

MEMORANDUM

TO: Systems Performance, Operations, and Technology Subcommittee

FROM: Andrew Burke, Transportation Engineer

SUBJECT: TPB Regional TIM Self-Assessment

DATE: February 15, 2024

In January 2018 TPB staff in collaboration with COG's Department of Homeland Security staff formed the Traffic Incident Management Enhancement (TIME) Task Force at the direction of the COG Board of Directors chaired by Matt Letourneau. The task force formed to oversee the effort encompassed a multi-disciplinary group, comprised of Transportation, Law Enforcement, and Fire/EMS subject matter experts. The task force met seven times during the year and hosted a regional TIM workshop. The Task Force issued a final report and presented it to the COG Board who approved the findings. Listed below are the seven priority items identified in the report:

TIME TASK FORCE RECOMMENDATIONS

- 1. Update Regional Agreements and Improve Consistency of TIM Laws and Policies.
- 2. Coordinate Regional Annual TIM Self-Assessments.
- 3. Encourage and Coordinate TIM Trainings to Promote Best Practices.
- 4. Launch Outreach Initiatives That Better Engage the Public and Officials on TIM.
- 5. Create a Regional TIM Program.
- 6. Designate Transportation Incident Responders as Emergency Responders Regionwide.
- 7. Expand Roadway Service Patrols to Federal Parkways and Other Critical Major Roads Not Currently Covered.

Of the seven recommendations, TPB staff looked at recommendation number two, coordinating a regional TIM Self-Assessment, as one of the most straightforward and attainable recommendations to implement. Unfortunately, staff turnover at member agencies and the COVID-19 pandemic delayed this effort until 2023. Coming out of the pandemic, TIM efforts among TPB member agencies began to re-emerge. The VDOT NOVA TIM committee started meeting again, DDOT started efforts to form a TIM committee, and MDOT/SHA looked at TIM in the region as part of their TSMO planning workshops. In 2023 TPB staff renewed planning for a regional TIM Self-Assessment which took place in November 2023.

TPB REGIONAL TIM SELF-ASSESSMENT

The FHWA's TIM Capability Maturity Self-Assessment (<u>TIM CMSA</u>) tool was developed by the U.S. DOT Federal Highway Administration with input from state DOTs, law enforcement, and other TIM responders. The TIM self-assessment intended use is not to be a benchmarking tool, but rather as a resource for agencies to identify appropriate actions for improving management and operations of traffic incident management systems. The FHWA's TIM Program management recommends

performing the Self-Assessments periodically. The tool has been available since 2003 with about one hundred responding locations each year.

The TIME Task Force had over thirty members and an even larger number attended the regional TIM event held at COG. After internal discussions TPB staff concluded starting with a small transportation focused group made more sense for this first regional self-assessment. Representatives from the three TPB State DOT members, Joe Warner from VDOT, Charles Tenbrook from DDOT, and Eric Fogle from MDOT took part in the self-assessment, as well as Taran Hutchinson from MATOC.

The Self-Assessment tool currently consists of forty-one questions in seven sections. These sections are Formal TIM Programs, TIM Training and After-Action Reviews, TIM Performance Measures, TIM Laws, Policies and Procedures for Incident Response and Clearance, Responder and Motorists Safety, and Support. The overall score for the region was 71.68. The scores broken down by section follows:

- 1. Formal TIM Programs subsection score: 6.96.
- 2. TIM Training and After-Action Reviews subsection score: 6.43.
- 3. TIM Performance Measures subsection score: 11.25.
- 4. TIM Laws subsection score: 7.28
- 5. Policies and Procedures for Incident Response and Clearance subsection score: 22.5.
- 6. Responder and Motorists Safety subsection score: 10.59.
- 7. Support section score: 6.67.

Individual question responses are in the 2023 TPB TIM SA RESULTS document attached to the end of this memo.

