or Pradhan et al. (*14*).

## Experimental Design

The two groups of participants were asked to drive through the virtual world while performing secondary external distraction tasks. The participants encountered 11 secondary external distraction tasks during the drive. One of the aims of the study was to investigate the effect that distractions outside the vehicle have on the drivers' ability to detect hazards. Therefore, two of the 11 secondary external tasks were presented in the presence of hazards.

During the drive, the participants were directed by means of a lead vehicle. The speed of the lead vehicle was tied to the participant's vehicle speed. Tying the two vehicle speeds allowed the participant to drive at his or her natural driving speed with respect to the posted speed limit, thus reducing any influence that following the lead vehicle might have on the driver's speed. The virtual environment was a city section with four lanes, two in each direction. The city environment was populated with randomly occurring vehicles and pedestrians.

## External Tasks

The external tasks were designed to resemble an activity similar to scanning a sign dense with information in the real world, such as a digital billboard that changed a static image every few seconds. The external task required participants to scan a sign containing 25 letters (a $5 \times 5$ grid). Each sign itself was 10 ft wide by 10 ft high. The participants' task was to search for and indicate the number of times the Target Letters P, E, and W appeared in the displays by the side of the road. Only one of the target letters was presented on each display, although the number of times this letter was present on the display could vary between one and four. The letter grids were populated with distractor letters that were visually similar to the target letters to increase the task difficulty. For the 11 external tasks, the target letters were present in six of the tasks with the order of present and absent trails counterbalanced throughout the drive.

The displays were placed 8 ft away from either the right or left edge of the roadway, and they became visible about 197 ft before the driver encountered them. At this point, the sign display subtended approximately 1.6 degrees of visual angle, and the center was 5.1 degrees from a fixation point straight ahead of the vehicle. The signs were designed to be visible for 5 s if the drivers were driving at the posted speed limit of 30 mph.

## Hazard Anticipation Scenarios

Some of the out-of-vehicle tasks were presented in the presence of potential roadway hazards. In this study, the effect of external distractions was tested on only two types of hazard anticipation scenarios: a passive hazard scenario and an active hazard scenario. Each of these hazard anticipation scenarios was presented twice during the drive, once in the presence of an external task and once without an external task. The order of presentation of the scenarios was counterbalanced across participants.

In the passive hazard scenario, a line of cars was parked on the shoulder of the road; the first and last cars in the line were police patrol cars. Work zone cones were also placed on the near and far end of the cars; they are depicted by orange dots in Figure 2*a*. Stationary pedestrians were visible between the first and the second upstream cars. The scenario was designed to resemble an emergency situation that one might encounter on the roadway. A careful driver who approaches such a scenario would be expected to consider the presence of pedestrians who are visible upstream as a cue to scan the line of cars downstream for possible pedestrians who might suddenly emerge from behind these cars. In the analysis, the drivers were scored based on whether they scanned the line of cars downstream.

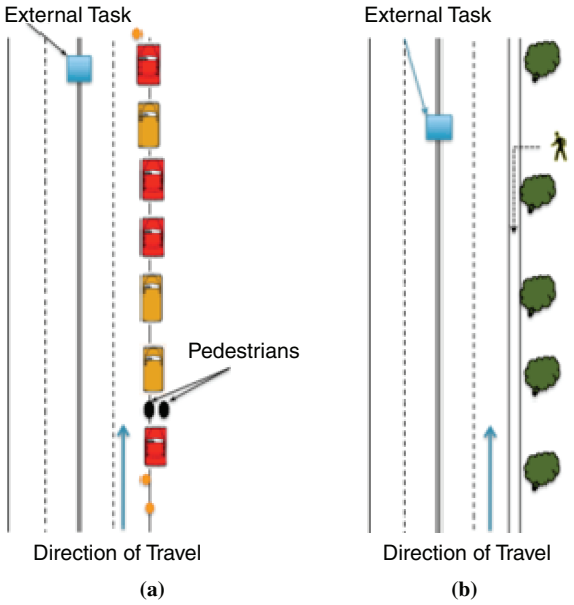



FIGURE 2 Anticipation scenarios: (*a*) passive hazard, cars parked on the side of the road in the presence of an external task, and (*b*) active hazard, previously obscured pedestrian running toward the sidewalk after the external task is presented.

In the active hazard scenario, a previously occluded pedestrian would emerge from behind a tree (see Figure 2*b*). The pedestrian was programmed to first run toward the sidewalk and then along it. This was basically a detection task rather than an anticipation task. The running pedestrian was expected to grab the driver's attention, but the main aim was to test the effect of the secondary external task on the detection of this running pedestrian. To test this, the pedestrian movement was initiated 250 ms after the sign in the secondary task was visible to the driver. For analysis, the dependent measure was whether the driver detected (fixated) the pedestrian.

## RESULTS

### Attention Maintenance

To evaluate how the secondary external distraction tasks affected the drivers' ability to maintain their attention on the forward roadway, the authors analyzed the eye tracker output. The primary measure analyzed was the amount of time the drivers spent looking away from the forward roadway at the external task (i.e., the duration of the glance at the sign). The duration of a single glance is defined here as the amount of time that transpires between the point at which the eyes leave the forward roadway to look at the external task to the point at which the eyes return to the forward roadway. The two measures that were considered were the percentage of tasks with a maximum glance duration over the threshold and the percentage of glances with durations greater than the threshold. The thresholds for the length of glances away from the forward roadway were set at 2 s, 2.5 s, and 3 s for both these measures. The motivation to use these thresholds comes from naturalistic and simulator studies that have indicated that glances away from the forward roadway inside the vehicle for more than 2 s are associated with an elevated crash rate (*8, 9*).

#### *Maximum Glance Duration in Each Task*

For this measure, the percentage of tasks with at least a maximum glance away from the forward roadway over the critical thresholds was analyzed for both groups. As seen in Figure 3, there were only small differences between the groups in the percentage of tasks with at least one maximum glance greater than any of the thresholds. For the critical thresholds of 2 s, 2.5 s, and 3 s, the differences between the novice and experienced drivers were 3.8%, 10.3%, and 7.3%, with $t(42) = 1.68$, 1.72, and 0.80, and $p > .20$, .08, and .40, respectively.

The authors also looked at the average maximum glance away from the forward roadway for both age groups. Even though the average maximum glance away from the forward roadway was greater for the novice group of drivers than the experienced group of drivers (3.12 s versus 2.96 s), a *t*-test indicated that the difference between

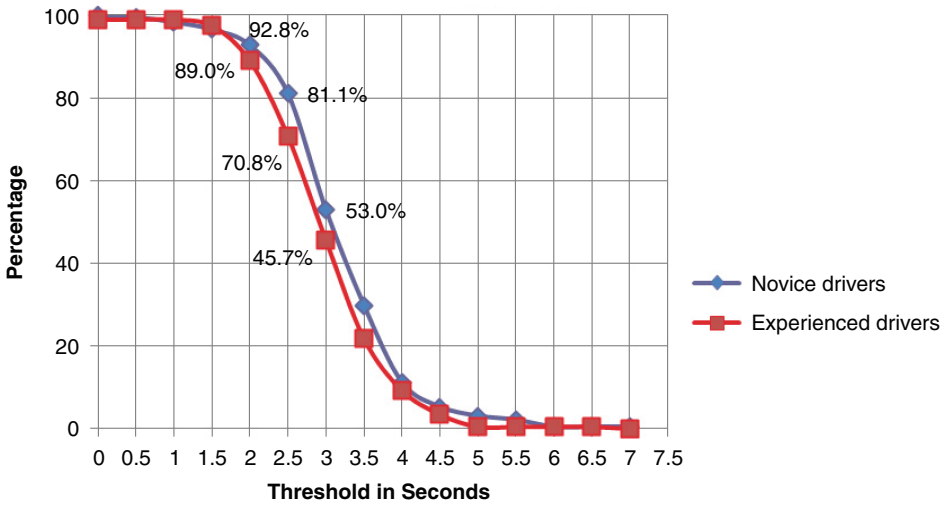



FIGURE 3 Percentage of tasks with a maximum glance greater than threshold for novice drivers and experienced drivers.

the groups on this measure was far from significant, $t(42) = -1.13$, $p > .20$.

### *Glances Greater Than Threshold*

In this measure, the authors considered the total number of glances away from the forward roadway across all tasks and then calculated the percentage of glances that were greater than the critical thresholds (see Figure 4). For the critical thresholds of 2 s, 2.5 s, and 3 s, the differences between the novice and experienced drivers in percentage of glances greater than the threshold were small: 4.0%, 9.9%, and 6.5%; $t(42) = 0.98$, 1.62, and 0.77; $p > .30$, .10, and .40, respectively.

### *Number of Glances*

Another measure that was considered was the average number of glances the participants took to perform the external tasks. This measure indicated that on average, both groups took 1.07 glances per task; $t(42) = -0.20$ and $p > .80$. The average number of glances per task clearly indicates that the novice and the experienced drivers did not distribute their glances between the forward roadway and the external task (i.e., the drivers in both groups took just one long glance away from the forward roadway to perform the external task rather than short multiple glances between the forward roadway and the external task).

## Hazard Anticipation

To test the effect of external distractions on the drivers' hazard anticipation and detection skills, both groups were presented with two types of hazards: a passive hazard and an active hazard. As seen in Figure 5, the presence of an external task had a negative effect on the performance of both groups in detecting and anticipating hazards. The experienced drivers performed better throughout than the novice drivers. However, a mixed design analysis of variance indicated that none of the interactions were close to significant and that the pattern was the same for the passive hazard and active hazard scenarios.

In the passive hazard scenario, the drivers were scored according to whether they scanned the line of cars downstream (i.e., the drivers received a positive score in a scenario if they fixated in front of each of the last three vehicles for potential pedestrians). The hazard anticipation performance of novice drivers dropped from 37.5% to 8.3%, $t(37) = -2.51$, $p < .02$. The experienced drivers' hazard anticipation performance was similarly affected by the presence of an external task, and their performance dropped from 68.4% to 15%, $t(34) = -3.91$, $p < .01$. The drop-off in the performance of experienced drivers looks more drastic than the drop-off for the novice drivers, largely because the baseline performance of experienced drivers was much higher and significantly different from that of the novice drivers [68.4% versus 37.5%, $t(39) = 2.07$, $p < .05$]. This difference in baseline performance is in line with other studies that have shown that novice drivers are poorer at hazard anticipation than their more experienced counterparts (*14*).

For the active hazard scenarios, the dependent measure was whether the pedestrian was detected. Without an external distracting task, detection performance was good for both the novice and experienced drivers: 87.5% and 95.0%, respectively; however, $t(40) = 0.88$, $p > .30$. The hazard detection for both groups was much worse than in the baseline condition (no external task). The difference was 50.0 percentage points for the novice drivers, $t(41) = 4.09$, $p < .01$ and 42.4 percentage points for the experienced drivers, $t(24) = 3.31$, $p < .01$.

## Vehicle Control

The two measures of vehicle control that were analyzed to assess the effect of performing a secondary external task while driving were lane exceedance and variability of speed. These measures were considered for the temporal window when the participants performed the task.

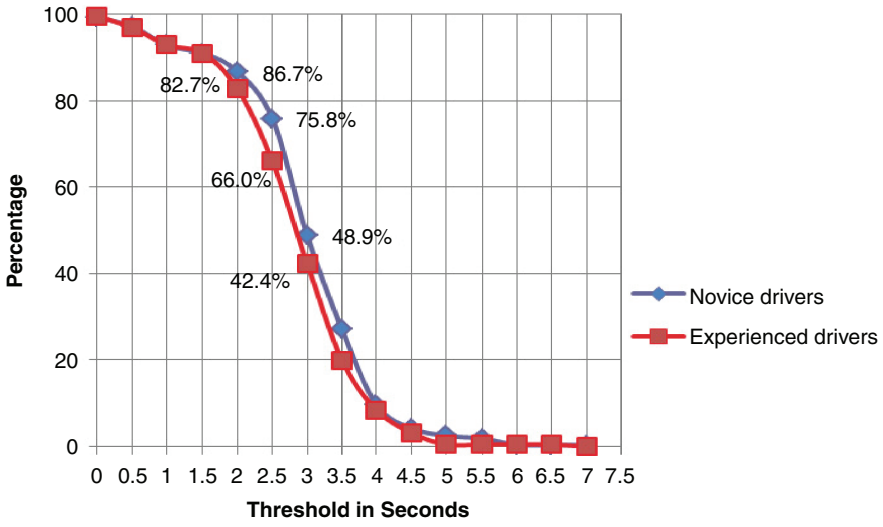



FIGURE 4 Percentage of glances greater than threshold for novice drivers and experienced drivers.

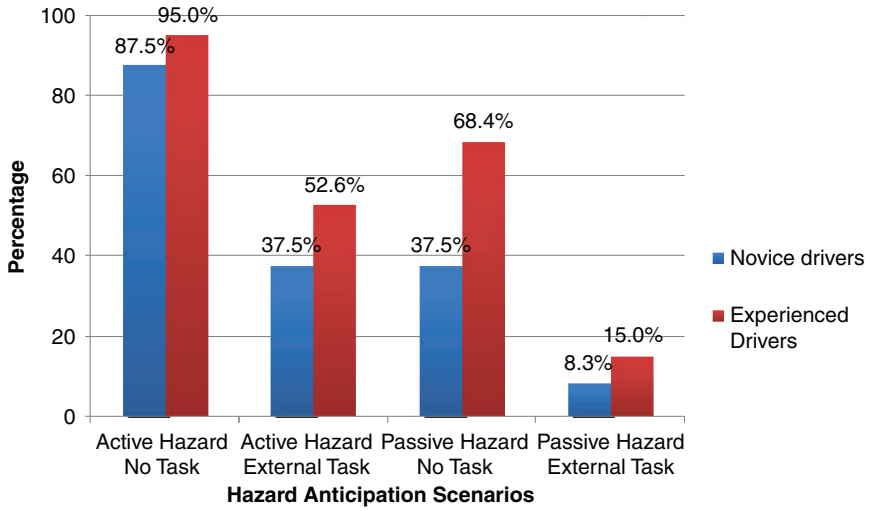



FIGURE 5 Percentage of scenarios in which novice drivers and experienced drivers recognized the risk.

The lane exceedance was a binary measure, and the authors analyzed the number of times drivers exceeded their lane boundary (i.e., a positive score was recorded each time the driver's vehicle crossed over the lane markings) while performing the external task. In the control sections (no external task) there were no instances of lane exceedance for either group, and overall the percentage of scenarios in which the participant exceeded the lane was low. However, as expected, the younger drivers performed significantly worse than the experienced group in the presence of an external task, $t(26) = 5.07$, $p < 0.01$. The novice drivers exceeded their lane in 26% of the scenarios that had an external task as compared with only 4% of scenarios with external tasks for the experienced group. These results are consistent with the findings that novice drivers do need to use their foveal vision to maintain their lane position and that experienced drivers can maintain their lane position using their peripheral vision (*13, 15*).

Another measure of vehicle control that was considered was the standard deviation of speed of the participants' vehicles while they were performing the external task. There was no significant difference between the groups on this measure, with younger drivers' average standard deviation of speed being 0.54 mph as compared with 0.36 mph for the experienced group. The lack of significance in this measure might be attributed to the small temporal window that was considered for the purpose of this analysis.

## DISCUSSION OF RESULTS

The specific aims of the study were to determine (*a*) if experienced drivers were perhaps deceived into thinking that they could control their vehicles while glancing for long periods of time to the side at an external task and (*b*) whether in doing so they significantly sacrificed their ability to anticipate active and passive hazards. The more general aim of this study was to evaluate the effect that external distractions might have on the attention maintenance, hazard anticipation, and vehicle control ability of both novice drivers and experienced drivers. The lack of these three skills has been associated with novice driver crashes (*6*). Therefore, the performance of drivers in these three skills was used to evaluate the effect that external distractions might have on the safety of both novice and experienced drivers.

The eye movement measures that were considered to analyze the effect of an external task on attention maintenance clearly indicated that both groups of drivers took an equally high percentage of long glances away from the forward roadway to perform the external task. For the critical thresholds of 2 s, 2.5 s, and 3 s that were considered according to their association with increasing crash risk, the two groups did not differ significantly in the percentage of tasks in which the maximum glance was greater than the thresholds (92.8% versus 89%, 81.1% versus 70.8%, 53.0% versus 45.7%). In addition, the groups did not differ significantly in the measure of percentage of glances greater than threshold. These findings are in line with the findings in the study by Chan et al. (*10*).

From previous research on in-vehicle distractions, one would have expected the experienced drivers to show greater reluctance to glance for long periods of time at secondary external tasks; however, the results of the attention maintenance measure indicate otherwise. The question is why? The results provide one possible answer. Specifically, they indicated that there was no effect of an external task on the experienced drivers' ability to maintain their lane position and speed. However, the younger drivers' performance in these two measures of vehicle control was somewhat compromised. Although novice drivers did not show any significant decrement in performance on the measure of speed variability in the presence of an external task, their performance in the presence of an external task was highly compromised in instances of lane exceedance. The novice drivers exceeded their lane boundaries in 26% of the scenarios in which the external task was presented as compared with 0% in the absence of an external task. There was also a significant difference in the performance of novice and experienced drivers on this measure in the presence of an external task (26% versus 4%). The results of lane maintenance are in line with previous research that indicates that experienced drivers can maintain their lane position just by using their peripheral vision (*13*). The results also suggest why experienced drivers may believe that they can drive safely while still glancing to the side.

However, the evaluation of experienced (and novice) drivers' ability to anticipate hazards indicates that this belief is false. The

performance of both groups was poor on hazard anticipation in the presence of an external task. For the passive hazard scenarios with no secondary external tasks, the experienced drivers detected the hazard in 68.4% of the scenarios as compared with 15% in the presence of an external task. Similarly, for the passive hazard scenario, the novice drivers' performance also dropped from 37.5% with no secondary external task to 8.3% in the presence of an external task. Thus, although the experienced drivers anticipated hazards better than the novice drivers with and without the external task, their performance was greatly degraded by the presence of an external task.

In the active hazard scenario, the experienced drivers' performance was significantly affected by the presence of an external task, with hazard detection dropping from 95% with no secondary external task to 52.6% in the presence of an external task. Similarly, the younger drivers' performance dropped from 87.5% with no secondary task to 37.5% in the presence of an external task. The aim of the active hazard scenario was to test whether peripheral vision was good enough to detect the movement of the hazard or pedestrian even when attention was focused on an external distraction. The pedestrian was programmed to pop out on the opposite side of the external task, 250 ms after the task became visible. If attention was not critical to detection of movement in the periphery, then it was expected that this movement would be detected even when the driver was glancing at the external distraction. However, as the results of the active hazard scenario indicated, the presence of movement in the periphery is not by itself enough to detect a hazard in the absence of attention.

The question of what can be done about the problem of out-of-vehicle distractions remains. Until doing this research, the authors were not sure that it was a problem. Indeed, a major purpose of this research was to determine whether these out-of-vehicle glances were indeed a problem or whether drivers could process the forward roadway adequately while attending to such stimuli. Until determining that there was a problem, there was no point in spending a significant amount of time on a training program. Now it is obvious that there is a problem. Unfortunately, previous training studies with younger drivers indicate that the problem is not easily remediated with current attention maintenance training programs. Specifically, prior training concentrated on ensuring that novice drivers did not glance inside the vehicle for periods of greater than 2 s when doing an in-vehicle task (e.g., finding a station on the radio). Although this training produced large and significant improvement on the length of glance durations while performing in-vehicle tasks while driving, it had no impact on their glance durations for tasks such as the ones studied in this paper. Thus, it appears that drivers have the illusion that they can process active and passive hazards ahead of them while looking at something such as a billboard, and thus they view glancing away from the forward roadway in such situations as totally different from when they are looking inside the vehicle. Therefore, a separate training procedure is needed to deal with long glances at distractions outside the vehicle, most likely using scenarios such as the ones studied here to illustrate the dangers of long out-of-vehicle distractions away from the forward roadway.

In summary, the overall results of the hazard anticipation manipulations provide clear support to the argument that when a driver's attention is directed toward a sign outside the vehicle, peripheral vision in itself is not good enough to perform a task such as hazard anticipation. This finding is true whether the hazard to be anticipated is a potential threat that is not present in the scenario or an actual threat that is present and moving. These demonstrated limitations of peripheral vision when attention is focused on a given task suggest the importance of distributing one's glances between the external task and the forward roadway.

## CONCLUSION

This study provides clear evidence that external tasks are distracting not only for novice drivers, but also for more experienced drivers. For both groups of drivers, external distractions significantly affect the drivers' anticipation of hazards. The study also suggests why it is that experienced drivers allow themselves such long glances away from the forward roadway while performing distraction tasks that are external to the vehicle. The major piece of feedback that they might recognize as limiting their ability to drive safely—realizing that they are out of their lane—is missing; experienced drivers drive outside their lane no more frequently when glancing to the side at an external task than they do when looking straight ahead.

The study also provides evidence that even though peripheral vision is useful in getting some driving-related information from the forward roadway, it is not adequate to perform the task of hazard anticipation when attention is focused elsewhere. Even though the study provides evidence of limitations on peripheral vision when attention is directed elsewhere, more work needs to be done to study specifically the type of information that can or cannot be detected by using the periphery in a visually dynamic environment such as driving, where attention is almost always focused on the area directly around fixation. For example, can drivers maintain their headway with the car ahead or detect the turn signal or brake light? Milloy and Caird (*5*) showed that drivers in the presence of external distractions had difficulty with these tasks. But it is not clear that the difficulty was experienced while the driver was looking to the side or, more generally, because the driver was distracted. In addition, when considering the effect of external distractions on hazard anticipation, one should note that there were only two types of hazards considered in the study and that more work needs to be done in testing the effect of various other hazard-anticipation scenarios. Finally, when considering the role of external distractions on hazard anticipation, one needs to consider what the effect would be of the ongoing cognitive load on glances to the forward roadway that might be sandwiched between glances to the side of the road (*16*). Regarding vehicle control, the study did not find a significant negative effect from external distractions on the lane maintenance and speed maintenance ability of experienced drivers, but the distraction did affect novice drivers' ability to maintain their lane. Overall the study showed that experienced as well as novice drivers are at an elevated risk of getting in a crash when they are performing a secondary external task.

## ACKNOWLEDGMENTS

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# Roadside Advertising Affects Driver Attention and Road Safety

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# Roadside Advertising Affects Driver Attention and Road Safety

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## Abstract

For many years, roadside advertising along rural roads has been strongly restricted in Scandinavian countries, mostly for safety reasons and aesthetic considerations. But during the last decades, a growing pressure on road authorities caused by significant financial interests has resulted in a rapidly increasing number of advertising signs along rural roads.

The signs are placed with the purpose of capturing drivers' visual attention. Every time the drivers' visual attention is distracted away from the road and towards competing advertising signs, the time available for the drivers' response to avoid a crash if something unexpected occurs is reduced. In this perspective, it is relevant to ask whether roadside advertising affects driver attention and road safety.

With the purpose of clarifying this question, a literature study followed by empirical studies has been carried out. The empirical studies were made by use of an instrumented car equipped with a camera system to track eye movements, GPS for registration of speed behaviour, and laser scanner for measurement of distances to other road users.

The overall results of the empirical studies show that advertising signs do affect driver attention to the extent that road safety is compromised.

## Introduction

During the last decades, roadside advertisement has become a major and rapidly expanding industry and the growing pressure on road authorities caused by big financial interests has resulted in a rapidly increasing number of rural roadside advertising signs. Signs are becoming larger, and luminous and video advertising signs are used deliberately to capture road user attention. In this perspective, it is relevant to ask whether roadside advertising signs influence the driver's attention to the extent that it compromises road safety.

The roadside signs are placed with the purpose of attracting and keeping driver attention to a subject irrelevant for the driving task. Every time this objective is met, the driver's attention to traffic and other road users is disturbed. When the driver's attention is captured, resulting in long eye glances in large angles away from the road, the driver's response time to avoid a crash if something unexpected occurs is reduced.

With the purpose of investigating if and how roadside advertising signs affect road safety, a literature study followed by empirical studies has been carried out.

## Summary of literature study

Roadside advertising signs are very diverse - as are people. Size, movement and light, however, are very powerful artefacts affecting most of us. Consequently, the advertising industry utilises these artefacts to attract and keep our visual attention.

Several foreign studies, including a study from Brunel University (Young and Mahfoun 2007), have demonstrated that roadside advertising signs have a clear impact on the drivers' lane position control. The results suggest that roadside advertising may increase the mental stress and draw the road user's attention away from the traffic. The

effect of roadside advertising may be more pronounced in monotonous traffic situations where the mental stress is low compared to urban area driving where the mental stress is already relatively high (Chattington et al 2009).

Studies have shown how increased visual complexity in the traffic environment – number of road signs, advertising signs and other information – results in the driver needing more time to search for road direction information (Akagi et al 1996). This accounts particularly for elderly drivers who generally have less capacity to ignore irrelevant information in the traffic (Helmers et al 2004).

*Two Danish studies*

In a Danish study from 2003, *conflict studies in 4 Copenhagen urban intersections* before and after installation of advertising signs were conducted. Conflict data registration was carried out using the Swedish conflict measuring method developed at the Technical University of Lund (Hydén, 1987; Almquist et al 1999). The analysis is based on a comparison of serious conflicts among road users in those traffic flows mostly exposed to distraction through advertising signs.

The results from the study proved that the number of serious conflicts increased significantly during periods with advertising sign installation in urban intersections (Andersson & Lund 2003).

In another Danish study from 2004, *drivers' visual behaviour* while passing a large advertisement located very close to a highway was examined. The advertisement in itself was an airplane which was used as advertisement and showroom by an advertising agency.

Based on 40 test drives using an eye tracking system, it was recorded whether drivers were looking at the advertisement – and for how long. Concurrently, speed measurements and recording of time intervals between cars on the highway were recorded.

The results showed that the driver's attention was captured by the advertisement when passing it on the highway; in most cases (80%) only quick glances of less than 1 sec., however, 20% of the glances lasted more than 1 sec. and 7% lasted 1.5 sec. or more. In a few cases, glance duration at the airplane was more than 2 sec.

In 25% of the test drives, the driver was glancing at the advertisement for more than 1 sec. with a time interval of less than 2 sec. to the vehicle ahead - in some cases as low as 1 sec. (Herrstedt & Lund 2004).

*Canadian study of video advertisements*

During the period 2002-2005, a number of Canadian studies were conducted on the impact of video advertisements on drivers' behaviour in three downtown intersections and on a 6-lane urban expressway in the city of Toronto (Smiley 2005). The study consists of five sub-studies: 1) Registration of eye movement in relation to the advertisements, 2) Conflict studies in the three intersections with and without video advertising, 3) A before-and-after sign installation study of headways and speeds on the urban expressway) 4) Comparison of crashes before and after advertising sign installation at the intersections, 5) Stop interviews with drivers for clarification of road user perception of the impact of advertisements on road safety.

The main results of these studies are summarised in the following:

- Video advertisements attracted drivers' attention and in several cases this possessed a danger to the road safety because the time gap to drivers ahead was very short (1 sec. or less) at relatively long eye glances (glance duration more than 1.5 sec.) and with relatively wide angles away from the road ahead.
- More than 20% of all glances towards the video advertisements lasted more than 0.75 sec. When drivers were looking at the video advertisements, an entire 38% of the time gaps to the driver ahead were less than 1 sec. A quarter of the glances at the advertisements went away from the road at an angle of 20 degrees or more from the road ahead.
- Drivers tend to look more at digital video advertisements than at conventional static advertising signs. They glance several times and the glance duration is longer.
- Although drivers looked at video advertisements when available, in approximately half the cases, the majority of the tracked glances (76%) were directed at the road ahead. Next were traffic lights and street names (7%) and pedestrians on sidewalks (6%). Glances at static advertising signs and video boards accounted for 1.5%.
- On roads leading to the three intersections with visible video advertising a significantly higher number of conflicts in the form of sudden braking was reported.
- On roads leading to the three intersections with visible video advertising, a slower start of vehicle was reported at traffic lights changing to green.
- A before & after comparison of driving patterns indicated a slight decrease in average driving speed. When the video advertisements were visible, the speed variations increased and the time gap to the drivers ahead decreased.
- A before & after comparison of traffic accidents in the three downtown intersections showed a 43% increase in the number of personal injury accidents and a 13% increase in the number of rear end collisions in traffic flow at intersection approaches with visible advertisements. However, the differences were not significant.
- 59% of the surveyed drivers stated that their attention was attracted by video advertisements and around 6% had experienced near-crash situations caused by the presence of video advertisements.

*Inattention increases the risk of conflicts and accidents*

During the period 2002-2006, Researchers from Virginia Tech Transportation Institute conducted a comprehensive study, *The 100 Car Naturalistic Driving*, in which 100 drivers drove an instrumented car in their daily life (Klauer et al 2006). This provided a strong base of data e.g. with respect to the drivers' visual behaviour. During the study period, there were 12 police reported accidents, 70 less serious accidents of material damage and 761 near-crash situations (serious conflicts).

The cumulative average time which the driver looked away from the road in the last 6 sec. leading up to the episode was 1.8 sec. for accidents and 1.25 sec. for near-crash situations. For baseline driving, the time was measured to 0.85 sec. All differences are significant.

The average duration of the longest glance away from the road was measured to 1.6 sec. for accidents and just less than 1.2 sec. for near-crash situations. For baseline driving, the duration was measured to be slightly less than 0.80 sec.

A major finding of the study was that the risk of getting involved in a serious conflict (traffic accident or near-crash situation) was twice as large as usual when drivers were looking away from the traffic (at driving-irrelevant stimuli) for periods of 2 sec. or more within a 6 sec. period.

*Video advertisements distract more than static advertising signs*

Another study conducted by Virginia Tech Transportation Institute in 2007 (Wachtel 2009) shows that the incidence of drivers' long eye glancing away from the traffic is significantly higher on roads with large billboards. In addition, digital billboards with movement were found to attract road users' attention to a far greater extent than conventional static billboards.

In a British study by the Transport Research Laboratory (Chattington et al 2009) a simulated test compared the impact of video billboards and static billboards respectively on driving behaviour. The main results showed that:

- Drivers glance longer and more frequently at video billboards compared to static billboards.
- The billboards affect the drivers' control of lane positioning. The variation in lane positioning is larger at sites with video billboards.
- There are more incidents of sudden braking linked to video billboards.
- The speed is decreased when passing video billboards.

Generally, video advertising billboards have a bigger impact on road user behaviour compared to static advertising billboards. This corresponds with the experiences of the surveyed persons based on interviews, showing that:

- Video advertisements are more distracting than static advertisements – videos are very distracting.
- Video advertisements are more dangerous to traffic safety than static advertisements.
- The distraction level is equal regardless of whether advertisements are placed in the left or right side of the road.
- Advertisements placed directly above the road in the field of vision are more distracting than signs placed in the roadside.

*Conclusion on the literature studies*

Overall, the results from a large number of research projects show, that advertisements – and especially the more aggressive ones – may capture road users' attention to the extent that it affects road user behaviour and traffic safety.

**New empirical studies**

The new empirical studies have been carried out on rural main roads in Denmark during a 4-year period starting in 2009.

*Purpose*
The purpose was to study whether roadside advertising in rural areas captures and keeps drivers' attention to the extent that it affects driver behaviour and thereby traffic safety.

Initially, the following issues must be clarified:

A) To what extent are the drivers' visual attention captured by roadside advertisement signs in rural areas?

B) Do the roadside advertisement signs – or some of them – capture the drivers' attention to the extent that it affects road safety?

*Method*
Initially, systematic considerations (method of analysis) were made as to the choice of method. "On road instrumented car studies" were estimated to be most suitable for the purpose. This choice has since been supported by an American method of analysis (Molino et al 2009).

The main features of the applied method is known from other international studies of the distraction effect of roadside advertising signs and the method of analysis is very similar to the test design applied in Canadian studies of video advertising signs in Toronto (Smiley et al 2005).

Test drives have been performed using an instrumented car on four different routes in rural areas. Data from these test drives are used as basis for the responses in A and B.

***Test drivers***
The test drives were carried out by 32 different drivers, both men and women, between 23 and 70 years of age. All test drivers were required to possess a valid Danish driving license, to drive a car regularly, be at least 23 years of age, and to not need glasses when driving. The latter was necessary to secure data quality from the eye tracking records.

Each test driver made only one test drive through one of the routes using the instrumented car. The test drivers were not informed in advance about the main purpose of the drive. They were all told that the car was equipped with different new instruments for measurement of road data and that the purpose was to test those instruments by letting a number of normal car drivers make a number of anonymous test drives. The instructions given to all test drivers on beforehand were the same: The test route was presented on a map and they were informed about length of the route and duration of the drive (between 1 and 1.5 hours). They were asked to keep speed limits and drive as usual without unnecessary conversation with the observer sitting in the backseat. During the drive, the observer instructed the test driver when to turn right or left.

