Federal Highway Administration

Work Zone Safety and Mobility Rule

23 CFR Section 630, Subpart J

Two Years After the Publication of the Rule: Where Are We Now?

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Even in a Perfect World?
Topics

- Brief Overview
- Resources available to help with Rule implementation
- Rule implementation status
- Examples
Overview

• **Initial Activities:** Focused on building awareness of the Rule and educating state and local agencies about the basics of the Rule.

• **Current Activities:** Focused on implementing the Rule
  – Distributing implementation guides
  – Responding to frequently asked questions
  – Sponsoring regional workshops
  – Sharing examples and resources based on what agencies are currently doing to implement the Rule

• **What’s Next:** Determine what additional implementation guidance/support may be needed to help agencies implement the Rule by October 12, 2007
Implementation Resources

Implementing the Rule on Work Zone Safety and Mobility

Work Zone Public Information and Outreach Strategies

Developing and Implementing Transportation Management Plans for Work Zones
Implementation Guides

- Implementing the Rule on WZ Safety and Mobility
- Work Zone Public Information and Outreach Strategies
- Developing and Implementing Transportation Management Plans (TMPs) for Work Zones
- Work Zone Impacts Assessment: An Approach to Assess and Manage Work Zone Safety and Mobility Impacts of Road Projects

- To request hard copies: email workzonepubs@fhwa.dot.gov
Implementation Guides

• Announcements of availability of Guides sent to key partners.
• Demand has been high for the Guides.
• Feedback has been positive.
• All Guides will eventually be available on a CD-Rom, along with other Rule resources.

“Can I please get 50 more copies of this publication? I know you just sent us 50 copies, but our DOT liked it so well they want to send it to all of their Regions, so I exhausted my supply.”

- FHWA Field Office in Reference to Public Outreach Guide
Rule Web Site Content

http://www.ops.fhwa.dot.gov/wz/resources/final_rule.htm

• Implementation Guide
• Public Information and Outreach Guide
• TMP Guide
• FAQs
• Brochure and fact sheets
• Rule language
• Presentations on the Rule
• Examples

FHWA Work Zone Web Site
http://www.fhwa.dot.gov/workzones
Frequently Asked Questions

• List of 42 questions and answers
  – Questions heard during presentations, web conferences, and from practitioners

• Grouped into categories
  – General Questions
  – Work Zone Safety and Mobility Policy
  – Agency-Level Processes and Procedures
  – Local Public Agencies and the Rule
  – Significant Projects
  – Transportation Management Plans (TMPs)
  – Implementation and Compliance
  – Technical Assistance for Implementing the Rule

• List will be updated as needed

• Ideas for additional questions should be sent to workzonefeedback@fhwa.dot.gov
Additional Resources

- Road Safety Audits (RSAs) Guidance  
  http://safety.fhwa.dot.gov/state_program/rsa/
- QuickZone Traffic Impact Analysis Tool  
  http://www.tfhrc.gov/its/quickzon.htm
- Full Road Closure for Work Zone Operations  
- Innovative Contracting Guidance  
  http://www.ops.fhwa.dot.gov/wz/contracting/index.htm
- ITS in Work Zones  
  http://www.ops.fhwa.dot.gov/wz/its/index.htm
- Work Zone Training Courses  
  http://www.nhi.fhwa.dot.gov/
- Manual on Uniform Traffic Control Devices (MUTCD)  
  http://mutcd.fhwa.dot.gov/
- Traffic Control Handbook for Mobile Operations at Night
Implementation Status
Regional Workshops

- **Held 4 Workshops:**
  - Northwest: April 18-21, 2006
  - Mid-Atlantic: April 25-27, 2006
  - Northeast: May 1-2, 2006
  - Midwest: May 16-18, 2006

- **Purpose:** Enable participating states to discuss their status in implementing the Rule, exchange information and best practices, and develop policies and practices to help implement the Rule.

- **Format:** Presentations, roundtable discussions, breakout sessions.

