

## ***MnDOT Statewide Work Zone Safety Committee Meeting Minutes***

April 4, 2012 - - - MnDOT Saint Cloud Training Center, 3725 12<sup>th</sup> Street North, Saint Cloud, MN

- Meeting: 9:00 am to 3:00 pm -

### *Attendees*

The attendance roster is listed at the end of these minutes. The list includes members, people substituting for members, and guests.

### *Welcome and Introductions*

Tom Ravn (MnDOT Office of Construction and Innovative Contracting, **OCIC**) welcomed the group and thanked everyone for attending. Tom encouraged the agencies and industry keep looking to use advancements to improve work zone safety.

Each participant introduced themselves.

It was explained why this meeting location was moved away from the ATSSA How-To. Fargo is a long distance to travel and many couldn't make the trip for this meeting. Attendance from key personnel improved.

### *Committee Reports*

#### *Statewide Work Zone Executive Committee – Sue Groth*

Sue Groth (MnDOT Office of Traffic, Safety & Technology, **OTST**) also thanked the participants for attending and continually working to improve work zone safety. She described the role of the Executive Committee as key MnDOT Management members that can assure implementation of the appropriate ideas brought forth from the overall SWWZSC. The Executive Committee wants to know what support of management is needed to foster work zone safety.

Sue let the group know that OTST is working with the Office of Communications on a substantial educational effort to the public regarding work zone safety. Funding towards education had fallen a little over the past few years, but more funding will be used for a concerted work zone safety message blitz. In addition, MnDOT intends to work with the State Patrol to increase enforcement in work zones. Expect to see the work zone safety message blitz between May 15 and June 15. OTST and the Office of Communications will evaluate the efforts to see what improvements can be done for succeeding years.

Sue also mentioned that the Commissioner is concerned about work zones and wants to make sure that appropriate efforts are being utilized to improve work zone operations, traffic mobility, and work zone safety. Based on this, the Executive Committee wants to understand how closely MnDOT offices are following the [MnDOT Work Zone Safety and Mobility Policy](#). The districts will be receiving a survey to help the Executive Committee know where additional effort may be necessary as well as determining if modifications are made to the Policy.

Sue then covered some legislative issues. The Executive Committee would like to know what legislative efforts could help improve safety. Speeds through work zones is seen as a safety issue and photo enforcement has been shown to be successful in reducing speeds in other states; however, photo enforcement is not seen to be politically viable in Minnesota at this time. Sue encouraged industry to bring ideas such as this forward to legislators. A suggestion was made that photo enforcement be used as part of a study or pilot project. Sue stated that CERS

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(Center for Excellence in Rural Safety) will bring stakeholders together to determine what the issues are for automated speed enforcement - a report may be available next year.

Sue reiterated that if anyone has suggestions to improve work zone safety, to please make sure that the Executive Committee (and the Committee Coordinator - Ken Johnson of OTST) is aware.

### *Traffic Engineering Organization Temporary Traffic Control (TEO TTC) Committee– Chair: Ted Ulven*

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Ted Ulven (OTST) let the group know that the TEO TTC meets quarterly and the next meeting is May 1<sup>st</sup>. He mentioned that the major issues that this committee is looking at are:

- ADA in Work Zones Guidance, including TPAR (Temporary Pedestrian Access Routes)
  - Layouts and device information has been placed in the *Temporary Traffic Control Zone Layouts Field Manual (February, 2011)* - commonly known as the **Field Manual**.
  - The committee is about to publish a document to give design guidance to Project Managers regarding what to consider during project development in order to accommodate pedestrians with disabilities.
- Construction Information Signs - The Office of Communications has found that the public would like more information about construction projects; in addition, some legislation has been introduced to have signs placed to give information about projects. OTST has been working with the Office of Communications regarding these Construction Information Signs that contain information about the timelines of construction projects. This idea will be implemented on a couple of pilot projects this year - one in Metro District and one in District 1. Feedback will be measured.
- Work Zone Speed Limits and speeds in work zones - this has been a topic of discussion and the TEO TTC will discuss effective ways to implement speed limits in work zones.
- Barrier (Concrete Median Barrier and Cable Median Barrier)
  - The appropriate application of concrete median barrier in work zones will be discussed at the next meeting - particularly regarding converting a multilane divided road into two-way, two-lane traffic. Few states have a published policy.
  - Also to be discussed is what to do when in-place cable median barriers have to have their anchors disconnected due to a construction project. When should a temporary anchor need to be installed?
- Transportation Management Plans - MnDOT will be holding a training session for developing TMPs in mid-April. This class is mostly targeted towards Project Managers.
- Traffic Control Plan Development Training - MnDOT OTST will hold TCP Training later this year. It will be a pilot training to which both experienced and inexperienced designers will be invited.
- Urban Work Zone Training from ATSSA - MnDOT OTST is looking at bringing in this training to the state later this year. The Northland Chapter of ATSSA may sponsor this training with MnDOT.

