
A Year 1 Update to the 2005-2007 WZMS Action Plan

Prepared for:
Wisconsin Work Zone Management and Safety Advisory Group

Prepared by:
Wisconsin Traffic Operations & Safety Laboratory at University of Wisconsin-Madison

July 2006
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1 INTRODUCTION/BACKGROUND

In April 2004, an exploratory meeting was held with a group of organizations with an interest in highway work zone management and safety. The organizations represented a broad cross-section of the highway work zone community including:

- State Department of Transportation
- Transportation Builder’s Association / Highway Contractor’s
- Motorist Advocacy Groups (i.e., AAA Wisconsin)
- Wisconsin County Highway Association
- Law Enforcement
- Traffic Control Providers
- University Research

Since the initial meeting in early 2004, the Wisconsin Work Zone Management and Safety Advisory Group has met approximately quarterly to discuss a variety of work zone topics. In late 2004, the group suggested hosting an outreach event in conjunction with the National Highway Work Zone Awareness Week on early April 2005. The Work Zone Safety Call to Action Workshop was held April 7, 2005 in Madison and included attendance by over 70 people. The workshop was broken onto 3 components: 1) Educations, 2) Media Outreach and 3) Strategic Planning.

About 40 people attended the afternoon strategic planning session where feedback from the discussion has served as a basis to develop a 3-year Work Zone Management and Safety Action Plan. The Action Plan will assist in guiding the Work Zone Management and Safety Advisory Group over the next several years and will be updated at least once per year.

In March 2006, a second annual Work Zone Management and Safety Workshop was held at Olympia Resort and Conference Center in Oconomowoc. As part of the meeting, an executive round table break-out session was held to serve as a basis for updating the original 2005-2006 Action Plan. To that end several of the original Action Plan Initiatives were removed, modified or added. The revised Action Plan Initiatives are described in Section 5.

2 ACTION PLAN GOALS

The Action Plan will serve several goals:

- Serve as a mechanism to understand what issues are critical to the multi-discipline work zone community
- Strengthen ties between the existing work zone community
- Serve as a basis for guiding the Work Zone Management and Safety Advisory Group over the next three years

3 ACTION PLAN INITIATIVE UPDATES

Based on discussions during the Executive Round Table Break-Out Session during the 2006 Work Zone Management and Safety Workshop several changes were made to the original Action Plan initiatives. The
discussion related to work zones were broken into the following categories and several initiatives were removed, modified, or added:

- Engineering/Construction
- Enforcement
- Education
- Traffic Incident Management
- Planning and Programming
- Other

The proposed changes were agreed to at the April Work Zone Management and Safety Advisory Group Meeting as shown in Tables 1 and 2.

Table 1: 2005-2007 WZMS Action Plan with Proposed Modification

<table>
<thead>
<tr>
<th>INITIATIVE</th>
<th>MODIFICATION</th>
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<tr>
<td>1: Develop More Aggressive, Innovative Work Zone Public Awareness Campaign</td>
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<tr>
<td>2: Institutionalize Cross-Cutting Project Pre-Planning</td>
<td>KEEP</td>
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<tr>
<td>3: Apply Low-Tech Traffic Calming Devices in Work Zones</td>
<td>MERGE WITH INITIATIVE 5</td>
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<td>4: Consider Mobile Phone Restrictions</td>
<td>REMOVE</td>
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<td>5: Pilot Broader use of Work Zone Management and Traveler Information</td>
<td>MERGE WITH INITIATIVE 3</td>
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<tr>
<td>Systems</td>
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<tr>
<td>6: Develop Supplemental Violation Signing Standards</td>
<td>KEEP</td>
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Table 2: 2006-2008 WZMS Action Plan Initiatives

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<th>INITIATIVE</th>
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<td>1: Develop More Aggressive, Innovative Work Zone Public Awareness Campaign</td>
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<td>3: Apply Broader Use of Traffic Calming Devices and Traveler Information</td>
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<td>4: Develop Supplemental Violation Signing Standards</td>
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<td>5: Develop Consistent Work Zone Speed Zoning Guidelines</td>
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<td>6: Develop Nighttime Work Lighting and Traffic Control Guidelines</td>
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<td>7: Develop Accelerated Review Process for use of emerging work zone safety</td>
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<td>products or management techniques</td>
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4 ACTION PLAN COMPONENTS

The 3-year action plan has been developed based on logical grouping of the top 10 areas receiving votes in the prioritization exercise. A total of 6 initiatives have been formulated with the following components provided for each:

- **Initiative Description** – basic description of what the initiative objectives and activities.
- **High Level Tasks** – A short listing that will serve as a starting point to start work on the specific initiative.
- **Initiative Leader(s)** – Identifies who is tasked with moving the initiative forward. There may be cases where there are multiple champions (e.g., one champion internal to WisDOT and another outside)
- **Stakeholders** – Listing of organizations with an interest in moving forward with the initiative.
- **Resources** – initial listing of staffing and/or financial resources required.
- **Preliminary Schedule** – High level schedule of when specific task activities need to occur over the next 3 years.
5 2006-2008 ACTION PLAN
Six total initiative areas have been developed based on logical grouping of approximately the top 10 solutions. Each initiative is described below.

