



FLORIDA TRAFFIC INCIDENT MANAGEMENT (TIM) 2019 STRATEGIC PLAN January 2019

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EXECUTIVE SUMMARY

The Florida Department of Transportation (FDOT) 2018 Traffic Incident Management (TIM) Strategic Plan was developed under the leadership of the State Traffic Engineering and Operations Office (STEOO), Incident Management/Commercial Vehicle Operations (CVO) Program Division. District-level TIM Managers and support personnel also contributed significantly with input, guidance and representation of stakeholder interests.

The state of Florida enjoys a mature traffic incident management (TIM) program. Examples of the more than three decades of investment and successes that set the stage for envisioning a future include:

- **Technology** – Regional or Satellite Traffic Management Centers (RTMCs/STMCs) integrate data from Intelligent Transportation System (ITS) field devices, state law enforcement computer aided dispatch (CAD) and other sources to detect and verify incidents, coordinate response activities, and provide information to responders and motorists.
- **Resources** – FDOT's service patrol program, known as the Road Rangers, patrols more than 1,500 centerline miles of freeways proactively identifying incidents and clearing roadways. The Rapid Incident Scene Clearance (RISC) incentive based heavy-duty wrecker program is available in several Districts to support quick clearance of major incidents.
- **Institutional** - FDOT is a leader nationally in providing a well-established structure to support TIM. This structure includes a full-time statewide TIM Program Manager in FDOT's Central Office, TIM Program Managers in each district, a statewide TIM Working Group to facilitate continued collaboration amongst TIM partner disciplines and multiagency, multidiscipline stakeholder representation in twenty-five (25) active local TIM Teams in all seven FDOT Districts and Florida's Turnpike.

These examples and FDOT's recognition and reinforcement of TIM as a critical Transportation Systems Management and Operations (TSM&O) Program element have positioned the state for continued and future success. However, even with existing investments and innovations in TIM, much work remains for enhancing TIM in Florida. An agency-wide strategic plan, at its core, is designed to set priorities, focus energy and resources, strengthen operations, and ensure that stakeholders are working toward common goals.

TIM Strategic Plan Organization and Topics

For over 15 years, the Federal Highway Administration (FHWA) has utilized the TIM Capability Maturity Self-Assessment (TIM CMSA) as a tool to evaluate the state of practice in traffic incident management across the country. The TIM CMSA provides a systematic and structured approach for assessing and benchmarking existing TIM capabilities, and, upon completion each year, provides an Action Plan with tangible actions for increasing capability and sophistication levels. Florida has been a longstanding participant in the TIM CMSA since it was initiated in 2003. As such, and given FDOT's and its partner stakeholders' familiarity with the CMSA content, the Florida TIM Strategic Plan is purposely structured according to the following primary TIM program areas. Under each TIM program area are the numbered subsections of the strategic plan that address specific topics.

Strategic – Programmatic activities of TIM covering formal policies, partnerships and understandings among agencies, measuring and evaluating TIM performance.

Section	Topic
2	Formal TIM Programs
3	TIM Training
4	After-Action Reviews
5	TIM Performance Measures

Tactical – the on-scene activities addressing responder and motorist safety, response, traffic control and clearance.

Section	Topic
6	TIM Law Outreach and Public Education
7	Policies and Procedures for Incident Response and Clearance
8	Responder and Motorist Safety

(continued)

Support – Effective TIM enabling activities such as interagency communications, data sharing, ITS and traveler information.

Section	Topic
9	Data Collection/Integration/Sharing

Additionally, to emphasize the importance of TIM in the context of other stand-alone TSM&O strategies, the Strategic Plan also includes sections on the priority focus areas of: Integrated Corridor Management and Arterial TIM; TIM for Express Lanes; and TIM Supplement for Transportation Management Plans.

In each section, subsections are presented as strategies. For each strategy, the State of the Practice and Strategic Direction are described followed by “Steps to Get There” and a timeline for implementation. In total and as summarized in Table ES-1, 23 strategies and 65 corresponding action items have been identified to advance Florida’s TIM Program.

Table ES-1 2018 FDOT TIM Strategic Plan Summary

ID	Action Item	Timeline
2	FORMAL TIM PROGRAMS	
2.1	Statewide TIM Working Group Strategic Direction: Maintain as a permanent entity for providing guidance to FDOT, its partners and other stakeholders on policy matters and issues impacting TIM needs in the State of Florida.	
2.A	Formalize the FL TIM Working Group by documenting, communicating, and reinforcing objectives with TIM Working Group member agencies/organizations. Consider Working Group leadership structure potentially comprised of an individual representing FHP, Fire and FDOT.	< 1 year
2.B	Meet quarterly with the TIM Working Group to provide updates on matters concerning TIM and key activities in progress. Continually review Working Group membership and consider additional associations. Other ongoing TIM Working Group Meeting considerations: <ul style="list-style-type: none"> • Solicitation of key issues and concerns • Discussion of outreach to Organization and/or Association membership • Conducting a meeting at an RTMC 	On-going
2.C	Develop a plan for participating in TIM Working Group member’s association’s annual meetings/conferences through presentations, training sessions, and/or booth space in vendor areas.	< 1 year
2.D	Publish statewide TIM newsletters.	On-going
2.E	Work with TIM Working Group members from the Florida Fire Chief’s Association (FFCA) to develop a fire specific action plan for improving TIM Team participation.	1-3 years

ID	Action Item	Timeline
2.2	TIM Teams Strategic Direction: Provide value to stakeholders while continuously improving TIM in their respective areas.	
2.F	Identify key partners that have not been participating in TIM Team meetings and conduct one-on-one meetings. Consider incentives (e.g. emergency traffic control equipment) for participation and a focus on the development of arterial TIM plans.	On-going
2.G	Approach local and regional fire and police chiefs' associations about adopting the Florida Open Roads Policy.	On-going
2.H	Complete enhancements to the FDOT TIM website.	< 1 year
2.3	TIM Program Support Strategic Direction: Establish organizational mechanisms to facilitate staff transitions and ensure knowledge transfer. Consider developing a standard set of duties and responsibilities that can be utilized by FDOT TIM Program Managers to establish consistent practices within the program itself as well as facilitate continuity with future successors. Implement mechanisms that facilitate timely information sharing between the districts.	
2.I	Conduct regular FDOT TIM Program Manager webinars, and hold at least one in-person 2-3 day meeting annually.	On-going
2.J	Establish an internal and external statewide repository for storing TIM Program support materials.	< 1 year
ID	Action Item	Timeline
3	TIM TRAINING	
3	SHRP2 National TIM Responder Training Program Strategic Direction: As a top stakeholder identified focus are, continue promoting and conducting TIM training via the Florida version of the FHWA SHRP2 National TIM Responder training curriculum.	
3.A	Identify potential avenues for encouraging TIM Program stakeholders to have their incident response personnel attend the National TIM Responder Training.	< 1 year
3.B	Conduct TIM trainer outreach efforts at least twice a year to keep them engaged in the National TIM Responder Training Program.	On-going
3.C	Provide formal Central Office support for local trainers that includes online registration, printed materials, and certificate distribution. For future sessions, consider location and responder schedule/potential conflicts.	On-going
3.D	Integrate the National TIM Responder Training as a requirement for workers/employees involved in all future Asset Maintenance (AM) contracts.	1-3 years
3.E	Identify outreach opportunities for fire/rescue, EMS, and law enforcement leadership to promote involvement in the National TIM Responder Training Program.	1-3 years
3.F	Integrate other TIM related and focus topics in developing a comprehensive training program for Florida. Consider training for: <ul style="list-style-type: none"> • Road Rangers • RISC • TIM Response in Express Lanes • Incidents Involving Electric and Hybrid Vehicles • Incidents involving highway infrastructure (e.g. bridges, overhead sign structures, toll gantry structures, high-mast light poles, etc.) • Cable Barrier 	< 1 year

ID	Action Item	Timeline
4	AFTER-ACTION REVIEWS	
4	After-Action Reviews (AARs) Strategic Direction: Continued recognition of AARs as central to the overall, ongoing TIM enhancement process. Establish formats for conducting AARs and sharing lessons learned and best practices.	
4.A	Collect existing AAR templates from each district and establish a generalized format for documentation and sharing lessons learned.	< 1 year

ID	Action Item	Timeline
5	TIM PERFORMANCE MEASURES	
5	TIM Performance Measures Strategic Direction: TIM data collection and performance monitoring and measuring are critical to improving TIM, demonstrating program effectiveness and justifying future planning and investments.	
5.A	Improve and enhance TIM data collection efforts.	By 6/2019*
5.B	Train appropriate staff on TIM data analysis, reporting, and visualization. <ul style="list-style-type: none"> • Law enforcement (crash form) • RTMC operators (TIM performance measures) 	By 6/2019*
5.C	Establish a meaningful format for sharing TIM performance measures, both at the responder level (operational decisions) and executive level. <ul style="list-style-type: none"> • To demonstrate adoption of the FHWA Every Day Counts 4 (EDC-4) initiative, collect the following performance measures: <ol style="list-style-type: none"> 1. Roadway Clearance Time 2. Incident Clearance Time 3. Secondary Crashes Develop a dashboard component to implement to the FDOT TIM website that displays TIM performance measure data.	By 6/2019*
5.D	Establish District by District goals relative to TIM Performance Measures for routes and route segments where TIM measures are employed. <ul style="list-style-type: none"> • Establish consistency among RTMCs for data collection 	By 6/2019*
5.E	Report TIM outcomes relative to performance measures goals established in the 2014 Open Roads Policy Agreement between FDOT and FHP.	Quarterly beginning 7/2019*

* Specific dates provided for consistency with FDOT's 2017 TSM&O Strategic Plan

ID	Action Item	Timeline
6	TIM LAW OUTREACH AND PUBLIC EDUCATION	
	TIM Law Outreach and Public Education Strategic Direction: As a top stakeholder identified focus area, seek TIM law outreach and education opportunities such as participation in the annual National Traffic Incident Response Week, advertisements, partnerships and use of dynamic message signs (DMS).	
6.A	Actively participate in National Traffic Incident Response Week.	Annually
6.B	Utilize Community Traffic Safety Teams (CTSTs) to identify opportunities to partner on TIM law public outreach efforts and determine if funding may be available.	1-3 years
6.C	Work with the Florida Department of Highway Safety and Motor Vehicles (DHSMV) to develop a TIM law strategic communications plan that includes identification of outreach opportunities and specific actions for implementation.	1-3 years

