



# Work Zone Speed Management

Transportation Finance & Policy Committee - March 2022

## **Sec. 140. WORK ZONE SPEED MANAGEMENT STUDY.**

- (a) The commissioners of transportation and public safety must perform a work zone speed management study. At a minimum, the study must:
- (1) evaluate existing legal authority for strategies, practices, and methods to reduce vehicle speeds and enhance worker safety in work zones, which may include but is not limited to use of traffic control devices, use of barriers, traffic control design modifications, and speed enforcement actions;
  - (2) propose a process for contractors operating in a work zone that allows contractors to request modifications to a project's traffic control plan, in order to reduce vehicle speeds or improve worker safety in a work zone;
  - (3) make recommendations on changes to current policies and procedures related to work zone safety; and
  - (4) make recommendations on changes to state law to improve work zone safety.

# Work Zone Speed Management Study



## Work Zone Speed Management Study

February 2022

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- Started in May 2021 - MnDOT and Contractors
- July – Made into law, broader participation (next slide)
- September - Feedback solicited from industry
- October – November
  - Task Force recommendations determined
- December – January
  - MnDOT and DPS recommendations determined
- February 2022 – submitted to Legislature

<https://www.dot.state.mn.us/govrel/reports.html>

# Work Zone Speed Management Task Force

- MnDOT
- DPS
- Minnesota State Patrol
- Minnesota Safety Council
- Grant County
- Sherburne County
- Washington County
- City of Brainard
- MN Citizens for Safe Work Zones
- Associated General Contractors
- Warning Lites of MN
- Egan Company
- Mathy Construction
- Valley Paving
- Safety Signs
- HDR Engineering, Inc.

# The Work Zone Environment

- Workers are often next to traffic
- Work zones introduce complex changes to the roadway and this increases risk to road users and workers
- Speed limits are difficult to enforce
- Excessive speeding (15+ mph over the speed limit) has substantially increased since March 2020



# I-94 in Maple Grove Work Zone Case Study

## 60 MPH 24/7 Construction Speed Limit

Location	Elm Creek Rest Area	
	# vehicles	% of traffic
76+ mph	13,568	4%
61-75 mph	199,417	60%
< 60 mph	120,039	36%
<b>Total Vehicles</b>	<b>333,024</b>	<b>100%</b>

Additional information  
can be found on page  
13 of the report

Traffic observed during Nov 1-7, 2020



# Regulating and Enforcing Safe Speeds

- Drivers will reduce speeds only if they clearly perceive a need to do so.
- Static work zone speed signing is not an effective method of reducing speeds in work zones
- Work zones create constrained environments in which it is difficult to enforce speeds
- Enforcement activities may create undesirable side effects

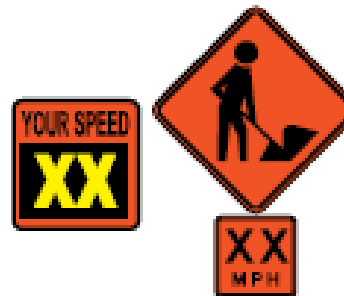
See pages 13 – 19 in the report

No shoulders  
available for  
enforcement



# Recommendations for changing existing policies and procedures to improve work zone safety

- MnDOT and DPS reviewed task force recommendations and included 14 in the report for greater implementation and study:
  - Speed management techniques (speed control vehicles, electronic workers present speed limits, vehicle speed feedback displays)
  - Greater use of detours and full closures (over limited timeframes)
  - Greater use of constructability reviews
  - Intelligent work zone systems (end of queue warning systems)



