



# Work Zone Traffic Control and Safety Training – Phase 1

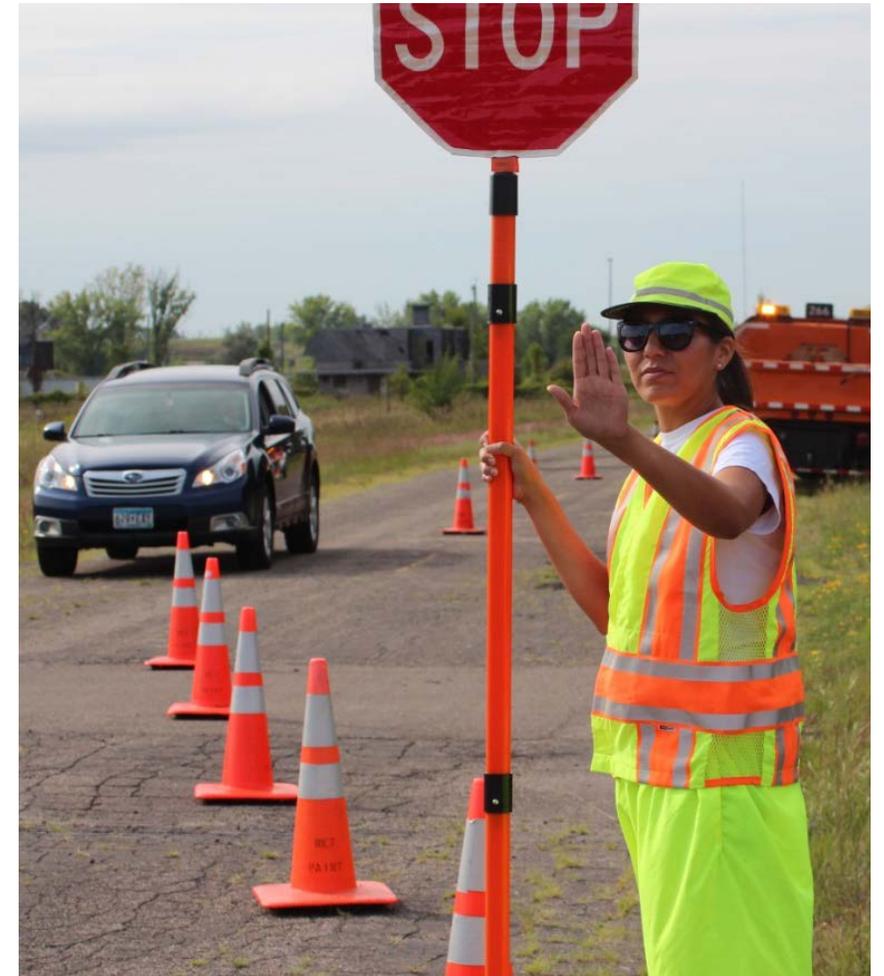
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# What is the Problem?

- Temporary Traffic Controls need to be uniform and consistent on all road systems between counties, cities and state.
- As drivers travel they don't know or care whose road they are on.
- Meeting driver expectations = safety
- Violating driver expectations = crashes



# What is the Need?

To understand the work zone training that local agency staff needs.



## To be effective training must:

- Be accessible
- Meet the needs of workers and managers
- Meet the needs of public agencies and private contractors / companies

# Three Phase Approach

- Phase 1 – Develop Training Plan
- Phase 2 – Develop Training Curriculum *FUTURE*
- Phase 3 – Market, Coordinate, Deliver *FUTURE*

# Phase 1 - Project Goals

- Identify training needs
- Identify available courses
- Identify gaps
- Recommend course development needs
- Develop a training plan