Test drivers were recruited amongst members of Trafitec's test panel which includes drivers of different ages and sex, education and place of residence. Furthermore, recruitment took place by use of posters at e.g. work places and student hostels.

***The instrumented car***
The instrumented car includes a SMART EYE 3-camera system for tracking of eye movements, a scene camera for video detection of the traffic situation ahead, GPS for

registration of speed and a laser scanner (Ibeo Lux) placed in the car front for measurement of distances to other road users ahead.


**Figure 1** **The 3-camera system for tracking eye movements together with the scene camera behind the rear view mirror (photo left). The scanner is installed in front of the car (photo right).**

Registration data verifies whether the driver is looking at the advertising signs and the number of glances. Glance duration and glance angles are measured as well. Those measurements are related to present driving speed and distances to other road users and thereby critical situations are detected. The three cameras in the SMART EYE system track the head and eye movements of the test driver 60 times per sec. (60 Hz).

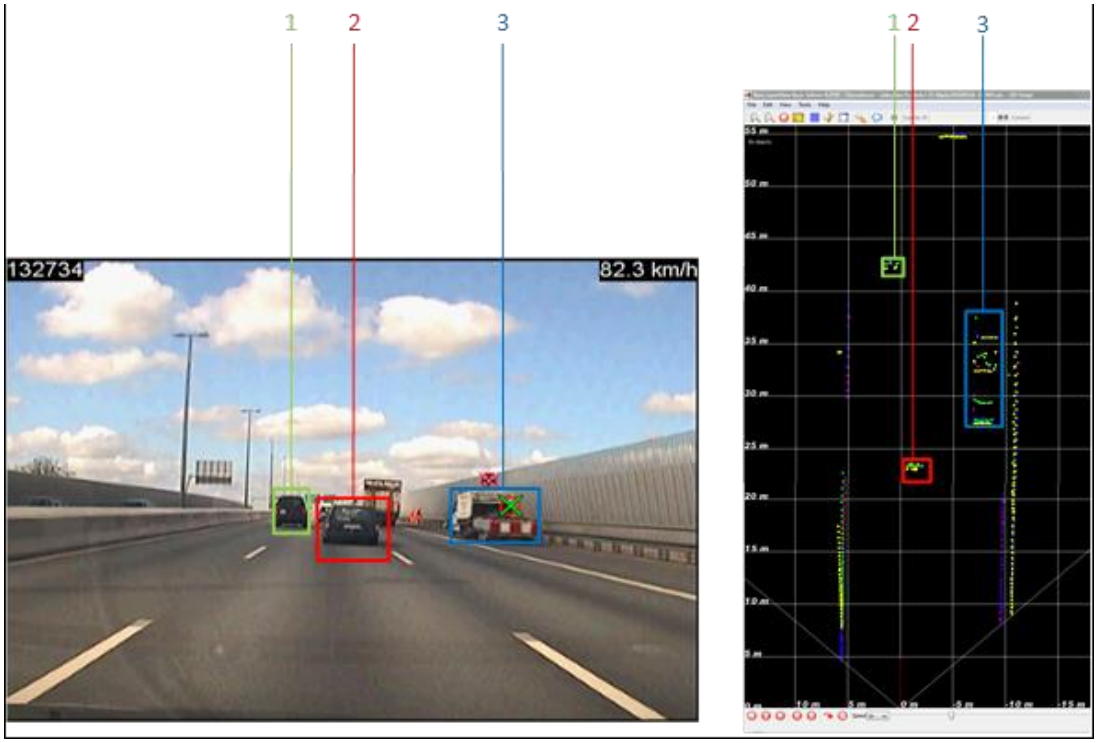


**Figure 2** **Example: Screen dump photo from the scene camera (left) and the laser scan result (right) from the same traffic situation. The small green cross with the red ring around it on the photo indicates the eye glance direction of the test driver.**

The laser scanner tracks all objects in a horizontal angle of approximately ± 50 degrees from the instrumented car's driving direction – and at a driving distance of up to 80-120 m depending on the object's reflection properties. The vertical scanning angle is 3.5 degrees at which four separate levels are scanned. The scanning frequency is 12.5 Hz. Laser scanner results are displayed as a scan of the area in front of the car.

Figure 2 shows an example from the scene camera and the laser scan results from the same traffic situation. To the left in Figure 2, a screen dump from the scene camera shows the current traffic situation. The driving speed of the instrumented car is shown in the upper right corner of the photo. In addition, the small green cross with a red ring around it indicates the eye glance direction of the test driver. Three vehicles appear in front of the test driver (1, 2, 3). The three vehicles can also be seen on the laser scanner result (right in Figure 2), and the driving distance between the test driver and the vehicles ahead can be read. Based on the driving speed, the time gap to the vehicle ahead can be calculated.

***Safety buffer***

In order to answer question B), a *Safety Buffer* is calculated. The safety buffer reflects the time available for the driver to respond to a sudden critical situation requiring immediate action to avoid an accident.

The time gap to the vehicle ahead is calculated from the length of distance and the driving speed. In situations where the time gap to the vehicle ahead is larger than 3 sec., the test driver is defined as "free running", meaning without vehicles ahead.

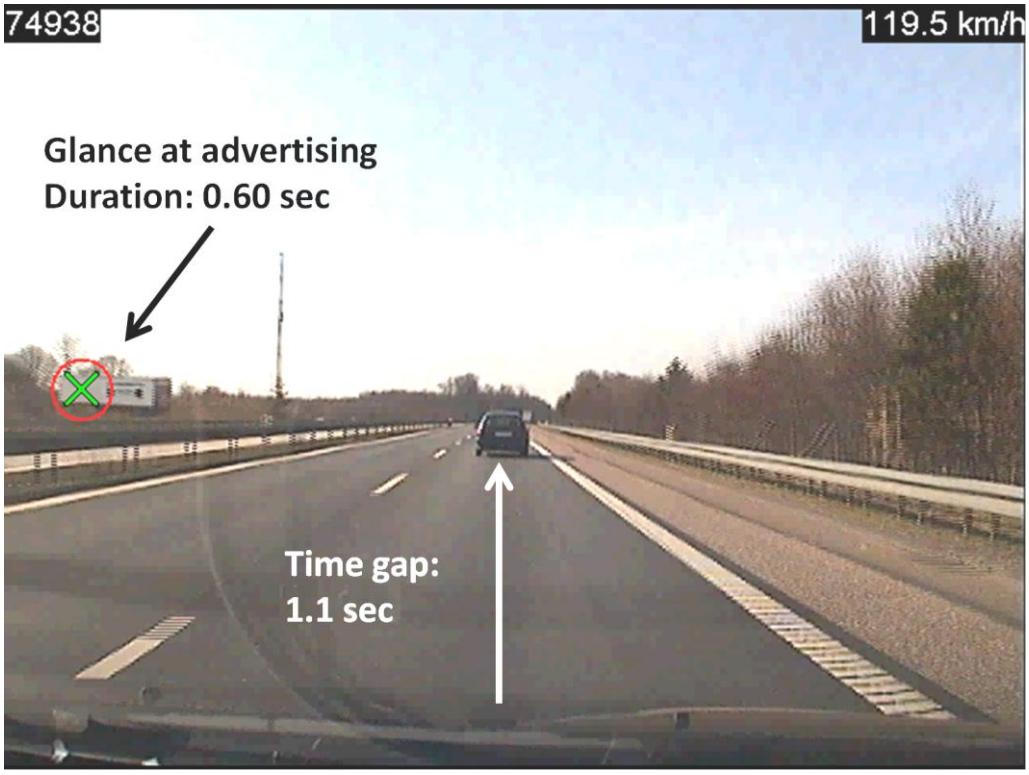


**Figure 3 Safety buffer = Time gap to vehicle ahead (sec.), advertising glance duration (sec.) subtracted.**

In situations where the test driver is looking at an advertisement while a vehicle is positioned within a time gap of 3 sec. ahead, a "Safety buffer" is calculated:

$$T\ (sec.) = l\ (sec.) - t\ (sec.)$$

where
T = Safety buffer (sec.)
l = Time gap to driver ahead (sec.)
t = Advertising glance duration (sec.)

If the distance from test driver to vehicle ahead e.g. is 1.1 sec., and the advertising eye glance is 0.6 sec., a safety buffer of T = 1.1 sec. - 0.6 sec. = 0.5 sec. can be calculated (Figure 3). In other words, the safety buffer decreases when looking away from the road ahead and is a measure of the maximum time in which the test driver has to perceive, interpret and respond to a sudden incident registered by the test driver after re-directing the eye glance away from the advertisement and back to the road ahead.

***Visual distraction***

The second key parameter underlying the response to question B) is the amount of detected situations with visual distraction.

Visual distraction can be defined as: Diversion of drivers' visual attention away from the road and traffic towards a competing activity/object irrelevant for the driving task.

Different algorithms for detection of driver distraction have been introduced in international research and different choices of algorithms have been used to operationalize detection and estimation of driver distraction (Kircher and Ahlström, 2013).

In a study carried out by Klauer et al (2006) video recordings were analysed to determine when the driver looked away from the road. *Visual distraction* was estimated by the cumulative glance duration away from the road in a 6-sec. sliding window and the driver was considered distracted, when the distraction estimate exceeded 2 sec.

This threshold gave results that were expressively associated with crash/near crash involvement: When a driver is looking away from the road ahead at driving-irrelevant stimuli for a total period of at least 2 sec. within a 6-sec. continuous period, the risk of being involved in an accident or near-crash situation almost doubles. This algorithm for detection of distraction has been used in the Danish study.

***Background data for the analysis***

The total data compiled for the analysis includes 109 drive pasts of 16 different static advertising signs. The roadside advertising signs were selected amongst the – by Danish standards – most striking conventional rural roadside advertising signs. Figure 4 shows a few examples.

All test drives were conducted during the day and outside of peak hours and were divided into four different routes located in three different regions around Denmark (Northern Jutland, Funen, Zealand).


**Figure 4 Examples of the roadside advertising signs included in the study.**

**Results**

A total of 109 drives past advertising signs were completed and a total of 233 glances upon the 16 roadside advertising signs were registered. The primary results of the study are summarised below.

*A) To what extent are the drivers' visual attention captured by roadside advertisement signs in rural areas?*

The results show that advertising signs do attract the test drivers' attention. In 69% of all drive pasts, the driver was tracked glancing at the advertisement at least once. In almost half of all drive pasts the driver glanced twice or more at the same advertisement.

The vast majority of glances at the advertising signs was short. 44% of the advertising glances, however, lasted more than 0.5 sec. or more. The entire 18% of the tracked glances at advertising signs lasted 1 sec. or more (Figure 5).

When looking at the total duration of successive advertising glances at the same drive past, the total advertising glance duration was tracked to 1.5 sec. in more than 29% of the drive pasts. In more than 22% of the drive pasts the total glance duration was 2.0 sec. or more, and in 10% of the drive pasts the total glance duration was 3.0 sec. or more.

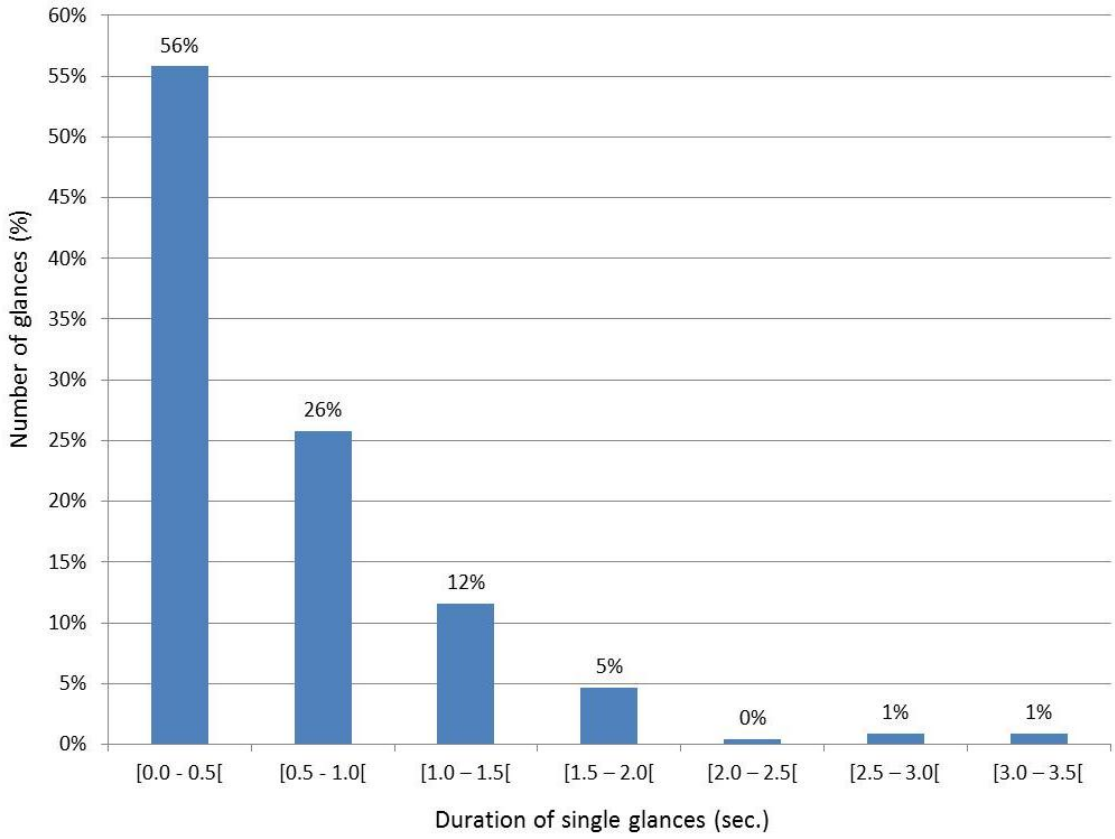


**Figure 5 Number in % of single glances at advertisements distributed on glance duration (sec.)**

*B) Do the roadside advertisement signs – or some of them – capture the drivers' attention to the extent that it affects road safety?*

***Safety buffer***

In order to answer question B), a safety buffer is calculated. The safety buffer reflects the time available for the driver to respond to a sudden critical situation. The safety buffer is calculated from *"time gap to vehicle ahead"* and *"glance duration"*.

In 65 out of 233 advertising glances, a vehicle ahead was present within a time gap of less than 3.0 sec. In these situations, a safety buffer (see Table 1) was calculated. In 59 cases, representing 25% of all tracked advertising glances, the safety buffer was less than 2 sec. These 59 cases are shared by 15 different test drivers and 12 advertising signs. For 20% of the advertising glances, the safety buffer is as low as 1.5 sec.

In summary, the results show that approximately 25% of the tracked advertising glances are associated with reduced driving safety as the safety buffer in these situations is less than 2 sec. to the vehicle ahead.

**Table 1 Estimated safety buffer to vehicle ahead (time gap to vehicle ahead, glance duration subtracted)**

| Safety buffer to vehicle ahead T (sec) | Glances at roadside advertising sign | | |
|---|---|---|---|
| | Number | % | %-cum |
| <0.0 | 2 | 0.9 | 0.9 |
| [0.0 - 0.5] | 17 | 7.3 | 8.2 |
| [0.5 - 1.0] | 20 | 8.6 | 16.7 |
| [1.0 - 1.5] | 9 | 3.9 | 20.6 |
| [1.5 - 2.0] | 11 | 4.7 | 25.3 |
| [2.0 - 2.5] | 5 | 2.1 | 27.5 |
| [2.5 - 3.0] | 1 | 0.4 | 27.9 |
| Not estimated (no vehicles ahead) | 168 | 72.1 | 100.0 |
| Total | 233 | 100.0 | |

***Glance duration and horizontal glance angle***

Figure 6 shows the number of advertising glances within the respective measured horizontal angles.

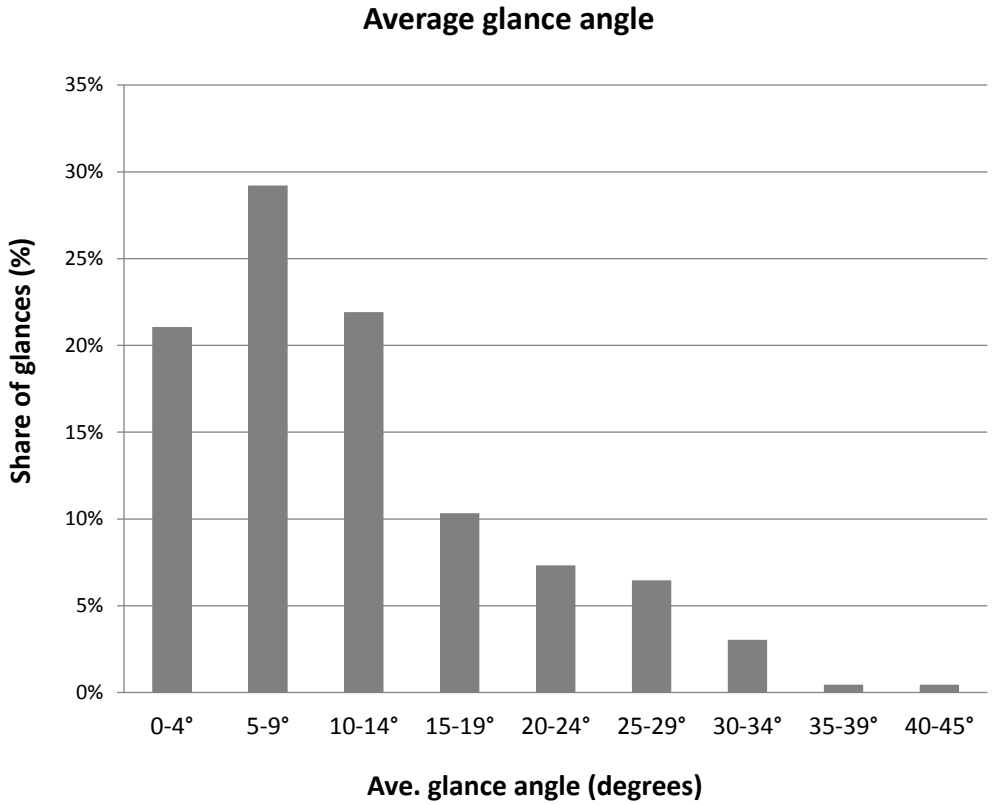


**Figure 6 Distribution of horizontal glance angle for glances at advertising signs.**

Most tracked advertising glances are placed in a 5-9 degree angle; however, advertising angles of up to 45 degrees have also been tracked. Advertising angles in rural roads generally lie within +/- 10 degrees. The greater the angle when looking away from the road ahead, the more time the driver needs to re-direct attention to the road ahead.

Figure 7 shows all 233 tracked glances at advertising signs by horizontal glance angle and glance duration in sec. Each dot represents an advertising glance.

Glances below the red line lie within the "normal range" for Danish rural road driving. To some extent, all glances above the red line are critical; either due to large glance angles or due to long glance durations or a combination of glance angle and glance duration. The larger the horizontal glance angle – and the longer the glance duration at the advertising sign – the more critical. Among the 233 advertising glances, 48 glances (21%) lie outside the "normal range" and are therefore regarded critical.

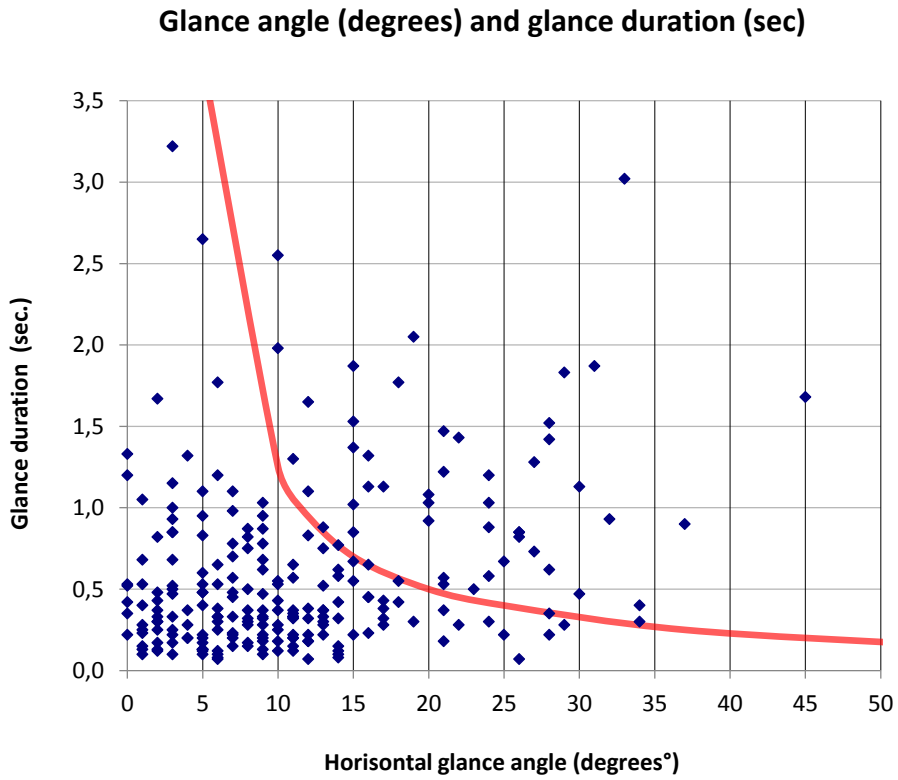


**Figure 7** **Horizontal glance angle (degrees) and glance duration (sec.) for all glances at advertising signs. Each dot represents a roadside advertising glance. The area below the red line is considered the "normal range".**

***Visual distraction***

When a driver is looking away from the traffic at driving-irrelevant stimuli for a total period of at least 2 sec. within a 6-sec. continuous period, the risk of being involved in an accident or near-crash situation almost doubles (Klauer et al 2006). These situations are defined as visual distraction.

The results of this study show that for 17 out of the 109 drive pasts included in the study, visual distraction is taking place. A few more than every sixth drive past is

the sum of several successive advertising glances at the same advertising sign in 2 sec. or more within a period of 6 sec. This means that, for every sixth drive past, visual distraction caused by the advertising sign is a fact.

The 17 drive pasts at which the test drivers were visually distracted are distributed on 11 different test drivers. Consequently, the impact of advertising signs seems to apply to a substantial part of all road users and is not concentrated on a single - or a few - persons. On average, approximately every third test driver experiences a situation of visual distraction.

Visually distracted drivers are registered at 8 out of 16 advertising signs covered in the study.

**Conclusion on empirical studies**

Based on the results of the empirical studies using an instrumented car, the following can be concluded in response to the two initial questions A) and B):

*A) Results document that drivers' attention is captured by roadside advertising signs*

- In 69% of all drive pasts, the driver is glancing at least once at the advertising sign, and in almost half of all drive pasts, the driver is glancing twice or more at the same advertising sign.
- A glance duration of 1 sec. or more is registered in 18% of the drivers' advertising glances
- For 22% of the drive pasts, the total glance duration of successive glances is 2 sec. or more.

*B) Results show that the drivers' visual attention to the roadside advertising signs does impact road safety*

- For approximately 25% of the tracked advertising glances, the safety buffer to the vehicle ahead is less than 2 sec., and for 20% of the advertising glances, the safety buffer is lower than 1.5 sec.
- More than 20% of the glances are a combination of horizontal angle and glance duration, which lies outside the normal range of road users' visual behaviour on rural roads.
- In more than every sixth drive past, visual distraction occurs as a result of the advertising sign.

Overall, the results of the present study therefore show that the investigated advertising signs do capture drivers' attention to the extent that it impacts road safety.

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# Evaluation of the Visual Demands of Digital Billboards Using a Hybrid Driving Simulator

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# Evaluation of the Visual Demands of Digital Billboards Using a Hybrid Driving Simulator

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Digital billboards (DBBs) are designed to present a virtually limitless stream of information intended to acquire the attention of passing motorists. Unfortunately, very little published research has been conducted to examine how much information drivers can extract during these epochs, or how the acquisition of this information impacts driving performance. Large-format signs are difficult to study using conventional driving simulators because their displays lack the spatial resolution needed to adequately render signs at distances greater than 100-ft. The current study used a hybrid video/mechanical driving simulator to overcome such limitations. Lane keeping, eye gaze position and reading performance were monitored while participants read digital billboards displaying 4, 8 and 12 words while traveling at 25 and 50 MPH. Results indicated that drivers gradually drift away from the centerline during the DBB inspection interval, and then execute large / sudden compensatory steering inputs to re-establish their position in the center of the lane after the billboard had been overtaken. Conditions leading to visual processing overload are identified and some preliminary guidelines for the design and placement of roadside DBBs are proposed.

## INTRODUCTION

Though legislation has been enacted to control outdoor advertising signs, much of it was written when large, *static* billboards dominated the landscape adjoining the interstate system (1950s – 1990s). Over the last 10 years, advancements in sign technology have led to a significant influx of *digital* billboards (DBBs) and advertising signs that now populate both rural and urban roadways. And while the location of DBBs is subject to the same controls as static advertisements, no rules have yet been enacted to regulate how digital signs should function in the field (e.g., information given per unit time). Even when local ordinances are enacted to govern digital signs, they are often stated colloquially (e.g., the sign cannot be "too bright"), and without reference to empirically-derived guidelines

In contrast to static advertisements, on which only a few words are typically presented, DBBs are also designed to project a virtually limitless stream of information to nearby motorists. This effectively forces drivers to remove their gaze farther from the forward view of the roadway in order to acquire new content as it is presented upon approach. In doing so, the normal symmetrical processing of the optic flow in the visual environment becomes increasingly asymmetric, a condition leading to erroneous heading estimation and a decreased ability to maintain baseline steering performance (Gibson & Crooks, 1938; Hildreth et al., 2000; Land & Horwood, 1995; Readinger et al., 2002; Telford & Howard, 1996).

Beijer, Smiley, and Eizenman (2004) recorded the eye movements of drivers as they traversed the Gardiner Expressway, a heavily-traveled and advertisement-rich corridor in Toronto, Canada. The focus of this research was to determine both the length of time and frequency upon which motorists attend to various forms of advertising signage. Findings indicated that 88% of participants made long glances while driving (> 750 ms), and that 78% of all long glances were projected upon *active* advertising billboards (i.e., scrolling or video). Much like Beijer's (2002) study, it was also discovered that active roadway signage incurred a significantly greater number of total glances than did their static counterparts.

Upon examining the same segment of highway in Toronto, Canada, Smiley and her colleagues (2005) noted that active advertising billboards were also able to elicit unsafe looking behavior from passing motorists. This study determined that 20% of all long glances (> 750 ms) were made towards video advertising signs, and that 25% of these long glances were projected at eccentricities up to and exceeding 20 degrees. During several of these instances, drivers fixated video advertising signs for durations longer than 1.5 seconds.

Because digital billboards are able to render large amounts of information, attempting to extract their content may force drivers to remove their eyes farther off of the roadway as they approach the sign. Studies have shown that drivers are able to safely view roadway signage for relatively long periods of time *if* the sign is positioned at a

relatively narrow angular offset from the centerline of the road (Schieber, Burns, Myers, Gilland, & Willan, 2004). However, human observers are inaccurate in assessing their heading while looking at large offsets from the direction of travel (Telford & Howard, 1996; Readinger, Chatziastros, Cunningham, Bulthoff, & Cutting, 2002), and drivers perform significantly worse when attempting to navigate a motor vehicle in the absence of visual feedback (Hildreth, Beusmans, Boer, & Royden, 2000); both likely scenarios when one allocates visual resources away from the roadway and onto lengthy digital advertisements.

### Current Study

Video-based driving simulators are not well suited for studying a driver's ability to extract information from signs at the same distances at which drivers can perform such tasks in the real world. These simulators lack sufficient display resolution to render sign stimuli that are readable at a distance. In the study reported here, we designed, built and evaluated a specialized hybrid simulator for investigating the limits of sign reading performance while driving. The driving task and its central visual environment (i.e., the road ahead) was implemented using a validated, commercial driving simulator; while the DBB stimulus was implemented via a separate 20:1 scaled LCD display mounted on a linear actuator rail that could move the simulated DBB toward the observer at angular velocities simulating speeds up to 55 MPH. Based upon this hybrid approach, the current study sought to evaluate driving performance exhibited while reading digital billboard messages of various lengths. The amount of information extracted (i.e., read aloud) as well as eye gaze direction data were recorded throughout the duration of each trial. The findings of this preliminary study are reported below.

## METHOD

Participants. 18 participants were recruited from undergraduate university classes (7 males; 11 females; mean age = 21.8 years). Participants had corrected visual acuity of 20/28 or better.

Apparatus. A Systems Technology STISIM simulator was used to implement a simple driving scenario consisting of a rural three-lane highway. Participants were required to guide the vehicle down the center lane while obeying the posted speed limit. The STISIM's visual output was rendered on a single, color LCD display that subtended approximately 40 degrees. To the right of the STISIM display, a 20-ft long linear actuator rail was placed so that it could be used to simulate a DBB path-of-travel that was approximately 300-ft long and offset 30-ft from the virtual roadway (assuming a 1:20 lab-to-world scale). A high-resolution LCD display was mounted on the linear actuator rail via a set of bearings (attached to a motor driven belt). A computer controlled stepping motor was employed to drive the LCD display up and down the actuator rail in a smooth and consistent fashion − simulating a moving 10-ft wide DBB at speeds up to 55 MPH. Text characters on the DBB simulator were displayed at high contrast and brightness (greater than 85% @ 85 cd/m$^2$). All text characters were 0.5-in tall and subtended 9.5 minarc at the maximum DBB simulation distance of 300-ft (the same size as a 20/40 acuity optotype). See http://apps.usd.edu/coglab/schieber/eyetracking/hfes2014/hybridsim.html for a video demonstration of an early prototype of the hybrid DBB-driving simulator in action. Finally, a close-up video recording of the participant's face (with audio from a head-mounted microphone) was used to determine relative gaze position (road ahead versus toward the DBB stimulus) using off-line, frame-by-frame video analysis (The validity of this technique was previously demonstrated by Schieber, Harms, Berkhout & Spangler, 1997).

Procedure. Each participant was provided with approximately 10 minutes of practice time driving the simulator (and reading sample DBB messages). The experiment was divided into two blocks. Half of the DBB presentations occurred while driving at 25 MPH while the remaining half occurred while driving at 50 MPH. The order of these speed blocks was counterbalanced across subjects. Within each block, participants were presented with DBB stimuli at predetermined random locations along the simulated roadway. DBBs contained either 4, 8 or 12 words drawn randomly from a pool of words with high frequency usage in the U.S. English language. All words were 4-to-5 characters in length. Each of the three DBB message lengths was repeated 4 times within a block. DBB message length/replication order was randomized. Each experimental trial began with a signal being sent from the STISIM driving simulator to a purpose-build controller that modulated the motion of the DBB display. The stimulus message

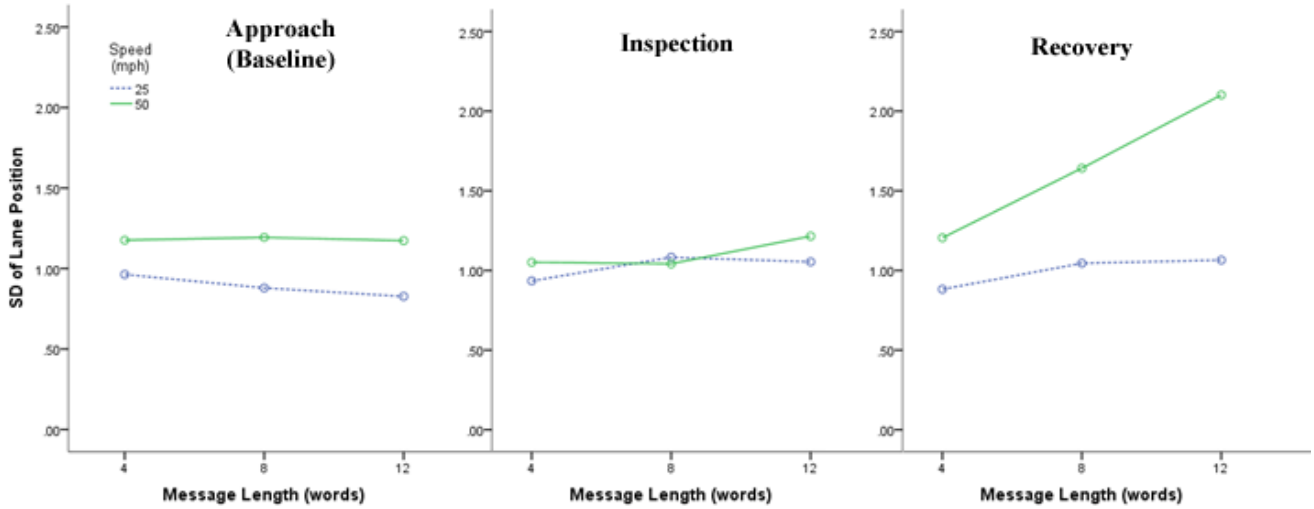


**Figure 1**. Standard deviation of lane position as a function of observation epoch, digital billboard message length and simulated driving speed.

was presented on the DBB display that was previously positioned at a simulated distance of 300-ft and then immediately began moving toward the participant at a simulated speed of either 25 or 50 MPH (depending upon the experimental condition). The message was erased at the end of the run and the controller slowly returned the blanked DBB display back to the home position in preparation for the next trial. The participant was required to read aloud as many words as possible while still maintaining adequate control of the primary driving task.

