

MnDOT Statewide WZ Safety Committee Meeting Minutes

October 22, 2015 - - - MnDOT Training and Conference Center, Shoreview, MN

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

Welcome and Introductions

Chair – Steve Lund, Office of Maintenance

- Steve welcomed the group and introductions were made. Of additional note:
 - Eric Minge attended for Jon Jackels of SRF
 - Mark Panek will be representative from PCMG and CMG as he is on both committees
 - Steve encouraged participation from all in attendance
- The minutes of the previous meeting were reviewed

Committee Reports

Statewide Work Zone Safety Executive Committee – Sue Groth

- Tom Ravn led the discussion of the Executive Committee discussions
 - Intrusions in Work Zones has been a strong concern. Leadership at MnDOT has been encouraging Patrol and prosecutors to take intrusions seriously and prosecute.
 - Charges have been filed against MnDOT employees when negative interactions with the public have happened - often when a motorist has intruded into a work zone.
 - MnDOT will continue to push for the Flagger legislation that would allow a driver to be cited if pulled over by law enforcement within 4 hours of a violation of a flagger direction.
 - Peter Buchen mentioned that the MnDOT Flagger that testified at a MN senate hearing made a difference. The issue was taken more seriously by the committee.

Traffic Engineering Organization Temporary Traffic Control (TEO TTC) Committee

– Co-Chairs: Ted Ulven & Ken Johnson

- Ted Ulven reported on activities and training:
 - Ted gave an update on what the committee's role is - to develop guidance and assist the TEO to create standards for the application of TTC.
 - Standard Plate 8000I (Barricades) is being updated to 8000J (Channelizers) and will be published soon.
 - Ken discussed the Type B Channelizers that include both the drum and the vertical panel. Concerns were raised by some that the drum is superior to the vertical panel as it is bigger and can be turned around without losing retroreflective visibility.
 - **Action: OCIC and OTST staff will look at when drums should be used and when vertical panels should be used.**
 - Pedestrians in Work Zones
 - Ken explained the difference between Alternate Pedestrian Routes (APR) and Temporary Pedestrian Access Routes (TPAR). An APR is an alternate route that has accessibility consistent with the impacted route. A TPAR is an alternate route that is fully accessible based on PROWAG. Thus an APR may be a TPAR - if the impacted route was fully accessible, but it doesn't have to be.

- New templates are being developed for APRs (bypasses and detours) and TPAR devices. They will be available from the MnDOT TTC Templates website.
 - The 2563 Temporary Pedestrian Access Control boilerplate special provision will be replaced with a 2563 Alternate Pedestrian Route boilerplate special provision. The new APR boilerplate should be used in any construction project in which pedestrian routes may be impacted by construction.
- The Temporary Traffic Control Chapter of the Traffic Engineering Manual (Chapter 8) has been rewritten and published to MnDOT OTST's Publication website.
- Bridge inspection template layouts are being developed and will be published to the MnDOT OTST TTC Templates website.
- Leigh Kriewall demonstrated the TAPCO flagger paddle and pole enhanced with LEDs on the sign face to improve conspicuity. She mentioned that maintenance staff will be testing them.
- 2015 Work Zone Process Feedback Report - Ted Ulven:
 - Ted explained the intent of the WZ Process Feedback visits to the group and listed out some of the key messages heard
 - These are visits from CO staff to a few districts each year. TTC is looked at from a system wide basis. The team hears feedback on guidance, policies and procedures.
 - Some districts felt that consultant TTC plans required more assistance from MnDOT staff than what should be provided. MnDOT OTST offers a TTC Plan Development Training course that may help with this.
 - Some incidents and incident response traffic control seemed lengthy. Districts were reminded that the fluorescent pink signs could be used.
 - Permits - 1 district visited mentioned that all permits are routed to the maintenance supervisors. Some concerns were raised about the traffic control provided by smaller utilities. MnDOT OTST, OM & OCIC worked together to develop online training for basic temporary traffic control. This may be a useful tool for these smaller utilities.
 - Extraordinary enforcement was discussed quite a bit in the districts visited.
 - Generally State Patrol was used, but local law enforcement was sometimes paid for as part of the project.
 - Steve Lund mentioned that MnDOT upper staff is looking at the possibility of utilizing Extraordinary Enforcement for maintenance projects.
 - Many of the districts have asked State Patrol to conduct work (such as paperwork) near maintenance activities. This has gone well when used.
 - Leigh Kriewall mentioned that OCIC is starting to send out a checklist to assist Construction when using extraordinary enforcement. She also mentioned that a trooper suggested the idea of driving through the work zone at the beginning of the shift with their video camera recording.
 - **Action: Executive committee continue discussions about the use of Extraordinary Enforcement in maintenance work zones.**

Presentation: Work Zone Crash Study Presentation

- Ken Johnson presented for Caitlin Johnson, OTST Intern.
- The presentation, *Work Zone Crashes 2012-2014 Presentation*, can be found at <http://www.dot.state.mn.us/trafficeng/workzone/wzscommittees.html>.

