

## MEETING MINUTES

1. David O'Hagan (Committee Chairperson / FDOT State Roadway Design Engineer) opened the meeting. He stated this meeting was being held under the Sunshine Law and minutes were being taken. David also asked that everybody fill in their information on the [sign-in sheet](#) that was being passed around. David stated that the [agenda](#) was very full and we would try to stay on schedule.
2. David O'Hagan discussed Committee Member changes (since last meeting): William "Bill" Lecher passed away earlier in the year, and Richard McCubbin left the City of Jacksonville (leaving the District 2 Rural and Urban area positions vacant). George Webb replaced Henry Cook as the District 4 Urban Area member. Also several associate member changes took place: Robert Robertson replaced William Nickas as the State Structures Engineer; and Gail Holley and Chester Henson were added at the last meeting.
3. The meeting attendees took turns introducing themselves.
4. David O'Hagan said that everybody should have picked up a [Meeting Package](#). He then asked that everybody turn to and review the [2006 Meeting Minutes](#). Rob Quigley (FDOT Roadway Design) noted that the minutes showed where a question was asked as to whether or not members could receive Professional Development Hour (PDH) credits for attending future meetings. Rob stated that this issue was researched and no PDH credits could be earned for attending this meeting. There were no other comments, and all were in favor to accept the minutes.
5. Rob Quigley (FDOT Roadway Design) discussed Florida Greenbook ownership, FDOT's role and the Committee's role and responsibilities. Rob also noted that active Committee participation is essential and asked that each member participate in at least one subcommittee. Rob also stated that participation is also measured by meeting attendance and that although attendance at every meeting is preferred, members that could not attend at least one annual meeting every three years would be questioned on whether or not they were able to remain on the committee.
6. Rob Quigley gave a brief overview of the [Rulemaking Process](#).
7. Rob Quigley briefly discussed the [Sunshine Law](#) and what was required during annual meetings and subcommittee meetings. There requirements were outlined in the [2006 Meeting Minutes](#).
8. Jim Mills (FDOT Roadway Design) discussed current FDOT design issues. These issues included a brief presentation on the Department's [Median Crossover Policy](#) and a brief presentation on [Cable Barrier](#). For more information on these issues, contact [Jim Mills](#).

Chester Henson (FDOT Roadway Design) also discussed current FDOT design issues related to Traffic Design. He discussed the changes in wind speed requirements for signals, signing and lighting. He also talked about the single point signal connection and its advantages compared to a two cable system. For more information on these issues, contact [Chester Henson](#).

9. Chester Henson and Gail Holley (FDOT Traffic Operations) discussed the DRAFT Signing and Marking chapter ([Chapter 18](#)) proposed for inclusion in the next edition of the Florida Greenbook after the 2007 edition. Chester discussed what was put into the chapter including information on signs, pavement markings and retro-reflective pavement markers (RPM's). Any comments on the proposed Chapter should be forwarded to [Chester Henson](#). **When all comments are incorporated, the next draft of the chapter will be posted online on the Florida Greenbook Web Page for review (<http://www.dot.state.fl.us/rddesign/FloridaGreenbook/FGB.htm>), and the committee will vote on approving the chapter at the 2008 meeting.**
10. Billy Hattaway (Glattig Jackson Kercher Anglin) discussed the subcommittee progress on the Traditional Neighborhood Development (TND)chapter (which the subcommittee agreed needed to be a new Florida Greenbook chapter). The new chapter will address street development and land use. He made a presentation on [Traditional Neighborhood Development](#) that will be presented to different stakeholder groups to make sure they are aware of what's going on and give them an opportunity to comment. **Billy stated the subcommittee's goal is to have a chapter introduction (with definitions) ready in May 2007 and a draft chapter ready for the 2008 meeting.**
11. Duane Brautigam (FDOT Specifications) discussed the background and status of the Local Agency Program (LAP) Specifications which are still in DRAFT form: Landscape (580), Earthwork (120), Hot Mix Asphalt (334), and Concrete (344). **These are available for review and comment on the History of LAP Specifications web page: <http://www.dot.state.fl.us/specificationsoffice/LapSpecs/HistoryofLAPSPECS.htm>}** Duane discussed each of the Specifications, discussed the different categories of each, and also highlighted points of flexibility. **Duane asked the Greenbook Committee for endorsement and all were in favor to endorse these specifications.**
12. Ken Leuderalbert (FDOT Project Management) also gave an explanation of the [Local Agency Program Advisory Council](#). He invited those interested to join this committee. For more information on this council, or to join, contact [Ken Leuderalbert](#).
13. Amy Datz (FDOT Transit Office) discussed the Accessing Transit handbook. Electronic versions of the current edition are available on the FDOT Transit Web Page: <http://www.dot.state.fl.us/transit/>, and copies of the hand book can be obtained by contacting Amy Datz. Amy also gave a presentation on [Version 2 of Accessing Transit](#), and discussed the proposed revisions and timeline for completion.
14. Lunch Break
15. Marianne Trussell (FDOT Safety Office) discussed Florida's Strategic Highway Safety Plan and mentioned the Florida Safety Summit in Orlando that was taking place on March 12-13, 2007. Marianne gave an overview of the Plan, its development history, and emphasis areas. Details can be found on the Strategic Highway Safety Plan Web Page: <http://www.dot.state.fl.us/safety/StrategicHwySafetyPlan.htm>.

16. Jim Mills gave an overview of the [Federal Rule on Work Zone Safety and Mobility](#) and discussed how it applies to local agencies on projects of significant impact. Jim also covered the Transportation Management Plan (TMP), Temporary Traffic Control (TTC) Plan, and Training requirements of the Rule. Jim also mentioned the presentation on the Rule which was done for the [2007 FDOT Design Update Training by Cheryl Adams](#). This training is available online on the Design Update Training web page (under PPM Vol 1 Chapter 10) at: <http://wbt.dot.state.fl.us/ois/UpdateTraining2007/> **The Committee agreed that a reference to this rule be included in the 2007 edition of the Florida Greenbook.**
17. Allen Schrupf (Dyer, Riddle, Mills, & Precourt, Inc.) discussed some potential areas of improvement for Chapter 11 – Work Zone Safety which were detailed in the [Memorandum to the Greenbook Committee and Cheryl Adams](#) which he handed out. **The Committee decided that these issues need to be discussed among the Chapter 11 Subcommittee and the Subcommittee recommendations can be presented at the 2008 Committee Meeting.**
18. Dwayne Kile (FDOT District Design Engineer – District 7) gave a presentation on the [Americans with Disabilities Act \(ADA\) and the Florida Accessibility Code](#). He discussed the background of ADA and ADA Accessibility Guidelines (ADAAG) including proposed changes in the proposed Public Rights of Way Accessibility Guidelines. **{CLARIFICATION: The 4' minimum accessible route width requirement discussed at the Greenbook meeting is being proposed, but HAS NOT YET BEEN ADOPTED by Federal Rule. FDOT has adopted 4' as a standard for new construction and reconstruction, but even FDOT still allows for reductions to current adopted minimums in ADAAG where space is constrained or restricted. For Utilities on the State Highway System, the minimums in the current UAM are still in effect (36" and 32").}** Dwayne also discussed issues that have arisen in lawsuits and the efforts made to resolve those issues. For more information on these issues, contact [Dean Perkins](#) or [Dwayne Kile](#).
19. Rick Renna (FDOT Drainage Design) discussed current FDOT drainage design issues. These issues included discussions on the High Density Polyethylene Pipe (HDPE), she proposed Statewide Erosion and Sediment Control Manual for designers and inspectors, and the proposed update of Rule 14-86. Rick also gave a brief update on Coastal Wave Research, Spiral Ribbed Aluminized Pipe, and Fiber Reinforced Concrete Pipe. For more information on these issues, contact [Rick Renna](#).
20. Open discussion / Committee Member issues.
  - a. Jim Davis offered several proposed changes to Chapter 2 – Land Development. **These changes were accepted by the committee for the 2007 Florida Greenbook.**
  - b. Andre Pavlov identified the major changes for the update of Chapter 17, and mentioned some minor changes which were necessary for this update. **These changes were accepted by the committee for the 2007 Florida Greenbook.**

- c. George Webb and Craig Batterson had some questions regarding the 14.5' driver's eye setback in Figure 3-8. Jim Mills referred to Section C.9.b.4.(a) of Chapter 3 for further information.
- d. Joy Puerta asked about updating the Florida Greenbook to reflect 48" minimum sidewalk width rather than the current 36" minimum. Jim Mills suggested that we wait until he gets confirmation as to whether the new values have been adopted by Federal Rule yet. **{See Clarification note in Item 18.}**
- e. Gaspar Miranda had a question about Table 3-11. He asked if there can be a narrower width available for use for Urban Streets with design speeds of 45mph and less. **It was recommended that this issue be researched by the Chapter 3 Subcommittee.**
- f. George Webb asked who approves off-system LAP Exceptions. The Maintaining Agency must approve those, and Ken Leuderalbert noted that it is covered in the LAP Manual which is available on the Project Management web page at:  
<http://www.dot.state.fl.us/projectmanagementoffice/lap/default.htm>
21. David O'Hagan went through each of the chapters of the Florida Greenbook, highlighted the major changes, and asked the committee if they approve the changes to the document inclusive of the edits discussed at the meeting. **All were in favor to approve the changes and proceed with Rulemaking.**
22. Rob Quigley asked the committee to review their [member information](#) and provide updates. **Updated Member Info is posted on the Florida Greenbook Web Page <http://www.dot.state.fl.us/rddesign/FloridaGreenbook/FGB.htm>.**
23. [Subcommittee membership](#) was briefly reviewed and updated as well. **Updated Subcommittee Membership information is posted on the Florida Greenbook Web Page: <http://www.dot.state.fl.us/rddesign/FloridaGreenbook/FGB.htm>.**
24. Rob Quigley discussed the [Tentative Schedule](#) for the 2007 Florida Greenbook. Rob also mentioned that **the tentative date of the 2008 meeting is March 11, 2008**, and the location is yet to be determined.
25. Travel Form Reminder. Contact [Rob Quigley](#) if you have any questions.
26. Meeting critique: Improvements were discussed for the next meeting: Suggestions included having a slightly larger room with bigger tables. Other comments included that this meeting was in a good location, and some good information was provided.
27. Meeting adjourned.

# Florida Greenbook Advisory Committee Meeting

March 13, 2007

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# Florida Greenbook Advisory Committee Meeting

## March 7, 2006

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47	Jim Harrison	Orange County	Jim.Harrison@OCFL.net
48			
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50			

*March 13, 2007*

*Florida Greenbook Advisory Committee Meeting*

*Meeting Handouts*

*Hawthorn Suites – Orlando Airport  
Orlando, Florida*





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# AGENDA

## FLORIDA GREENBOOK ADVISORY COMMITTEE MEETING

Tuesday, March 13, 2007 8:00am – 5:00pm

**Hawthorn Suites, Orlando**  
**7450 Augusta National Drive**  
**Orlando, FL 32822**  
**(407) 438-2121**

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|----------------------|--|
| <b>8:00 – 8:15</b>   | General Information (15min) <ul style="list-style-type: none"> <li>• Introductions (David O’Hagan)</li> <li>• Committee Member Changes (David O’Hagan)</li> <li>• Review March 2006 Meeting Minutes (David O’Hagan)</li> <li>• Discuss Florida Greenbook Ownership (Rob Quigley)</li> <li>• 2007 FGB / Rulemaking Process (Rob Quigley)</li> <li>• Sunshine Law (Rob Quigley)</li> </ul> |
| <b>8:15 – 9:00</b>   | FDOT Design Issues (45min) <ul style="list-style-type: none"> <li>• Cable Barrier Status (Jim Mills)</li> <li>• Median Crossover Policy (Jim Mills)</li> <li>• Signing and Signalization Issues (Chester Henson)</li> </ul>  |
| <b>9:00 – 9:30</b>   | Signing & Marking Chapter Subcommittee Update (Chester Henson / Gail Holley) (30min)   |
| <b>9:30 – 10:00</b>  | Traditional Neighborhood Development (TND) Chapter Subcommittee Update (Billy Hattaway) (30min)  |
| <b>10:00 – 10:15</b> | <b><i>Morning Break (15min)</i></b>  |
| <b>10:15 – 11:15</b> | Local Agency Project (LAP) Specifications (Duane Brautigam) (60min)  |
| <b>11:15 – 11:30</b> | Transit Happenings (Amy Datz) (15min)  |
| <b>11:30 – 12:30</b> | <b><i>Lunch (1hr)</i></b>  |
| <b>12:30 – 1:30</b>  | Strategic Highway Safety Plan. (Marianne Trussell) (60min)   |
| <b>1:30 – 2:00</b>   | Final Rule on Work Zone Safety and Mobility Update (Jim Mills / Fred Schneider) (30min)  |
| <b>2:00 – 2:45</b>   | ADA Issues (Dwayne Kile) (45 min)  |
| <b>2:45 – 3:00</b>   | <b><i>Afternoon Break (15min)</i></b>  |
| <b>3:00 – 3:45</b>   | Drainage Issues (Rick Renna) (45min)   |
| <b>3:45 – 4:45</b>   | Roundtable Discussion / Committee Member Issues (Committee) (60min)  |
| <b>4:45 – 5:00</b>   | Closing Items (Rob Quigley) (15min) <ul style="list-style-type: none"> <li>• Review / Update Subcommittee Assignments</li> <li>• Tentative Schedule for 2007 Manual</li> <li>• Travel Form Reminder / Reimbursement Info</li> <li>• Meeting Critique</li> </ul>  |

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Time slots for the agenda are tentative and could change slightly due to individual schedules of guests.

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## MEETING MINUTES

1. David O'Hagan (FDOT State Roadway Design Engineer) opened the meeting by introducing himself as the new FDOT State Roadway Design Engineer and the new Committee Chairperson. He stated this meeting is being held under the Sunshine Law and minutes were taken. David also asked that everybody fill out their information on the [sign-in sheet](#) that was being passed around. David stated that the [agenda](#) was very full and we would try to stay on schedule.
2. Meeting attendees introduced themselves.
3. David said that everybody should have picked up a [meeting package](#). He then asked that everybody turn to and review the [2005 meeting minutes](#). There were no comments.
4. Rob Quigley (FDOT Roadway Design) discussed Committee Member changes (since last meeting): Steve Neff (replaced Dennis Daughters), Craig Batterson (replaced Robert Shutts), David Ponitz (replaced James Sloane) David O'Hagan (replaced Brian Blanchard) and Marianne Trussell (replaced Ed Rice). Also several associate members were added at the last meeting (William Nickas, Duane Brautigam, and Allen Schruppf).
5. Rob Quigley stated that the 2005 Florida Greenbook went through rulemaking and became effective on November 24, 2005. Rob also gave a brief overview of the [Rulemaking Process](#).
6. Rob Quigley discussed Florida Greenbook ownership, FDOT's role and the Committee's role and responsibilities. Rob also noted that active Committee participation is essential and asked that each member participate in at least one subcommittee. Rob also stated that participation is also measured by meeting attendance and that although attendance at every meeting is preferred, members that could not attend at least one annual meeting every three years would be questioned on whether or not they were able to remain on the committee.
7. Gail Holley (FDOT Traffic Operations) made a presentation on the FDOT [Elder Road User Program](#). After her presentation the committee discussed the need for a chapter on signing and marking to include additional information for such things as designing for elder road users, and wayfinding signs. **The committee members unanimously voted (13 yes - 0 no) to establish a subcommittee to develop the chapter.** (Updated Subcommittee Membership information is posted on the [Florida Greenbook Web Page \(http://www.dot.state.fl.us/rddesign/Florida%20Greenbook/FGB.htm\)](#). (Additional information on the Elder Road User Program can be found on the Traffic Operations web page: [http://www.dot.state.fl.us/trafficoperations/Operations/ElderRdUser.htm](#) )
8. The new [Federal Rule on Work Zone Safety and Mobility](#) and how it applies to local agencies was discussed. The Rule applies to all local agencies but only on projects of significant impact. Dennis Filloon (FDOT's Central Office Local Agency Program (LAP) Administrator) to give the LAP perspective on the new Rule. If the LAP

agreements already take the Rule into account, then it may not need to be specifically covered in the Greenbook. **The Chapter 11 (Work Zone Safety) subcommittee will review the Rule, define “projects of significant impact,” and make a recommendation to the Committee. Jim Mills will also report back at next meeting on what changes have been made in FDOT standards and criteria in response to the Rule.**

9. Duane Brautigam (FDOT Specifications) handed out four DRAFT Local Agency Project Specifications and discussed each of them: [Landscape \(580\)](#), [Earthwork \(120\)](#), [Hot Mix Asphalt \(334\)](#), and [Concrete \(344\)](#). **The Local Agency Specifications subcommittee will review these draft specifications to determine if these are what they needed, and to determine where to go from here. {These are available for review and comment on the FDOT Specifications web page: [http://www.dot.state.fl.us/specificationoffice/LAP\\_IndustryReview.html](http://www.dot.state.fl.us/specificationoffice/LAP_IndustryReview.html) }** Also, Dennis Filloon mentioned that the LAP Checklist would be posted on the **LAP Web Page: ([http://www.dot.state.fl.us/ProjectManagementResearchDevelopment/LAP%20Files/lap\\_pmr&d.htm](http://www.dot.state.fl.us/ProjectManagementResearchDevelopment/LAP%20Files/lap_pmr&d.htm))** and not in the LAP Manual (which will be updated and issued soon). Dennis also mentioned that he had looked at the 2004-2005 work mix on LAP projects and found that 2/3 of the LAP projects were projects like sidewalks, bike paths, culverts, etc.
10. Todd Buckles (FACERS) presented the training issue mentioned in the [FACERS Letter to FDOT](#). He stated that current IMSA training is not Florida specific, it is expensive (and has renewal fees) and it is not provided often enough. T<sup>2</sup> representative Nina Barker was also present because T<sup>2</sup> is developing training in several areas. Todd said that FACERS would like that training to be recognized in lieu of IMSA training to meet requirements on some city or county employee position descriptions. Todd said that FACERS would like to lend subject matter experts to provide review of the courses and he presented a plan to add something to the Florida Greenbook. Jim Mills (FDOT Roadway Design) pointed out that FDOT is **[not placing any certification requirements](#)** on city or county employees. **Todd said that FACERS will re-evaluate their request and decide which direction they want to go.** No proposed language was added to the Florida Greenbook.
11. Nina Barker (T<sup>2</sup>) was also present to give an update on the Florida Greenbook Seminar Series that T<sup>2</sup> is developing as discussed at last year’s meeting. Funding has been delayed but they will be moving forward with the development of the course and FACERS may be able to beta test the course. Nina also mentioned that T<sup>2</sup> has a quarterly newsletter on their **Web Page (<http://t2.ce.ufl.edu/>)** and the **February 2006 Newsletter (<http://t2.ce.ufl.edu/nl/2006-02.pdf>)** has a work zone traffic control equipment and training needs application.
12. Amy Datz (FDOT Transit Office) and Rick Sparer (Earth Tech) discussed the proposed changes to **Chapter 13** (addressing bus stops and bus bays) that were updated since the last meeting and reviewed by the Chapter 13 Subcommittee. Amy also handed out the **Transit Facilities Guidelines** that are available on the **FDOT Transit Web Page**

[\(http://www.dot.state.fl.us/transit/\)](http://www.dot.state.fl.us/transit/). The committee had a few additional comments to be incorporated in the chapter, and the updated chapter will be sent out to the subcommittee and committee once the changes have been incorporated.

13. Jim Mills discussed current FDOT design issues. These issues included information on [patterned/textured pavement](#) (the new Specification is in place), the new Mast Arm Policy Area ([updated in the Plans Preparation Manual\(PPM\)](#)) and the [Design Update Training CD](#) (This was sent to registered PPM users and is available for purchase through the FDOT Maps and Publications Sales Office Web Page (<http://www.dot.state.fl.us/mapsandpublications/>)).
14. Billy Hattaway (Hall Planning and Engineering, Inc.) gave a [Presentation on Livable Communities](#). A Livable Communities Subcommittee was established by unanimous vote. **This committee will determine what aspects of livable community design need to be addressed in the Florida Greenbook. They will also determine if a new chapter is needed or if the information can be integrated into current chapters.**
15. Martin Guttenplan (FDOT Systems Planning Office) gave a presentation on Planning Issues. The first issue presented was the current research project on [Establishing Guidelines for Midblock Crosswalks at Uncontrolled Locations](#) being conducted with the Center for Urban Transportation Research (CUTR). Dr. Xuehao Chu (CUTR) was also present to discuss the project.

Martin also presented an overview of the [2025 Florida Transportation Plan](#) (FTP).

16. Bruce Conroy (FDOT General Counsel) presented the [Sunshine Law](#) and how it applies to committee activities. **David O’Hagan said that guidelines will need to be developed for the subcommittee activities.**

*{These Subcommittee were subsequently determined to be as follows:*

- a. *Subcommittees (author) shall provide advance public notification of any meetings or conference calls. This can be accomplished by forwarding the information to the FDOT Roadway Design Office for posting on the Florida Greenbook web page (which will be rearranged with subcommittee pages). Meetings must be held in a facility that is open to the public. For teleconferences, at least one physical location (i.e. conference room that is dialed into teleconference) must be provided in a facility that is open to the public. That location will be posted online with the meeting notice.*
- b. *Minutes must be taken for each meeting/teleconference. Meeting minutes can be brief, however at a minimum, the meeting minutes must document any committee action taken*
- c. *The minutes from all subcommittee meetings must be sent to the FDOT Roadway Design Office for posting on the Florida Greenbook web page.*

- d. Any email correspondence relating to the subcommittee's tasks and efforts, must be kept on file by the Subcommittee author. The author must keep them until the changes are incorporated into the final manual and adopted by Rule. At that point, copies of the email correspondence can be submitted to the FDOT Roadway Design Office.}*
  
- 17. Open discussion / Committee Member issues.
  - a. David O'Hagan and Andre Pavlov discussed the Chapter 17 changes needed for the 2007 Florida Greenbook.
  - b. Craig Batterson asked whether or not members could receive Professional Development Hour (PDH) credits for attending future meetings. **(This is being researched).**
  
- 18. Rob Quigley asked the committee to review their [member information](#) and provide updates. (Updated Member Info posted on the [Florida Greenbook Web Page \(http://www.dot.state.fl.us/rddesign/Florida%20Greenbook/FGB.htm\)](#)).
  
- 19. [Subcommittee membership](#) was briefly reviewed and updated as well. *{If any other members need their subcommittee membership updated, please contact [Rob Quigley](#).}* (Updated Subcommittee Membership information is posted on the [Florida Greenbook Web Page: \(http://www.dot.state.fl.us/rddesign/Florida%20Greenbook/FGB.htm\)](#)).
  
- 20. Rob Quigley discussed the [Tentative Schedule](#) for the 2007 Florida Greenbook.
  
- 21. Travel Form Reminder. Contact [Rob Quigley](#) if you have any questions.
  
- 22. Discussed improvements for the next meeting: Suggestions included having a microphone for presenters and teleconference capabilities.
  
- 23. Marianne Trussell discussed Florida's Strategic Highway Safety Plan and mentioned the Florida Safety Summit in Orlando on March 30, 2006. Details can be found on the [State Safety Office Web Page \(http://www.dot.state.fl.us/safety/\)](#).
  
- 24. Meeting adjourned.

# A Summary of Florida's Government in the Sunshine Law

## September 22, 2005

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### 1. Scope of the Sunshine Law

The Sunshine Law provides public access to governmental proceedings, including meetings of public boards or commissions. § 286.011, Fla. Stat. (2004)

Section 286.011, Florida Statutes, provides that 1) meetings of public boards or commissions must be open to the public, 2) reasonable notice of such meetings must be given; and 3) minutes of the meeting must be taken.

### 2. Definition of a Meeting

The Sunshine Law does not only apply to formal proceedings by boards and commissions. It applies to any gathering, casual or not, concerning matters upon which *foreseeable action* may be taken by the applicable agency or organization. *See Hough v. Stembridge*, 278 So. 2d 288 (Fla. 3d DCA 1973). Meetings in defiance of the Sunshine Law are those that are “violative of the statute’s spirit, intent and purpose.” *Id.*

Because the Sunshine Law applies to *any* gathering, formal or casual, concerning matters upon which action may be taken, the statute also applies to discussions over the telephone or communications via computer.

### 3. Individuals/Organizations Subject to the Sunshine Law

The Sunshine Law applies to any meeting between two or more members of “any board or commission of any state agency or authority or of any agency or authority of any county, municipal corporation, or political subdivision.” *See* § 286.011, Fla. Stat. (2004). The courts have stated that it was the Legislature’s intent to bind “every board or commission of the state, or of any county or political subdivision over which it has domain and control.” *Times Publishing Company v. Williams*, 222 So. 2d 470 (Fla. 2d DCA 1969). All public agencies, including elected and appointed boards or commissions and even collegial bodies, are subject to the statute. The Florida Department of Transportation (the Department) is a public agency and thus falls under the authority of the Sunshine Law.