ID	Action Item	Timeline
7	POLICIES AND PROCEDURES FOR INCIDENT RESPONSE AND CLEARANCE	
7.1	Road Ranger Service Patrol Program Strategic Direction: Address program identity issues related to branding, sponsorships, and public perception of the services being provided as a “courtesy.” Emphasize Road Rangers importance as FDOT-backed TIM/ safety program. Address operational concerns, such as uniforms and emergency vehicle lighting.	
7.A	Evaluate Road Ranger standardization (with flexibility), emphasize safety and address other operational needs based on customer feedback.	< 1 year
7.B	Conduct Statewide Road Ranger Survey for Incident Responders and correlate to roadways, districts, counties, regions.	Annually
7.C	Refocus Road Ranger branding to incident response and TIM.	1-3 years
7.D	Document concerns and suggested revisions to the existing Road Ranger sponsorship contract.	1-3 years
7.2	Severe Incident Response Vehicle (SIRV) Strategic Direction: Recognize as valuable link between FDOT and other responder disciplines including asset maintenance contractors. Identify elements and activities to standardize the program statewide.	
7.E	Establish a SIRV/IRV FDOT procedure (with procedure identification number).	< 1 year
7.F	Explore a standardized, scalable approach for replicating select SIRV functions and activities in other districts. Evaluate SIRV duties and responsibilities for standardization (with flexibility) and possible implementation in other Districts.	1-3 years
7.3	Rapid Incident Scene Clearance (RISC) Program Strategic Direction: Conduct routine training of FHP and FDOT personnel and clarify coordination requirements through a joint operating statement. Maintain procedural boilerplate to accommodate industry needs and program cost changes.	
7.G	Develop a statewide Joint Operating Program Statement or MOU between FDOT and FHP to strengthen understanding of RISC.	< 1 year
7.H	Establish a plan to refresh and conduct training to familiarize FHP and RTMC operators on RISC activation protocols.	< 1 year
7.I	Review and revise RISC procedure and clearance time goals to address changing operational needs and incentive structure of the program.	< 1 year

ID	Action Item	Timeline
7.4	<p>Instant Dispatch Tow Strategic Direction: FHP may seek to have F.S. 321.051(4) changed to lane blocking events, since delaying requests for towing and recovering services further delays incident clearance and increases the exposure of responders and motorists to hazard. FHP may also consider making Administrative Rule changes that support implementing a plan where they simultaneously dispatch a trooper and tow truck when RTMC cameras or other on-scene responders provide information that a tow is required. Such a system would expedite lane clearance and promote safety.</p>	
7.J	Develop an Instant Tow Dispatch concept paper (including recognition of Instant Tow Pilot in Volusia County) to take to FHP to initiate discussion and eventually implementation.	< 1 year
7.5	<p>Staged Towing Vehicles Strategic Direction: FDOT should consider including staged tow trucks in major roadway work zones where there are extended lane restrictions or limited to no shoulders. Stage towing arrangements should be considered in Transportation Management Plans (TMPs) required under the Federal Work Zone Safety and Mobility Rule for all major projects.</p>	
7.K	Develop warrants for when staged tow vehicles should be included in Express Lanes and Work Zone TMPs.	< 1 year
7.6	<p>Safe Tow Strategic Direction: FDOT should consider implementation of the strategy beyond District 2 as a means to alleviate the problems created by the FHP “owner request” requirement and facilitate timely dispatch and removal of vehicles to the shoulder or other safe location away from travel lanes.</p>	
7.L	Create a standard template for contracting Safe Tow in any FDOT District.	< 1 year
7.7	<p>Florida Guidelines for the Mitigation of Accidental Discharges of Motor Vehicle Fluids (Non-Cargo) Direction: FDOT should continue to market the guidelines as a resource for incident responders in Florida, focusing attention on the reportable quantities component of the guideline. Reinforcement of the guidelines should also be made during statewide responder training.</p>	
7.M	Conduct reminder activities related to the <i>Florida Guidelines for the Mitigation of Accidental Discharges of Motor Vehicle Fluids (Non-Cargo)</i> to maintain awareness by responders.	On-going
7.8	<p>Crash Investigations Strategic Direction: FDOT has purchased photogrammetry, total station, and other types of technology to assist FHP in expediting crash scene processing. To keep pace with rapid advancements in these and other emerging technologies it will be important to maintain awareness of how they may apply to crash reconstruction and to articulate benefits.</p>	
7.N	Maintain an awareness of new/emerging technologies related to crash investigations.	On-going
7.O	Maintain an inventory of available THIs.	On-going
7.P	Document and articulate the benefits of current crash investigation technologies.	1-3 years
7.9	<p>Tagging of Abandoned Vehicles Strategic Direction: Safety is advanced by removing disabled vehicles that are stopped on freeways or in the “clear zone”. FHP should review their procedures to more aggressively check and subsequently tow abandoned vehicles left on the shoulder since they present a potential safety hazard. FHP should also enlist the help and support of Road Rangers in this important practice by allowing them to “Red Tag” vehicles in all Troops.</p>	

ID	Action Item	Timeline
7.Q	Develop a standard operating policy or MOU that specifies FHP and FDOT roles in, and procedures for, tagging abandoned vehicles.	< 1 year
7.10	Designated Incident Response Coordinator (IRC) Strategic Direction: Establishing a designated Incident Response Coordinator (IRC) will help ensure that FDOT is properly represented at traffic incident scenes under the Incident Command System (ICS). This position would be filled with a manager from an AM contractor, RTMC operations contractor, FDOT on-call supervisor, or FDOT District TSM&O Office.	
7.R	Coordinate with the FDOT Traffic Engineering & Operations Office, Office of Maintenance and Districts to prepare draft/final typical IRC position requirements, performance metrics and other contract language.	< 1 year
7.S	Require IRC position in future Asset Maintenance (AM) contracts and/or renewals (as appropriate).	Future (AM contract and/or renewal dependent)

ID	Action Item	Timeline
8	RESPONDER AND MOTORIST SAFETY	
8.1	TIM Response Procedures/Guidelines Strategic Direction: Model policies or procedures consistent with the FHWA SHRP2 National TIM Responder Training Program are needed for: High-Visibility Safety Apparel Use; Emergency-Vehicle Lighting Use at Incident Scenes; Vehicle Positioning at Incident Scenes; and Traffic Control at Incident Scenes.	
8.A	Develop a Florida TIM Response Guideline/Procedure.	1-3 years

ID	Action Item	Timeline
9	DATA COLLECTION/INTEGRATION/SHARING	
9.1	Regional Traffic Management Centers Strategic Direction: Consideration should be made by FDOT and FHP to move beyond simple RTMC operator and FHP dispatcher co-location and more formally integrate the operations of key personnel. Re-introducing an FHP uniformed supervisor in urban communications centers during peak periods may serve to strengthen operations between field units and the RTMC.	
9.A	Ensure RTMC designs consider physical integration of RTMC operator and public safety dispatcher, including FHP, work space.	< 1 year
9.B	Explore ways to re-introduce FHP uniformed supervision in communications centers during peak periods (i.e., hire back, light duty staffing, etc.).	< 1 year
9.2	Data Sharing Strategic Direction: Given the importance of real-time data and information to traffic incident response, a statewide consistent policy and approach to sharing this data, including RTMC video, with TIM partners is needed. This will ensure that the investment in video infrastructure is maximized.	
9.C	Identify opportunities to facilitate sharing of TMC video and data with local responders.	< 1 year
9.D	Develop a statewide policy for data and video sharing.	1-3 years
9.E	Develop a standard MOU for agencies that have access to the video that includes a commitment to participating in the local TIM program.	1-3 years

ID	Action Item	Timeline
10	TIM CONSIDERATIONS FOR PRIORITY FOCUS AREAS	
10.1	<p>Integrated Corridor Management and Arterial TIM Strategic Direction: The objective for arterial TIM and an integrated corridor approach seeks to promote safe, efficient travel on both arterials and freeways. Many stakeholder organizations, such as local agency police, fire, and EMS that do not routinely provide freeway traffic incident response, need to be familiarized with TIM on arterials, notably for responder safety and safe quick clearance of incidents.</p>	
10.A	Continue to leverage the FHWA SHRP2 National TIM Training Program to properly train local agencies (police, fire, EMS, towing) on arterial TIM.	1-3 years
10.B	In coordination with TSM&O Program efforts, measure and monitor arterial performance and use data to support a business case for arterial TIM.	1-3 years
10.C	Explore and potentially deploy TIM strategies such as Road Rangers, RISC, and SIRV to support TIM and arterial management.	1-3 years
10.2	<p>TIM for Express Lanes Strategic Direction: A scalable, dedicated TIM approach for facilities utilizing Express Lanes is needed to balance the needs of a “premium” service with operating revenue constraints. The approach would prioritize resources, based on available funding, to maximize investments.</p>	
10.D	Develop a menu of TIM staffing options available for managed lanes to include average cost, and periodization based on benefit-cost.	1-3 years
10.E	Develop training materials for TIM operational practices on managed lanes.	1-3 years
10.F	Conduct training with all responders, including RTMC operators and dispatchers in conjunction with new managed lane project openings.	1-3 years
10.G	Monitor development of, and provide TIM-specific input to Express Lane Operations Plans/Manuals/Guidelines. Recognize unique requirements for Express Lane incident response.	Ongoing
10.H	Review strategies such as dedicated Crash Investigation Sites to enhance Express Lane TIM and safety.	Ongoing
10.3	<p>TIM Plan Supplement for Transportation Management Plans (TMPs) Strategic Direction: TIM is a critical operational strategy to mitigate many of the negative impacts of roadway construction projects. Accordingly, there needs to be better general awareness of the FDOT TMP requirements with specific emphasis on TIM and operations. In addition, process enhancements are needed to ensure that TIM is considered and integrated both early in the project development process and throughout design and construction life cycle.</p>	
10.I	Explore opportunities such as annual FDOT Maintenance, Design, and Construction conferences to promote awareness of work zone TIM in the context of TMP development.	1-3 years
10.J	Assemble conference sessions, talking points, PowerPoint slides and other documentation to facilitate work zone TIM dialogue.	1-3 years
10.K	Clarify and/or highlight TIM in the FDM and include a requirement to more formally consider TIM resourcing early in the TMP development process.	1-3 years

INTRODUCTION



1 | INTRODUCTION

1.1 BACKGROUND

The state of Florida enjoys a mature traffic incident management (TIM) program. Three decades of investment in technology, resources, and institutional support have positioned the state for continued and future success. Understanding the current state of TIM in Florida sets the stage for envisioning a future.

Technology investments enable Florida to detect and verify incidents, coordinate response activities, and provide information to responders and motorists. Freeways and other limited access roadways in Florida are monitored with traffic detectors, cameras, and dynamic message signs (DMS) that feed into Regional or Satellite Transportation Management Centers (RTMCs/STMCs) in each of the seven Florida Department of Transportation (FDOT) Districts and Florida's Turnpike Enterprise. The RTMCs use a state-of-the-art advanced traffic management system (ATMS) software, referred to as SunGuide, to manage data, measure system performance, and record incidents. Florida was among the first states in the nation where a statewide integration of state police computer-aided dispatch (CAD) and RTMC software occurred, and that integration continues to this day.