Discussion: Training

- Work Zone Safety Awareness Program Status and Tools - Leigh Kriewall, MnDOT OCIC
- Leigh gave a presentation about the Work Zone Safety Awareness Program. The presentation, *WZSAP*, can be found at <http://www.dot.state.mn.us/trafficeng/workzone/wzscommittees.html>. Highlights include:
 - This education program was formerly known as the Speaker Bureau. This included (and still does) a stand-alone presentation that can be presented by MnDOT personnel.
 - It has been difficult to quantify the audience, but presentations have been given to driver education classes, 55 alive courses, and other interested venues.
 - The program is being transitioned so that the presentation documents are now videos available on YouTube. More information about the WZSAP can be found at (along with the three videos): <http://dot.state.mn.us/const/wzs/speakers.html>
 - Short clips of the videos were shown.
- Ken mentioned to the group that MnDOT has formed a TTC Training Task Force. This task force was formed at the behest of the Statewide Work Zone Safety Executive Committee create a work zone training plan for MnDOT personnel and those that perform work on the state highway system.
 - From MN MUTCD:

Each person whose actions affect TTC zone safety, from the upper-level management through the field workers, should receive training appropriate to the job decisions each individual is required to make. Only those individuals who are trained in proper TTC practices and have a basic understanding of the principles (established by applicable standards and guidelines, including those of this Manual) should supervise the selection, placement, and maintenance of TTC devices used for TTC zones and for incident management.

Committee Reports (continued)

Resident Engineers Work Zone Safety Advisory Committee – Chair: Trudy Kordosky

- Trudy reported on recent activities
 - Upcoming meeting in November
 - A common concern that has been discussed at previous meetings has been lack of guidance on portable concrete barriers. Questions have been raised on when to anchor and how to connect to other barrier types.

- Reed Liedle of Safety Signs mentioned that there has been discussion of MASH being the crashworthy standard.
 - Chris Roy mentioned that this is being driven by AASHTO and that MnDOT will be paying attention to this effort.
 - Reed mentioned that the prime contractors own most of the temporary barrier and was wondering if there would be a firm transition date. Tom Ravn of OCIC stated that it would likely be a firm transition date, but to keep watch on the AASHTO announcements.
 - Ken Johnson of OTST mentioned that the non-proprietary concrete barrier design that MnDOT uses is MASH crashworthy already.

Traffic Control Special Provisions Annual Update Committee – Interim Chair: Leigh Kriewall

- Leigh reported on recent activities
 - The committee met the previous Thursday and discussed many issues
 - Many proposed changes from the previous year’s meeting that didn’t get implemented at that time will be modified in this year’s version.
 - No roll-up signs will be allowed unless authorized by the engineer
 - The portable signal section of the 1404 boilerplate has been modified
 - The truck mounted attenuator section of the 1404 boilerplate has added trailers as attenuation options
 - The spotter language for permanent pavement markings had been discussed as they were part of the 1404 boilerplate. This was removed as it likely belongs in the permanent pavement marking specifications

Statewide Maintenance Temporary Traffic Control Committee – Chair: Sue Lorentz

- Sue updated the group on some recent activities with this committee. This group, which consists of about 30 members from Central Office and the Districts, holds meetings in different parts of the state to showcase interesting elements related to TTC - examples: sign stand issues, cone deployment with device on front of truck, AVL on snow plows. The group has discussed the crashworthiness of portable sign stands, appropriate maintenance of truck mounted attenuators, the Work Zone Safety Awareness Program, camera systems with AVL implementation on snow plows.
 - Discussed the Dedicated Short Range Communication research. This was formerly called *Here I Am*. They are halfway through the study that uses devices and communication to locate and keep track of work vehicles and personnel to improve safety to workers.
 - This group also brings elements that need to be addressed from their perspective to other appropriate committees within MnDOT.

