

## Statewide Work Zone Safety Committee

Date: April 30, 2021 12:30 pm – 3:30 pm

Chair: Brian Sorenson- Director, Office of Traffic Engineering

Location: Microsoft Teams

Attendees: Matt Krengel, Steve Blaufuss, Rashmi Brewer, Jackie Brown, Dave Meslow, Kristine Elwood, JP Gillach, Todd Haglin, Cathy Huebsch, Ken Johnson, Jed Falgren, Jon Jackels, Ken Russell, Jim Kosluchar, Kevin Kosobud, Sue Lohdahl, Jeff Morey, Michelle Moser, Ron Rauchle, Tom Ravn, Reed Leidle, Jeff Reider, Kathy Schaeffer, Brian Sorenson, Jason Spilak, Rod Starkey, Will Stein, Jeff Streeter, Ted Ulven, Bob Vasek, Shiloh Wall, Adam Bruening

### Mission, Purpose, & Meeting Methods

- **Mission** – The SWWZSC will influence the actions of those involved with work zones through the information that is shared through the innovations and best practices that are identified so that we achieve safer work zones and fewer fatal and life changing crashes.
- **Purpose** to provide a forum for
  - Identifying work zone safety problems, safety areas, and help set priorities
  - Brainstorming ideas
  - Recommending direction to our functional offices and committees
- **Meeting Methods**
  - Committee, partner, and group reports with discussion. Representatives will give
    - Status report on Action Items (from previous meeting if assigned)
    - Update report on work zone safety issues

### Welcome/Introductions (12:30-12:40)

- **Brian Sorenson – Director, Office of Traffic Engineering**
  - **Introductions/Mic check**
  - **Previous Action Items:**
    - **Removal of construction signs from inactive work zones**
      - Will be discussed by the TEO TTC as to how it is being enforced.
    - **Temporary Overhead Sign option for wider spans**
      - McCrossan is putting one on 94, following the standard plan. MnDOT will own it. TPI project also has one, which had a manufacturing quality control issue. It's best to work out the kinks before starting to design larger structure.

## Committee Reports (12:40-1:40)

- **Executive Committee**
  - Ken Johnson, OTE
    - From January 2021 meeting:
      - Suggestions on shorter meetings, frequent breaks, etc.
      - Speeds in work zones: Excessive speeds rose in 2020. While not found to be a major factor in the number of K&A crashes, it was found to be a bigger factor in causing fatal crashes. DPS is doing more enforcement and really trying to address excessive speeds.
      - Also looking at enhanced speed compliance project. Alerts downstream patrol to higher speeds. Software is proving hard to find.
      - Detours and enhanced guidance. OH signs and in pavement messages discussed.
      - WZ Safety and Mobility Policy is being updated.
  
- **Traffic Engineering Organization Temporary Traffic Control (TEO TTC) Committee**
  - Co-chairs: Jeff Morey & Michelle Moser, both of OTE
    - MUTCD NPA Review
      - Primarily reviewed Part 6 Temporary Traffic Control section, but also various other sections for TTC impacts.
    - AAH Temporary Traffic Control Effort-signs and segments
      - Working with the Office of Maintenance and the Adopt A Highway group to devise a TTC setup that can be use by the volunteers when out picking.
        - Wanted something easy for the volunteers to use and could be stored on site.
        - Does not require much from Maintenance.
        - One size will not fit all. Probably a combo of roll ups and static folding sign
      - TTC committee has been asked for recommendation on how to determine segments that are adoptable from a civilian worker safety standpoint.
    - APR/TPAR Standard Plans published
      - APR plans-either the standard plan or a project specific plan should be in any plan that has pedestrian facility impacts.
      - TPAR device standard plan should be in all projects with pedestrian facility impacts.
    - Revised 8000 and 8337 Standard Plates coming soon

- 8000K – added the 6” retroreflective bands to the drums channelizers and modified to remove the surface mount delineators and show just the Tubular Markers.
- 8337 – added the modified T-Pin connector pin from expired tech memo.
- Special Provision review for SP2020
  - Did a quick run through of 2563 special provisions for any updates.
  - Committee has been reviewing all TTC Special Provisions as they are modified.
- Working with OCIC on Work Zone Road Safety Audit on TPI Project
  - Lots of systems on this project: Extra Enforcement, queue warning, etc. Go Pro and Drone footage will be used. **Action: Update at fall meeting.**
- Portable sign stand quality standards and crashworthiness
  - Committee has been looking into crashworthiness of our NCHRP 350 compliant Portable Sign Stands and Type III barricades.
  - Testing has not been funded in either of the roadside safety pooled fund programs that we participate in.
  - Possibility of self-certification via in-service performance evaluation or trying to work with some local states/industry to pool funds to have them MASH crash tested.
- **Resident Engineers Work Zone Safety Advisory Committee**
  - Dan Penn, Metro GV NW Construction and Ted Ulven, OCIC
    - Concerns with higher speeds and distracted drivers.
    - Low traffic volumes helped with stage changes in 2020.
    - Extra Enforcement funds are available.
    - Temporary OH sign should be in place by end of May on 94 Design Build between Maple Grove and Rogers.
- **Time and Traffic Special Provisions Committee**
  - Ted Ulven, OCIC
    - Flagging section changes-crossroads noted where flagger is expected, pilot car driver needs to be trained as a flagger.
    - 2562 list will have a couple name changes-tubular markers and vehicle speed feedback signs/trailers, maybe add some more items in the fall.
    - Task force to address additional 2562 items-RE’s etc. to determine what items are needed. OCIC will gather what changes are needed and ask for input from industry.  
**Action: Possible Liaison Committee item**