- **Outcomes:** Action plans for implementing the Rule, draft policy statements, sharing of example documents.
Where Are States in Implementing the Rule?

• Many agencies have overall policy/vision statement that reflects their commitment to managing WZ safety and mobility
  – May need some modification/updates

• Some are struggling with defining “Significant Project”
  – Regional workshop: States need to have a trigger/quantifiable criteria to identify significant projects
  – Issue of combined effects of nearby projects across jurisdictions

• Process reviews: Need to be enhanced in many cases

• Impacts Assessment: Varies widely
Where Are States in Implementing the Rule?

• **Data**: Recognized need to enhance data resources
  – Modest use of data now (mostly safety)
  – Likely to be a work in progress

• **Many agencies have some form of training requirements**
  – Most will revise/update/expand training program to some degree
  – Need for National and agency-specific training
  – Likely to be a work in progress

• **TMPs:**
  – Many agencies implementing public information and outreach
  – Likely to see increased consideration of operational strategies
Where Are States in Implementing the Rule?

• Many States formed a workgroup to implement the Rule
  – Review existing policies, procedures, etc and identify gaps
  – Revise policies as needed
  – Develop procedures to implement the policy
  – Develop significant projects definition
  – Seek management buy-in

• Many States anticipate a year to fully develop all aspects of their policy and implement it

• Many States anticipating Rule implementation by end of 2006 or Spring 2007
Examples
Maine DOT Work Zone Policy

• Maine DOT is developing a WZ Safety and Mobility Policy and is in the process of implementing.

• **TAME**
  “Traffic Analysis & Movement Evaluation”

• Goals and Objectives:
  – Provide a safe work environment
  – Provide safety for the traveling public
  – Reduce average delays to 5 minutes or less in WZs
  – Work “Towards Zero Deaths” in WZs
ND DOT Work Zone Policy

- ND DOT has developed a WZ Safety and Mobility Policy but has not yet implemented it.

- “North Dakota Department of Transportation policy is to provide a smooth and efficient flow of traffic, while retaining safety through a highway work zone.”

- Goals and Objectives:
  - Provide a safe work environment
  - Provide safety for the traveling public
  - Reduce delays to 15 minutes or less in WZs
  - Work “Towards Zero Deaths” in WZs
  - Utilize current ITS technology that reduces delays, improves safety, etc.
  - Develop a training program for all project staff in plan development and construction administration related to WZs.
  - Develop a data base of WZ related crashes and a review process to improve WZ designs
  - Reduce crashes involving the traveling public in WZs on all types of construction and maintenance activities
ND DOT Work Zone Policy (cont.)

• The policy includes specific provisions for each phase of project development.

• The policy includes a statement about training

“The NDDOT will develop, implement, and maintain a training program for personnel that will be working on work zone traffic control.”
NY State DOT Work Zone Policy

It is the policy of the New York State Department of Transportation that Department projects shall include provisions, and plans when necessary, for the maintenance and protection of traffic, workers, motorists, pedestrians, bicyclists, and persons with disabilities, in highway work zones. Such provisions and plans should strive to achieve an appropriate balance of the following objectives:

1. **Provide a high level of safety for workers and the public.**
2. **Minimize congestion and community impacts by maintaining acceptable levels of service as close as possible to preconstruction levels.**
3. **Provide a feasible design of highway traffic control during highway and bridge operations.**
4. **Provide the Contractor with access to the roadway that is adequate to complete the work efficiently while meeting the quality requirements of the contract.**
5. **Keep the cost as low as possible, consistent with safety and an appropriate degree of convenience for the public.**
Policy Statement - NW Regional Workshop

• “Plan, design, construct, maintain highways while balancing (maintaining) work zone safety, user mobility and stakeholder impacts.”