*Work Zone Safety Advisory Committee – Co-chairs: Trudy Kordosky and Craig Mittelstadt*

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Craig Mittelstadt (OCIC) let the group know that the Work Zone Safety Advisory Committee is mostly being used as a sounding board for issues. They haven't met in person recently, but Craig communicates with them through emails. An example is that the group looked at ADA and TPAR design standards that OTST had developed and comments were sent to OTST through Craig. Craig also discussed the Zipper Merge.

- Zipper Merge - OCIC has been monitoring projects with the Zipper Merge and Craig gave a presentation about the results.
  - Destination Innovation funding was used to add the active Zipper merge to as many projects as possible. Passive Zipper merge signing was incorporated into other projects.
  - He mentioned that it is hard to quantify the results, but OCIC staff conducted the research by: field visits, observation, reviewing RTMC loop detector data (when available), and meeting with project personnel.
  - He noted that there were inconsistencies in the signing used for Zipper merge - particularly for the passive implementation. Ken Johnson of OTST pointed out that there is a layout in the Field Manual that should give more consistency. He encouraged the group to use the appropriate layout.
  - Results of the investigation:
    - When it works, it works well. Traffic flows consistently, merges predictably in a known location, and the queue lengths are drastically reduced.
    - There has been some inconsistent driver compliance.
    - Issues with commercial trucks have been noticed. Often commercial trucks would straddle lanes preventing both lanes to be used.
    - Seems to work best with heavy backups. Inconsistent compliance seems to occur where backups are light, leading to: road rage, lane blocking, lane policing.
  - Recommendations from OCIC and comments from OTST
    - Continue public education and communication. OTST and Communications have planned to do so. These offices also intend to target the trucking industry.
    - Advertise in non-construction times.
    - Use consistent signing. OTST recommends project engineers and designers utilize Field Manual layouts.
    - When using PCMS, don't tell motorist which lane will be closed.
    - Suggest use of flashing beacon to be used with static signs.
    - Utilize Active Stopped Traffic Ahead IWZ applications in more rural projects.
    - More broad application of Zipper Merge. OTST and the Office of Maintenance mentioned that the Zipper Merge was to be used for maintenance projects in areas where backups

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were expected in 2011, but the shutdown interfered with maintenance implementations. The signs are ready to be (and will be) used in 2012 maintenance projects.

*Special Provisions Annual Update Committee – Chair: Craig Mittelstadt*

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Craig Mittelstadt (OCIC) let the group know that the last meeting of the Special Provisions Annual Update Committee occurred in October 2011 and that the minutes of the last SWWZSC contain the information from that meeting.

*Metro Maintenance Work Zone Safety Committee – Chair: None at this time*

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Has not met recently, but some issues that this group had been working on will be discussed in the next agenda item as Sue Lorentz has the history.

*Statewide Maintenance Work Zone Safety Committee – Co-Chairs: Randy Reznicek & Sue Lorentz*

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Sue and Randy discussed the following endeavors/issues with the group:

- *Portable Non-Intrusive Advanced Warning Devices for Work Zones with or without Flag Operators Study* - As mentioned in the October 2011 minutes, MnDOT is working with the U of Mn on this study. The Principal Investigator has had health issues recently, so the study has been delayed a little. Rancy is hoping for the final report in a few months.
- Portable rumble strips - Maintenance has found that these work well for static flagging operations. If the work zone is moving too much, the rumbles aren't being used as you have to continually redeploy them in different locations. Currently only being used in two-way, two-lane locations.
- Sue will be meeting more often with the Maintenance Work Zone Coordinators in the state.
- CONEZONE - Ryan Otte discussed how he is using CONEZONE and updated the group on the following:
  - CONEZONE is a software product that allows you to lay in a map/photo of a project area and it'll set up your device locations based on the Field Manual.
  - Maintenance Supervisor EBoard is interested in Ryan's use of this software. It is currently not being used significantly in the state, but interested EBoard supervisors could try it out.
  - To use this, Maintenance may need to follow a Train the Trainer methodology.
  - Kathy Schaefer used it recently in training with Ramsey County and it seemed to work well.