The simulator time-stamped and recorded driving performance data for 8 seconds prior to DBB message onset (Approach epoch), while the DBB was in motion (Inspection epoch) and for 8 seconds following the termination of the DBB message (Recovery epoch). Audio/video data streams were time-stamped and recorded for off-line analysis of eye gaze location and scoring of the number of words successfully read on each DBB stimulus trial.

## RESULTS

Analyses reported here are limited to lane keeping performance, reading accuracy and eye glance behavior. The standard deviation of lane position was analyzed using a (2) Driving Speed {25 vs. 50 MPH} by (3) Message Length {4, 8 and 12 words} by (3) Driving Epoch {Approach; Inspection; Recovery intervals} repeated-measures analysis of variance. All three main effects were highly significant. However, due to space limitations, attention will be limited to the decomposition of the significant 3-way interaction effect ($\mathbf{F}(4,68) = 3.14$, $p < 0.02$) which is graphically depicted in Figure 1. Reference to baseline performance depicted in the left-panel of Figure 1 reflects the finding that lane keeping was significantly better at 25 MPH compared to 50 MPH ($p < 0.001$). The fact that lane keeping performance did not vary with message length meets nominal expectations since this data was collected BEFORE the digital billboard message was encountered. During the inspection interval while the observer was actually reading the sign (middle panel), the lane keeping performance advantage of slower driving disappeared. However, lane keeping performance was not negatively affected by increases in DBB visual demand as message length increased from 4 to 12 unrelated stimulus words. Somewhat unexpected was the finding that lane keeping performance decrements associated with the visual demands of DBBs did not emerge until the recovery interval immediately after reading the sign (see the right-panel of Figure 1). During the 8 seconds immediately following the DBB encounter, lane keeping performance returned to baseline levels in the low speed (25 MPH) condition but was significantly reduced at the higher speed (50 MPH). This performance decrement was statistically significant at all levels of the message length manipulation (4words: $\mathbf{t}(35)=3.44$, $p<0.002$; 8 words: $\mathbf{t}(35)=5.68$, $p<0.001$; 12 words: $\mathbf{t}(35=7.36$, $p<0.001$). Furthermore, the reduction in lane keeping performance at 50 MPH became increasingly larger as the length of the DBB message became longer (4 vs 8 words: $\mathbf{t}(35)=5.06$, $p<0.001$; 4 vs 12 words: $\mathbf{t}(35)=6.93$, $p<0.001$; 8 vs 12 words: $\mathbf{t}(35)=3.59$, 0.001).

The eye gaze data (total eyes-off-road time; number of glances to the sign) and reading performance data

**Table 1. Reading Performance & Eye Glance Behavior**

| Experimental condition | Mean words read (% of sign content) | Mean number of glances | Mean eyes-off-road time (msec) |
|---|---|---|---|
| 4 words/25 mph | 3.96 (99) | 2.45 | 2346 |
| 8 words/25 mph | 7.88 (98.5) | 3.27 | 3676 |
| 12 words/25 mph | 11.4 (95) | 3.99 | 4803 |
| 4 words/50 mph | 3.99 (99.8) | 2.07 | 1861 |
| 8 words/50 mph | 7.54 (94.3) | 2.69 | 2902 |
| 12 words/50 mph | 9.0 (75) | 2.82 | 3484 |

collected during the DBB inspection epoch are summarized in Table 1. A (2) Driving Speed by (3) Message Length analysis of variance was performed upon the eyes-off-road time data. The significant speed by message length interaction (**F**(2,34) = 38.0, $p < 0.001$) is graphically depicted in Figure 2. All *post hoc* pairwise contrasts between the various levels of message length were statistically significant ($p < 0.001$) for both speed conditions. Similarly, the pairwise contrasts of driving speed were statistically significant ($p < 0.001$) at every level of the message length factor. An analogous analysis of variance was also performed on the number of glances to the DBB observed during the inspection epoch. The results of this ANOVA were identical to the eyes-off-the-road time analyses: i.e., the driving speed by message length interaction was statistically significant (**F**(2,34) = 12.39, $p < 0.001$) as were all possible pairwise comparisons.

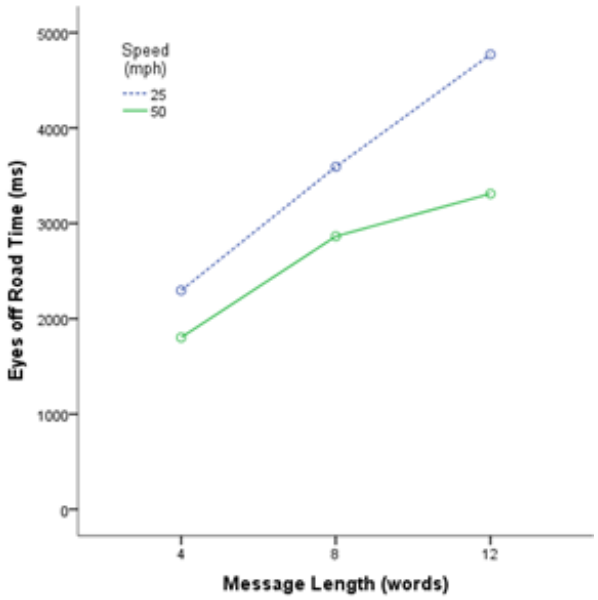


**Figure 2**. Eyes-off-road time as a function of DBB message length and speed of travel.

A graphical display of data derived from Table 1 can be used to reveal the relationship between eyes-off-the-road time and reading performance. When reading performance is plotted as a function of reading time available per word displayed on a DBB (Figure 3), a sudden performance decrement can be noted when available viewing time dropped below 500 msec per linguistic unit. Asymptotic reading performance was reached when 1000 msec of viewing time per word was available. This asymptote time is much longer than required for normal text-reading and appears to reflect the need to time-share vision with the navigation task.

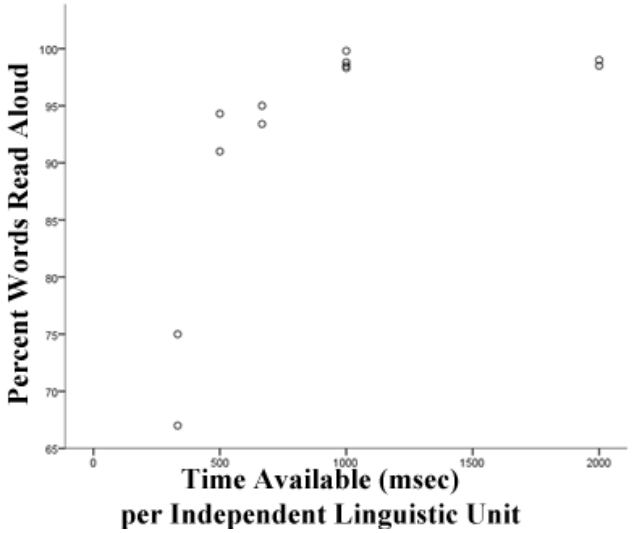


**Figure 3**. Reading performance as a function of time available per DBB stimulus word.

## DISCUSSION

This initial study using a hybrid video/mechanical driving simulation platform suggests that our approach can reveal important information about the effects of reading large-format digital billboards (DBBs) while driving. Although little or no decrement in lane keeping or reading performance was observed at slow speed (25 MPH) on straight roads, clear evidence of impaired performance became apparent at the higher driving speed (50 MPH).

Lane keeping performance was significantly degraded when participants were required to read DBBs with 8 or more words at 50 MPH. This decrement was especially noteworthy when 12 words appeared on the DBB display. Curiously, these decrements in lane keeping performance (increases in SD lane position) emerged AFTER the participants had finished reading the sign. *Post hoc* analyses were conducted to better understand the nature of this somewhat unexpected migration of performance decrements from the Inspection epoch to the Recovery epoch. These analyses revealed that instead of weaving back-and-forth on the road while reading the DBBs with 8 or 12 words, participants tended to "slowly" drift away from the center of their lane and then execute a large amplitude corrective steering input during the Recovery interval (8 sec-

onds after encountering the DBB stimulus). As would be expected, the standard deviation of lane position metric was somewhat insensitive at discriminating between these two modes of steering error but our *post hoc* analyses revealed that the maximum first derivative of lane position clearly detected such compensatory turbulence in the post-DBB encounter.

The eye gaze statistics and reading performance data suggest that information processing overload began to emerge at a message length of 8-words and was clearly present when encountering 12-word DBBs under the high speed condition. That is: the proportion of words extracted from the DBB dropped by 5% at 8-words and all the way down to 75% for 12-word DBBs encountered at 50 MPH. The non-linearity in eyes-off-road-time as a function of increasing message length at 50 MPH (see Figure 2) can be interpreted as a clear indication that participants did not have enough time available to process all of the stimuli in the 12-word DBB condition. The qualitative analysis of reading performance as a function of visual processing time available per stimulus word (see Figure 3) indicated that reading performance began to suffer when processing time allocations dropped below 500 msec/word. Optimal reading and lane keeping performance occurred at 1000 msec/word under these dynamic, dual-task viewing conditions. At this point it should be noted that the use of isolated word stimuli (instead of complete sentences) in this experiment introduces some reductions in ecological validity. However, this approach allows our results to be more easily generalized to other modeling applications since each word represents a distinct linguistic unit of information and it reduces variability due to idiosyncratic semantic differences within and across stimulus demand conditions.

Finally, the findings of the current study provide a basis for the formulation of some design guidelines for the deployment of DBBs in the roadway environment. These are listed below. Additional work will be required to extend these guidelines to dynamic displays such as multiple-page formats and real-time video. In addition, future efforts will need to simulate the demands of surrounding traffic as well as the DBB's visual load. The hybrid driving simulator appears well suited to supporting such efforts.

## Preliminary DBB Design Guidelines

No more than 8 linguistic units (i.e., content words) should be presented at a time for low-speed roads (25 MPH); with a maximum of 4 content words on high-speed surface roads (50 MPH).

Optimal reading-while-driving requires at least 1000 msec of exposure time per content word displayed.

At least 500 msec per content word is necessary to avoid significant decrements in reading performance.

Placement decisions for DBBs must consider environmental demands imposed upon drivers in the "recovery zone" immediately beyond the sign's location (e.g., other signs; parking lot entrances, etc.). This migration of DBB effects to the 8 sec of travel *beyond* the sign is perhaps the most unexpected finding of the current investigation.

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# Distracted Driving and Risk of Road Crashes among Novice and Experienced Drivers

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SPECIAL ARTICLE

# Distracted Driving and Risk of Road Crashes among Novice and Experienced Drivers

Sheila G. Klauer, Ph.D., Feng Guo, Ph.D., Bruce G. Simons-Morton, Ed.D., M.P.H., Marie Claude Ouimet, Ph.D., Suzanne E. Lee, Ph.D., and Thomas A. Dingus, Ph.D.

## ABSTRACT

### BACKGROUND

Distracted driving attributable to the performance of secondary tasks is a major cause of motor vehicle crashes both among teenagers who are novice drivers and among adults who are experienced drivers.

### METHODS

We conducted two studies on the relationship between the performance of secondary tasks, including cell-phone use, and the risk of crashes and near-crashes. To facilitate objective assessment, accelerometers, cameras, global positioning systems, and other sensors were installed in the vehicles of 42 newly licensed drivers (16.3 to 17.0 years of age) and 109 adults with more driving experience.

### RESULTS

During the study periods, 167 crashes and near-crashes among novice drivers and 518 crashes and near-crashes among experienced drivers were identified. The risk of a crash or near-crash among novice drivers increased significantly if they were dialing a cell phone (odds ratio, 8.32; 95% confidence interval [CI], 2.83 to 24.42), reaching for a cell phone (odds ratio, 7.05; 95% CI, 2.64 to 18.83), sending or receiving text messages (odds ratio, 3.87; 95% CI, 1.62 to 9.25), reaching for an object other than a cell phone (odds ratio, 8.00; 95% CI, 3.67 to 17.50), looking at a roadside object (odds ratio, 3.90; 95% CI, 1.72 to 8.81), or eating (odds ratio, 2.99; 95% CI, 1.30 to 6.91). Among experienced drivers, dialing a cell phone was associated with a significantly increased risk of a crash or near-crash (odds ratio, 2.49; 95% CI, 1.38 to 4.54); the risk associated with texting or accessing the Internet was not assessed in this population. The prevalence of high-risk attention to secondary tasks increased over time among novice drivers but not among experienced drivers.

### CONCLUSIONS

The risk of a crash or near-crash among novice drivers increased with the performance of many secondary tasks, including texting and dialing cell phones. (Funded by the Eunice Kennedy Shriver National Institute of Child Health and Human Development and the National Highway Traffic Safety Administration.)

From the Virginia Tech Transportation Institute (S.G.K., F.G., S.E.L., T.A.D.) and the Department of Statistics, Virginia Polytechnic Institute and State University (F.G.) — both in Blacksburg; the Eunice Kennedy Shriver National Institute of Child Health and Human Development, Bethesda, MD (B.G.S.-M.); and the University of Sherbrooke, Sherbrooke, QC, Canada (M.C.O.). Address reprint requests to Dr. Klauer at 3500 Transportation Research Plaza, Virginia Tech Transportation Institute, Blacksburg, VA 24061, or at cklauer@vtti.vt.edu.

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Drivers who are 15 to 20 years of age constitute 6.4% of all drivers, but they account for 10.0% of all motor vehicle traffic deaths and 14.0% of all police-reported crashes resulting in injuries.[1] These rates are thought to result from a combination of young age, inexperience, and risky driving behaviors.[2]

One of the riskiest driving behaviors is the performance of a secondary task, and novice drivers appear to be particularly prone to this distraction.[3] Distracted driving has been defined as the "diversion of attention away from activities critical for safe driving toward a competing activity."[4] Drivers engage in many competing tasks (including eating, adjusting the radio, and talking to passengers) that are not related to operating the vehicle in traffic, but the use of electronic devices such as cell phones while driving has garnered the most public and mass-media interest. An estimated 9% of all persons who drive during the day do so while dialing or talking on a cell phone or sending or receiving text messages.[3]

Estimates based on cell-phone records indicate that cell-phone use among all drivers increases the risk of a crash by a factor of 4.[5,6] Likewise, simulator studies involving adolescent drivers indicate that texting while driving increases the frequency of deviations in a lane relative to the position from the centerline.[7] Adolescents who were using a cell phone on a test track were more likely than experienced adult drivers who were using a cell phone to enter an intersection at a red or yellow light.[8] Simulation and test-track research on distraction among experienced drivers indicates that cell-phone use delays reaction to potential hazards,[9-11] increases following distances,[12] and decreases the driver's visual scanning of the environment.[13,14] Performance of a secondary task can increase the risk of a crash because it is cognitively demanding (preventing the driver from devoting full attention to driving) and because it takes the driver's eyes off the road ahead so that he or she cannot see and respond to unexpected hazards.[15]

Both the 100-Car Naturalistic Driving Study (hereinafter called the 100-Car Study),[14] which involved experienced drivers, and the Naturalistic Teenage Driving Study (NTDS),[16] which involved novice drivers, used data-recording devices installed in the participants' vehicles to assess their behaviors while driving and during a crash or near-crash. In previous analyses of NTDS data, we reported that among newly licensed drivers, the rates of crashes or near-crashes were 3.9 times as high as the corresponding rates among their parents when they drove the same vehicles, and the rates of a gravitational-force event (e.g., hard braking or making sharp turns or an overcorrection) were 5.1 times as high.[15] Here we report the results of our analysis of both studies with respect to the prevalence of engagement in a secondary task and the associated risk of a crash or near-crash among novice and experienced drivers.

*A Quick Take animation is available at NEJM.org*

## METHODS

### STUDY DESIGN AND OVERSIGHT

The NTDS data were collected from June 2006 through September 2008, and the 100-Car Study data were collected from January 2003 through July 2004. The two studies used similar experimental methods, detailed descriptions of which have been reported previously.[14,16]

We used a case–cohort approach to compare the prevalence of each task in the seconds before a crash or near-crash with the prevalence of the task during randomly sampled control periods of driving. We conducted separate analyses involving novice drivers and experienced drivers.

In both studies, adults provided written informed consent, and adolescents (i.e., those under the age of 18 years) provided written informed assent. Both studies were approved by the institutional review board of Virginia Polytechnic Institute and State University.

### PARTICIPANTS

In the NTDS, 42 newly licensed drivers (22 females and 20 males) from southwestern Virginia were recruited, and instruments were installed in their personal vehicles. At the initiation of the study, the mean (±SD) age of the participants was 16.4±0.3 years of age, and they had had a driver's license for 3 weeks or less. They received a total of $1,800 in monthly and end-of-study compensation for participation in the 18-month study.

In the 100-Car Study, 109 participants (43 women and 66 men) between the ages of 18 and 72 years (mean age, 36.2±14.4 years) from the Washington, D.C., area were recruited. The mean length of time that participants had been driving was 20.0±14.5 years. A total of 22 participants were compensated with the use of a leased ve-

**Table 1. Secondary Tasks Observed in the Studies.***

| |
|---|
| Talking on a cell phone (either a handheld or a hands-free device) |
| Dialing a cell phone or other handheld device (includes the use of shortcut keys) |
| Reaching for a cell phone (includes locating and answering) |
| Reaching for an inanimate object inside the vehicle |
| Sending text messages or using the Internet to read e-mail or Web content |
| Adjusting the radio, HVAC, or other internal vehicle system with controls on the dashboard |
| Adjusting controls other than those for the radio or HVAC (e.g., windows, seat belt, rearview mirror, or sun visor) |
| Looking at a roadside object (e.g., a previous crash or highway incident, a construction zone, a pedestrian, an animal, or other known or unknown object) |
| Eating (with or without utensils) |
| Drinking a nonalcoholic beverage from an open container with or without a lid, straw, or both† |

* HVAC denotes heating, ventilation, and air conditioning.
† Cases in which alcohol consumption was suspected were not included in the current analysis.

hicle, and 87 participants drove their own vehicles; the latter group received a total of $1,800 ($125 per month plus $300 at the end of the 12-month study).

### EQUIPMENT

Instruments with the same data-acquisition systems (developed at the Virginia Tech Transportation Institute) were installed in vehicles in both studies. These systems included four cameras (forward view, rear view, view of the driver's face, and view over the driver's right shoulder) and a suite of vehicle sensors that included a multiaxis accelerometer, forward radar, a global positioning system, and a machine-vision lane tracker. Video and driving-performance data were collected continuously for the duration of the studies.[15,17]

### DATA CODING AND ANALYSIS

Highly trained analysts used threshold values obtained through a sensitivity analysis of the vehicle-sensor data (e.g., braking at more than 65 gravitational units)[16] to identify potential crashes and near-crashes. The operational definition of a crash was any physical contact between the vehicle and another object for which the driver was at fault or partially at fault. (None of the crashes involved a death or serious injury.) The operational definition of a near-crash was any circumstance requiring a last-moment physical maneuver that challenged the physical limitations of the vehicle to avoid a crash for which the driver was at fault or partially at fault.

On the basis of prespecified criteria, we excluded events in which the driver was considered to be not at fault (108 events in the NTDS and 190 events in the 100-Car Study) and in which the driver was observed to be drowsy or under the potential influence of drugs or alcohol (7 events in the NTDS and 113 events in the 100-Car Study). The analyses included 31 crashes and 136 near-crashes among novice drivers and 42 crashes and 476 near-crashes among experienced drivers. Previous analyses have shown that near-crashes are reliable surrogates for crashes.[18]

Randomly sampled control periods that consisted of 6-second time segments during which the vehicle was moving faster than 5 mph were selected to represent typical or "normal" daily driving conditions. For each driver, sampling for control periods was stratified according to the number of miles the vehicle had traveled (in the NTDS) or the number of hours the person had driven (in the 100-Car Study). Thus, the number of control periods for each driver was proportional to either the distance of travel (e.g., one sample per 50 vehicle miles traveled) or the duration of travel (e.g., two samples per hour driven).[17]

Two analysts viewed the video footage before each confirmed crash or near-crash and identified and coded secondary tasks. Analysts also viewed the video footage of the randomly sampled control periods and recorded the performance of secondary tasks. The identified secondary tasks were organized according to the 10 categories listed in Table 1.[15] Operational definitions of the tasks were identical in the two studies; texting was assessed only in the NTDS, since the 100-Car Study was performed before this activity was widely used.

A secondary task was included if it occurred within the 6-second duration of each sampled control period or within 5 seconds before or 1 second after the onset of the crash or near-crash. Coding continued for 1 second after the onset of the crash or near-crash to capture behaviors that continued because the driver was not aware of the onset of the crash or near-crash.

It was not considered feasible for analysts to be unaware of whether a crash or near-crash occurred, but they were unaware of the purpose of the analyses and recorded many variables in addition to performance of secondary tasks. Any

disagreements among analysts were adjudicated by a senior researcher. Interrater reliability, which was determined by comparing the analysts' assessments of the performance of secondary tasks during control periods with the assessments of a senior researcher, was 88.4% in the 100-Car Study[17] and 93.3% in the NTDS (see Tables S1 and S2 of Appendix 1 in the Supplementary Appendix, available with the full text of this article at NEJM.org).

### STATISTICAL ANALYSIS

We used a mixed-effects logistic-regression analysis to estimate odds ratios for a crash or near-crash associated with each category of distracting task. We conducted separate regression analyses involving novice drivers and experienced drivers. A random intercept was assigned to each driver to incorporate within-driver correlations.

The prevalence of engagement in a secondary task was calculated per 3-month interval as the percentage of control conditions in which any recorded secondary task was observed. A mixed-effects linear-regression model was used to assess trends for performance of a secondary task over time by both novice and experienced drivers.

**Table 2. Odds Ratio for a Motor Vehicle Crash or Near-Crash Associated with Performance of a Secondary Task.***

| Task | Novice Drivers | Experienced Drivers |
|---|---|---|
| | Odds Ratio (95% CI) | |
| Using cell phone | | |
| Texting or using Internet | 3.87 (1.62–9.25) | NA† |
| Dialing | 8.32 (2.83–24.42) | 2.49 (1.38–4.54) |
| Talking | 0.61 (0.24–1.57) | 0.76 (0.51–1.13) |
| Reaching for phone | 7.05 (2.64–18.83) | 1.37 (0.31–6.14) |
| Reaching for object other than cell phone | 8.00 (3.67–17.50) | 1.19 (0.61–2.31) |
| Looking at roadside object | 3.90 (1.72–8.81) | 0.67 (0.37–1.22) |
| Adjusting controls for radio or HVAC | 1.37 (0.72–2.61) | 0.53 (0.30–0.94) |
| Adjusting controls other than those for radio or HVAC | 2.60 (0.89–7.65) | 0.64 (0.15–2.65) |
| Eating | 2.99 (1.30–6.91) | 1.26 (0.74–2.15) |
| Drinking nonalcoholic beverage | 1.36 (0.31–5.88) | 0.44 (0.16–1.22) |

* The analysis of the 100-Car Naturalistic Driving Study involving experienced adult drivers was based on 518 crashes and near-crashes for which the driver was at fault or partially at fault and 16,614 control periods. The analysis of the Naturalistic Teenage Driving Study was based on 167 crashes and near-crashes for which the driver was at fault or partially at fault and 5238 control periods. CI denotes confidence interval, and NA not applicable.

† Texting, accessing the Internet, or both rarely occurred during the data-collection period in the 100-Car Study, so this task could not be appropriately evaluated with the use of the data from this study.

## RESULTS

### RISK OF A CRASH OR NEAR-CRASH

The odds ratios and corresponding confidence intervals for a crash or near-crash associated with each secondary task are shown in Table 2. Among novice drivers, dialing or reaching for a cell phone, texting, reaching for an object other than a cell phone, looking at a roadside object such as a vehicle in a previous crash, and eating were all associated with a significantly increased risk of a crash or near-crash. Among experienced drivers, only cell-phone dialing was associated with an increased risk. Table 1 of Appendix 2 in the Supplementary Appendix shows the prevalence of engagement in secondary tasks as a percentage of crashes and near-crashes and as a percentage of control periods.

### PREVALENCE OF ENGAGEMENT IN SECONDARY TASKS

As shown in Figure 1, the prevalence of engagement in a secondary task was estimated as the percentage of randomly sampled control periods in which they occurred. The incidence of high-risk performance of secondary tasks did not change significantly over time among the experienced drivers ($P=0.61$ for trend). Novice drivers engaged in secondary tasks more frequently over time ($P<0.05$ for trend). However, overall mean rates of performance of secondary tasks were similar among novice and experienced drivers (9.9% and 10.9%, respectively).

## DISCUSSION

Our analysis showed that the performance of secondary tasks, including dialing or reaching for a cell phone, texting, reaching for an object other than a cell phone, looking at a roadside object, and eating, was associated with a significantly increased risk of a crash or near-crash among novice drivers. Among experienced drivers, only dialing a cell phone was associated with an increased risk; data on secondary tasks performed by experienced drivers were collected before the widespread use of texting. The secondary tasks associated with the risk of a crash or near-crash all required the driver to look away from the road ahead. The

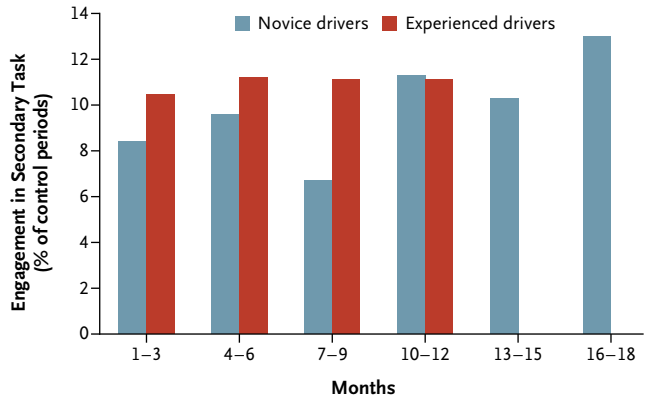


**Figure 1. Performance of High-Risk Secondary Tasks among Novice and Experienced Drivers.**

The prevalence of engagement in a secondary task was estimated as the percentage of randomly sampled control periods in which these tasks occurred. In the 100-Car Naturalistic Driving Study (red bars), the data-collection period was 12 months, so no data are shown for months 13 through 18. The blue bars represent data from the Naturalistic Teenage Driving Study.

prevalence of high-risk performance of secondary tasks was similar overall in the two groups, although it increased among young drivers over the 18-month study period, possibly because of increased confidence in driving over time.

Previous research[5,6] involving experienced drivers indicated that cell-phone use (both dialing and talking) was associated with an increase in the risk of a crash by a factor of 4. Our analysis, which separated talking and dialing tasks, showed that talking on a cell phone was not associated with a significant increase in the risk of a crash among novice or experienced drivers, whereas dialing was associated with an increased risk in both groups. In contrast to dialing and other high-risk tasks such as texting and reaching for a cell phone or other object, talking on a cell phone does not require the driver to look away from the road ahead. However, our findings should not be interpreted to suggest that there is no risk associated with this activity, since previous simulation and test-track research has shown that talking on a cell phone reduces attention to visible road hazards and degrades driving performance.[10-12] Also, talking on a cell phone can rarely be accomplished without reaching for it and dialing the phone or answering calls, all of which are likely to take the driver's eyes off the road.

The limitations of our analysis included the relatively small regional samples of study participants. Although the same data-collection methods were used in the two studies, the 100-Car Study data were collected in 2003–2004 in the Washington, D.C., area (where traffic density and crash rates are relatively high) and the NTDS data were collected in 2006–2008 in southwestern Virginia. The methods for sampling the control conditions in the NTDS and 100-Car Study were very similar, but they were not identical. Also, in both studies, the majority of events were near-crashes rather than crashes. In addition, the coding of secondary tasks was subject to possible human error and bias. However, the coding procedures and reliability tests were designed to ensure the most accurate data possible, and the standard for coding secondary tasks before a crash or near-crash required 100% accuracy between two expert analysts, thereby minimizing inconsistencies. Another limitation is that actual crashes were relatively rare and the samples were small; thus, confidence intervals were relatively wide, even with the combination of crashes and near-crashes. Previous research has indicated that combining crash and near-crash events, as compared with the use of crash events alone, produces conservative estimates of risk associated with various behaviors.[19]

Considerable policy attention that has been directed toward young drivers has primarily resulted in graduated driver licensing. Graduated licensing has been adopted in all 50 states, but there is considerable variation in these state programs. Our finding of the association of several secondary tasks with a significantly increased risk of a crash or near-crash among young drivers provides support for policies limiting the performance of these tasks through graduated licensing requirements or other policy initiatives.

In conclusion, our findings indicate that secondary tasks requiring drivers to look away from the road ahead, such as dialing and texting, are significant risk factors for crashes and near-crashes, particularly among novice drivers.

Supported by the Eunice Kennedy Shriver National Institute of Child Health and Human Development and the National Highway Traffic Safety Administration.

Disclosure forms provided by the authors are available with the full text of this article at NEJM.org.

We thank Jennifer Mullen for her assistance with data collection and Julie McClafferty, M.S., for her assistance with data coding and reduction.

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# INTERGOVERNMENTAL AGREEMENT

This **INTERGOVERNMENTAL AGREEMENT** (this "***Agreement***") is entered into this [__] day of [__], 2021 (the "***Effective Date***"), by and between the Town of Port Royal, South Carolina (the "***Town***"), a municipality and political subdivision of the State of South Carolina (the "***State***"), and Beaufort County, South Carolina (the "***County***"), a county and political subdivision of the State, each a "***Party***" and together the "***Parties***."

## RECITALS

**WHEREAS**, the County and Jasper County, South Carolina ("***Jasper***" and together with the County, the "***Counties***") are authorized pursuant to Article VIII, Section 13(D) of the Constitution of South Carolina 1895, as amended, and South Carolina Code Annotated Section 4-1-170 (collectively, the *"**MCIP Law***") to jointly develop a multi-county industrial or business park within the geographical boundaries of one or both of the member counties.

**WHEREAS**, a company identified as REHC, LLC (f/k/a Project Stone) (the "***Company***") has proposed establishing or expanding certain manufacturing facilities on property located within the County and the Town (the "***Project***"), and has requested that the County place the Project within a multi-county industrial or business park (the "***Park***") under the MCIP Law.

**WHEREAS**, the Counties plan to enter into or have entered into a "Multi-County Park Agreement (REHC, LLC; Triple B Restaurant Holdings, LLC; GlassWRXSC, LLC; MRGSC Property, LLC)" (the "***Master Agreement***"), the provisions of which govern (i) the operation of the Park, including the sharing of expenses and revenues of the Park, and (ii) the manner in which the fee-lieu of tax ("***FILOT***") revenue is to be distributed to each of the taxing entities within each of the Counties, including the standard 1% allocation of FILOT revenue to Jasper (the "***Jasper Allocation***").

**WHEREAS**, the County and the Company have entered into, or intend to enter, into a Special Source Revenue Credit Agreement (the "***SSRC Agreement***") wherein the Company, prior to payment of the Jasper Allocation, will be provided a special source revenue credit (synthetic FILOT), the terms of which provide that FILOT revenues due and owing by the Company will be computed utilizing a 6% assessment ratio and a fixed millage rate (the "***SSRC Provisions***"). The FILOT revenues that remain after application of the Jasper Allocation and the SSRC Provisions is defined for the purposes herein as the "***Net FILOT Revenue***".

**WHEREAS**, the properties related to the Project ("***Project Property***") within the Park encompass a portion of the Town, and, pursuant to Section 4-1-170(C) of the MCIP Law, the County must obtain the consent of the Town prior to the creation of the Park.

**WHEREAS**, the Project Property has been recently annexed into the Town and the FILOT revenues derived therefrom may be the subject of an ongoing dispute between the Town and the Burton Fire District ("***Burton***").

**WHEREAS**, the Town and the County desire to enter into this Agreement to: (i) identify the location of the Project Property; (ii) confirm the Town's commitment and consent to the creation of the Park; and (iii) provide the methodology for distribution of Net FILOT Revenues to the Town.

**WHEREAS**, the Town and the County, each acting by and through their respective governing bodies, have authorized the execution and delivery of this Agreement.

**NOW THEREFORE**, in consideration for the mutual covenants, promises, and consents contained in this Agreement, the Parties agree as follows:

1. **Binding Agreement**; **Representations**.

(A) This Agreement serves as a written instrument setting forth the entire agreement between the Parties and shall be binding on the Parties, their successors and assigns.