RESULTS

When looking at the results of this first TIM Self-Assessment there are two things to keep in mind. First, this assessment had a transportation agency focus and it is possible the score may have been different with inputs from other fields. The Baltimore Metropolitan Council's TIMBR committee which has a long history of performing the TIM Self -Assessment, starting in 2004, has seen its score change over the years as their process has matured and stakeholders become more engaged in the process. Changes to the self-assessment tool can also influence scores as BMC has seen their score vary over the years as the tool has changed. Plans for future self-assessments include expanding representation from other fields related to TIM issues by leveraging relationships with both MATOC and the COG R-ESF 1 Committee and its links to the Law Enforcement and Fire/EMS community in the NCR. Second, while this score is a baseline to use for the region going forward it does not denote whether the region is doing a good or poor job with TIM in the region. It is a snapshot of where we see ourselves currently and hopefully members will use the information to help guide the discussion as our members make decisions on implementing TIM strategies in their work programs.

The national average score in 2022, the last <u>report</u> issued by the FHWA TIM program, was 73.1% for established TIM programs. The average score for emerging TIM programs was 62%. The 71.68% score from the TPB's regional self-assessment results puts the NCR on the higher end of the scale for new and emerging TIM programs. TPB staff will keep track of results to highlight where the region is in regards TIM implementation and how it compares to other peer areas nationally.

NEXT STEPS

TPB staff will continue to support TIM implementation in the NCR region amongst our member agencies and seek to assist in capacities where able. TPB staff and the COG R-ESF 1 Committee have reviewed the TIME Task Force's recommendations regularly and look for opportunities to further their implementation in the region. TPB staff discussed with our state DOT member a schedule for hosting future self-assessments and chose a biennial schedule as the best option for the region. The next TIM Self-Assessment will be in 2025 with a plan to increase representation from other fields working in the TIM area. Any questions or comments please reach out to TPB staff member Andrew Burke at aburke@mwcog.org.

Andrew Burke

From: FHWA Traffic Incident Management Self-Assessment <fhwa-tim-sa@battelle.org>

Sent: Monday, December 18, 2023 3:17 PM

To: Andrew Burke

Subject: Survey Submited - Traffic Incident Management Capability Maturity Self-Assessment

Traffic Incident Management Capability Maturity Self-Assessment - Battelle Memorial Institute

Andrew Burke aburke@mwcog.org submitted the following:

Survey ID: 372

Last Updated: 2023-12-18 19:12:54

TIM Team Name: Systems Performance, Operations and Technology Subcommittee

TIM Team State: District of Columbia, Maryland, and Virginia. **TIM Team Location / Description:** National Capital Region

TIM Stakeholder Group(s): transportation,

TIM Group Other:

1. Is there a formal TIM program that is supported by a multidiscipline, multi-agency team or task force, which meets regularly to discuss and plan for TIM activities?

Answer Selected: TIM activities are occurring on an ad-hoc basis and no formal TIM program exists

Answer Score: 1

1a. How frequently does the team or task force meet?

Response:

Comment: While there is currently no formal TIM program the NCR region, many of the things a TIM committee would do are performed by a combination of the Metropolitan Area Transportation Operations Coordination (MATOC), MWCOG's Transportation Emergency Preparedness (RESF 1) Committee, and the Transportation Planning Board's Systems Performance, Operations and Technology Subcommittee (SPOTS).

2. Are all disciplines represented and key agencies participating in ongoing TIM enhancement activities/efforts?

Answer Selected: There is strong, routine involvement from all disciplines and agencies, which in turn lead to good working relationships. Collaboration and teamwork at incident scenes is consistently evident. The importance of collaboration and relationships is widely understood and promoted through training, planning, and program activities. All disciplines understand that they are an equal partner in TIM.

Score: 4

Comment: Due to the unique situation of the National Capitol Area (NCR) geography, responders often work with other disciplines and agencies from multiple states and local jurisdictions in responding to incidents.

3. Is there a full-time position within at least one of the participating agencies with responsibility for coordinating the TIM program as their primary job function?

Answer Selected: Responsibility for coordinating the TIM program has been assigned to a position within a participating agency and 50% or more of their time is dedicated to TIM.

Score: 3

Comment: Not every member agency has someone whose time is more than 50% devoted to TIM, however our DOT members do have staff who have TIM as a large component of their duties.

4. Is planning to support TIM activities, including regular needs assessments, done across and among participating agencies?