*PERCOM – Chair: Ed Barrett*

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Ed was not able to make it and there is no update at this time.

**Presentation: MnDOT Work Zone Safety and Mobility Policy – Elements and Current Efforts**

Ken Johnson gave a presentation on the MnDOT Work Zone Safety and Mobility Policy - indicating the major elements and the progress MnDOT is making towards meeting the policy. The presentation *MnDOT WZ S&M Policy Elements and Current Efforts - Johnson - 120403.pdf* can be found at the following link:

<http://www.dot.state.mn.us/trafficeng/workzone/wzcommittees.html>

**Presentation: Transportation Management Plans – Applications in Metro & Responsibilities of the Metro Traffic Control Engineer**

Tiffany Dagon gave a presentation on the how TMPs are being applied in the Metro District, as well as a summary of the plan to monitor what's happening during construction. The presentation *TMPs in Metro - Dagon - 120411.pdf* can be found at the following link: <http://www.dot.state.mn.us/trafficeng/workzone/wzcommittees.html>

**Discussion: Industry Meeting – Making our Work Zones Safer**

Craig Mittelstadt summarized a meeting held with the construction and traffic control contractors held in late February:

- The goal of this meeting was to get input from industry, particularly from front line folks.
  - MnDOT expected concerns about inattentive driving and speeds through work zones, but concerns were especially raised about speeds.
  - A tool that seems to be effective in controlling speeds is Extraordinary Enforcement. MnDOT spends an average of \$400,000 each year for this practice.
- Other tools that can be helpful in improving safety in work zones include:
  - Active warning systems - examples: *trucks exiting work zone when flashing* and *stopped traffic ahead*. The Stopped Traffic Ahead system seems to be near the cost of a CMS alone.
  - Driver feedback signs - Your Speed Is: Each district has at least 2 that can be moved around as necessary
  - Pilot use of a Changeable Regulatory Speed Limit Sign that will be used as a Work Zone Speed Limit on I35 near Faribault for a concrete rehab job. Major Asleson doesn't think that there will be a problem with enforcing tickets.

## External Partners

*Law Enforcement - Major Mike Asleson (State Patrol)*

Major Asleson reported:

- Fatal crashes were down last year, but it appears to be on a higher track this year. One note - there have been 9 pedestrians killed so far this year.

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- Firefighters are killed more often in traffic than in actual fires. There is a group developing a video presentation of incident management - Brian Kary and John McClellan of RTMC are involved.
- State Patrol is down about 50 troopers - rookie school is in session. However, there are plenty of troopers available for extra enforcement.
- Regarding the crash reporting concerns. Whoever addresses this, try to make it as simple as possible. As a note, Mike mentioned that crash reports are not required to be submitted for 10 days. So there will be a lag if crash reports are the tool.
- Regarding trooper use in work zones. Be clear in your expectations of the trooper. There has been confusion in the past.

*Engineering Consultants – John Crawford and/or Gary Thompson (URS)*

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John Crawford introduced himself to the committee. This is his first meeting and he is very interested in seeing how it operates.

*Northland Chapter ATSSA – Emily Fisher (ETranstech), Jay Blanchard (Safety Signs), Ken Russell (3D Specialties), Lynn Berg (SignCAD)*

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Ken Russell, Lynn Berg, & Judd Roby reported the following:

- The 2012 ATSSA Northland Chapter How-To had near record attendance. The attendance was not impacted by the Statewide Work Zone Safety Committee not being there, but the Committee was missed. Planning for the 2013 How-To has already started and Ken R. asks that ideas be sent on to him to bring to the planning session that will be held in July in Ottertail, MN. Absence of MnDOT leadership was noticed, but Steve Lund mentioned that the How-To occurred during Spring Break and that could have had an impact.

*Contractors - Frank Weiss (Shafer)*

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Frank was not able to make it and there is no update at this time.

*Temporary Traffic Control Providers – John Story (Traffic Technologies), Mike Granger (Street Smart Rental), & Tim Lewis (Highway Technologies)*

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Nothing to add at this time.

*Federal - Will Stein (FHWA)*

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Will Stein discussed Transportation Management Plans (TMPs) with the group. MnDOT is making headway in the development and implementation of TMPs. FHWA with MnDOT OTST conducted another TMP training this year. It is Will's understanding that Metro has started to collect operations information during construction, which will help with future projects (as well as allowing Construction to make necessary changes during the current construction projects). Will also mentioned that the TMP doesn't need to report any of the Purpose and Need of the project (typically already done with the Environmental Documentation phase), so less narrative is needed.

