Introduction to Traffic Incident Management

Saving Lives, Time, and Money

U.S. Department of Transportation
Federal Highway Administration

Traffic Incident Management, or TIM, offers coordinated strategies to detect, respond to, and clear traffic incidents. TIM programs increase traveler and responder safety. They also improve travel reliability, air quality, energy use, and commerce on all roadways.

When a crash, debris, stalled vehicle, or other incident affects roadways, TIM programs work to make sure responders collaborate to clear the incident scene safely and quickly. Firefighters, emergency medical services and technicians, law enforcement, towing and recovery, public works, transportation, and 911 dispatchers are many of the disciplines that work together using well-rehearsed procedures and advanced technologies to save lives, prevent secondary crashes, and return traffic to normal conditions.

A COORDINATED APPROACH

At its core, TIM teaches practices for responders to be safe and effective, including practices for clearance of traffic incident scenes; prompt, reliable, and open communication; and motorist and responder safeguards. TIM training offers procedures and techniques for incident notification, scene size-up, safe vehicle positioning, scene safety, command responsibilities, traffic management, and incident clearance and termination.

TIM can be effectively coordinated through regional committees that include all responder disciplines, as well as other public and private organizations that support incident mitigation. Committees meet quarterly or more frequently to collaborate and implement strategies to advance safe, quick clearance.

TIM can often include a range of technologies that responder agencies can use to serve the public more efficiently and effectively. Utilizing technologies such as unmanned aerial systems (UAS), computer-aided dispatch (CAD), navigation-app notification of active responders in the vicinity, passive incident detection using crowdsourced data, and high-resolution video sharing can help TIM professionals do their jobs safely and quickly.

The TIM community also fosters greater public awareness of and adherence to safe, quick clearance laws. States are modifying Move Over laws to implement additional penalties for endangering responders. States are also broadening Move Over law applications to include more responder communities.[1, 2]

POSITIVE RETURN ON INVESTMENT

Modern TIM practices are the result of decades of focused investment in training, processes, and technologies. From its genesis in the 1960s with freeway service patrols, TIM has grown to reflect a full discipline that supports emergency responder and motorist needs. Notable milestones of the last two decades include:

- **2003 | The TIM Self-Assessment** was launched by FHWA as a voluntary program to help regions benchmark and improve their TIM practices through data and performance. More than 90 regions now participate each year.

- **2007 | A National Unified Goal** further focused the TIM community on responder safety; safe and quick clearance; and prompt, reliable, and interoperable communications.

- **2013 | Free National TIM Responder Training** was launched. As of the year 2020, more than 500,000 professionals have completed this training to clear incidents safely, collaboratively, and quickly.[3]

- **2017 | Data-Informed Decision Making,** a National FHWA program, promoted the collection, analysis, and use of data to improve TIM practices across responder communities.

Regions recognize positive returns on investment in TIM. For example, the Arizona Department of Public Safety saved 25 full-time equivalent staff hours by improving TIM practices.[4] The Maryland TIM program eliminated 38.6 million vehicle-hours of delay, equating to more than $1.4 Billion in annual benefits.[5]

AN EVOLVING PRACTICE

The FHWA Next-generation TIM program now focuses on local agency TIM innovations, integrating proven technology, data, and training. It offers these benefits:

- **Increased Safety.** Next Generation TIM targets safety improvements through education and technology to help keep responders, drivers, and pedestrians safe across freeway, arterial, and multimodal travel.
- **Improved Travel Reliability.** Training, data, and technology combine to help local and State agencies reduce secondary crashes and delays, improving trip reliability and travel time.
- **Improved Operations.** Integrating proven technology, data, and training can reduce operator and responder workload, reduce costs associated with response vehicles struck, and improve strategic TIM resource allocation.

HELP ADVANCE TIM IN YOUR REGION

Every traffic incident responder, response agency, and even the broader public can help advance TIM. Begin by asking the following questions:

- Is every responder in your region TIM trained?
- Does your region have a TIM program? Do TIM stakeholders communicate routinely?
- Do your region's response communities collect, share, and use TIM performance data?

RESOURCES

- FHWA TIM Site
- FHWA Next Generation TIM Site
- Talking TIM Webinar Series
- National TIM Responder Training
- ResponderSafety.com

REFERENCES

1. Pennsylvania Department of Transportation Website. Move Over Law.
2. Maryland State Police News Release Oct 5, 2020.
3. FHWA TIM Training Status Report. Nov 23, 2020.
4. King, Jeff. Arizona Department of Public Safety. TIM Performance Measurements and Reducing Secondary Collisions. TIM Enhancement Task Force Meeting. Oct 2013.
5. Maryland Department of Transportation and the University of Maryland. Coordinated Highways Action Response Team 2019 Performance Evaluation and Benefits Analysis. Oct 2020.

U.S. Department of Transportation
Federal Highway Administration

Paul Jodoin, FHWA Office of Operations, (202) 366-5465, paul.jodoin@dot.gov
James Austrich, FHWA Office of Operations, (202) 366-0731, james.austrich@dot.gov
Joseph Tebo, FHWA Office of Operations, (202) 366-9242, joseph.tebo@dot.gov

Publication No: FHWA-HOP-22-14