#### 3(a). Advisory Boards or Committees

Advisory boards or committees appointed by public agencies are subject to the Sunshine Law, even if their recommendations are not acted upon. *See* AGO 82-35, *Town of Palm Beach v. Gradison*, 296 So. 2d 473 (Fla. 1974). A limited exception applies to committees established strictly for fact-finding such as information gathering and reporting.

### **3(b). Staff Members**

The meetings of staff members of a board or commission covered by the Sunshine Law are generally not subject to the Sunshine law. This exception also applies to staff members of advisory boards or committees. *See* § 286.011, Fla. Stat., *Occidental Chemical Co. v. Mayo*, 351 So. 2d 336 (Fla. 1977). However, when a staff member ceases to function in a staff capacity and is appointed to a committee which is delegated authority to make recommendations to a board or official, the staff member loses his or her identity as staff while working on the committee and the Sunshine Law applies to the committee. Thus, it is the nature of the act performed, not the makeup of the committee or the proximity of the act to the final decision which determines whether a committee composed of staff is subject to the Sunshine Law.

### **3(c). Purchasing or Bid Evaluation Committees**

Generally committees appointed by agencies subject to Sunshine Law to consider purchases or bids by contractors are themselves subject to the Sunshine Law. However, meetings involving confidential bid estimates are not subject to the Sunshine Law because the Department's contract award process has been adopted in recognition of Sunshine Law requirements.

## **4. Notice Requirements**

As previously mentioned, meetings covered by the Sunshine Law require that "reasonable notice" be given beforehand. The Attorney General's Office has suggested notice guidelines, which include: 1) the notice should contain the time and place of the meeting and, if available, an agenda, 2) the notice should be prominently displayed in the area in the agency's office set aside for that purpose, 3) emergency sessions should be afforded the most effective notice under the circumstances and 4) effective methods include press releases, phone calls to wire services, and advertising in local newspapers of general circulation.

## **5. Consequences for Failure to Comply**

The consequences for violation of the Sunshine Law vary. There can be criminal penalties if any board or commission member *knowingly* violates the Sunshine Law, including the possibility of a second degree misdemeanor charge (which can include imprisonment and/or a fine). Additional consequences include removal from office, non-criminal penalties such as fines, attorney's fees, and civil actions for injunctive or declaratory relief.

Violation of the Sunshine Law also renders actions taken by boards or commissions invalid. Section 286.011, Florida Statute provides that no resolution, rule, regulation or formal action shall be considered binding except as taken or made at an open meeting.

## **6. Conclusion**

It is advisable to be well acquainted with Florida's Government-in-the-Sunshine Law. The overarching policy behind the law is very simple. Actions should be analyzed in light of the Sunshine Law's spirit and intent to provide the public a right of access to government proceedings.

**FLORIDA DEPARTMENT OF TRANSPORTATION  
GOVERNMENT IN THE SUNSHINE  
September 2005**

**Caveat:** This briefing paper is intended as an overview of the complex legal issues involving Florida's Government in the Sunshine Law, Public Record Law, and Ethics Laws. Readers are cautioned that these laws contain traps for the unwary, which can cause seemingly innocent activities to become a crime. The advice of an attorney should be sought for their application to particular circumstances.

**OPEN MEETINGS**

All meetings at which public business is discussed or transacted shall be duly noticed and open to the public.<sup>1</sup>

**YOU CANNOT:**

- Discuss with any other member any item that is under consideration by the authority, except at a duly noticed public meeting

**YOU CAN:**

- Discuss other matters with other members at any time.
- Discuss authority business with any person who is not a member, except that the person cannot act as a liaison between or among members.

A continuing concern is the sending of e-mail by a member to other members. An e-mail that states factual background material is permissible<sup>2</sup> so long as there is no interaction between or among members. E-mails that solicit comments from other members or that circulate responses from members are prohibited.<sup>3</sup>

Minutes of each meeting must be taken, which must include a record of all voting.<sup>4</sup>

**PUBLIC RECORDS**

Records of "any board or commission of any state agency or authority of any agency or authority of any county, municipal corporation, or political subdivision," except those that are specifically exempted by statute, are public records and must be available for inspection and copying by any person at a reasonable place and time.<sup>5</sup>

A public record is defined very broadly and includes tape recordings, hand written notes, and information in a computer.<sup>6</sup> All materials made or received in connection with official business regardless of form are to be open for public review unless exempted by the legislature. This includes notes that are intended to be kept as a record or that are circulated or communicated to another.<sup>7</sup> However, notes prepared for personal use are not public records.<sup>8</sup>



Electronic mail comes within the public records law, and any e-mail sent or received relating to official business must be made available to the public if requested. As noted above, the Public Meeting Law prohibits interactive e-mail between or among members relating to official business of the authority.

## **ETHICS**

Certain provisions of the Florida Code of Ethics for Public Officers and Employees, Sections 112.311-112.326, Florida Statutes, apply. It is not the intent of this summary to cover the multifarious aspects of governmental ethics. For more information, visit the Commission of Ethics Website: <http://www.ethics.state.fl.us/> Certain key provisions are summarized below.

- Prohibited actions or conduct:<sup>9</sup> Solicitation or acceptance of gifts or unlawful compensation to influence official action; misuse of public position; or use of information not available to the public generally for personal pecuniary gain for themselves or anyone else. Note: For the gifts that are allowed by the statute,<sup>10</sup> the Governor's Code of Ethics places further restrictions.<sup>11</sup>
- Restricted business and contractual relationships:<sup>12</sup> Certain restrictions and prohibitions apply to members or their relatives.
- Voting Conflicts of Interest:<sup>13</sup> Persons present at a meeting are required to vote, unless the member has a voting conflict of interest, in which case the member may abstain from voting.<sup>14</sup> A voting conflict occurs when the measure being voted on inures to the private gain or loss of the member, a relative, the member's employer, or a client of the member. The member must disclose the conflict prior to participating in discussion or voting on the matter, or if unknown at the time, as soon as possible. The member must file Commission on Ethics Form 8A<sup>15</sup> with the recording secretary within fifteen days of the vote.

### **Reference Materials:**

Attorney General's Website: <http://myfloridalegal.com/sunshine>

*Government-in-the-Sunshine Manual*, First Amendment Foundation, Tallahassee, FL

First Amendment's Website: <http://www.floridafaf.org/>

### **ENDNOTES:**

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<sup>1</sup> Article 1, Section 24(b), Florida Constitution, and Section 286.011, Florida Statutes (Florida Government in the Sunshine Law), apply to agencies of the state. Sections 343.80-343.89, Florida Statutes, created the Northwest Florida Transportation Corridor Authority as an agency of the state.

<sup>2</sup> Attorney General Opinion 2001-20, March 20, 2001.

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<sup>3</sup> Attorney General Informal Opinion, October 31, 2000.

<sup>4</sup> Sections 286.011(2) and 286.012, Florida Statutes.

<sup>5</sup> Article I, Section 24(a), Florida Constitution; Section 119.07, Florida Statutes.

<sup>6</sup> Section 119.011(1), Florida Statutes; Orange County v. Florida Land Co., 450 So. 2d 341 (Fla. 5th DCA 1984).

<sup>7</sup> Shevin v. Byron, Harless, Schaffer, Reid & Assoc., Inc., 379 So. 2d 633 (Fla. 1980).

<sup>8</sup> Times Publishing Co. v. City of St. Petersburg, 558 So. 2d 487 (Fla. 2d DCA 1990).

<sup>9</sup> Section 112.313(7), Florida Statutes.

<sup>10</sup> Sections 112.312(12) and 112.313(2), Florida Statutes.

<sup>11</sup> Governor Bush's Code of Ethics, available at:

<http://www.myflorida.com/myflorida/government/policies/ethicscode.html>

<sup>12</sup> Sections 112.313(3), (7), and (12), Florida Statutes.

<sup>13</sup> Section 112.3143, Florida Statutes.

<sup>14</sup> Section 286.012, Florida Statutes.

<sup>15</sup> [http://www.ethics.state.fl.us/forms/Form8a\\_2000.PDF](http://www.ethics.state.fl.us/forms/Form8a_2000.PDF).

# **Emergency and Maintenance Crossovers on Limited Access Facilities**

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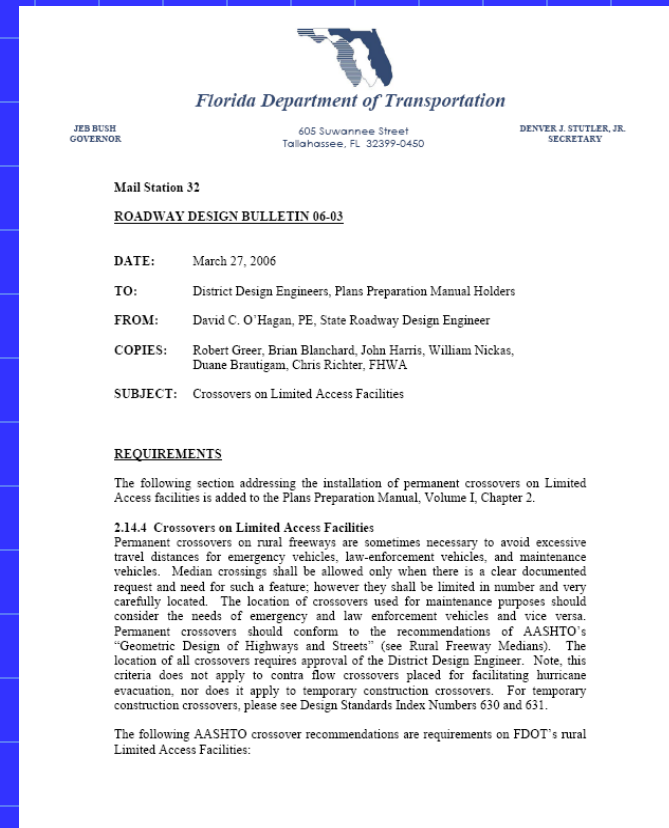


<b>Facility</b>	<b>Centerline Miles</b>	<b>Total Number of Crossovers</b>	<b>Not Meeting Criteria</b>	<b>Average Spacing (Miles)</b>
<b>I-4</b>	<b>132.3</b>	<b>12</b>	<b>11</b>	<b>11.0</b>
<b>I-10</b>	<b>362.3</b>	<b>37</b>	<b>29</b>	<b>9.8</b>
<b>I-75</b>	<b>470.7</b>	<b>90</b>	<b>59</b>	<b>5.2</b>
<b>I-95</b>	<b>382.1</b>	<b>40</b>	<b>23</b>	<b>9.6</b>
<b>I-275</b>	<b>60.4</b>	<b>1</b>	<b>1</b>	<b>60.4</b>
<b>I-295</b>	<b>35.5</b>	<b>3</b>	<b>3</b>	<b>11.8</b>
<b>I-595</b>	<b>12.9</b>	<b>6</b>	<b>6</b>	<b>2.2</b>
<b>Total Interstate</b>	<b>1456.2</b>	<b>189</b>	<b>132</b>	<b>7.7</b>
<b>Turnpike</b>	<b>446.7</b>	<b>221</b>	<b>220</b>	<b>2.0</b>
<b>Total</b>	<b>1917.4</b>	<b>410</b>	<b>352</b>	<b>4.7</b>

# Crossovers

## Limited Access Facilities

- Roadway Design Bulletin 06-09 (8-25-06)
  - Location and Spacing Requirements
  - Approval Requirements
  - Design Guidance
- PPM Jan 2007



# Crossovers

## Limited Access Facilities

- **Criteria Applies to:**
  - Emergency Vehicle Use
  - Law Enforcement
  - Maintenance Use
- **Does Not Apply to:**
  - Crossovers for Contra Flow
  - Temporary Construction Crossovers
    - Index 630 and 631.

# Crossovers

## Limited Access Facilities

- Location and Spacing Criteria
  - Must be a Documented Need
  - Shall be Limited in Number
  - Shall be Carefully Located
  - Must be approved by the District Design Engineer

# Crossovers

## Limited Access Facilities

- Location and Spacing Criteria
  - Must Conform to AASHTO
    - 2004 Green Book Chapter 8  
(page 510)

# Crossovers

## Limited Access Facilities

- Where Interchange Spacing  $\geq 5.0$  mi.
  - No closer than 3.0 miles apart.
  - Above-minimum Stopping Sight Distance
  - Not within Superelevated Curves.
  - Not within 1,500 ft of a speed-change taper
  - Not within 1,500 ft of any Structure
    - Bridge, Overpassing Facility or Overhead Sign
  - Not where Median Width  $< 25$  ft

# Crossovers

## Limited Access Facilities

- Where Interchange Spacing  $< 5.0$  mi.
  - Above-minimum Stopping Sight Distance
  - Not within Superelevated Curves.
  - Not within 1,500 ft of a speed-change taper
  - Not within 1,500 ft of any Structure
    - Bridge, Overpassing Facility or Overhead Sign
  - Not where Median Width  $< 25$  ft

# Crossovers

## Limited Access Facilities

- Exceptions to the preceding Criteria must be approved by:
  - State Roadway Design Engineer
  - FHWA (Interstates only)



# Crossovers

## Limited Access Facilities

- **Additional FDOT Requirements**
  - Not Located within 1.5 miles of any Interchange
  - Not Located where Median Width < 40 ft.
  - Where Median Barrier is continuous, space openings not greater than 5 miles apart.
- **Variations may be approved by the District Design Engineer**

# Crossovers

## Limited Access Facilities

- Design Guidance
  - Typical Layouts in Design Bulletin
    - 6 Lane without Barrier
    - 4 Lane without Barrier
    - 4 Lane with Barrier
  - Design Vehicles to Consider
    - Fire Trucks
    - Ambulances
    - Maintenance Vehicles

# Typical Layouts Provided in PPM

6 Lanes – Med Barrier

4 Lanes – No Barrier

6 Lanes – No Barrier

Figure 2.14.3  
Median Barrier Opening For  
Crossovers on Limited Access Facilities  
Typical Layout

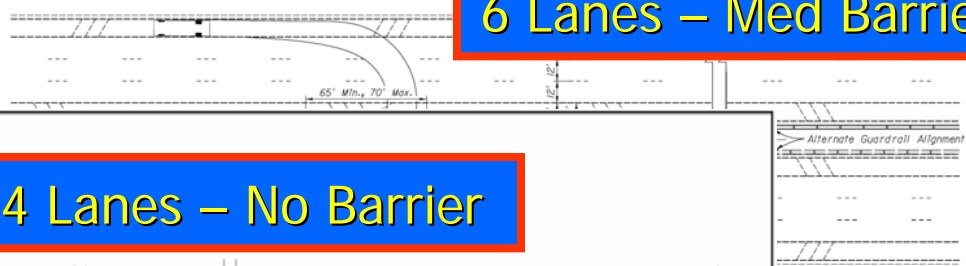
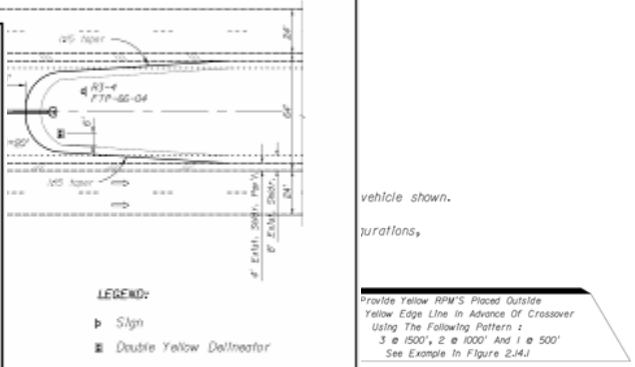
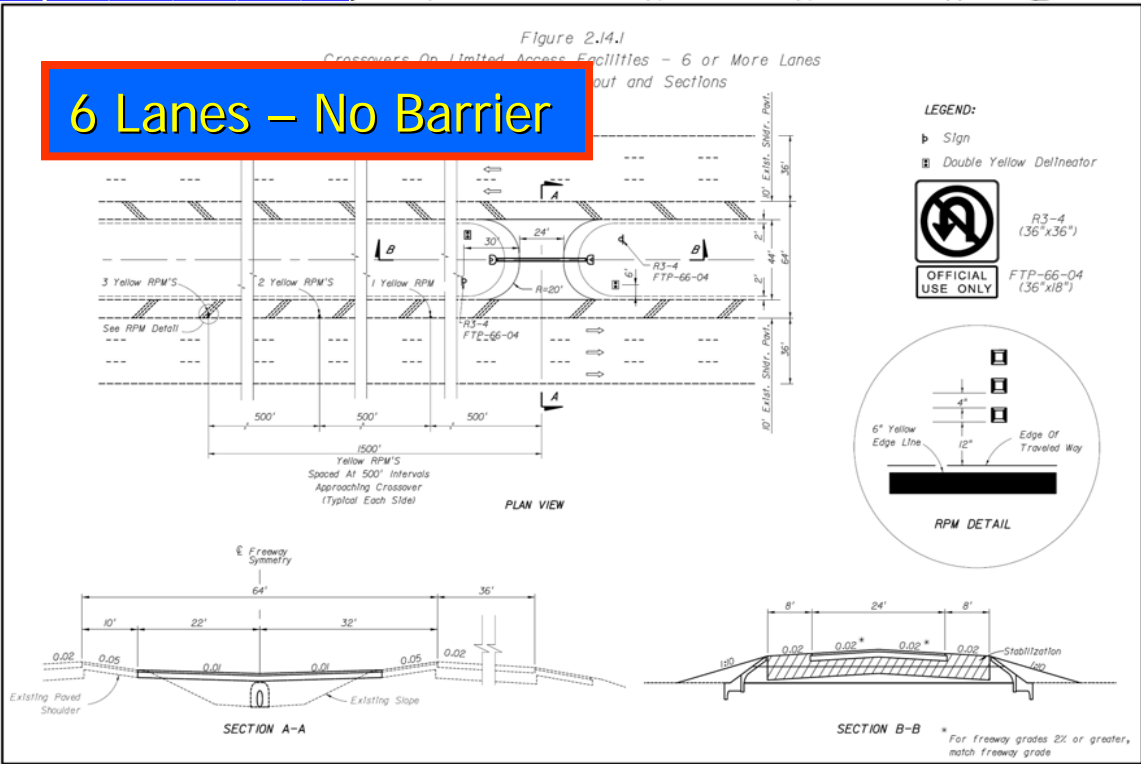


Figure 2.14.1  
Crossovers On Limited Access Facilities - 6 or More Lanes  
Layout and Sections



# Crossovers

## Limited Access Facilities



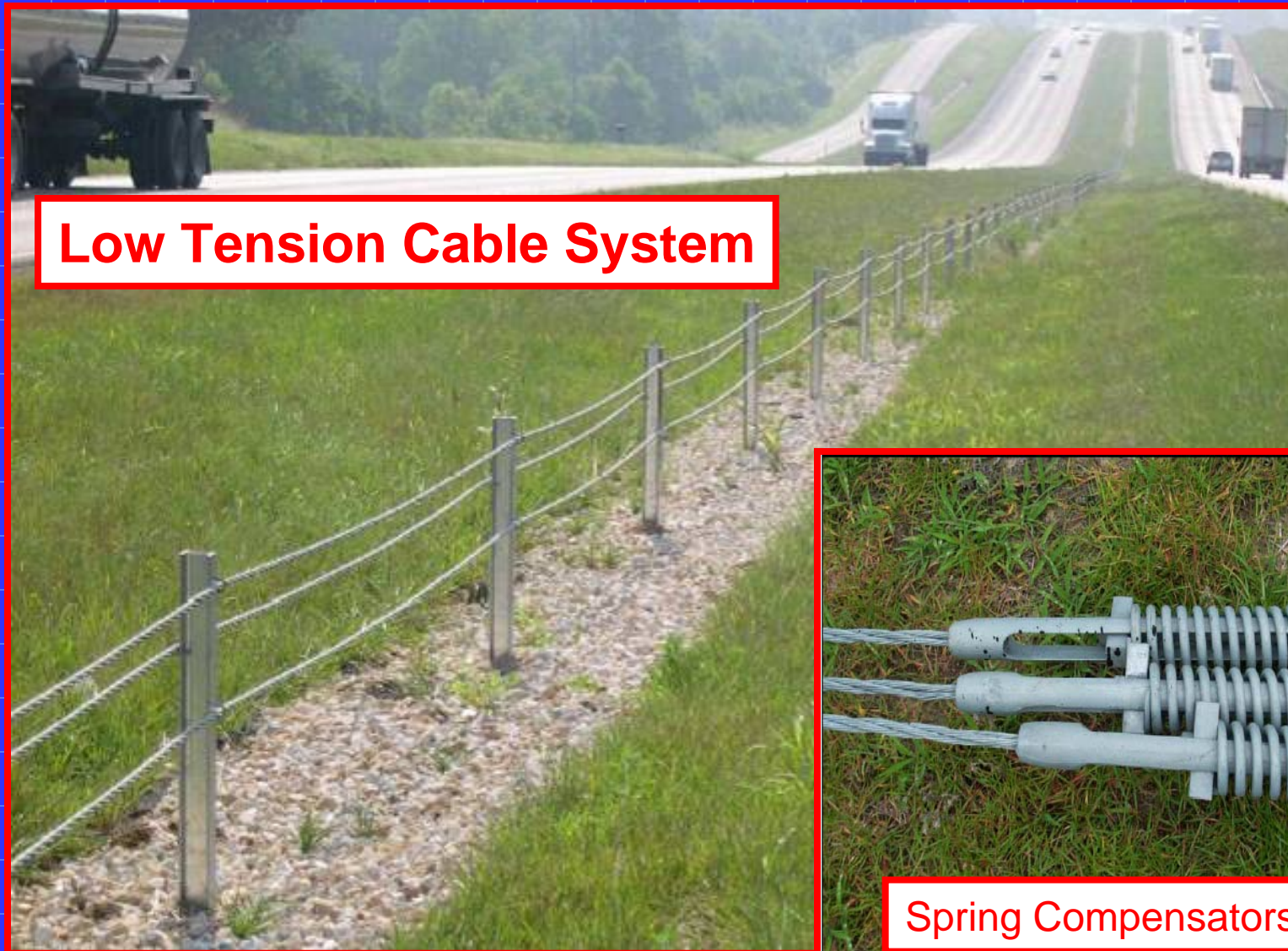
THE END

James A. Mills, P.E.  
Roadway Design Office  
Criteria and Standards Section  
850-414-4318/SC 994-4318  
[jim.mills@dot.state.fl.us](mailto:jim.mills@dot.state.fl.us)