Other resource investments enable Florida to respond to and clear incidents expeditiously. FDOT's service patrol program, known as the Road Rangers, patrols more than 1,500 centerline miles of freeways proactively identifying incidents and clearing roadways. They are also an important part of incident response, providing temporary traffic control at incident scenes. Asset and routine maintenance contractors, under contract to FDOT, or the FTE are also available to provide long term traffic control, debris removal, and transportation infrastructure damage repairs. Finally, the Rapid Incident Scene Clearance (RISC) incentive based heavy-duty wrecker program is available in several Districts to support quick clearance of major incidents. Created on Florida's Turnpike in 2004, the state of Florida was among the first to develop and implement the RISC concept. Since its inception, the program has spread to all FDOT Districts, and has been replicated by DOTs across the nation.

Programmatic investments have helped to reinforce TIM as a strategically critical element of Transportation Systems Management and Operations (TSM&O). FDOT's 2017 TSM&O Strategic Plan recognizes TIM as an important component of FDOT's freeway management system. By designating a full-time statewide TIM Program Manager in FDOT's Central Office, as well as TIM Program Managers in each district, FDOT leads the nation in providing

programmatic support that is critical for continued and future TIM success. Organizationally across the state, there are twenty-five (25) local TIM Teams that are active across all seven FDOT Districts and the Turnpike, as well as a statewide TIM Working Group whose role is to facilitate continued collaboration amongst TIM partner disciplines. Additionally, FDOT and the Florida Highway Patrol (FHP) have co-located operations at multiple RTMCs statewide to promote cohesive operations. This level of support has allowed Florida to focus on the multiagency, multidiscipline relationships that are foundational to TIM success.

However, even with existing investments and innovations in TIM, much work remains for enhancing TIM in Florida. An agency-wide strategic plan, at its core, is designed to set priorities, focus energy and resources, strengthen operations, and ensure that stakeholders are working toward common goals.

1.2 APPROACH

The strategic plan development team used several methods to obtain input from stakeholders for the TIM strategic plan, including:

- **Survey Research** – An online survey was created to obtain insight on several TIM topics. Opened on March 13, 2017, the web-based survey was distributed to local TIM responders and other stakeholders through the FDOT District TIM Program Managers. A total of 164 individuals participated in the survey, representing law enforcement, fire/rescue, EMS, transportation, and towing and recovery professionals. The survey was closed on April 30, 2017 and the data obtained was utilized to guide discussion at subsequent stakeholder meetings.
- **Stakeholder Meetings** – The team conducted meetings with every FDOT District Program Manager and, in many cases, their consultants. TIM Team meetings were also attended in five districts as well as individual meetings with the FDOT Statewide Program Manager and the Director of FHP.
- **2017 FDOT TIM Workshop** – On July 27-28, 2017 FDOT TIM leaders representing each District convened in a workshop setting to further elaborate on TIM issues and needs and to provide input to the draft strategic plan. Their engagement was critical to finalizing content.

- **TIM Capability Maturity Self-Assessment (CMSA)**
The TIM Capability Maturity Self-Assessment (TIM CMSA) tool was developed by the Federal Highway Administration (FHWA) with input from state DOTs, law enforcement, and other TIM responders. The TIM CMSA provides a systematic and structured approach for assessing and benchmarking existing TIM capabilities, and, upon completion, provides an Action Plan with tangible actions for increasing capability and sophistication levels. Florida has been a longstanding participant in the TIM CMSA since it was initiated in 2003. The team reviewed information gathered from 12 cities/regions in Florida for the 2016 CMSA for integration into the strategic plan.

Additionally, the TIM strategic plan was developed to be consistent with, and to support the vision and mission outlined in FDOT's *2017 TSM&O Strategic Plan*:

- **Vision** – To increase the delivery rate of fatality-free and congestion-free transportation systems supporting the FDOT vision and Florida Transportation Plan goals.
- **Mission** – To identify, prioritize, develop, implement, operate, maintain, and update TSM&O program strategies and measure their effectiveness for improved safety and mobility.

For reference, the following is a link to the FDOT 2017 TSM&O Strategic Plan:

http://www.fdot.gov/traffic/Doc_Library/PDF/2017%20TSM&O%20Strat%20Plan%20Aug%2024%202017%20FINAL.pdf

1.3 TIM STRATEGIC PLAN ORGANIZATION

As stated above, the FHWA TIM CMSA provides a structured approach for reviewing the complex institutional framework, technologies and business processes required to make TIM a success. As such, and given FDOT's and its partner stakeholders' familiarity with the CMSA content, the Florida TIM Strategic Plan is purposely structured according to three main TIM program areas:

1. **Strategic** – the programmatic activities of TIM covering formal policies, partnerships and understandings among agencies, measuring and evaluating TIM performance.
2. **Tactical** – the on-scene activities addressing responder and motorist safety, response, traffic control and clearance.

3. **Support** – Effective TIM enabling activities such as interagency communications, data sharing, ITS and traveler information.

The three main TIM program areas are further organized into more detailed TIM CMSA topics:

Strategic

- Formal TIM Programs
- TIM Training
- After-Action Reviews
- TIM Performance Measures

Tactical

- TIM Law Outreach and Public Education
- Policies and Procedures for Incident Response and Clearance
- Responder and Motorist Safety

Support

- Data Collection/integration/Sharing

Additionally, to emphasize the importance of TIM in the context of other stand-alone TSM&O strategies, the Strategic Plan also includes sections on the following priority focus areas:

- Integrated Corridor Management and Arterial TIM
- TIM for Express Lanes
- TIM Supplement for Transportation Management Plans

In each section, subsections are presented as strategies. For each strategy, the State of the Practice and Strategic Direction are described followed by "Steps to Get There". Accordingly, each "Step to Get There" includes an identification number (e.g., 2.A, 3.B, 4.C, etc.), the action item title/topic and timeline for implementation.

2 | FORMAL TIM PROGRAMS

2.1 STATEWIDE TIM WORKING GROUP

State of the Practice

FDOT established a statewide TIM Working Group in early 2017 with its first in-person meeting conducted on February 6, 2017. The Working Group includes policy level representatives from the following organizations:

- Florida Department of Transportation
- Florida Highway Patrol
- Florida Department of Health
- Florida Sheriffs Association (FSA)
- Florida Police Chiefs Association (FPCA)
- Florida Fire Chiefs Association (FFCA)
- Professional Wrecker Operators of Florida (PWOFF)
- Sunshine State Towing Association (SSTA)
- Florida Association of County Engineers and Road Superintendents (FACERS)
- Florida Department of Forestry
- Florida Division of Emergency Management
- Florida Trucking Association
- Florida Department of Environmental Protection
- Florida Metropolitan Planning Organization Advisory Council (MPOAC)
- Federal Highway Administration

To promote and gain support for TIM, the Working Group is focusing on understanding and promoting the benefits of TIM as they relate to the safety of incident responders and motorists, as well as to commerce and productivity.

Strategic Direction

The Working Group is expected to serve as a permanent entity for providing guidance to FDOT, its partners and other stakeholders on policy matters and issues impacting TIM needs in the state of Florida. Ongoing Working Group functions include:

- Consider and coordinate the views of Florida's multidiscipline TIM partners and stakeholders
- Provide policy recommendations to partners and stakeholders, including FDOT, on selected responder training and safety issues
- Provide advice and input to partners and stakeholders, including FDOT, on traffic incident management training issues
- Support TIM stakeholders in identifying and promoting best practices
- Support TIM stakeholders in collecting and analyzing TIM performance measures
- Provide a conduit for information, education and policy recommendations between FDOT, its partners, and TIM stakeholders

One initial action is to obtain institutional support by documenting, communicating, and reinforcing objectives with the individual agencies/organizations represented by the Working Group.



Steps to Get There

ID	Action Item	Timeline
2.A	Formalize the FL TIM Working Group by documenting, communicating, and reinforcing objectives with TIM Working Group member agencies/organizations. Consider Working Group leadership structure potentially comprised of an individual representing FHP, Fire and FDOT.	< 1 year
2.B	<p>Meet quarterly with the TIM Working Group to provide updates on matters concerning TIM and key activities in progress. Continually review Working Group membership and consider additional associations. Other ongoing TIM Working Group Meeting considerations:</p> <ul style="list-style-type: none"> • Solicitation of key issues and concerns • Discussion of outreach to Organization and/or Association membership • Conducting a meeting at an RTMC 	On-going
2.C	Develop a plan for participating in TIM Working Group member's association's annual meetings/conferences through presentations, training sessions, and/or booth space in vendor areas.	< 1 year
2.D	Publish statewide TIM newsletters.	On-going
2.E	Work with TIM Working Group members from the Florida Fire Chief's Association (FFCA) to develop a fire specific action plan for improving TIM Team participation.	1-3 years

2 | FORMAL TIM PROGRAMS

2.2 TIM TEAMS

State of the Practice

FDOT is a decentralized organization with seven geographic districts and the Florida Turnpike Enterprise responsible for carrying out the policies of the agency. Within these districts and the Turnpike, twenty-five (25) active TIM Teams exist and are active. The teams consist of representatives from all TIM disciplines, including law enforcement, fire/rescue, EMS, towing and recovery, and transportation, as well as other contract service providers. The meeting frequency is specific to each TIM Team and ranges from monthly to semi-annually. The teams use meetings to review past response actions and explore ways that incident management can be improved on the highways they serve. The TIM Teams also conduct training for incident responders and are active in traffic management planning for special events.



Originally established in 2002 and revised in January 2014 a *State of Florida Open Roads Policy Agreement* (http://www.fdot.gov/traffic/traf_incident/pdf/Open_Roads_Policy_FDOT_FHP.pdf) was established and entered into by FDOT and FHP. The Agreement “establishes a policy for FHP and FDOT personnel to expedite the removal of vehicles, cargo, and debris from the roadways on the State Highway System to restore, in an URGENT MANNER, the safe and orderly flow of traffic following a motor vehicle crash or other incident on Florida’s roadways”. Many TIM Teams have used the open roads policy, or a slightly modified version, to obtain local agency commitment to TIM efforts.

Maintaining responder participation from all disciplines and keeping TIM Team meetings informative and interesting was identified as a challenge at the 2016 statewide TIM workshop, and was further confirmed during more recent stakeholder meetings conducted in 2017. In particular, FDOT District TIM Managers indicated a significant decline in participation from the fire/rescue discipline. Addressing this decline is strategically critical given the importance of understanding and addressing fire/rescue needs as part of the overall TIM process.