Answer Selected: Some local TIM planning may take place but is predominantly specific/unique to individual partner agency(ies) only. Some regional TIM planning is conducted, but typically on an ad-hoc basis and in reaction to an urgent need or problem. TIM needs are assessed on an infrequent (e.g., annual) basis with minimal follow-up.

Score: 2

Comment:

5. Are funds available for TIM activities?

Answer Selected: Some TIM elements/activities such as program or training support are funded annually. Little programming and budgeting takes place for other TIM enhancement activities, though a nominal amount of funding is sometimes available. There is a moderate understanding of available funding and the process for accessing it.

Score: 3

Comment: On a regional level, MATOC performs region wide exercises that focus on TIM.

Section Comment. Do you have any additional comments on your scores in the Formal TIM Programs subsection?

Section Comment: No.

Formal TIM Programs subsection score: 6.9642857115000

6. Have stakeholders in the region participated in a SHRP2 National TIM Responder Training Program, or equivalent, Train-the-Trainer (TtT) session and are they actively training others?

Answer Selected: Yes, and between 20%-40% of the TtT participants have provided TIM training to others. There are a handful of very active trainers, but many trainers have only assisted with 1 or 2 training sessions.

Score: 3
6a. Is there any other TIM-related supplemental or topic-specific training being provided?
Response:
Comment:
7. Is the SHRP2 TIM Responder Training being conducted in a multidiscipline setting?
Answer Selected: The majority of training activities are taking place in a multidiscipline setting. Large agencies that are using in-service to train their employees have invited other disciplines to participate in the training.
Score: 4
Comment:
8. Has the SHRP2 TIM Responder Training, or equivalent, been incorporated into the state or local academy and/or technical college curriculums?
Answer Selected: A limited number of academies and/or technical colleges have incorporated the SHRP2 TIM Responder Training, or equivalent, into their curriculums.
Score: 2
Comment:
9. Does the TIM program conduct multidiscipline, multi-agency after-action reviews (AARs)?
Answer Selected: Routine AARs are conducted, but not all involved responders participate. AARs may only occur in the context of an established TIM committee or task force meeting, which may lead to delayed or ineffective discussion.
Score: 3
Comment: For large multistate events, MATOC performs ARRs for the NCR region.
Section Comment. Do you have any additional comments on your scores in the TIM Training and After-Action Reviews subsection?
Section Comment: No.
TIM Training and After-Action Reviews subsection score: 6.4285714125000
10. Is Roadway Clearance Time (RCT) measured and used by your agency? FHWA defines RCT as the "time between first recordable awareness of an incident by a responsible agency and first

confirmation that all lanes are available for traffic flow."

Answer Selected: CT is routinely measured and reported.
Score: 3
Comment:
11. Which of the following data collection and analysis practices best align with your region for RCT?
Answer Selected: Data are collected among TIM partner agencies for a significant proportion of incidents in the region. Data collection reflects the intent for use in performance measurement. Efforts may be underway to broaden data collection and explore opportunities for data integration.
Score: 3
Comment: The Regional Integrated Transportation Information System (RITIS) software is often used to access this information.
12. Has the TIM program established performance targets for RCT?
Answer Selected: No RCT performance targets have been established.
Score: 1
Comment:
13. How does your agency use RCT performance data to influence your TIM operations?
Answer Selected: Regional or local operations are rarely, if ever, modified or improved upon based on prior TIM performance. Status quo is generally acceptable to all agencies and disciplines.
Score: 1
Comment:
14. Is Incident Clearance Time (ICT) measured and used by your agency? FHWA defines ICT as the "time between the first recordable awareness of the incident and the time at which the last responder has left the scene."
Answer Selected: ICT is routinely measured and reported.
Score: 3
Comment:
15. Which of the following data collection and analysis practices best align with your region for ICT?