# Technical Advisory Committee Members

- Mark Vizecky - MnDOT - SALT
- Alyssa Rubenstrunk - MnDOT - SALT
- Vic Lund - St. Louis County
- Lon Aune - Marshall County
- Tim Plath - City of Eagan
- Samuel Budzyna - City of Rochester
- Reed Leidle - Safety Signs
- Mindy Carlson - U of M – CTS
- Katherine Stanley - U of M – CTS
- Ken Johnson - MNDOT - OTE
- Ted Ulven - MnDOT - OCIC
- Bob Vasek - MnDOT – Maintenance
- Kathy Schafer - MnDOT – Maintenance
- Sue Lodahl - MnDOT – Maintenance
- Renae Kuehl – SRF Consulting
- Jon Jackels – SRF Consulting



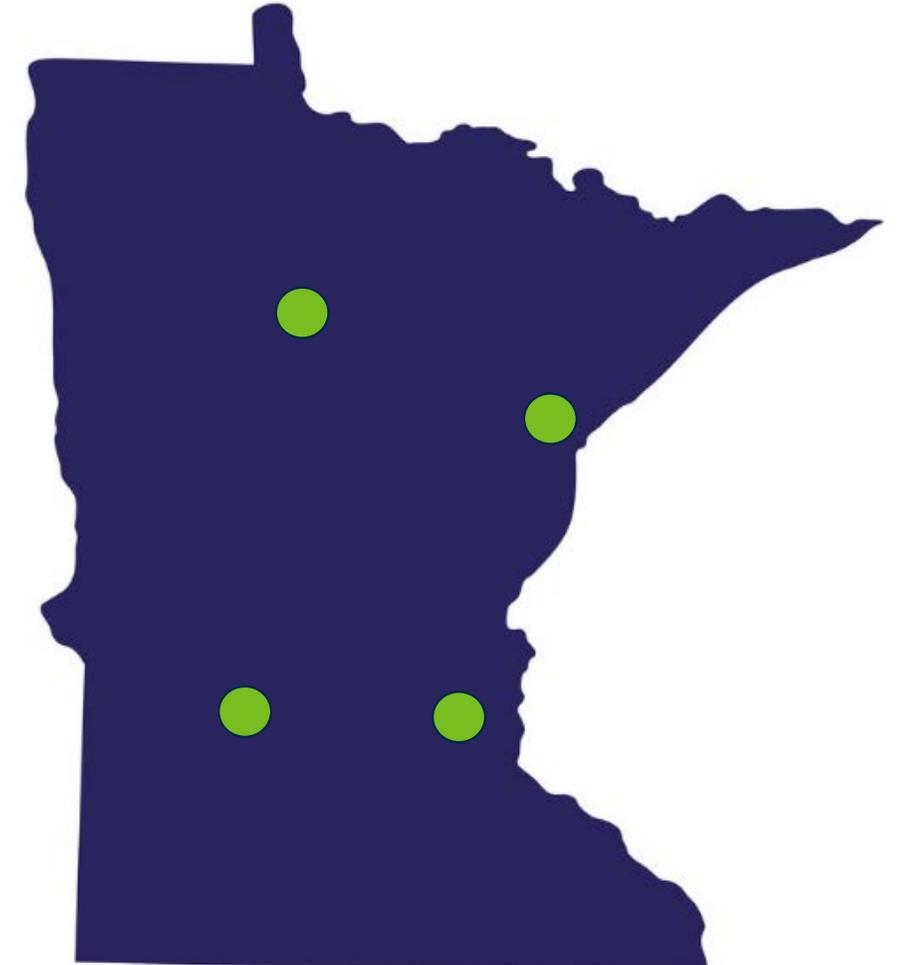
# Project Schedule

Milestone	Description	Month														
		7/18	8/18	9/18	10/18	11/18	12/18	1/19	2/19	3/19	4/19	5/19	6/19	7/19	8/19	9/19
1	Training Needs	█	█	█	█	█	█	█	█							
	TAP Meeting							█								
2	Available Courses	█	█	█	█	█	█	█	█	█						
	Email to TAP									█						
3	Recommendations					█	█	█	█	█	█	█				
	TAP Skype Meeting											█				
4	Draft Report											█	█	█		
	TAP Skype Meeting												█			
5	Final Presentation														█	█
	TAP Meeting															█