TIM Team state of the practice is further illustrated by the results of several questions from the Florida Statewide Strategic Plan Survey described in the TIM Strategic Plan development approach (Section 1.2). Results indicate that:

- 25% of participants “always” attend TIM Team meetings, 31% attend “often,” 36% attend “occasionally,” and the remaining 8% have “never attended” a meeting;
- 62% of participants rated the meetings as extremely or very valuable;
- 78% of participants rated after-action reviews of recent traffic incidents as an important agenda topic and 62% rated construction updates as important;
- 56% of participants thought that TIM Team meetings should be held on a quarterly basis.

Strategic Direction

All TIM Teams have the common goal to provide value to their stakeholders and to continuously improve TIM activities in their respective areas. This effort requires regular contact with all local responders, including those agencies that may not be regularly participating in TIM Team meetings.

During the 2016 and 2017 statewide TIM workshops, each district provided valuable suggestions and recommendations based on their experiences facilitating local TIM Team meetings. Compiling this information in one location, along with support documents such as sample agendas, successful presentations and meeting summaries will serve to enhance TIM Team efforts statewide.

Steps to Get There

ID	Action Item	Time-line
2.F	Identify key partners that have not been participating in TIM Team meetings and conduct one-on-one meetings. Consider incentives (e.g. emergency traffic control equipment) for participation and a focus on the development of arterial TIM plans.	On-going
2.G	Approach local and regional fire and police chiefs’ associations about adopting the Florida Open Roads Policy.	On-going
2.H	Complete enhancements to the FDOT TIM website.	< 1 year

2.3 TIM PROGRAM SUPPORT

State of the Practice

The state of Florida is among the nation's leaders in programmatic support for TIM. Not only does FDOT provide for a full-time statewide TIM Program Manager in its Central Office, each of the districts and the Turnpike also have a TIM program manager. In addition, consultant support is provided in districts and the Central Office for individual program areas including TIM, ITS, and RTMC operations. The combination of FDOT staff and consultant support helps reinforce TIM as a prominent part of TSM&O.

Despite TIM programs being well staffed, information gathered during the Strategic Plan development process indicated that currently there is little to no documentation of institutional knowledge among TIM practitioners, leaders, and advocates. As a result, when TIM program staff changes positions or there is a change in consultant support, there often is a loss of program understanding and historical knowledge, creating a significant learning curve for new staff. Similarly, there is a lack of information sharing occurring between practitioners at the districts, which has resulted in some duplication of efforts.

Strategic Direction

Organizational mechanisms should be put in place to facilitate staff transitions and ensure knowledge transfer. Consideration should be given to developing a standard set of duties and responsibilities that can be utilized by FDOT TIM Program Managers to establish consistent practices within the program itself as well as facilitate continuity with future successors. In addition, mechanisms that facilitate timely information sharing between the districts need to be implemented.

Steps to Get There

ID	Action Item	Timeline
2.I	Conduct regular FDOT TIM Program Manager webinars, and hold at least one in-person 2-3 day meeting annually.	On-going
2.J	Establish an internal and external statewide repository for storing TIM Program support materials.	< 1 year



3 | TIM TRAINING

3.1 SHRP2 National TIM Responder Training Program

State of the Practice

In 1987, the U.S. Congress passed the Surface Transportation and Uniform Relocation Act, which authorized the Strategic Highway Research Program (SHRP). The first five-year SHRP authorization was an applied research initiative to develop and evaluate techniques to address deteriorating conditions of the nation's highways and to improve their performance, durability, safety and efficiency. In 2006 Congress passed a second five-year authorization of the program (SHRP2) to focus on three national transportation challenges: improving highway safety, reducing congestion, and improving methods for renewing roads and bridges.

The National TIM Responder Training Program was developed “by responders, for responders” under SHRP2. The program was designed to establish the foundation for and promote consistent training of all responders to achieve the three objectives of the TIM National Unified Goal (NUG):

- Responder Safety
- Safe, Quick Clearance
- Prompt, Reliable, Interoperable Communications

The course was successfully pilot tested in four U.S. cities, including Fort Lauderdale, FL, and was subsequently adopted by the Federal Highway Administration (FHWA) for national rollout in 2012.

The national program utilizes a Train-the-Trainer (TtT) approach to provide each state with a cadre of TIM trainers that are responsible for delivering the 4-hour version of the training to local responders. Including the pilot session held in Fort Lauderdale, Florida has conducted 16 TtT sessions and trained a total of 601 individuals to serve as trainers. However, based on current training records, only

about 12% of those individuals are providing training to others. There are several factors that likely contributed to this low percentage, including initial difficulties related to accessing the FHWA TIM Training Program SharePoint site, a lack of understanding of the expectation for TtT participants to conduct training, and staff turnover.

To address this issue, in early 2017 FDOT reached out to all trainers that had attended a TtT session prior to November 2016. The trainers were asked to respond if they were still interested in participating in the program. For all sessions conducted after that time period, training expectations were clearly outlined in registration materials as well as emphasized during the TtT session. Furthermore, when FHWA released a national update to the training materials in March of 2017, FDOT updated the Florida specific materials and required all trainers participate in a rollout webinar to maintain their status as an active trainer.



National Traffic Incident Management Responder Training Program



In addition to the in-person training, there are two online options of the training available:

- National Highway Institute (NHI) – <https://www.nhi.fhwa.dot.gov/> – Free online version of the course that takes approximately 4 hours to complete. (Course: FHWA- NHI-133126)
- ResponderSafety.com Learning Network – <https://learning.respondersafety.com> – FHWA worked closely with the Emergency Responder Safety Institute (ERSI) to review the training modules they have available through the Responder Safety Learning Network (RSLN). Ultimately, FHWA and ERSI identified ten modules that cover all 33 lesson objectives of the National TIM Responder Training course. Once an individual completes all ten modules, which are offered at no-cost, a special certificate may be downloaded that is equivalent to completing the National TIM Responder Training course.

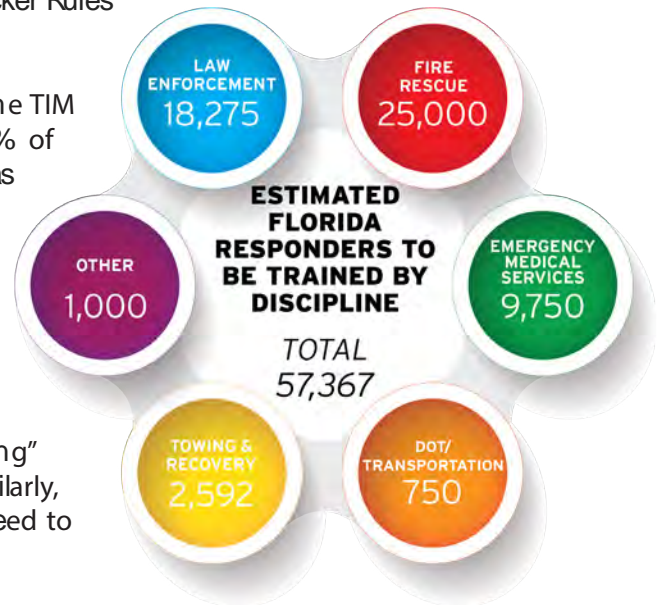


FDOT has also integrated TIM training requirements into standalone contracts for both the Road Ranger and the RISC programs. TIM training requirements are being incorporated in the FDOT Road Ranger procedure to address when Road Ranger support is included in an asset maintenance contract. Additionally, a requirement has been proposed for TIM training to be integrated into the pending update to the Wrecker Rules (Florida Administrative Code 15B-9).

When asked if their agency/organization had implemented the TIM training in the Florida Statewide Strategic Plan Survey, 26% of respondents were not even aware that the TIM training was available. Additionally, the most common barriers selected as preventing implementation of the TIM training in the survey were a lack of awareness and difficulty related to integrating into their existing training schedule.

Strategic Direction

Overall, 65% of participants of the Florida Statewide Strategic Plan Survey selected “promoting and conducting TIM training” as one of the top three (3) TIM focus areas for 2017-2018. Similarly, a common theme from the stakeholder meetings was the need to make the TIM training mandatory for all responders.



The graphic to the right illustrates the number of responders by discipline that FDOT has identified requiring TIM training statewide.

Steps to Get There

ID	Action Item	Timeline
3.A	Identify potential avenues for encouraging TIM Program stakeholders to have their incident response personnel attend the National TIM Responder Training.	< 1 year
3.B	Conduct TIM trainer outreach efforts at least twice a year to keep them engaged in the National TIM Responder Training Program.	On-going
3.C	Provide formal Central Office support for local trainers that includes online registration, printed materials, and certificate distribution. For future sessions, consider location and responder schedule/potential conflicts.	On-going
3.D	Integrate the National TIM Responder Training as a requirement for workers/employees involved in all future Asset Maintenance (AM) contracts.	1-3 years
3.E	Identify outreach opportunities for fire/rescue, EMS, and law enforcement leadership to promote involvement in the National TIM Responder Training Program.	1-3 years
3.F	Integrate other TIM related and focus topics in developing a comprehensive training program for Florida. Consider training for: <ul style="list-style-type: none"> • Road Rangers • RISC • TIM Response in Express Lanes • Incidents Involving Electric and Hybrid Vehicles • Incidents involving highway infrastructure (e.g. bridges, overhead sign structures, toll gantry structures, high-mast light poles, etc.) • Cable Barrier 	< 1 year

4 | AFTER-ACTIONS REVIEWS

State of the Practice

The purpose of multiagency, multidiscipline After-Action Reviews (AARs) is to collectively evaluate the decisions made and actions taken during an incident and to identify both best practices and opportunities for improvement. Elements of after-AARs are incorporated into most Florida TIM Team meetings and discussions. In some districts, the AARs are referred to as a Post Incident Analysis (PIA). Typically, AARs or PIAs are occurring for all RISC activations and for major or significant incidents (those that last more than 90 minutes). Florida's Turnpike uses a STEALTH report to document AARs for each RISC activation. The STEALTH acronym stands for:

Set time of incident, Tone of discussion (e.g. nameless, rankless, etc.), Execution of incident, Analyze incident execution, determine Lessons learned, Tie lessons learned to future improvement, and end on a High note.

The STEALTH AAR process includes the identification of lessons learned, which are shared with all Turnpike TIM Team members.

