

Traffic Incident Management Newsletter

Quarter #1 | April 2023 | Department of Public Safety

What is TIM?

A planned and coordinated process to detect, respond to, and clear traffic incidents safely and efficiently.

What is TSMO? Transportation Systems Management and Operations (TSMO) encompasses a broad set of **strategies** that aim to **optimize** the safe, efficient, and reliable use of **existing** and **planned** transportation infrastructure.

TIM Tips:

Quick Clearance – Move incidents off the main roads or highway

Early Warning – Utilize flares, cones, or additional emergency lights

High Visibility – Wear issued high visibility jackets or vest while working a scene

Situational Awareness – Seatbelts should be worn when sitting in your vehicle

DPS/MnDOT TIM Project

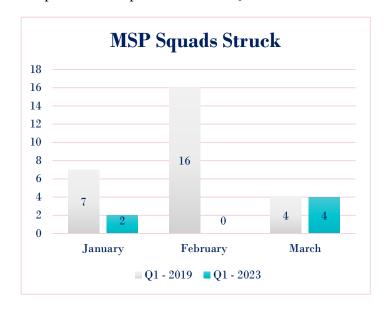
Traffic incidents account for 25 percent of all roadway congestion in the United States and 20 percent of all incidents are secondary crashes according to data from the Federal Highway Administration.* Incident response and related congestion can have serious implications in terms of responder safety, public safety, the economy, and the environment.

Minnesota Department of Public Safety (DPS) Office of Traffic and Safety (OTS), the Minnesota State Patrol (MSP), and the Minnesota Department of Transportation (MnDOT) have prioritized the need to enhance their TIM program to strengthen their safety culture. Enhancing Minnesota's Traffic Incident Management (TIM) program will help to achieve Minnesota's traffic incident fatality and serious injury crash prevention goals and drive toward zero deaths. This plan identifies and prioritizes opportunities to enhance Minnesota's TIM program.

MSP Squad Struck Data 1st Quarter

January 2023: 2 squads struck by passing motorist February 2023: 0 squads struck by passing motorist March 2023: 4 squads struck by passing motorist

Graph shows comparison between Q1 for 2019 and 2023



DPS TIM Workgroup

Twenty one (21) Troopers met as a workgroup at Camp Ripley to enhance the MSP TIM project.

What is the group's goals and objectives?

Troopers serving on the TIM workgroup have a passion for trooper safety and TIM. Troopers are able to work closely with MnDOT Traffic Incident Management coordinators Tony Kasella and John McClellan. Troopers also work closely with other TIM stakeholders, such as: Communications, Fire/EMS, Allied Agencies, and Towing Companies. In order to gain various perspectives and identify appropriate TIM tactics and strategies, troopers represent every region within the state.

Group members serve as agency experts and instructors. Involved troopers will be instructing classes, collaborating on training material, creating training plans, discussing traffic incident management tactics, and evaluating traffic control devices for agency use.



Pi-Lit LED Flares:

MSP is currently field testing Pi-Lit LED flares, sponsored by the Office of Traffic Safety.

Early feedback from Trooper Erin Struck D2100: I had the set of lights for the last few days of my rotation to try out. I had two crashes I went to and was excited to use the lights. When I arrived on scene, both crash scenes had Pi-Lit's already out, to my surprise. Both the Caledonia Fire Department and Pickwick Fire Department recently purchased the lights and had them deployed at my scenes. It was the first time for the one agency and the second time for the other in using them.

When I pulled up to one scene, the agency had cones set up between the Pi-Lit lights at the start of the pre-warn area and then just the lights as you got closer to the scene. It was a cloudy/dreary day and the lights stood out well! It was a huge difference compared to just seeing a few cones and flaggers. It was nice to see the lights continue up the zipper giving the public "directions". Having a 10 pack gave me the opportunity to cover much more ground than a few cones or a few flaggers set up (having extra flaggers or cones isn't always an option). The lights were on a flash pattern and were noticeable from the ground as traffic was approaching. I think for this particular set up, I would have had them on a solid light rather than the flash, but it was still effective. I did not get to deploy my set at this scene.

The second scene had them out in a wiggle type pattern behind the fire truck, which got your attention, but didn't block the lane or "tell" the drivers what to do (more experience with them and possibly some training would eliminate or help this). They were visible as well in the daylight. When I arrived on scene, I was the rear prewarn vehicle. I deployed my set behind my squad and continued it to meet up with the fire departments "wiggle". Mine did not sync up with theirs, but after some research, I found if they would have hit the button to start their "pairing" again, we should have been able to get them all to talk to each other since the original five minute pairing time had already lapsed. It was incredibly quick to be able to grab the case and just deploy them out. Once done, it was equally quick to grab the case and pop them back in and go. In the amount of time I could set them all out, I would just be getting the flares out and working on getting the caps off. No more worry about them rolling away, damaging boots or uniforms, or smelling horrible the rest of your shift!



