



MODULE 8: TSMO and Incident Management



Traffic Incident Management (TIM)

- Planned and coordinated process to detect, respond and clear incidents and crashes quickly and safely
- Multi-disciplinary activity involving DOTs & emergency service providers
- TIM reduces the duration of traffic incidents (30%-50%)
 - Reduces congestion
 - Improves reliability
 - Improves safety - reduces secondary crashes



Principles of Good TIM

- Promote the safety of motorists, crash victims, and incident responders.
- Reduce the time for incident detection and verification.
- Reduce response time (the time for response personnel and equipment to arrive at the scene).
- Exercise proper and safe on-scene management of personnel and equipment, while keeping as many lanes, as possible, open to traffic.
- Conduct an appropriate response, investigation, and safe clearing of an incident.
- Reduce clearance time (the time required for the incident to be removed from the roadway).
- Provide timely and accurate information to the public that enables them to make informed choices.
- Get traffic moving again as soon as possible after a partial or complete roadway closure while managing the affected traffic until normal conditions are restored.



Traffic Incident Management Cost Management and Cost Recovery Primer, FHWA

INCIDENT TIMELINE



National Traffic Incident Management (TIM) Responder Training Program

- TIM Training is an interactive, hands on training bringing together police, firefighters, tow operators, medical personnel and other incident responders.
- Over 277,000 responders trained.
- Established a national network of TIM training champions.
- Foster relationship building both in-State and State-to-State.
- Institutionalizing the training - Public safety academies in 20 States have adopted training.



Safety Service Patrols and Incident Response Truck

Part of TIM Program

- Provides specially equipped response trucks and trained operators
- Assists stranded motorists and clearing debris
- Provides traffic control during traffic incidents

Example Benefits

- Cleared 80% of incidents within 10 minutes
- Average Benefit/Cost Ratio of 12.4:1
- Favorable public response



Training

TIM training areas:

- TIM within agency or company
- Other responders' roles or existence
- Specific procedural operations

| TRAINING STRATEGIES | Inadequate Joint Training | Responder Competency/ Standards | Variable Traffic Control Training |
|--|---------------------------|------------------------------------|--------------------------------------|
| National TIM Training | • | | |
| Information Clearinghouses/ Communities of Practice | • | | |
| Local Multidisciplinary TIM Training | • | | |
| TapleTOP Exercises/Scenarios | • | | |
| After-Action Reviews/Debriefings | • | | |
| Multidisciplinary TIM Response Plan/ Operating Procedures | • | • | • |
| TIM Personnel Certification/ Training Requirements | | • | • |



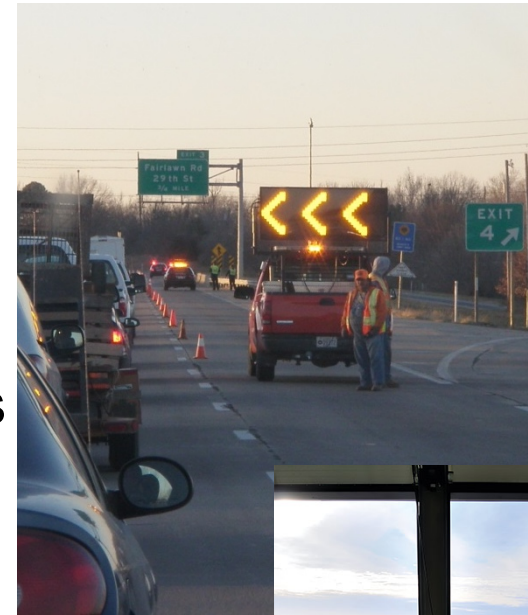
Equipment

Some common equipment used in TIM events:

- High-visibility safety apparel/ vehicle markings
- Vehicle-Mounted Push Bumpers
- Quick Clearance Using Fire Apparatus
- End-of-Queue Advance Warning Systems

Strategies for rapidly/ efficiently mobilizing equipment:

- Personnel/equipment resource lists
- Equipment staging areas/pre-positioned equipment



MOUs

Successful TIM programs require **multiagency coordination** making it important to:

- Meet regularly with partner agencies and stakeholders
- Establish a joint vision or mission
- Formally document all agreements with memorandums of understanding (MOUs) signed by all participants



TIM Costs & Benefits

- In the TOP-BC, the number of crashes is predicted to change for any strategy that results in a change in VMT, or strategies that result in a change to the volume/capacity level of freeway facilities.
- Improved **safety** of motorists, crash victims, and incident responders.
 - 10% reduction in fatality crashes for incident detection/verification strategies due to faster response times
- Timely and accurate information to the public, enabling them to make informed choices
 - No change to default crash rates, but economic and environmental savings?
- Faster return to normal conditions; **reduced traffic impacts** during partial or complete closure
- <https://ops.fhwa.dot.gov/publications/fhwahop16084/fhwahop16084.pdf>