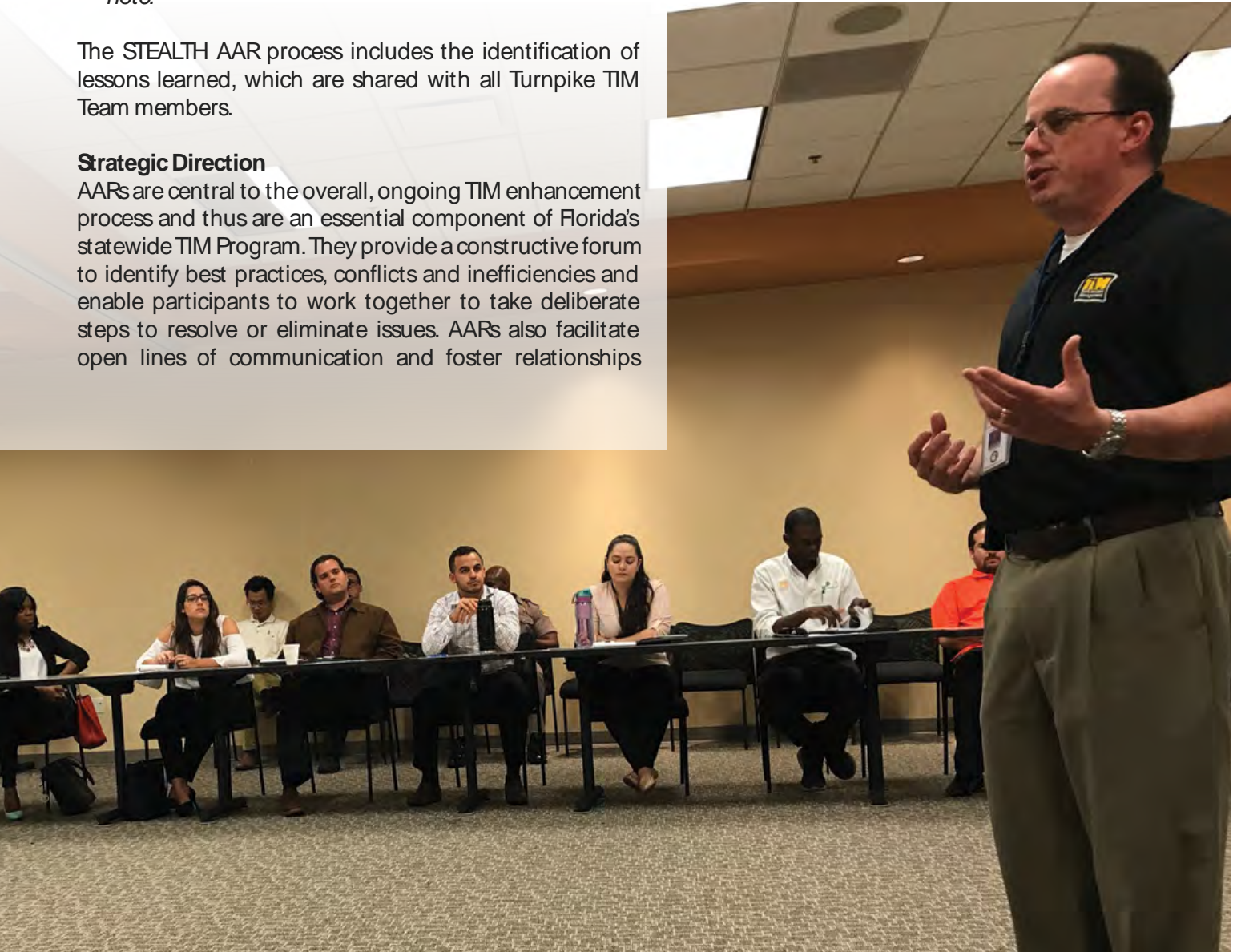
Strategic Direction

AARs are central to the overall, ongoing TIM enhancement process and thus are an essential component of Florida's statewide TIM Program. They provide a constructive forum to identify best practices, conflicts and inefficiencies and enable participants to work together to take deliberate steps to resolve or eliminate issues. AARs also facilitate open lines of communication and foster relationships

among responders. From results of the TIM Strategic Plan survey and discussions with District TIM Managers, the majority agreed that AARs are important and that their documented results also serve as an excellent mechanism for sharing lessons learned, regardless of where the incident and corresponding AAR took place.

Steps to Get There

ID	Action Item	Timeline
4.A	Collect existing AAR templates from each district and establish a generalized format for documentation and sharing lessons learned.	< 1 year



State of the Practice

According to FHWA's *Using Data to Improve TIM*, a project that is part of the agency's fourth round of Every Day Counts (EDC-4) initiatives (https://www.fhwa.dot.gov/innovation/everydaycounts/edc_4/timdata.cfm),

"An ideal TIM program must rely on efficient data collection, analysis, and reporting to measure performance and identify where and when it can be improved. However, performance management through enhanced data collection remains elusive in many jurisdictions that either do not collect TIM data or collect data for a small percentage of traffic incidents." This EDC-4 project is promoting low-cost, off-the-shelf technologies such as computer-aided dispatch (CAD) integration, electronic crash reporting, traffic management center software and a host of smart mobile devices that make data collection easier. Tools such as these enable agencies to expand the amount and quality of TIM data they collect so that trends can be recognized, areas of improvement identified, benefits measured and programs institutionalized. In other words, data drives improvements and outcomes.

In Florida, responder agencies are well-positioned with technology where police, fire, EMS, and Road Rangers use mobile computing to capture data associated with various activities. For example, the nearly 400 law enforcement agencies are approaching 100% electronic crash reporting and more than 90% electronic citation collection. The three principal TIM performance measures, defined below, are collected at the RTMC level as well as on the FHP traffic crash report.

- **Roadway Clearance Time (RCT)** – Time between the first recordable awareness of an incident by a responsible agency and the first confirmation that all lanes are available for traffic flow
- **Incident Clearance Time (ICT)** – Time between the first recordable awareness of an incident by a responsible agency and the time at which the last responder has left the scene
- **Secondary Crashes** – 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

The next version of the statewide traffic crash report used by all agencies will contain these metrics as well .

Strategic Direction

In Florida and nationwide, TIM data collection and performance monitoring and measuring are critical to advancing TIM. Data drives improvements and outcomes, demonstrates program effectiveness and helps justify future planning and investments. Also, there is a need to increase the quantity and quality of TIM data and the application of descriptive analytics will enable presentation of primary performance measures to stakeholders in an easy to digest format. Lastly, measuring TIM performance is consistent with FDOT's 2017 TSM&O Strategic Plan that identifies the need to establish goals to reduce all lanes cleared time (i.e. RCT) and to reduce secondary crash rates in order to measure improvements to mobility and safety respectively.

Steps to Get There

ID	Action Item	Timeline
5.A	Improve and enhance TIM data collection efforts.	By 6/2019*
5.B	Train appropriate staff on TIM data analysis, reporting, and visualization. <ul style="list-style-type: none"> • Law enforcement (crash form) • RTMC operators (TIM performance measures) 	By 6/2019*
5.C	Establish a meaningful format for sharing TIM performance measures, both at the responder level (operational decisions) and executive level. <ul style="list-style-type: none"> • To demonstrate adoption of the FHWA Every Day Counts 4 (EDC-4) initiative, collect the following performance measures: <ol style="list-style-type: none"> 1. Roadway Clearance Time 2. Incident Clearance Time 3. Secondary Crashes Develop a dashboard component to implement to the FDOT TIM website that displays TIM performance measure data.	By 6/2019*
5.D	Establish District by District goals relative to TIM Performance Measures for routes and route segments where TIM measures are employed. <ul style="list-style-type: none"> • Establish consistency among RTMCs for data collection 	By 6/2019*
5.E	Report TIM outcomes relative to performance measures and Goals.	Quarterly beginning 7/2019*

* Specific dates provided for consistency with FDOT's 2017 TSM&O Strategic Plan.

6 | TIM LAW OUTREACH AND PUBLIC EDUCATION

State of the Practice

There are two laws in Florida involving TIM. The Move Over Law (Florida Statute [316.126\(1\)\(c\)](#)) requires drivers to move over one lane, when it is safe to do so, for stopped law enforcement, emergency, sanitation, utility service vehicles, and tow trucks or wreckers. If it is unsafe to move over one lane, or when on a two-lane road, the driver must slow to a speed that is 20 mph less than the posted speed limit. The Driver Removal Law (Florida Statutes [316.027](#), [316.061](#), [316.063](#), [316.071](#)) requires that if a damaged or disabled vehicle is obstructing traffic, the driver of the vehicle must make every reasonable effort to move the vehicle or have it moved so as not to obstruct the regular flow of traffic. If the driver cannot move the vehicle alone, he/she should solicit help and move the vehicle. If there are no injuries, motorists involved in a traffic incident or attending to a disabled vehicle are required to move their vehicle off the roadway when the vehicle is movable.

Florida's Move Over Law [Florida Statute 316.126\(1\)\(c\)](#) proactively recognizes the importance of public outreach and education of the law by including the following provision:

The Department of Highway Safety and Motor Vehicles shall provide an educational awareness campaign informing the motoring public about the Move Over Act. The department shall provide information about the Move Over Act in all newly printed driver license educational materials.

Additionally, January is designated as “Move Over Law awareness month” during which FHP focuses on both public outreach and enforcement efforts. As part of day-to-day operations, RTMC operators also place move over messages on dynamic message signs (DMS) in response to incidents.

Both the Move Over and the Driver Removal Laws are promoted with highway signage, as well as through paid media in the form of billboards. The Road Rangers also participate in outreach efforts by distributing a business card that summarizes the two laws to motorists they come in contact with. Finally, FHP duty officers routinely instruct drivers to move their vehicles out of traffic in accordance with the Driver Removal Law when applicable.

Strategic Direction

Public outreach and education for TIM laws was the top selection for 2017-18 TIM focus areas by participants of the Florida Statewide Strategic Plan Survey. This topic also generated significant discussion during the 2016 and

2017 statewide TIM workshops, resulting in the following list of potential outreach opportunities:

- Participation in the annual National Traffic Incident Response Week
- Advertisements at gas/fuel stations and/or rest areas
- Partnerships with WAZE, rental car companies, AAA and/or insurance companies
- Inclusion with the license renewal process
- Use of Dynamic Message Signs (DMS) for program public service announcements
- Message placement on the Road Ranger vehicle wraps
- Use of social media, including partner agencies (e.g., many law enforcement agencies have Facebook pages or Twitter accounts that reach a large number of people)

Opportunities to coordinate with Community Traffic Safety Teams (CTSTs) through the Statewide CTST Coalition should be explored to maximize efforts.



Steps to Get There

ID	Action Item	Timeline
6.A	Actively participate in National Traffic Incident Response Week.	Annually
6.B	Utilize Community Traffic Safety Teams (CTSTs) to identify opportunities to partner on TIM law public outreach efforts and determine if funding may be available.	1-3 years
6.C	Work with the Florida Department of Highway Safety and Motor Vehicles (DHSMV) to develop a TIM law strategic communications plan that includes identification of outreach opportunities and specific actions for implementation.	1-3 years

7.1 Road Ranger Service Patrol Program

State of the Practice

The Florida Department of Transportation, Florida Turnpike Authority, Miami-Dade Expressway Authority, Tampa Hillsborough Expressway Authority, and Central Florida Expressway Authority combine for more than 105 contracted freeway service patrol beats under the well-known branding ‘Road Rangers.’ Road Rangers patrol more than 1,500 centerline miles of freeways proactively identifying incidents and clearing roadways. Road Rangers are “full-function service patrols” and as such they go beyond simple motorist assistance and are actively engaged in supporting other incident responders with temporary traffic control and incident management.