# Listening Sessions

- Duluth (MnDOT District Office)
- Bemidji (MnDOT District Office)
- Arden Hills (MnDOT Training Center)
- Willmar (MnDOT District Office)

	# of Participants	# of Agencies
<b>Field Worker</b>	28	14
<b>Field Supervisor</b>	34	18
<b>Designer</b>	25	16



# Training Identified by Participants

- Field Workers & Field Supervisor/Managers
  - Work Zone Traffic Control Seminar – Mike Leaf; Warning Lites via LTAP
  - Work-Zone Safety, Temporary Traffic Control, and Flagging – Kathy Schaefer; MnDOT via CTAP
  - MnDOT Flagger Video
  - Annual Personal Protection Training (required) – Work Zone is a small component
- Traffic Control Designers
  - MnDOT TTC Plan Course – held every other year

# Preferred Method, Time and Location

TOPIC	GROUP		
	Field Workers	Supervisors/Managers	Designers
Method	In person Online or Video for Refresher	In person Online or Video for Refresher Webinar for Updates	In person Online and On Demand
Time	Winter for Permanent Late Spring for Seasonal On Demand Year Round	Winter for Permanent On Demand Year Round	On Demand Year Round
Location	Local	Local Regional	Regional On Line

# Listening Session Findings

- Training needs to be tailored to agency needs
- Qualified Instructors with previous field experience
- In person training must be interactive
- Class size should be small (10-20)



# Training Outcomes Identified

- Needs to be more than how to look up Field Manual layout
  - Discuss why and how to adjust to fit situation
- Do not overuse traffic control devices
- Remove unnecessary devices
- How and when to use law enforcement
- Address mobile and moving operations
- Incorporate case studies and real life examples



# Other Concerns and Comments

- Support from the top down needed
- Many participants unaware of training and had outdated materials
- Designers need vastly different training
- Support of a certificate program similar to MnDOT technical certification program



# Established Achievement Levels

- **Informed** – attend an event, no attendance or measure of understanding.
- **Trained** – attend an event, attendance taken, receive acknowledgement of attendance.
- **Certified** – attends training in person, attendance taken, and demonstration of acceptable level of understanding (test). May include work experience (recommended).

# Recommended Eight Training Levels

Level	Level Title	Duties and Responsibilities
1	Fundamentals of TTC and Work Zone Safety	Perform work on public right of way intended for travel without the need for lane closures
2	Flagging	Flag traffic
	Flagger Train-the-Trainer	Provide training for flaggers
3	Core TTC Knowledge	Supervise, lead or install short and intermediate term TTC using the Field Manual as minor part of duties.
4	Advanced TTC Knowledge	Set up short, intermediate and long term TTC using the Field Manual and/or TTC plans as major part of duties.
5	TTC Supervisor	Supervise and/or set up short, intermediate and long term TTC. Allowed to exercise engineering judgement.

# Recommended Training Levels (continued)

<b>Level</b>	<b>Level Title</b>	<b>Duties and Responsibilities</b>
6	TTC Plan Development Skills	Designer, licensed engineer or working under the supervision of a licensed engineer to develop TTC plans.
7	TMP Development	Project manager or planner responsible to plan and/or manage project development on public right of way that impacts transportation management and operations.
8	Work Zone Safety Information	Manager responsible to manage a company or agency or portion thereof whose work affects transportation facilities or operations.

# Work Zone Training Recommendations

- Develop new modular training for agencies to pick which topics they need to be trained on based on the work they do.
- Make revisions (minor and major) to existing training course curriculum.
- Develop new courses for project and agency managers.

# Other Recommendations

- Establish a Work Zone Technical Expert for local agencies.
- Establish minimum experience requirements for certification courses.
- Establish and maintain a Work Zone Traffic Control Training Database.
- Expand availability of in-person training.
- Improve accessibility to all TTC tools.
- Increase work zone training outreach to local agencies and utilities.

- MnDOT Staff approval of Recommendations
- Initiate Phase II - Development
- Initiate Phase III - Delivery

# Thank you again!

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