# High Tension Cable Barriers Do They Work?







**Low Tension Cable System**



**Spring Compensators**



## High Tension Cable System





Low Tension System



High Tension Cable System



Brifen



CASS



Gibraltar



Nucor Marion



Safence

# Post Footings

**Driven**



**Concrete Sockets**



# Tension Adjustment Systems



# Anchor Systems

Deadman Anchor



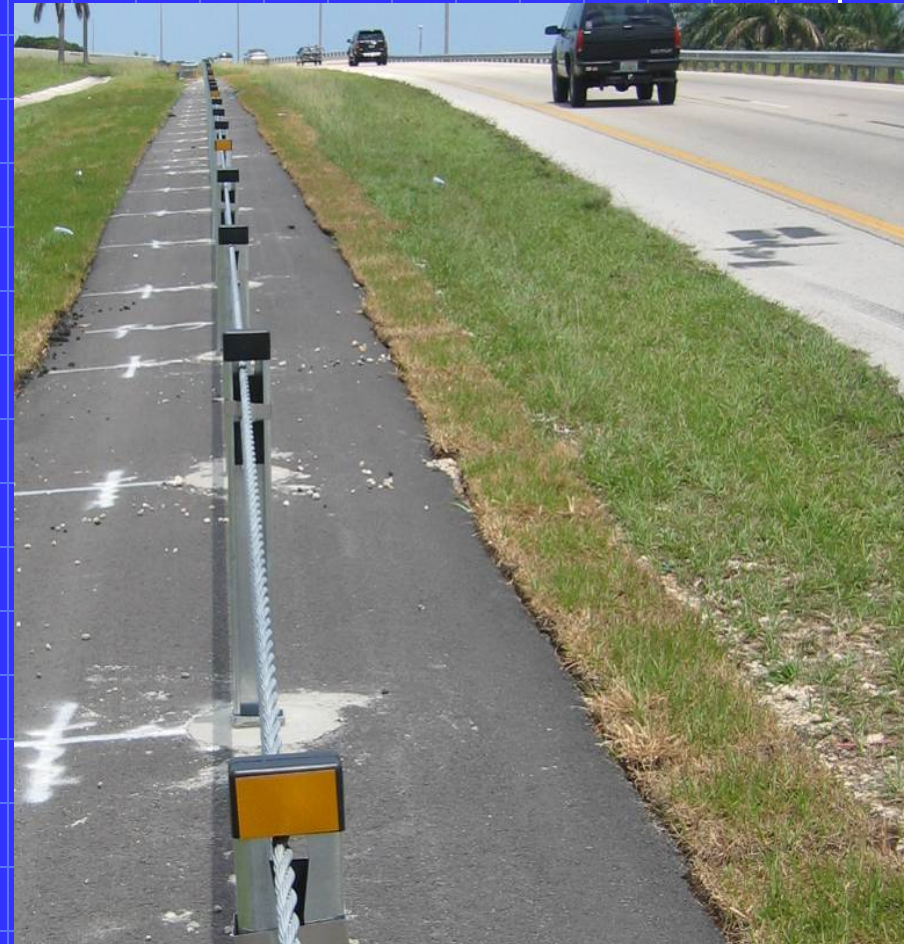
Crashworthy Anchor



# Guardrail Anchor



# Design Considerations Location - Shoulder



# Deflection Space

Deflection	Post Spacing
9'3"	30.FT
9'	28.FT
8'	20.FT
7'	12.FT



# Deflection Space



# Design Considerations Location - Slope



# Design Considerations

## Location - Slope

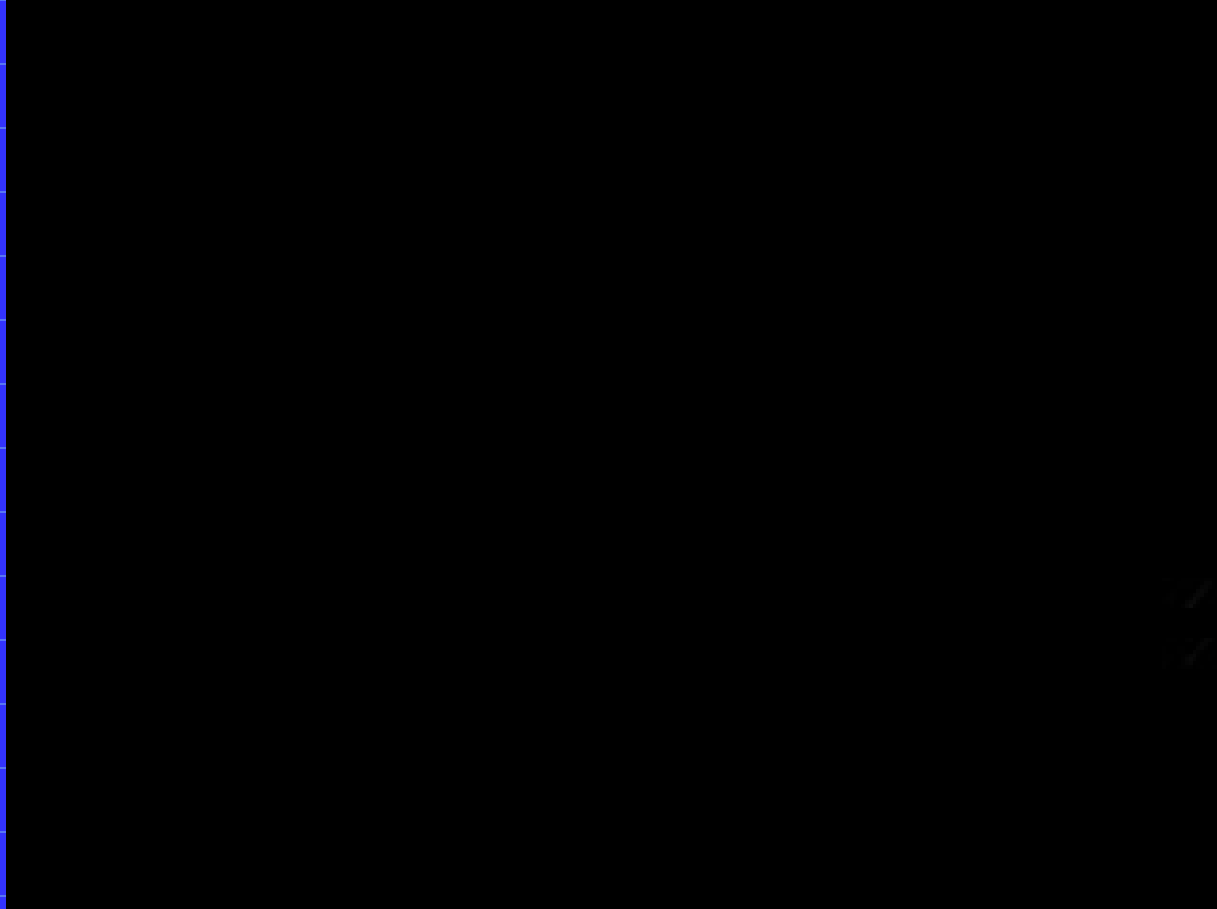


1' Offset



4' Offset

# Maintenance



# Installation Costs

- **Numbers Vary**

\$9.00 - \$19.00 LF

- Anchors included or separate?
- Cable System Only?
- Mowing Strip/Earthwork?
- Maintenance of Traffic?

# Installation Costs

## Beach Line Comparison

6.3 mi Dbl Face Guardrail    \$338,000 per mi.

11.1 mi Cable Barrier    \$209,000 per mi.

-----  
Savings:    \$129,000 per mi.

## FDOT HIGH TENSION CABLE BARRIER PROJECTS

FPN	Description	Length	Let Date
417456	I-275, US 41 to I-75	5.6 mi	Sep 05
416411	I-75, CR 762 to SR 64 (at interchanges)		Feb 06
416410	I-4, Hillsborough CL to Osceola CL		Apr 06
419658	SR90/US41/Tamiami Trail	3.3 mi	May 08
419496	SR90/US 41/Tamiami Trail	5.7 mi	July 08
420655	I-75, Golden Gate Pkwy to SR 80	35 mi	Feb 07

### Pending projects:

419202	I-275, 38th Ave S to 26 th Ave S	0.8 mi	Aug 07
419197	I-75, Manatee CL to SR 674	4.5 mi	July 08
419200	I-75, CR 577 to Hernando CL	5.6 mi	July 08
419196	I-75, SR 50 to Sumter CL	3.9 mi	July 08

### Turnpike HEFT Pilot Project

Brifen	MP 3.200 – MP 5.274	2.074 mi
Safence	MP 5.274 – MP 6.837	1.563 mi
CASS	MP 6.837 – MP 9.200	2.363 mi

**Canal Protection**                      **St. Lucie, Palm Beach & Miami-Dade - Approx. 55 miles**

# High Tension Cable Barriers

- Currently Underway at FDOT:
  - Development of Standard Specification
    - QPL Vendor Drawings
  - Development of Design Criteria and Guidelines











## CHAPTER 18

### SIGNING AND MARKING

A	INTRODUCTION.....	18-1
B	SIGNING .....	18-1
B.1	Advance Street Name Signs .....	18-41
B.1.a	Standards.....	18-1
B.1.b	Installation.....	18-2
B.1.c	Sign Design.....	18-2
B.2	Advance Warning Signs.....	18-42
B.3	Overhead Street Name Signs .....	18-42
B.3.a	Standards.....	18-3
B.3.b	Installation.....	18-3
B.3.c	Sign Design.....	18-4
B.4	Internally Illuminated Signs .....	18-4
B.5	Panel Size for Regulatory and Warning Signs .....	18-4
C	PAVEMENT MARKINGS.....	18-14
C.1	6-inch Pavement Markings.....	18-4
C.2	Reflective Pavement Markers .....	18-45

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## CHAPTER 18

### SIGNING AND MARKING

#### A INTRODUCTION

Signing and pavement markings help improve highway safety by providing guidance information to road users. Both signs and pavement markings should provide sufficient visibility to meet the driver's needs. The design of signs and pavement markings should complement the basic highway design. Designers and engineers should also be aware of the capabilities and needs of senior drivers and consider appropriate measures to better meet their needs and capabilities."

Section B and C of this chapter specifically discuss the traffic control devices for both signing and marking that accommodate not only the needs of drivers but also the special needs of senior drivers.

#### B SIGNS

##### B.1 Advance Street Name Signs

The use of advance street name signs provides advance notification to drivers in order to assist them in making safe roadway decisions. Signs should be used to identify critical or significant cross streets, as defined in the MUTCD.

##### B.1.a Standards

The word Street, Boulevard, Avenue, etc. may be abbreviated or deleted to conserve sign panel length. However, if confusion would result due to similar street names in the area, than this deletion should not be made.

Use of the local name is preferred on the advance street name sign.

When a cross street has a different name on each side of the intersection, both names shall be shown on the advance street name sign with an arrow beside each name to designate direction.

Additional legend such as NEXT SIGNAL or XX FEET may be added to the advance street name sign.

##### B.1.b Installation

Deleted: As stated in AASHTO's A Policy for Geometric Design of Highways and Streets, "Research findings show that enhancements to the highway system to improve its usability for older drivers and pedestrians can also improve the system for all users.

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Deleted: Thus d

Deleted: to aid their performance. A Federal Highway Administration report, entitled Highway Design Handbook for Older Drivers and Pedestrians provides information on how geometric design elements and traffic control devices can be modified

Deleted: not only

Deleted: special

Deleted: the older

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Deleted: benefit every

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Deleted: older

Advance street name guide signs should be installed in advance of the intersection in accordance with the distances shown in "Condition A" of Table 2C-4 of the MUTCD. These distances are to be considered the minimum for a single lane change maneuver and should be measured from the Begin taper point for the longest auxiliary lane designed for the intersection. The degree of traffic congestion and the potential number of lane change maneuvers that may be required should also be considered when determining the advance placement distance.

**B.1.c Sign Design**

Advance street name signs shall be designed in accordance with Section 2D.39 of the MUTCD.

Letter height should conform to Table 18-1, Design Guidelines for Advance Street Name Signs.

<b>Table 18-1 Design Guidelines for Advance Street Name Signs</b>						
<u>Posted Speed Limit (mph)</u>	<u>Letter Size (inches) Series E (upper case)</u>		<u>Letter Size (inches) Series E Modified (upper case)</u>		<u>Letter Size (inches) Series E Modified (lower case)</u>	
	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>	<u>Rural</u>	<u>Urban</u>
	30 -35	6	6	N/A	N/A	N/A
40-45	N/A	N/A	8	8	6	6
50-55	N/A	N/A	10.67	8	8	6

**B.2 Advance Warning Signs**

In accordance with Section 2C.29 of the MUTCD, Advance Warning Signs, i.e., Stop Ahead (W3-1), Yield Ahead (W3-2) and Signal Ahead (W3-3) signs, shall be installed on the approach to a primary traffic control device that is not visible for a sufficient distance to allow the driver to properly respond to the device.

Advance Warning Signs may also be used to provide advance notification to give drivers sufficient time to react to the upcoming primary traffic control device even when the visibility to the driver seems satisfactory.

**B.3 Overhead Street Name Signs**

The use of overhead street name signs with mixed-case lettering is recommended at major intersections as a supplement to post mounted street



name signs.

### **B.3.a Standards**

Overhead street name signs shall only be used to identify cross streets, not to identify destinations, such as cities or facilities.

The word Street, Boulevard, Avenue, etc. may be abbreviated or deleted to conserve sign panel length.

It is recommended that the border be eliminated on overhead street name signs to minimize sign panel size.

When a cross street is known by both route number and a local name, use of the local name is preferred.

When a cross street has dual local street name designations, both names may be used on the overhead street name sign.

When a cross street has a different name on each side of the intersection, both names shall be shown on the overhead street name sign, two signs should be used with one on the left and one on the right side of the intersection. When used, the names shall be separated with a border, with the left name displayed over the right. The display of block numbers is not required when two street names with arrows are provided on a single panel

In accordance with the Plans Preparation Manual, overhead street name signs are not to be installed on span wire.

### **B.3.b Installation**

The location of the overhead street name sign on a signal strain pole and/or mast arm may vary. However, it shall not interfere in any way with the motorist view of the signal heads. The preferred location is shown in the Department's Design Standards, Index No. 17748. In the case of separate street names on each side of the street, one sign should be placed to the right of the centerline and signal heads and the other to the left side of the centerline and signal heads.

### **B.3.c Sign Design**

Overhead street name signs should be designed in accordance with Section 2D.05 of the MUTCD. At a minimum, the sign panel should be 24

inches in height with length determined by text. The minimum lettering size should be 8-inch upper case with 6-inch lower case lettering. The font used (either Series E Modified or Series E) may vary to accommodate the amount of text on the panel, so as not to exceed the 96-inch maximum length.

Where structurally possible, overhead street name signs should be designed in compliance with the FHWA recommendations for older drivers as shown in Section 2D.38 of the MUTCD. The minimum lettering size used shall be 12-inch upper case with 9-inch lower case.

#### **B.4 Internally Illuminated Signs**

It is recommended that internally illuminated overhead street names signs are the standard used in order to improve night-time visibility and to benefit older drivers.

When used, internally illuminated overhead street name signs should have a standardized height of 24-inches and length of 72-inches, with either Series E Modified or Series E font, which may vary to accommodate the amount of text on the panel. In extreme cases, a 96-inch maximum length sign may be used.

When used, the internally illuminated signs must be on the Florida Department of Transportation's Approved Products List in accordance with Section 316.0745 of the Florida Statutes.

#### **B.5 Panel Size for Regulatory and Warning Signs**

At a minimum, in order to increase visibility, it is recommended to use the Conventional Road size of all regulatory and warning signs as shown in Table 2B-1 and Table 2C-2 of the MUTCD.

### **C PAVEMENT MARKINGS**

#### **C.1 6-inch Pavement Markings**

It is recommended that 6-inch pavement markings are used for all centerline pavement and edge line pavement markings that are placed in accordance with the MUTCD.

## **C.2 Reflective Pavement Markers**

In order to provide greater emphasis, it is recommended that reflective (raised) pavement markers (RPM) be placed at 40 foot spacings along the centerline markings of the roadway.





# Florida Green Book & Traditional Neighborhood Development

Florida Green Book Committee  
Billy Hattaway, PE, CNU

*MANUAL OF UNIFORM MINIMUM STANDARDS  
FOR DESIGN, CONSTRUCTION AND MAINTENANCE  
FOR STREETS AND HIGHWAYS*



*STATE OF FLORIDA  
DEPARTMENT OF TRANSPORTATION  
TALLAHASSEE, FLORIDA*

# Florida Green Book

- **What is it?**

- “Manual of Uniform Minimum Standards for the Design, Construction and Maintenance for Streets and Highways”
- Purpose: “provide basic guidance for developing and maintaining a highway system with reasonable operating characteristics and a minimum number of hazards.”

- **Where does it apply?**

- Public roads not on the state or federal system, unless a municipality or county has adopted other criteria.

# Florida Green Book

- **What is the process for development of the manual?**
  - The Green Book Committee consists of city, county and F.D.O.T. representatives from the seven F.D.O.T. districts.
  - Florida Department of Transportation facilitates and supports the production of the document with the input of the Florida Green Book Committee (Sections 334.044 & 336.045, Florida Statutes).
  - Once that process is complete, the document is submitted to the Joint Administrative Procedures Committee, since it is adopted through the rule making process by the Department of State.



# Florida Green Book

- **Why are we coming to you?**
  - The Green Book Committee voted to add a chapter on Traditional Neighborhood Development to the Green Book.
  - Your expertise, concerns and input are important to the successful development of this chapter.
  - The process will ensure TND is a viable development option, while ensuring that diverse interest groups have a voice in the final content of the chapter.
  - The current Green Book does not provide for design of walkable communities
  - Deviation from the criteria requires an exception

# Florida Green Book

- **Why is this important to you?**
  - This document provides an opportunity to implement Smart Growth principles, while respecting the integrity of traditional practices.
  - Local governments may use these guidelines to ensure that development projects follow the best practices for Traditional Neighborhood Development.
  - The guidelines in this document could impact the way you conduct business, if you are in the regulatory, design or development practices.

# Traditional Neighborhood Development Chapter

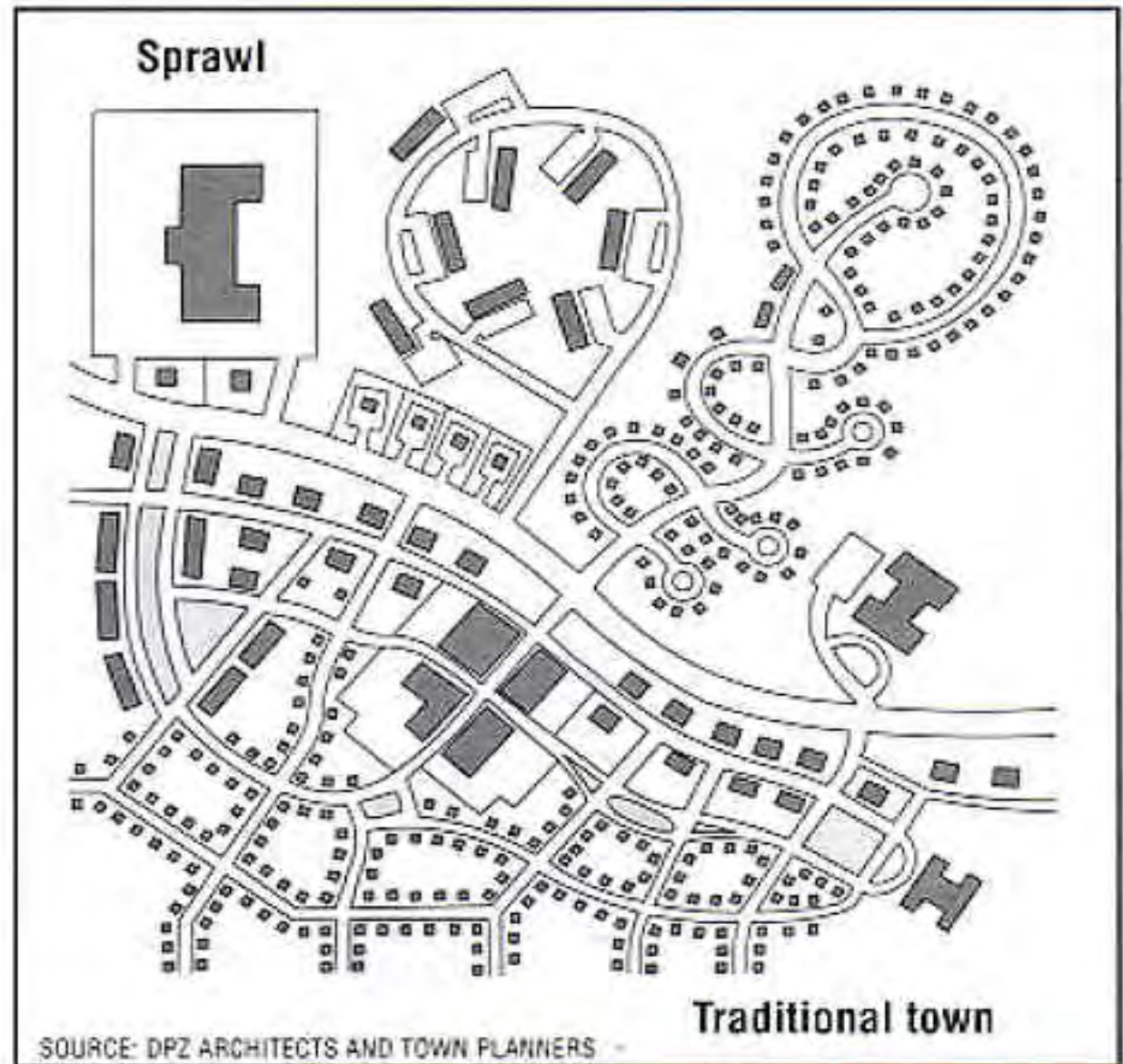
- **Why is this chapter being included?**
  - Currently available criteria provides only for “conventional” development and highways.
  - Local governments and consultants involved in development are looking for best practices in creating Traditional Neighborhood Developments.
  - Direction is needed to establish the context for when the criteria are appropriate
  - Established criteria will reduce liability for all parties

# Green Book Project Goals

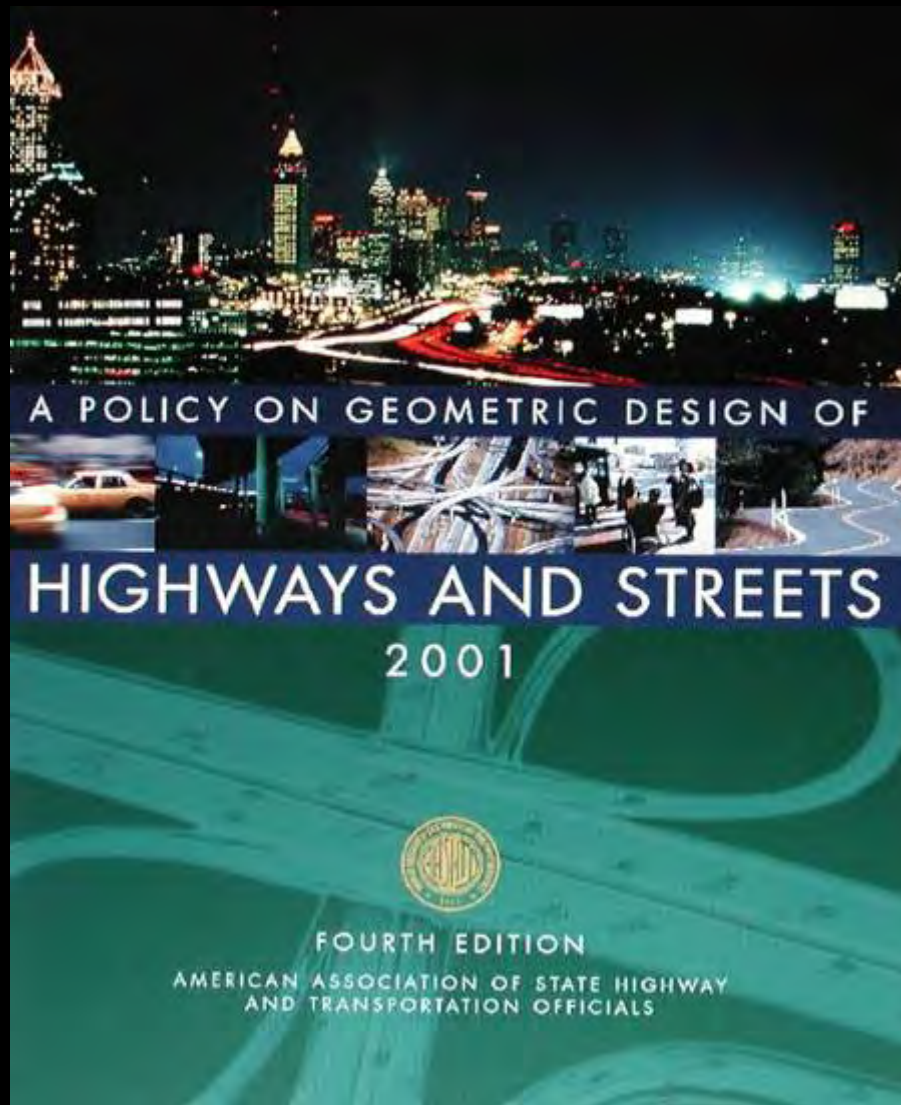
- A new chapter for Traditional Neighborhood Development (TND).
- “Conventional” and “Traditional” thoroughfare design clearly defined and differentiated.
- The context and character of the area for use of Traditional thoroughfare design defined to minimize misapplication.
- Completion and Approval by March, 2008 Green Book Committee meeting.