• Group also identified goals and objectives for a WZ policy:
  – Safe work environment
  – Safety for traveling public (toward zero deaths)
  – Reduce delay to less than 15 min or to a defined maximum queue length
  – Utilize current ITS to support goals/objectives
  – Develop database to improve crashes and review process to improve WZ traffic control
  – Reduce crashes involving workers and public on all construction, maintenance, utility work
  – Develop training program
  – Eliminate impacts to business environment
  – Early stakeholders involvement
  – Quick clearance
  – Crash investigation
  – Incident management
  – Increase partnering with law enforcement and emergency responders
  – Manage queue lengths
  – Effective/flexible project phasing (including right sized work zones)
Significant Projects – MDSHA

• MD SHA has drafted guidance on identifying significant projects

• Guidance describes:
  – Purpose of identifying significant projects
  – When a significant project should be identified
  – What happens once a project is identified as significant
  – Who is responsible for identifying significant projects
  – Exceptions

• Guidance contains two flow charts for identifying significant projects
  – For projects from specific MD SHA offices
  – For District Projects and Minor Projects
MDSHA – Determination of Significant Project for OPPE, OHD and OBD Projects

- Where in MDSHA did the project come from?
  - If from Planning or Hwy or Bridge Design, then go to 2.
  - If from other (e.g., District project) follow the flow chart on the following slide.

- Is it on the NHS (Interstate or principal arterial), an urban freeway/expressway, or an urban or rural OPA?
  - If yes, go to 3. If not, then not significant

- Are there mobility, safety, or other issues that may make a project significant? If yes go to 4. If not, then not significant.
  - Are there capacity issues?
  - Is there a lot of public attention on the project?
  - Is there a high crash history?
  - Are there particular worker safety issues?, Etc.

- Perform a Maintenance of Traffic Alternatives Analysis
  - If selected alternative will have significant WZ safety and mobility impacts, project is significant
  - If the selected alternative does not have significant WZ safety and mobility impacts, the project is not significant, but TO and PI strategies may still be required
MDSHA – Determination of Significant Project for District and Minor Projects

1. Will the work involve continuous or intermittent lane closures on a freeway/expressway for 3+ days?
   1. If yes, go to 2.
   2. If no, not significant.

2. Does the project fall under the “Blanket Exceptions” Category?
   1. If yes, not significant. Proceed with project work.
   2. If no, go to 3.

3. Will the project comply with the WZ mobility policy?
   1. If yes, not significant. Submit an exception request.
   2. If no, go to 4.

4. Perform Maintenance of Traffic Alternatives Analysis. Determine if the selected alternative will comply with wz mobility policy.
   1. If yes, not significant. Submit an exception request.
   2. If no, project is significant. Prepare TMP.
Significant Projects – ND DOT

• ND DOT defines significant projects in its WZ policy as:
  – Any project which exceeds an estimated $3M in cost and is either on the urban regional system that goes through an MPO or city over 25,000 in population.
  – All Interstate system projects within the boundaries of a designated Transportation Management Area (TMA) that occupy a location for more than three days with either intermittent or continuous lane closures.

• ND DOT policy identifies what is required for a significant project in each phase of project development.
MoDOT TMP Strategies Matrix Database

- Uses WZ Management Strategies Matrix in TMP Guide
- Enables searching
- 3 reports: Full Report, Synopsis Report, Settings Report
- Full report uses 4 categories: Duration-Staging, Impacts, Location, Traffic
  - Under each category is the “Trigger of Consideration”
  - Under each trigger are WZ Management Strategies provided in the TMP Guide
- Synopsis Report correlates the strategies and shows how many times the strategies were found
- Settings Report shows triggers used in the search
Caltrans TMP Policy

• “TMPs, including contingency plans, are required for all construction, maintenance, encroachment permit, planned emergency restoration, locally or specially-funded, or other activities on the State highway system. Where several consecutive or linking projects or activities within a region or corridor create cumulative needs for a TMP, the Department coordinates individual TMPs or develops a single interregional TMP.”

• TMPs are considered early, during the project initiation or planning stage.