(B) Each of the Parties represents and warrants that: (i) it has the full legal right, power, and authority to enter into this Agreement and carry out and consummate all other transactions contemplated by this Agreement; (ii) it has duly authorized the execution, delivery, and performance of its obligations under this Agreement and the taking of any and all actions as may be required on its part to carry out, give effect to, and consummate the transactions contemplated by this Agreement; and (iii) this Agreement constitutes a legal, valid, and binding obligation of each respective Party, enforceable in accordance with its terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally, and subject, as to enforceability, to general principles of equity regardless of whether enforcement is sought in a proceeding in equity or at law.

2. **Location of the Park; Consent; Limitations.**

(A) The Park consists of certain property described in the Master Agreement and includes certain property located in the Town, specifically including the Project Property as is hereinafter more specifically described in Exhibit A hereto.

(B) Subject to the terms, conditions and provisions hereof, the Town consents to the creation of the Park and the inclusion of the Project Property therein.

(C) The County shall not enlarge or diminish the boundaries of the Park through the addition or subtraction of the property located within the Town without receiving the Town's prior written consent to any such enlargement or diminution.[1]

(D) During the pendency of this Agreement, no amendments or modifications to the SSRC Provisions or the Jasper Allocation, the terms of which change the distribution of Net FILOT Revenues, shall be permitted without the written consent of the Town.

3. **Distribution of Net FILOT Revenue**.

(A) The Town's share of the Net FILOT Revenues (the "***Town's FILOT Portion***") shall be calculated in the manner set forth at South Carolina Code Annotated Section 12-44-80(A) as if the Project were not located in a Park.

(B) In the event that Burton is determined to be legally entitled to some allocation of the Town's FILOT Portion, through (i) a determination of a court of competent jurisdiction, (ii) through an agreement between the Town and Burton, or (iii) upon written request of the Town,

[1] Contemporaneously with the execution of this Agreement, the Town has additionally authorized a separate agreement related to Project Burger, which is also located within the Park.

then the Parties agree, and as permitted by the MCIP Law, that the County shall allocate to Burton the sum of $1.00 per year from the Town's FILOT Portion.

4. **Termination**. The Town and County agree that this Agreement shall terminate concurrently with the SSRC Agreement.

5. **Records**. The Parties covenant and agree that, upon the request of either, the other will provide to the requesting Party copies of the FILOT records and distributions pertaining to Project Property, as such records become available in the normal course of Town and County procedures.

6. **Severability**. In the event and to the extent, and only to the extent, that any provision or any part of a provision of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable the remainder of that provision or any other provision or part of a provision of this Agreement.

7. **Conflicts.** To the extent any provisions of this Agreement conflict with the provisions of any other agreement between the Parties, the terms and provisions of this Agreement shall control in all circumstances.

[Remainder of Page Intentionally Left Blank]

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officials as of the Effective Date.

**TOWN OF PORT ROYAL, SOUTH CAROLINA**

By: _____
Town Manager

(SEAL)

ATTEST:

By: _____
Town Clerk

[*Signature Page of the County on Following Page*]

**BEAUFORT COUNTY,**
**SOUTH CAROLINA**

By: _____
Chairman,
Beaufort County Council

(SEAL)

ATTEST:

By: _____
Clerk to County Council

# EXHIBIT A

## LEGAL DESCRIPTION - PROJECT STONE/REHC, LLC

All that certain piece, parcel or tract of land, situate, lying and being in Beaufort County, South Carolina, containing 3.70 acres as shown on that certain plat prepared by David E. Gasque, RLS, dated May 2, 2001, entitled "Boundary Survey & Lot Line Revision, Portion of Tax Parcel 100-031-017C and Parcel 100-031-0167 prepared for Henry J. Lee Distributors, Inc., and recorded in Plat Book 80 at Page 2 in the office of the Register of Deeds for Beaufort County, South Carolina. For a more complete description as to metes, bounds, courses and distances reference may be had to aforementioned plat of record.

-ALSO-

All that certain piece, parcel or tract of land situate, lying and being on Port Royal Island, Beaufort County, State of South Carolina containing 4.01 acres as shown on that certain plat prepared by David E. Gasque, R.L.S., dated October 6, 1988 and entitled "Plat showing 4.01 acres, located on S.C. Highway 170, survey at the Request of Harold E. Trask" a copy of which is recorded in the Office of the RMC for Beaufort County, S.C. in Plat Book 35 at page 361. For a more detailed description as to metes and bounds, courses and distances reference is craved to the above referred to plat of record.

BEING the same property conveyed to DJL Land Company, LLC (predecessor by name change to LONE OAK – SOUTH CAROLINA, L.L.C.) by deed of Dennis J. Lee dated March 1, 2004 and recorded March 16, 2004 in Record Book 1923, Page 882, Register of Deeds for Beaufort County, S.C.

# INTERGOVERNMENTAL AGREEMENT

This **INTERGOVERNMENTAL AGREEMENT** (this "***Agreement***") is entered into this [__] day of [__], 2021 (the "***Effective Date***"), by and between the City of Beaufort, South Carolina (the "***City***"), a municipality and political subdivision of the State of South Carolina (the "***State***"), and Beaufort County, South Carolina (the "***County***"), a county and political subdivision of the State, each a "***Party***" and together the "***Parties***."

## RECITALS

**WHEREAS**, the County and Jasper County, South Carolina ("***Jasper***" and together with the County, the "***Counties***") are authorized pursuant to Article VIII, Section 13(D) of the Constitution of South Carolina 1895, as amended, and South Carolina Code Annotated Section 4-1-170 (collectively, the *"**MCIP Law***") to jointly develop a multi-county industrial or business park within the geographical boundaries of one or both of the member counties.

**WHEREAS**, a company identified as GlassWRXSC, LLC (f/k/a Project Glass) (the "***Company***") has proposed establishing or expanding certain manufacturing facilities on property located within the County and the City (the "***Project***"), and has requested that the County place the Project within a multi-county industrial or business park (the "***Park***") under the MCIP Law.

**WHEREAS**, the Counties plan to enter into or have entered into a "Multi-County Park Agreement (REHC, LLC; Triple B Restaurant Holdings, LLC; GlassWRXSC, LLC; MRGSC Property, LLC)" (the "***Master Agreement***"), the provisions of which govern (i) the operation of the Park, including the sharing of expenses and revenues of the Park, and (ii) the manner in which the fee-lieu of tax ("***FILOT***") revenue is to be distributed to each of the taxing entities within each of the Counties, including the standard 1% allocation of FILOT revenue to Jasper (the "***Jasper Allocation***"). The FILOT revenue less the Jasper Allocation is defined for the purposes herein as the "***Net FILOT Revenue***".

**WHEREAS**, the County and the Company have entered into, or intend to enter, into a Fee Agreement (the "***Fee Agreement***") pursuant to Title 12, Chapter 44 of the Code of Laws of South Carolina 1976, as amended (the "***Fee Act***"), which provides for the payment a negotiated fee-in-lieu-of-tax ("***FILOT***") with respect to certain property of the Company.

**WHEREAS**, the properties related to the Project ("***Project Property***") within the Park encompass a portion of the City, and, pursuant to Section 4-1-170(C) of the MCIP Law, the County must obtain the consent of the City prior to the creation of the Park.

**WHEREAS**, the Project Property has been recently annexed into the City and the FILOT revenues derived therefrom may be the subject of an ongoing dispute between the City and the Burton Fire District ("***Burton***").

**WHEREAS**, the City and the County desire to enter into this Agreement to: (i) identify the location of the Project Property; (ii) confirm the City's commitment and consent to the creation of the Park; and (iii) provide the methodology for distribution of the Net FILOT Revenue.

**WHEREAS**, the City and the County, each acting by and through their respective governing bodies, have authorized the execution and delivery of this Agreement.

**NOW THEREFORE**, in consideration for the mutual covenants, promises, and consents contained in this Agreement, the Parties agree as follows:

1. **Binding Agreement**; **Representations**.

(A) This Agreement serves as a written instrument setting forth the entire agreement between the Parties and shall be binding on the Parties, their successors and assigns.

(B) Each of the Parties represents and warrants that: (i) it has the full legal right, power, and authority to enter into this Agreement and carry out and consummate all other transactions contemplated by this Agreement; (ii) it has duly authorized the execution, delivery, and performance of its obligations under this Agreement and the taking of any and all actions as may be required on its part to carry out, give effect to, and consummate the transactions contemplated by this Agreement; and (iii) this Agreement constitutes a legal, valid, and binding obligation of each respective Party, enforceable in accordance with its terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally, and subject, as to enforceability, to general principles of equity regardless of whether enforcement is sought in a proceeding in equity or at law.

2. **Location of the Park; Consent; Limitations.**

(A) The Park consists of certain property described in the Master Agreement and includes certain property located in the City, specifically including the Project Property as is hereinafter more specifically described in Exhibit A hereto.

(B) Subject to the terms, conditions and provisions hereof, the City consents to the creation of the Park and the inclusion of the Project Property therein.

(C) The County shall not enlarge or diminish the boundaries of the Park through the addition or subtraction of the property located within the City without receiving the City's prior written consent to any such enlargement or diminution.[1]

(D) During the pendency of this Agreement, no amendments or modifications to the Fee Agreement or the Jasper Allocation, the terms of which change the distribution of Net FILOT Revenues, shall be permitted without the written consent of the City.

3. **Distribution of Net FILOT Revenue**.

(A) The City's share of the Net FILOT Revenues (the "***City's FILOT Portion***") shall be calculated in the manner set forth at South Carolina Code Annotated Section 12-44-80(A) as if the Project were not located in a Park.

(B) In the event that Burton is determined to be legally entitled to some allocation of the City's FILOT Portion, through (i) a determination of a court of competent jurisdiction, (ii) through an agreement between the City and Burton, or (iii) upon written request of the City, then the Parties agree, and as permitted by the MCIP Law, that the County shall allocate to Burton the sum of $1.00 per year from the City's FILOT Portion.

[1] Contemporaneously with the execution of this Agreement, the City has additionally authorized a separate agreement related to Project Garden, which is also located within the Park.

4. **Termination**. The City and County agree that this Agreement shall terminate concurrently with the SSRC Agreement.

5. **Records**. The Parties covenant and agree that, upon the request of either, the other will provide to the requesting Party copies of the FILOT records and distributions pertaining to Project Property, as such records become available in the normal course of City and County procedures.

6. **Severability**. In the event and to the extent, and only to the extent, that any provision or any part of a provision of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable the remainder of that provision or any other provision or part of a provision of this Agreement.

7. **Conflicts.** To the extent any provisions of this Agreement conflict with the provisions of any other agreement between the Parties, the terms and provisions of this Agreement shall control in all circumstances.

[Remainder of Page Intentionally Left Blank]

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officials as of the Effective Date.

**CITY OF BEAUFORT, SOUTH CAROLINA**

By: _____
City Manager

(SEAL)

ATTEST:

By: _____
City Clerk

[*Signature Page of the County on Following Page*]

**BEAUFORT COUNTY,**
**SOUTH CAROLINA**

By: _____
Chairman,
Beaufort County Council

(SEAL)

ATTEST:

By: _____
Clerk to County Council

# EXHIBIT A

## LEGAL DESCRIPTION - PROJECT GLASS/GlassWRXSC, LLC

ALL THAT CERTAIN PIECE, PARCEL OR TRACT OF LAND, SITUATE, LYING AND BEING ON PORT ROYAL ISLAND, BEAUFORT COUNTY, SOUTH CAROLINA, CONSISTING OF 35.68 ACRES, BEING A PART OF LOTS 6, 7, 10, 11, 22 AND 23 IN SECTION 28, TOWNSHIP ONE (1) NORTH, RANGE TWO (2) WEST AND A PART OF LOTS 58 AND 59, IN SECTION 21, TOWNSHIP ONE (1), RANGE TWO (2) WEST, ACCORDING TO THE SURVEY OF UNITED STATES DIRECT TAX COMMISSIONERS FOR THE DISTRICT OF SOUTH CAROLINA, AND HAVING SUCH METES, COURSES, DISTANCES AND BOUNDS AS MORE FULLY SHOWN BY REFERENCES TO A PLAT PREPARED FOR PNEUMO CORPORATION BY R.D. TROGDON, JR., R.L.S., DATED FEBRUARY 9, 1976, AND RECORDED IN THE OFFICE OF THE CLERK OF COURT FOR BEAUFORT COUNTY IN PLAT BOOK 24, AT PAGE 102.

Being the same property conveyed to Parker-Hannifin Corporation by deed from Pneumo Abex Corporation dated April 10, 1996 and recorded April 15, 1996 in Book 850, Page 975 in the Register of Deeds Office for Beaufort County, South Carolina.

PIN # 100 25 170

Tax Map Number/Parcel ID: *R120 025 000 0170 0000*

# INTERGOVERNMENTAL AGREEMENT

This **INTERGOVERNMENTAL AGREEMENT** (this "***Agreement***") is entered into this [__] day of [__], 2021 (the "***Effective Date***"), by and between the Town of Port Royal, South Carolina (the "***Town***"), a municipality and political subdivision of the State of South Carolina (the "***State***"), and Beaufort County, South Carolina (the "***County***"), a county and political subdivision of the State, each a "***Party***" and together the "***Parties***."

## RECITALS

**WHEREAS**, the County and Jasper County, South Carolina ("***Jasper***" and together with the County, the "***Counties***") are authorized pursuant to Article VIII, Section 13(D) of the Constitution of South Carolina 1895, as amended, and South Carolina Code Annotated Section 4-1-170 (collectively, the *"**MCIP Law***") to jointly develop a multi-county industrial or business park within the geographical boundaries of one or both of the member counties.

**WHEREAS**, a company identified as Triple B Restaurant Holdings (f/k/a Project Burger) (the "***Company***") has proposed establishing or expanding certain manufacturing facilities on property located within the County and the Town (the "***Project***"), and has requested that the County place the Project within a multi-county industrial or business park (the "***Park***") under the MCIP Law.

**WHEREAS**, the Counties plan to enter into or have entered into a "Multi-County Park Agreement (REHC, LLC; Triple B Restaurant Holdings, LLC; GlassWRXSC, LLC; MRGSC Property, LLC)" (the "***Master Agreement***"), the provisions of which govern (i) the operation of the Park, including the sharing of expenses and revenues of the Park, and (ii) the manner in which the fee-lieu of tax ("***FILOT***") revenue is to be distributed to each of the taxing entities within each of the Counties, including the standard 1% allocation of FILOT revenue to Jasper (the "***Jasper Allocation***").

**WHEREAS**, the County and the Company have entered into, or intend to enter, into a Special Source Revenue Credit Agreement (the "***SSRC Agreement***") wherein the Company, prior to payment of the Jasper Allocation, will be provided a special source revenue credit (synthetic FILOT), the terms of which provide that FILOT revenues due and owing by the Company will be computed utilizing a 6% assessment ratio and a fixed millage rate (the "***SSRC Provisions***"). The FILOT revenues that remain after application of the Jasper Allocation and the SSRC Provisions is defined for the purposes herein as the "***Net FILOT Revenue***".

**WHEREAS**, the properties related to the Project ("***Project Property***") within the Park encompass a portion of the Town, and, pursuant to Section 4-1-170(C) of the MCIP Law, the County must obtain the consent of the Town prior to the creation of the Park.

**WHEREAS**, the Town has previously enacted Ordinance No. 2011-23 dated February 8, 2012, the provisions of which established and approved the "Town of Port Royal, South Carolina Seaport Redevelopment Plan" (the "***Seaport TIF***") - the terms of which constitute a "redevelopment plan" as such term is defined in South Carolina Code Annotated Section 31-6-30(5).

**WHEREAS**, pursuant to South Carolina Code Annotated Section 4-29-68(F), the FILOT revenues derived within any "Redevelopment Project Area" (as defined in South Carolina Code

Annotated Section 31-6-30(7)) shall be allocated in accordance with the ordinance creating and approving the redevelopment plan as if the FILOT revenues remained ad valorem taxes, and all revenues collected in the redevelopment project area that are not subject to the ordinance creating and approving the redevelopment plan become payments in lieu of taxes.

WHEREAS, the property within the Town subject to the Seaport TIF constitutes a Redevelopment Project Area as described in the foregoing recital.

**WHEREAS**, respecting the Seaport TIF: (i) the County Assessor is responsible for determining the "Total Initial Assessed Value" and the "Incremental Assessed Value", as such terms are respectively defined in the Seaport TIF;[1] (ii) ad valorem taxes applicable to the Total Initial Equalized Assessed Value, if any, shall be paid to the respective taxing districts (by the County Treasurer) in the manner required by law in the absence of the Seaport TIF ("***Baseline Taxes***"); and (iii) ad valorem taxes applicable to the Incremental Assessed Value shall be captured as the revenues of the Seaport TIF ("***TIF Revenues***") and deposited into the Special Tax Allocation Fund (as defined in the Seaport TIF).

**WHEREAS**, the Project Property is located within the Redevelopment Project Area and the FILOT revenues derived thereunder shall be distributed in conformity with the terms of the Seaport TIF as provided in Section 3 of this Agreement.

**WHEREAS**, the Town and the County desire to enter into this Agreement to: (i) identify the location of the Project Property; (ii) confirm the Town's commitment and consent to the creation of the Park; (iii) ratify and confirm the existence of the Seaport TIF and the distribution of Net FILOT Revenues thereunder; and (iv) provide the methodology for distribution of Net FILOT Revenues to the Town if and when the Seaport TIF is terminated.

**WHEREAS**, the Town and the County, each acting by and through their respective governing bodies, have authorized the execution and delivery of this Agreement.

**NOW THEREFORE**, in consideration for the mutual covenants, promises, and consents contained in this Agreement, the Parties agree as follows:

1. **Binding Agreement**; **Representations**.

(A) This Agreement serves as a written instrument setting forth the entire agreement between the Parties and shall be binding on the Parties, their successors and assigns.

(B) Each of the Parties represents and warrants that: (i) it has the full legal right, power, and authority to enter into this Agreement and carry out and consummate all other transactions contemplated by this Agreement; (ii) it has duly authorized the execution, delivery, and performance of its obligations under this Agreement and the taking of any and all actions as may be required on its part to carry out, give effect to, and consummate the transactions contemplated by this Agreement; and (iii) this Agreement constitutes a legal, valid, and binding obligation of each respective Party, enforceable in accordance with its terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally, and subject, as to enforceability,

[1] Upon information and belief, the Total Initial Assessed Value is $0.00, and therefore the Incremental Assessed Value shall capture all assessed value growth within the Seaport TIF.

to general principles of equity regardless of whether enforcement is sought in a proceeding in equity or at law.

2. **Location of the Park; Consent; Limitations.**

(A) The Park consists of certain property described in the Master Agreement and includes certain property located in the Town, specifically including the Project Property as is hereinafter more specifically described in Exhibit A hereto.

(B) Subject to the terms, conditions and provisions hereof, the Town consents to the creation of the Park and the inclusion of the Project Property therein.

(C) The County shall not enlarge or diminish the boundaries of the Park through the addition or subtraction of the property located within the Town without receiving the Town's prior written consent to any such enlargement or diminution.[2]

(D) During the pendency of this Agreement, no amendments or modifications to the SSRC Provisions or the Jasper Allocation, the terms of which change the distribution of Net FILOT Revenues, shall be permitted without the written consent of the Town.

3. **Distribution of Net FILOT Revenue under Seaport TIF.**

(A) The Town agrees that the FILOT revenues derived from the Company within the Park shall be directly reduced by the amount attributable to the SSRC Provisions and the Jasper Allocation. Thereafter, the Net FILOT Revenues shall be distributed as follows:

(i) amounts otherwise attributable as Baseline Taxes, if any, shall be distributed in the manner set forth at South Carolina Code Annotated Section 12-44-80(A) as if the Project were not located in a Park; and

(ii) amounts otherwise attributable as TIF Revenues shall be transferred to the Town for deposit into the Special Tax Allocation Fund, subject, however to the terms of Seaport TIF pertaining to distribution of revenues derived from the Seaport TIF. The County makes no representations and assumes no responsibility as to the portion of the TIF Revenues allocable to Beaufort County School District ("***BCSD***") under the Seaport TIF, and the Town is solely responsible for making any distributions of TIF Revenues to BCSD under the terms of the Seaport TIF.

(B) In the event the Seaport TIF is terminated prior to the termination of this Agreement for any reason, the Net FILOT Revenues shall be subject to distribution under the provisions of Section 4 below.

4. **Distribution of Net FILOT Revenue After Seaport TIF**. In the event the Seaport TIF terminates prior to the termination of this Agreement, the Town's share of the Net FILOT Revenues that remain after the allocation of the SSRC Provisions and the Jasper Allocation shall be calculated in the manner set forth at South Carolina Code Annotated Section 12-44-80(A) as if the Project were not located in a Park.

[2] Contemporaneously with the execution of this Agreement, the Town has additionally authorized a separate agreement related to Project Stone, which is also located within the Park.

5. **Termination**. The Town and County agree that this Agreement shall terminate concurrently with the SSRC Agreement.

6. **Records**. The Parties covenant and agree that, upon the request of either, the other will provide to the requesting Party copies of the FILOT records and distributions pertaining to Project Property, as such records become available in the normal course of Town and County procedures.

7. **Severability**. In the event and to the extent, and only to the extent, that any provision or any part of a provision of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable the remainder of that provision or any other provision or part of a provision of this Agreement.

8. **Conflicts.** To the extent any provisions of this Agreement conflict with the provisions of any other agreement between the Parties, the terms and provisions of this Agreement shall control in all circumstances.

[Remainder of Page Intentionally Left Blank]

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officials as of the Effective Date.

**TOWN OF PORT ROYAL, SOUTH CAROLINA**

By: _____
Town Manager

(SEAL)

ATTEST:

By: _____
Town Clerk

[*Signature Page of the County on Following Page*]

**BEAUFORT COUNTY,**
**SOUTH CAROLINA**

By: _____
Chairman,
Beaufort County Council

(SEAL)

ATTEST:

By: _____
Clerk to County Council

EXHIBIT A

LEGAL DESCRIPTION - PROJECT BURGER/TRIPLE B RESTAURANT HOLDINGS LLC

ALL that certain piece, parcel or tract of land, with improvements thereon, situate, lying and being in the Town of Port Royal, Beaufort County, South Carolina, containing 0.59 acres, more or less, and being more particularly shown as Parcel "F" on that certain plat prepared by David E. Gasque, R.L.S., dated October 14, 2019, and recorded in Plat Book 152 at Page 181 in the Office of the Register of Deeds for Beaufort County, South Carolina (this plat supersedes that plat dated September 20, 2019, and recorded in Plat Book 152 at Page 150 in the Office of the Register of Deeds for Beaufort County, South Carolina). For a more complete description as to metes, courses, distances and bounds of said property, reference may be had to the aforementioned plat.

This is the same property conveyed to Triple B Restaurant Holdings, LLC by deed from Grey Ghost Property Holdings, LLC, recorded in Book 3806 at Page 1628 in the Office of the Register of Deeds for Beaufort County, South Carolina.

TMP R113-010-000-0375-0000

**STATE OF SOUTH CAROLINA )**
**) ORDINANCE**
**COUNTY OF BEAUFORT )**

**ORDINANCE APPROVING CERTAIN INTERGOVERNMENTAL AGREEMENTS BY AND BETWEEN BEAUFORT COUNTY AND THE CITY OF BEAUFORT, SOUTH CAROLINA; APPROVING CERTAIN INTERGOVERNMENTAL AGREEMENTS BY AND BETWEEN BEAUFORT COUNTY AND THE TOWN OF PORT ROYAL, SOUTH CAROLINA; AMENDING PRIOR ORDINANCES REGARDING MULTI-COUNTY INDUSTRIAL PARKS; AND ADDRESSING OTHER MATTERS RELATED THERETO (PROJECTS BURGER, GARDEN, GLASS, AND STONE).**

**WHEREAS**, Beaufort County (the "***County***"), a public body corporate and politic under the laws of the State of South Carolina, and the County is authorized pursuant to Article VIII, Section 13(D) of the Constitution of South Carolina 1895, as amended, and Section 4-1-170 of the Code of Laws of South Carolina 1976, as amended (together, the "***MCIP Law***") to enter into agreements with other counties within the State for the purpose of creating joint county industrial and business parks (a "***Park***"); and

**WHEREAS**, pursuant to Section 4-1-170(C) of the MCIP Law, if any Park encompasses all or a portion of a municipality, the counties must obtain the consent of the municipality prior to the creation of the Park; and

**WHEREAS**, the County has entered into a new Multi-County Park Agreement with Jasper County, South Carolina pursuant to the MCIP Law (the "***New MCIP Agreement***") to place four economic development projects into a Park; and

**WHEREAS**, two of the projects, identified as Project Garden (MRGSC Property, LLC) and Project Glass (WRXSC LLC) (together, the "***Projects***") are located within the City of Beaufort, South Carolina (the "***City***"); and

**WHEREAS**, two of the projects, identified as Project Burger (Triple B Restaurant Holdings, LLC) and Project Stone (REH, LLC) (together, the "***Projects***") are located within the Town of Port Royal, South Carolina (the "***Town***"); and

**WHEREAS**, the County desires to enter four Intergovernmental Agreements (together, the "***IGAs***") pursuant to which the City and Town will evidence their consent to the inclusion of each Project, as applicable, within a Park and the County will agree to certain allocations of revenues received and retained by the County with respect to property subject to the New MCIP Agreement.

**NOW, THEREFORE, BE IT ORDAINED** by the County Council in a meeting duly assembled as follows:

**Section 1 Approval of IGAs.** The IGAs, the forms of which are attached to this Ordinance as **Exhibits A**, **B**, **C**, and **D**, respectively are hereby approved. The Chairman of

County Council and/or the County Administrator are authorized, empowered, and directed to execute, acknowledge, and deliver the IGAs and, with the advice of counsel, to approve such changes to the final form of the IGAs as are necessary and convenient to carry out the intent of this Ordinance which are not adverse to the interests of the County, and the execution and delivery of the final form of the IGAs by the County is to serve as conclusive evidence of the approval thereof by the County.

**Section 2** To the best of the County's knowledge, the Project Garden property is currently included in the Agreement for Development of Joint County Industrial and Business Park between the County and Jasper County dated December 31, 1999 (the "***Prior MCIP Agreement***"), but the County is unable to locate the Prior MCIP Agreement. The County acknowledges that the Project Garden property will not be effectively included in the New MCIP Agreement prior to the expiration of the Prior MCIP Agreement with respect to such property, but the County is unable to determine such expiration date definitively. Accordingly, the allocation provisions pursuant to Sections 3 and 4 below are intended to provide for identical allocations of revenues from the Project Garden property regardless of whether it is included in the Prior MCIP Agreement or New MCIP Agreement.

**Section 3 Amendment to Prior Ordinance Regarding Prior MCIP Agreement**

Beaufort County hereby amends the provisions of all prior ordinances regarding the allocation of revenues within Beaufort County pursuant to the Prior MCIP Agreement (as defined below) and removes and replaces any prior allocation provisions with the following:

(a) Revenues generated from industries or businesses located in the Beaufort County portion of the Park to be retained by Beaufort County shall be distributed within Beaufort County in accordance with this subsection:

(1) First, unless Beaufort County elects to pay or credit the same from only those revenues which Beaufort County would otherwise be entitled to receive as provided under item (3) below, to pay annual debt service on any special source revenue bonds issued by Beaufort County pursuant to, or to be utilized as a credit in the manner provided in Section 4-1-175, Code of Laws of South Carolina 1976, as amended;

(2) Second, at the option of Beaufort County, to reimburse Beaufort County for any expenses incurred by it in the administration, development, operation, maintenance and promotion of the Park or the industries and businesses located therein or for other economic development purposes of Beaufort County; and

(3) Third, to those taxing entities in which the property is located, in the same manner and proportion that the millage levied for the taxing entities would be distributed if the property were taxable for that year.

(b) Notwithstanding any other provision of this section:

(1) all taxing entities which overlap the applicable properties within the Park shall receive at least some portion of the revenues generated from such properties; and

(2) all revenues receivable by a taxing entity in a fiscal year shall be allocated to operations and maintenance and to debt service as determined by the governing body of the taxing entity.

(c) Revenues generated from industries or businesses located in the Jasper County portion of the Park shall be retained by Beaufort County.

(d) Notwithstanding any other provision of this section, with respect to Project Garden (MGRSC Property, LLC), the revenue allocations are subject to the provisions of the Intergovernmental Agreement by and between Beaufort County and the City of Beaufort dated _____, 2021.

**Section 4 Amendment to Prior Ordinance Regarding New MCIP Agreement**

Beaufort County hereby amends the provisions of all prior ordinances regarding the allocation of revenues within Beaufort County pursuant to the New MCIP Agreement and removes and replaces any prior allocation provisions with the following:

(a) Revenues generated from industries or businesses located in the Beaufort County portion of the Park to be retained by Beaufort County shall be distributed within Beaufort County in accordance with this subsection:

(1) First, unless Beaufort County elects to pay or credit the same from only those revenues which Beaufort County would otherwise be entitled to receive as provided under item (3) below, to pay annual debt service on any special source revenue bonds issued by Beaufort County pursuant to, or to be utilized as a credit in the manner provided in Section 4-1-175, Code of Laws of South Carolina 1976, as amended;

(2) Second, at the option of Beaufort County, to reimburse Beaufort County for any expenses incurred by it in the administration, development, operation, maintenance and promotion of the Park or the industries and businesses located therein or for other economic development purposes of Beaufort County; and

(3) Third, to those taxing entities in which the property is located, in the same manner and proportion that the millage levied for the taxing entities would be distributed if the property were taxable for that year.

(b) Notwithstanding any other provision of this section:

(1) all taxing entities which overlap the applicable properties within the Park shall receive at least some portion of the revenues generated from such properties; and

(2) all revenues receivable by a taxing entity in a fiscal year shall be allocated to operations and maintenance and to debt service as determined by the governing body of the taxing entity.

(c) Revenues generated from industries or businesses located in the Jasper County portion of the Park shall be retained by Beaufort County.

(d) Notwithstanding any other provision of this section, with respect to Project Garden (MRGSC Property, LLC) and Project Glass (WRXSC LLC), the revenue allocations are subject to the provisions of the Intergovernmental Agreements by and between Beaufort County and the City of Beaufort dated _____, 2021, and with respect to Project Burger (Triple B Restaurant Holdings, LLC) and Project Stone (REH, LLC), the revenue allocations are subject to the provisions of the Intergovernmental Agreements by and between Beaufort County and the Town of Port Royal dated _____, 2021.

**Section 5** The provisions of this Ordinance are hereby declared to be separable, and if any section, phrase, or provision shall for any reason be declared by a court of competent

jurisdiction to be invalid or unenforceable, such declaration shall not affect the validity of the remainder of the sections, phrases, and provisions hereunder.

**Section 6** All orders, resolutions, ordinances, and parts thereof in conflict herewith are, to the extent of such conflict, hereby repealed, and this Ordinance shall take effect and be in full force from and after its passage and approval.

(SIGNATURE PAGE TO FOLLOW)

Passed and approved this ____ day of _____, 2021.

**BEAUFORT COUNTY,**
**SOUTH CAROLINA**

Signature: _____
Name: Joseph Passiment
Title: Chair, Beaufort County Council

STATE OF SOUTH CAROLINA )
)
COUNTY OF BEAUFORT )

I, the undersigned, Clerk to County Council of Beaufort County, South Carolina ("County Council"), DO HEREBY CERTIFY:

That the foregoing constitutes a true, correct, and verbatim copy of an Ordinance adopted by the County Council. The Ordinance was read and received a favorable vote at three public meetings of the County Council on _____, _____, and _____. At least one day passed between first and second reading, and at least seven days passed between second and third readings. A public hearing was held on _____, and notice of the public hearing was published in the _____ on _____. At each meeting, a quorum of County Council was present and remained present throughout the meeting.

Attached hereto are excerpts of the minutes of the meetings of the County Council. The County Council complied with the Freedom of Information Act, Chapter 4, Title 30 of the S.C. Code of Laws, 1976, in connection with said meetings of County Council.

The Ordinance is now in full force and effect.

IN WITNESS WHEREOF, I have hereunto set my Hand and the Seal of Beaufort County Council, South Carolina, as of this ____ day of _____, 2021.

Signature: _____
Name: Sarah W. Brock
Title: Clerk to County Council

# EXHIBIT A

## Form of Agreement – Project Garden

# EXHIBIT B

## Form of Agreement – Project Glass

# EXHIBIT C

## Form of Agreement – Project Burger

# EXHIBIT D

## Form of Agreement – Project Stone

# INTERGOVERNMENTAL AGREEMENT

This **INTERGOVERNMENTAL AGREEMENT** (this "***Agreement***") is entered into this [__] day of [__], 2021 (the "***Effective Date***"), by and between the City of Beaufort, South Carolina (the "***City***"), a municipality and political subdivision of the State of South Carolina (the "***State***"), and Beaufort County, South Carolina (the "***County***"), a county and political subdivision of the State, each a "***Party***" and together the "***Parties***."

## RECITALS

**WHEREAS**, the County and Jasper County, South Carolina ("***Jasper***" and together with the County, the "***Counties***") are authorized pursuant to Article VIII, Section 13(D) of the Constitution of South Carolina 1895, as amended, and South Carolina Code Annotated Section 4-1-170 (collectively, the *"**MCIP Law***") to jointly develop a multi-county industrial or business park within the geographical boundaries of one or both of the member counties.