# Development Patterns

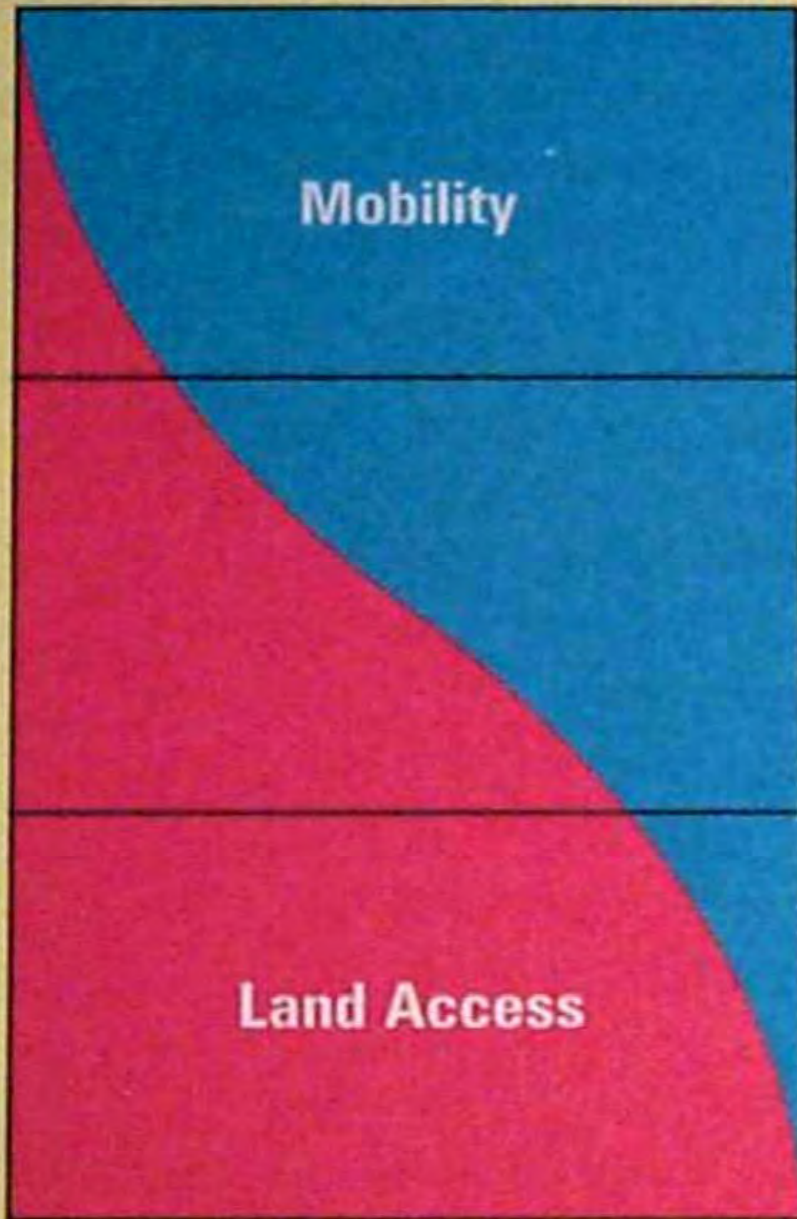
- **Conventional Suburban**
  - Auto dominant
  - Separated use
  - Single use zoning
  - Low density
  - All trips depend on “the arterial”
- **TND**
  - Focus on pedestrian
  - Mixed use
  - Compact
  - Multi-modal
  - Less dependent on “the arterial”



# Highway Design Codes



American Association of  
State Highway  
& Transportation Officials  
“AASHTO Green Book”



### Arterials

- higher mobility
- low degree of access

### Collectors

- balance between mobility and access

### Locals

- lower mobility
- high degree of access

# Three Functional Classifications

- Arterials – (State) Connect major areas, long trips (50-100 miles), high speed (60-70 mph)
- Collectors – (County) Intermediate trips (5-15 miles), high speed (50 mph)
- Locals – (City) Local access, short trips (5 miles <, lower speeds (30-45)
- All trips are by auto or truck, no pedestrians in the critical functional definition



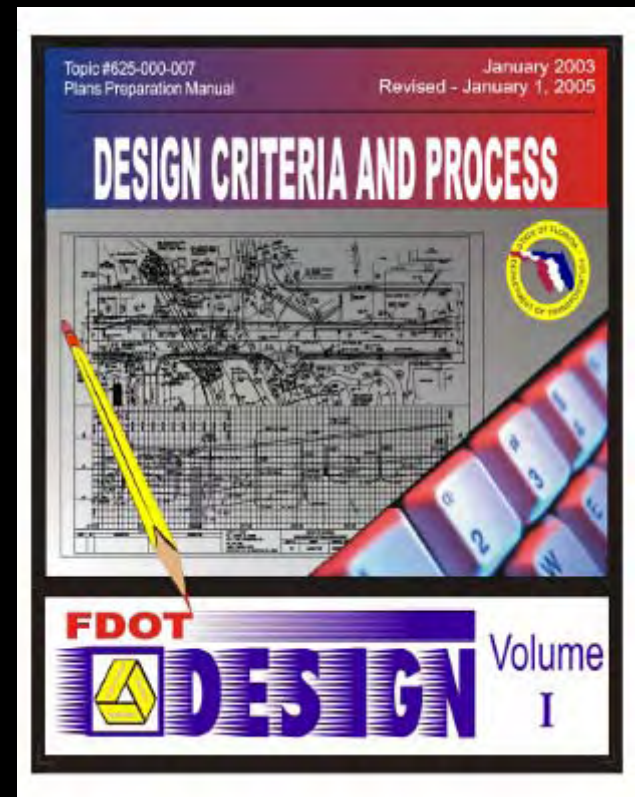
# Flexibility in Highway Design - FHWA

- “... a determination of functional classification establishes the basic roadway cross section in terms of lane width, shoulder width, type and width of median area, and other major design features...”
- “*The flexibility available to a highway designer is **considerably limited** once a particular functional classification has been established.*”

# Highway Design Codes

## FDOT Plans Preparation Manual

- Based on AASHTO criteria
- State of Florida highways – focus on:
  - Higher speeds
  - Highway capacity
  - Functional classification
  - Rural & suburban development



# A Typical State Arterial Highway



Miami, Fl

# FDOT “Green Book”

- Existing Document
  - Based on AASHTO “minimums”
  - County & City Roads – focus on:
    - Rural & suburban development
    - Highway capacity
    - Functional classification
- Traffic calming & Residential Street (suburban) chapters recently added



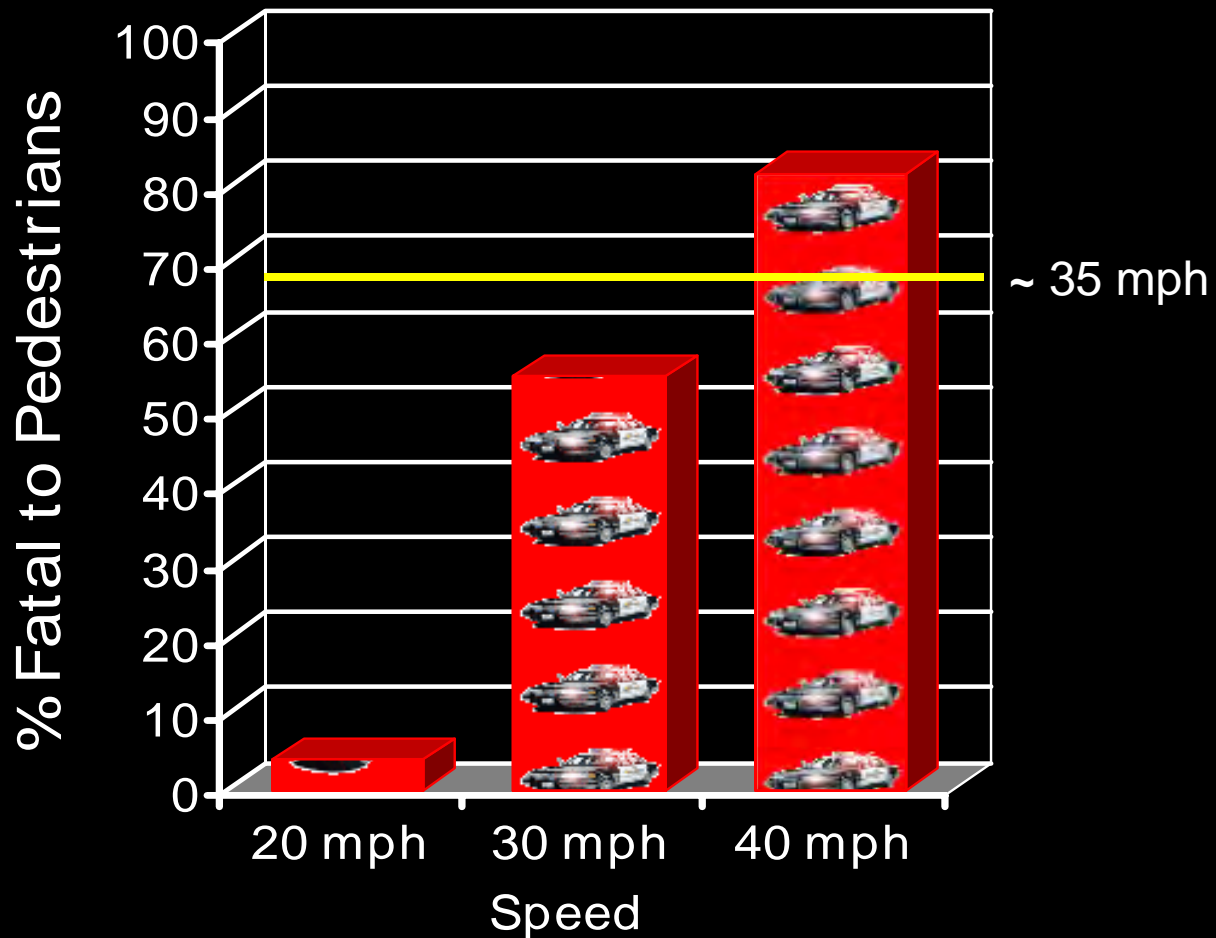
# **“Help Wanted” . . . .**

## **Tools to Design TND**

- Thoroughfare design that truly balance pedestrian, transit and bicycle mobility with the automobile
- Clearly defined context and conditions for TND thoroughfare design
- Criteria that is usable for TND without extensive use of “exception” process

# Why this is essential!

## Pedestrian Fatalities & Speed



# SMARTCODE & MANUAL



*Includes the complete SmartCode v8.0*

Example Code that facilitates TND

<http://www.placemakers.com/info/SCdownloads.html>

# Vehicular Lane Standards (Smart Code 8.0)

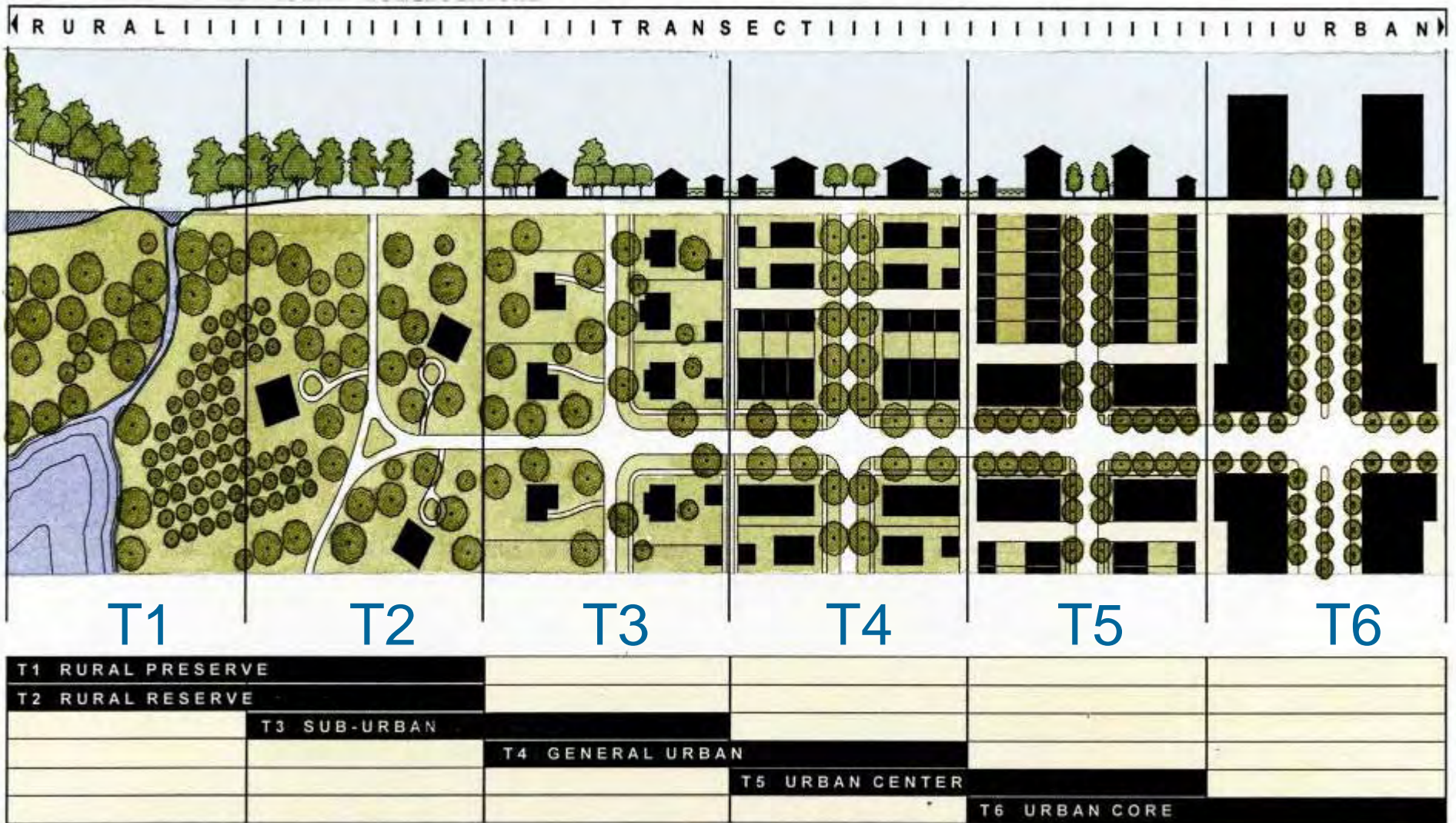
6.7.1 Travel Lane Width		Design Speed	T1	T2	T3	T4	T5	T6
8 feet	Very Low	▪	▪	▪	•			
9 feet	Low	▪	▪	▪	▪	•	•	
10 feet	Moderate	▪	▪	▪	▪	▪	▪	▪
11 feet	Moderate	▪	▪			▪	▪	
12 feet	High	▪	▪				•	•

6.7.2 Parking Lane Width		Design Speed	T1	T2	T3	T4	T5	T6
(Angle) 18 feet	Varies						▪	▪
(Parallel) 7 feet	Very Low / Low			▪	▪			
(Parallel) 8 feet	Moderate			▪	▪	▪	▪	▪
(Parallel) 9 feet	High							▪

6.7.3 Inside Turning Radius		Design Speed	T1	T2	T3	T4	T5	T6
5-10 feet	Very Low				▪	▪	▪	▪
10-15 feet	Low	▪	▪	▪	▪	▪	▪	▪
15-20 feet	Moderate	▪	▪	▪	▪	▪	▪	▪
20-30 feet	High	▪	▪				•	•



# The Transect – A Classification System (Smart Code 8.0)



# T-4 General Urban

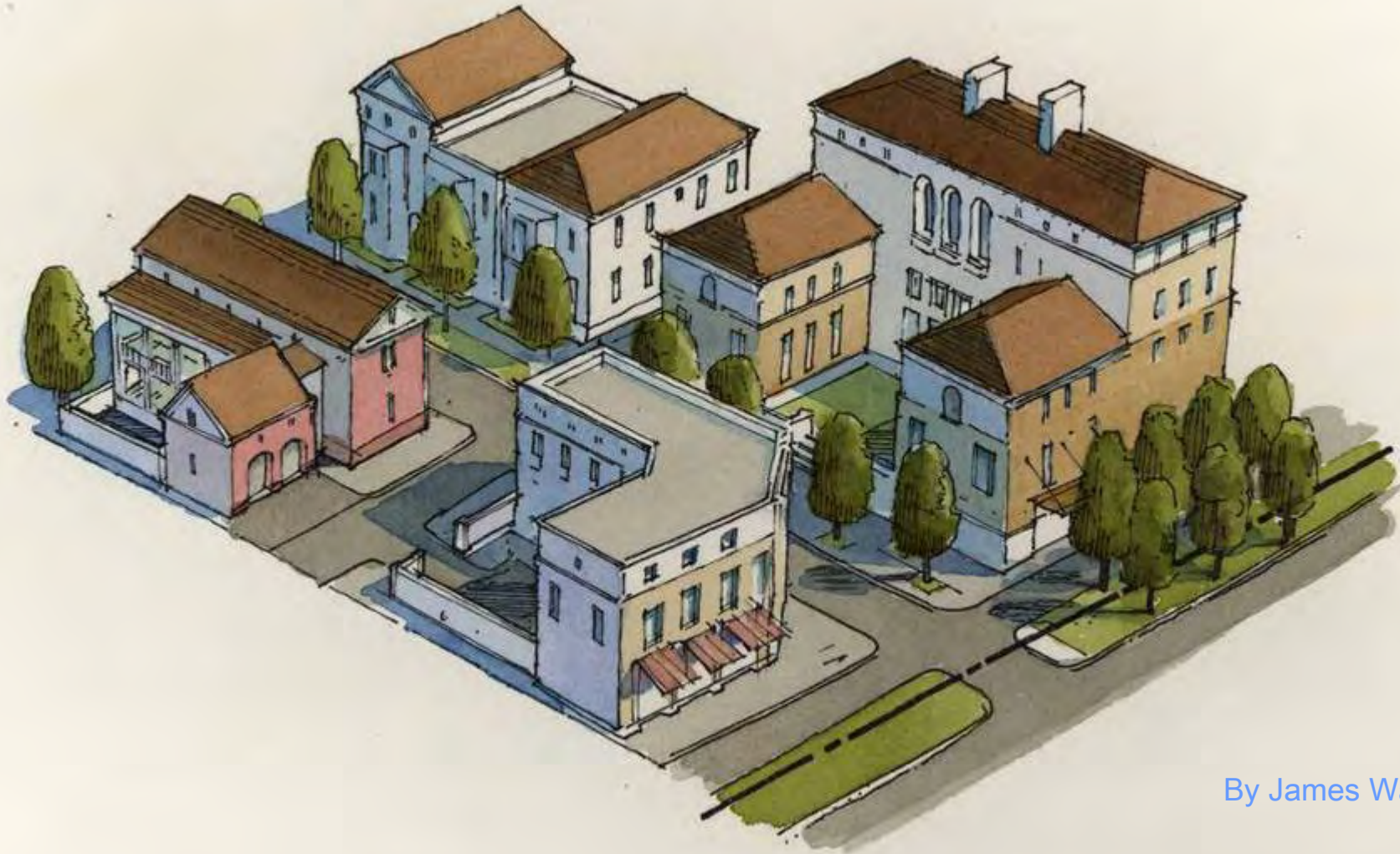


By James Wassell

# T-4 General Urban



# T- 5 Urban Center

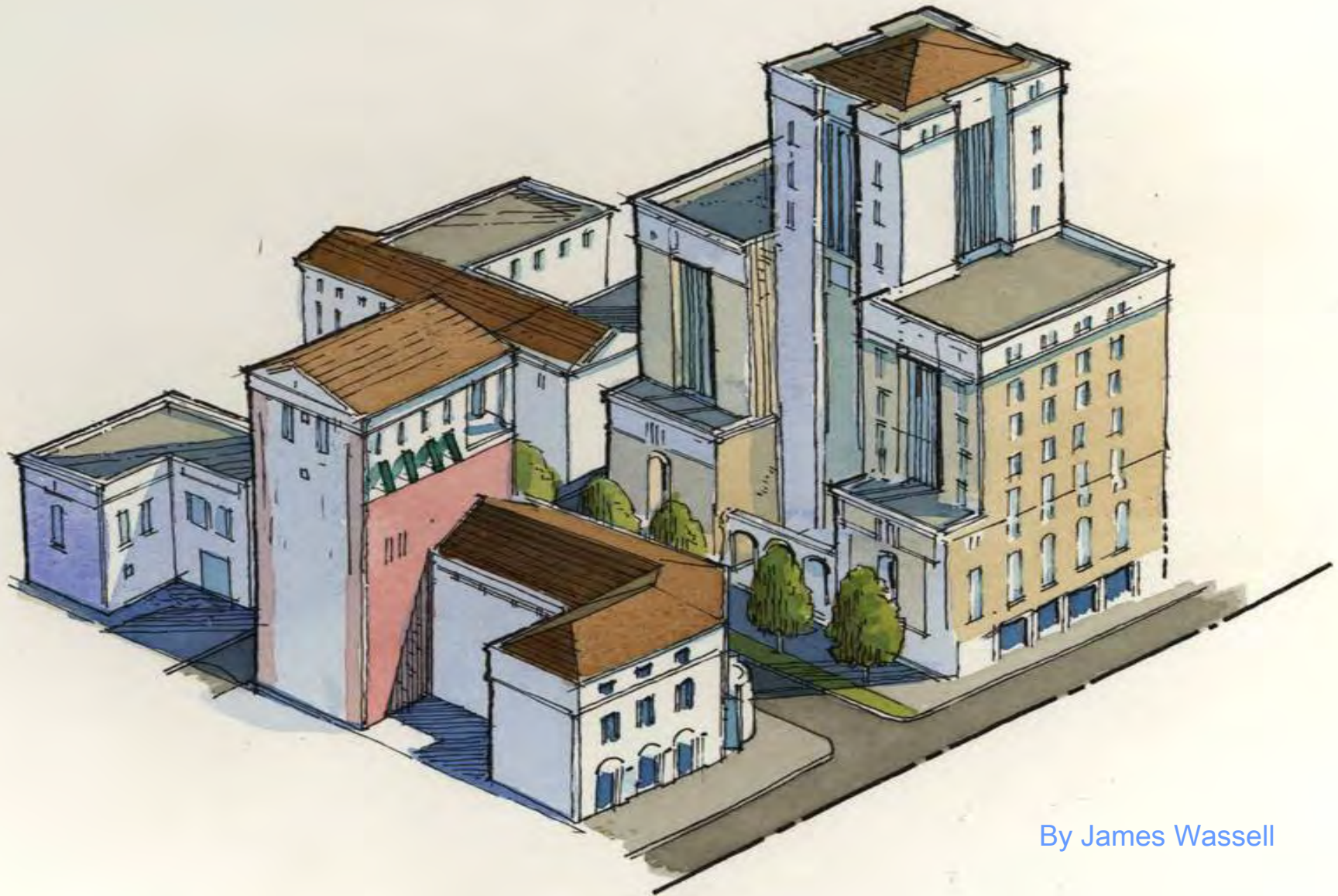


By James Wassell

# T- 5 Urban Center



# T- 6 Urban Core



By James Wassell

# T- 6 Urban Core



# Wrap up

- First release – March, 2007
- Final document – March, 2008
- Questions??



# What we would like from you!!

- Review & comments on draft document
- Help to inform your constituents regarding the TND chapter.
- Questions??
- Thanks for your interest and support!

# Contacts:

- Billy Hattaway [bhattaway@glatting.com](mailto:bhattaway@glatting.com)
- Alissa Torres [alissa.torres@ocfl.net](mailto:alissa.torres@ocfl.net)
- Rick Hall [rickhall@hpe-inc.com](mailto:rickhall@hpe-inc.com)
- Elizabeth Plater-Zyberk [lizz@dpz.com](mailto:lizz@dpz.com)

## TND Chapter Working Group

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Orange Co.

Orange Co.

Lake Co.

Duany Plater-Zyberk & Co.

Dover, Kohl & Partners

HPE, Inc.

Glatting Jackson Kercher Anglin

**Committee Name:** Statewide Local Agency Program Advisory Council

**Purpose:**

The committee will be used as a communication tool working with FDOT, the State LAP Administrator, the District LAP Administrator's, the Central Office Standing Committee on Standards and Practices for Local Agencies, and FHWA by assisting in the review of policies, documents and to also help prioritize future actions that may impact Local Agencies. The committee may also assist in the review of major areas of the Local Agency Program such as training, Quality Assurance Program or any other area that the State LAP Administrator or Manager of the Project Management Office might request. Recommendations and actions taken by the committee will be in line with all applicable federal and state standards and requirements.

**Frequency of Meetings:** It is anticipated that the committee will meet quarterly for the first year and then as needed after that.

**Proposed Committee Structure/Membership:**

<b>Committee Membership</b>		
<b>Chair: Manager Project Management Office</b>	1	<b>Other Organizations</b>
<b>Co-Chair: FACERS</b>	1	FACERS 1
		FHWA 1
<b>LAP Administrators</b>		League of Cities 1
CO State LAP Administrator	1	Florida Assoc. of Counties 1
District 5 LAP Administrator	1	MPO's? 1
District 7 LAP Administrator	1	Consultants 2
		<b>Certified Local Agencies (One from Each Region)</b>
<b>FDOT Functional Units</b>		Counties 2
Construction	1	Cities 2
Specifications	1	Transportation Authorities 1
Design	1	
Environmental Management Office	1	
Right of Way	1	23
Federal Aid Management Office	1	





**Accessing Transit  
2007 Revision  
Version 2**

Design Handbook  
For Florida  
Bus Passenger Facilities

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**Handbook Version 2  
Revised Throughout**

- Responds to comments received since 2004
- Comprehends new District 1 and 7 guidance

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**Handbook Version 2  
Revised Throughout**

- New chapter on safety and security at transit stops
- New information on transit use across the lifecycle and attracting young and elderly patrons.