- **Statewide Maintenance Work Zone Safety Committee**
  - Steve Blaufuss, OM
    - December meeting topics: TMA attachments-maybe audible feature-IA has 19 in service currently, TMA flagger-solicitation is out, D6 will take delivery. Demand is going up, more requests for mobile lane closures. How do you know your following distance? Usually count skips. Should maybe have some training on it, as it requires some practice/skill-could add to training initiative.
    - Work Zone intrusion mobile app development in conjunction with safety and traffic offices.
  
- **SWWZSC Industry Liaison Group**
  - Reed Liedle, NLCATSSA; Michelle Moser, OTE
    - Group Purpose and Methods
      - Purpose: Discuss industry suggestions for efforts to improve work zone safety, Identify industry thoughts with existing state guidelines, standards, and procedures, and determine actions that industry can implement or pursue to improve work zone safety.
      - Methods: Direct dialogue between MnDOT offices and representative industry groups, identify large problem areas of safety in work zones and discuss possible solutions, identify new methods and devices with temporary traffic control Identify roadblocks, advocacy of statutory changes.
    - 2021 Goal setting
      - Nice to have a big audacious goal
      - Take some little ones too
      - Next meeting will likely be about re-focusing and a what are we going to accomplish discussion - welcome any thoughts / suggestions / ideas
    - Legislative Advocacy
      - ASE update: Working with the Minnesota Safety Council & Transportation Alliance, we've been successful in having our proposal included in the Omnibus House Transportation bill. (Which means it's still in play for passage this year.)
    - Industry Liaison update on Construction Work Zone initiative
      - Attenuator Hits, reduced longitudinal buffers, chutes, etc.
      - Pavement Marking Shields (Lane Designation Messages)
      - Temp OH sign Structures
    - MASH issues
      - Out of State Contractor wanted to purchase "MnDOT signs and barricades"
      - How do the smaller, newer TTC companies grow
      - We still aren't able to start working to comply with the Tech Memo
      - Unintended consequences and force us all to decide between following or disregarding the rules.

## Presentation and Discussion

- **Autonomous Truck Mounted Attenuator**  
Cathy Huebsch, MnDOT CAV-X  
Connected follow/protection truck that can be unmanned in the future.

## Break (1:50-2:00)

## External Partner Reports (2:00 - 2:45)

- **Law Enforcement**
  - Major Sean Meagher, State Patrol
    - No updates
- **Minnesota Local Technical Assistance Program**
  - Kathy Shaefer, LTAP
    - Have been providing virtual training to both MnDOT and local agencies.
    - Conducted virtual train the trainer for D8. Kathy can provide to any other interested districts.
    - Prerecorded training on the LTAP website for sections of the field manual.
- **Engineering Consultants**
  - Jon Jackels, SRF; Jeff Hilden, TKDA
    - No updates
- **Northland Chapter of ATSSA**
  - Reed Leidle, Jay Blanchard, Ken Russell
    - Virtual training in lieu of the 2021 How-To Conference: March 17-18, NDLTAP funded and managed the event. Presentations on TTC in work zones-“See something say something”, Pavement markings, and MASH
    - ATSSA participated in funding of temporary sign stands years ago and would be willing to participate/help fund-raise again.
    - Plan signature: contractors are sometimes told that their plans that they are asked to provide do not need to be signed.
    - APR/TPAR-still would like more than typicals to be in plans-need project specific designs so that they know what devices are needed.
    - Work Zone signs not built properly are still out there. Need to continue to educate and enforce.
    - Summer planning meeting in July-hybrid meeting.

- **Contractors**
  - Matthew Semerad, AGC; Woody Bear, Shafer; Brad Drews, Egan
    - AGC-CHASE update: Doug Swenson will be retiring at the end of July. Matt Semerad will be taking over in the coming months.
    - Attachment for Highway/Heavy incidence rate.
  
- **TTC Providers**
  - Matt Krengel, Street Smart Rental; Eric Johnson, Salander Tech; Reed Leidle, Safety Signs; Tim Lewis, Warning Lites of MN
    - No updates
  
- **FHWA**
  - Will Stein and Jason Spilak, FHWA
    - Will gave a reminder about the close of MUTCD comments on May 14.
    - On the MASH topic, one way FHWA may be able to help is by reaching out to States beyond the Midwest to see what other options may already exist for some of the devices that we still need in MN. Some of the States like California, do a fair amount of crash testing on their own, and may have options that we're not aware of.
  
