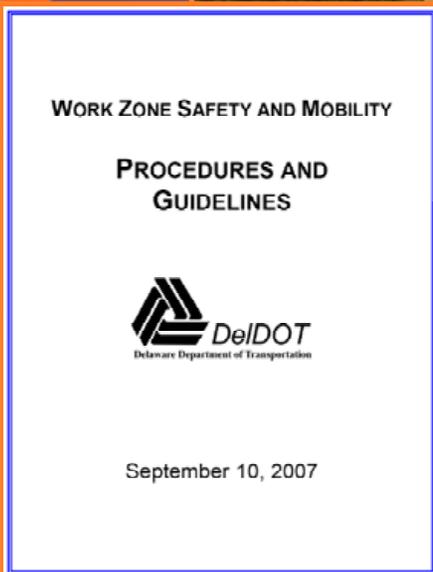
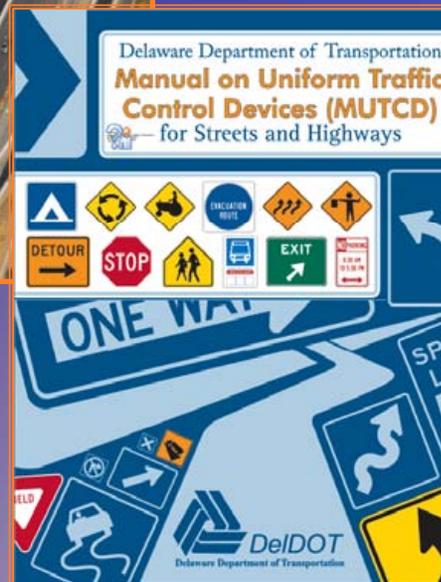


New DeIDOT Work Zone Safety Initiatives

Presentation to:
DeIDOT Winter Workshop
February 26, 2009



Delaware Department
of Transportation





Recent DeIDOT Safety Initiatives

- Strategic Highway Safety Plan (2006)
- Safe Routes to School Program (2007)
- New Occupational Safety Section (2007)
- **New Traffic Control Manual (2007)**
- **Work Zone Safety & Mobility Guidelines & Procedures (2007)**
- **Subpart K Initiatives (2008)**

Channelizing Device Retroreflectivity

- New mandatory sheeting requirements
- Fluorescent orange and white prismatic retro reflective sheeting mandatory
- Effective ~~January 5, 2009~~ for contracts awarded after December 31, 2009



