

Resources to Support Traffic Incident Management Capability Maturity Framework Users

Traffic Incident Management (TIM) consists of a planned, coordinated, multi-disciplinary process to detect, respond to, and clear traffic incidents so that traffic flow may be restored as safely and quickly as possible.

The TIM Capability Maturity Framework has evolved to take advantage of an existing and closely related process called the TIM Self-Assessment. In 2015, TIM SA was aligned with the emerging Capability Maturity Framework (CMF). Today, the framework is formally known as TIM Capability Maturity Self-Assessment (CM SA).

Just like the other program area CMFs, the TIM CM SA provided a structured approach to assessing an agency's existing capabilities, and upon completion, provides an action plan for the agency to improve its capability levels. However, in contrast to other frameworks, the TIM CM SA is used for benchmarking State and local TIM programs around the country.

For an example of the TIM CM SA national analysis results, see [2018 Traffic Incident Management Capability Maturity Self-Assessment National Analysis Report](#).

The TIM CM SA is organized differently from the other CMFs with three major areas of assessment instead of the six dimensions:

- Strategic (addresses formalization of TIM programs, TIM training and TIM performance measures)
- Tactical (addresses TIM laws, policies and procedures for incident response and clearance, and responder & motorist safety)
- Support (addresses data collection/integration/sharing related questions)

The following resources, organized by the three major areas, provide examples from different parts of the country around these topics. These resources provide users of TIM CM SA with relevant information as they consider the results of the TIM CM SA.

Click below to go directly to a particular area of focus:

- [Strategic](#)
- [Tactical](#)
- [Support](#)

For more general resources on TIM, see [FHWA Traffic Incident Management Program website](#). The [TIM Network](#) also provides additional resources for some of the areas listed in the TIM CMSA.

Strategic

As part of the TIM CM SA, the strategic area of focus addresses the level of formalization of TIM programs including the necessary agreements required between the agencies. Support for TIM training, after action reviews and the use of TIM performance measures are also included in this section. Table 1 provides a list of resources in this area.

Table 1. Resources Relating to Strategic Areas of Focus

| Sub-Dimensions | Primary Example |
|---|--|
| <p>Formal TIM Programs</p> <p>Formal TIM Programs are defined by a planned and coordinated program to detect, respond to, and remove traffic incidents and restore traffic capacity as safely and quickly as possible. This coordinated process involves a number of public and private sector partners and underpinned by agreements and memoranda of understanding between various partners.</p> | <p>Florida Department of Transportation's (DOT) TIM Program comprises of local, state and private partners including law enforcement, fire rescue, emergency medical services, transportation, towing and recovery service providers, medical examiners, hazardous material responders, media, etc. Regional TIM teams have been established in many areas of the state.</p> <p>Additional Examples</p> <ul style="list-style-type: none"> • The TIM network maintains a list of TIM Programs in the country. • Washington State has agreements with the State Patrol and various county medical examiners for operating procedures related to dispatch and communications with investigative personnel. Traffic Incident Management is a key component in the Joint Operations Policy Statement (JOPS) agreement between WSDOT and the Washington State Patrol (WSP) and the WA Fire Chiefs (WFC). |
| <p>TIM Training</p> <p>This area is related to ongoing support and delivery of TIM training using national, multidisciplinary training curriculum to help ensure a well-coordinated response to traffic incidents that achieves faster clearance and improved safety for both responders and motorists.</p> | <p>Oregon DOT has a robust TIM Training Program, and even has created a "Train the Trainer" course to ensure that TIM training staff are as knowledgeable as possible.</p> <p>Additional Examples</p> <ul style="list-style-type: none"> • New Jersey DOT's Traffic Incident Management Resource webpage provide ongoing support and guidance for TIM training. Videos, working groups and other resources are provided. • Arizona's TIM website was built to be a one-stop shop for TIM training |

| Sub-Dimensions | Primary Example |
|---|--|
| <p>After Action Reviews</p> <p>This area is related to support for structured reviews or debriefs of significant TIM events by multi-agency, multi-disciplinary groups to analyze what happened, why it happened, and how response can be improved.</p> | <p>Virginia DOT incident after action report: Virginia DOT provides standard definitions, processes and templates for reporting—see attachments.</p> <p>Additional Example</p> <ul style="list-style-type: none"> • City of Seattle After Action Report Aurora Avenue Bus Collision: a detail report of a bus crash that occurred on September 24, 2015. |
| <p>TIM Performance Reports</p> <p>This area is related to the encouragement to adoption of three national TIM performance measures (roadway clearance time, incident clearance time and secondary crashes) and the supporting practices and reporting around these measures.</p> | <p>Oregon DOT had coordinated efforts between the State DOT and the State Police to establish protocols for describing the nature and extent of provided information. They use this information to develop performance report, such as the Oregon DOT TIM Performance Measures Quarterly Report.</p> <p>Additional Examples</p> <ul style="list-style-type: none"> • Missouri DOT reports the national TIM performance measures as part of its TIM program. • Nevada DOT implemented a statewide pilot project for standardized TIM performance measurement and reporting. • The I-95 Coalition identified common performance measures for TIM in States along the East Coast—see Section 14. Performance Measures. • Michigan DOT assessed its TIM Action Team progress towards achieving its goals through responder workshops, literature reviews, leadership visioning, and a new survey of 1,200 Michigan motorists. |

Tactical

As part of the TIM CM SA, the tactical area of focus addresses the TIM laws for quick clearance, policies and procedures for response, and responder and motorist safety. Table 2 provides a list of resources in this area.