*County - Wayne Sandberg & Adam Bruening (Wash.Co.) & Wayne Fingalson (Wright County)*

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Adam Bruening reported that Washington County is using Twitter on another project in the County - Broadway. They've been pleased with how that can notify subscribers with project information.

*Municipal - Jay Koslucher (Fridley)*

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Jay was not able to make it and there is no update at this time.

*Education - Kathy Schaefer (LTAP)*

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Kathy reported that she has 5 Field Manual classes scheduled for May and more classes are planned for the Circuit Training.

*Utilities - Andrew Balgobin (CenterPoint Energy) & David Haedtke (CenturyLink)*

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David H. introduced himself and mentioned that CenturyLink is happy for the opportunity to be involved on the Committee. He was interested to hear about TMPs and mentioned that these Plans don't usually involve the Utilities. Better coordination may be achieved if utilities are considered in the development of the TMP.

**Action:** OTST will discuss with CO Utilities the possibility of the TMP process being discussed in the utility coordination training.

## *MnDOT Internal Partners*

### *Management Teams*

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- *PCMG*                      *Mark Waisanen*
- *CMG*                        *Mark Panek*

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- *OMG* *Sue Lodahl*
  - Bob Vasek notified the group that the following issues will be discussed at the next OMG meeting: Work Zone Safety and Mobility Policy, Cone Setting Policy, Zipper Merge, and the Flashing Arrow Board guidelines.

### *Maintenance*

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- *OM* *Steve Lund, Bob Vasek*
  - Bob Vasek let the group know:
    - The Changeable Message Sign Manual of Practice has been completed and the online training is currently being worked on.
    - The Maintenance Manual is being updated so be ready to provide input in the near future.
    - An understanding of Maintenance's role in following the Work Zone Safety and Mobility Policy is a big need area. Steve L., Bob V., & Sue L. are working on this area.
  - OM is providing some funding to get more TL-3 attenuators out in the districts. They've been finding issues with trucks that have mounted TL-3s. Mechanics are trying to develop better ways of attaching them.
  - OM has not been pushing for the acquisition of Mobile Barriers as this would compete with other, more pressing needs, such as TL-3s.
- *Training (Maint/Locals)* *Sue Lorentz and/or Kathy Schaefer*
- *Districts* *Sheila Johnson, Randy Reznicek*
  - Cone Setting: Metro is working on trying to more fully develop a vehicle with a front-mounted cone setter. They will share with other districts.

### *Traffic Engineering*

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- *OTST* *Sue Groth, Peter Buchen, Ken Johnson*
  - OTST has a lot of new personnel. Out of 45 in Waters Edge, 16 are new.
  - Road Closed to Thru Traffic: Some discussion was held about what level of traffic control should be used beyond the "ROAD CLOSED TO THRU TRAFFIC" sign. OTST reiterated that if the road is open to any traffic, MN MUTCD standards need to be followed.
  - Detours: Concerns were heard about changed traffic control due to detours. There are tools that could be used to improve safety at intersections that have modified traffic control. Perhaps use Temporary Rumble Strips or enhanced signing with LEDs.

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- *Districts*                      *Tom Miles, Jeff Rieder, Jerilyn Swenson, Tiffany Dagon, Mike Engh*
- Regarding Extraordinary Enforcement - District 1 has utilized in some maintenance projects for areas of concern - they used operation dollars.

### *Construction*

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- *OCIC*                              *Tom Ravn, Craig Mittelstadt*
- *Training/Speaker Bur.*    *Leigh Kriewall*
  - 355 people have gone through OCIC WZ Training this year so far.
    - Increasing class offerings - demand has been high. Industry wants to see more classes - particularly Traffic Control Supervisor classes. Will be at least 2 next year.
    - Recertification classes have been relatively small.
  - A question was raised about what Traffic Control Companies teach their personnel. The companies responded by saying it was more about how to get the work done - example: how to do the set ups and take downs.
  - Speakers Bureau has gone through some changes - new pamphlets (contact names have changed). It's more tied in with the Work Zone Safety Awareness program.
- *Resident Engineers*        *Trudy Kordosky*

### *Communications*

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- *Statewide*                      *Kevin Gutknecht*
- *Metro*                            *Kent Barnard*
  - Communications: Chris Krueger of the Office of Communications is the point person for OTST.
  - The Work Zone Safety Memorial in the Metro will be held in Golden Valley on April 27<sup>th</sup> at 9AM.