**WHEREAS**, a company identified as MRGSC Property, LLC (f/k/a Project Garden) (the "***Company***") has proposed establishing or expanding certain manufacturing facilities on property located within the County and the City (the "***Project***"), and has requested that the County place the Project within a multi-county industrial or business park (the "***Park***") under the MCIP Law.

**WHEREAS**, the Counties plan to enter into or have entered into a "Multi-County Park Agreement (REHC, LLC; Triple B Restaurant Holdings, LLC; GlassWRXSC, LLC; MRGSC Property, LLC)" (the "***Master Agreement***"), the provisions of which govern (i) the operation of the Park, including the sharing of expenses and revenues of the Park, and (ii) the manner in which the fee-lieu of tax ("***FILOT***") revenue is to be distributed to each of the taxing entities within each of the Counties, including the standard 1% allocation of FILOT revenue to Jasper (the "***Master Agreement Jasper Allocation***").

**WHEREAS**, to the best of the County's knowledge, the Project Property (as defined herein) is currently included in the Agreement for Development of Joint County Industrial and Business Park between the County and Jasper dated December 31, 1999 (the "***Prior MCIP Agreement***"), but the County is unable to locate the Prior MCIP Agreement.

**WHEREAS**, the County acknowledges that the Project Property will not be effectively included in the Master Agreement prior to the expiration of the Prior MCIP Agreement with respect to such property, but the County is unable to determine such expiration date definitively.

**WHEREAS**, in order to eliminate uncertainty with respect to such expiration date, the County has agreed to modify the revenue allocation provisions governing revenues collected and distributed by the County pursuant to the Prior MCIP Agreement to ensure that such allocations are identical to the allocations in the Master Agreement and Section 3 of this Agreement.

**WHEREAS**, upon information and belief, the Prior MCIP Agreement also provides for a standard 1% allocation of FILOT revenue to Jasper (the "***Prior MCIP Agreement Jasper Allocation***").

**WHEREAS**, the County and the Company have entered into, or intend to enter, into a Special Source Revenue Credit Agreement (the "***SSRC Agreement***") wherein the Company, prior to payment of the Master Agreement Jasper Allocation, will be provided a special source revenue

credit (synthetic FILOT), the terms of which provide that FILOT revenues due and owing by the Company will be computed utilizing a 6% assessment ratio and a fixed millage rate (the "***SSRC Provisions***"). The FILOT revenues that remain after application of the Master Agreement Jasper Allocation or Prior MCIP Agreement Jasper Allocation, as applicable, and the SSRC Provisions is defined for the purposes herein as the "***Net FILOT Revenue***."

**WHEREAS**, the properties related to the Project, as is hereinafter more specifically described in Exhibit A hereto("***Project Property***"), within the Park encompass a portion of the City, and, pursuant to Section 4-1-170(C) of the MCIP Law, the County must obtain the consent of the City prior to the creation of the Park.

**WHEREAS**, the Project Property has been recently annexed into the City and the FILOT revenues derived therefrom may be the subject of an ongoing dispute between the City and the Burton Fire District ("***Burton***").

**WHEREAS**, the City and the County desire to enter into this Agreement to: (i) identify the location of the Project Property; (ii) confirm the City's commitment and consent to the creation of the Park; and (iii) provide the methodology for distribution of Net FILOT Revenues to the City.

**WHEREAS**, the City and the County, each acting by and through their respective governing bodies, have authorized the execution and delivery of this Agreement.

**NOW THEREFORE**, in consideration for the mutual covenants, promises, and consents contained in this Agreement, the Parties agree as follows:

1. **Binding Agreement**; **Representations**.

(A) This Agreement serves as a written instrument setting forth the entire agreement between the Parties and shall be binding on the Parties, their successors and assigns.

(B) Each of the Parties represents and warrants that: (i) it has the full legal right, power, and authority to enter into this Agreement and carry out and consummate all other transactions contemplated by this Agreement; (ii) it has duly authorized the execution, delivery, and performance of its obligations under this Agreement and the taking of any and all actions as may be required on its part to carry out, give effect to, and consummate the transactions contemplated by this Agreement; and (iii) this Agreement constitutes a legal, valid, and binding obligation of each respective Party, enforceable in accordance with its terms, subject to applicable bankruptcy, insolvency and similar laws affecting creditors' rights generally, and subject, as to enforceability, to general principles of equity regardless of whether enforcement is sought in a proceeding in equity or at law.

2. **Location of the Park; Consent; Limitations.**

(A) The Park consists of certain property described in the Master Agreement and includes certain property located in the City, specifically including the Project Property as is hereinafter more specifically described in Exhibit A hereto.

(B) Subject to the terms, conditions and provisions hereof, the City consents to the creation of the Park and the inclusion of the Project Property therein.

(C) The County shall not enlarge or diminish the boundaries of the Park through the addition or subtraction of the property located within the City without receiving the City's prior written consent to any such enlargement or diminution.[1]

(D) During the pendency of this Agreement, no amendments or modifications to the SSRC Provisions, the Master Agreement Jasper Allocation, or the Prior MCIP Agreement Jasper Allocation, the terms of which change the distribution of Net FILOT Revenues, shall be permitted without the written consent of the City.

(E) Upon the termination of the Prior MCIP Agreement in accordance with its terms, the Parties agree that the terms of the Master Agreement, as supplemented by the terms of this Agreement, shall control.

3. **Distribution of Net FILOT Revenue**.

(A) The City's share of the Net FILOT Revenues (the "***City's FILOT Portion***") shall be calculated in the manner set forth at South Carolina Code Annotated Section 12-44-80(A) as if the Project were not located in a Park.

(B) In the event that Burton is determined to be legally entitled to some allocation of the City's FILOT Portion, through (i) a determination of a court of competent jurisdiction, (ii) through an agreement between the City and Burton, or (iii) upon written request of the City, then the Parties agree, and as permitted by the MCIP Law, that the County shall allocate to Burton the sum of $1.00 per year from the City's FILOT Portion.

4. **Termination**. The City and County agree that this Agreement shall terminate concurrently with the SSRC Agreement.

5. **Records**. The Parties covenant and agree that, upon the request of either, the other will provide to the requesting Party copies of the FILOT records and distributions pertaining to Project Property, as such records become available in the normal course of City and County procedures.

6. **Severability**. In the event and to the extent, and only to the extent, that any provision or any part of a provision of this Agreement shall be held invalid or unenforceable by any court of competent jurisdiction, such holding shall not invalidate or render unenforceable the remainder of that provision or any other provision or part of a provision of this Agreement.

7. **Conflicts.** To the extent any provisions of this Agreement conflict with the provisions of any other agreement between the Parties, the terms and provisions of this Agreement shall control in all circumstances.

[Remainder of Page Intentionally Left Blank]

[1] Contemporaneously with the execution of this Agreement, the City has additionally authorized a separate agreement related to Project Glass, which is also located within the Park.

**IN WITNESS WHEREOF**, the Parties have caused this Agreement to be duly executed by their duly authorized officials as of the Effective Date.

**CITY OF BEAUFORT, SOUTH CAROLINA**

By: _____
City Manager

(SEAL)

ATTEST:

By: _____
City Clerk

[*Signature Page of the County on Following Page*]

**BEAUFORT COUNTY,**
**SOUTH CAROLINA**

By: _____
Chairman,
Beaufort County Council

(SEAL)

ATTEST:

By: _____
Clerk to County Council

EXHIBIT A

LEGAL DESCRIPTION - PROJECT GARDEN/MRGSC Property, LLC

**That certain parcel of real property located in the County of Beaufort, State of South Carolina, containing 3.00 acres, and shown as Beaufort County tax map parcel R120-024-0000-00445, Lot 15 in the Beaufort Commerce Park.**

# BEAUFORT COUNTY COUNCIL
## AGENDA ITEM SUMMARY

**ITEM TITLE:**

First Reading of an Ordinance Proposing Amendments to Beaufort County Code of Ordinances: Chapter 46, Article II, Sections 46.26 through 46.33

**MEETING NAME AND DATE:**

Executive Committee June 7, 2021

**PRESENTER INFORMATION:**

Thomas J. Keaveny, II
Deputy County Attorney

Laura J. Evans, Esquire
Shumaker Loop & Kendrick (Charleston Office)

**ITEM BACKGROUND:**

Beaufort County's Ordinance regarding Beaufort Memorial Hospital has been in effect without revision for approximately 40 years (since at least 1982). The Ordinance needs to be updated.

**PROJECT / ITEM NARRATIVE:**

Staff recently had reason to review Beaufort County's Ordinance which relates to Beaufort Memorial Hospital. The County retained Laura Evans, managing partner of the Charleston office of Shumaker Loop & Kendrick to assist in that review. Ms. Evans limits her practice primarily to health care law, and health care administration law. Ms. Evans recommends Beaufort County update its Ordinance in a number of important particulars all as set forth in the proposed amended Ordinance which is attached.

**FISCAL IMPACT:**

None

**STAFF RECOMMENDATIONS TO COUNCIL:**

Amend the Ordinance as recommended by Ms. Evans.

**OPTIONS FOR COUNCIL MOTION:**

◊ Allow the existing ordinance to remain as it is;
◊ Amend the existing ordinance as recommended by Ms. Evans;
◊ Amend the existing ordinance incorporating some of the recommendations of Ms. Evans.

**Next step: County Council June 14, 2021 to review Committee recommendations. First reading of an Ordinance to amend existing ordinance.**

**ORDINANCE 2021/ _____**

**TEXT AMENDMENTS TO BEAUFORT COUNTY CODE OF ORDINANCES: CHAPTER 46, ARTICLE II, SECTIONS 46.26 THROUGH 46.33.**

**WHEREAS** deleted text is stricken through; added text is underlined.

Adopted this _____ day of _____, 202___.

COUNTY COUNCIL OF BEAUFORT COUNTY

By: _____

Joseph Passiment, Chairman

ATTEST:

_____

Sarah w. Brock, JD, Clerk to Council

First Reading:
Second Reading:
Third reading:

~~ARTICLE II. - BEAUFORT COUNTY MEMORIAL HOSPITAL BOARD OF TRUSTEES~~ Sec. 46-26. ~~-~~ Purpose; ~~agency created~~form.

The ~~board of regents~~Beaufort County Council ("County Council") is charged with enacting ordinances necessary and proper for preserving the health of Beaufort County residents. The Board of Trustees of Beaufort County Memorial Hospital (~~referred to as the~~ "board") is constituted ~~an agency~~as a board of the county council in order to equip, maintain and operate Beaufort County Memorial Hospital and such other ancillary facilities and services as ~~the board~~ may ~~find~~be necessary to serve the health care needs of the citizens of the county. The board shall be known as the Beaufort County Memorial Hospital Board of Trustees. The board shall adopt an official seal and shall keep minutes of all meetings and records of all transactions in accordance with applicable law.

Sec. 46-27. - Membership; organization; terms of office.

(a) ~~The initial board of trustees shall be composed of the existing nine members of the Beaufort Memorial Hospital Boards of Regents. The initial board members shall complete their terms as defined at the time of their most recent appointment. Hereafter, vacancies in the board of trustees of Beaufort County Memorial Hospital shall be filled by the county council from nominees submitted by the board. Section 2-193 shall not govern the number of voting members of the board, which shall be determined by the board, provided that the board is comprised of a minimum of seven voting members.~~ The board shall have a total of thirteen (13) members as follows, all of whom must be residents of Beaufort County and be registered to vote therein: (i) eleven (11) members appointed by County Council; (ii) the hospital's medical staff chief; and (iii) the Beaufort Memorial Hospital Foundation chairperson. At least one member of County Council shall act as an advisory member, with no voting rights. Vacancies on the board shall be filled by the county council from nominees based upon selection criteria outlined in Sec. 2-193(d). Each county district shall have at least one board member representing the district.

(b) The members of the board ~~of trustees~~ shall elect a chairman and such other officers as the board ~~of trustees~~ may deem necessary. ~~Subsection 2-193(g) shall not govern officers' eligibility for reelection, which shall be determined by the board.~~

(c) Board members shall serve three (3) year terms and may serve more than one (1) term, all subject to the provisions of Sec. 2-193(b).

Sec. 46-28. - Powers and duties.

The board ~~of trustees of Beaufort County Memorial Hospital~~ shall have the following powers and duties:

(1) Adopt and use a corporate seal;

(2) Adopt such bylaws, rules and regulations for the conduct of its business and expenditure of its funds as it may deem advisable, including the development and implementation of a procurement policy;

(3) Acquire, by gift, purchase, lease or otherwise, all kinds and descriptions of real and personal property;

(4) Accept gifts, grants, donations, devises and bequests;

(5) Enlarge and improve any hospital building that it may acquire or construct, subject to budgetary constraints and the authorization of the County Council;

(6) Adequately staff and equip any ~~hospital~~health care facility that it may operate;

(7) Employ a competent administrator or contract for management services to execute policies established by the board for the operation of the facilities maintained by the board, except that any contract for management services must be authorized by the County Council;

(8) Provide and operate outpatient departments;

(9) Establish and operate such clinics as the board may deem necessary to the health of the residents of the county;

(10) Employ such personnel as it may deem necessary for the efficient operation of the several facilities maintained by the board;

(11) Establish and promulgate reasonable rates for the use of the services and facilities afforded by the board;

(12) Provide reasonable regulations concerning the use of the facilities maintained by the board, including reasonable rules governing the conduct of physicians, nurses and technicians while on duty or practicing their professions in the facilities maintained by the board;

(13) Define eligibility requirements for patients for charity services, operate and maintain necessary services for such patients, contract with third parties for reimbursement for the cost of services rendered to such patients, and collect partial payment from patients unable to pay the rates established by the board;

(14) Arrange with proper authorities of any adjoining county, upon such financial terms as are agreeable to each, to admit and care for charity cases from adjoining counties, provided that patients may be admitted to the hospital from any place whatsoever;

(15) Expend the proceeds derived from the charges made for the use of the services and facilities of the hospital for the operation and maintenance thereof;

(16) Expend any funds received in any manner, including the proceeds derived from the issue of bonds,, to defray any costs incident to establishing, constructing, equipping and maintaining any hospital;

(17) Apply to the federal government and any other governmental agency for a grant of monies to aid in the construction and equipment of any hospital;

(18) Dispose, by sale, lease, or otherwise, of any property, real or personal~~, that it may possess, provided that the county council and the board of trustees shall, from time to time, inform each other of their plans to dispose of real property so that mutual needs can be assessed~~ so long as the disposal does not interfere with the maintenance of Beaufort Memorial Hospital,;

(19) Borrow funds for use in constructing, equipping, operating and maintaining the facilities afforded by the board, provided that the board shall have no authority to create any financial obligation on the county except as may be approved by the council;

(20) Enter into contracts for hospital care with any association or agency of the federal government having a hospital care program; and

(21) ~~Exercise~~With the authorization of the County Council, exercise the power of eminent domain in the manner provided by the general laws of the state for procedure by any county, municipality or authority created by or organized under the laws of this state or by the state highway department or by railroad corporations.

(22) Equip, maintain, and operate Beaufort Memorial Hospital and any ancillary facilities or services in accordance with applicable law and in a manner to protect and maintain its tax-exempt status.

Sec. 46-29. - Indigent care.

The board ~~of trustees of Beaufort County Memorial Hospital~~ shall be charged with the responsibility of providing health care for the county's indigent ~~county~~ citizens. The county shall provide monies, in amounts deemed appropriate through the county's budgetary process, to contribute toward the cost of indigent care provided by the hospital and/or its ancillary facilities and services.

~~Sec. 46-30. - Management and control.~~

~~The board of trustees of Beaufort County Memorial Hospital shall manage and control the hospital and its financial affairs. The board shall be exempt from section 2-193, provided that the board shall maintain written personnel and purchasing procedures.~~

Sec. 46-31. - Additional capital funding; Loans.

(a) The ~~county council~~County Council and the board ~~of trustees of Beaufort County Memorial Hospital~~ recognize and acknowledge that it will be necessary, from time to time, to secure funds for expansion or improvement of the hospital and related ancillary facilities or services. The council and the board pledge their cooperation in formulating and executing programs designed to fund necessary ~~longterm~~long-term capital improvements of facilities maintained by the board.

(b) The board may borrow money and obtain loans from, and issue notes to, banks or other lending insitutions or other governmental entities in amounts up to Five Hundred Thousand and No/100 Dollars ($500,000.00) and secure such loans with a pledge of hospital revenues and assets, including mortgaging or granting security interests in real and personal property of Beaufort Memorial Hospital, provided such loans: (i) shall be authorized by a resolution of the board, without the necessity of obtaining consents or approvals from any other party or entity; (ii) shall be under such terms and conditions as established by the board; and (iii) shall not require a public bid from such banks or other lending institutions or other government entities. In addition to these requirements, any borrowing or loans in excess of Five Hundred Thousand and No/100 Dollars ($500,000.00) must be authorized by County Council.

(c) The board shall have no authority to create any financial obligation or debt on the county without the County Council's authorization.

(d) Bonds of the hospital, for whatever purpose, shall be issued only by the council ~~and only~~ or by third-parties with the council's authorization. Funds received from such issues shall be deposited with the county treasurer.

Sec. 46-32. ~~-~~ Audit; Budget Requests; Regular Reports; Records.

The board ~~of trustees of Beaufort County Memorial Hospital~~ shall file a copy of an annual audit of the financial operations of the hospital with the county administrator. During April of each year, the board shall furnish the council with its budget requests for the succeeding fiscal year. On a quarterly basis, the board shall supply County Council with the following information: (1) copies of minutes of all regular, special, and emergency board meetings, as well as all board committee meetings; (2) income statement summary, balance sheet, and cash flow statements from each month in the quarter, including any data regarding any physician network; (3) days of cash on hand for each month in the quarter; (4) maximum debt service coverage for each month in the quarter; and (5) debt to capitalization report for each month in the quarter. Records relating to the hospital and its ancillary facilities and services shall at all times be available for inspection by County Council or its authorized representative.

~~Sec. 46-33. - Amendments.~~

~~This article shall not be amended, nor shall the agency's relationship created by this article be modified or terminated without the express mutual consent and approval of the council and the board of trustees of Beaufort County Memorial Hospital.~~

~~Secs. 46-34—46-90. - Reserved.~~

Document comparison by Workshare 9.5 on Tuesday, June 1, 2021 1:51:17 PM

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| Description | #15305021v1<iManage> - Original Ordinance |
| Document 2 ID | interwovenSite://DMS/iManage/15145309/1 |
| Description | #15145309v1<iManage> - redlined ordinance |
| Rendering set | Standard |

| **Legend:** | |
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| Insertion | |
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| **Statistics:** | |
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| | Count |
| Insertions | 33 |
| Deletions | 32 |
| Moved from | 0 |
| Moved to | 0 |
| Style change | 0 |
| Format changed | 0 |
| Total changes | 65 |

# BEAUFORT COUNTY COUNCIL
## AGENDA ITEM SUMMARY

**ITEM TITLE:**

*A one year contract extension for Mauldin & Jenkins.*

**MEETING NAME AND DATE:**

County Council Meeting 07/26/2021

**PRESENTER INFORMATION:**

*Hayes Williams Interim Chief Financial Officer*

*5 minutes*

**ITEM BACKGROUND:**

*An extension needs to be approved to extend the external audit an additional year in order to meet necessary reporting requirements.*

**PROJECT / ITEM NARRATIVE:**

Mauldin & Jenkins was hired for a five year contract in 2016. Mauldin & Jenkins prepares the Annual Comprehensive Financial Report, the Single Audit, the Passenger Facility Charge Program Agreed Upon Procedure, and the South Carolina Department of Disabilities and Special Needs Provider Audit. Staff is requesting that Council approve an additional one year extension in order to meet the necessary reporting requirements for Beaufort County.

**FISCAL IMPACT:**

*This is a budgeted item as follows:*

*$69,500 10001111-51160 Professional services*

*$12,000 24410011-51160 Professional services*

**STAFF RECOMMENDATIONS TO COUNCIL:**

Staff recommends to extend the contract with Mauldin & Jenkins an additional year. Staff will request an RFP for the spring of 2022.

**OPTIONS FOR COUNCIL MOTION:**

Staff recommends to extend the contract with Mauldin & Jenkins an additional year. Staff will request an RFP for the spring of 2022.

MAULDIN & JENKINS
CPAs & ADVISORS

June 15, 2021

Members of the Beaufort County Council
Beaufort County, South Carolina
106 Industrial Village Road, Building 2
Beaufort, South Carolina 29906

Attn: Hayes Williams, CPA, Finance Director

We are pleased to confirm our understanding of the nature and limitations of the services we are to provide for Beaufort County, South Carolina (the "County").

We will apply the agreed-upon procedures which the Government has specified and which are listed below to assist you with respect to compliance with the requirements outlined in the South Carolina Department of Disabilities and Special Needs ("DDSN") Provider Audit Policy (275-06-DD) for the fiscal year ended June 30, 2021. Our engagement to apply agreed-upon procedures will be conducted in accordance with attestation standards established by the American Institute of Certified Public Accountants. The sufficiency of the procedures is solely the responsibility of those parties specified in this report. Consequently, we make no representation regarding the sufficiency of the procedures described below, either for the purpose for which this report has been requested or for any other purpose. If, for any reason, we are unable to complete the procedures, we will describe any restrictions on the performance of the procedures in our report, or will not issue a report as a result of this engagement.

Because the agreed-upon procedures included in this letter do not constitute an examination, we will not express an opinion on any of the specific elements, accounts, or items referred to in our report. In addition, we have no obligation to perform any procedures beyond those listed below. If, however, as a result of the procedures or through other means, matters come to our attention that cause us to believe that the Government is not in compliance with the DDSN Provider Audit Policy (275-06-DD), we will disclose those matters in our report. Such disclosure, if any, may not necessarily include all matters which might have come to our attention had we performed additional procedures or an examination.

We will submit a report listing the procedures performed and our findings. This report is intended solely for the information and use of management, Beaufort County Council, Beaufort County Disabilities and Special Needs and South Carolina Department of Disabilities and Special Needs and is not intended to be and should not be used by anyone other than these specified parties.

Our report will contain a paragraph indicating that had we performed additional procedures, other matters might have come to our attention that would have been reported to you.

The specific agreed-upon procedures to be performed with respect to compliance with the requirements outlined in the DDSN Provider Audit Policy (275-06-DD) for the fiscal year ended June 30, 2021, are outlined as follows:

| Item | Procedures and Findings |
|---|---|
| a. | We will inquire of management regarding the controls over the Medicaid billing process and controls over Medicaid billable services. |
| b. | We will inquire indication that consumers' total cash do not exceed the established limits mandated by Medicaid (generally $2,000). |
| c. | We will obtain and read the consumer files for indication that documentation is on file to support the billings for which the provider is receiving payments for Medicaid billable services. |
| d. | We will verify with consumers that services are being provided as indicated in the documentation file. |
| e. | We will obtain and read evaluation notes for indication that monitoring is being provided for consumers by supervisory staff for which the provider is receiving payments for Medicaid billable services. |
| f. | We will inquire of management regarding the controls over consumers' personal funds, managed by provider staff. |
| g. | We will determine that each member of the provider staff having access to consumers' personal funds is bonded. |
| h. | We will obtain and read consumers' bank statements for indication that consumers' personal funds are not borrowed, loaned, or co-mingled by the provider or another person or entity for any purpose, or combined or co-mingled in any way with the provider's operating funds. |
| i. | We will obtain and read consumers' bank statements for indication that consumers' checking and/or savings accounts are established in the consumers' names and social security numbers, or that they indicate that the accounts are for the benefit of the consumers. |
| j. | We will review disbursements and read the signatures on the check copies to determine that withdrawals from consumers' accounts require co-signature of the facility or program director or his or her designee, unless a waiver is on file. |

k. We will inquire and review check registers, which include all account transactions, for the consumers for indication that items costing $50 or more are purchased by check from the consumers' accounts.

l. We will obtain and read supporting documentation for the deposits selected for consumer accounts for indication that all sources of income are deposited within five business days of receipt to their accounts.

m. We will obtained and read bank reconciliations for consumers' accounts for indication that the reconciliations are being performed by a staff member who is not a co-signer for the accounts and within 20 business days of receipt of the bank statements.

n. We will review copies of receipts for indication that receipts are on hand to support expenditures for non-incidental purchases made from the consumers' personal funds.

o. We will review and read check registers for five consumers for indication that checks are not written to cash.

p. We will inquire for indication that consumers' cash on hand (consumers' cash held in the residence by staff plus cash actually held by the consumer) does not exceed $50.

q. We will inquire for indication that actual counts of consumers' cash was held by residential staff, and agreement of the counts to the records, are done monthly by someone who does not have authority to receive or disburse cash. The count and agreement to the records must be documented in the cash records.

r. We will gain an understanding of the DDSN requirements for compensating Early Interventionists, Case Managers, and Direct Care staff, excluding DDSN Respite workers, and performed procedures to determine if the established minimum salary or hourly wage for staff members is in accordance with DDSN requirements.

s. We will gain an understanding of the DDSN room and board policy through discussions and inquiries with management to determine whether or not the Provider has established and implemented a room and board policy for consumers' fees that has been reviewed and approved by DDSN.

You are responsible for the presentation of the information and for selecting the criteria and determining that such criteria are appropriate for your purposes. David Irwin is the engagement partner and is responsible for supervising the engagement and signing the report or authorizing another individual to sign it.

You are also responsible for making all management decisions and performing all management functions; for designating an individual with suitable skill, knowledge, and/or experience to oversee the agreed-upon procedures we provide; and for evaluating the adequacy and results of those procedures and accepting responsibility for them.

At the conclusion of the engagement, we will require a representation letter from management that, among other things, will confirm management's responsibility for the presentation of the information related to the County.

We expect to begin our audit in mid-October. Our quoted hourly rates vary according to the degree of responsibility involved and the experience level of the personnel assigned to your audit. Our fee for these services will be $12,000 for the year ended June 30, 2021. However, if major problems arise during our examination, any additional work necessary will be billed at standard rates. This above fee will be subject to adjustments based on unanticipated changes in the scope of our work and/or the incomplete or untimely receipt by us of the information on the respective client participation listings to be prepared annually. All other provisions of this letter will survive any fee adjustment. No changes will be made without approval from you regarding the proposed change. Our invoices for these fees will be rendered as work progresses and are payable upon presentation.

We appreciate the opportunity to assist you and believe this letter accurately summarizes the significant terms of our engagement. If you have any questions, please let us know. If this letter defines the arrangements as you understand them, please sign below and return to us. If the need for additional procedures arises, our agreement with you will need to be revised. It is customary for us to enumerate these revisions in an addendum to this letter. If additional specified parties of the report are added, we will require that they acknowledge in writing their responsibility for the sufficiency of procedures.

Sincerely,

MAULDIN & JENKINS, LLC

David Irwin

RESPONSE:

This letter correctly sets forth the understanding of Beaufort County, South Carolina.

By: _____

Title: _____

MAULDIN & JENKINS
CPAs & ADVISORS

June 15, 2021

Members of the County Council
Beaufort County, South Carolina
106 Industrial Village Road, Building 2
Beaufort, South Carolina 29906

Attn: Hayes Williams, CPA, Finance Director

We are pleased to confirm our understanding of the services we are to provide Beaufort County, South Carolina (the "County") for the year ended June 30, 2021. We will audit the financial statements of the governmental activities, the business-type activities, each major fund and the aggregate remaining fund information, including the related notes to the financial statements, which collectively comprise the basic financial statements, of the County as of and for the year then ended. Accounting standards generally accepted in the United States of America provide for certain required supplementary information ("RSI"), such as management's discussion and analysis ("MD&A"), to supplement the County's basic financial statements. Such information, although not a part of the basic financial statements, is required by the Governmental Accounting Standards Board who considers it to be an essential part of financial reporting for placing the basic financial statements in an appropriate operational, economic, or historical context. As part of our engagement, we will apply certain limited procedures to the County's RSI in accordance with auditing standards generally accepted in the United States of America. These limited procedures will consist of inquiries of management regarding the methods of preparing the information and comparing the information for consistency with management's responses to our inquiries, the basic financial statements and other knowledge we obtained during our audit of the basic financial statements. We will not express an opinion or provide any assurance on the information because the limited procedures do not provide us with sufficient evidence to express an opinion or provide any assurance. The following RSI is required by generally accepted accounting principles and will be subjected to certain limited procedures, but will not be audited:

1. Management's Discussion and Analysis ("MD&A").
2. Schedule of Modified Approach for Airport Infrastructure Assets.
3. Schedule of County's Proportionate Share of the Net Pension Liability.
4. Schedule of County's Contributions to the South Carolina Retirement System.
5. Budgetary comparisons for the General Fund and Major Special Revenue Funds.

We have also been engaged to report on supplementary information other than RSI that accompanies the County's financial statements. We will subject the following supplementary information to the auditing procedures applied in our audit of the financial statements and certain additional procedures, including comparing and reconciling such information directly to the underlying accounting and other records used to prepare the financial statements or to the financial statements themselves and other additional procedures in accordance with auditing standards generally accepted in the United States of America, and will provide an opinion on it in relation to the financial statements as a whole:

1. Schedule of Expenditures of Federal Awards.
2. Combining and Individual Fund Statements and Schedules.
3. Schedule of Fines, Fees, Assessments and Surcharges.
4. Daufuskie Ferry Schedule of Budgeted to Actual.

The following other information accompanying the financial statements will not be subjected to the auditing procedures applied in our audit of the financial statements, we have no responsibility for determining whether such other information is properly stated, and our auditor's report will not provide an opinion or any assurance on that other information:

1.Introductory section
2.Statistical section

**Audit Objectives**
The objective of our audit is the expression of opinions as to whether your basic financial statements are fairly presented, in all material respects, in conformity with U.S. generally accepted accounting principles and to report on the fairness of the supplementary information referred to in the second paragraph when considered in relation to the financial statements as a whole. The objective also includes reporting on –

- Internal control over financial reporting and compliance with the provisions of laws, regulations, contracts and award agreements, noncompliance with which could have a material effect on the financial statements in accordance with *Government Auditing Standards.*

- Internal control over compliance related to major programs and an opinion (or disclaimer of opinion) on compliance with federal statutes, regulations, and the terms and conditions of federal awards that could have a direct and material effect on each major program in accordance with the Single Audit Act Amendments of 1996 and Title 2 U.S. *Code of Federal Regulations* (CFR) Part 200, *Uniform Administrative Requirements, Cost Principles, and Audit Requirements for Federal Awards* (Uniform Guidance).

The *Government Auditing Standards* report on internal control over financial reporting and on compliance and other matters will include a paragraph that states: 1) that the purpose of the report is solely to describe the scope of testing of internal control and compliance and the results of that testing, and not to provide an opinion on the effectiveness of the entity's internal control or on compliance, and 2) that the report is an integral part of an audit performed in accordance with *Government Auditing Standards* in considering the entity's internal control and compliance. The Uniform Guidance report on internal control over compliance will include a paragraph that states that the purpose of the report on internal control over compliance is solely to describe the scope of testing of internal control over compliance and the results of that testing based on the requirements of the Uniform Guidance. Both reports will state that the report is not suitable for any other purpose.

Our audit will be conducted in accordance with auditing standards generally accepted in the United States of America; the standards for financial audits contained in *Government Auditing Standards*, issued by the Comptroller General of the United States; the Single Audit Act Amendments of 1996; and the provisions of the Uniform Guidance, and will include tests of accounting records, a determination of major program(s) in accordance with the Uniform Guidance, and other procedures we consider necessary to enable us to express such opinions. We will issue written reports upon completion of our Single Audit. Our reports will be addressed to the Members of the County Council of Beaufort County, South Carolina. We cannot provide assurance that unmodified opinions will be expressed. Circumstances may arise in which it is necessary for us to modify our opinions or add emphasis-of-matter or other-matter paragraphs. If our opinions on the financial statements or the Single Audit compliance opinions are other than unmodified, we will discuss the reasons with you in advance. If, for any reason, we are unable to complete the audit or are unable to form or have not formed opinions, we may decline to express opinions or to issue reports, or may withdraw from this engagement.

**Management Responsibilities**
Management is responsible for the financial statements, schedule of expenditures of federal awards, and all accompanying information as well as all representations contained therein.

Management is responsible for: 1) designing, implementing, establishing, and maintaining effective internal controls relevant to the preparation and fair presentation of financial statements that are free from material misstatement, whether due to fraud or error, including internal controls over federal awards, and for evaluating and monitoring ongoing activities, to help ensure that appropriate goals and objectives are met; 2) following laws and regulations; 3) ensuring that there is reasonable assurance that government programs are administered in compliance with compliance requirements; and 4) ensuring that management and financial information is reliable and properly reported. Management is also responsible for implementing systems designed to achieve compliance with applicable laws, regulations, contracts and grant agreements. You are also responsible for the selection and application of accounting principles; for the preparation and fair presentation of the financial statements, schedule of expenditures of federal awards, and all accompanying information in conformity with U.S. generally accepted accounting principles; and for compliance with applicable laws and regulations (including federal statutes) and the provisions of contracts and grant agreements (including award agreements). Your responsibilities also include identifying significant contractor relationships in which the contractor has responsibility for program compliance and for the accuracy and completeness of that information.