Discussion: Work Zone Intrusions

- Work Zone Intrusions - Todd Haglin
 - Statewide there isn’t a standard method to report intrusions into work zones. MnDOT research conducted a synthesis of practices nationwide related to reporting WZ intrusions - [Synthesis on Work Zone Intrusions](#). See

<http://www.dot.state.mn.us/research/TS/2015/TRS1506.pdf> for report summary. The bottom line determined is that there are no common practices in other states related to collecting intrusion information.

- The next step is a research project to develop a methodology and protocol to report work zones intrusions in a way that removes excessive effort by the reporter.
 - The product (if electronic) needs to work with MNIT standards.
 - Contractor will start in early 2016.
 - Doug Swenson mentioned that AGC has conducted a study of WZ safety that may include intrusion information.
 - **Action: Doug will send a copy to Ken to include in minutes.**
 - The following documents Doug sent are found on the website <http://www.dot.state.mn.us/trafficeng/workzone/wzcommittees.html>.
 - *2015 Work Zone Survey-National.pdf*
 - *AGC provided incident report form.pdf*
 - The goal of the intrusion reporting is to get real data and use to determine what should be done to reduce intrusions.
- Worker Safety and Incidence Reporting Protocol and Documentation - Ken Johnson
 - See documents *incident report form - draft 151021.pdf* and *Tips for Field Personnel Dealing with Angry Citizens 2015 - Draft.pdf* on <http://www.dot.state.mn.us/trafficeng/workzone/wzcommittees.html>.
 - The incident report form is similar to what MnDOT uses to track work vehicle hits.
 - Delorah Curry, MnDOT Human Resources, put together the tips document for MnDOT personnel if they encounter frustrated citizens, which may occur in intrusions.
 - Bob Vasek mentioned that the draft is being looked at by different offices, he particularly wants MnDOT attorneys to review it.
 - Major Frandrup commented that on a first look, she likes the information on the form.
 - **Action: Major Frandrup will review from a DPS viewpoint and send comments back.**

External Partner Reports

Law Enforcement – Major Cheri Frandrup (State Patrol)

- The State Patrol is in the process of hiring over 40 troopers
 - MN PASS team - 5 of the troopers will be dedicated to MN PASS.
 - 2 year pilot program
 - The thought was raised that these troopers could be asked to help out Metro Maintenance when not patrolling MN PASS
- Regarding TZD Seatbelt Enforcement efforts - still seeing some violators, but becoming fewer and fewer.
- TZD Conference - over 60 DPS staff attended

- Major Frandrup finished up by stating if there are issues with troopers in work zone extraordinary enforcement - then notify the captain. The group reported that they hadn't heard of any.

Industry Liaison Group – Tim Lewis (Warning Lites of MN)

- Tim Lewis reported that the group hasn't met for a while.
- **Action: Ken Johnson will set up meetings of this group.**

Engineering Consultants – John Crawford (Kimley-Horn), Jon Jackels (SRF) & Lisa Radeunz (Olsson)

- Eric Minge of SRF reported for Jon Jackels.
 - SRF is assisting Iowa DOT with using Intelligent Work Zones to mitigate problems in work zones.
 - SRF and Iowa DOT are assessing all work zones to see which would benefit from IWZ.
 - Iowa DOT has a statewide contract with Street Smart Rental and the systems seem to be doing well.
 - All IWZ devices are being integrated into the state's Transportation Management Center.

Northland Chapter ATSSA – Rick Shomion, Jay Blanchard, Ken Russell & Lynn Berg

- Reed Liedle reported
 - National ATSSA is becoming more involved with autonomous vehicles. They are working on setting up a committee to discuss issues and opportunities.
 - National ATSSA is advocating for State level 'fly-ins'. The organization has been using this on a national level for industry partners to meet with members of Congress to advocate for highway safety funding. National ATSSA is offering some scholarships for industry partners to attend.
 - The Government Relation folks at ATSSA are optimistic for federal funding for traffic safety and are continuing to advocate for Work Zone Safety Grant funding to provide training.
 - The Northland Chapter How-To had 22 breakout sessions, of which 5 were conducted by MnDOT staff.
 - ATSSA overall feels that training is important for safety in work zones.

Presentation/Discussion: ConeZone

- Lynn Berg of SignCAD delivered a presentation, *ConeZONES and IWZs*, to the group. The presentation of the same name can be found at <http://www.dot.state.mn.us/trafficeng/workzone/wzcommittees.html>. Some highlights follow:
 - At least 35 states were implementing IWZ in 2015.
 - ConeZONE has added features that barricade companies and local agencies are using. Integrated sign design, temporary traffic control design, signing and TTC standards, inventory management and sign replacement.