### *Worker Safety*

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- *Statewide*                      *Todd Haglin*
  - Conspicuity tape on MnDOT vehicles. MnDOT requires contractors to have conspicuity tape, but MnDOT does not require for MnDOT vehicles.
    - Randy Cameron does not have a problem with adding tape - whether magnetic or directly applied. The directly applied tape can last 8-9 years.

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- There was discussion about whether this is a Work Zone issue or a Fleet issue. It was decided that the Statewide Work Zone Safety Committee recommends to Fleet that conspicuity tape be added to vehicles that are expected to be in night work zones.
  - **Action:** Steve Lund will notify his staff that this should be done, get comments back and report to the full SWWZSC at the Fall Meeting.

- *District*                      *Doug Thies*

*State Aid*

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- *SALT*                      *Mark Vizecky*
  - Monica Beeman of the City of St. Paul is developing TTC for local urban operations. OTST staff have also seen what was developed and were impressed. Monica has been encouraged to share her experience with LRRB.
- *Districts*

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**Name:**

**present:**

**Rotating CHAIRS:**

Amr Jabr (Metro District Operations)   
 Sue Groth (OTST - Director)   
 Steve Lund (OM – Director)   
 Tom Ravn (OCIC – Director)

**EXECUTIVE COMMITTEE:**

Nick Thompson (Division Director)   
 Mike Barnes (Division Director)   
 Jon Chiglo (Division Director)   
 Rick Kjonaas (SALT - Asst Director)

**FUNCTIONAL ADVISORS:**

Ken Johnson (MnDOT OTST)   
 Bob Vasek (MnDOT OM)   
 Craig Mittelstadt (MnDOT OCIC)   
 Ted Ulven (MnDOT OTST)   
 Mark Vizecky (MnDOT SALT)

**EXTERNAL PARTNERS:**

**Enforcement**

Major Mike Asleson (DPS – State Patrol)

**Federal Agency**

Will Stein (FHWA)

**Counties**

Wayne Sandberg (Washington County)   
 Adam Bruening (Washington County)   
 Wayne Fingalson (Wright County)

**Municipal**

James Koslucher (Fridley)

**NCATSSA**

Emily Fisher (NCATSSA – Etranstech)   
 Jay Blanchard (NCATSSA - Safety Signs)   
 Ken Russell (NCATSSA - 3D Specialties)   
 Lynn Berg (NCATSSA – SignCAD)

**Contractors**

Frank Weiss (Shafer Contracting)

**TTC / IWZ Services**

Tim Lewis (Highway Technologies)   
 John Story (Traffic Technologies)   
 Mike Granger (Street Smart Rental)

**LTAP**

Kathy Schaefer (LTAP)

**Consultants**

John Crawford (URS)   
 Gary Thompson (URS)

**Utilities**

Dale Anderson (CenterPoint Energy)   
 David Haedtke (CenturyLink)

**INTERNAL PARTNERS:**

**Construction:**

CMG Mark Panek (D-6)   
 Training/Spk Bureau Leigh Kriewall (OCIC)   
 Resident Eng Trudy Kordosky (D-4)

**Maintenance:**

OMG Sue Lodahl (OM)   
 Statewide MWZSC Sue Lorentz (OM)   
 PERCOM Ed Barrett (Metro)   
 District Randy Reznicek (D-3)   
 Sheila Johnson (Metro)

**Public Affairs/Communications:**

Central Office Kevin Gutknecht (Comm)   
 District Kent Bernard (Metro)

**Design:**

PCMG Mark Waisanen (D-4)

**State Aid:**

District Vacant

**Worker Safety:**

Central Office Todd Haglin (Admin)   
 District Doug Thies (Metro)

**Traffic Engineering:**

Central Office Peter Buchen (OTST)   
 District Tiffany Dagon (Metro)   
 District Mike Engh (Metro)   
 District Jerilyn Swenson (D-3)   
 District Jeff Rieder (D-6)   
 District Tom Miles (D-6)

**Subs Attending:**

Reed Leidle  
 Tony Hughes

**Representing:**

NCATSSA (Jay Blanchard)  
 Resident Eng (Trudy Kordosky)

**Guests Attending:**

Ken Nelson KN Services LLC  
 David Tody MnDOT Metro Maintenance  
 Steve Anderson Street Smart Rental  
 Andrew Balgobin CenterPoint Energy  
 Ryan Otte MnDOT Office of Maintenance  
 Dave Schwarting MnDOT Resident Engineers  
 Judd Roby SignCAD

**Name:**

**present:**