5.1 Initiative 1: Develop More Aggressive, Innovative Work Zone Public Awareness Campaign

Initiative Description

Develop a more aggressive, innovative work zone public awareness campaign by re-emphazing the importance of work zone safety in WisDOT and other WZ organizations. Develop program where WisDOT will match contributions for other WZ community members. Continue to leverage existing relationships with media outlets to maximize available funding.

High Level Tasks

1. Develop Public Awareness Campaign Plan (with expected results)
2. Gain commitment to support additional funding for awareness campaign from WZ Community Executives
3. Evaluate effectiveness of public awareness campaign
4. Reassess Public Awareness Campaign / Level of Funding

Initiative Leader(s)

Mike Goetzman, WisDOT Office of Public Affairs
TBD, WTBA

Stakeholders

- WisDOT
- WTBA
- WCHA
- Trade Unions
- AAA Wisconsin
- Channel 27
- Wisconsin Broadcaster’s Association

Resources

- Public Awareness Campaign Plan - $50k
- Additional Annual Funding – TBD
- Public Awareness Campaign Evaluation - $25k x 2 years ($50k total)
- Leverage existing WisDOT OPA staff to manage process
### Preliminary Schedule

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<td>Gain Support for Additional Resources</td>
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<td>Reassess Resources for Public Awareness</td>
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5.2 Initiative 2: Institutionalize Cross-Cutting Project Pre-Planning

Initiative Description

The initiative includes integrating pre-planning of work zones with a broad range of work zone community members. Activities related to the initiative include:

- Ensure processes are developed that consider perspectives from law enforcement, traffic operations, safety professionals, contractors;
- Create enforcement friendly work zones; and
- Institutionalize traffic incident planning for partial and full blockage of work zones as part of Traffic Management Plans that are required for new Work Zone Mobility Rulemaking

High Level Tasks

1. Determine level of existing coordination - Complete
2. Determine processes for engaging work zone community based on projected mobility impacts and size of project
3. Integrate processes into WisDOT Facilities Development Manual
4. Develop processes for developing practices for reacting to traffic incidents in work zones

Initiative Leader(s)

- Tom Notbohm, WisDOT
- Peter Amakobe, WisDOT
- Sandy Huxtable, State Patrol

Stakeholders

- WisDOT
- WTBA
- WCHA
- Contractors – for staging perspectives
- Contractor Safety Representatives
- Law Enforcement

Resources

- Existing WisDOT and TOPS staff
- Leverage existing traffic incident management consultant support where possible
### Preliminary Schedule

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<td>Q3</td>
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<td>Assess Work Zone Mobility Impacts</td>
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<td>Develop processes for consistently engaging work zone community</td>
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<td>Pilot Processes</td>
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<td>Integrate Processes into FDM</td>
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5.3 Initiative 3: Apply Broader Use of Traffic Calming Devices and Traveler Information Systems in Work Zones

Initiative Description

The initiative includes developing a program to test, evaluate and develop standards for low-cost traffic calming devices in work zones and more advanced traveler information/traffic management systems in work zones.

High Level Tasks

Low Cost Speed Reduction Products
1. Develop mechanism for allowing new products to be tested and evaluated on state projects (Possibly serve as an AASHTO National Transportation Product Evaluation Program test state)
2. Link products to test sites
3. Develop test plan for products
4. Perform product evaluations

Advanced Traveler Information/Traffic Management Strategies
1. Develop white paper investigating statutory use of variable speed limits in work zones
2. Emerging work zone management and traveler information systems scan
3. Develop Pilot Program that identifies capital and O&M costs
4. Design Pilot Program
5. Procure/Build and Operate Pilot Program
6. Evaluate Pilot Program

Initiative Leader(s)

Marie Treasize, WisDOT
Peter Amakobe, WisDOT
Xiao Qin, TOPS Laboratory

Stakeholders

- WisDOT
- WTBA
- Traffic control contractors
- Traffic control vendors
- Academic research organizations

Resources

- Leverage existing TOPS Laboratory Work Orders to provide resources for developing processes
- Evaluation costs to be covered completely or partially by vendors (NTPEP model)
- Limited WisDOT staff time to assist in coordinating with project development sections
## Preliminary Schedule