- Ryan Otte, MnDOT Office of Maintenance, reported that some MnDOT district maintenance offices are using ConeZONE.
 - ConeZONE provides documentation of the TTC deployed
 - Some districts really like the tabulation features - helps them know how many devices to bring out.
 - More effort needs to go into getting the software into the right people's hands, but each District has multiple copies.
- Reed Liedle mentioned that some TTC contractors are creating traffic control plans.
- Craig Collison asked if the IWZ devices can determine delay times
 - It was mentioned that the IWZ devices can do so if programmed.

External Partner Reports (Continued)

Contractors -Doug Swenson (AGC), Woody Bear (Shafer), Larry Hanson (Egan)

- Doug Swenson of AGC reported:
 - AGC has a program called CHASE (Construction Health and Safety) that consist of partnerships to improve the overall safety of construction projects. Most of the participants are vertical contractors, but there are a few horizontal contractors. MnDOT is involved in 2 partnerships.

Temporary Traffic Control Providers - Mike Granger (Street Smart Rental), Tim Lewis (Warning Lites of MN), Reed Liedle (Safety Signs) & Eric Johnson (uGOvia)

- Tim Lewis reported that this has been a busy year, and that contractors feel that intrusions and distracted driving is indeed a big problem. The contractors would be in support of any efforts to reduce distracted driving. He hopes that the industry liaison group will work to identify methods.

Federal - Will Stein (FHWA)

- Will Stein reported the following:
 - Every Day Counts initiatives - see <https://www.fhwa.dot.gov/innovation/everydaycounts/> for more information. The FHWA is promoting some EDC initiatives to accelerate innovation in the delivery of highway projects. There are two funding sources that are being used - State Transportation Innovation Councils (STIC) and Accelerated Innovation Deployment (AID) Demonstration. MnDOT is partnering with FHWA with the following projects:
 - Downstream Speed Notification IWZ to be used in I-94 project in 2016-2017 (STIC)
 - Paving projects using Intelligent Compaction and Infrared (AID)
 - Interconnected mini-roundabouts on MN Highway 4 (AID)

- Training (Maint/Locals) Sue Lorentz, Kathy Schaefer
 - Reports previously done.
- Districts Sheila Johnson
 - Sheila mentioned that Metro Maintenance is continuing to try to come up with methods for better cone deployment. They have purchased two flatbeds with side lower areas that may work well. They have been using a rented version and the crews in Metro really like them.
 - Craig Collision mentioned that they've had a couple of projects in which flaggers were using their cell phones to communicate. This was felt to be a distraction and the practice was stopped.
 - He mentioned that South Carolina's flagging manual has a nice resource with Dos and Don'ts. Kansas also has some good info.
 - Ted Ulven and Leigh Kriewall mentioned that they've looked at these resources and feel that the MnDOT manual provide equivalent information.

Traffic Engineering

- OTST Sue Groth, Peter Buchen, Ken Johnson
 - Peter Buchen mentioned that Chapter 8 of the Traffic Engineering Manual has been rewritten as part of the latest TEM update.
 - Peter also thanked Ted Ulven for his work with OTST and wishes him luck at OCIC.
- Districts Dave Mavec, Jeff Rieder, Tiffany Dagon, Scott Meier

Construction

- OCIC Tom Ravn
- Training/Speaker Bur Leigh Kriewall
 - Leigh mentioned that the Work Zone Training Class information is available online.
- Resident Engineers Trudy Kordosky

Communications

- Statewide Kevin Gutknecht
 - Sue Roe reported for Communications. The summer work zone awareness campaign has been wrapped up. They are now currently prepping for the winter work zone awareness campaigns. She also mentioned that Metro Communications has a good social media protocol that will be implemented statewide.
- Metro Kent Barnard

Worker Safety

- Statewide Todd Haglin
- District Doug Thies
 - Doug raised some concerns and thoughts for consideration
 - He has seen many instances where work vehicles are moving at a high rate of speed in work zones. Perhaps workers in work vehicles should practice behaviour that they'd like to see in work zones.
 - He's seeing people with hi visibility apparel; however, he's seen instances where the hat isn't being worn, or the vest isn't closed. Workers need to be aware that the hi vis apparel is for their safety and if it isn't being used correctly, it won't help them.
 - He's also seen a lot of cell phone use; both by drivers through work zones, and workers in work zones. These devices can be a distraction to both groups.
 - Bob Vasek reported that he's heard from the Sign Supervisor's group that it appears that there is more concern for traffic flow than there is for worker safety.

State Aid

- SALT Mark Vizecky
- Districts Kelvin Howieson

Adjourn