Road Ranger deployment began more than two decades ago, mainly in urban areas during peak traffic hours. Statewide program funding began in December 1999. Since then, the roadways covered and hours of operation have expanded greatly. Nearly all Florida freeways and limited access facilities are currently patrolled by Road Rangers and the program is one of the largest safety service patrol programs in the nation. During this time, sponsorships from private companies were also introduced to help offset program costs in exchange for advertising rights on Road Ranger vehicles, signing, etc.

During Fiscal Year 2015/2016, Road Rangers made 349,223 assists and since the program inception they have made over 4.3 million assists. In 2010, a study funded by FDOT found that \$1 spent on Road Ranger service patrol program yielded \$6.68 dollars in benefits through reduced congestion, reduced delays and increased safety (Lin et al, 2012).

FDOT has developed and implemented an annual Statewide Road Ranger Survey for Incident Responders. The survey has a threefold purpose:

1. Determine incident responders’ opinion of the program;
2. Compare results and customer satisfaction to previous years’ results;
3. Solicit comments and suggestions to improve the program from the incident responder’s perspective.

The annual Statewide Road Ranger Survey for Incident Responders continues to be important for continual program and TIM improvement. In addition to the annual survey for responders, Road Ranger services are routinely assessed and promoted through customer surveys and other on-line/website tools.

Strategic Direction

The Road Ranger Program and associated branding suffers from the public perception that the motorist assistance services it provides is often viewed as a “courtesy”. Furthermore, private company sponsorships and corresponding increased advertising have resulted in a diminished identity of Road Rangers as an FDOT-backed TIM/safety program. This in-turn has created some confusion with the motoring public receiving Road Ranger emergency services. While motorist assistance is an important part of the services provided, Road Rangers are also a vitally important part of the TIM Program in Florida and routinely assists public safety responders with advance warning, temporary traffic control, vehicle blocking and clearance of travel lanes.

Accordingly, private sponsorship advertising standards should be clearly established and routinely reviewed to ensure that responders and motorists understand that Road Ranger services are provided by FDOT.

Two other Road Ranger elements that warrant review are uniforms and vehicle lighting. The original Road Ranger uniform has not changed since the inception of the program and may lack utility safety features, along with professional differentiation from private motor-assistance clubs and/or sponsoring companies. Emergency vehicle lighting systems have evolved greatly over the past decade and there is a need to revisit the most effective systems that promote safety for Road Rangers and other responders.

Steps to Get There

ID	Action Item	Timeline
7.A	Evaluate Road Ranger standardization (with flexibility), emphasize safety, and address other operational needs based on customer feedback.	< 1 year
7.B	Conduct Statewide Road Ranger Survey for Incident Responders and correlate to roadways, districts, counties, regions.	Annually
7.C	Refocus Road Ranger branding to incident response and TIM.	1-3 years
7.D	Document concerns and suggested revisions to the existing Road Ranger sponsorship contract.	1-3 years

7 | POLICIES AND PROCEDURES FOR INCIDENT RESPONSE AND CLEARANCE

7.2 Severe Incident Response Vehicle (SIRV)

State of the Practice

In Southeast Florida, FDOT created a specialized response to certain freeway incidents to expedite coordination and communication and to provide immediate incident command presence. The Incident Response Vehicle (IRV) on the I-95 Express Lanes in Miami-Dade and the Severe Incident Response Vehicle (SIRV) Team in District 4 (Broward County Region) were created to provide an immediate FDOT Incident Command presence on the scene of major incidents. SIRV negotiates command with public safety, private sector, FDOT responders, and RTMC operators. SIRV is an important addition to the Road Ranger and asset maintenance programs, particularly on express lane/managed lane facilities where expedited clearance is important.

Strategic Direction

IRVs provide a valuable link between FDOT and other responder disciplines, particularly in light of the current trend to use asset maintenance-type contracts as a mechanism to deliver TIM support services. While the IRV and SIRV programs in South Florida are very successful, there should be some standardization of the concept going forward.

Steps to Get There

ID	Action Item	Timeline
7.E	Establish a SIRV/IRV FDOT procedure (with procedure identification number).	< 1 year
7.F	Explore a standardized, scalable approach for replicating select SIRV functions and activities in other districts. Evaluate SIRV duties and responsibilities for standardization (with flexibility) and possible implementation in other Districts.	1-3 years



7.3 Rapid Incident Scene Clearance (RISC) Program

State of the Practice

The Rapid Incident Scene Clearance (RISC) program is an innovative, incentive based heavy duty wrecker program. Originally created for the FTE in 2004, the program has spread to all FDOT Districts. Delayed arrival times of wrecker services or arrival with the wrong type of equipment often leads to increased traffic delays and greater risk of secondary collisions. RISC provides monetary incentives for timely response and expedited clearance of incidents involving large trucks. RISC is implemented and funded by contractual agreements between the FDOT and qualifying private towing and recovery companies. RISC is activated by either the FDOT or the on-scene FHP supervisor, and during Fiscal Year 2016/2017, six FDOT Districts and the FTE activated RISC 233 times with bonus-incentive payments to vendors totaling \$577,700.

Strategic Direction

RISC continues to be a national model for incentive-based towing programs. Turnover within FHP has created a situation that requires re-training personnel in RISC and activation protocols. A joint operating statement between FHP and FDOT will benefit the coordination of efforts and underlying RISC concept for all personnel. The boilerplate statewide RISC procedure should be revisited to accommodate current industry needs and changes in program costs.

Steps to Get There

ID	Action Item	Timeline
7.G	Develop a statewide Joint Operating Program Statement or MOU between FDOT and FHP to strengthen understanding of RISC.	< 1 year
7.H	Establish a plan to refresh and conduct training to familiarize FHP and RTMC operators on RISC activation protocols.	< 1 year
7.I	Review and revise RISC procedure and clearance time goals to address changing operational needs and incentive structure of the program.	< 1 year

7.4 Instant Dispatch Tow

State of the Practice

For all Florida freeways, FHP is the primary response agency for traffic incidents. Like many law enforcement agencies, FHP uses a rotation wrecker allocation system to equitably distribute calls for wrecker companies. [Florida Statute 321.051\(4\)](#), *Florida Highway Patrol wrecker operator system; penalties for operation outside of system*, states:

This section does not prohibit, or in any way prevent, the owner or operator of a vehicle involved in a crash or otherwise disabled from contacting any wrecker operator for the provision of towing services, whether the wrecker operator is an authorized wrecker operator or not.

Because of this language, FHP has historically waited until a trooper arrives on the scene to establish that the driver of a crash vehicle does not have their own preference, prior to initiating the rotation tow request. This owner request requirement conflicts with TIM objectives of safety and quick clearance. Lane blocking events and cases where quick clearance can benefit safety are not exempted.

Strategic Direction

Due to the requirements of the law, FHP has limited flexibility. The agency should seek to have F.S. 321.051(4) changed to include lane blocking events, since delaying requests for towing and recovering services further delays incident clearance and increases the exposure of responders and motorists to hazard. Because very few drivers actually make an owner request for a tow company, FHP should consider making Administrative Rule changes that support implementing a plan where they simultaneously dispatch a trooper and tow truck when RTMC cameras or other on-scene responders provide information that a tow is required. Such a system would expedite lane clearance and promote safety. In rare cases where the trooper arrives to find the driver would like to make their own arrangements, the rotation towing operator could drop the vehicle at a safe location and be compensated a minimal amount, similar to a service call (driver payment) or Safe (Harbor) Tow (FDOT payment), and be placed back on top of the rotation.

Steps to Get There

ID	Action Item	Timeline
7.J	Develop an Instant Tow Dispatch concept paper (including recognition of Instant Tow Pilot in Volusia County) to take to FHP to initiate discussion and eventually implementation.	< 1 year

7.5 Staged Towing Vehicles

State of the Practice

Staging tow vehicles at strategic locations and times can be an effective quick clearance strategy for certain circumstances. Staging a tow vehicle typically involves contracting those services and compensating the company at an hourly rate, regardless if they are used or not. Currently, FDOT uses staged tow trucks on the Howard Frankland Bridge in Tampa, and on the I-95 Express Lanes in Miami.

Strategic Direction

FDOT should consider including staged tow trucks in major roadway work zones where there are extended lane restrictions or limited to no shoulders. Stage towing arrangements should be considered in Transportation Management Plans (TMPs) required under the Federal Work Zone Safety and Mobility Rule for all major projects.

Steps to Get There

ID	Action Item	Timeline
7.K	Develop warrants for when staged tow vehicles should be included in Express Lanes and Work Zone TMPs.	< 1 year



7 | POLICIES AND PROCEDURES FOR INCIDENT RESPONSE AND CLEARANCE

7.6 Safe Tow

State of the Practice

Clearing travel lanes when an incident occurs is important for safety and mobility. Vehicle disablements, crashes, or long bridges with reduced horizontal clearances/limited shoulders create a need for expedited removal of the vehicle to a safer location. A Safe Tow is a means by which a vehicle is only relocated from the scene to a safe location. In District 2, FDOT contracts with towing providers as part of their Road Ranger contract to respond and remove vehicles from travel lanes and/or hazards. The FTE Specialty Towing and Roadside Repair (STARR) program serves a similar function when called upon. In either case, the responding company is compensated at a flat rate, based on vehicle identification. This arrangement does not supersede law enforcement towing arrangements since there is no tow away and only relocation.

Strategic Direction

The Safe Tow strategy is a relatively economical addition to the TIM toolkit and should be implemented in other districts. There is a potential to alleviate the problems created by the FHP “owner request” requirement by timely dispatch and removal to the shoulder or other safe location away from travel lanes.

Steps to Get There

ID	Action Item	Timeline
7.L	Create a standard template for contracting Safe Tow in any FDOT District.	< 1 year

7.7 Florida Guidelines for the Mitigation of Accidental Discharges of Motor Vehicle Fluids (Non-Cargo)

State of the Practice

FDOT created *Florida Guidelines for the Mitigation of Accidental Discharges of Motor Vehicle Fluids (Non-Cargo)* to assist incident responders with making sound decisions concerning the handling of those situations. Instrumental to the guidelines are the reportable quantities of motor vehicle fluids and the list of actions to contain spills. The guideline was reviewed by FHP and revised in 2011. An accurate assessment of the type and quantity of a spill on the highway can have dramatic impact on overall incident duration, since response of specialized hazardous materials resources for containment

HAZMAT

When In Doubt . . .