Management is also responsible for making all financial records and related information available to us and for the accuracy and completeness of that information. You are also responsible for providing us with: 1) access to all information of which you are aware that is relevant to the preparation and fair presentation of the financial statements, including identification of all related parties and all related-party relationships and transactions, 2) access to personnel, accounts, books, records, supporting documentation, and other information as needed to perform an audit under the Uniform Guidance, 3) additional information that we may request for the purpose of the audit, and 4) unrestricted access to persons within the government from whom we determine it necessary to obtain audit evidence.

Your responsibilities include adjusting the financial statements to correct material misstatements and confirming to us in the management representation letter that the effects of any uncorrected misstatements aggregated by us during the current engagement and pertaining to the latest period presented are immaterial, both individually and in the aggregate, to the financial statements taken as a whole.

You are responsible for the design and implementation of programs and controls to prevent and detect fraud, and for informing us about all known or suspected fraud affecting the government involving: 1) management, 2) employees who have significant roles in internal control, and 3) others where the fraud could have a material effect on the financial statements. Your responsibilities include informing us of your knowledge of any allegations of fraud or suspected fraud affecting the government received in communications from employees, former employees, grantors, regulators, or others. In addition, you are responsible for identifying and ensuring that the government complies with applicable laws, regulations, contracts, agreements and grants. Management is also responsible for taking timely and appropriate steps to remedy fraud and noncompliance with provisions of laws, regulations, contracts and grant agreements that we report. Additionally, as required by the Uniform Guidance, it is management's responsibility to evaluate and monitor noncompliance with federal statutes, regulations, and the terms and conditions of federal awards; take prompt action when instances of noncompliance are identified including noncompliance identified in audit findings; promptly follow up and take corrective action on reported audit findings; and to prepare a summary schedule of prior audit findings and a separate corrective action plan. The summary schedule of prior audit findings should be available for our review subsequent to the start of fieldwork.

You are responsible for identifying all federal awards received and understanding and complying with the compliance requirements and for the preparation of the schedule of expenditures of federal awards (including notes and noncash assistance received) in conformity with the Uniform Guidance. You agree to include our report on the schedule of expenditures of federal awards in any document that contains and indicates that we have reported on the schedule of expenditures of federal awards. You also agree to include the audited financial statements with any presentation of the schedule of expenditures of federal awards that includes our report thereon or make the audited financial statements readily available to intended users of the schedule of expenditures of federal awards no later than the date the schedule of expenditures of federal awards is issued with our report thereon. Your responsibilities include acknowledging to us in the written representation letter that: 1) you are responsible for presentation of the schedule of expenditures of federal awards in accordance with the Uniform Guidance; 2) you believe the schedule of expenditures of federal awards, including its form and content, is stated fairly in accordance with the Uniform Guidance; 3) the methods of measurement or presentation have not changed from those used in the prior period (or, if they have changed, the reasons for such changes); and 4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the schedule of expenditures of federal awards.

You are also responsible for the preparation of the other supplementary information, which we have been engaged to report on, in conformity with U.S. generally accepted accounting principles. You agree to include our report on the supplementary information in any document that contains and indicates that we have reported on the supplementary information. You also agree to include the audited financial statements with any presentation of the supplementary information that includes our report thereon or make the audited financial statements readily available to users of the supplementary information no later than the date the supplementary information is issued with our report thereon. Your responsibilities include acknowledging to us in the written representation letter that: 1) you are responsible for presentation of the supplementary information in accordance with GAAP; 2) you believe the supplementary information, including its form and content, is fairly presented in accordance with GAAP; 3) the methods of measurement or presentation have not changed from those used in the prior period (or, if they have changed, the reasons for such changes); and 4) you have disclosed to us any significant assumptions or interpretations underlying the measurement or presentation of the supplementary information.

With regard to an exempt offering document with which Mauldin & Jenkins is not involved, you agree to clearly indicate in the exempt offering document that Mauldin & Jenkins is not involved with the contents of such offering document.

Management is responsible for establishing and maintaining a process for tracking the status of audit findings and recommendations. Management is also responsible for identifying and providing report copies of previous financial audits, attestation engagements, performance audits or other studies related to the objectives discussed in the Audit Objectives section of this letter. This responsibility includes relaying to us corrective actions taken to address significant findings and recommendations resulting from those audits, attestation engagements, performance audits, or studies. You are also responsible for providing management's views on our current findings, conclusions, and recommendations, as well as your planned corrective actions, for the report, and for the timing and format for providing that information.

With regard to the electronic dissemination of audited financial statements, including financial statements published electronically on your website, you understand that electronic sites are a means to distribute information and, therefore, we are not required to read the information contained in these sites or to consider the consistency of other information in the electronic site with the original document.

You agree to assume all management responsibilities relating to the financial statements, schedule of expenditures of federal awards, related notes, and any other nonaudit services we provide. You will be required to acknowledge in the management representation letter our assistance with preparation of the financial statements, schedule of expenditures of federal awards, and related notes and that you have reviewed and approved the financial statements, schedule of expenditures of federal awards, and related notes prior to their issuance and have accepted responsibility for them. You agree to oversee the nonaudit services by designating an individual, preferably from senior management, who possesses suitable skill, knowledge, or experience; evaluate the adequacy and results of those services; and accept responsibility for them.

**Audit Procedures – General**

An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements; therefore, our audit will involve judgment about the number of transactions to be examined and the areas to be tested. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluating the overall presentation of the financial statements. We will plan and perform the audit to obtain reasonable rather than absolute assurance about whether the financial statements are free of material misstatement, whether from: 1) errors, 2) fraudulent financial reporting, 3) misappropriation of assets, or 4) violations of laws or governmental regulations that are attributable to the government or to acts by management or employees acting on behalf of the government. Because the determination of waste and abuse is subjective, *Government Auditing Standards* do not expect auditors to perform specific procedures to detect waste or abuse in financial audits nor do they expect auditors to provide reasonable assurance of detecting waste or abuse.

Because of the inherent limitations of an audit, combined with the inherent limitations of internal control, and because we will not perform a detailed examination of all transactions, there is a risk that material misstatements or noncompliance may exist and not be detected by us, even though the audit is properly planned and performed in accordance with U.S. generally accepted auditing standards and *Government Auditing Standards*. In addition, an audit is not designed to detect immaterial misstatements or violations of laws or governmental regulations that do not have a direct and material effect on the financial statements or major programs. However, we will inform the appropriate level of management of any material errors, any fraudulent financial reporting or misappropriation of assets that come to our attention. We will also inform the appropriate level of management of any violations of laws or governmental regulations that come to our attention, unless clearly inconsequential. We will include such matters in the reports required for a Single Audit. Our responsibility as auditors is limited to the period covered by our audit and does not extend to any later periods for which we are not engaged as auditors.

Our procedures will include tests of documentary evidence supporting the transactions recorded in the accounts, and may include direct confirmation of receivables and certain other assets and liabilities by correspondence with selected individuals, funding sources, creditors, and financial institutions. We will request written representations from your attorneys as part of the engagement, and they may bill you for responding to this inquiry. At the conclusion of our audit, we will require certain written representations from you about your responsibilities for the financial statements; schedule of expenditures of federal awards; federal award programs; compliance with laws, regulations, contracts, and grant agreements; and other responsibilities required by generally accepted auditing standards.

**Audit Procedures – Internal Control**

Our audit will include obtaining an understanding of the government and its environment, including internal control, sufficient to assess the risks of material misstatement of the financial statements and to design the nature, timing, and extent of further audit procedures. Tests of controls may be performed to test the effectiveness of certain controls that we consider relevant to preventing and detecting errors and fraud that are material to the financial statements and to preventing and detecting misstatements resulting

from illegal acts and other noncompliance matters that have a direct and material effect on the financial statements. Our tests, if performed, will be less in scope than would be necessary to render an opinion on internal control and, accordingly, no opinion will be expressed in our report on internal control issued pursuant to *Government Auditing Standards.*

As required by the Uniform Guidance, we will perform tests of controls over compliance to evaluate the effectiveness of the design and operation of controls that we consider relevant to preventing or detecting material noncompliance with compliance requirements applicable to each major federal award program. However, our tests will be less in scope than would be necessary to render an opinion on those controls and, accordingly, no opinion will be expressed in our report on internal control issued pursuant to the Uniform Guidance.

An audit is not designed to provide assurance on internal control or to identify significant deficiencies or material weaknesses. However, during the audit, we will communicate to management and those charged with governance, internal control related matters that are required to be communicated under AICPA professional standards, *Government Auditing Standards*, and the Uniform Guidance.

**Audit Procedures – Compliance**

As part of obtaining reasonable assurance about whether the financial statements are free of material misstatement, we will perform tests of the County's compliance with provisions of applicable laws, regulations, contracts and agreements, including grant agreements. However, the objective of those procedures will not be to provide an opinion on overall compliance and we will not express such an opinion in our report on compliance issued pursuant to *Government Auditing Standards*.

The Uniform Guidance requires that we also plan and perform the audit to obtain reasonable assurance about whether the auditee has complied with federal statutes, regulations, and the terms and conditions of federal awards applicable to major programs. Our procedures will consist of tests of transactions and other applicable procedures described in the *OMB Compliance Supplement* for the types of compliance requirements that could have a direct and material effect on each of the County's major programs. The purpose of these procedures will be to express an opinion on the County's compliance with requirements applicable to each of its major programs in our report on compliance issued pursuant to the Uniform Guidance.

**Other Services**

We will also assist in preparing the financial statements, schedule of expenditures of federal awards, and related notes of the County in conformity with U.S. generally accepted accounting principles and the Uniform Guidance based on information provided by you. These nonaudit services do not constitute an audit under *Government Auditing Standards* and such services will not be conducted in accordance with *Government Auditing Standards*. We will perform these services in accordance with applicable professional standards. The other services are limited to the financial statements, schedule of expenditures of federal awards, and related notes services previously defined. We, in our sole professional judgement, reserve the right to refuse to perform any procedure or take any action that could be construed as assuming management responsibilities.

**Audit Administration, Fees and Other**

We understand that your employees will prepare all cash or other confirmations we request and will locate any documents selected by us for testing.

At the conclusion of the engagement, we will complete the appropriate sections of the Data Collection Form that summarizes our audit findings. It is management's responsibility to electronically submit the reporting package (including financial statements, schedule of expenditures of federal awards, summary schedule of prior audit findings, auditors' reports, and corrective action plan) along with the Data Collection

Form to the federal audit clearinghouse. We will coordinate with you the electronic submission and certification. The Data Collection Form and the reporting package must be submitted within the earlier of 30 calendar days after receipt of the auditors' reports or nine months after the end of the audit period.

We will provide copies of our reports to the County; however, management is responsible for distribution of the reports and financial statements. Unless restricted by law or regulation, or containing privileged and confidential information, copies of our reports are to be made available for public inspection.

The audit documentation for this engagement is the property of Mauldin & Jenkins and constitutes confidential information. However, pursuant to authority given by law or regulation, we may be requested to make certain audit documentation available to a federal agency providing direct or indirect funding, or the U.S. Government Accountability Office for purposes of a quality review of the audit, to resolve audit findings, or to carry out oversight responsibilities. We will notify you of any such request. If requested, access to such audit documentation will be provided under the supervision of Mauldin & Jenkins personnel. Furthermore, upon request, we may provide copies of selected audit documentation to the aforementioned parties. These parties may intend, or decide, to distribute the copies or information contained therein to others, including other governmental agencies.

The audit documentation for this engagement will be retained for a minimum of five years after the report release date or for any additional period requested by a regulatory body. If we are aware that a federal awarding agency, pass-through entity, or auditee is contesting an audit finding, we will contact the party(ies) contesting the audit finding for guidance prior to destroying the audit documentation.

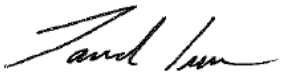
We expect to begin our audit on in mid-October (as long as that works for you) and to issue our reports no later than December 31, 2021. David Irwin is the engagement partner and is responsible for supervising the engagement and signing the reports or authorizing another individual to sign them. Our fee for these services will be $54,000 for the annual financial and compliance audit of the County for the year ended June 30, 2021, $3,500 for the report on compliance with requirements on the Passenger Facility Charge Program, $8,000 for the preparation of the County's Comprehensive Annual Financial Report for the year ended June 30, 2021, and $4,000 for each major program for single audit. Our hourly rates vary according to the degree of responsibility involved and the experience level of the personnel assigned to your audit. Our invoices for these fees will be rendered as work progresses and are payable upon presentation. The above fees are based on anticipated cooperation from your personnel (including complete and timely receipt by us of the information on the respective client participation listings to be prepared annually) and the assumption that unexpected circumstances (including scope changes) will not be encountered during the audit. If significant additional time is necessary, we will discuss it with management and arrive at a new fee estimate before we incur the additional costs.

As a result of our prior or future services to you, we might be requested or required to provide information or documents to you or a third party in a legal, administrative, arbitration, or similar proceeding in which we are not a party. If this occurs, our efforts in complying with such requests will be deemed billable to you as a separate engagement. We shall be entitled to compensation for our time and reasonable reimbursement for our expenses (including legal fees) in complying with the request. For all requests, we will observe the confidentiality requirements of our profession and will notify you promptly of the request.

We appreciate the opportunity to be of service to Beaufort County, South Carolina and believe this letter accurately summarizes the significant terms of our engagement. If you have any questions, please let us know. If you agree with the terms of our engagement as described in this letter, please sign the enclosed copy and return it to us.

Sincerely,

MAULDIN & JENKINS, LLC



David Irwin

DI:ssr
Enclosures

RESPONSE:

This letter correctly sets forth the understanding of Beaufort County, South Carolina.

By: _____

Title: _____

**HILTON HEAD ISLAND AIRPORT**
**HILTON HEAD ISLAND, SOUTH CAROLINA**
**WORK AUTHORIZATION 21-01**
**June 7, 2021**
**PROJECT NO.: TBI NO. 2119-2101**

It is agreed to undertake the following work in accordance with the provisions of our Contract for Professional Services.

---

**Description of Work:** Engineering and Planning Services for preparation, design, and bidding of the contract drawings for the proposed pavement rehabilitation and strengthening for the existing Runway 3-21 pavement and for the existing Taxiway F pavement, as depicted in Appendix A (page 7), for the Hilton Head Island Airport in accordance with the Master Contract.

The intent of this project is to place 3 inches +/- of P-401 Bituminous Concrete over the existing Runway and Taxiway F airfield pavements in order to strengthen the pavements to accommodate the commercial service aircraft that are currently using the facility.

Professional services to be provided by Talbert, Bright & Ellington, Inc. (TBE) will include civil, electrical, topographic surveying, and geotechnical engineering services required to accomplish the following items:

**PHASE 01 – Preliminary Design**

The preliminary design phase is intended to identify and evaluate alternatives to assure cost effective and practical solutions for the work items identified. TBE will complete its evaluation of alternatives through contacts with local authorities, field investigations, and a practical design approach. The design will take advantage of local knowledge and experience and utilize expertise from recent construction projects to design a cost-effective project and ensure competitive construction bids. Bids will adhere to the purchasing and procurement policies set forth by Beaufort County, as well as, local and state laws. Activities include:

a. Conduct a project kick-off meeting. Attendees will be Beaufort County, FAA, design team, and airport tenants.

b. Coordinate with airport staff, airline representatives (current airlines are: American Airlines, Delta Airlines and United Airlines) to minimize impacts of day-to-day flight operations at the airport (2 meetings).

c. Coordinate with the following agencies for necessary permits related to the proposed improvements for this project:

   - SCDHEC-OCRM NPDES Permit (to be applied for during design)

- Town of Hilton Head Island Design Plan Review Permit (to support construction activity, includes Town departments [Natural Resources, Engineering, Emergency – EMS/Fire, Planning, etc.] to be applied for during design)

- FAA and Beaufort County Engineering (plan review, to be performed during design)

d. Prepare a preliminary estimate of probable construction costs and schematic design for each element of the project.

e. Coordinate with all subconsultants on the project. This coordination will provide all geotechnical investigation and analysis required for the design, as well as the required survey information for the project.

f. Prepare an overall construction and safety phasing plan in order to maximize project constructability and minimize interference with airport operations.

**PHASE 04 – Engineering Phase Activities-Preliminary Design**

a. Layout and design of pavement overlay grades and elevations for the proposed runway and taxiway overlays.

b. Layout and design of proposed shoulder grades and elevations for the proposed shoulder buildup along the proposed pavement overlay edges of pavement.

c. Design of erosion and sediment control devices.

d. Design of elevation adjustments to existing airfield electrical lighting fixtures within the limits of construction.

e. Review original design plans for existing pavement thickness within the project limits and compare with pavement thickness from proposed geotechnical borings.

f. Design of the bituminous concrete overlay of Runway 3-21, Taxiway F and stub Taxiways F1, F2, F3, and F4 using FAA FAARFIELD software.

g. Complete the soils investigation, soils report, and recommendations including:

1. Field Exploration
   a) Conduct boring explorations at various locations in accordance with FAA Advisory Circular (AC) 150/5320-6F. Log and field classify soils and obtain samples for laboratory testing.

2. Laboratory Testing
   a) Perform laboratory index and strength tests as follows:
      1) Compacted CBR tests with subgrade modulus recommendations.
      2) Modified proctor compaction tests.
      3) Atterberg limit determinations.
      4) Sieve analysis.
      5) Unit weight and water content determinations.
      6) FAA soil classifications for all samples.

h. Complete necessary topography and site surveying, including establishment of project control points. Survey is not required to be in accordance with FAA AC 150/5300-18B and related advisory circulars.

i. Provide recommendations for construction phasing to the sponsor and airline tenants for their review.

j. Prepare preliminary engineering report.

k. Meet with Sponsor/FAA to review project after preliminary engineering report submittal, and at 60 percent and 90 percent completion (3 meetings).

l. Complete estimates of probable construction costs for the recommended alternatives.

m. Solicit comments on preliminary design from airport personnel and FAA.

**PHASE 04 – Final Design**

a. Incorporate preliminary design comments and respond as necessary to requests for additional information.

b. Provide final design drawings, specifications, and final estimate of probable construction costs and schedule for the project.

c. Develop specifications using FAA AC 150/5370-10, "Standards for Specifying Construction of Airports," as amended, and utilize standard provisions supplied by the sponsor, as necessary.

d. Development of construction safety and phasing plan in accordance with FAA AC 150/5370-2, "Operational Safety on Airports during Construction."

e. Design all improvements in accordance with FAA standards and guidelines.

f. Provide for all required design of utilities and services within the area defined in the preliminary design.

g. Complete final quantity calculations.

h. Complete final engineer's report for the project. This report will detail all data utilized in the design of the project. The final design report will discuss any/all assumptions made during the design. This shall include the following: Geotechnical investigation, topographic survey, final plans, pavement section design and analysis, estimates of probable construction costs, and phasing/scheduling recommendations.

i. Solicit sponsor and FAA approval.

j. Complete and submit 7460 application through FAA OEAAA website.

k. Submit project to local and state permitting agencies.

l. Assist airport with advertising and interpretation of project requirements.

m. Assist airport with preparation of the project application to FAA.

n. Deliverables - Engineer will provide interim design submittals at 60 percent, 90 percent and 100 percent design completion phases. Deliverables for the 60 percent and 90 percent phases will consist of plan sheets, technical specifications, itemized construction cost estimate, and preliminary Engineer's Report – electronic copy: PDF format. Paper copy: bond full-size for plan sheets. Deliverables for the 100 percent phase will consist of plan sheets, technical specifications, itemized construction cost estimate, and final Engineer's Report.

**PHASE 05 – Bidding**

a. Coordinate schedule and advertisement with Sponsor and FAA.

b. Distribute plans/specifications to bidders, plan rooms, and funding agencies.

c. Conduct the pre-bid meeting.

d. Respond to contractor Requests for Information.

e. Prepare addenda based off pre-bid meeting and bidders' questions.

f. Beaufort County will conduct the bid opening per standard practices.

g. Prepare and distribute the bid tabulation.

h. Review bids. Coordinate with FAA Civil Rights on DBE participation.

i. Send recommendation of contract award to Sponsor.

j. Assist Sponsor with grant application.

k. Deliverables - Engineer will provide bid tabulation of bids received, and submittal of DBE participation proposed by low responsive bidder to FAA Civil Rights for review and concurrence by the FAA. Upon receipt of written approval of DBE Participation Letter from FAA Civil Rights, Engineer will provide written summary of bids received and construction contract award recommendation for consideration by the Owner.

l.

**PHASE 06 – Construction Administration**

a. **Construction Administration** – No construction administration services are included in this work authorization.

b. **Quality Assurance Testing** – No quality assurance testing services are included in this work authorization.

c. **Resident Project Representative –** No resident project representative services are included in this work authorization.

d. **As-Built Survey** – No as-built survey services are included in this work authorization.

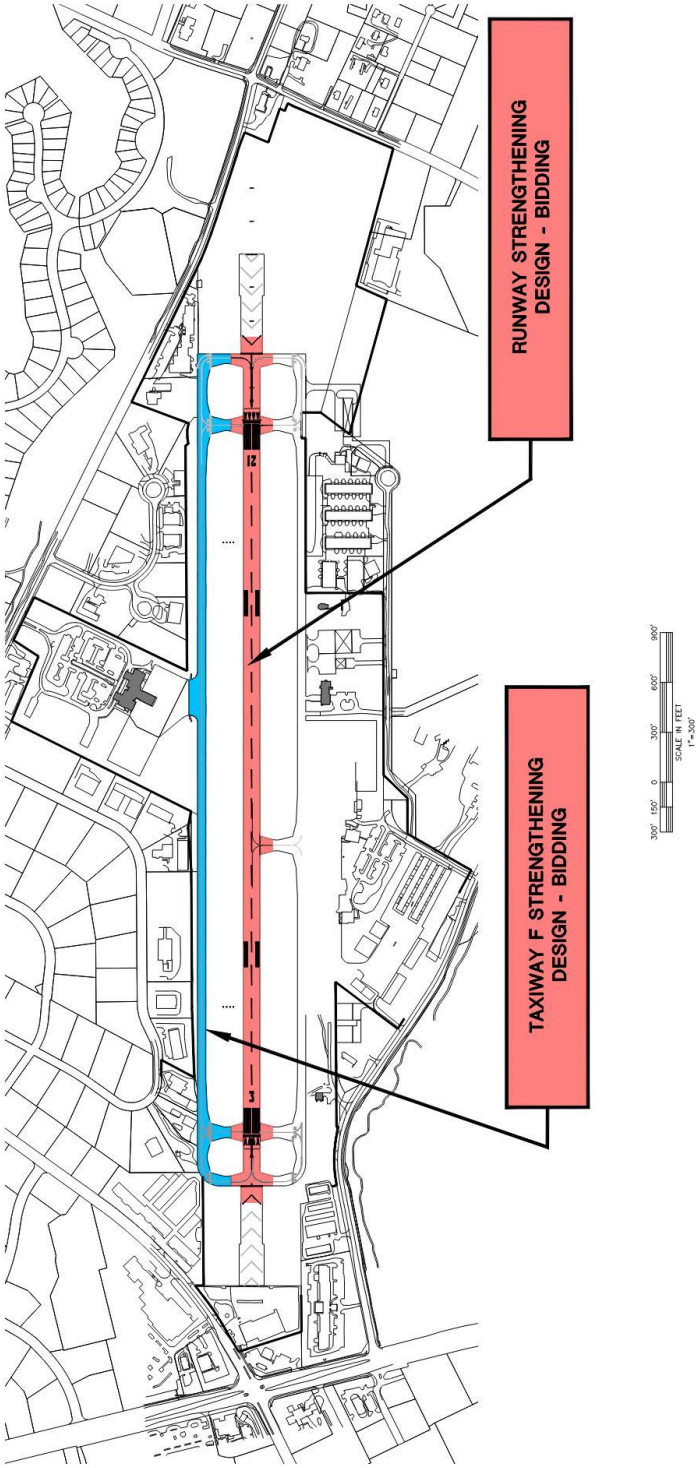
**Estimated Time Schedule:** Work shall be completed in accordance with the schedule established and agreed upon by the Owner and Engineer.

**Cost of Services:** The method of payment shall be in accordance with Article 6 – Compensation of the contract. The work shall be performed in accordance with the Master Contract as a lump sum of **$458,792.00**. Special services shall be performed on a not to exceed basis with a budget of **$72,450.00**, which includes reimbursable expenses. For a total of **$531,242.00** (Appendix B, page 8).

**Agreed as to Scope of Services, Time Schedule and Budget:**

| | |
|---|---|
| **APPROVED:**<br>BEAUFORT COUNTY | **APPROVED:**<br>TALBERT, BRIGHT & ELLINGTON, INC. |
| _____ | _____ |
| _____<br>Title | Vice President<br>Title: |
| _____<br>Date: | _____<br>Date: |
| _____<br>Witness: | _____<br>Witness: |

# APPENDIX A SCHEMATIC



# APPENDIX B FEE PROPOSAL

**SUMMARY OF FEES**

**RUNWAY 3-21 AND TAXIWAY F STRENGTHENING**
HILTON HEAD ISLAND AIRPORT
HILTON HEAD ISLAND, SOUTH CAROLINA
AIP PROJECT NO:
NCDOA PROJECT NO:
CLIENT PROJECT NO:
TBI PROJECT NO: 2119-2101

June 7, 2021

| DESCRIPTION | | ESTIMATED COST |
|---|---|---|
| **BASIC SERVICES** | | |
| PROJECT FORMULATION/DEVELOPMENT PHASE (01) | $ | 42,751.00 |
| DESIGN PHASE (04) | $ | 383,502.00 |
| BIDDING ASSISTANCE PHASE (05) | $ | 25,814.00 |
| CONSTRUCTION ADMINISTRATION PHASE (06) | $ | - |
| SUBTOTAL | $ | 452,067.00 |
| EXPENSES | $ | 6,725.00 |
| SUBTOTAL | $ | 458,792.00 |
| SUBCONSULTANTS | $ | 72,450.00 |
| INSPECTION - RESIDENT PROJECT REPRESENTATIVE | $ | - |
| TOTAL | $ | 531,242.00 |

**MANHOUR ESTIMATE**

**RUNWAY 3-21 AND TAXIWAY F STRENGTHENING**
HILTON HEAD ISLAND AIRPORT
HILTON HEAD ISLAND, SOUTH CAROLINA
AIP PROJECT NO:
NCDOA PROJECT NO:
CLIENT PROJECT NO:
TBI PROJECT NO: 2119-2101

June 7, 2021

PROJECT FORMULATION/DEVELOPMENT PHASE (01)

| DESCRIPTION | PRIN $ 250 | PM $ 205 | SP $ 151 | E5 $ 172 | E4 $ 139 | E2 $ 105 | E1 $ 80 | T5 $ 127 | T3 $ 87 | AD5 $ 80 | AD3 $ 66 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Preliminary project review w/Owner | 8 | 8 | 0 | 2 | 4 | 2 | 0 | 0 | 0 | 0 | 0 |
| Prepare FAA preapplication | 1 | 2 | 4 | 0 | 2 | 0 | 0 | 0 | 2 | 2 | 0 |
| Coordinate with FAA | 10 | 10 | 8 | 2 | 0 | 2 | 2 | 0 | 4 | 0 | 0 |
| Develop project scope/contract | 8 | 10 | 8 | 0 | 0 | 0 | 0 | 2 | 0 | 4 | 0 |
| Coordinate with subconsultants | 2 | 8 | 0 | 0 | 8 | 4 | 6 | 4 | 4 | 0 | 2 |
| Determine project approach | 12 | 16 | 4 | 12 | 8 | 6 | 4 | 4 | 0 | 2 | 2 |
| Develop preliminary estimate | 2 | 4 | 0 | 4 | 6 | 4 | 6 | 6 | 4 | 0 | 2 |
| Prepare IFE documents | 2 | 4 | 0 | 0 | 0 | 0 | 0 | 0 | 1 | 0 | 2 |
| MANHOUR TOTAL | 45 | 62 | 24 | 20 | 28 | 18 | 18 | 16 | 15 | 8 | 8 |

DIRECT LABOR EXPENSES:

| CLASSIFICATION | | BILL RATE | EST. MHRS | EST. COST |
|---|---|---|---|---|
| Principal | PRIN | $ 250 | 45 | $ 11,250 |
| Project Manager | PM | $ 205 | 62 | $ 12,710 |
| Senior Planner | SP | $ 151 | 24 | $ 3,624 |
| Engineer V | E5 | $ 172 | 20 | $ 3,440 |
| Engineer III | E4 | $ 139 | 28 | $ 3,892 |
| Engineer II | E2 | $ 105 | 18 | $ 1,890 |
| Engineer I | E1 | $ 80 | 18 | $ 1,440 |
| Technician V | T5 | $ 127 | 16 | $ 2,032 |
| Technician III | T3 | $ 87 | 15 | $ 1,305 |
| Admin. Assistant IV | AD5 | $ 80 | 8 | $ 640 |
| Admin. Assistant III | AD3 | $ 66 | 8 | $ 528 |
| | | Total | 262 | |
| *SUBTOTAL* | | | | *$ 42,751.00* |

DIRECT EXPENSES:

| EXPENSE DESCRIPTION | UNIT | UNIT RATE | EST. UNITS | EST. COST |
|---|---|---|---|---|
| Telephone | LS | $ 25 | 1 | $ 25 |
| Postage | LS | $ 50 | 1 | $ 50 |
| Miscellaneous expenses (prints, faxes, copies) | LS | $ 100 | 1 | $ 100 |
| Travel | LS | $ 440 | 1 | $ 440 |
| *SUBTOTAL* | | | | *$ 615.00* |

SCOPE OF SUCONTRACTED SERVICES:

| EXPENSE DESCRIPTION | UNIT | UNIT RATE | EST. UNITS | EST. COST |
|---|---|---|---|---|
| Topographic Surveying | LS | $ 39,100 | 1 | $ 39,100.00 |
| Geotechnical Investigation | LS | $ 33,350 | 1 | $ 33,350.00 |
| *SUBTOTAL* | | | | *$ 72,450.00* |

**TOTAL PRELIMINARY COST: $ 115,816.00**

**MANHOUR ESTIMATE**

**RUNWAY 3-21 AND TAXIWAY F STRENGTHENING**
HILTON HEAD ISLAND AIRPORT
HILTON HEAD ISLAND, SOUTH CAROLINA
AIP PROJECT NO:
NCDOA PROJECT NO:
CLIENT PROJECT NO:
TBI PROJECT NO: 2119-2101

June 7, 2021

DESIGN PHASE (04)

| DESCRIPTION | PRIN $ 250 | PM $ 205 | SP $ 151 | E5 $ 172 | E4 $ 139 | E2 $ 105 | E1 $ 80 | T5 $ 127 | T3 $ 87 | AD5 $ 80 | AD3 $ 66 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| PLANS | | | | | | | | | | | |
| Cover Sheet | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 6 | 0 | 0 |
| Construction Safety and Phasing Plans | 4 | 16 | 0 | 0 | 24 | 0 | 20 | 40 | 40 | 0 | 0 |
| Overlay/Shoulder Grading Plans | 8 | 28 | 0 | 40 | 50 | 72 | 92 | 152 | 40 | 0 | 0 |
| Overlay Spot Elevations Plans | 8 | 16 | 0 | 48 | 0 | 0 | 0 | 64 | 0 | 0 | 0 |
| Erosion Control Plans | 4 | 8 | 0 | 20 | 28 | 40 | 60 | 40 | 50 | 0 | 0 |
| Erosion Control Details | 2 | 2 | 0 | 4 | 8 | 0 | 0 | 0 | 16 | 0 | 0 |
| Marking Plans | 2 | 8 | 0 | 12 | 16 | 20 | 24 | 16 | 12 | 0 | 0 |
| Electrical Layout Plans | 6 | 12 | 0 | 20 | 28 | 40 | 60 | 48 | 60 | 0 | 0 |
| Electrical Details | 2 | 2 | 0 | 4 | 8 | 8 | 8 | 16 | 12 | 0 | 0 |
| Miscellaneous Details | 2 | 2 | 0 | 8 | 12 | 16 | 12 | 8 | 12 | 0 | 0 |
| Centerline Profiles | 2 | 16 | 0 | 4 | 6 | 8 | 12 | 20 | 16 | 0 | 0 |
| DESIGN | | | | | | | | | | | |
| Coordination/Meetings with Client, and FAA | 24 | 24 | 24 | 8 | 16 | 0 | 0 | 8 | 8 | 4 | 4 |
| Sequence of construction | 4 | 12 | 0 | 8 | 12 | 12 | 8 | 0 | 2 | 0 | 0 |
| CSPP Design/CSPP Document | 8 | 16 | 0 | 24 | 20 | 24 | 30 | 8 | 8 | 0 | 0 |
| Pavement designs | 2 | 6 | 0 | 8 | 0 | 0 | 0 | 2 | 0 | 0 | 0 |
| Overlay design | 4 | 12 | 0 | 16 | 22 | 26 | 30 | 40 | 8 | 0 | 0 |
| Marking design | 2 | 4 | 0 | 4 | 16 | 12 | 8 | 16 | 4 | 0 | 0 |
| Electrical design | 2 | 8 | 0 | 8 | 20 | 16 | 10 | 16 | 4 | 0 | 0 |
| Edge Light/In-Pavement Light Adjustments | 2 | 8 | 0 | 16 | 0 | 16 | 10 | 12 | 2 | 0 | 0 |
| Erosion control design | 2 | 4 | 0 | 24 | 16 | 0 | 4 | 0 | 2 | 0 | 0 |
| SCDHEC submittals | 2 | 4 | 0 | 4 | 6 | 12 | 6 | 0 | 10 | 0 | 2 |
| Town of HHI Permit Coordination | 4 | 24 | 0 | 16 | 0 | 0 | 0 | 8 | 0 | 4 | 0 |
| Specifications | 4 | 16 | 0 | 0 | 16 | 20 | 8 | 0 | 0 | 16 | 24 |
| Quantities/Estimates | 4 | 8 | 0 | 24 | 10 | 16 | 0 | 12 | 16 | 0 | 0 |
| Quality assurance | 16 | 24 | 0 | 12 | 8 | 4 | 0 | 4 | 0 | 4 | 0 |
| Revisions | 4 | 8 | 0 | 16 | 24 | 24 | 8 | 32 | 8 | 2 | 2 |
| MANHOUR TOTAL | 125 | 290 | 24 | 348 | 366 | 386 | 410 | 562 | 336 | 30 | 32 |