- **Counties**
  - Wayne Sandberg, Washington County; Adam Bruening, Washington County; Vic Lund, St. Louis County
    - No updates
  
- **Municipal**
  - James Koslucher, City of Fridley
    - No updates
  
- **Utilities**
  - Dale Anderson, Center Point Energy; David Haedtke, Century Link
    - No updates

## **MnDOT Internal Partners (2:45-3:30)**

- **Management Teams**
  - PCMG & CMG – Sue Lohdahl for Mark Panek
    - PCMG includes: Hydraulics, Design, Traffic and Right of Way

- CMG includes: Resident Engineers, Materials engineers, and surveyors and survey engineers
- Anything that needs to be brought back to these groups?
- OMG – Sue Lodahl
  - Reminder: a snowplow is a work zone!
  - Maintenance Operations Innovation program-
    - Research group within OM
    - Identify innovation, gain statewide consensus, and deploy quickly
    - 30 ideas already since January
- **Transportation Systems Management Operations**
  - TSMO – Jed Falgren
    - 511-Integrates weather information from various sources to predict road conditions in 511, provides road condition information even when we are not able to.
    - Involved in the ATMA project.
    - Watching IA as all of their message boards this year are fed into the data exchange system.
    - Participated in FHWA Rural TSMO Peer Exchange.
    - Traveler Alert System-using AVL systems in the plows to send info to DMS (plow drives by DMS at slower speed and message board will light up). Mainly outstate boards. Second phase will send message to cell phone (personal message boards)-beta testing right now.
- **Construction**
  - OCIC – Tom Ravn
  - Training/WZSAP – Jackie Brown/Ted Ulven: training season recap
    - TCS/TCT classes were taken care of by ATSSA, Virtual classes were well attended
    - Recertification had 3 sessions through e-learning
    - Train the trainer flagger training was also administered virtually.
  - Districts- Troy Strassburg
    - Districts are exploring more with the use of portable rumble strips on rural paving projects and it seems like industry has handled it fine thus far as they are having another component of the traffic control to adjust/set up/take down. Very effective and positive vibe from all persons as well as the contractors.
    - Overhead temp signage is another good thing and hope to use more of when appropriate.

- **Maintenance**

- OM – Bob Vasek
  - National WZ Awareness Week-would be great to find ways to participate in future.
  - Good year for safety and training initiatives.
  - Looking for way to help move the crashworthy TTC device transition along.
  - Continuing Extra Enforcement contract with patrol in maintenance work zones.
- Training – Kathy Schaefer
  - Local agency and MnDOT Maintenance Virtual training update
- Districts – Sheila Johnson

- **Communications**

- Statewide – JP Gillach
  - Construction Season Kickoff had good coverage.
  - National WZ Awareness Week-Worker memorial day, districts did interviews, would like to participate more in that in the future.
  - Go Orange Day 2022 – would like to organize a campaign to encourage statewide participation in 2022, from MnDOT but also potentially reach out to work zone partners beyond MnDOT. Reed Leidle agreed there was good potential and this is something easy MnDOT and industry could potentially partner on. J.P. and Reed to connect for further discussion and action. Will Stein will also provide contacts from FHWA communications team who've worked Go Orange Day in the past.
  - Working on Communications plan for work zone intrusion app.
- Metro – Chris Krueger

- **State Aid for Local Transportation**

- Statewide – Marc Briese, Rashmi Brewer
  - No updates
  - **Action-next meeting update on WZ training Initiative**
- Districts – Kelvin Howieson

- **Worker Safety**

- Statewide – Todd Haglin, Keith Juliar
  - Work Zone Intrusion phone app
    - Field testing is happening.
    - Communications plan and plan for use of data gathered are in the works.
- District – Troy Hollasch (D6)
  - No update



- **CAV-X**
  - Cathy Huebsch
    - No update
  
- **Traffic Engineering**
  - OTE – Brian Sorenson, Ken Johnson
    - SHSP was published a year ago, with strategies and tactics for to address the most common factors involved with fatal and serious injury crashes. We are assembling teams for most relevant factors. Speed team will be tackling speed related issues. This group (SWWZSC) is an effective action team for work zones. How do we make sure the things we are doing are of the most value, i.e. reducing life changing crashes-vehicle, ped, and bike? Action: **Will bounce off executive committee for this group for some bigger goals.**
    - OTE has started to look at safe systems philosophy and how we can incorporate that into our projects, and what things we can prioritize.
  - Districts – Ron Rauchle, Morris Luke, Jeff Rieder, Scott Meier
    - Ron-Metro will be actively monitoring about 16 projects with Clearguide (probe data). They can get actual speeds, queueing, etc. This will assist in efforts to improve WZ design in the future and catch issues in active work zones. Can also use it to look at incident management and make decisions to mitigate delays during peak hours.
  
- **Other updates:**
  - Shiloh Wahl (D4 District Engineer) is the new District Engineer representative on the Committee, succeeding Duane Hill who served on the committee for 11 years. Shiloh worked in construction for a number of years and is excited to have the opportunity to work with this group on work zone safety.

**Adjourn (3:30)**