Call the **State** Watch Office at
800.320.0519

Report discharges in **Duval County**
to **904.255.7171** by voice mail

Report the following:

- o Material involved
- o Amount released
- o Responsible party
- o Location of incident
- o What is affected
- o Actions taken and by whom
- o Call back information

PETROLEUM BASED SPILLS

State

- o Greater than 25 gallons
- o Into/involving state waterways
- o Requiring state/federal notifications or assistance

Duval County

- o Greater than 10 gallons
- o Into/involving surface water or storm water systems

CHEMICAL SPILLS

State and Duval County

- o SARA/EHS/CERCLA releases
- o Threat to population or environment
- o Requiring evacuation

Provided by FDOT District 2

and recovery often involves several hours.

Strategic Direction

FDOT should continue to market the guide as a resource for incident responders in Florida, focusing attention on the reportable quantities component of the guideline. Reinforcement of the guidelines should also be made during statewide responder training.

Steps to Get There

ID	Action Item	Timeline
7.M	Conduct reminder activities related to the <i>Florida Guidelines for the Mitigation of Accidental Discharges of Motor Vehicle Fluids (Non-Cargo)</i> to maintain awareness by responders.	On-going

7.8 Crash Investigations

State of the Practice

FHP is responsible for more than 90% of traffic crash investigations on Florida freeways and 97% of fatal crashes on those roadways. When a fatality or possible fatality occurs, FHP dispatches a Traffic Homicide Investigator (THI) to the scene. The fatal crash investigation conducted by the THI is separate from the traffic crash investigation that is required by law, to avoid issues with criminal procedure should there have been a crime committed like manslaughter or vehicular homicide. The THI investigation generally involves collecting more detailed measurements, photographs, and statements which are often time-consuming.

Strategic Direction

FHP has used various types of technology for measuring fatal crash scenes for more than two decades. FDOT has purchased photogrammetry, total station, and other types of technology to assist the agency in expediting scene processing. FHP continues to invest in procuring new robotic total station units to enhance crash investigation and quick clearance activities.

Steps to Get There

ID	Action Item	Timeline
7.N	Maintain an awareness of new/emerging technologies related to crash investigations.	On-going
7.O	Maintain an inventory of available THIs.	On-going
7.P	Document and articulate the benefits of current crash investigation technologies.	1-3 years

7.9 Tagging of Abandoned Vehicles

State of the Practice

[Florida Statute 316.1945\(11\)](#), *Stopping, standing, or parking prohibited in specified places, states:*

On the roadway or shoulder of a limited access facility, except as provided by regulation of the Department of Transportation, or on the paved portion of a connecting ramp; except that a vehicle which is disabled or in a condition improper to be driven as a result of mechanical failure or crash may be parked on such shoulder for a period not to exceed 6 hours.

During routine patrol duties, FHP checks roadside vehicles to determine if there are any individuals present, identify if the vehicle has been used in a crime, and to check the vehicle's registration status. If everything checks out, the trooper places a readily identifiable decal on the vehicle that includes the date, time, and trooper identification. This serves as a time stamp for later towing of the vehicle as abandoned pursuant to law. In many places, FHP allows Road Rangers to assist in tagging abandoned vehicles, since the use of the State Law Enforcement Radio System (SLERS) by Road Rangers provides contact with FHP dispatch. However, in some locations, FHP prohibits the Road Rangers from performing this function.

Strategic Direction

Safety is advanced by removing disabled vehicles that are stopped on freeways or in the "clear zone". FHP should review their procedures to more aggressively check and subsequently tow abandoned vehicles left on the shoulder since they present a potential safety hazard. FHP should also enlist the help and support of Road Rangers in this important practice by allowing them to "Red Tag" vehicles in all Troops

Steps to Get There

ID	Action Item	Timeline
7.Q	Develop a standard operating policy or MOU that specifies FHP and FDOT roles in, and procedures for, tagging abandoned vehicles.	< 1 year

7 | POLICIES AND PROCEDURES FOR INCIDENT RESPONSE AND CLEARANCE

7.10 Designated Incident Response Coordinator (IRC)

State of the Practice

Management of incidents and emergencies are guided by the Incident Command System (ICS). ICS is a standardized approach to the command, control and coordination of emergency response. ICS can be further characterized by Single and Unified Command. Under Single Command, an Incident Commander has complete responsibility for incident management. For traffic incidents that require multiagency and multidiscipline response, Unified Command is typically utilized. Unified Command provides a structure for responding agencies and disciplines to establish a common set of incident objectives and to work together without affecting authority, responsibility or accountability. For traffic incidents under Unified Command, FDOT may only be represented by operators at the RTMC who are not physically present at the incident scene along with other responders. Furthermore, Asset Maintenance (AM) contractors may be requested by FDOT and/or other emergency responders, with little or no notice, to provide TIM personnel and equipment support for activities such as traffic control and debris removal.

Strategic Direction

Establishing a designated Incident Response Coordinator (IRC) will help ensure that FDOT is properly represented at traffic incident scenes under ICS. This position would be filled with a manager from an AM contractor, RTMC operations contractor, FDOT on-call supervisor, or FDOT District TSM&O Office. Specific requirements for this new position will need to be developed for the future but will likely include responsibilities such as:

- Coordination of, and communication with, FDOT TIM assets and strategies including RTMC Operations, Road Rangers and RISC;
- Coordination of detour route traffic signal timing during incidents;
- Participation in incident AARs, TIM team and related meetings; and
- Adherence to all FDOT/FHP Open Roads Policy Agreement provisions.

Steps to Get There

ID	Action Item	Timeline
7.R	Coordinate with the FDOT Traffic Engineering & Operations Office, Office of Maintenance and Districts to prepare draft/final typical IRC position requirements, performance metrics and other contract language.	< 1 year
7.S	Require IRC position in future Asset Maintenance (AM) contracts and/or renewals (as appropriate).	Future (AM contract and/or renewal dependent)



8.1 TIM Response Procedures/Guidelines

Current Conditions

In 2009, the North Florida Transportation Planning Organization (TPO), located in FDOT District 2 region, released the TIMe4Safety DVD, which included five video modules, and a TIM handbook. The handbook addressed responder roles and responsibilities, establishment of TIM areas, and responder safety precautions and equipment. However, aside from this District 2 specific document, existing TIM response procedures and guidelines are largely agency specific, may not always be consistent and sometimes not thoroughly documented.

Strategic Direction

Participants of the Florida Statewide Strategic Plan Survey overwhelming supported the need for developing model policies or procedures for the following topics:

- High-Visibility Safety Apparel Use
- Emergency-Vehicle Lighting Use at Incident Scenes
- Vehicle Positioning at Incident Scenes
- Traffic Control at Incident Scenes

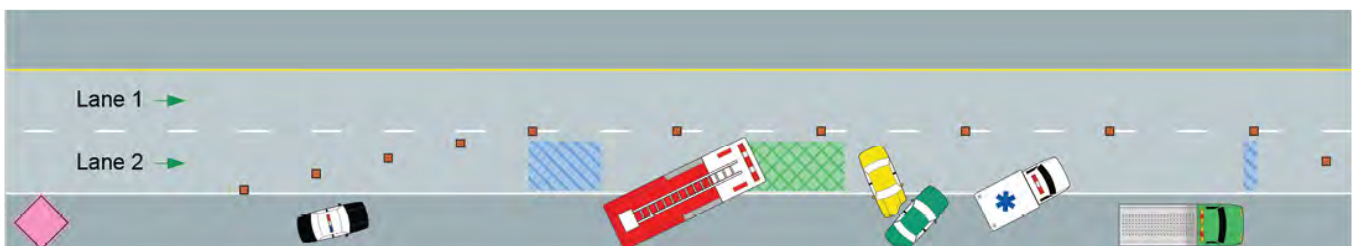


These topics are addressed in the FHWA SHRP2 National TIM Responder Training Program and any policies or procedures developed should remain consistent with the training. As part of the national program, FHWA developed a supplemental guide to serve as a reference for responders that had received TIM training. It is anticipated that this document can be used as the foundation for developing a Florida specific TIM response guideline that addresses the topics listed above.



Steps to Get There

ID	Action Item	Timeline
8.A	Develop a Florida TIM Response Guideline/Procedure.	1-3 years



9 | DATA COLLECTION/INTEGRATION/SHARING

9.1 Regional Traffic Management Centers

State of the Practice

Freeways in Florida are monitored with an extensive network of traffic detectors, cameras, and DMS. These Intelligent transportation systems (ITS) devices feed into RTMCs that use SunGuide® software to manage data and record incidents. To facilitate data sharing, FHP CAD data has been integrated with the SunGuide® software.

Relationships are an important part of TIM and as such, FDOT and FHP have co-located several operations throughout the state to promote cohesive interagency operations. With FHP dispatch and RTMC operators working side-by-side together, traffic incidents are more quickly identified and cleared through real-time agency coordination.

Strategic Direction

Consideration should be made by FDOT and FHP to move beyond simple RTMC operator and FHP dispatcher co-location and more formally integrate the operations of key personnel. FHP formerly had a 24-hour uniformed supervisor in each dispatch center but reallocation of resources to reduce inefficiencies resulted in this position being eliminated. Re-introducing an FHP uniformed supervisor in urban communications centers during peak periods may serve to strengthen operations between field units and the RTMC.

Steps to Get There

ID	Action Item	Timeline
9.A	Ensure RTMC designs consider physical integration of RTMC operator and public safety dispatcher, including FHP, work space.	< 1 year
9.B	Explore ways to re-introduce FHP uniformed supervision in communications centers during peak periods (i.e., hire back, light duty staffing, etc.).	< 1 year



9.2 Data Sharing

State of the Practice

The ability to access RTMC camera feeds and view incidents in real-time is an extremely valuable resource for incident responders. FDOT is providing this service in some districts, but how video is shared with responders varies greatly throughout the state.

Strategic Direction

Given the importance of real-time data and information to traffic incident response, a statewide consistent policy and approach to sharing this data, including RTMC video, with TIM partners is needed. This will ensure that the investment in video infrastructure is maximized. Sharing data/video may also enhance relationships between FDOT and its partner response agencies, particularly when they begin to utilize it and recognize its value.

Steps to Get There

ID	Action Item	Timeline
9.C	Identify opportunities to facilitate sharing of TMC video and data with local responders.	< 1 year
9.D	Develop a statewide policy for data and video sharing.	1-3 years
9.E	Develop a standard MOU for agencies that have access to the video that includes a commitment to participating in the local TIM program.	1-3 years



10 | TIM CONSIDERATIONS FOR PRIORITY FOCUS AREAS

10.1 Integrated Corridor Management and Arterial TIM

State of the Practice

Florida has been very successful in creating a statewide approach to TIM for freeways and limited access facilities. However, incidents that occur on our freeways often have a ripple effect on local arterials, especially those that have direct access to the freeway system via interchanges. It is anticipated that the next generation of TIM in Florida will view TIM and corresponding strategies from an integrated corridor perspective that considers the impact of traffic incidents on both freeways and arterials.