• 3 levels of TMP:
  – TTC Plan only/Blanket TMP
  – Minor TMP - Typically projects that require WZ mitigation measures beyond a TTC plan, such as CMS or enhanced enforcement
  – Major TMP – For major improvement projects, an extensive TMP that evaluates multiple mitigation strategies, public outreach, and extended closure methods is needed. Several months to prepare, developed for < 5% of projects at Caltrans
Ohio DOT TMP Policy

Traffic Management in Work Zones Interstate and Other Freeways, Policy No.: 516-003(P), dated July 18, 2000 defines a TMP as:

• Use of a multi-faceted and multi-jurisdictional program of operational, communications, and demand management strategies to maintain acceptable levels of traffic flow during periods of construction activities

• TMPs typically consist of elements from each of these areas: Public Information, Motorist Information, Incident Management, Construction Strategies, Demand Management Strategies, and Alternate Route Strategies

• A TMP can be used for either single projects or for coordination of multiple projects within a given area
INDOT Data Collection

- INDOT has established work zone baselines, benchmarks, and performance goals for fatalities and injuries.
- This practice is a performance-based process to measure effectiveness in work zones.
- Indiana began this process in 1996 as a pilot State.
- The benchmarks (10 years of data) provide a statistical picture of Indiana’s traffic safety challenges.
- The baselines, benchmarks, and performance goals makeup Indiana’s traffic safety action plan.
  - The traffic safety action plan can only be achieved by successful partnerships. These partnerships set out to achieve a similar goal and often use this as a road map to guide them along the way.
  - The biggest benefit realized is that it provides a clear vision for Indiana and keeps stride with national efforts.
Data Efforts

• Utah is working to improve its WZ crash reporting system to help understand what problems are occurring on projects

• New Jersey gathers 24 hour / 7 day traffic counts during the preliminary design of a project

• West Virginia is incorporating GPS referenced crash data into their GIS. Law enforcement personnel are being provided GPS training. Intended to improve data quality and data consistency.

• West Virginia is also revising their crash reporting form to incorporate additional WZ elements
DC DOT WZ Training Efforts

- DC has used the MD T2 center for training
- DC requested a heavy crane operator participate in ATSSA training given their impact on traffic in the City
- DC is updating its TTC manual (and pocket guide) called Guidelines and Standards for Temporary Traffic Control. A new section on work zone mobility will be added
Other Training Efforts

- NJ has a specially trained police force for work zone operations.

- MD has a WZ course for designers offered through the UMD T2 center. Will be updating course to incorporate elements in the Rule such as TMPs and performance monitoring.

- OH provides training on its WZ Policy to DOT employees. Consultants are required to attend the WZ design training class as part of prequalification. Testing and certification are required for both ODOT and consultant staff.

- New WZ safety grant program in SAFETEA-LU includes developing and providing WZ training.
Stewardship Agreements

- FHWA Wisconsin Division reviewed current stewardship agreement and found no mention of the old WZ Rule.
- FHWA Georgia Division reviewed their stewardship agreement and found that it has a general statement requiring the State to follow the old Rule.
- Some Divisions and States talking about updating their stewardship agreements to include specific discussion of components of the Rule.
Where to Go for More Examples

• Rule Web Site
  – Section of examples
  – Recordings of Implementation Guide web casts

• Implementation Guides

• January/February 2006 issue of FHWA Public Roads
  – Article has a number of examples illustrating what States are currently doing for Rule implementation
What’s Next?
What’s Next

• FHWA is currently determining what additional guidance and support is needed for Rule implementation.

• We’ve heard:
  – Compile information on data collection and analysis methods for safety and performance data.
  – Compile successful practices on law enforcement training.
  – Provide technical assistance in the form of having someone well versed in the Rule spend a few days with the FHWA Division Office and State DOT to assess what needs to be done to comply with the Rule.
  – Continue updating Frequently Asked Questions.
  – Monitor feedback on existing guidance and make adjustments as needed.
Work Zone Rule Web Site: www.ops.fhwa.dot.gov/wz/resources/final_rule.htm

To request publications: workzonepubs@fhwa.dot.gov

To submit questions, feedback, comments: workzonefeedback@fhwa.dot.gov
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Questions?

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