Table 2. Resources Relating to Tactical Areas of Focus

| Sub-Dimensions | Primary Example |
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| <p>TIM Laws</p> <p>This area pertains to status and support for three types of general legislation constituting "Quick Clearance Laws" (Move Over Laws, Driver Removal Laws, Authority Removal Laws).</p> | <p>American Automobile Association (AAA)'s Digest of Motor Laws is an online compendium of laws and rules. A summary of Move Over laws by State are provided in the digest.</p> <p>Additional Examples</p> <ul style="list-style-type: none"> • A national review of best practices around TIM laws was conducted by FHWA in 2009. • The Pennsylvania State Transportation Advisory Committee's TIM Report lists policies and legislation that support TIM in the State—see Section 2.4. The report also provides an overview of best practices in other States—see Section 3. |
| <p>Policies and Procedures for Incident Response and Clearance</p> <p>This area pertains to various functional and overlapping TIM activities such as detection and verification, traveler information, response, scene management and traffic control and quick clearance and recovery.</p> | <p>Colorado developed guidance that contains defined workflows, communication protocols, and operational plans. Colorado incorporated these into the Transportation Management Center Situational Awareness System. Colorado State Patrol conducts regular outreach and engagement exercises with the Towing and Recovery Professionals of Colorado as part of the Governor's Task Force on Responder Safety.</p> <p>Additional Example</p> <ul style="list-style-type: none"> • Georgia DOT's TIM Guidelines provide standard guidelines to improve responder and motorist safety by efficiently clearing incident scenes |

| Sub-Dimensions | Primary Example |
|---|--|
| <p>Responder and Motorist Safety</p> <p>This area focuses on minimizing the risk for responders and motorists. For responders, this includes considerations of policies including formalized procedures to manage traffic flows through and around an incident area; training in emergency traffic flow management, proper use of traffic control devices, emergency lighting, and emergency vehicle positioning; and, use of ANSI Class 2 or 3 approved reflective clothing. For motorists, this includes consideration of traffic control at the scene and at the end of the queue, use of Manual on Uniform Traffic Control Devices (MUTCD), equipment staging and emergency lighting procedures.</p> | <p>New Jersey DOT's Traffic Incident Management Safety Guidelines for Emergency Responders provides standard operational practices for first responders. [The guidelines are the third document in the linked repository.]</p> <p>Additional Example</p> <ul style="list-style-type: none"> • Minnesota's State Fire Marshall, a Division of Minnesota's Department of Public Safety, has created a repository called SceneSafe. The website includes a 30 minute video, along with other resources to improve responder safety. |

Support

As part of the TIM CM SA, the support area of focus addresses the data collection, sharing and integration for TIM related activities. Table 3 provides a list of resources in this area.

Table 3. Resources Relating to Support Areas of Focus

| Sub-Dimensions | Primary Example |
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| <p>Data Collection</p> <p>This area supports effective collection of TIM-related data to support performance measurement and management. This includes considerations of low-cost, off-the-shelf technologies, including integrated computer-aided dispatch (CAD), electronic crash reporting, use of traffic management center software and various smart devices that make data collection from the field possible for an event.</p> | <p>Minnesota DOT and State Patrol CAD Integration for Traffic and Incident Management [Page 36 of the pdf] provides insight into the value of CAD integration for TMCs.</p> <p>Additional Example</p> <ul style="list-style-type: none"> Nevada DOT implemented a statewide pilot project that included data collection for TIM performance measurement and reporting. |
| <p>Data Sharing and Integration</p> <p>This area pertains to the effective sharing of information between agencies and travelers to support effective response, improve situational awareness and inform motorists of ongoing activities.</p> | <p>Pennsylvania Turnpike’s use of dashboards to show TIM events, performance. Details of TIM data collection, use and integration with other data sources are provided in a presentation made by the Turnpike on September 2018.</p> <p>Additional Examples</p> <ul style="list-style-type: none"> Oregon’s Traffic Incident Management Strategic Plan outlines data and data-sharing policies with all response partners. Washington State developed an assessment of cost and time savings, and presents the case for its TIM Program on its Incident Response Program website. |