See pages 35 and 36 in the report



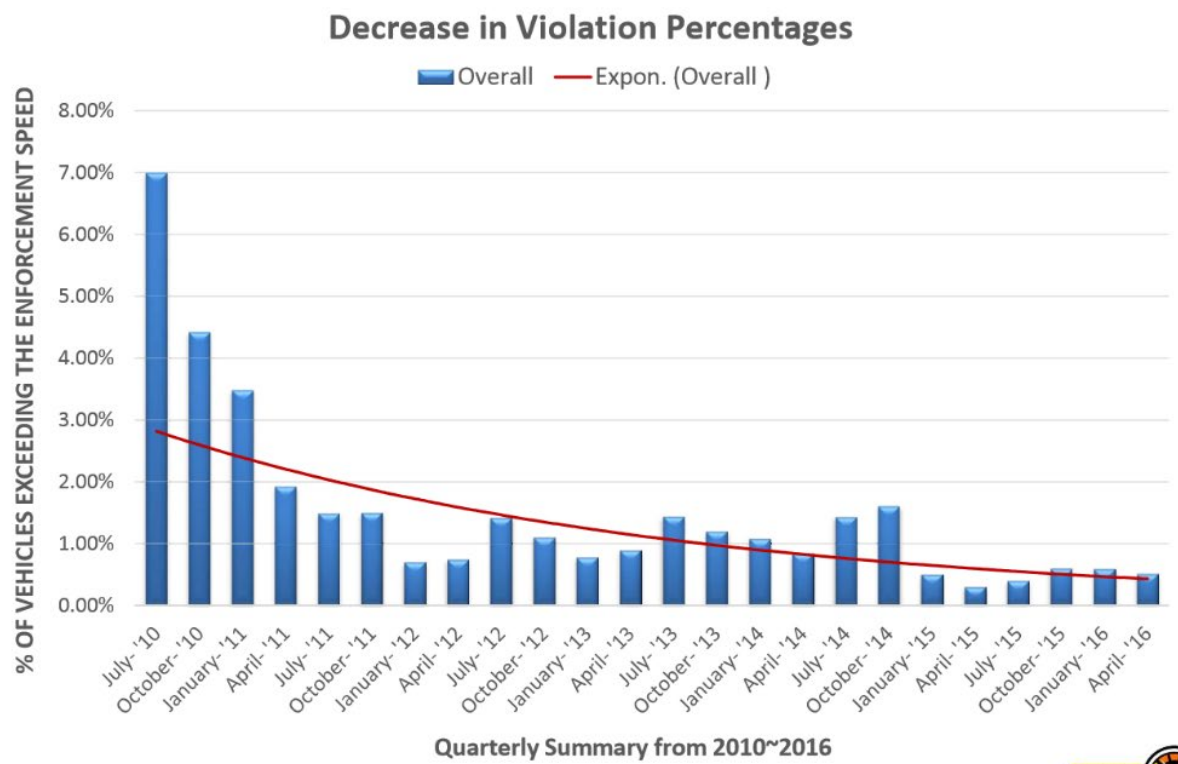
# Recommendations on changes to state law to improve work zone safety

## Speed Safety Camera Demonstration Project

- Work zones present extraordinary challenges to traditional enforcement methods
- Speed Safety Camera systems are currently used by 19 states and the District of Columbia
- Research has indicated public support for SSC to reduce speeds in work zones and school zones
- SSCs are part of FHWA and NHTSA Proven Safety Countermeasures
- MnDOT and DPS agree that the proposed demonstration project is a worthwhile endeavor
- Details including proposed parameters can be found on pages 43 and 44 of the report

# Recommendations on changes to state law to improve work zone safety

## Decrease in Violation Percentages



Quarterly Summary from 2010~2016

Maryland SafeZones - Work Zone Automated Speed Enforcement Program



Additional information about other states' programs can be found on pages 23 & 24 of the report

Additional information on Maryland's program can be found at: <https://www.safezones.maryland.gov/>

- Work zones often increase safety risks for road users and workers
- Excessive speeding has substantially increased since March 2020
- Enforcement is challenging in work zones
- MnDOT will implement recommendations based on current legislative authority
- Speed Safety Cameras are effective; demonstration program would require legislation