Vertical Difference

- Clarifies what devices are required for specific situations



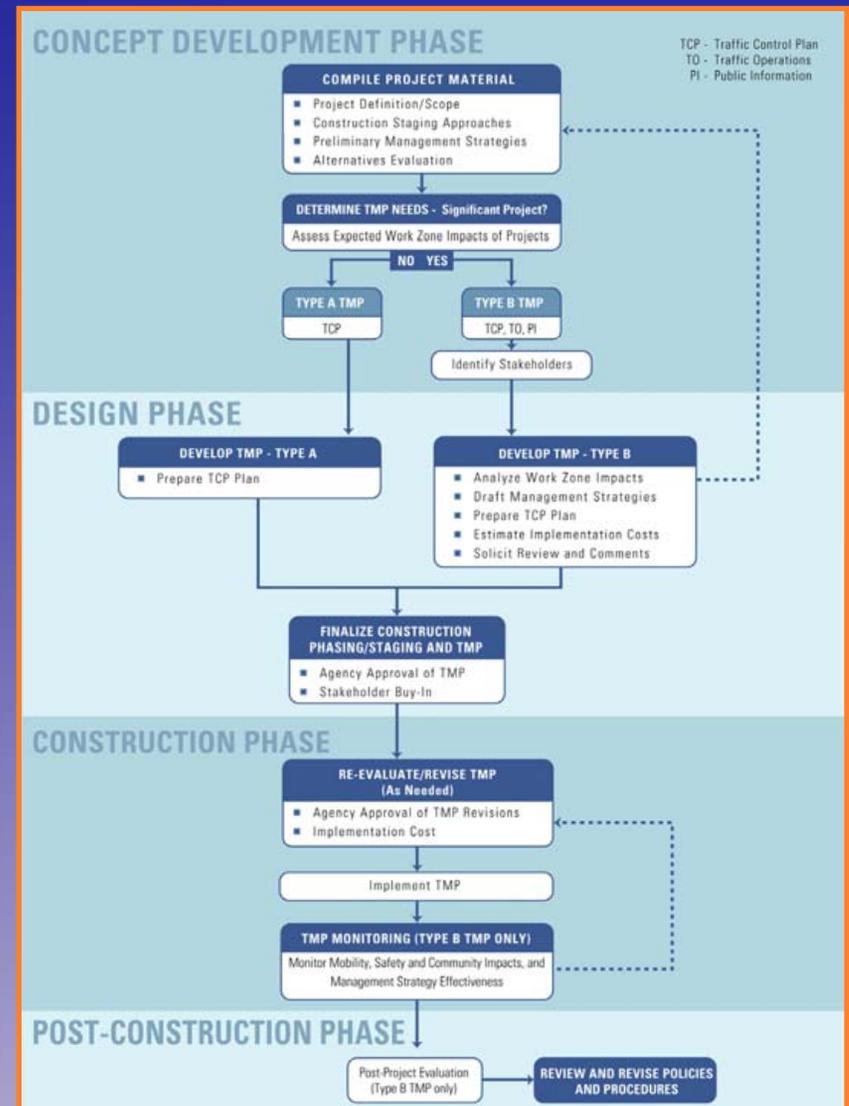


DeIDOT's Work Zone Safety and Mobility Procedures and Guidelines

- 2005 Federal Transportation Reauthorization: SAFETEA-LU, Section 1110, Subpart J
- Purpose
 - ◆ Provide guidance for systematically addressing the safety and mobility impacts of work zones throughout the various stages of the project development and implementation process, and developing strategies to help manage these impacts.
- Applicability
 - ◆ All projects on roadways under DeIDOT's jurisdiction
 - ◆ New and existing projects with a preliminary plan due date before October 12, 2007
 - ◆ Does not apply to work related to emergency repairs

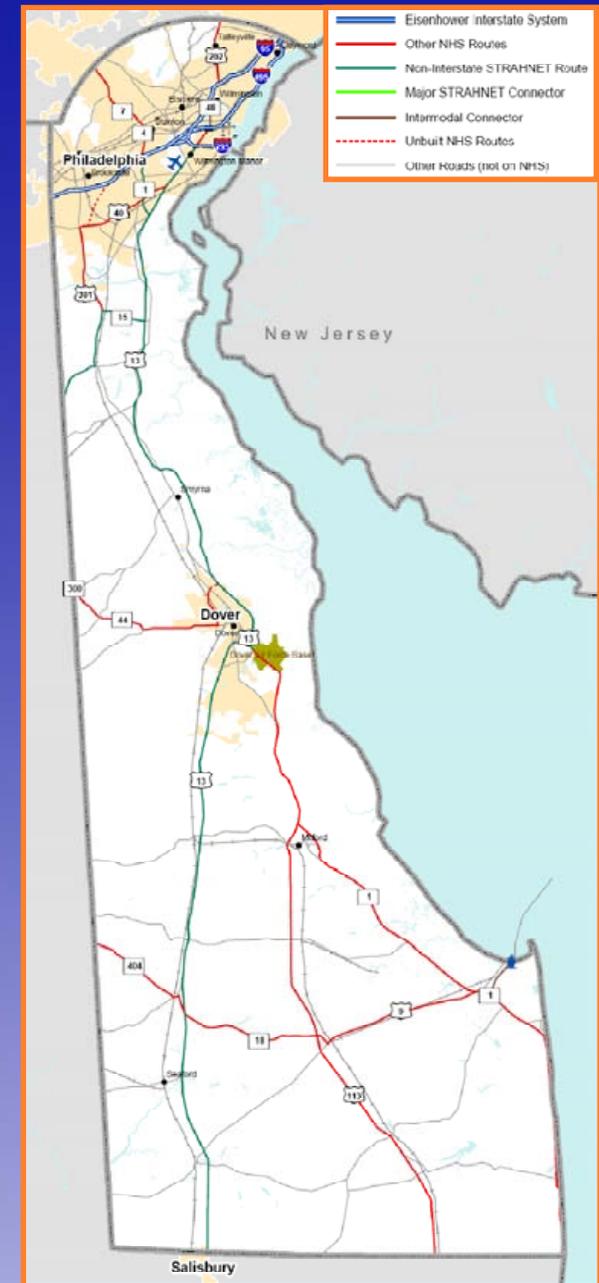
DeIDOT's Work Zone Safety and Mobility Procedure and Guidelines