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## Handbook Version 2

### Curb-Side Guidelines

- Incorporates new universal design guidance
- Bus shelters
  - Provide additional information on fragility
  - Incorporate changes to the FL Building Code as they regard bus shelters
  - Provide information on single person solar-powered bus shelters and SMART bus shelters
    - Real-time visual displays in shelters indicating estimated waiting time



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## Handbook Version 2

### Curb-Side Guidelines

- **Bus Stop Pads**
  - Additional discussion on pavement design at bus bays
- **Additional information on low floor busses**

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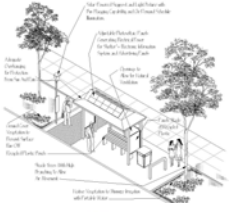
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## Curb-Side Guidelines

### Greening Transit

- New discussion on rubber sidewalks and median plantings

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## Handbook Version 2

**Streetside Guidelines**

- Revised to incorporate FDOT Transit Facility Guidelines
- Incorporates information on pavement design

**Land Use Guidelines**

- Incorporates multimodal district guidance



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## Handbook Version 2

**New Facility Prototypes**

- Transit at educational facilities
- BRT
- Intermodal facilities



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## Timeline

- July 2006
  - Notice to proceed
- July 2006 through August 2007
  - Research, revision, and design
- September 2007-December 2008
  - Review and comment by FDOT transit agency users, other users, and peers
- December 2008-March 2008
  - Revision and resubmission to review group
- April 2008-June 2008
  - Production and Distribution

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**More information**

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  - Amy Datz
  - 850-414 – 4239
  - amy.datz@dot.state.fl.us
- FSU Project Manager
  - Harrison Higgins
  - 850-644-8513
  - hhiggins@fsu.edu

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# FINAL RULE on WORK ZONE

## Safety and Mobility

23 CFR 630 Subpart J

## Final Rule on Work Zone Safety and Mobility

The **Final Rule on Work Zone Safety and Mobility** was published on September 9, 2004, in the Federal Register. This rule updates and broadens the former regulation on "Traffic Safety in Highway and Street Work Zones" (23 CFR 630 Subpart J). All state and local governments that receive federal-aid highway funding are affected by this rule and are required to comply with the provisions of this rule no later than October 12, 2007.

### The Rule:

- Focuses on a state-level work zone policy approach to institutionalize work zone processes and procedures.
- Reflects changing times to address more traffic, more congestion, greater safety issues, and more work zones.
- Broadens the regulation to address more of the current issues affecting work zone "safety" and "mobility."
- Facilitates customer-focused project development for comprehensive consideration of "work zone impacts."

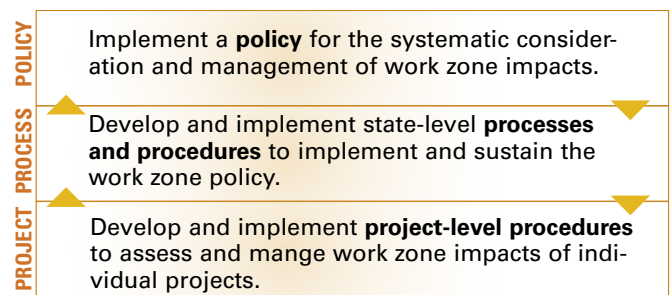
### Why Update the Rule?

- Many of our roads are facing growing traffic volumes and congestion.
  - Vehicle travel is up, but there has been very little growth in road miles.
- Our highways are approaching middle age.
  - More construction and repair are needed, which means more work zones.
- A growing portion of this work is rehabilitation done under traffic.
  - More traffic exposed to work zones and more workers exposed to traffic.
  - Compressed contractor schedules.
  - Increasing night work.
- Work zone safety is a concern.
  - More than 41,000 injuries and 1,028 fatalities in 2003
- Travelers are not happy with work zones.
  - Unexpected road conditions, delays, and inconsistency cause traveler frustration.

### Rule Overview

The full text of the rule can be found at [http://www.ops.fhwa.dot.gov/wz/docs/wz\\_final\\_rule.pdf](http://www.ops.fhwa.dot.gov/wz/docs/wz_final_rule.pdf). A summary of the rule follows.

The new rule was written to be flexible, taking into account different project types. The rule has three primary components, illustrated in the figure below:



As indicated in the figure, the policy will affect the state- and project-level processes and procedures, and the outcomes of projects may cause states to reassess their processes and procedures and policy.

For each of the components, the rule includes provisions and guidance intended to help transportation agencies address work zone considerations starting early in planning, and progressing through project design, implementation, and performance assessment.

### Policy-Level Provisions

- Implement a policy for the systematic consideration and management of work zone impacts. The policy:
  - May take the form of processes, procedures, and/or guidance.
  - Should be customized as appropriate to an individual state's needs.
  - Should be sensitive to varying project characteristics and expected work zone impacts.
- Work in partnership with the FHWA to develop and implement the policy.

### State-Level Processes and Procedures

- Develop and implement processes/procedures for systematic work zone impact assessment and management

- Use work zone safety and mobility information and data to manage impacts on ongoing projects, and to conduct performance assessments across multiple projects to improve state work zone procedures.
- Require training for personnel involved in work zone planning, design, implementation, management, and enforcement.
- Conduct process reviews to assess widescale performance of work zones with the goal of improving work zone processes and procedures.

## Project-Level Provisions

- Identify significant projects early in the project development process. Significant projects are those anticipated to cause sustained work zone impacts greater than what is considered tolerable based on state policy and/or engineering judgment.
  - Develop transportation management plans (TMPs) that consist of strategies to manage the work zone impacts of projects.
    - TMPs for **significant projects** must consist of a temporary traffic control (TTC) plan. The TMPs must address transportation operations (TO) strategies that will be used to ease work zone impacts. They must also address public information (PI) strategies to inform the public and concerned stakeholders about the project, its expected work zone impacts, and changing conditions.
    - TMPs for **all other projects** must consist at least of a TTC plan and may include TO and PI strategies as well.
  - Include appropriate TMP provisions in the plans, specifications, and estimates (PS&Es).
  - In the PS&Es, include appropriate pay item provisions for implementing the TMP—either unit pay items or lump sum pay items.
  - Assign a responsible person (state and contractor) to monitor the TMP and other safety and mobility aspects of the project.
- **Work Zone Impacts Assessment**—guidance on developing procedures to assess work zone impacts of projects.
  - **Transportation Management Plans**—guidance on developing TMPs for managing work zone impacts of projects.
  - **Public Information and Outreach**—guidance on the development of communications strategies that seek to inform affected audiences about construction projects, the expected work zone impacts, and the changing conditions on projects.
  - **Roadside Safety Audits**—guidance on performing audits to assess a project's accident potential and safety performance.
  - **QuickZone Traffic Impact Analysis Tool**—a tool that can be used to estimate work zone delays, allowing road owners and contractors to analyze and compare project alternatives, such as the effects of doing highway work at night instead of during the day, or of diverting the traffic to different roads at various stages of construction. Information on the tool is available at <http://www.tfhr.gov/its/quickzon.htm>.
  - **Full Road Closure for Work Zone Operations**—a series of documents providing a description of how several state DOTs each used a full closure approach to reduce the impacts of a road rehabilitation/reconstruction project. The documents are available at [http://www.ops.fhwa.dot.gov/wz/construction/full\\_rd\\_closures.htm](http://www.ops.fhwa.dot.gov/wz/construction/full_rd_closures.htm).
  - **Innovative Contracting Guidance**—resources for innovative contracting methods, including a link to an online knowledge exchange, are available at <http://www.ops.fhwa.dot.gov/wz/contracting/index.htm>.
  - **ITS in Work Zones**—a series of documents to raise awareness among maintenance and construction engineers and managers of the applications and benefits of ITS in work zones. These documents are available at <http://www.ops.fhwa.dot.gov/wz/its/index.htm>.
  - **Work Zone Training Courses**—a new NHI course, Advanced Work Zone Management and Design (#380072A), will provide planners, designers, construction managers, and other transportation professionals with additional skill and knowledge of both technical and non-technical aspects of work zone design and traffic management practices. The course is expected to become available in Summer 2005.

## FHWA Support Efforts

FHWA is committed to providing the guidance that practitioners need to implement this rule. An outreach strategy has been developed to promote awareness of the rule and the availability of implementation guidance. A comprehensive implementation guide will be available in late 2005. This guide will address each component of the rule and provide related case studies, examples, and resources. Other guidance includes:

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FHWA-HOP-05-011

# FINAL RULE on WORK ZONE

## Safety and Mobility

23 CFR 630 Subpart J

## Work Zone Impacts Assessment

The **Final Rule on Work Zone Safety and Mobility** was published on September 9, 2004, in the Federal Register. All state and local governments that receive federal-aid funding are required to comply with the provisions of this rule no later than October 12, 2007.

The rule updates and broadens the former regulation at 23 CFR 630 Subpart J to address more of the current issues affecting work zone safety and mobility. Within the rule are three primary components:

- Implementation of an overall, state-level work zone safety and mobility **policy**.
- Development and implementation of standard **processes and procedures** to support policy implementation, including procedures for work zone impacts assessment, analyzing work zone data, training, and process reviews.
- Development and implementation of procedures to assess and manage work zone impacts on individual **projects**. This includes requirements for identifying significant projects and developing and implementing transportation management plans (TMPs). A significant project is defined in the rule as one that, alone or in combination with other concurrent projects nearby, is anticipated to cause sustained work zone impacts that are greater than what is considered tolerable based on state policy and/or engineering judgment.

The full text of the rule can be found at [http://www.ops.fhwa.dot.gov/wz/docs/wz\\_final\\_rule.pdf](http://www.ops.fhwa.dot.gov/wz/docs/wz_final_rule.pdf).

While the rule encourages agencies to develop and implement procedures for work zone impacts assessment, it does not prescribe any specific approach. To assist agencies with developing their own procedures for assessing the work zone impacts of road projects, the Federal Highway Administration (FHWA) is developing a work zone impacts assessment guidance document. The document will set forth some guiding principles for work zone impacts assessment.

This fact sheet provides an introduction to the forthcoming guidance document.

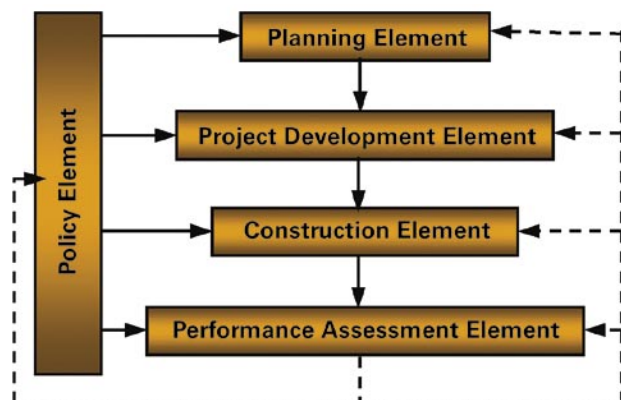
### What Are the Benefits of Work Zone Impacts Assessment?

Assessing work zone impacts is intended to help transportation professionals:

- Understand the work zone safety and mobility impacts of their road projects.
- Understand the work zone safety and mobility implications of alternative project options and design strategies.
- Identify significant projects.
- Identify transportation management strategies that help manage the expected work zone impacts of a project.
- Develop a suitable TMP for a road project.
- Implement a TMP and monitor and manage the impacts of a project during construction.
- Provide guidance and input to conduct post-construction performance assessment studies.

### Contents of the Guidance Document

The guidance document provides a general approach for assessing the potential impacts of road projects and developing strategies to manage the expected impacts. The approach is envisioned as a decision support tool. The impacts assessment process presented in the guidance document consists of five elements that represent the major activities of program delivery. As illustrated in the following figure, information from one element of the impacts assessment process feeds into the other elements. For example, what is learned through performance assessment could lead to changes in a state's policies.



- **Policy Element.** The policy element provides guidance on assessing, developing, and applying work zone safety and mobility policies. It is intended to help agencies use their existing policies and further develop them, as needed, to implement an overall work zone safety and mobility policy.
- **Systems Planning Element.** The systems planning element sets forth guidance on incorporating work zone safety and mobility in long range and short-term transportation planning. It provides a systematic decision structure at the systems planning level to identify potential work zone impacts of projects; identify potential transportation management strategies and estimate their costs; and schedule projects so as to minimize their cumulative impacts.
- **Project Development Element.** The project development element provides decision support in progressively assessing the work zone impacts of individual projects through the various stages of project development, and in developing an appropriate TMP for the project. The level of impacts assessment and the strategies included in the TMP will vary with the type, duration, size, length, and anticipated work zone impacts of the project.
- **Construction Element.** The construction element provides guidance on implementing the TMP, monitoring the impacts of the project during construction, and revising the TMP, if necessary.
- **Performance Assessment Element.** The performance assessment element provides guidance on assessing the performance of individual work zones, conducting process reviews, and using the information from the reviews to improve the agency's work zone processes and procedures.

Within the guidance document, a variety of methods will be used to describe recommended activities and decision-making factors for each of these elements:

- Process diagrams
- Work-flow explanations
- Decision matrices
- Real-world examples
- Links to locations where more detailed information may be obtained on the example cases

## Implementation Guidance

The Federal Highway Administration (FHWA) is currently developing an Implementation Guidance document to help state and local transportation agencies implement the provisions of the work zone final rule and attain compliance. To supplement the overall Implementation Guidance document, FHWA is also developing a suite of companion guidance documents that will provide more detail on the following aspects of the final rule:

- Work Zone Impacts Assessment
- Work Zone Transportation Management Plans (TMPs)
- Work Zone Public Information and Outreach Strategies

The guidance documents will be available in late 2005 and will provide guidelines and sample approaches for implementing the rule, examples from states using practices that relate to the rule, and sources for more information.

This fact sheet is one in a series of final rule fact sheets meant to increase awareness and understanding of the rule and the products being developed to assist agencies with implementation of the rule. Fact sheets are available for the three specific guidance document topics as well as for the final rule itself.

**All final rule resources will be posted to [http://www.ops.fhwa.dot.gov/wz/resources/final\\_rule.htm](http://www.ops.fhwa.dot.gov/wz/resources/final_rule.htm) as they become available.**

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FHWA-HOP-05-023

# Transportation Management Plans (TMPs) for Work Zones

The **Final Rule on Work Zone Safety and Mobility** was published on September 9, 2004, in the Federal Register. All state and local governments that receive federal-aid funding are required to comply with the provisions of this rule no later than October 12, 2007.

The rule updates and broadens the former regulation at 23 CFR 630 Subpart J to address more of the current issues affecting work zone safety and mobility. Within the rule are three primary components:

- Implementation of an overall, state-level work zone safety and mobility **policy**.
- Development and implementation of standard **processes and procedures** to support policy implementation, including procedures for work zone impacts assessment, analyzing work zone data, training, and process reviews.
- Development and implementation of procedures to assess and manage work zone impacts on individual **projects**. This includes requirements for identifying significant projects and developing and implementing transportation management plans (TMPs). A significant project is defined in the rule as one that, alone or in combination with other concurrent projects nearby, is anticipated to cause sustained work zone impacts that are greater than what is considered tolerable based on state policy and/or engineering judgment.

The full text of the rule can be found at [http://www.ops.fhwa.dot.gov/wz/docs/wz\\_final\\_rule.pdf](http://www.ops.fhwa.dot.gov/wz/docs/wz_final_rule.pdf).

The Federal Highway Administration (FHWA) is developing a guidance document to help state and local agencies developing TMPs. This fact sheet provides an introduction to the forthcoming guidance document.

## What Is a TMP?

A TMP lays out a set of strategies for managing the work zone impacts of a project. The TMP requirement in the rule helps to expand mitigation of work zone impacts beyond traffic safety and control. The scope and content of the TMP required for a project are based on the agency's work zone policies, its understanding of the expected work zone impacts of the project, and whether a project is determined to be significant.

For all projects, the TMP called for in the rule will contain a Temporary Traffic Control (TTC) plan that addresses

traffic safety and control through the work zone. Some states refer to TTC plans as Traffic Control Plans (TCPs) or Maintenance of Traffic (MOT) plans.

If a project is expected to be significant, the TMP for that project must also contain both transportation operations and public information components. The transportation operations (TO) component addresses operations and management of the transportation system in the work zone impact area. Examples of TO strategies include travel demand management, signal retiming, use of intelligent transportation systems (ITS), speed enforcement, and traffic incident management. The public information (PI) component addresses communication with the public and concerned stakeholders, both before and during the project, about the project, what to expect in and around the work zone, and available travel alternatives. Examples of PI strategies include using brochures, web sites, radio, and/or variable message signs to disseminate this information both pre-trip and in-route.

## What Are the Benefits of a TMP?

Some of the key benefits of a TMP are to help:

- Address the broader safety and mobility impacts of work zones at the corridor and network levels.
- Promote more efficient and effective construction staging, duration, and costs.
- Improve work zone safety for construction workers and the traveling public.
- Minimize traffic and mobility impacts.
- Improve public awareness.
- Minimize impacts to local communities and businesses.
- Improve intra and interagency coordination.

"TMPs would streamline the process through which road user impacts due to work zones can be properly analyzed and addressed."

– **Jawad Paracha**,  
Maryland State  
Highway Administration

"[TMPs] bring all stakeholders into the discussions in advance, so we can work out the best detour routes, signal retiming, and other geometric improvements."

– **Tom Notbohm**, Wisconsin DOT

## TMP Development and Implementation

The guidance document suggests an approach in which TMP development begins during the design phase (or earlier) of a project. In this approach, TMP development starts with **gathering relevant information** about the project, including materials created during earlier project planning and preliminary engineering. Relevant information includes the project's characteristics, its potential impacts, and potential mitigation strategies to address the impacts. This information, along with the agency's work zone policies and its determination of whether a project is significant, will help the agency **determine what the TMP needs to address**.

Once the TMP requirements are identified, the project team can **develop the TMP**. The TMP will need to consider project constraints and include proposed mitigation strategies and estimated implementation costs. After review and approval of the TMP, it will then be **implemented and monitored** during the construction phase. In this phase, the contractor and/or design team may need to adjust the TMP based on the performance of the work zone.

Following completion of construction, a post-project **evaluation** is done to assess how well the TMP worked. The findings from this performance assessment can be used by an agency to improve the effectiveness of future TMPs.

*"Effective TMPs are ones that are developed early, and address both the traffic control design and traffic operational components of the work zone."*

– Steve Kite, North Carolina DOT

## Tips for an Effective TMP

- Look to involve relevant stakeholders early in the process.
- Consider potential management strategies and implementation costs early in planning and programming.
- Consider and develop management strategies for impacts beyond the physical location of the work zone itself (e.g., on adjacent roadways, on local businesses).
- Consider a range of alternative transportation management strategies. Avoid constraining the number and/or type considered.
- Constructability needs and work zone management strategies need to be balanced.

- Recognize that cost is often a constraint for the development of a TMP, particularly for major TMPs.
- The TMP is a 'dynamic document' that needs to be maintained and revised by the project team as project development progresses.
- During construction, monitoring the implementation of the TMP and field conditions enables an agency to identify potential safety and mobility concerns, and to adjust the TMP as necessary.
- Evaluating the effectiveness of your TMPs can provide valuable lessons learned for future projects.

*"Based on our experience, public information is the TMP mitigation strategy that gives us the 'biggest bang for the buck'—its effectiveness is greater in urban areas, but still holds true in rural areas."*

– Robert Copp, Caltrans

## Implementation Guidance

The Federal Highway Administration (FHWA) is currently developing an Implementation Guidance document to help state and local transportation agencies implement the provisions of the work zone final rule and attain compliance. To supplement the overall Implementation Guidance document, FHWA is also developing a suite of companion guidance documents that will provide more detail on the following aspects of the final rule:

- Work Zone Impacts Assessment
- Work Zone Transportation Management Plans (TMPs)
- Work Zone Public Information and Outreach Strategies

The guidance documents will be available in late 2005 and will provide guidelines and sample approaches for implementing the rule, examples from states using practices that relate to the rule, and sources for more information.

This fact sheet is one in a series of final rule fact sheets meant to increase awareness and understanding of the rule and the products being developed to assist agencies with implementation of the rule. Fact sheets are available for the three specific guidance document topics as well as for the final rule itself.

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# Public Information and Outreach Strategies for Work Zones

The **Final Rule on Work Zone Safety and Mobility** was published on September 9, 2004, in the Federal Register. All state and local governments that receive federal-aid funding are required to comply with the provisions of this rule no later than October 12, 2007.

The rule updates and broadens the former regulation at 23 CFR 630 Subpart J to address more of the current issues affecting work zone safety and mobility. Within the rule are three primary components:

- Implementation of an overall, state-level work zone safety and mobility **policy**.
- Development and implementation of standard **processes and procedures** to support policy implementation, including procedures for work zone impacts assessment, analyzing work zone data, training, and process reviews.
- Development and implementation of procedures to assess and manage work zone impacts on individual **projects**. This includes requirements for identifying significant projects and developing and implementing transportation management plans (TMPs). A significant project is defined in the rule as one that, alone or in combination with other concurrent projects nearby, is anticipated to cause sustained work zone impacts that are greater than what is considered tolerable based on state policy and/or engineering judgment.

The full text of the rule can be found at [http://www.ops.fhwa.dot.gov/wz/docs/wz\\_final\\_rule.pdf](http://www.ops.fhwa.dot.gov/wz/docs/wz_final_rule.pdf).

For significant projects, the TMP must include public information and outreach strategies to inform those affected by the project of expected work zone impacts and changing conditions. To assist state and local agencies with these strategies, the Federal Highway Administration (FHWA) is developing a Public Information and Outreach guidance document. This document will include information to help agencies plan and evaluate an outreach campaign; identify the audiences for a campaign; decide when to begin a campaign and what types of information to convey to the public and other audiences and what methods of communication to use; and work with the mass media to spread the message.

This fact sheet provides an introduction to the forthcoming guidance document.

## What Is a Public Information and Outreach Campaign?

A public information and outreach campaign involves communicating to road users, the general public, area residents and businesses, and appropriate public entities about a road project, the impacts expected from the project's work zone, and changing conditions on the

"Illinois DOT (IDOT) has made a concerted effort to communicate to the public in advance. We've been consistent in our messaging of how important this project is for our future safety and this has really resonated with the public."

– **Beth Mosher**, IDOT, on the Upgrade 74 project

project. A typical campaign will include traveler information strategies for providing information about what to expect in and around the work zone—such as lane and shoulder closings, new traffic patterns, and traffic delay—

and available travel alternatives such as different routes and travel modes.

## What Are the Benefits of a Public Information and Outreach Campaign?

Public information campaigns are increasingly being viewed by transportation professionals as an integral part of highway construction programs, large or small.



Park and ride sign for the Hyperfix project on I-65/I-70 in Indianapolis, Indiana

"Because Indiana DOT (INDOT) partnered with the news media throughout the process from the very first day of the closure, we did not experience the gloom and doom gridlock that was feared would have the entire city shut down. People changed their travel behaviors and the overall project was a huge success."

– **Roger Manning**, INDOT, on the I-65/70 "Hyperfix" reconstruction project

Some of the main benefits of a public information and outreach campaign are:

- Improved driver and worker safety.
- Less traffic delay.
- Reduced driver frustration.

## Successful Practices for Effective Public Outreach Campaigns

A review of approximately 30 project-specific work zone public outreach campaigns used around the country found that:

- Successful public information and outreach campaigns are typically planned well in advance of work zone deployment.
- Public information needs can be determined by identifying the scale and patterns of disruption.



Logo for the reconstruction of I-74 in Peoria, Illinois

- Target audiences are often diverse and may include drivers (private and commercial, local and long distance), residents, employers, other public agencies, organizers of special events, and emergency responders/hospitals.

- A range of communication methods is the best way to

reach a diverse audience. Methods may include a Web site, e-mail alerts, printed materials, videos, public meetings, mass media, traveler information, and information centers.

- The underlying messages of most public outreach campaigns are safety first, plan ahead, know your surroundings (delays, change in traffic patterns), and "we care."
- Partnerships with other organizations will help shape and communicate a public outreach message. Other organizations may include public agencies, major employers, and mass media.
- Information should be provided before and during work zone deployment and, in some cases, after completion.
- The strategies used should be evaluated to improve public outreach in the long run.

"Overwhelmingly, the reaction from both the target audience and the media to the outreach program has been positive. The Public Information team and the Texas DOT regularly receive positive feedback from the community regarding the regular and timely dissemination of information."