**MANHOUR ESTIMATE**

**RUNWAY 3-21 AND TAXIWAY F STRENGTHENING**
HILTON HEAD ISLAND AIRPORT
HILTON HEAD ISLAND, SOUTH CAROLINA
AIP PROJECT NO:
NCDOA PROJECT NO:
CLIENT PROJECT NO:
TBI PROJECT NO: 2119-2101

June 7, 2021

DESIGN PHASE (04)

DIRECT LABOR EXPENSES:

| CLASSIFICATION | | | BILL RATE | EST. MHRS | | EST. COST |
|---|---|---|---|---|---|---|
| Principal | PRIN | $ | 250 | 125 | $ | 31,250 |
| Project Manager | PM | $ | 205 | 290 | $ | 59,450 |
| Senior Planner | SP | $ | 151 | 24 | $ | 3,624 |
| Engineer V | E5 | $ | 172 | 348 | $ | 59,856 |
| Engineer III | E4 | $ | 139 | 366 | $ | 50,874 |
| Engineer II | E2 | $ | 105 | 386 | $ | 40,530 |
| Engineer I | E1 | $ | 80 | 410 | $ | 32,800 |
| Technician V | T5 | $ | 127 | 562 | $ | 71,374 |
| Technician III | T3 | $ | 87 | 336 | $ | 29,232 |
| Admin. Assistant IV | AD5 | $ | 80 | 30 | $ | 2,400 |
| Admin. Assistant III | AD3 | $ | 66 | 32 | $ | 2,112 |
| | | | Total | 2,909 | | |
| *SUBTOTAL* | | | | | *$* | *383,502.00* |

DIRECT EXPENSES:

| EXPENSE DESCRIPTION | UNIT | | UNIT RATE | EST. UNITS | | EST. COST |
|---|---|---|---|---|---|---|
| Telephone | LS | $ | 50 | 1 | $ | 50.00 |
| Postage | LS | $ | 100 | 1 | $ | 100.00 |
| Miscellaneous expenses (review fees, prints, faxes, copies) | LS | $ | 1,500 | 1 | $ | 1,500.00 |
| Travel | LS | $ | 440 | 3 | $ | 1,320.00 |
| *SUBTOTAL* | | | | | *$* | *2,970.00* |

SCOPE OF SUCONTRACTED SERVICES:

| EXPENSE DESCRIPTION | | | UNIT RATE | EST. UNITS | | EST. COST |
|---|---|---|---|---|---|---|
| | LS | $ | - | 1 | $ | - |
| *SUBTOTAL* | | | | | *$* | - |

**TOTAL DESIGN COST:** **$ 386,472.00**

**MANHOUR ESTIMATE**

**RUNWAY 3-21 AND TAXIWAY F STRENGTHENING**
HILTON HEAD ISLAND AIRPORT
HILTON HEAD ISLAND, SOUTH CAROLINA
AIP PROJECT NO:
NCDOA PROJECT NO:
CLIENT PROJECT NO:
TBI PROJECT NO: 2119-2101

June 7, 2021

BIDDING ASSISTANCE PHASE (05)

| DESCRIPTION | PRIN $ 250 | PM $ 205 | SP $ 151 | E5 $ 172 | E4 $ 139 | E2 $ 105 | E1 $ 80 | T5 $ 127 | T3 $ 87 | AD5 $ 80 | AD3 $ 66 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| Coordinate advertisement | 0 | 0 | 0 | 0 | 2 | 0 | 0 | 0 | 0 | 1 | 0 |
| Distribute bid documents | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Prebid meeting | 2 | 8 | 0 | 2 | 0 | 0 | 0 | 0 | 2 | 0 | 0 |
| Bidder question & answers | 4 | 8 | 0 | 16 | 20 | 12 | 2 | 0 | 0 | 2 | 2 |
| Prepare addenda | 4 | 8 | 0 | 12 | 16 | 8 | 4 | 12 | 10 | 4 | 8 |
| Bid opening, tabulation | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| Recommendation of Award | 1 | 2 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 2 |
| MANHOUR TOTAL | 12 | 28 | 0 | 30 | 38 | 20 | 6 | 12 | 12 | 7 | 14 |

DIRECT LABOR EXPENSES:

| CLASSIFICATION | | BILL RATE | EST. MHRS | EST. COST |
|---|---|---|---|---|
| Principal | PRIN | $ 250 | 12 | $ 3,000 |
| Project Manager | PM | $ 205 | 28 | $ 5,740 |
| Senior Planner | SP | $ 151 | 0 | $ - |
| Engineer V | E5 | $ 172 | 30 | $ 5,160 |
| Engineer III | E4 | $ 139 | 38 | $ 5,282 |
| Engineer II | E2 | $ 105 | 20 | $ 2,100 |
| Engineer I | E1 | $ 80 | 6 | $ 480 |
| Technician V | T5 | $ 127 | 12 | $ 1,524 |
| Technician III | T3 | $ 87 | 12 | $ 1,044 |
| Admin. Assistant IV | AD5 | $ 80 | 7 | $ 560 |
| Admin. Assistant III | AD3 | $ 66 | 14 | $ 924 |
| | | Total | 179 | |
| *SUBTOTAL* | | | | *$ 25,814.00* |

DIRECT EXPENSES:

| EXPENSE DESCRIPTION | UNIT | UNIT RATE | EST. UNITS | EST. COST |
|---|---|---|---|---|
| Telephone | LS | $ 100 | 1 | $ 100.00 |
| Postage | LS | $ 100 | 1 | $ 100.00 |
| Copying | LS | $ 500 | 1 | $ 500.00 |
| Reproduction | LS | $ 250 | 1 | $ 250.00 |
| Advertisement | LS | $ 1,500 | 1 | $ 1,500.00 |
| Miscellaneous expenses (prints, faxes, copies) | LS | $ 250 | 1 | $ 250.00 |
| Travel | LS | $ 440 | 1 | $ 440.00 |
| *EXPENSE DESCRIPTION* | | | | *$ 3,140.00* |

SCOPE OF SUCONTRACTED SERVICES:

| EXPENSE DESCRIPTION | UNIT | UNIT RATE | EST. UNITS | EST. COST |
|---|---|---|---|---|
| - | - | - | - | - |
| *SUBTOTAL* | | | | *$ -* |

**TOTAL BIDDING COST: $ 28,954.00**

# BEAUFORT COUNTY COUNCIL
# AGENDA ITEM SUMMARY

**ITEM TITLE:**

Recommendation for Approval - Hilton Head Island Airport (HXD) – TBE Work Authorization 2119-2101

*(Fiscal impact:) $531,242 (Funded 100% (reimbursable) by FAA Grant 47 – announced but pending official letter)*

**MEETING NAME AND DATE:**

County Council – July 26, 2021

**PRESENTER INFORMATION:**

Jared Fralix, P.E. ACA – Engineering
Stephen Parry, Deputy Airports Director (Alternate)
(2 minutes)

**ITEM BACKGROUND:**

Grant #: AIP Grant 3-45-0030-047 Engineer: Talbert, Bright & Ellington, Inc (TBE).
This Work Authorization is being conducted as part of the Master Services Agreement dated 8/14/2018.
Scope of work: Runway 3-21 and Taxiway F strengthening design and bidding
Cost of Services: **$531,242.00**
Approved by Beaufort County Airports Board on 7/15/2021
Approved by Public Facilities Committee on 7/19/2021

**PROJECT / ITEM NARRATIVE:**

The existing runway and taxiway at HXD need additional strengthening and rehabilitation due to the increased commercial jet aircraft using the airport. Professional services to be provided by Talbert, Bright & Ellington, Inc. (TBE) will include full engineering design services and bidding.

**FISCAL IMPACT:**

*The funding of the contract will come from account # 5402-0011-54346*

*$531,242 (Funded 100% (reimbursable) by FAA Grant 47 – announced but pending official letter).*

**STAFF RECOMMENDATIONS TO COUNCIL:**

*Staff recommends approval of Work Authorization 2119-2101*

**OPTIONS FOR COUNCIL MOTION:**

*Motion to approve /deny the recommendation for approval - Work Authorization 2119-2101*

(***Next step – County Administrator to execute the work authorization 2119-2101***)

# BEAUFORT COUNTY COUNCIL
## AGENDA ITEM SUMMARY

**ITEM TITLE:**

Recommendation of contract renewal for Securitas Security Services FY22 - Hilton Head Island Airport (HXD) ($127,764)

**MEETING NAME AND DATE:**

County Council - July 26, 2021

**PRESENTER INFORMATION:**

Jared Fralix, P.E. ACA – Engineering

Stephen Parry, Deputy Airports Director (Alternate)

*(2 minutes)*

**ITEM BACKGROUND:**

To improve the process for renewing annual contract renewals a summary sheet (see the attached excel sheet) is provided for Council's review and approval. The summary sheet provides the vendor name, purpose, requesting department, account name and number, prior and current contract cost, term, and notes. The Department Head responsible for the contract or their representative will be available for questions during the Council meeting.
Approved by Beaufort County Airports Board on 7/15/2021
Approved by Public Facilities Committee on 7/19/2021

**PROJECT / ITEM NARRATIVE:**

There is no cost increase for this FY 22 contract renewal. Department backup support is also included and numbered to match the contract item number on the contract list.

**FISCAL IMPACT:**

See the attached Excel Summary Sheet covering contract Accounts used, FY21 and the new FY 22 cost is included on the attached Excel Summary Sheet.

**STAFF RECOMMENDATIONS TO COUNCIL:**

Staff recommends the County Council approval of the contract renewal as stated in the attached summary.

**OPTIONS FOR COUNCIL MOTION:**

*Motion to approve/deny the recommendation of contract renewal for Securitas Security Services.*

*(**Next step – Purchasing will issue a renewal letter to the vendor)***

| | Vendor | Purpose | Department | Account | FY21 Cost | FY22 Cost | Term (Beg/End) | |
|---|---|---|---|---|---|---|---|---|
| 1 A | Securitas Security | Renewal | Hilton Head Island Airport | 54000011-51185 | $127,764.00 | $127,764 | 4/1/2021-6/30/2022 | Jon Rembold |
| NOTES | | | | | | | | |
| | | | | | | | | |
| NOTES | | | | | | | | |

PLEASE USE INTERNET EXPLORER (IE) AS YOUR BROWSER WITH THIS FORM



# COUNTY COUNCIL OF BEAUFORT COUNTY

PURCHASING DEPARTMENT
106 Industrial Village Road
Post Office Drawer 1228
Beaufort, South Carolina 29901-1228

**PURCHASING CONTRACT REVIEW FORM**

Form Number: 2020-0130P

Select One:

- O Lease Agreement
- O Maintenance Agreement
- O Software Agreement
- O Warranty Agreement
- O Consulting Services
- O Construction Contract
- ◉ Service Contract
- O Other _____

Document Title: Securitas Security Services

Document needed by: 3/1/2020

Is this pending any committee reviews? ◉ Yes O No

| Choose Committee | Choose Committee Review Dt |
|---|---|
| Executive | 3/9/2020 |

Insert another committee review

Is this Contract Amount below $2500? O Yes ◉ No

Description of documents:

Securitas Security Services

Department Head: Jon Rembold ☑ jrembold@bcgov.net

Attachments (contract, agreement, lease, PO, committee approval and/or any back up information)

| | | |
|---|---|---|
| JR_Memo_BCAB_Exec_Securitas_Security_Services.pdf 118.42 KB | JR_Memo_Thomas_ to the Chairman of Exec Cmte_ Securitas Security Services.pdf 24.41 KB | JR_Memo-From Jon to Mr. Ackerman - Securitas Security Services.pdf 112.82 KB |
| JR_AIS - HXD_Securitas Security Services.pdf 469.55 KB | Click here to attach a file | Click here to attach a file |

Insert item

Form Completed by: ☑ emilbrandt Date: 2/25/2020 2:57:25 PM

***** Department Head Review Section *****

Department Head Signature: ☑ jrembold Date: 2/25/2020 3:14:55 PM

***** Purchasing Review Section *****

Attachments:

| | |
|---|---|
| SecurityGuardsServicesfortheHH(Airport+all Contacts)2020updates.docx 70.43 KB | Click here to attach a file |

Insert item

◉ Approved O On Hold ☐ Does NOT Require Legal Review
O Disapproved ☐ Additional Documents Requested

Comments:

Updated contract ready for Legal review.

Dave Thomas 2/26/2020
4:05:36 PM
Authorized Purchasing Signature Date / Time

Insert Purchasing Section

***** Legal Review Section *****

Attachments:

Click here to attach a file | Click here to attach a file | Click here to attach a file

Insert item

(•) Approved ( ) On Hold

( ) Disapproved ☐ Additional Documents Requested

Comments:

Approved as to form, but legal will need to review the contract prior to being signed.

Brittany L. Ward — 2/27/2020 — 12:37:12 PM

Authorized Legal Signature — Date / Time

Insert Legal Section

***** Purchasing Completion Section *****

Process Complete: ☑ dthomas Date/Time: 2/27/2020 12:41:05 PM

Comments:

Have Legal approve the final contract before it is signed.

**STATE OF SOUTH CAROLINA** )
)
)
**COUNTY OF BEAUFORT** )

**CONTRACT NO. RFP 112819**
**Security Patrol Guards Services for Beaufort County Hilton Head Island Airport**

**THIS CONTRACT** (hereinafter the "Contract") entered into this 20 day of March 2020, 2020 between the **COUNTY OF BEAUFORT**, South Carolina, a public body corporate and politic and political subdivision of the State of South Carolina, (hereinafter the "County"), and Securitas Security Services USA, Inc, the address of which is 9 Campus Drive, Parsippany, NJ 07054 (hereinafter the "Contractor"), ("Party" as to each; collectively the "Parties").

**W I T N E S S E T H:**

**WHEREAS,** the County has sought to contract with an independent contractor providing uniformed personnel for vehicle traffic control at Hilton Head Island Airport terminal curb front and for the security checkpoints at our County Administration buildings located on 100 Ribaut Road, Beaufort, SC, 29901 and Human Services building on 1905 Duke Street, Beaufort, SC 29901 ("Work") as detailed in the Contract Documents (defined below); and

**WHEREAS,** the County, solicited bids pursuant to RFP NO. 112819 for the aforesaid Work that is needed; and

**WHEREAS,** the Contractor has represented to the County that its staff is qualified to provide the Work required in this Contract in a professional, timely manner; and

**WHEREAS,** the County has relied upon the above representations by the Contractor; and

**WHEREAS,** the County's Airport's and Facilities Director has recommended that a contract for aforesaid Work be entered into with the Contractor; and

**WHEREAS,** the Contractor desires to provide the aforesaid services pursuant to the terms and conditions contained below;

**NOW, THEREFORE,** in consideration of these promises and of the mutual covenants herein set forth, it is agreed by and between the Parties hereto as follows:

## SECTION ONE
## Definitions

Unless the context clearly requires otherwise, all capitalized terms used in this Contract shall have the meanings set forth in this Section One.

"Commencement Date" means the date specified in the Notice to Proceed as the date on which the Contractor shall begin providing the Work.

"Contract" means document titled "Contract No. RFP 112819."

"Contract Documents" means all exhibits, attachments, specifications, and any addenda to this Contract which are incorporated by reference into this Contract and which are marked as follows:

"Contract Price" means the price listed in the Contract for service to be received in return.
"Contract Quantities" means the estimated quantities listed on the Bid form.

"Contractor" has the meaning assigned above to that term, and includes that company's agents, employees, and representatives.

"County" means County of Beaufort, South Carolina, a public body politic and corporate and political subdivision of the State of South Carolina.

"Notice to Proceed" means the written notice to be given by the County to the Contractor to commence Work under this Contract.

"Procurement Director" means the Procurement Director for Beaufort County.

"Project" means the "Work" and is used interchangeably with that term.

"Project Manager" shall be the field representative designated by the County to serve as project manager for the Work.

"Project Site" means the site or sites where the Work is performed. This term is used interchangeably with "Work Site."

"Work" means the work specified and described in Exhibit B ("Scope of Work (with Appendices)") to this Contract and includes, but is not limited to, materials, workmanship, manufacture and fabrication of components.

"Work Site" means the "Project Site" and is used interchangeably with that term.

## SECTION TWO
## Contract Documents

The Parties agree that the Contract Documents shall include the following, which are incorporated herein by reference:

Exhibit A - Request for Proposals (RFP) No. 112819
Exhibit B - Scope of Work/Specifications (with Appendices)
Exhibit C - Contractor's Insurance Certificate(s) and Endorsement(s)
Exhibit D - Contractor's Proposal dated November 25, 2019
Exhibit C-"Best and Final Offer Email dated January 28, 2020

In the event of any conflict, discrepancy, or inconsistency among any of the documents which make up this Contract, the following shall control:

a. As between the Contract and any other document to include, but not limited to, the plans or specifications, the Contract shall govern.

b. In the event of any conflict, discrepancy, or inconsistency among any of the other Contract Documents, the Contractor shall notify the County immediately upon discovery of same, and the County will notify the Contractor of the resolution.

c. Any documents not included or expressly contemplated in this Contract do not, and shall not, form a part of this Contract. The Contract Exhibits are intended to be complementary, and a requirement in one document shall be deemed a requirement in all documents.

As provided in Exhibit B, Scope of Work (with Appendices) attached hereto, certain publications shall also govern the work hereunder, unless otherwise provided herein, and are also hereby incorporated by reference.

## SECTION THREE
## Term

The initial term of this Agreement shall begin April 1, 2020 and end on June 30, 2021 with option to renew for up to four additional years. The Contractor shall not commence work prior to the issuance of a Notice to Proceed.

## SECTION FOUR
## Work

The Contractor agrees to perform and furnish all labor, supervision, materials, equipment, tools, machinery, transportation and supplies necessary for the completion of the Work required under this Contract in a professional, timely manner.

See Exhibit B, Scope of Work (with Appendices), for complete Scope of Work and Plans.

Work is to be completed as indicated in Section Two after the issuance of the Notice to Proceed, absent any extensions as provided in Section Five hereof.

## SECTION FIVE
## Contract Price: Payment Terms

A. The Contractor is to perform the Work beginning on the Commencement Date until the termination of this Contract, for the total of $127,764 for the Hilton Island Airport. Contractor Bill Rates: UNARMED SECURITY OFFICER - $19.45 PER HOUR; ARMED SECURITY OFFICER - $23.20 PER HOUR. The total annual cost for the Administration Buildings will be added as a change order once the new Fiscal Year funding is approved. Actual payments will be based on verified quantities actually incorporated in the Work as priced in Contractor's Bid.
The amount as specified may be increased or decreased by the County through the issuance of a change order or Amendment. Any prices specified in Contractor's Bid or any such change order or Amendment will remain firm for the term of this Contract or any Amendment thereto. Notwithstanding anything to the contrary, Contractor may raise its rates on 30 days' written notice to account for any increases in (a) health care, benefit, or insurance costs, (b) labor or fuel costs,

(c) costs arising from changes to laws, regulations, or insurance premiums, (d) SUI or similar taxes, or (e) any other taxes, fees, costs or charges related to Contractor's services.

B. The Contractor shall submit monthly invoices itemizing all labor and materials for which payment is requested. Subject to approval of the invoice by the County, the County shall pay Contractor for the performance of the Work, including all labor and items necessary to accomplish and complete the Work, in accordance with all terms and conditions as stated in the Contract Documents, on the following basis:

The Contractor shall submit invoices in the format that shall be provided by the County at the pre-construction meeting and approved by the parties. Failure to follow the format may result in payment delays.

All invoices will be processed by the County once a month

C. Invoices will be submitted to the Airport's and Facilities Director, and the invoice will contain Contract No. 112819 and the purchase order number.

D. Intentionally deleted.

No claim shall be made by the Contractor for any loss of anticipated profits because of any such alteration, or by reason of any variation between the approximate quantities and the quantities of work as done. If the altered or added work is of sufficient magnitude as to require additional time in which to complete the Project, such time adjustment will be made at the determination of the County.

E. No claim by the Contractor for any adjustment under this Contract shall be allowed if asserted after Final Payment under this Contract.

F. When the County requires substantiating information the Contractor shall submit data justifying dollar amounts in question.

## SECTION SIX
## Time

The Contractor agrees to punctually and diligently perform all parts of the Work at the time scheduled by the Contractor which shall be subject to change by the County as deemed necessary or convenient to the overall progress of the Project. In this connection, the Contractor agrees that the Contractor will keep itself continually informed of the progress of the job and will, upon its own initiative, confer with the County so as to plan its work in coordinated sequence with the Work of the County and of others and so as to be able to expeditiously undertake and perform the Work at the time most beneficial to the entire Project. The Contractor will be liable for any loss, costs, or damages sustained by the County for delays in performing the Work hereunder, other than excusable delays for which Contractor shall be granted an extension of time. If, in the reasonable opinion of the County, the Contractor is not complying with the progress schedule or will not meet the completion date, the County may require the Contractor to provide additional manpower, or work overtime, or expedite materials, and the Contractor shall take the necessary steps to comply, all without increase in Contract Price.

If the Contractor is delayed at any time in the progress of the Work by any act or neglect of the County, or by any separate contractor employed by the County, or by changes in the Work, or by labor disputes, fire, unusual delay in transportation, unusually severe weather conditions, unavoidable casualties, delays specifically authorized by the County, or by causes beyond the Contractor's control, avoidance, or mitigation, and without the fault or negligence of the Contractor and/or subcontractor or supplier at any tier, then the Contract time shall be extended by change order for such reasonable time, if any, as the County may determine that such event has delayed the progress of the Work or overall completion of the Work, if the Contractor complies with the notice and documentation requirements set forth below.

Any claim for extension of time, except as provided for below with regards to rain delays, shall be made in writing to the County, not more than Five (5) Calendar Days from the beginning of the delay. The notice shall indicate the cause of delay upon the progress of Work. If the cause of the delay is continuing, the Contractor must give written notice every week to the County. Within Five (5) Calendar Days after the elimination of any such delay, the Contractor shall submit further documentation of the delay and a formal change order request for an extension of time for such delay.

The written request for a time extension shall state the cause of the delay, the number of days extension requested, and such analysis and other documentation to demonstrate a delay in the progress of the Work or the overall Project completion. If the Contractor does not comply with the above notice and documentation requirements, the claim for the delay shall be waived by the Contractor.

Extensions of time shall be the Contractor's sole remedy for any and all delays, hindrances, or obstructions. No payment or compensation of any kind shall be made to the Contractor for damages because of hindrance or obstruction in the orderly progress of the Work or delay from any cause in the progress of the Work, whether such hindrances or delays be avoidable or unavoidable. The Contractor expressly agrees not to make, and hereby waives any claim for damages on account of any delay, obstruction, or hindrance for any cause whatsoever, including but not limited to the aforesaid cause and agrees that the Contractor's sole right and remedy in the case of any delay, obstruction, or hindrance, shall be an extension of the time fixed for completion of the Contract. Without limitation, the County's exercise of its rights under the changes clause, regardless of the extent or number of such changes, shall not under any circumstances be construed as compensable, other than through an extension of time, it being acknowledged that the Contract amount includes and anticipates any and all delays, hindrances, or obstructions whatsoever from any cause, whether such be avoidable or unavoidable.

## SECTION SEVEN
## Insurance Requirements

The Contractor, at its own expense, shall at all times during the term of the Contract, maintain insurance as included in Exhibit A, Insurance Certificate(s) and Endorsement(s), which is attached hereto and previously incorporated by reference. The County may contact the Contractor's insurer(s) or insurer(s)' agent(s) directly at any time regarding the Contractor's coverages, coverage amounts, or other such relevant and reasonable issues related to this Contract. The Contractor shall also require any subcontractors to carry the same coverages in the same amounts. Additional insureds will only be covered by Contractor's insurance for liability assumed by Contractor in this Contract, subject to the terms of Contractor's insurance.

The County must be advised immediately of any changes in required coverages.

## SECTION EIGHT
## Payment and Performance Security

A. Intentionally deleted.

## SECTION NINE
## Compliance with Legal Requirements

All applicable federal, state and local laws, ordinances, and rules and regulations of any authorities (including, but not limited to, any laws, ordinances or regulations relating to the S.C. Department of Revenue or the S.C. Board of Contractors) shall be binding upon the Contractor throughout the pendency of the Work. The Contractor shall be responsible for compliance with any such law, ordinance, rule or regulation, and shall hold the County harmless and indemnify same to the extent in the event of Contractor's non-compliance as set forth in the Contract.

By signing a bid, the Contractor certifies that it will comply with the applicable requirements of Title 8, Chapter 14 of South Carolina Code of Laws, 1976, as amended, and agrees to provide to the State upon request any documentation required to establish either: (a) that Title 8, Chapter 14 is inapplicable to the Contractor and its subcontractors or sub-subcontractors; or (b) that the Contractor and its subcontractors or sub-subcontractors are in compliance with Title 8, Chapter 14.

Pursuant to Section 8-14-60, "A person who knowingly makes or files any false, fictitious, or fraudulent document, statement, or report pursuant to this chapter is guilty of a felony and, upon conviction, must be fined within the discretion of the Court or imprisoned for not more than five years, or both."

The Contractor agrees to include in any contracts with subcontractors, language requiring subcontractors to (a) comply with applicable requirements of Title 8, Chapter 14, and (b) include in its contracts with the subcontractors language requiring the sub-subcontractors to comply with the applicable requirements of Title 8, Chapter 14.

The Contractor agrees to and shall certify agreement to abide by the requirements under Title VI of the Civil Rights Act of 1964, and other non-discrimination authorities under Federal Executive Order Number 11246, as amended, and specifically the provisions of the equal opportunity clause.

The Contractor shall comply with all federal, state and local laws, ordinances, rules and regulations of any authorities throughout the duration of this Contract. The Contractor shall be responsible for compliance with any such law, ordinance, rule or regulation, and shall hold the County harmless and indemnify same to the extent of non-compliance of the above laws, ordinances, rules and regulations by Contractor.

## SECTION TEN
## Drug-free Workplace Act

The Contractor shall comply with the South Carolina Drug-free Workplace Act, Section 44-107-10 et seq., S.C. Code of Laws (1976, as amended). The County requires all Contractors executing contracts for a stated or estimated value of $50,000 or more to sign a Drug-free Workplace Certification form prior to the issuance of the Notice to Proceed.

## SECTION ELEVEN

**Material and Workmanship: Warranties and Representations**

The Contractor represents that its staff is knowledgeable about and experienced in performing the Work required in this Contract and warrants that it will use best skill and attention to provide above described Work in a professional, timely manner.

The Contractor warrants and represents that it shall be responsible for all subcontractors working directly for it, as well as for their work product, as though Contractor had performed the Work itself.

A. All equipment, materials and articles incorporated in the Work covered by the Contract and supplied by the Contractor are to meet the Federal/State Standard Specifications, unless otherwise stated herein. Unless otherwise specifically provided in this Contract, reference to any equipment, material, article or patented process, by trade name, make or catalog number, shall not be construed as limiting competition. When requested, the Contractor shall furnish to the Contracts and Procurement Director, for approval the name of the manufacturer, the model number, and other identifying data and information respecting the performance, capacity, nature and rating of the machinery and mechanical and other equipment which the Contractor contemplates incorporating in the Work. When required by this Contract or when called for by the Contracts and Procurement Director, the Contractor shall provide full information concerning the material or articles which he contemplates incorporating in the Work. When so directed, samples shall be submitted for approval at the Contractor's expense, with all shipping charges prepaid. Machinery, equipment, material and articles installed or used without the required prior approval of the County shall be at the risk of subsequent rejection by the County.

B. Any and all manufacturers' warranties on any equipment or materials will be passed on to the County and copies of said warranties will be furnished by the Contractor to the County upon completion and final acceptance of the Project. Notwithstanding anything to the contrary, any equipment/software provided by Contractor (or information collected therewith) in connection with Contractor's services is for Contractor's use and will always be Contractor property. Contractor is not selling or leasing any of the equipment/software to County, and Contractor will remove its equipment/software upon termination of this Contract.

C. The Procurement Director may, in writing, require the Contractor to remove from the Work Site any employee the Procurement Director deems incompetent, careless or otherwise objectionable.

D. In addition to any manufacturer's warranties, all workmanship and materials are warranted to be free from defects for a period of twenty-four (24) months after the date of Final Payment by the County.

## SECTION TWELVE
## Retention of Records

The Contractor agrees to maintain for three (3) years from the date of Final Payment, or until the end of any audit or closure of all pending matters under this Contract, whichever is later, all books, documents, papers, and records pertinent to this Contract. The Contractor agrees to provide to the County, any federal grantor agency, the Comptroller General of the United States, any state grantor agency, any assignee, or any of their duly authorized representatives reasonable access to such books, documents, papers, and records for the purpose of examining, auditing, and copying them. The Contractor further agrees to include these provisions in any subcontracts issued in connection with this Contract.

## SECTION THIRTEEN
## State and Local Taxes

Except as otherwise provided, Contract prices shall include all applicable state and local taxes.

The Contractor shall calculate that portion of the Contract that is subject to the to the total South Carolina and local sales and/or use tax, which amount shall be itemized and shown on all invoices, and shall be paid to the SCDOR by Contractor. If the Contractor is a non-South Carolina company, the County will withhold said amount from all invoices and remit payment to the SCDOR, unless Contractor furnishes County with a valid South Carolina Use Tax Registration Certificate Number.

The Contractor shall indemnify and hold harmless the County for any loss, cost, or expense incurred by, levied upon or billed to the County as a result of Contractor's failure to pay any tax of any type due in connection with this Contract.

The Contractor shall ensure that the above sections are included in all subcontracts and sub-subcontracts, and shall ensure withholding on out of state sub and sub-subcontractors to which withholding is applicable.

## SECTION FOURTEEN
## Independent Contractor

The Contractor is an independent contractor and shall not be deemed the agent or employee of the County for any purpose whatsoever. The Contractor shall not hold himself out as an employee of the County, and shall have no power or authority to bind or obligate the County in any manner, except the County shall make payment to the Contractor for Work and expenses as herein provided. The Contractor shall obtain and maintain all licenses and permits required by law for performance of this Contract by him or his employees, agents, and servants. The Contractor shall be liable for and pay all taxes required by local, state or federal governments, including but not limited to social security, Workers' Compensation, employment security, and any other taxes and licenses or insurance premiums required by law. No employee benefits of any kind shall be paid by the County to or for the benefit of the Contractor or its employees, agents, or servants by reason of this Contract.

## SECTION FIFTEEN
## Inspection and Acceptance, No-Claim Affidavits

A. The Contractor shall, without charge, replace any material or correct any workmanship found by the County not to conform to the Contract requirements, unless the County consents in writing to accept such material and workmanship with an appropriate adjustment in Contract Price. The Contractor shall promptly remove rejected material from the premises.

B. Upon completion and acceptance of all Work, the Contractor shall provide the Project Manager with written affidavits. Such affidavits shall state that all claims arising by virtue of the Contract have been paid in full with any exceptions listed on such affidavits.

C. Final acceptance of the completed project will be upon final payment to the Contractor. Upon final acceptance, the workmanship and material warranty period will begin.

## SECTION SIXTEEN
## Cleanup Work

A. During progress of Work, Contractor will keep the site and affected adjacent areas cleaned up. The Contractor will remove all rubbish, surplus materials, surplus excavates, and unneeded construction equipment so that the sites will be inconvenienced as little as possible.