- Provides guidelines for procedures that should be performed during each phase of a project:
 - ◆ Statewide Planning
 - ◆ Concept Development
 - ◆ Design Phase
 - ◆ Construction
 - ◆ Post-Construction
- Classifies projects as “significant” or “not significant” to determine the level of detail required in a Transportation Management Plan (TMP)



Identification of Significant Projects

- 1) All projects on Interstates, freeways, and expressways that occupy a location for more than three days with either intermittent or continuous lane closures (*FHWA requirement*).
- 2) All projects on the National Highway System that occupy a location for more than five consecutive days with either intermittent or continuous lane closures.
- 3) Any project or combination of projects that are anticipated to cause sustained work zone impacts that are greater than what is considered tolerable as determined by the Chief Engineer.



Project Procedures

Concept Development Phase

- Perform Preliminary Work Zone Impacts Analysis

Factor	Design Alternative			
	1		2	3
	Work Zone Option 1	Work Zone Option 2		
Ability to maintain access	Temporary accesses will be required for properties along the east side of the roadway.	Temporary accesses will be required for properties along the west side of the roadway.	No impact to access.	No impact to access.
Right-of-way and environmental impacts	MOT scheme would not increase R/W or enviro. impacts.	MOT scheme would not increase R/W or enviro. impacts.	MOT scheme would likely require additional R/W impacts on the east side of the roadway.	MOT scheme would not increase R/W or enviro. Impacts.
Construction duration	1 construction season	3 construction season	2 construction seasons	2 construction seasons
Overall impact to traveling public	Minimal	High	High	Medium
Overall constructability	Good	Poor	Poor	Excellent



Project Procedures

Concept Development Phase (cont.)

- Determine Transportation Management Plan (TMP) requirements
 - ◆ Type A TMP - Not significant projects
 - ◆ Type B TMP - Significant projects
- Identify stakeholders and begin public outreach



Project Procedures

Final Design Phase

- Develop TMP during Preliminary and Semi-Final Plan Stages
 - ◆ Perform detailed Work Zone Impacts Assessment (as necessary)
- Update/Revise TMP
- Finalize TMP



Transportation Management Plan (TMP)

- Type A TMP - Required for projects that will result in minimal disruption
 - ◆ Traffic Control Plan (TCP)
- Type B TMP - Required for "Significant" projects
 - ◆ Traffic Control Plan (TCP)
 - ◆ Transportation Operations (TO) Component
 - ◆ Public Involvement (PI) Component
 - ◆ Work Zone Impacts Assessment

Project Procedures

Post-Construction (Significant Projects Only)

- Prepare a Post-Construction TMP Review as part of the Post-Construction Review

Post-Construction TMP Review

State Project No. _____ Federal-Aid Project No. _____
Date: _____ Reviewer: _____
Project Title: _____