– Raquelle Wooten, TxDOT, on the Katy Freeway reconstruction project

## Implementation Guidance

The Federal Highway Administration (FHWA) is currently developing an Implementation Guidance document to help state and local transportation agencies implement the provisions of the work zone final rule and attain compliance. To supplement the overall Implementation Guidance document, FHWA is also developing a suite of companion guidance documents that will provide more detail on the following aspects of the final rule:

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Slide 1  
Text Captions: FDOT 2007 Update Training

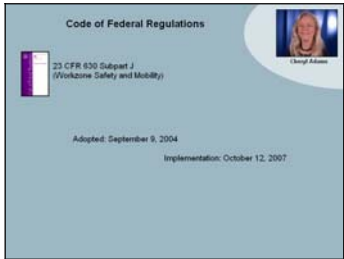
Slide 2  
Text Captions: Welcome to:

PPM Vol 1 Chapter 10

PPM Vol 1 Chapter 10

Cheryl Adams  
Roadway Design  
(850) 414-4327

Updated: 10/19/06  
Select "Start" or ALT+N. If using closed captioning, you will need to select the "CC" button below.  
Select Continue or ALT+N



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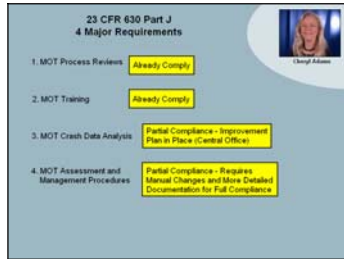
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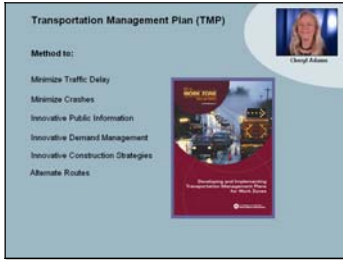
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Slide 3  
Text Captions: Code of Federal Regulations  
23 CFR 630 Subpart J  
(Workzone Safety and Mobility)  
Adopted: September 9, 2004  
Implementation: October 12, 2007  
Cheryl Adams

Slide 4  
Text Captions: 23 CFR 630 Part J  
4 Major Requirements  
1. MOT Process Reviews  
2. MOT Training  
3. MOT Crash Data Analysis  
4. MOT Assessment and Management Procedures  
Already Comply  
Already Comply  
Partial Compliance - Improvement Plan in Place (Central Office)  
Partial Compliance - Requires Manual Changes and More Detailed Documentation for Full Compliance  
Cheryl Adams



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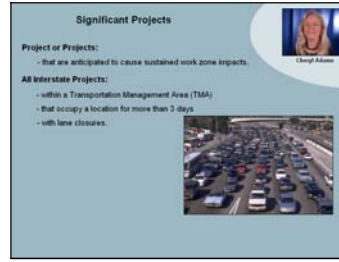
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Slide 5  
Text Captions: Transportation Management Plan (TMP)  
Method to:  
Minimize Traffic Delay  
Minimize Crashes  
Innovative Public Information  
Innovative Demand Management  
Innovative Construction Strategies  
Alternate Routes  
Cheryl Adams



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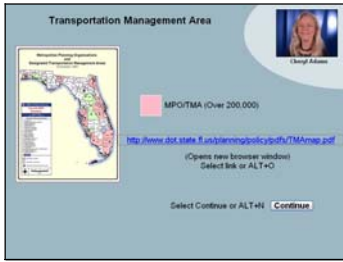
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Slide 6  
Text Captions: Significant Projects  
Project or Projects:  
- that are anticipated to cause sustained work zone impacts.  
  
All Interstate Projects:  
- within a Transportation Management Area (TMA)  
- that occupy a location for more than 3 days  
- with lane closures.  
Cheryl Adams



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Slide 7  
Text Captions: Transportation Management Area  
MPO/TMA (Over 200,000)  
  
Cheryl Adams  
(Opens new browser window)  
Select link or ALT+O  
Select Continue or ALT+N



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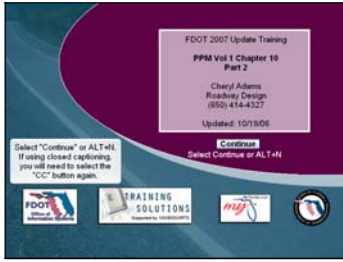
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Slide 8  
Text Captions: Cheryl Adams



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Slide 1  
Text Captions: FDOT 2007 Update Training

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Roadway Design  
(850) 414-4327

Updated: 10/19/06  
Select "Continue" or ALT+N. If using closed captioning, you will need to select the "CC" button again.



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Slide 2  
Text Captions: Significant Projects  
Cheryl Adams  
Multi-discipline team to handle:  
Planning  
Coordination  
Implementation  
Monitoring  
Evaluation



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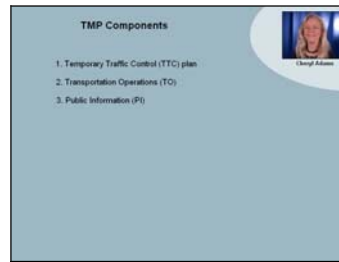
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Slide 3  
Text Captions: TMP Team Members  
PD&E  
Design  
Traffic Operations  
Construction  
Transit  
FHWA  
Local Government Officials  
Public Information  
Others, as necessary  
(Police, hospitals, etc)  
Cheryl Adams



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Slide 4  
Text Captions: TMP Components  
1. Temporary Traffic Control (TTC) plan  
2. Transportation Operations (TO)  
3. Public Information (PI)  
Cheryl Adams



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Slide 5  
Text Captions: Temporary Traffic Control Plan (TTC) Component  
Reference to Specific Design Standard Index Drawing(s)  
Designed Specifically for the Project  
Cheryl Adams



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Slide 6  
Text Captions: Transportation Operations (TO) Component  
Strategies to Mitigate Work Zone Impacts:  
Demand Management  
Corridor/Network Management  
Safety Management and Enforcement  
Work Zone Traffic Management  
Cheryl Adams



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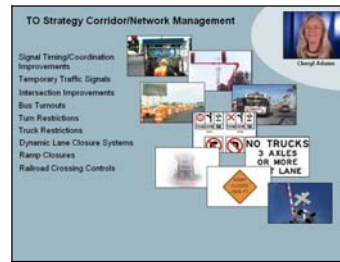
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Slide 7  
Text Captions: TO Strategy Demand Management  
Transit Services Improvements and Transit Incentives  
Shuttle Services  
Ridesharing/Carpooling Incentives  
Park-n-Ride Promotions  
HOV Lanes  
Variable Work Hours and Telecommuting  
Cheryl Adams



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Slide 8  
Text Captions: TO Strategy Corridor/Network Management  
Signal Timing/Coordination Improvements  
Temporary Traffic Signals  
Intersection Improvements  
Bus Turnouts  
Turn Restrictions  
Truck Restrictions  
Dynamic Lane Closure Systems  
Ramp Closures  
Railroad Crossing Controls  
Cheryl Adams



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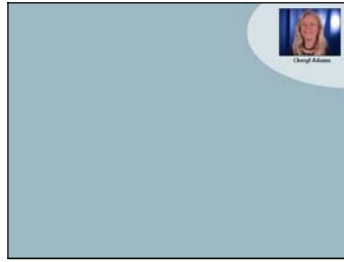
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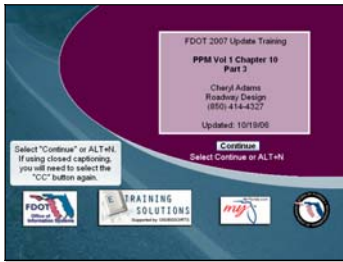
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Slide 9  
Text Captions: TO Strategy Safety Management & Enforcement  
Motorist Awareness System  
Temporary Barriers  
Temporary Crash Cushions  
Rumble Strips  
Automated Flagger Assistance Devices  
On-site Safety Training  
TMP Inspection Team Meetings  
Cheryl Adams

Slide 10  
Text Captions: Cheryl Adams



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Slide 1  
Text Captions: FDOT 2007 Update Training

PPM Vol 1 Chapter 10  
Part 3

Cheryl Adams  
Roadway Design  
(850) 414-4327

Updated: 10/19/06  
Select "Continue" or ALT+N. If using closed captioning, you will need to select the "CC" button again.



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Slide 2  
Text Captions: Cheryl Adams  
TO Strategy Work Zone Traffic Management  
Intelligent Transportation System (ITS) for Monitoring and Management  
Transportation Management Center (TMC)  
Aerial Surveillance  
Call Boxes  
Mile Post Markers  
Service Patrol  
Local Detour Routes  
Incident Response Plan  
Law Enforcement



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Slide 3  
Text Captions: Public Information (PI) Component  
Communication Strategies About the Expected Work Zone Impacts to Inform:  
Road Users  
General Public  
Residences  
Businesses  
Public Entities  
May be included in the Districts Community Awareness Plan (CAP)  
Cheryl Adams  
(Opens new browser window)  
Select link or ALT+O  
Select Continue or ALT+N



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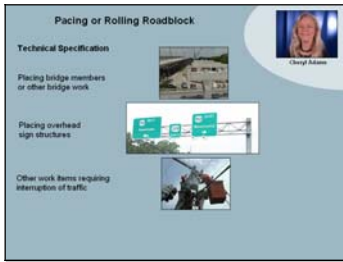
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Slide 4  
Text Captions: Public Information (PI) Key Steps  
Determine the appropriate size and nature of the public information and outreach campaign.  
Identify Resources  
Identify Partners  
Identify Target Audiences  
Develop the message(s)  
Determine communication strategies  
Determine communication timing  
Cheryl Adams



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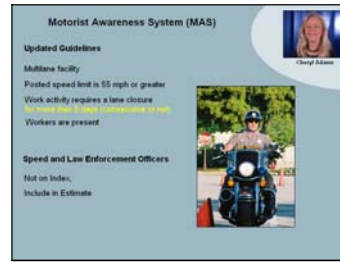
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Slide 5  
Text Captions: Pacing or Rolling Roadblock  
Technical Specification  
Placing bridge members or other bridge work  
  
Placing overhead sign structures  
Other work items requiring interruption of traffic  
Cheryl Adams



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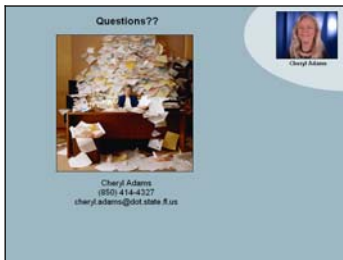
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Slide 6  
Text Captions: Motorist Awareness System (MAS)  
Updated Guidelines  
Multilane facility  
Posted speed limit is 55 mph or greater  
Work activity requires a lane closure  
for more than 5 days (consecutive or not)  
Workers are present  
Speed and Law Enforcement Officers  
  
Not on Index,  
Include in Estimate  
Cheryl Adams



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Slide 7  
Text Captions: Questions??  
Cheryl Adams  
(850) 414-4327  
cheryl.adams@dot.state.fl.us  
Cheryl Adams





## MEMORANDUM

**To: Greenbook Committee Members and Cheryl Adams**  
**From: Allen Schrupf, Chapter Subcommittee Co-Chair**  
**Subject: Should we update Chapter 11 – Work Zone Safety?**

In reviewing the current Florida Greenbook Chapter 11 – Work Zone Safety, it looks like the chapter has not changed much since I first came to Florida in 1989. Changes have been made from time to time, but most changes are more of an administrative nature, not as much of a technical one. Since I am an Instructor for the Florida T2 Center, teaching Advanced MOT, I'd like to make sure the current Greenbook is valid. I have received many questions on this issue during teaching AMOT. Both the MUTCD and also the Design Standards have changed significantly in the past 4-5 years. I am interested to know if there is a need to review the content of this chapter and identify any issues which need to be updated, added or deleted from the current version.

As I review it, I think the content of the chapter is rather general in nature, and that seems to be the appropriate intent. My concern is that there may have been issues that have arisen more recently that we should consider including. Examples of these newer concerns are:

### **OBJECTIVES (this is the heading in the current Greenbook)**

1. Should an additional objective to limit serious congestion on the facility be added? *THIS IS INTENDED TO ACHIEVE CONSISTENCY WITH THE LATEST FHWA DIRECTION (Transportation Management Plan now includes three (3) components - Temporary Traffic Control Plan + Traffic Operations Plan + Community Awareness Plan)*
2. Should an additional objective to limit impacts to transit, commercial deliveries to adjacent property and emergency vehicle operation be added?
3. Should the objective to maintain safe passageways for pedestrians in the work zone be modified to require ADA compliance?

### **PLANNING OF OPERATIONS (specifically the section on Traffic Control and Protection)**

1. Should the plan include consideration to include buffer spaces in front of the work zone and in front of barriers? What about attenuators on barrier ends?
2. Should the plan include consideration of protecting dropoffs within the clear zone?
3. Should the plan include Access to the WORK ZONE (by construction vehicles)?
4. Should the plan include Access to ADJACENT PROPERTIES? The current reference seems too vague as to what "Access" refers to.

### **WORK ZONE OPERATIONS (specifically the section on Contracts and Permits)**

1. Should the second paragraph be amended to require that ANY work effort be PRECEDED by the development /selection of a plan?

**EVALUATION**

1. Should the text refer to “Utility” as well as Construction and Maintenance operations? I know some Utilities (Progress Energy and FPL are the best examples) are under the UAM, but there are so many utilities that may not be under it, because they subcontract so much of their field work.

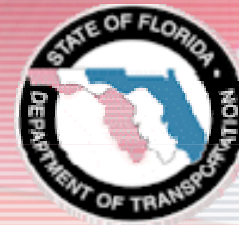
**\*\*\*\*\* ADDITIONAL ISSUES I DID NOT CATEGORIZE \*\*\*\*\***

1. Should we add a requirement that all TCP planning and TCP field personnel be trained in accordance with FDOT Policy? MUTCD now requires training, but does not specify methods. Perhaps FDOT’s training is best here.
2. Do we need to require (or suggest) all individual pay items for all projects?
3. Do we need to require all roadsides to be “crashworthy”. By this I mean adding language to require NCHRP Category 4 Devices (Advance Warning Arrow Panels, etc.) to be moved behind barrier or beyond the Clear Zone).
4. Do we need to require ANSI Class II apparel (or Class III for Flaggers at night). Also, do we need to require materials, equipment and clothing to be reflectorized if used at night?
5. Do we need to require permanent warning signs installed at 7’ height in areas where pedestrian traffic occurs, 5’ where pedestrians are not likely.
6. What about requiring warning lights on the traffic side of the sign?
7. Do we need to add a requirement to have warning signs sizes and advance distance a function of speeds on high speed facilities? MUTCD allows 24” x 24” & 100’ on very low speed roads, 36” x 36” on moderate facilities, and 48” x 48” & 1000’ on high speed facilities.
8. Do we need to address the concern that posts be able to endure the severe weather that can be expected (FDOT standards require stronger post installations, and due to deeper imbedment, more utility conflicts are anticipated).
9. Do we need to add a requirement for dimming certain devices at night?
10. Do we need to add a requirement that Portable Changeable Message Sign – messages be stated in the plans?
11. Do we need to add a requirement that Arrow Panels in the Arrow are ONLY to be used for Lane Closures on a multilane facility, with a separate panel for each lane closed.

**END OF MEMORANDUM**

# Americans with Disabilities Act

and Florida Accessibility Code

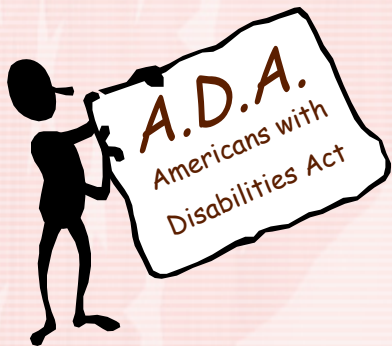


2007

D. Dwayne Kile, P.E.  
D7 Design Engineer  
[dwayne.kile@dot.state.fl.us](mailto:dwayne.kile@dot.state.fl.us)  
813-975-6030

# Introduction

- What changes are proposed?
- What are the lawsuit issues?
- Where to call



# Background

- FDOT initiated ADA program - 1992
- Revise Standards to match ADA
- Training for designers and project managers and project engineers
- Modify procedures and practices
- Added ADA features to projects

# Background

- **Recently: 2001-2003**
  - 6 ADA lawsuits on roadways
    - Turnpike / Miami / Tallahassee
    - Miami Beach/Pinellas/Jacksonville
    - Threatened future lawsuits
  - **Statewide ADA surveys of state roads**
    - Document compliance
    - Identify deficiencies
    - The more recent the work, the more out-of-compliance it is

# Background

- **New initiative**
  - Updated ADA implementation plan
    - (Freddie Simmons memo 3/5/02)
  - Enhance awareness of ADA responsibilities at all levels
    - Add training opportunities for all FDOT staff and contractors' staffs and CEI staffs
  - **Goals:**
    - Increase accessibility on facilities
    - Avoid future lawsuits

# Background of the ADA

- ADA - Civil Rights Law
  - 1964 - 1990 Federal Laws
    - 1964 Civil Rights Act
    - 1968 Architectural Barriers Act (federal buildings)
    - 1973 Rehabilitation Act (s. 504 - federal programs)
      - If you receive federal funds – you're a federal program
      - Includes services, programs, activities, buildings, facilities, roads, bridges, etc.
  - 1990 Americans with Disabilities Act
    - July 26, 1990 – signed into law
    - July 26, 1991 – implementing rules (ADAAG)
    - January 26, 1992 – became effective
    - January 26, 1995 – deadline for 'structural changes'



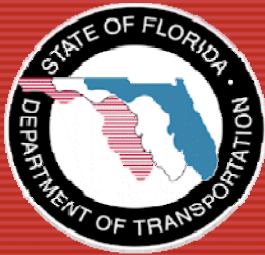




# Background of the ADA

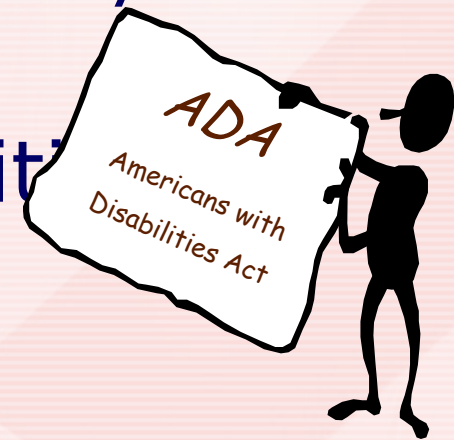
- July 23, 2004 – ADA & ABA combined & updated
- September 2005 – FDOT modifications to ADA/ABA
- November 2005 – Public Rights of Way Accessibility Guidelines
- October 30, 2006 – FDOT adopts ADA/ABA
  - Effective – November 29, 2006

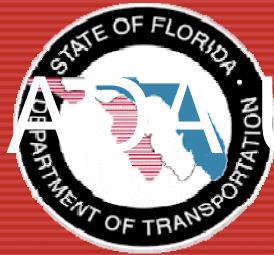




# ADA Update

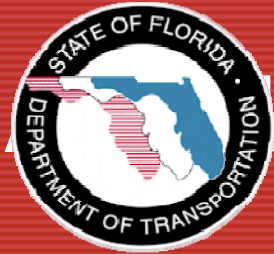
- Current "standard" as adopted by USDOJ
  - July 1, 1994 "*ADA Standards for Accessible Design*"
  - also known as ADA Accessibility Guidelines – ADAAG
- Applicable to building facilities





# Update

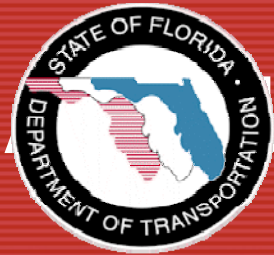
- Current “standard” as adopted by USDOT- FHWA
  - July 23, 2004 “**ADA and ABA Accessibility Guidelines**” (ADA/ABA, “New” ADAAG)
  - Modifications added in September 2005 by USDOT
- Applicable to “transportation” facilities



# Update

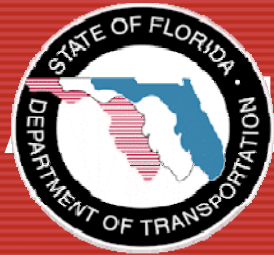
- FDOT Modifications (49 CFR Part 37):
  - 37.9(a) - Adopts the new ADAAG by reference
  - 37.9(c)(1) - If a project is in progress on the effective date of this amendment, and the work meets the requirements of the old standards, the work does not have to meet the requirements of the new standards
  - 37.9(c)(2) - An existing facility that complies with the old standards does not need to be retrofitted to meet the new standards
  - 39.9(d)(6)(i) - FTA determinations of "equivalent facilitation" are case-by-case, site-specific that apply to a particular situation and to other similar situations





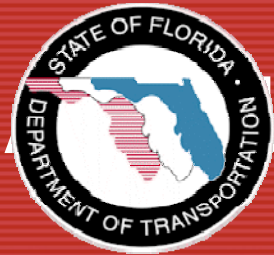
# Update

- FDOT Modifications (49 CFR Part 37):  
(*cont.*)
  - 37.41 - "Structural impracticability" exemption added back (this was deleted in the new ADAAG)
  - 37.41 - Structural impracticability should not be applied to "hilly" terrain or on land on which there are steep slopes
  - In such situations, accessibility can be achieved without destroying the physical integrity of a structure and is required in the construction of new facilities



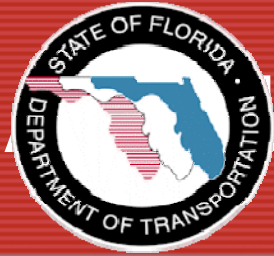
# Update

- FDOT Modifications (49 CFR Part 37): *(cont.)*
  - Appendix A, § 206.3 - The distance that persons with disabilities must travel to use various (transit) station elements must be minimized
  - Appendix A, 810.2.2 - Public entities must assure bus boarding and alighting areas comply with the required dimensions to the extent construction specs are within their control
  - Appendix A, 810.5.3 - Rail station platform height and rail car door height must be coordinated



# Update

- FDOT Modifications (49 CFR Part 37): *(cont.)*
  - 37.41(b)(1) – Structural impracticability will be considered only in those rare circumstances when the unique characteristics of terrain prevent the incorporation of accessibility features
  - 37.41(b)(2) – Any portion of a facility that can be made accessible shall be made accessible
  - 37.41(b)(3) – If providing accessibility to individuals with certain disabilities is structurally impracticable, accessibility shall be provided to persons with other disabilities



# Update

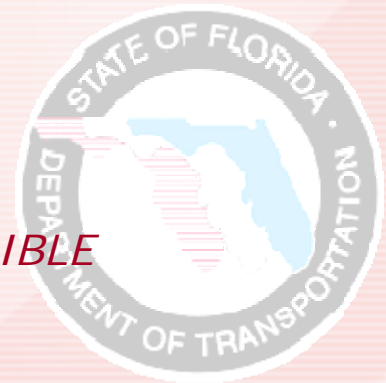
- FDOT Modifications (49 CFR Part 37):  
(*cont.*)
  - Links to the complete text of the adoption of the new ADAAG with modifications and other accessibility guidance may be found on the USDOT Web page:
  - *[www.fhwa.dot.gov/environment/bikeped/guidance.htm#Access](http://www.fhwa.dot.gov/environment/bikeped/guidance.htm#Access)*



# Department Responsibilities

- Plan / Budget for Accessibility
- ***Provide Accessible Design***
- Construct Accessible Facilities
- Maintain Accessible Features

- ***PROVIDE SAFE, FUNCTIONAL and ACCESSIBLE FACILITIES & STRUCTURES!***



# *Changes for Transportation*



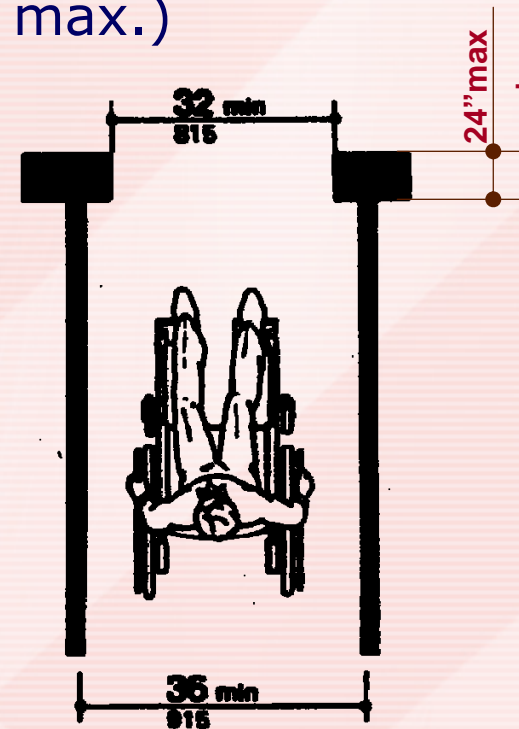
May 07

A D A and FDOT Construction

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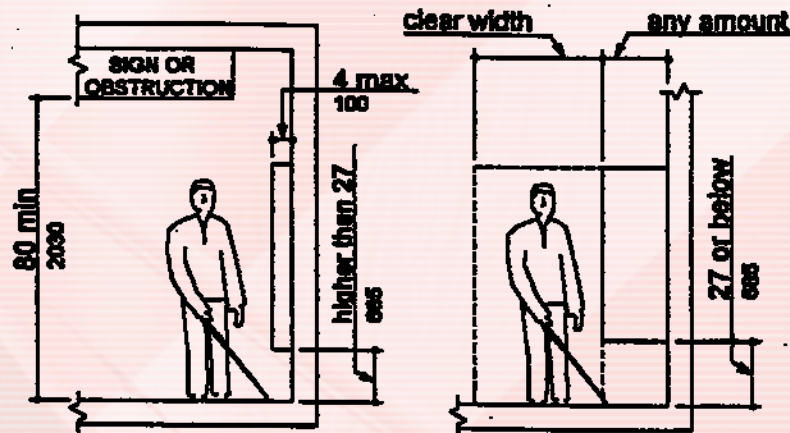
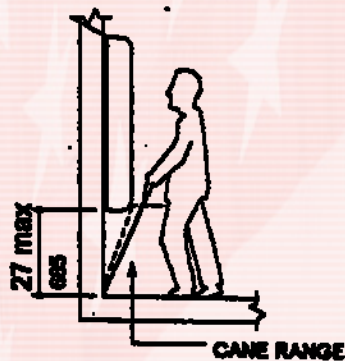
# Accessible Routes

- Current 36" continuous unobstructed path
  - **48" in new guidance**
- Current 32" min. at a 'point' (24" max.)
  - **48" in new guidance**
- 60" x 60" passing space
  - @ 200'
- Slopes:
  - $\leq 1:20$  is not ramp
  - $> 1:20$  is ramp
  - 1:12 max. allowed
- Cross-slope
  - 1:50 max. allowed



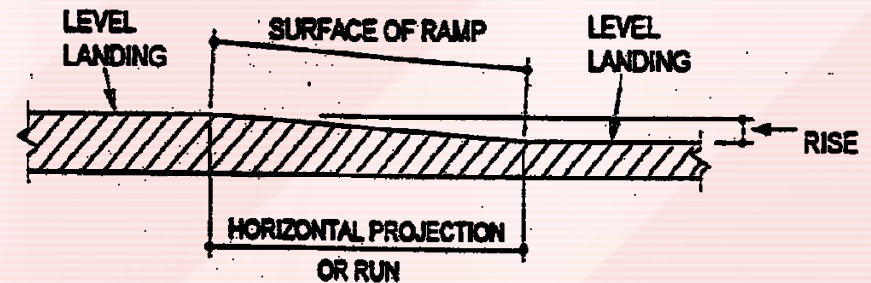
# Protruding Objects

- 27" – 80" range
- Post-mounted – 12" max. (**4" proposed**)
- Wall mounted – 4" max.
- Overhanging – 80" min.