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<td>Low Cost Speed Reduction Products</td>
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<td>Develop new product solicitation process</td>
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<td>Perform solicitation</td>
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<tr>
<td>Link products to improvement projects</td>
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<td>Develop product specific evaluation test plans</td>
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<td>Perform evaluations</td>
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<td>Develop FDM standards for products that pass evaluation thresholds</td>
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<td>Variable Speed Limit White Paper</td>
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<td>Emerging Technologies Scan</td>
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<td>Pilot Program Programming and Design</td>
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<td>Procure/Build and Operate Plot</td>
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<td>Pilot Evaluation</td>
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5.4 Initiative 4: Develop Supplemental Violation Signing Standards

Initiative Description

The initiative will develop criteria and schemes for supplemental work zone violation signing standards. Representative activities will investigate posting of penalties at beginning of work zone, providing a real-time account of how many citations have been issued, using PCMS to support enforcement activities, and “my parents work here” signing.

High Level Tasks

1. Investigate supplemental work zone signing strategies used by other Midwestern states - COMPLETE
2. Assess fiscal impact of preferred supplemental violation signing
3. Design and develop policies for supplemental signing
4. Pilot supplemental signing
5. Evaluate supplemental signing

Champion

Marie Treasize, WisDOT
TBD, State Patrol

Stakeholders

- WisDOT
- WTBA
- Law Enforcement
- WCHA

Resources

- WisDOT staff time to develop policies and sign plates
- Academic Evaluation Support Services, TBD

Preliminary Schedule

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<td>Supplemental Signing Evaluation</td>
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5.5 Initiative 5: Develop Consistent Work Zone Speed Zoning Guidelines

Initiative Description

The initiative will develop criteria and schemes for supplemental work zone violation signing standards. Representative activities will investigate posting of penalties at beginning of work zone, providing a real-time account of how many citations have been issued, using PCMS to support enforcement activities, and “my parents work here” signing.

High Level Tasks

6. Investigate supplemental work zone signing strategies used by other Midwestern states
7. Assess fiscal impact of preferred supplemental violation signing
8. Design and develop policies for supplemental signing
9. Pilot supplemental signing
10. Evaluate supplemental signing

Champion

Marie Milam, WisDOT
TBD, State Patrol

Stakeholders

- WisDOT
- WTBA
- Law Enforcement
- WCHA

Resources

- Initial investigative work can be performed under existing TOPS Work Order
- WisDOT staff time to develop policies and sign plates
- Academic Evaluation Support Services, TBD

Preliminary Schedule

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<td>Supplemental Signing Evaluation</td>
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5.6 Initiative 6: Develop Nighttime Work Lighting and Traffic Control Guidelines

Initiative Description

The initiative will develop suggested standards to support emerging requirements for nighttime work. The guidelines for assessing and planning nighttime construction and maintenance will include specifications for traffic control and work area illumination.

High Level Tasks

- Research Scan and Surrounding State Standards Scan
- Develop Guidelines for Nighttime Work
- Pilot Guidelines on select Projects
- Evaluate Pilot projects
- Develop Standards, Specifications and Bid Items for Nighttime Work
- Integrate Standards, Specifications and Bid Items into FDM

Champion

TBD, WisDOT Bureau of Project Development
TBD, WTBA
Gary Whited, UW-Madison Construction and Materials Support Center (CMSC)

Stakeholders

- WisDOT
- WTBA
- Law Enforcement
- WCHA
- Academic Research Organizations

Resources

- CMSC Work Order, TBD
- WisDOT staff time to develop policies and integrate recommendations into agency documents
- Academic Evaluation Support Services, TBD
## Preliminary Schedule

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<td>Pilot Guidelines on select Projects</td>
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<td>Evaluate Pilot projects</td>
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<td>Develop Standards, Specifications and Bid Items for Nighttime Work</td>
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<td>Integrate Standards, Specifications and Bid Items into FDM</td>
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5.7 **Initiative 7: Develop Accelerated Review Process for use of Emerging Work Zone Safety Products or Management Techniques**

**Initiative Description**

The initiative will develop an accelerated approval procedure for using emerging work zone products or innovative uses of existing equipment.

**High Level Tasks**

- Identify issues related to developing accelerated Review Process
- Develop flow chart for approval process including evaluation component
- Advertise accelerated Review Process
- Pilot Review Process
- Finalize Review Process

**Champion**

Tom Notbohm, WisDOT  
Bill Bremer, FHWA  
TBD, Traffic Control Vendor

**Stakeholders**

- WisDOT  
- WTBA  
- Traffic control contractors  
- Traffic control vendors  
- Academic research organizations

**Resources**

- WisDOT /FHWA staff time to develop policies and procedures  
- Academic Evaluation Support Services, TBD

**Preliminary Schedule**

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<td>Identify issues related to developing accelerated Review Process</td>
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<td>Advertise Accelerated Review Process</td>
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<td>Finalize Review Process</td>
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