Were there any changes to the TMP during Construction? Yes No
If yes, describe the changes and why the changes were made:

Did traffic delays and congestion match those projected by the TMP? Yes No N/A
If no, describe the delays due to construction and the cause (if known):

Were there any frequent legitimate complaints by the traveling public? Yes No
If yes, describe the nature of the complaints:

Were there any specific types of recurring crashes within the work zone? Yes No
If yes, describe the nature of the crashes, cause (if known) and what measures were taken to reduce the potential for these crashes:

Lessons learned for future projects:

Attachments: Crash summaries, traffic control inspection reports, etc. (as necessary).



New Federal Regulations (2008):

- 2005 Federal Transportation Reauthorization: SAFETEA-LU, Section 1110, Subpart K
- Goal: Decrease Work Zone fatalities & injuries to workers and road users
- New guidelines to be adopted by December 2008



Positive Protection

Develop guidelines on:

- Use of positive protection devices to prevent intrusions;
- Exposure control measures to minimize exposure;
- Other traffic control measures to minimize crashes;
- Safe entry/exit of work vehicles and equipment onto/from the travel lanes

Additional Issues from Subpart K

- Uniformed law enforcement officers
- Payment for traffic control devices
- Quality guidelines



Documents on DeIDOT Website

The screenshot shows a Windows Internet Explorer browser window displaying the Delaware Department of Transportation website. The address bar shows the URL: http://www.deldot.gov/information/pubs_forms/manuals/de_mutcd/index.shtml. The page title is "Delaware Manual on Uniform Traffic Control Devices (MUTCD)".

The main content area is titled "Delaware Manual on Uniform Traffic Control Devices (MUTCD)" and lists the following documents:

- The Delaware Register of Regulations Finding of Fact (August 1, 2007) [Part 2,3,4,5,10]
- The Delaware Register of Regulations Finding of Fact (November 20, 2007) [Part 6]
- The Delaware Register of Regulations Finding of Fact (July 1, 2008) [Part 1, 7, 8, 9]
- The Delaware Register of Regulations Finding of Fact (September 1, 2008) [Revisions to Part 2, 3, 6]

Below this list is a table of contents for the manual:

Part	Section
Part 1	General
Part 2	Signs (Revised Sept. 2008)
Part 3	Pavement Markings (Revised Sept. 2008)
Part 4	Highway Traffic Signals
Part 5	Traffic Control Devices for Low Volume Roads
Part 6	Temporary Traffic Control (Revised Sept. 2008)
Part 7	Traffic Controls for School Areas
Part 8	Traffic Controls for Highway-Rail Grade Crossings
Part 9	Traffic Controls for Bicycle Facilities
Part 10	Traffic Control for Highway-Light Rail Transit Grade Crossings

Below the table of contents is a section titled "Supplemental Guidance" with the following links:

- Use of Temporary Traffic Barrier in Work Zones
- Guidelines for the Use of Uniformed Law Enforcement Officers in Work Zones
- Quality Guidelines for Temporary Traffic Control Devices
- Work Zone Safety and Mobility - Procedures and Guidelines
- Interim Approval for Use of Clearview Font
- Traffic Controls for Streets and Highway Construction, Maintenance, and Utility Operations

A note at the bottom of the supplemental guidance section states: "[Old Manual: Only valid for contracts bid specifically requiring this Manual. New contracts, maintenance work, utility work, or any other activities etc. shall use Part 6, Temporary Traffic Control listed above.]"

On the right side of the page, there is a "Public Feedback" section with contact information:

Public Feedback
Contact: Public Relations
Phone: 302-760-2080
1-800-652-5600 (in-state only)
email: dotpr@state.de.us

The Windows taskbar at the bottom shows the Start button, several icons, and the system tray with the time 2:45 PM and date 10/24/2008.

www.deldot.gov -> Publications -> DE-MUTCD



Thanks!

Questions or Comments – Contact:

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