Answer Selected: Data are collected among TIM partner agencies for a significant proportion of incidents in the region. Data collection reflects the intent for use in performance measurement. Efforts may be underway to broaden data collection and explore opportunities for data integration.
Score: 3
Comment:
16. Has the TIM program established performance targets for ICT?
Answer Selected: No ICT performance targets have been established.
Score: 1
Comment:
17. How does your agency use ICT performance data to influence your TIM operations?
Answer Selected: Regional or local operations are inconsistently modified or improved upon based on this TIM performance measure.
Score: 2
Comment:
18. Is the number of Secondary Crashes being measured and used? FHWA defines Secondary Crashes as the "number of unplanned crashes beginning with the time of detection of the primary crash where a collision occurs either a) within the incident scene or b) within the queue, including the opposite direction, resulting from the original incident?
Answer Selected: Secondary Crashes are not typically measured.
Score: 1
Comment:
19. How is data for the number of Secondary Crashes collected?
Answer Selected: Data collection is limited, with TIM data available only as a bi-product of existing/separate data collection efforts (i.e., fields taken from crash reports) and manual review is required.
Score: 1
Comment:
20. Has the TIM program established performance targets for a reduction in the number of Secondary Crashes?

Answer Selected: No Secondary Crash reduction performance targets have been established.

Score: 1
Comment:
21. How does your agency use Secondary Crash performance data to influence your TIM operations?
Answer Selected: Regional or local operations are rarely, if ever, modified or improved upon based on prior TIM performance. Status quo is generally acceptable to all agencies and disciplines.
Score: 1
Comment:
Section Comment. Do you have any additional comments on your scores in the TIM Performance Measures subsection?
Section Comment: No.
TIM Performance Measures subsection score: 11.2499999915625
Strategic section score: 24.642857138
22. Is an Authority Removal Law in place?
Answer Selected: There is an Authority Removal Law in place that has been integrated into agency policies/protocols, and is utilized on a regular basis.
Score: 4
Comment:
23. Is a Driver Removal Law in place?
Answer Selected: There is a Driver Removal Law in place that has been integrated into agency policies/protocols, and is utilized on a regular basis.
Score: 4
Comment:
24. What activities are in place to outreach to and educate responders and the public about the value of TIM laws in place as well as the overall goals and benefits of TIM?

responders and the public understand and comply with the laws.

Answer Selected: Outreach/education for the TIM-related safe, quick clearance laws is ongoing to ensure that both

Score: 3
Comment:
Section Comment. Do you have any additional comments on your scores in the TIM Performance Measures subsection?
Section Comment: No.
TIM Laws subsection score: 7.2794117536765
25. Is there a Safety Service Patrol Program in place for incident and emergency response?
Answer Selected: There is sustained full-function Safety Service Patrol Program in place that provides motorist assistance, performs clearance and recovery services, and assists with emergency traffic control and scene management There is a comprehensive training program which includes classroom and hands-on training that all Safety Service Patro operators must complete.
Score: 4
Comment:
26. What level of coverage does the Safety Service Patrol Program provide?
Answer Selected: The Safety Service Patrol Program operates a large enough fleet to provide ample coverage on all major roadways (i.e., interstates, limited access highways) identified as needing service based on traffic volumes and/or incident frequency.
Score: 4
Comment: One set of roadways in the region lacking SSP coverage in the NCR are the many roads under National Park Service supervision.
27. Are temporary traffic control (TTC) devices (e.g., cones, advanced warning signs, etc.) prestaged in the region to facilitate timely response?
Answer Selected: A needs assessment has been completed to identify where pre-staged TTC devices are required and TTC devices are available at those locations. All TIM stakeholders are aware of where the TTC devices are staged and have the ability to, or know the process to, access them.
Score: 4
Comment:

28. Do towing and recovery procedures/rotation list policies deploy resources based on type/severity of incident?

Answer Selected: The tow procedures/rotation list was established to support safe, quick clearance. The rotation policy deploys resources based on the severity of the incident and proximity to facilitate a proper and quick response.
Score: 4
Comment:
29. Do towing and recovery procedures/rotation list policies include company/operator qualifications, equipment requirements, and/or training requirements?
Answer Selected: The tow procedures/rotation list has an application process that requires a summary of equipment capabilities. There is an initial check of this information but follow-up activities are not consistently completed. New operators are required to complete training, but veteran towers are often grandfathered in and do not need to complete training.
Score: 3
Comment:
30. Do towing and recovery procedures/rotation list policies include penalties for non-compliance of response criteria?
Answer Selected: Penalties are clearly identified but are not uniformly enforced.
Score: 3
Comment:
31. For incidents involving a fatality, is there a procedure in place for early notification and timely response of the Medical Examiner?
Answer Selected: A procedure is in place that is understood by both those requesting the Medical Examiner and the Medical Examiner's office. It is regularly reviewed and updated.
Score: 4
Comment:
32. For incidents involving a fatality, is there a procedure for the removal of the deceased prior to Medical Examiner arrival?
Answer Selected: A procedure is in place for removal of the deceased prior to the arrival of the Medical Examiner. The procedure is understood by response agencies, the Medical Examiner and the Medical Examiner's office. The procedure is regularly reviewed and updated.
Score: 4
Comment:

Section Comment. Do you have any additional comments on your scores in the Policies and Procedures for Incident Response and Clearance subsection?	
Section Comment: No.	
Policies and Procedures for Incident Response and Clearance subsection score: 22.4999999653676	
33. Are there procedures in place for expedited crash investigations?	
Answer Selected: A procedure is in place for expedited crash investigations. The procedure is understood by the majority of TIM stakeholders. The procedure is regularly reviewed and updated.	
Score: 4	
Comment:	
34. Do TIM responders routinely utilize TTC devices to provide traffic control for the three incident classifications (minor, intermediate, major) in compliance with the MUTCD?	
Answer Selected: TIM stakeholders carry and regularly deploy TTC devices at most incident scenes.	
Score: 3	
Comment:	
35. Do TIM responders routinely utilize traffic control procedures to provide back of traffic queue warning to approaching motorists?	
Answer Selected: Providing back of traffic queue warning is considered a priority. A policy/procedure for providing back of traffic queue warning has been established and training is regularly conducted.	
Score: 4	
Comment:	
36. Is there a mutually understood procedure/guideline in place for safe vehicle positioning?	
Answer Selected: A procedure/guideline is in place for the safe positioning of vehicles and it is consistent with the National TIM Responder Training Program. The procedure/guideline is understood by all TIM stakeholders. The	

37. Are there mutually understood procedures/guidelines in place for use of emergency-vehicle

procedure/guideline is regularly reviewed and updated.

Score: 4

Comment:

lighting?

these are not consistent or shared with other agencies.
Score: 2
Comment:
38. Are TIM responders following high-visibility safety apparel requirements as outlined in the MUTCD?
Answer Selected: Most responders are following high-visibility safety apparel requirements.
Score: 3
Comment:
Section Comment. Do you have any additional comments on your scores in the Responder and Motorist Safety subsection?
Section Comment: No.
Responder and Motorists Safety subsection score: 10.5882352920000
Tactical section score: 40.367647058
39. Is TIM video captured via TMCs and/or public safety CAD systems and is it shared with other disciplines for real-time operational purposes?
Answer Selected: No TIM video is collected and shared.
Score: 1
Comment:
39a. Describe the level of public safety Computer Aided Dispatch (CAD) integration with TMC/TOC software and systems.
Answer Selected: Public safety agency CAD information is viewed by TMC/TOC personnel on a public-facing web page or similar mechanism requires retyping to input into TMC/TOC software.
Score: 2
40. Are there policies or procedures in place for signal timing changes to support traffic

management during incident response?

Answer Selected: A standard policy is in place regarding the adjustment of signal timings during incident response but not all agencies are aware of it.
Score: 3
Comment:
41. Are there pre-planned detour and/or alternate routes identified and shared between TIM stakeholders?
Answer Selected: There are pre-planned detour and/or alternate routes identified and this information is conveyed to all impacted TIM stakeholders. Comprehensive, interactive guides have been developed. These guides are accessible via the web and are reviewed and updated regularly.
Score: 4
Comment:
Section Comment. Do you have any additional comments on your scores in the Support section?
Section Comment: No.
Support section score: 6.66666665
FHWA Traffic Incident Management Capability Maturity Self-Assessment Total Score: 71.677170860
Battelle Contact Us: fhwa-tim-sa@battelle.org