TRAFFIC INCIDENT MANAGEMENT FROM GOOD TO GREAT

By: Florida Department of Transportation

IN THIS CASE STUDY YOU WILL LEARN:

1. Florida was among the first states in the nation where integration of state police computer-aided dispatch (CAD) and RTMC software occurred, which continues to this day.

2. FDOT’s safety service patrol program, known as the Road Rangers, patrols more than 1,500 centerline miles of freeways, proactively identifying incidents and clearing roadways.

3. The FDOT TIM strategic plan was developed to support and be consistent with the department's TSMO program vision for increasing the delivery rate of fatality-free and congestion-free transportation systems.

BACKGROUND

For decades, the state of Florida has enjoyed a mature, statewide traffic incident management (TIM) program. However, as a strategically critical element of Transportation Systems Management and Operations (TSMO), the Florida Department of Transportation (FDOT) and its partner agencies and disciplines recognize that status quo is unacceptable when it comes to safety and mobility. FDOT's focus on, and model approach to continually elevating its TIM program from "good to great" is a case study in national leadership for this foundational TSMO activity, and is particularly relevant as many states struggle to sustain their TIM programs.

FOUNDATION OF TIM

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 that feed into Regional or Satellite Transportation Management Centers (RTMCs/STMCs) in each of the seven FDOT districts and the Florida Turnpike Enterprise. Florida was among the first states in the nation where integration of state police computer-aided dispatch (CAD) and RTMC software occurred, which continues to this day.

FDOT’s safety service patrol program, known as the Road Rangers, patrols more than 1,500 centerline miles of freeways, proactively identifying incidents and clearing roadways. The Road Rangers are also an important part of incident response, providing temporary traffic control at incident scenes. Asset maintenance contractors, under contract with FDOT, are also available to provide long-term traffic control, debris removal, and transportation infrastructure damage repairs.

The Rapid Incident Scene Clearance (RISC) incentive-based heavy-duty wrecker program is available to support quick clearance of major incidents. RISC is activated by either the FDOT or on-scene Florida Highway Patrol (FHP) supervisor. During Fiscal Year 2016/2017, FDOT districts and FHP activated RISC 233 times with bonus-incentive payments to vendors totaling $577,700. Since its inception, the program has spread to all FDOT districts, and has been replicated by DOTs across the nation.

Programmatic and institutional investments have also helped to reinforce TIM, including integration into FDOT’s TSMO program. 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. Additionally, FDOT and FHP have co-located operations at multiple RTMCs statewide to promote cohesive operations. This level of ongoing support and involvement has allowed Florida to embrace an organizational structure that is well positioned to sustain its statewide TIM program into the future.
TIM STRATEGIC PLANNING
A good TIM program routinely assesses issues and needs and implements or adjusts activities accordingly. Progressing from a good to great TIM program requires a deliberate, focused, and strategic approach. It also requires vision, leadership, and equally important recognition of the need to continually build on TIM successes for a sustained cycle of improvement.

In early 2017, FDOT made a conscious effort to improve its TIM program by developing a comprehensive TIM strategic plan. An agency-wide TIM strategic plan, at its core, is designed to set priorities, focus energy and resources, strengthen operations, and ensure that program stakeholders are working toward common goals. Foundational to the strategic planning process is thoroughly understanding the needs of the TIM program stakeholders.

Additionally, the FDOT TIM strategic plan was developed to support and be consistent with the department's TSMO program vision for increasing the delivery rate of fatality-free and congestion-free transportation systems. The strategic plan was also developed to support FDOT's mission to identify, prioritize, develop, implement, operate, maintain, and update TSMO program strategies, and measure the strategies' effectiveness for improved safety and mobility. To further emphasize the importance of TIM in the context of other standalone TSMO strategies, the strategic plan also includes sections addressing priority focus areas of integrated corridor management and arterial TIM, TIM for express lanes, and TIM supplement for transportation management plans.

COMMUNICATIONS PLANNING AND EXECUTION
Given the multiagency and multidisciplinary nature of TIM, it is critical to maintain a focus on communications, particularly with partner agencies and stakeholders. As yet another demonstration of leadership in elevating the Florida TIM program from good to great, FDOT established a statewide TIM Working Group during the initial stages of the strategic plan development. The purpose of the Florida TIM Working Group is to further unite TIM program partners and facilitate continued communication and collaboration in developing practical, yet innovative traffic incident management strategies that meet Florida's ongoing needs. The Working Group includes policy-level representatives from select TIM discipline-focused organizations and other stakeholders. Working Group input, discussion, and participation enable a multidiscipline forum for guiding FDOT, its partners, and other internal and external stakeholders on policy matters and issues affecting TIM needs throughout the state, including development of the strategic plan.

LESSONS LEARNED
Commensurate with FDOT's decades of experience in managing traffic incidents every day on Florida's highways are many lessons learned, including recognizing the criticality of TIM programs to overall success.

The resulting FDOT TIM strategic plan and associated timeline for strategy implementation will serve as a roadmap for FDOT and its partners to elevate their TIM program from good to great. More importantly, the plan's end result will translate to improved transportation safety and mobility for millions of Florida's citizens, businesses, and visitors. FDOT's leadership and investment in strategic planning is an excellent case study in sustaining TIM improvement and will undoubtedly be a model approach that other states and regions may use to enhance this foundational TSMO activity.

FDOT'S APPROACH FOR IDENTIFYING TIM NEEDS INCLUDED:

SURVEY RESEARCH
A web-based survey was distributed to local TIM responders representing law enforcement, fire/rescue, emergency medical services, transportation, and towing and recovery as well as other stakeholders, through the TIM Program Managers to obtain insights on several TIM topics.

STAKEHOLDER MEETINGS
Meetings were conducted with every FDOT District TIM Program Manager and the TIM teams, as well as individual meetings with the FDOT Statewide Program Manager and the Director of FHP.

STRATEGIC PLANNING WORKSHOP
FDOT TIM leaders representing each district convened in a two-day workshop to further elaborate on TIM issues and needs and provide input to the draft strategic plan. Their engagement was critical to finalizing content.

TIM CAPABILITY MATURITY SELF-ASSESSMENT
The Federal Highway Administration (FHWA) developed the TIM Capability Maturity Self-Assessment (CMSA) tool to provide a systematic and structured approach for assessing and benchmarking existing TIM capabilities and identifying tangible actions for increasing capability and sophistication levels. Information gathered from 12 cities and regions in Florida for the 2016 CMSA was integrated into the strategic plan.