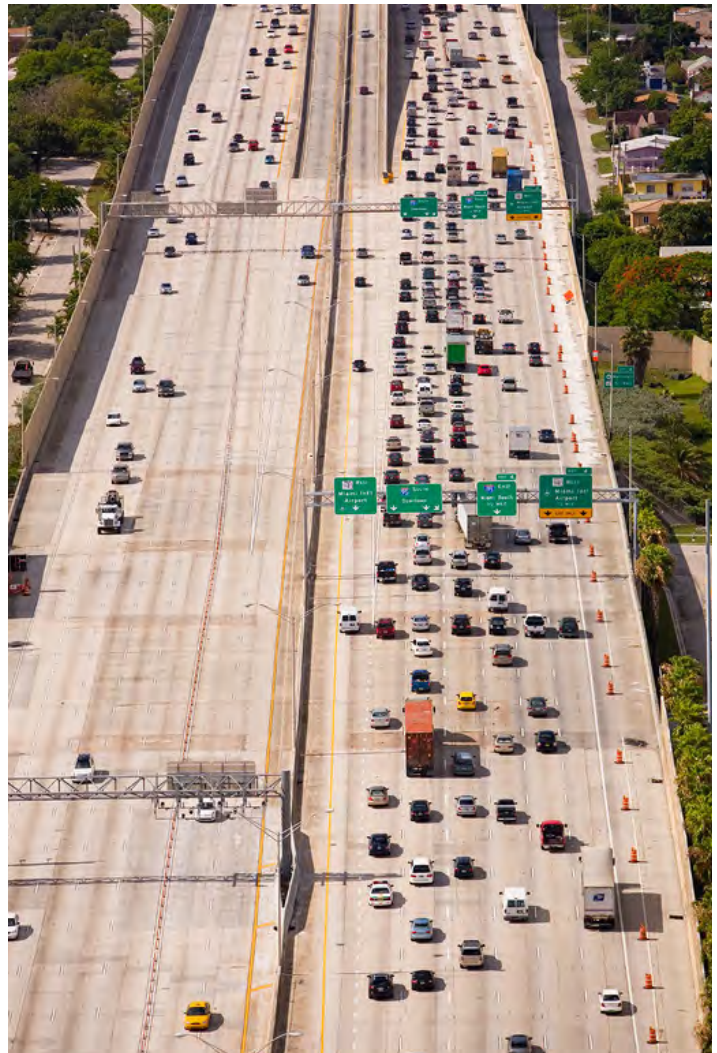
FDOT's TSM&O Division has established the Statewide Arterial Management Program (STAMP). Arterial roadways constitute the majority of the State Highway System centerline miles and Daily Vehicle Miles Traveled (DVMT) and therefore arterial management has been designated as a priority focus area in the 2017 TSM&O Strategic Plan (link provided in Section 1.2). FDOT and local agencies are investing in a variety of arterial management technologies including those involving Adaptive Signal Control Technology (ASCT) and Connected Vehicles (CV) that will support the performance-based goal of improving travel times and moving vehicles and pedestrians as quickly, efficiently and safely as possible along arterial roadways while supporting nearby limited access facilities. As an early example, through their Arterial Management Program (AMP), District 4 is currently pursuing approaches that will leverage arterial signal control, ITS, and RTMC operations on major arterials, particularly where they intersect with freeways. Responding to traffic incidents is an important capability of the District 4 AMP initiative.

Strategic Direction

The objective for arterial TIM and an integrated corridor approach seeks to promote safe, efficient travel on both arterials and freeways. Arterial signal coordination, enhanced signal timing at ramp locations, and systems that adapt to changing traffic patterns/volumes are foundational to seamless transitions between freeways and arterials. Many stakeholder organizations, such as local agency police, fire, and EMS that do not routinely provide freeway traffic incident response, need to be familiarized with TIM on arterials, notably for responder safety and safe quick clearance of incidents. Road Rangers and other incident response capabilities, such as an incident response vehicle can aid responders, facilitate temporary traffic control and improve safety. It will also be important to monitor conditions on arterials both from the perspective of real-time operations as well as system/roadway performance.

Steps to Get There

ID	Action Item	Timeline
10.A	Continue to leverage the FHWA SHRP2 National TIM Training Program to properly train local agencies (police, fire, EMS, towing) on arterial TIM.	1-3 years
10.B	In coordination with TSM&O Program efforts, measure and monitor arterial performance and use data to support a business case for arterial TIM.	1-3 years
10.C	Explore and potentially deploy TIM strategies such as Road Rangers, RISC, and SIRV to support TIM and arterial management.	3-5 years



10.2 TIM for Express Lanes

State of the Practice

Florida is a leader in the use of managed lanes, particularly express lanes, a type of managed lane. Express lanes are designed with a limited number of entrance and exit points to serve longer more regional trips. Using dynamic pricing, these facilities provide customers a choice to pay for a more predictable travel time.

The success of 95 Express in Miami-Dade County has resulted in the expansion of similar express lanes facilities in Miami-Dade, Broward, Duval, Hillsborough, Pinellas, Orange, Lake, Seminole, Volusia, and Osceola counties. TIM practices for Express Lanes have been established with the operation of 95 Express in Miami-Dade County, that include use of dedicated Road Rangers, staged flatbed tow vehicles and overtime FHP officers for enforcement.

Express Lanes are a travel choice for roadway users, and dynamic pricing is based on the congestion in the Express lanes. Accordingly, TIM strategies must focus on providing a reliable trip. Express Lanes operating procedures outlining TIM strategies are developed in coordination with first responders, law enforcement, and Road Ranger support.

Strategic Direction

The uniqueness of express lanes operations requires a dedicated approach to TIM that prioritizes resources and focuses on minimizing the amount of time that express lanes are obstructed or closed as a result of unplanned, non-recurring events and incidents.

Steps to Get There

ID	Action Item	Timeline
10.D	Develop a menu of TIM staffing options available for managed lanes to include average cost, and personalization based on benefit-cost.	1-3 years
10.E	Develop training materials for TIM operational practices for facilities utilizing Express Lanes.	1-3 years
10.F	Conduct training with all responders, including RTMC operators and dispatchers in conjunction with new Express Lanes project openings.	1-3 years
10.G	Monitor development of, and provide TIM-specific input to Express Lane Operations Plans/Manuals/Guidelines. Recognize unique requirements for Express Lane incident response.	Ongoing
10.H	Review strategies such as dedicated Crash Investigation Sites to enhance Express Lane TIM and safety.	Ongoing



10 | TIM CONSIDERATIONS FOR PRIORITY FOCUS AREAS

10.3 TIM Plan Supplement for Transportation Management Plans

State of the Practice

Section 240 of the Florida Design Manual (FDM) (Chapter 10, Volume 1 of the FDOT Plans Preparation Manual for projects that initiated design prior to January 1, 2018) presents requirements for developing a Transportation Management Plan (TMP) for all significant (roadway construction/work zone) projects. The FDM defines significant projects as:

1. A project that, alone or in combination with other concurrent projects nearby, is anticipated to cause sustained work zone impacts.
2. All Interstate system projects within the boundaries of a designated Transportation Management Area (TMA) that occupy a location for more than three days with either intermittent or continuous lane closures.

TMPs for significant projects require three primary components: (1) Temporary Traffic Control (TTC) plan; (2) Transportation Operations; and (3) Public Information. Within Transportation Operations are TIM strategy considerations that include service patrols, incident/emergency response plans, and contract support for TIM.

TIM in work zones is routinely discussed in the context of District-level TIM Team meetings but resources to address unique needs resulting from the work zone are not consistently available.

Strategic Direction

Improving capacity and rehabilitating Florida's highways has increased the number of construction projects occurring throughout the state at any given time. The safety, mobility and economic impacts of these dynamic work zones are significant, and TIM is a critical operational strategy to mitigate many of the negative impacts of these construction projects. Accordingly, there needs to be better general awareness of the FDOT TMP requirements with specific emphasis on TIM and operations. In addition, process enhancements are needed to ensure that TIM is considered and integrated both early in the project development process and throughout design and construction life cycle. Recognizing the importance of operations at these stages will help in leveraging existing TIM investments and program activities, while allocating the proper amount of additional capital and human resources necessary for safe, effective TIM in Florida's work zones.

Steps to Get There

ID	Action Item	Timeline
10.I	Explore opportunities such as annual FDOT Maintenance, Design, and Construction conferences to promote awareness of work zone TIM in the context of TMP development.	1-3 years
10.J	Assemble conference sessions, talking points, PowerPoint slides, and other documentation to facilitate work zone TIM dialogue.	1-3 years
10.K	Clarify and/or highlight TIM in the FDM and include a requirement to more formally consider TIM resourcing early in the TMP development process.	1-3 years





AAR	After-Action Reviews	ITS	Intelligent Transportation Systems
AM	Asset Maintenance	MOT	Maintenance of Traffic
AMP	Arterial Management Program	MPOAC	Metropolitan Planning Organization Advisory Council
ASCT	Adaptive Signal Control Technology	NHI	National Highway Institute
ATMS	Advanced Traffic Management System	NUG	National Unified Goal
CAD	Computer-Aided Dispatch	PIA	Post Incident Analysis
CMSA	Capability Maturity Self-Assessment	PWOF	Professional Wrecker Operators of Florida
CTST	Community Traffic Safety Team	RCT	Roadway Clearance Time
CV	Connected Vehicles	RISC	Rapid Incident Scene Clearance
DHSMV	Department of Highway Safety and Motor Vehicles	RSLN	Responder Safety Learning Institute
DMS	Dynamic Message Signs	RTMC	Regional Transportation Management Centers
EDC	Every Day Counts (FHWA)	SHRP2	Strategic Highway Research Program 2
EMS	Emergency Medical Service	SRV	Severe Incident Response Vehicle
ERSI	Emergency Responder Safety Institute	SLERS	State Law Enforcement Radio System
FACERS	Florida Association of County Engineers and Road Superintendents	SSTA	Sunshine State Towing Association
FAME	Florida Association of Medical Examiners	STAMP	Statewide Arterial Management Program
FDOT	Florida Department of Transportation	STMC	Satellite Transportation Management Center
FFCA	Florida Fire Chiefs' Association	THI	Traffic Homicide Investigator
FHP	Florida Highway Patrol	TIM	Traffic Incident Management
FHWA	Federal Highway Administration	TMA	Transportation Management Area
FPCA	Florida Police Chiefs' Association	TMP	Transportation Management Plans
FSA	Florida Sheriffs Association	TPO	Transportation Planning Organization
FTBA	Florida Transportation Builders' Association	TTC	Temporary Traffic Control
FTE	Florida Turnpike Enterprise	TtT	Train-the-Trainer
ICT	Incident Clearance Time	TSM&O	Transportation Systems Management and Operations
IRC	Incident Response Coordinator		
IRV	Incident Response Vehicle		