# Ramps – Slopes, etc.

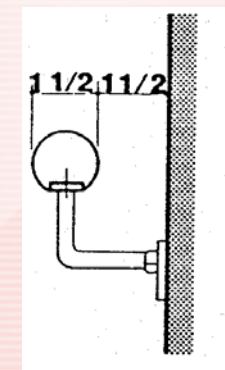
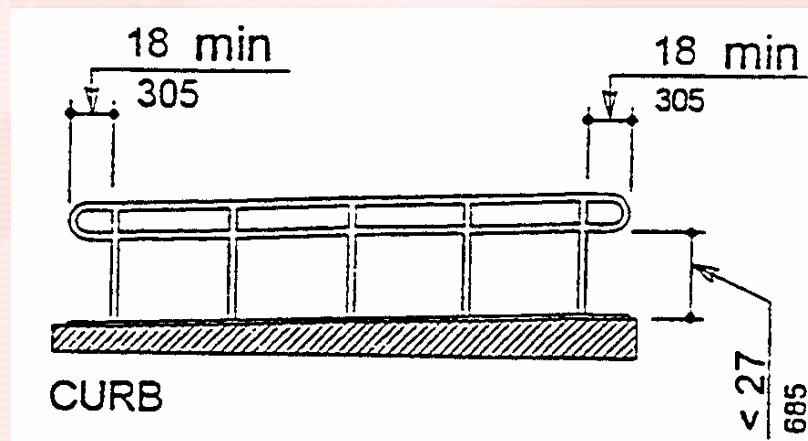
- Ramp Slope - **1:12 (8.33%) max.**
- Cross-slopes - **1:50 (2%) max.**
- Level Landings – **every 30-40 ft.**
  - A place to rest
- 2" curb/bottom rail



SLOPE	MAXIMUM RISE		MAXIMUM HORIZONTAL PROJECTION	
	IN	MM	FT	M
1:12 TO < 1:16	30	760	30	9
1:16 TO < 1:20	30	760	40	12

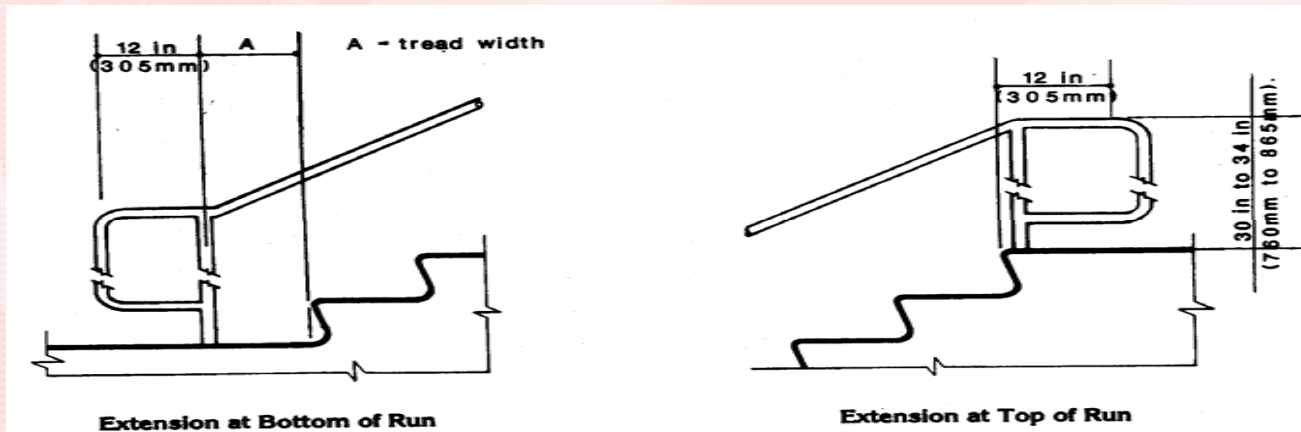
# Handrails: Ramps

- 1 1/4" - 1 1/2" o.d. pipe **2" proposed**
- 34" - 38" high to top of pipe **34" recommended**
- 18" horizontal extension top & bottom
- 2" curb (if grade change)



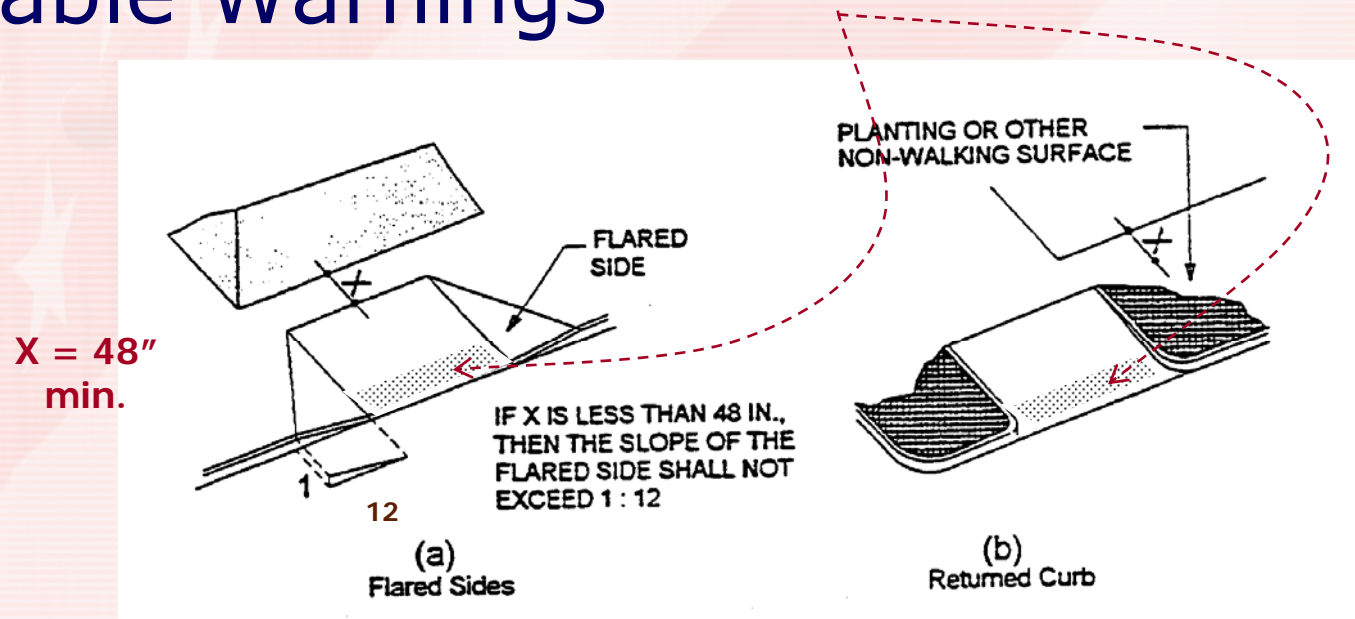
# Handrails: Stairs

- 1 1/4" - 1 1/2" o.d. pipe **2" prop.**
- 34" - 38" high to stair nosing
- Horizontal extension
  - Top - 12"
  - Bottom - 1 tread + 12"



# Curb Ramps

- Slopes ( $\leq 1:12$ )
- Cross-slopes ( $\leq 1:50$ )
- Detectable Warnings





# Bus Stops / Shelters

- On accessible route
- Boarding area (96" x 60" min.)
  - Place for bus lift to deploy (**Bus Pads**)
  - Firm, stable, and slip-resistant surface (**AC or Concrete Pad**)
  - Must connect to streets, sidewalks, etc. (**hard surface, not grass/soil**)
- Accessible approach to bus stop
- 30" x 48" clear floor area within shelter
- 36" min. approach to clear floor area

# Bus Stops / Shelters

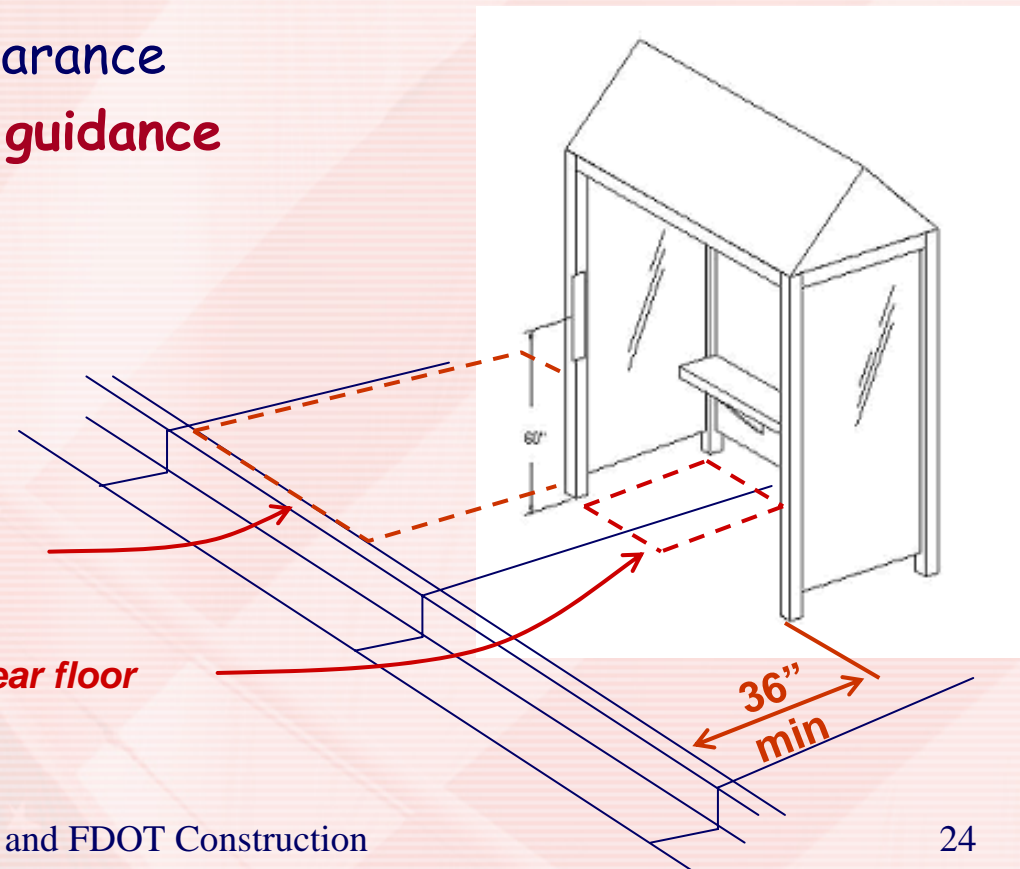
## ⚡ Bus Shelter *shall not* block sidewalk!

- ⚡ Maintain 36" min. clearance
- ⚡ **48" min. in new guidance**
- ⚡ 60" preferred

60" x 96" boarding area

30" x 48" clear floor area

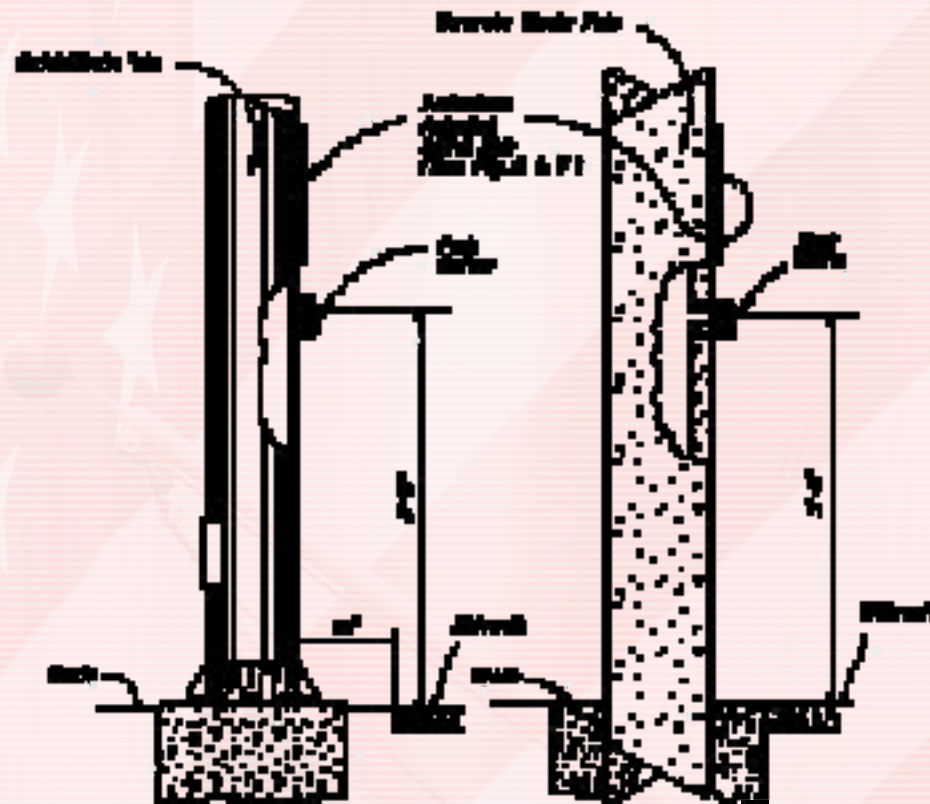
36" min



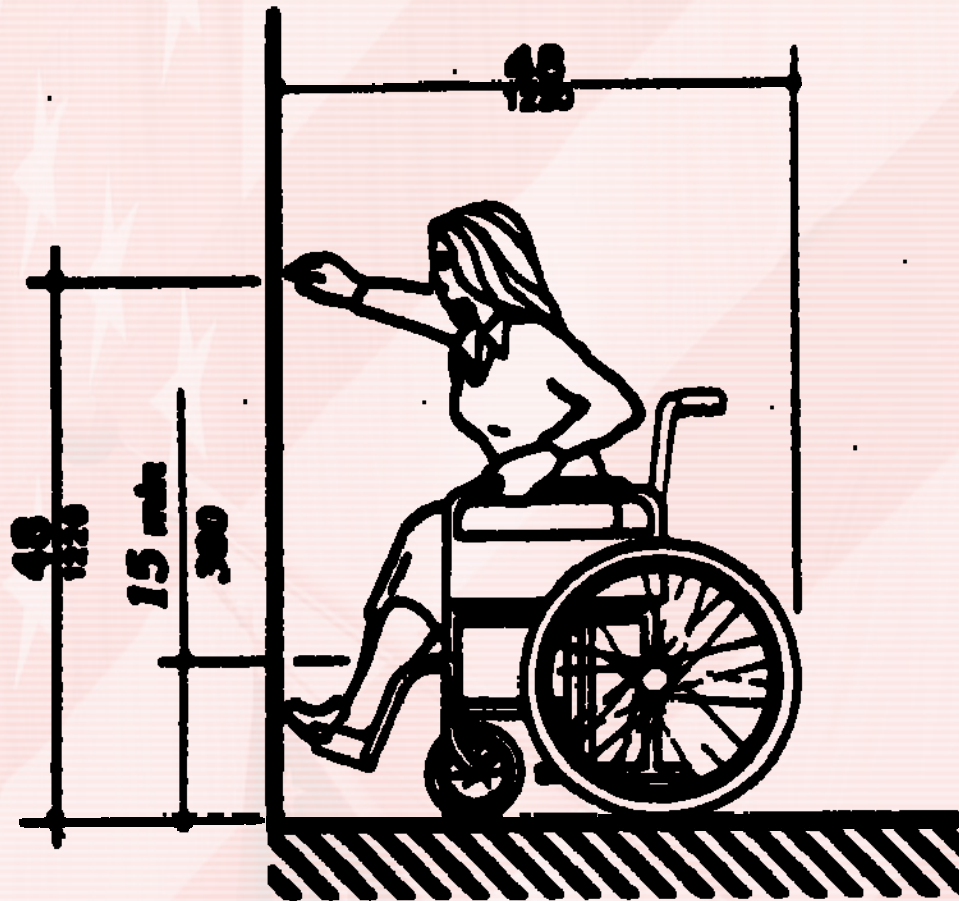
# Pedestrian Controls

- In reach ranges (54" max.) (48" proposed)
  - Front preferred (48" max.)
  - 44" (front), 46" (side) over obstruction ( > 10" ≤ 24")
- Maneuvering space (30" x 48" min., level)
- Check for protruding objects

# Pedestrian Controls



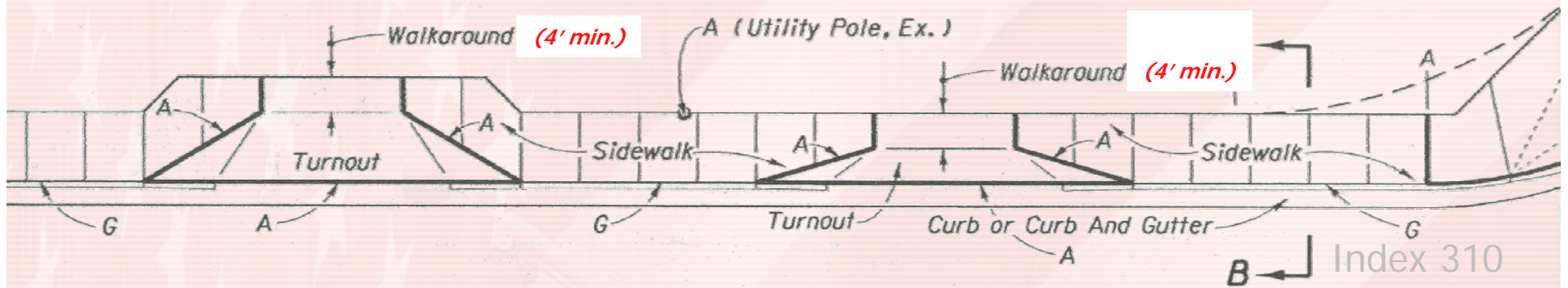
# Pedestrian Controls



# Sidewalks

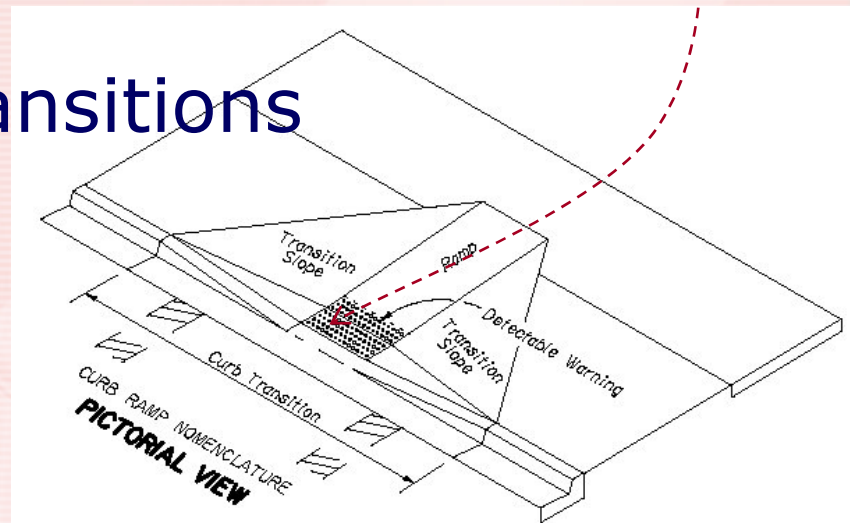
- Are Accessible Routes – **48"** **prop.**
- Cross-slopes – **1:50 / 2% max.**
- Check Surfaces – *"Firm, Stable, Slip-resistant"*
- Look for Level changes – **1/4" / 1/2"**
- Look for Protruding Objects

# Sidewalks



# Curb Ramps & Detectable Warnings

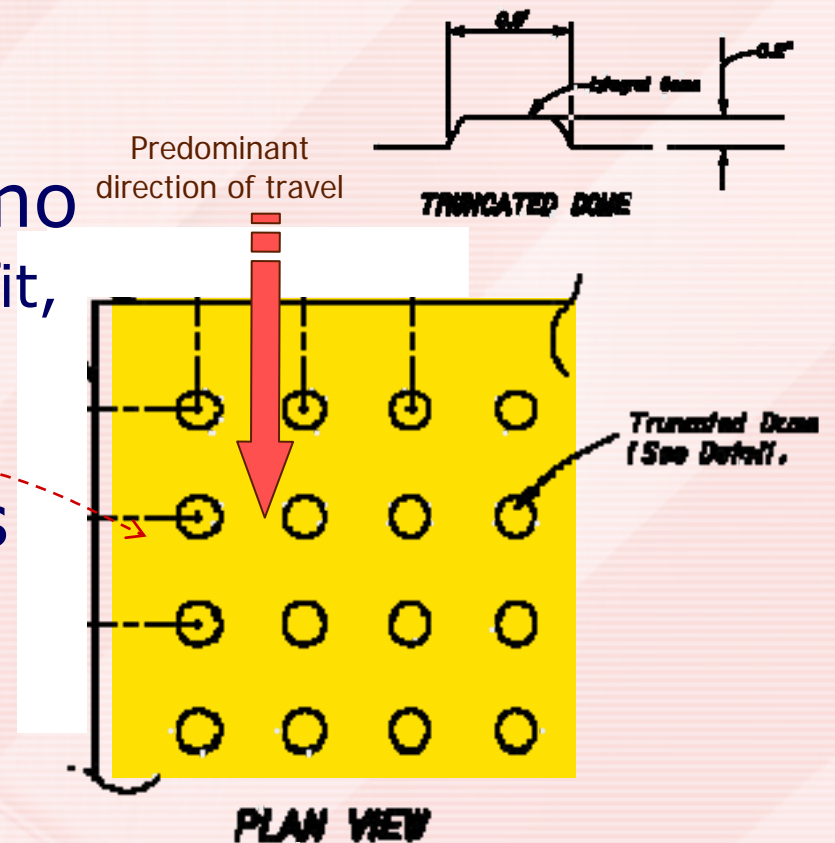
- Truncated domes are back
  - 2004 Design Standards – Index 304
  - **No stamped domes**
- At curb ramps
  - Full width of ramp & 24" deep from back of curb
  - **Not** on flared sides
- At landings and flush transitions
  - 24" deep from back of curb





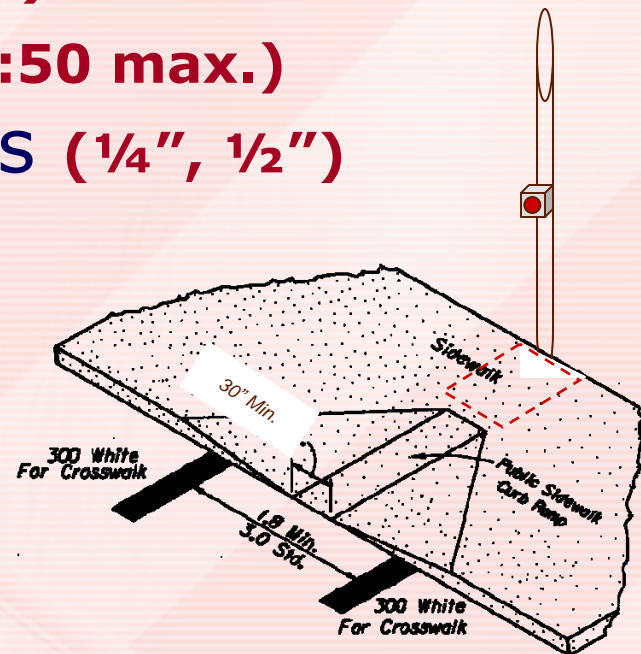
# Detectable Warnings

- Truncated Domes
  - Aligned pattern
- Mat, tile, paver, thermo
  - New construction, Retrofit, 3R, Maintenance
- Color/contrast with surrounding materials
  - Light-on-dark, Dark-on-light
  - Black, brick-red, safety yellow, etc.
  - **Not Blue!**



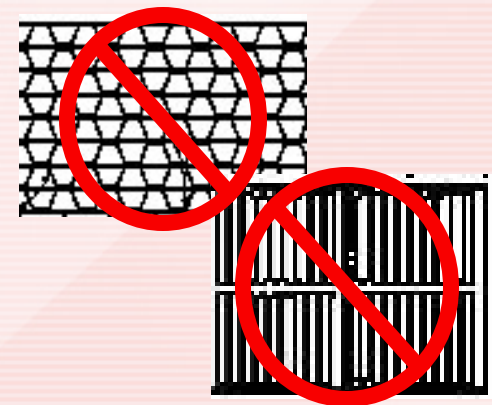
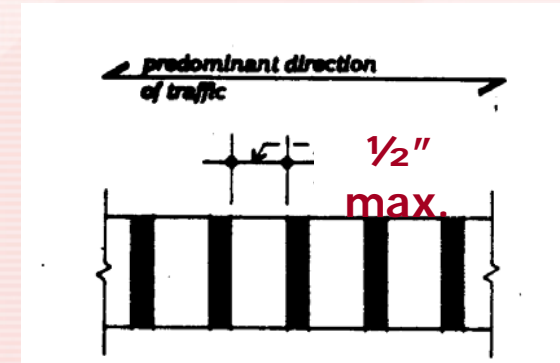
# Crossings

- Curb ramp is “wholly within” markings
- Check Transitions ( $\leq 11\%$ )
- Verify Slopes (**1:12 max.**)
- Check Cross-slopes (**1:50 max.**)
- Look for Level changes ( $\frac{1}{4}''$ ,  $\frac{1}{2}''$ )
- Check Controls
  - 30"x48" Maneuvering Area
  - “Level” space
  - **Buttons accessible**



# Drainage Grates

- Generally grates need to be out of pedestrian path
- If in pedestrian path, **must** meet grating limitations of ADA
  - Maximum of 1/2" openings between grating members, perpendicular to direction of ped traffic
  - *Neither steel (reticuline) nor cast iron (slotted) grate meets ADA!?!*
- Overlay expanded mesh on grate?