I also did more testing with them at the MnDOT shop, while showing them to a partner. We tried out the many patterns and discussed what ones would be best in

certain areas or types of scenes. My partner asked where he could get his set!! He was impressed how quickly he could deploy them all out. In greater Minnesota, these could potentially be our only "backup" or the only warning/pre-warn we have at a scene with us besides our squad. They don't need to be tended to like flares or have to plan how long you'll be there, eliminating the



need to add more flares or having extras staggered to start up when the first burns out. Also, we tried them out in the daylight under a cone to see if they illuminated. They were quite subtle in the daylight illumination and would not be something I would use in that instance. But, if I was working a night shift, they would work for lighting them up. More information can be obtained at www.pi-lit.com



Traffic incident management: The smoother the traffic flow, the safer the roads

Picture a river running through a meadow. With a smooth riverbed and nothing to impede it, it flows smoothly and peacefully along. But throw a few large boulders in its path, and suddenly you have a raging torrent. Traffic is much the same way—it's at its safest and most efficient when flowing smoothly. The difference is, when you add a boulder in the form of a crash or other incident, the result is damage, injury and sometimes death.

That's why traffic incident management is so important. In a nutshell, traffic incident management is what happens when first responders secure and clear the scene. That is, they make sure everyone at the scene of the crash – including themselves – is safe, and they clear it off the roadway as quickly as possible. It's one of the first things they learn in training.

But as you can imagine, that's more easily said than done. In fact, first responders are often the most at risk of being injured or killed while trying to secure the scene. Mike Hanson, director of the Minnesota Department of Public Safety Office of Traffic Safety (OTS), was a member of the State Patrol for many years and still has lots of friends and colleagues who either are or were first responders. "Anyone who spent any amount of time working traffic, you either had a number of close calls or you've been hit," Hanson says. "It's based on a lifetime of working in traffic safety and seeing how dangerous these incidents can be."

How can first responder's secure and clear crashes more quickly? "Training," says Hanson. "Everybody needs to be trained, and it needs to be integrated. Everyone needs to know what their role is—fire, EMS, tow truck, etc. We don't want silos, we want all those groups to talk to each other."



But Hanson knows there's even more to learn, and that takes data. That's why OTS has been working with other stakeholders in DPS and MnDOT on a traffic incident management study. After a request for proposals several years ago, OTS awarded the bid to HDR Engineering. "They have been doing the research and analysis and working with MnDOT and USDOT and all our partners to identify what we need to do to make our traffic incident management protocols the best they can be," Hanson explains.

OTS expects to have a final product in the form of action items to work on in the next eight or nine months. In the meantime, they're looking at other areas of the country and how they're using big data and real-time data. Hanson says, "We can leverage some of that to make our response even more efficient and effective—we can respond even sooner than a 911 call."

This will also involve working with lawmakers to update language in Minnesota's laws about quick clearance and to amend traffic statutes to allow assets, such as ambulances and tow trucks, to get to the crash scene more quickly.

Ultimately, studying traffic incident management in Minnesota is about two things: Safety for our first responders and other users of the road, and restoration of traffic flow and loss of delay. In short, once we make sure everyone is safe, we can get them where they need to go.

Across the Nation:

CATOOSA, Okla. — First responders in Oklahoma are considering themselves lucky to be alive after a semi crashed into their vehicles while they were on the scene of a highway rollover.

On March 31, the Oklahoma Highway Patrol and Catoosa firefighters were investigating a rollover when a driver of a semi hit a fire truck and cruiser. The police department posted on Facebook that everyone was able to scramble to safety. There were no injuries.

There is no report on the cause of the crash yet. Catoosa Police Chief Ronnie Benight stated in the social media post that high winds were possibly a factor in the earlier crash. Article can be found on www.Policel.com



<u>Recent Trainings:</u>

MSP CVI Training January 25th – Basic overview of Traffic Incident Management and how it relates to Commercial Motor Vehicle Inspectors.

On March 20th 2023, TIM instructors provided a four hour class to the MN State Patrol Experienced Traffic Safety Officer Academy. The class included training on tactics and strategies State Troopers utilize while working on Minnesota highways.

MnDOT instructor John McClellan instructed at the Minneapolis Fire Academy with the help of Trooper Eric Ouellette. The four hour course covered TIM practices such as quick clearance, blocking lanes, vehicle positioning, and scene response.

MnDOT instructor John McClellan also instructed at the St. Paul Fire Academy and the MN Fire and Rescue School in Lake Crystal, MN

Upcoming Trainings:

April 13^{th} and 20^{th} – Squad Struck By Presentation for RCO's at District 4700 Mendota Heights

 $May 16^{th} - MSP$ Academy class, Camp Ripley MN



Reduce Responder Exposure



Reduce Secondary Crashes



Reduce Incident Clearance Time



Reduce Travel Delay