B. Where materials or debris have washed or flowed into or have been placed in existing watercourses, ditches, gutters, drains, pipes, or structures by work done under this Contract, the Contractor will remove and dispose of such material or debris during the progress of the Work.

C. Upon completion of the Work, Contractor will leave all ditches, channels, drains, pipes, structures and work, etc. in a clean and neat condition.

D. The Contractor will remove all debris from any grounds which have been occupied by the Contractor and leave the roads and all parts of the premises and adjacent site affected by the Contractor's operations in a neat and satisfactory condition.

E. The Contractor will restore or replace, when and as directed, any public or private property damage by the Contractor's work, equipment or employees to a condition at least equal to that existing immediately prior to the beginning of the operations.

## SECTION SEVENTEEN
## Conditions Affecting the Work

A. The Contractor shall be responsible for having taken steps reasonably necessary to ascertain the nature and location of the Work and the general and local conditions which can affect the Work or the cost thereof. Any failure by the Contractor to do so will not relieve it from responsibility for successfully performing the Work without additional expense to the County. The County assumes no responsibility for any understanding or representations concerning conditions or anything related to this Contract, made by any of its officers or agents prior to the execution of this Contract, unless such understandings or representations by the County are expressly stated in this Contract.

B. The Contractor has visited and inspected the Work Site and accepts the conditions at the Work Site as they eventually may be found to exist and warrants and represents that this Contract can and will be performed under such conditions, and that all materials, equipment, labor and other facilities required because of any unforeseen conditions (physical or otherwise) shall be wholly at the Contractor's own cost and expense, anything in this Contract to the contrary notwithstanding.

## SECTION EIGHTEEN
## Safety of Persons and Property

A. The following provisions are in addition to those pertinent sections contained in the standard specifications.

B. The Contractor shall take reasonable precautions for safety of, and shall provide reasonable protection to prevent damage, injury or loss to:

(i) employees on the Work Site and other persons who may be affected thereby;

(ii) the Work and materials and equipment to be incorporated therein, whether in storage on or off the site, under care, custody or control of the Contractor or the Contractor's subcontractors or sub-subcontractors; and

(iii) other property at the site or adjacent thereto, such as trees, shrubs, lawns, walks, pavements, roadways, structures and utilities not designated for removal, relocation or replacement in the course of construction.

C. The Contractor shall give notices and comply with applicable laws, ordinances, rules, regulations and lawful orders of public authorities bearing on safety of persons or property or their protection from damage, injury or loss.

D. The Contractor shall erect and maintain, as required by existing conditions and performance of the Contract, reasonable safeguards for safety and protection, including posting and maintaining danger signs and other warnings against hazards as long as such hazards exist. The Contractor shall also promulgate safety regulations and notify owners and users of adjacent sites and utilities of all construction and related activities.

E. When use or storage of explosives or other hazardous materials or equipment or unusual methods are necessary for execution of the Work, the Contractor shall exercise utmost care and carry on such activities under supervision of properly qualified personnel.

F. The Contractor shall promptly remedy damage and loss (other than damage or loss insured under property insurance required by the Contract Documents) to property to the extent caused by the negligence of Contractor, a subcontractor, a sub-subcontractor, or anyone directly or indirectly employed by any of them, or by anyone for whose acts they may be liable and for which the Contractor is responsible except damage or loss attributable to acts or omissions of the County or anyone directly or indirectly employed by it, or by anyone for whose acts the County may be liable, and not attributable to the fault or negligence of the Contractor. The foregoing obligations of the Contractor are in addition to the Contractor's obligations under Section 25, Indemnification, herein.

G. The Contractor shall designate a responsible member of the Contractor's organization at the site whose duty shall be the prevention of accidents. This person shall be the Contractor's superintendent unless otherwise designated by the Contractor in writing to the County.

H. The Contractor shall not load or permit any part of the construction or site to be loaded so as to endanger its safety.

I. In an emergency affecting safety of persons or property, the Contractor shall act, at the Contractor's best discretion, to prevent threatened damage, injury or loss.

## SECTION NINETEEN
## Change Orders

One or more changes to the Work within the general scope of this Contract, may be ordered by change order. The County may also issue construction change directives, as set forth below. The Contractor shall proceed with any such changes, and same shall be accomplished in strict accordance with the following terms and conditions:

A. Change orders shall be submitted on the forms and pursuant to the procedures of the County. Change order shall mean a written order to the Contractor executed by the County after execution of this Contract, directing a change in the Work. A change order may include a change in the Contract Price, (other than a change attributable to damages to the Contractor for delay, which the Parties agree are not allowed under this Contract) or the time for the Contractor's performance, or any combination thereof. Where there is a lack of total agreement on the terms of a change order, the County may also direct a change in the Work in the form of a construction change directive, which will set forth the change in the Work and the change, if any, in the Contract Price or time for performance, for subsequent inclusion in a change order;

B. Any change in the Contract Price resulting from a change order shall be determined by use of the Unit Prices set forth in the Contractor's bid.

C. The execution of a change order by the Contractor shall constitute conclusive evidence of the Contractor's contract to the ordered changes in the Work, this Contract as thus amended, the Contract Price, and the time for performance by the Contractor. The Contractor, by executing the change order, waives and forever releases any claim against the County for additional time or compensation for matters relating to or arising out of or resulting from the Work included within or affected by the executed change order.

D. The Contractor shall notify and obtain the consent and approval of the Contractor's surety with reference to all change orders if such notice, consent or approval is required by the County, the Contractor's surety or by law. The Contractor's execution of the change order shall constitute the Contractor's warranty to the County that the surety has been notified of, and consents to, such change order and the surety shall be conclusively deemed to have been notified of such change order and to have expressly consented thereto.

## SECTION TWENTY
## Claims and Disputes

A. Definition. A Claim is a demand or assertion by one of the Parties seeking, as a matter of right, adjustment or interpretation of Contract terms, payment of money, and extension of time or other relief with respect to the terms of the Contract. The term "Claim" also includes other disputes and matters in question between the County and the Contractor arising out of or relating to the Contract. Claims must be made by written notice. The responsibility to substantiate Claims shall rest with the Party making the Claim. Following all limits and procedures herein shall be a condition precedent to the Contractor's entitlement to any increased compensation from any claim.

B. Time Limits on Claims. Claims by either Party must be made within Ten (10) Business Days after occurrence of the event giving rise to such Claim or within Ten (10) Business Days after the claimant first recognizes the condition giving rise to the Claim, whichever is later. An additional Claim made after the initial Claim has been implemented by change order will not be considered.

C. Continuing Contract Performance. Pending final resolution of a Claim request for review of site conditions, request for information, or resolution of a dispute, unless otherwise agreed in writing the Contractor shall proceed diligently with performance of the Contract and the County shall continue to make payments in accordance with the Contract Documents.

D. Waiver of Claims: Final Payment. The making of Final Payment shall constitute a waiver of Claims by the County except those arising from:

1. Liens, Claims, security interests or encumbrances arising out of the Contract and unsettled;

2. Failure of the Work to comply with the requirements of the Contract Documents; or

3. Terms of special warranties required by the Contract Documents.

E. Claims for Additional Costs. If the Contractor wishes to make Claim for an increase in the Contract Sum, written notice as provided herein shall be given before proceeding to execute the Work. Prior notice is not required for Claims relating to an emergency endangering life or property arising under Section 18(I). If the Contractor believes additional cost is involved for reasons including but not limited to (1) an order by the County to stop the Work where the Contractor was not at fault, (2) a written order for a minor change in the Work, (3) failure of payment by the County, (4) termination of the Contract by the County, (5) other reasonable grounds, Claim shall be filed in accordance with the procedure established herein.

F. Claims for Additional Time. See Section Five herein.

G. Injury or Damage to Person or Property. If either Party to the Contract suffers injury or damage to person or property because of ~~an~~ negligent act or omission of the other Party, of any of the other Party's employees or agents, or of others for whose acts such Party is legally liable, written notice of such injury or damage, whether or not insured, shall be given to the other Party within a reasonable time not exceeding Ten (10) Business Days after first observance. The notice shall provide sufficient detail to enable the other Party to investigate the matter. If a Claim for additional cost or time related to this Claim is to be asserted, it shall be filed as provided herein.

## SECTION TWENTY-ONE
## Damages

Intentionally deleted.

## SECTION TWENTY-TWO
## Suspension of Work

The Procurement Director may order, in writing, the Contractor to suspend, delay, or interrupt all or any part of the Work for such period of time as he may determine to be appropriate for the convenience of the County. The County may suspend performance of its obligations under this Contract in good faith for the convenience of the County or to investigate matters arising in the Work.

The Procurement Director may order suspension of the Work in whole or in part for such time as he deems necessary because of the failure of the Contractor to comply with any of the requirements of this Contract, and the Contract's completion date shall not be extended on account of any such suspension of Work

When the Procurement Director orders any suspension of the Work under the paragraph above, the Contractor shall not be entitled to any payment for Work with respect to the period during which such Work is suspended and shall not be entitled to any costs or damages resulting from such suspension.

The rights and remedies of the County provided in this Section are in addition to any other rights and remedies provided by law or under this Contract.

## SECTION TWENTY-THREE
## Modification of Contract

The County's Procurement Director has the unilateral right to modify this Contract when the modification is in the best interest of the County, provided however, the Contractor is given written notice of any such modification and the County is responsible for paying Contractor for any additional expenses incurred by Contractor which relate to the modification. Subject to the above, the Contractor shall immediately notify the County in writing of any proposed adjustment in its fee. The Contractor is obligated to perform the revised contract when so directed by the Procurement Director and the County is obligated to pay for the work performed pursuant to the modification. No claim by the Contractor for an adjustment hereunder shall be allowed if asserted after Final Payment under this Contract.

## SECTION TWENTY-FOUR
## Termination

A. **For Convenience**

The Procurement Director, by advance written notice, may terminate this Contract when it is in the best interests of the County. If this Contract is so terminated, the Contractor shall be compensated for all necessary and reasonable direct costs of performing the Work actually accomplished. The Contractor will not be compensated for any other costs in connection with a termination for convenience. The Contractor will not be entitled to recover any damages in connection with a

termination for convenience. The Contractor may terminate this Contract, in whole or in part, and without cause or penalty upon Sixty days' written notice.

B. **For Default**

If the Contractor refuses or fails to perform the Work or any separable part thereof in a timely or workmanlike manner in accordance with the Contract Documents, or otherwise fails, in the sole opinion of the County, to comply with any of the terms and conditions of the Contract Documents deemed, in the sole opinion of the County, to be material (including, without limitation, the requirement that Contractor obtain and maintain in force all necessary permits), such refusal or failure shall be deemed a default under this Contract.

In the event of a default under this Section, the County shall have the right to terminate forthwith this Contract by written notice to the Contractor. In the event of such default, the advance notice period for termination is waived and the Contractor shall not be entitled to any costs or damages resulting from a termination under this section.

Whether or not the Contractor's right to proceed with the Work is terminated, it and its sureties shall be liable for any damage to the County resulting from Contractor's default.

C. **Termination for Non-Appropriation of Funds**

The Procurement Director, by written advance notice, may terminate this Contract in whole or in part in the event that sufficient appropriation of funds from any source (whether a federal, state, County or other source) are not made or sufficient funds are otherwise unavailable, in either case, to pay the charges under this Contract. If this Contract is so terminated, the Contractor shall be compensated for all necessary and reasonable direct costs of performing the Work actually provided to the date of such termination. The Contractor will not be compensated for any other costs in connection with a termination for non-appropriation. The Contractor will not be entitled to recover any damages in connection with a termination for non-appropriation, including, but not limited to, lost profits.

D. **Rights Cumulative**

The rights and remedies of the County provided in this Section are in addition to any other rights and remedies provided by law or under this Contract.

## SECTION TWENTY-FIVE
## Indemnification

Except for expenses or liabilities arising from the negligence or intentional acts of the County, the Contractor hereby expressly agrees to indemnify and hold the County harmless against any and all expenses and liabilities to the extent caused by the negligent performance, or willful misconduct of the Contractor in conduct of this Contract, as follows:

For matters other than those arising from the rendering or failure to render professional services, the Contractor expressly agrees to the extent that there is a causal relationship between its negligence, or the negligence of any of its employees or any person, firm or corporation directly or indirectly employed by

the Contractor and any damage, liability, injury, loss or expense (whether in connection with bodily injury or death or property damage) that is suffered by the County and/or its officers or employees or by any member of the public, to indemnify and save the County and its officers and employees harmless against any and all liabilities, penalties, demands, claims, lawsuits, losses, damages, costs, and expenses to the extent arising out of the negligence of the Contractor. Such costs are to include, without limitation, reasonable defense, settlement and reasonable attorney's fees incurred by the County and its employees. This promise to indemnify shall include, without limitation, bodily injuries or death occurring to the Contractor's employees and any person, directly or indirectly employed by the Contractor (including, without limitation, any employee of any subcontractor) to the extent not caused by the County's negligence, the County's officers or employees, the employees of any other independent contractors, or occurring to any member of the public.

For matters arising out of the rendering or failure to render professional services, the Contractor will indemnify and save the County and its officers and employees harmless from and against all liabilities, penalties, demands, claims, lawsuits, losses, damages, costs and expenses to the extent caused by any negligent act, error or omission of the Contractor in the rendering or failure to render professional services under this Contract. Such costs are to include, without limitation, reasonable defense, settlement and reasonable attorneys' fees incurred by the County and its officers and employees. This promise to indemnify shall include, without limitation, bodily injuries or death occurring to the Contractor's employees and any person, directly or indirectly employed by the Contractor (including, without limitation, any employee of any subcontractor) to the extent not caused by the County's negligence, the County's officers or employees, the employees of any other independent contractors, or occurring to any member of the public.

Notwithstanding anything to the contrary, Contractor's liability will in no event exceed $2 million. Further, Contractor will not be liable for any (a) punitive or consequential damages, (b) damages arising from events beyond Contractor's reasonable control, or (c) injuries or deaths arising from any conditions of County's premises.

## SECTION TWENTY-SIX
## Gratuities and Kickbacks

**Gratuities**. It shall be unethical for any person to offer, give or agree to give any employee or former employee, or for any employee or former employee to solicit, demand, accept, or agree to accept from another person a gratuity or an offer of employment in connection with any decision, approval, disapproval, recommendation, preparation or any part of a program requirement or a purchase request, influencing the content of any specification or procurement standard, rendering of advice, investigation, auditing, or in any other advisory capacity in any proceeding or application, request for ruling, determination, claim or controversy, or other particular matter pertaining to any program requirement of a contract or subcontract, or to any solicitation or proposal therefore.

**Kickbacks**. It shall be unethical for any payment, gratuity, or offer of employment to be made by or on behalf of a subcontractor under a contract to the prime contractor, or to hire any subcontractor or any person associated therewith, as an inducement for the award of a subcontract or order.

Violation of this clause may result in Contract termination.

## SECTION TWENTY-SEVEN
## Labor: Subcontractors: Employment Consideration

The Contractor shall not contract with a proposed person or entity to whom the County has made reasonable and timely objections. The Contractor shall not be required to contract with anyone to whom the Contractor has made reasonable and timely objection.

The Contractor shall enforce strict discipline and good order among its employees and other persons carrying out the Contract.

Employment of labor by Contractor shall be effected under conditions which are satisfactory to County. Contractor shall remove or cause to have removed from the project any employee or employees who are considered unsatisfactory by the County.

The Contractor assumes the responsibility for assuring that its working forces are compatible with other forces on the job and Contractor is responsible for making himself aware of those forces. Contractor will furnish a competent representative who is to be kept available to the site to represent the Contractor for the purpose of receiving notices, orders and instruction.

## SECTION TWENTY-EIGHT
## Other Contracts

The County reserves the right to undertake or award other contracts for additional work/services, and may elect to complete portions of the work/services included in this Contract using its own forces or through other contracts, and the Contractor shall fully cooperate with such other contractors, County employees and carefully fit its own work/services to such work/services as may be directed by the County. The Contractor shall not commit or permit any act by its forces or subcontractors which will interfere with the performance of work/services by any other contractor or by County and or Department employees.

## SECTION TWENTY-NINE
## Permits and Licenses

The Contractor shall, without additional expense to the County, be responsible for obtaining and maintaining all necessary licenses and permits required by the State of South Carolina, a municipality or the County or any other authority having jurisdiction. Prior to execution of a contract, the Contractor may be required to provide a copy of its current applicable Contractor's License issued by the State of South Carolina and the County. Any subcontractor must comply with the regulations promulgated in the South Carolina Contractor's Licensing Board as enforced by the South Carolina Licensing Board for Contractors. Contractor's (and or any subcontractor's) License Number, Person's Name and Business Name must all be shown on all required licenses.

## SECTION THIRTY
## Assignment

The Contractor shall not assign in whole or in part the Contract without the prior written consent of the County or its Assignee. The Contractor shall not assign any money due or that may become due to it under said Contract without the prior written consent of the County or its Assignee. Each Party binds itself, its successors, assigns, executors, administrators or other representatives to the other Party hereto and to

successors, assigns, executors, administrators or other representatives of such other Party in connection with all terms and conditions of the Contract.

## SECTION THIRTY-ONE
## Controlling Law

The laws of South Carolina shall govern this Contract. All litigation arising under this Contract shall be litigated only in a nonjury hearing in the Court of Common Pleas, Fourteenth Judicial Circuit, Beaufort County, South Carolina.

## SECTION THIRTY-TWO
## Severance

Should any part of this Contract be determined by a Court of competent jurisdiction to be invalid, illegal, or against public policy, said offending Section shall be void and of no effect and shall not render any other Section herein, nor this Contract as a whole, invalid.

## SECTION THIRTY-THREE
## County's Designated Representative(s)

In the event that any questions or problems arise in the course of performing this Contract, Contractor shall immediately contact one or more of the following County representatives:

David Thomas, Director
Beaufort County Purchasing Department
P.O Drawer 1228
Beaufort, South Carolina 29901
843-255-2304

## SECTION THIRTY-FOUR
## Notices

Whenever any provision of this Contract requires the giving of written notice, it shall be deemed to have been validly given if delivered by person or by registered mail to the following:

If to the County:
David Thomas, Director
Beaufort County Purchasing Department
P.O Drawer 1228
Beaufort, South Carolina 29901
843-255-2304

If to the Contractor:

Justin Heyward, Area Vice President
Securitas, Inc.
3294 Ashley Phosphate Road, Suite 2F
North Charleston, SC 29418
(843) 554-5503

**SECTION THIRTY-FIVE**
**Non-Waiver**

Any waiver of any default by either Party to this Contract shall not constitute waiver of any subsequent default, nor shall it operate to require either Party to waive, or entitle either Party to a waiver of, any subsequent default hereunder. Notwithstanding anything to the contrary, in connection with the US Safety Act, each party waives all claims against the other for damages arising from or related to an act of terrorism, and the parties intend for this waiver to flow down to their respective contractors and subcontractors.

**SECTION THIRTY-SIX**
**Entire Contract**

This Contract constitutes the entire understanding and Contract between the Parties hereto and supersedes all prior and contemporaneous written and oral contracts between the Parties and their predecessors in interest regarding the subject matter of this Contract. This Contract may not be changed, altered, amended, modified, or terminated orally, except as specifically provided, and any such change, alteration, amendment, or modification must be in writing and executed by the Parties hereto.

**IN WITNESS WHEREOF**, the Parties executed this Contract under their several seals the day and year first written above.

**SECURITAS, INC.**

March 20, 2020

Name: Justin Heyward
Title: Area Vice President

**BEAUFORT COUNTY, SOUTH CAROLINA:**

Ashley Jacobs
County Administrator
Beaufort, SC

**Attest:**

**Attest:**

1) 1) Chief Harris

2) 2) Lidia Delhome

## Beaufort Executive Airport SC, Aviation Fuel & Service Provider

**RFP ARW060321**

## Summary Score Sheet

| Evaluators | Name of Company | Name of Company | Name of Company | |
|---|---|---|---|---|
| | AEG Fuels | Campbell Oil Company | World Fuel Services | |
| P. Dolin | 60 | 92 | 74 | |
| M. Myers | 79 | 100 | 73 | |
| S. Parry | 91 | 99 | 74 | |
| J. Rembold | 65 | 97 | 92 | |
| TOTALS: | 295 | 388 | 313 | |
| | | | | |
| | | | | |
| 1. Campbell Oil Company | 388 | | | |
| 2. World Fuel Services | 313 | | | |
| 3. AEG Fuels | 295 | | | |

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# BEAUFORT COUNTY COUNCIL
# AGENDA ITEM SUMMARY

**ITEM TITLE:**

Recommendation of Award RFB #ARW060321- Beaufort Executive Airport (ARW)

$375,000 *(Resale for profit)*

**MEETING NAME AND DATE:**

County Council – July 26, 2021

**PRESENTER INFORMATION:**

Jared Fralix, P.E. ACA – Engineering
Stephen Parry, Deputy Airports Director (Alternate)
(2 minutes)

**ITEM BACKGROUND:**

The Beaufort Executive Airport purchases aviation fuels for resale at a profit. The term of the contract for the current provider expires soon and Campbell Oil has been selected as the next provider following an RFP and interview process. Campbell Oil is a family-owned business that has grown into a major provider in the Southeast. Their reviews are strong, especially in the areas of reliability and customer service.
Approved by Beaufort County Airports Board on 7/15/2021
Approved by Public Facilities Committee on 7/19/2021

**PROJECT / ITEM NARRATIVE:**

Campbell Oil is a Phillips 66-branded provider and offers other benefits to the airport such as marketing assistance, customer loyalty programs, inexpensive fuel trucks with service plans, staff safety training, and point of sale software assistance. The airport purchases the aviation fuels and then sells the fuel at a profit. This is a top revenue line item for the airport.

**FISCAL IMPACT:**

*51000011-58000 (Purchases -Fuel/Lubricants)* $375,000 (resale for profit)

**STAFF RECOMMENDATIONS TO COUNCIL:**

*Staff recommends awarding* RFB #ARW060321 *to Campbell Oil Company*

**OPTIONS FOR COUNCIL MOTION:**

*Motion to approve /deny the recommendation of fuel contract award for* RFB #ARW060321 *to Campbell Oil Company*
***(Next step*: *Purchasing and Legal draft a contract for the County Administrator's approval*)**

# BEAUFORT COUNTY COUNCIL
## AGENDA ITEM SUMMARY

**ITEM TITLE:**

Recommendation of Award for RFP #032421– Project Management, Landscape Maintenance Services for Linear Medians for Various County Roads ($236,892.00)

**MEETING NAME AND DATE:**

County Council – July 26, 2021

**PRESENTER INFORMATION:**

Jared Fralix, ACE – Engineering

Neil Desai, P.E - Public Works Director *(Alternate)*

(5 min)

**ITEM BACKGROUND:**

February 12, 2021 – RFP posted on Vendor Registry
March 3, 2021 – Pre-Bid Meeting
March 24, 2021 – Bids due
July 26, 2021 – Public Facilities Committee approved

**PROJECT / ITEM NARRATIVE:**

Due to the maintenance responsibility of several linear project areas (Sections of Highway 278 medians, Spanish Moss Trail & Bluffton Parkway), staff recognized that these specific areas would be better suited to be contracted out. Initial discussions were conducted with several landscape contractors to gauge interest in potential bidders for this project. This project was put out for bid, four bids were received with County staff choosing The Greenery, the lowest, most responsive, and responsible bidder.

**FISCAL IMPACT:**

Funding will come from 10001301-51110 in FY22, The Greenery bid was for $236,892.00. The fund balance in this account is $600,000.00.

**STAFF RECOMMENDATIONS TO COUNCIL:**

Staff recommends the award of RFP #032421– Project Management, Landscape Maintenance Services for Linear Medians for Various County Roads to The Greenery.

**OPTIONS FOR COUNCIL MOTION:**

Motion to approve/deny recommendation of award for RFP #032421– Project Management, Landscape Maintenance Services for Linear Medians for Various County Roads to The Greenery.

***(Next Step – Execute contract with The Greenery)***

# Project Management, Landscape Maintenance Services

| | The Greenery | Hilton Head Landscapes | Southern Palmetto | Bright View |
|---|---|---|---|---|
| **John Miller** | 66 | 60 | 63 | 36 |
| | | | | |
| **Nancy Moss** | 69 | 68 | 60 | 43 |
| | | | | |
| **Neil Desai** | 71 | 61 | 64 | 62 |
| | | | | |
| **Total** | 206 | 189 | 187 | 141 |

# BEAUFORT COUNTY COUNCIL
## AGENDA ITEM SUMMARY

**ITEM TITLE:**

Beaufort County and City of Beaufort Intergovernmental Agreement Amendment for Airport Frontage Road

**MEETING NAME AND DATE:**

County Council – July 26, 2021

**PRESENTER INFORMATION:**

Jared Fralix, Assistant County Administrator - Engineering

**ITEM BACKGROUND:**

In March 2020, Beaufort County and City of Beaufort entered into an intergovernmental agreement for the construction and improvements at US 21 Airport Area and Airport Frontage Road (Lost Island Connectivity Project). Through the development of the project, Beaufort County and City of Beaufort have a desire to clarify right of way language in the agreement.

***Item was approved at Public Facilities Committee on July 19, 2021***

**PROJECT / ITEM NARRATIVE:**

The City will be responsible for the costs and expenses associated with the purchase of property from Airport Junction LLC and the County is responsible for all other land purchases.

**FISCAL IMPACT:**

N/A

**STAFF RECOMMENDATIONS TO COUNCIL:**

Staff recommends the execution of the Beaufort County and City of Beaufort Intergovernmental Agreement Amendment for Airport Frontage Road

**OPTIONS FOR COUNCIL MOTION:**

Motion to approve/deny the execution of the Beaufort County and City of Beaufort Intergovernmental Agreement Amendment for Airport Frontage Road

***Next Step: Execute amendment to the IGA for Airport Frontage Road.***

# FIRST AMENDMENT
# INTERGOVERNMENTAL AGREEMENT
# FOR CONSTRUCTION AND IMPROVEMENTS AT
# US 21 AIRPORT AREA AND FRONTAGE ROAD
# (LOST ISLAND CONNECTIVITY PROJECT)
# ORIGINAL AGREEMENT DATED: MARCH 19, 2020

THIS FIRST AMENDMENT to the Intergovernmental Agreement ("IGA") by and between the City of Beaufort, South Carolina, a municipal corporation ("City"), and Beaufort County, South Carolina, a political subdivision of the state of South Carolina ("County") dated March 19, 2020, is made and entered into this _____ day of _____ 2021.

The City and County desire to change paragraph 3 which states "All planning and construction expenses associated with the Project (specifically excluding all costs and expenses associated with all property acquisition [including, for instance but not limited to, condemnation, rights of way, easements of all types, etc.]) shall be paid with the revenue generated by the 2018 Transportation Sales and Use Tax".

The amendment shall read: "All planning and construction expenses associated with the Project (all costs and expenses associated with all property acquisition are defined in item 5) shall be paid with the revenue generated by the 2018 Transportation Sales and Use Tax".

The City and County desire to change paragraph 5 which states "The City shall bear all costs and expenses associated with all property acquisition including, for instance but not limited to, condemnation, rights of way, easements of all types, etcetera."

The amendment shall read: The City shall bear all costs and expenses associated with, for instance but not limited to, condemnation, rights of way, easements of all types, etcetera, for the acquisition of property from Airport Junction, LLC only. The County will acquire any other properties necessary for the construction of the project.

All other mutual covenants remain in effect. This Agreement cannot be further amended except in writing and with the mutual consent of the parties.

Any notice under this Agreement shall be delivered in writing to the following:

To the City:
Mr. William Prokop
City Manager
1911 Boundary Street
Beaufort, SC 29902

To the County:
Mr. Eric Greenway
County Administrator
PO Drawer 1228
Beaufort, SC 29901-1228

IN WITNESS WHEREOF, we have hereunto set our hands and seals the day and year first above written.

WITNESSES:

_____ By: _____
William A. Prokop, City Manager

_____

_____ By: _____
Eric Greenway, County Administrator

_____

# INTERGOVERNMENTAL AGREEMENT FOR CONSTRUCTION AND IMPROVEMENTS AT US 21 AIRPORT AREA AND FRONTAGE ROAD (LOST ISLAND CONNECTIVITY PROJECT)

THIS INTERGOVERNMENTAL AGREEMENT ("IGA") by and between the City of Beaufort, South Carolina, a municipal corporation ("City"), and Beaufort County, South Carolina, a political subdivision of the state of South Carolina ( "County") is made and entered into this 19th day of March 2019.20

WHEREAS, the City and the County recognize the need to improve the safety and the capacity of US 21 across Lady's Island for the public good. To that end the City did, in 2017, commission Stantec, an engineering firm, and Ward Edwards Engineering to conduct a traffic study and to make recommendations on steps the City and the County can take improve both; and

WHEREAS, on May 19, 2017, Stantec published a report entitled Lady's Island Corridor Study (Study") which identifies nine (9) specific projects all of which are designed to improve safety and capacity on US 21 across Lady's Island including improvements on US 21 in the area of the airport. One of the improvements listed in the Study, in fact the final project listed in the Study, is designated US 21 Airport Area and Frontage Road (hereinafter "Lost Island Connectivity Project" or "Project"); and

WHEREAS, the County did, by Resolution (Exhibit "A"), approve and adopt the Study and added the projects designated therein to the County's Transportation Capital Improvement Plan ("CIP"); and

WHEREAS, the County did, thereafter, adopt an Ordinance which called for a Referendum on a proposed Transportation Sales and Use Tax. Included in that Ordinance and Referendum was a list of projects to which the revenue generated by the tax, if approved, would apply. The projects listed in the Referendum, which the voters approved in November 2018, included the projects listed in the Study; and

WHEREAS, thereafter, specifically in May 2019, the City committed $95,000 of City Funds to the Lost Island Connectivity Project; and

WHEREAS, the City and the County are preparing to embark on the planning and construction phases of the Project. They wish to enter into this agreement which will clarify, identify and delineate the roles of each entity relating to the Project so they can move forward with the award, administration and management of it.

NOW, THEREFORE, for and in consideration of the mutual covenants exchanged herein, the City and the County hereby agree as follows:

1. The County shall assume responsibility for the planning, award, administration, and management of all contracts concerning, relating and pertaining to the Project except as specified in paragraph 4 below.

2. In the interest of continuity, timely response to issues which arise and fiscal control over the Project, the County will be responsible for day to day oversight of the Project.

3. All planning and construction expenses associated with the Project (specifically excluding all costs and expenses associated with all property acquisition [including, for instance but not limited to, condemnation, rights of way, easements of all types, etc.]) shall be paid with revenue generated by the 2018 Transportation Sales and Use Tax.

4. County will be responsible for the procurement, administration, and cost of the design phase of the project to include all necessary permitting. The roadway infrastructure will be designed to adhere to the most recent amended version of the City's Street Network and Design Standards (Section 7.2) and Appendix C of "The Beaufort, SC Code" which was formerly adopted by the City on June 27, 2017. City to review

5. The City shall bear all costs and expenses associated with all property acquisition including, for instance but not limited to, condemnation, rights of way, easements of all types, etcetera.

6. The City and the County that County shall deduct ten (10%) percent from each contractor payment as retainage. Retainage may, in County's sole discretion, be reduced to five (5%) percent upon fifty (50%) percent completion of the Project. All retainage will be paid upon satisfactory completion of the Project as required by the Contract Documents.

7. Upon completion of the project, the County will not retain any interest in the roadway improvements and the City will maintain the facility as a City street

8. Any notice under this Agreement shall be delivered in writing to the following:

| | |
|---|---|
| To the City: | Mr. William Prokop<br>City Manager<br>1911 Boundary Street<br>Beaufort, SC 29902 |
| To the County: | Ms. Ashley Jacobs<br>County Administrator<br>P. O. Drawer 1228<br>Beaufort, SC 29901-1228 |

9. The City and the County agree that procurement of goods or services in the furtherance of the Project shall be pursuant to Beaufort County procurement policies, ordinances and/or guidelines as well as any relevant state or federal procurement requirements which may be applicable if state and/or federal grant funding is received. The parties expressly agree to be bound by the County's interpretation of the same.

10. This Agreement constitutes the full and complete agreement between the parties relative to the Project. Neither party relies upon, or has the right to rely upon, any representation

regarding the terms of this Agreement regardless of whether such representations are oral or written, consistent or inconsistent with the terms set forth herein. This Agreement supersedes and replaces all previous Agreements discussion between the parties relating to the Project. To the extent any term or condition of this Agreement contradicts a term or condition in a previous Agreement or discussion, the terms and conditions set forth herein shall prevail.

11. This Agreement cannot be amended except in writing and with the mutual consent of the parties.

IN WITNESS WHEREOF, we have hereunto set our hands and seals the day and year first above written.

WITNESSES:

By: _____
William A. Prokop, City Manager

By: _____
Ashley Jacobs, County Administrator