# Lawsuit Issues

## OVERVIEW OF ADA RESEARCH

- OVERVIEW OF COMPLAINT
  - UNDERSTAND ISSUES
  - DEVELOP FEASIBLE SOLUTIONS
- COLLECTION OF DATA
  - IDENTIFIED BUS ROUTES / TYPES OF BUSES
  - DOCUMENTED EACH LOCATION
    - PHOTOGRAPHS
    - REVIEWED PAST, CURRENT, FUTURE PROJECTS
    - CATEGORIZED APPARENT ADA ISSUE AT EACH LOCATION
- ANALYZED DATA
- IDENTIFIED POTENTIAL SOLUTIONS FOR TODAY'S DISCUSSION

# Lawsuit Issues

## Types of Bus

# Lawsuit Issues

- PSTA TRANSIT BUS
- COUNTYWIDE OPERATION
- RAMPED ACCESS
- LOW FLOOR



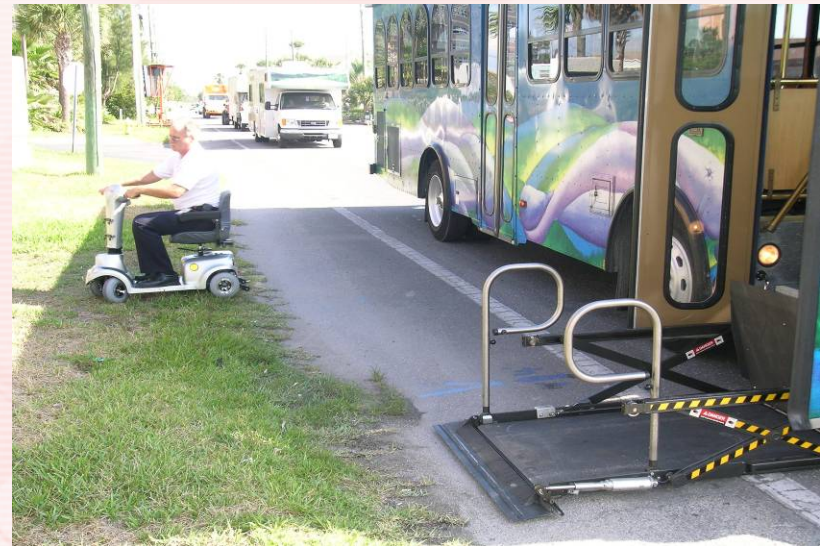
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# Lawsuit Issues

- GULF BOULEVARD TROLLEY
- OPERATED BY PSTA
- HIGH FLOOR



# Lawsuit Issues

- JOLLEY TROLLEY (NOT PSTA)
- OPERATED IN DOWNTOWN CLEARWATER AND CLEARWATER BEACH
- OWNED BY NONPROFIT CORPORATION





# Lawsuit Issues

## ANALYSIS OF DATA

# Lawsuit Issues

## 6 CATEGORIES

- BENCH ISSUES at BUS STOPS
- BUS BOARDING
- BUS BOARDING PAD CONNECTIVITY
- ACCESSIBLE BUS STOP
- CURB RAMPS AND EXISTING SIDEWALK
- ADA ACCESSIBILITY ISSUE (NOT APPARENT)

# Lawsuit Issues

## BENCH ISSUES at BUS STOPS



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# Lawsuit Issues

## BENCH ISSUES at BUS STOPS



Gulf Boulevard – Indian Rocks Beach

# OVERVIEW OF ADA ISSUES

## BENCH ISSUES at BUS STOPS



U.S. 19 – Palm Harbor

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# Lawsuit Issues

## BENCH ISSUES at BUS STOPS



Gulf Boulevard – Indian Shores

# Lawsuit Issues

## BUS BOARDING



US 19 (SR 55) – Near Wal-Mart

# Lawsuit Issues

## BUS BOARDING



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# Lawsuit Issues

## BUS BOARDING



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# Lawsuit Issues

## BUS BOARDING



Gulf Boulevard – Indian Rocks Beach

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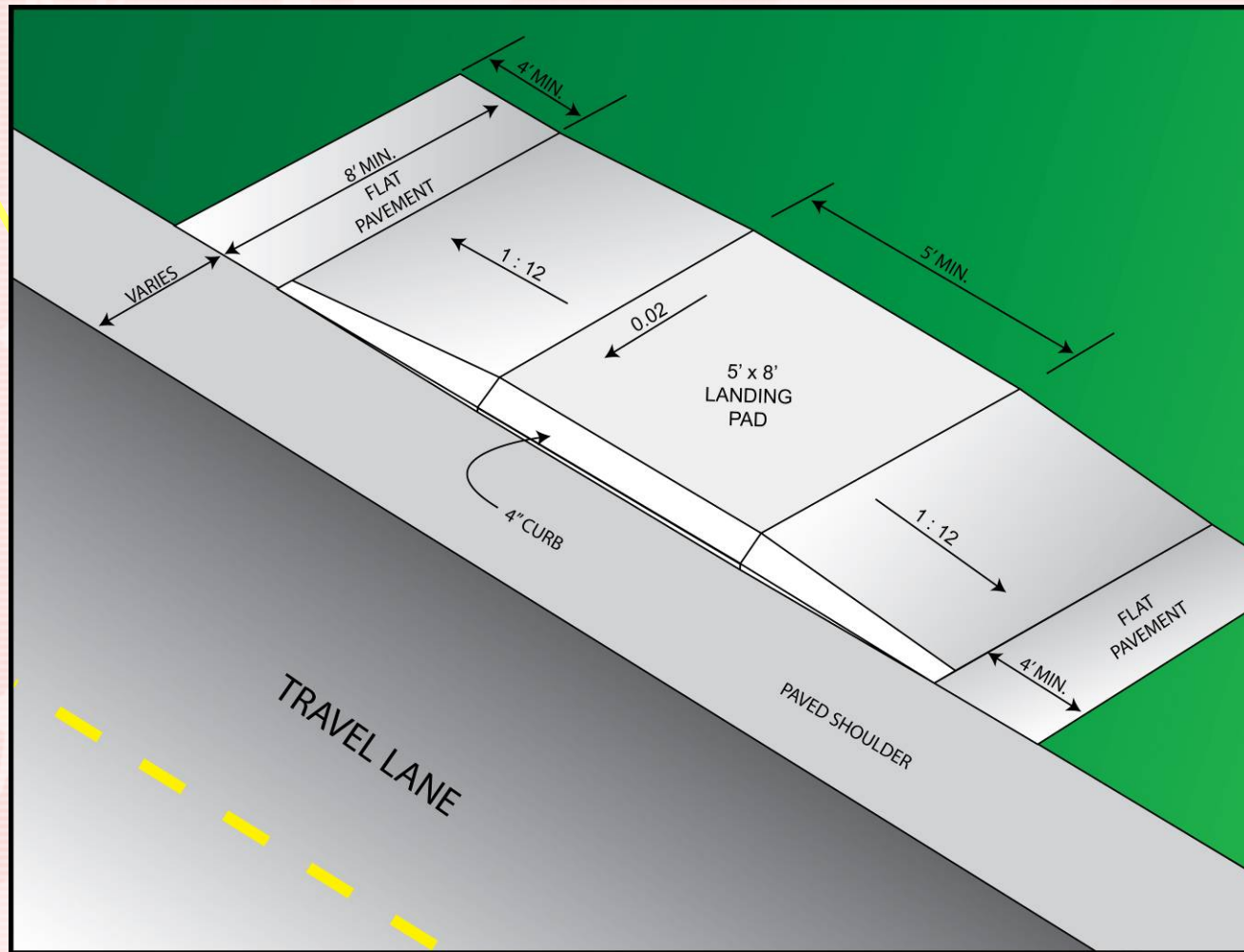
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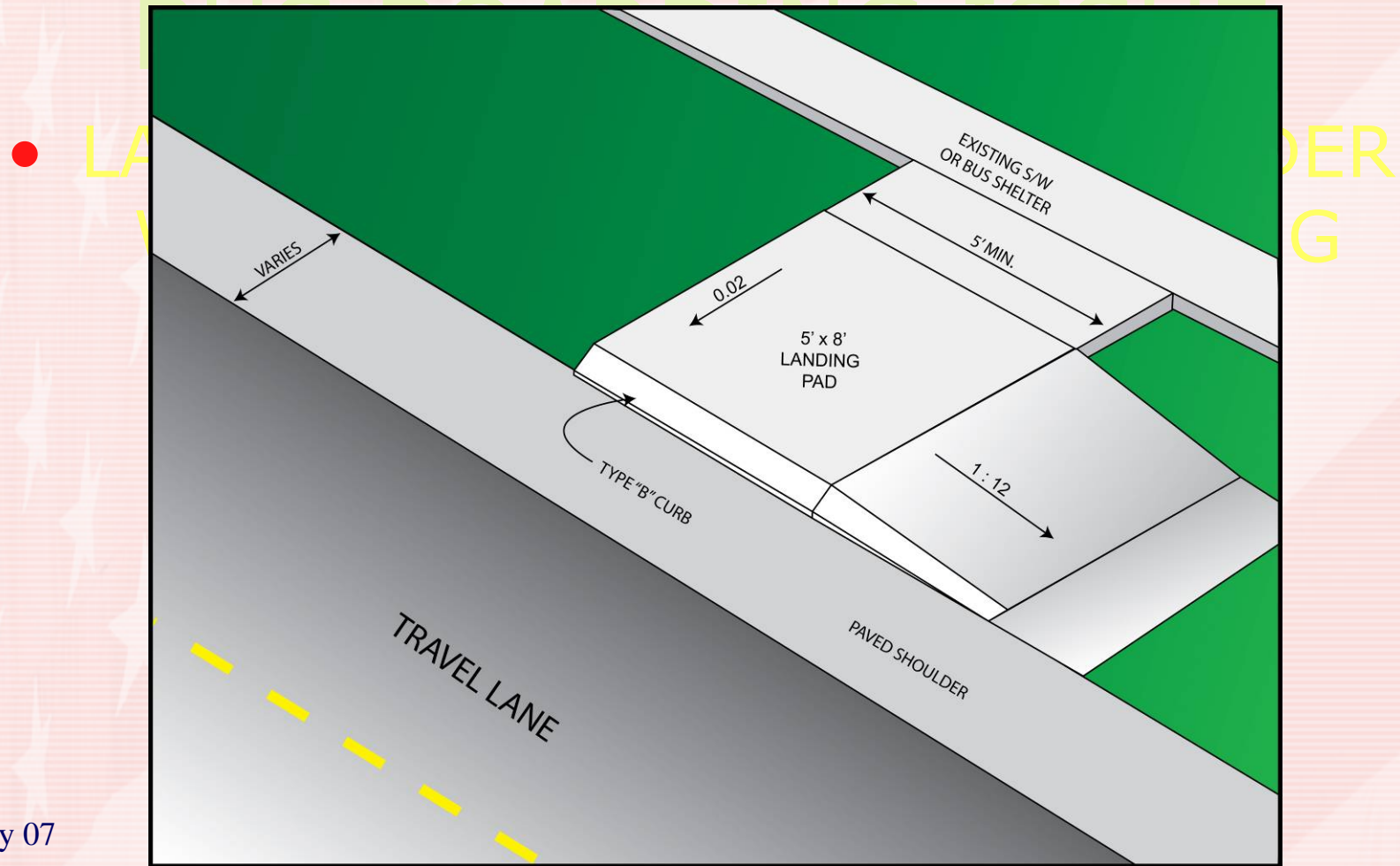
# OPEN DISCUSSION - ADA ISSUES / SOLUTIONS

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SHOULDER

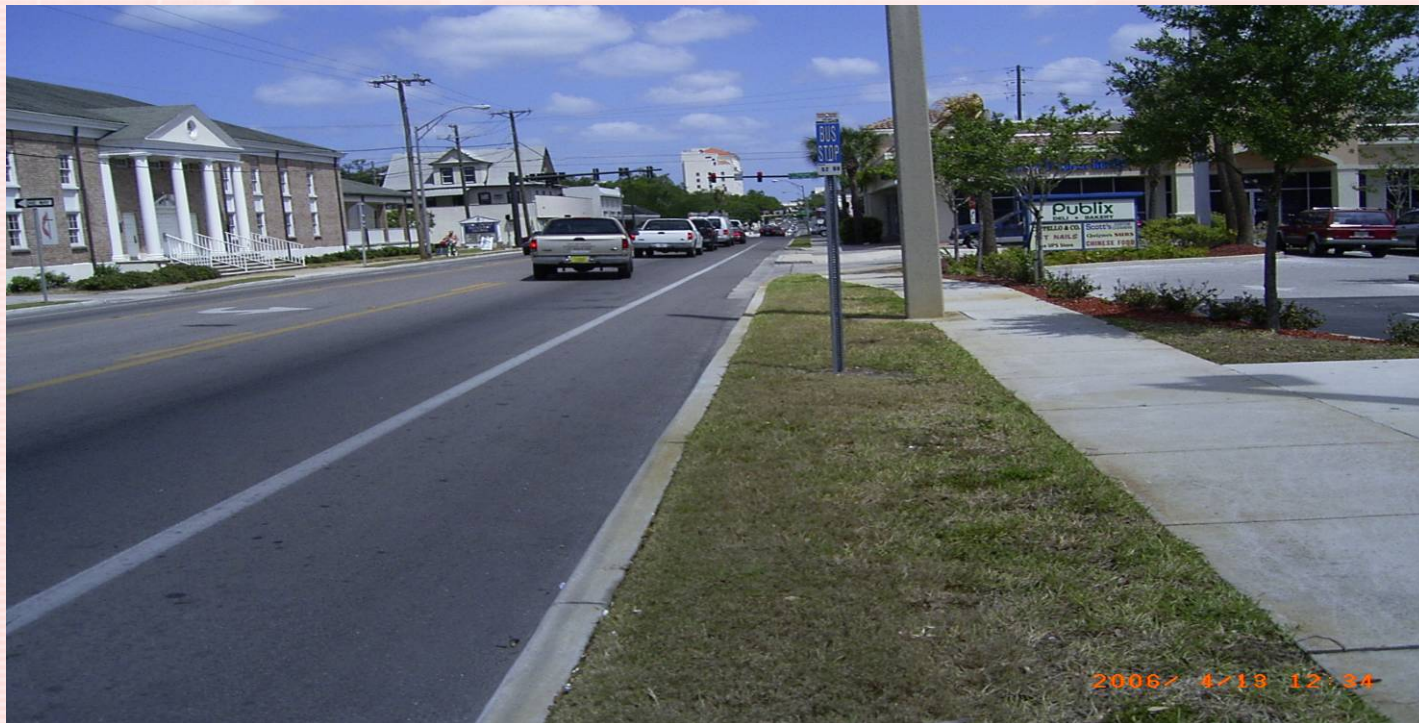


# OPEN DISCUSSION - ADA ISSUES / SOLUTIONS



# Lawsuit Issues

## BUS BOARDING PAD CONNECTIVITY



Fort Harrison Avenue – Clearwater

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# Lawsuit Issues

## BUS BOARDING PAD CONNECTIVITY



Gulf Boulevard – Indian Shores

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# Lawsuit Issues

## ACCESSIBLE BUS STOPS



Gulf Boulevard – Indian Shores

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# Lawsuit Issues

## ACCESSIBLE BUS STOPS



Gulf Boulevard – Indian Shores

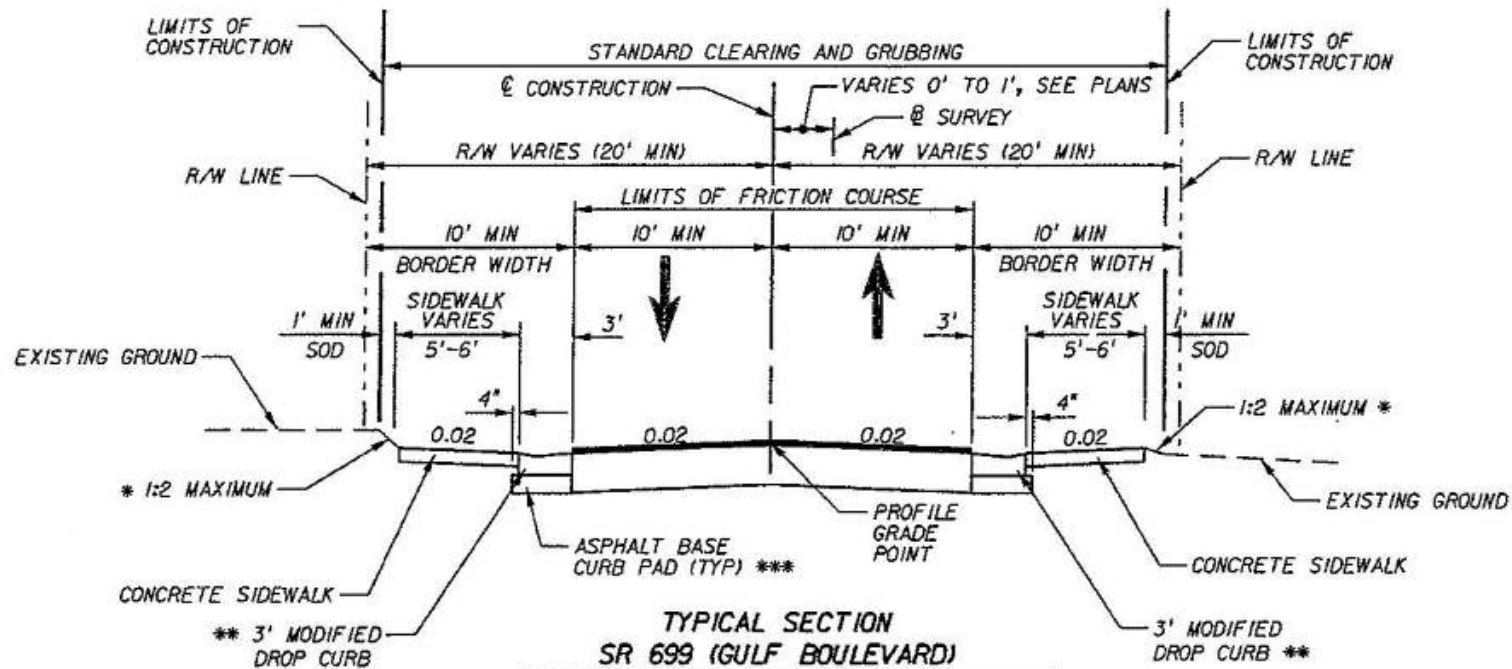
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# OPEN DISCUSSION - ADA ISSUES / SOLUTIONS



STA 398+70.00 TO STA 432+85.37 BK  
 STA 432+85.35 AH TO STA 439+18.98 BK  
 STA 439+18.94 AH TO STA 443+00.00  
 STA 508+60.00 AH TO STA 520+89.06 BK  
 STA 520+89.09 AH TO STA 526+10.51 BK  
 STA 526+10.50 AH TO STA 530+50.00  
 STA 537+95.00 TO STA 539+90.00

NOTE:

FOR ADDITIONAL DETAILS, SEE THE SEAWALL AND PARKING LOT TYPICAL SECTIONS.

NOTE:

SEE PLAN PROFILES FOR LIMITS OF TRENCH DRAINS

# Lawsuit Issues

## CURB RAMPS AND EXISTING SIDEWALKS



N. Fort Harrison And Drew Street

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# Lawsuit Issues

## CURB RAMPS AND EXISTING SIDEWALKS



Missouri Avenue – Near Court Street

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# Lawsuit Issues

## UNDEFINED ADA ISSUE



Gulf Boulevard – Treasure Island

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# Lawsuit Issues

## UNDEFINED ADA ISSUE



Gulf to Bay Blvd. – Clearwater Mall

# Quote to Remember

*“ . . . Disability is not the experience of a minority of Americans. Rather, it is an experience that will touch most Americans at some point in their lives. Today, there are over 54 million Americans with disabilities, a full 20 percent of the U. S. population. Almost half of these individuals have a severe disability, affecting their ability to see, hear, walk, or perform other basic functions of life. In addition, there are over 25 million family caregivers and millions more who provide aid and assistance to people with disabilities. . . . ”*

**George W. Bush**

New Freedom Initiative for People with Disabilities – 2002

# SUMMARY

- What changes are proposed?
- What are the lawsuit issues?
- Where to call



The background features a stylized American flag with a blue field of white stars on the left and red and white stripes on the right. The stripes are curved, creating a sense of movement. In the lower-left foreground, two black silhouettes of figures are shown pulling a rope that connects to a larger figure on the right. The figures are carrying large grey sacks. The overall composition is dynamic and patriotic.

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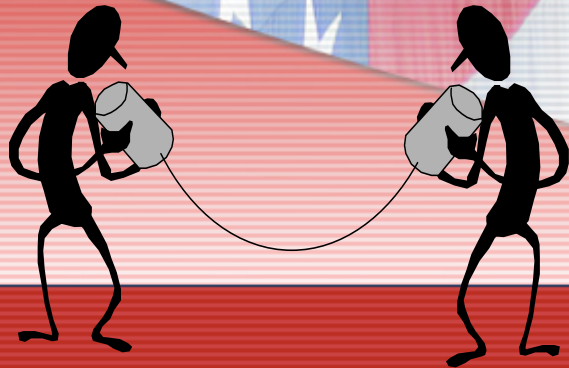
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*Thank You!*

*Merci!*

*Arigato!*

*Shokran!*

*Xie Xie!*

*Gracias!*

*Dhanya Vaad!*

*Danke!*

*Live long and prosper!*



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2. Land Development.....	Jim Davis
3. Geometric Design .....	Chuck Meister
4. Roadside Design .....	Jim Harrison
5. Pavement Design and Construction .....	Dwayne Kile
6. Roadway Lighting.....	Bernie Masing
7. Rail-Highway Grade Crossings .....	Jimmy Pitman
8. Pedestrian Facilities .....	Joy Puerta
9. Bicycle Facilities.....	Joy Puerta
10. Maintenance.....	David Ponitz
11. Work Zone Safety .....	<del>Frederick Schneider</del> <b>VACANT</b>
12. Construction.....	Tanzer Kalayci
13. Public Transit.....	Annette Brennan
14. Design Exceptions .....	Ramon Gavarrete
15. Traffic Calming.....	<del>Henry Cook</del> <b>VACANT</b>
16. Residential Street Design.....	Jim Harrison
17. Bridges and Other Structures .....	David O'Hagan

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# Tentative Key Dates for 2007 Florida Greenbook

## 2007

March 13, 2007	Florida Greenbook Advisory Committee Meeting
March 30, 2007	Deadline for addressing comments from Committee meeting. Deadline for submitting 2007 Draft for FDOT Legal office review.
April 20, 2007	Deadline for addressing comments made by FDOT Legal office
May 2, 2007	Deadline for publishing a Change Notice/Addendum/Rulemaking for the changes
May 23, 2007	Deadline for submitting comments on the change notice (21 days)
July 25, 2007	Deadline for addressing comments due to original change notice
August 8, 2007	Deadline for publishing new Change Notice in response to comments
August 29, 2007	File rule amendment (Rule 14-15.002) 2007 Greenbook
September 12, 2007	Tentative effective date of the 2007 Florida Greenbook / Post on website  <b>Notification</b> sent to registered holders that 2007 Greenbook has been posted on FDOT website

All dates subject to change

