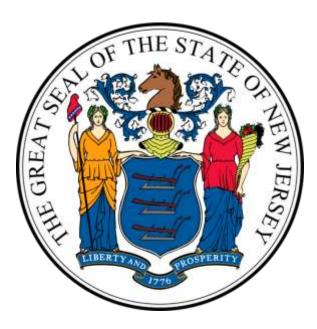
State of New Jersey Traffic Incident Management Strategic Plan



Endorsed by the New Jersey Statewide TIM Steering Committee Date: June 2022

Prepared for:

New Jersey Department of Transportation



ITS Resource Center New Jersey Institute of Technology



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- New Jersey State Police (NJSP)
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- South Jersey Transportation Authority (SJTA)
- South Jersey Transportation Planning Organization (SJTPO)
- Transportation Operations Coordinating Committee (TRANSCOM)

Document Maintenance and Updates

Collaborative and regular reviews will keep the plans current and relevant, incorporates new partners or processes, and retires obsolete content. Each revision will be numbered and documented. As new versions are created and distributed to the participants, older versions will be replaced at NJTIM.org The table below will keep a record of revisions made to the plan since it was first published.

Change Number	Date of Change	Section of Plan
Version 0	January 2015	Original Document
Version 1	November 2019	Text revised to document new accomplishments
Version 2	June 2022	Modifications of all sections

Introduction

A traffic incident is any non-recurring event that causes a reduction in roadway capacity or an abnormal increase in traffic demand that disrupts the normal operation of the transportation system. Such events include traffic crashes, disabled vehicles, spilled cargo, highway maintenance, reconstruction projects, and special non-emergency events. Traffic incidents are a significant cause of congestion and delays that motorists encounter every day on roadways and have become an important issue in New Jersey.

About half of all congestion is caused by temporary, "non-recurring" disruptions that take away from the use of the roadway, such as crashes, disabled vehicles, work zones, adverse weather events, and planned special events. According to the Federal Highway Administration (FHWA), the three main causes of non-recurring congestion are incidents ranging from a flat tire to an overturned hazardous material truck (25%), work zones (10%), and weather (15%).¹ Non-recurring incidents dramatically reduce the available capacity and reliability of the entire transportation system and when an incident occurs, congestion quickly builds up and chances of a secondary incident increase. The sooner incidents are detected, the more quickly personnel can respond to the incident and clear it from the roadway, thereby allowing traffic lanes to reopen.

Traffic Incident Management (TIM) consists of a planned and coordinated multidisciplinary process to detect, respond to, and clear traffic incidents so that traffic flow may be restored as safely and quickly as possible. Effective TIM reduces the duration and impacts of traffic incidents and improves the safety of motorists, crash victims, and emergency responders. The program is guided by the National Unified Goal ("NUG")² for Traffic Incident Management which encourages individuals, agencies, and organizations to work together on:

- promoting the safety of motorists, crash victims, and incident responders;
- reducing the time for incident detection and verification;
- reducing response time (the time for response personnel and equipment to arrive at the scene);
- exercising proper and safe on-scene management of personnel and equipment, while keeping as many lanes, as possible, open to traffic;
- conducting an appropriate response, investigation, and safe clearing of an incident;
- reducing clearance time (the time required for the incident to be removed from the roadway);

¹ <u>https://highways.fhwa.dot.gov/research/rtportfolio/operations-disruptions</u> (Updated: Tuesday, July 13, 2021)

² The National Unified Goal (NUG) for Traffic Incident Management is a unified national policy developed by major national organizations representing traffic incident responders.

- providing timely and accurate information to the public that enables them to make informed choices; and
- getting traffic moving again as soon as possible after a partial or complete roadway closure while managing the affected traffic until normal traffic conditions are restored.

To continue the effort to reduce the number of motor vehicle crashes, fatalities, and other incidents that occur on New Jersey roadways, the New Jersey Department of Transportation (NJDOT) started an initiative to implement a Statewide TIM Program. Beginning in April 1993, the Incident Management Operations Group (IMOG) was formed to direct and guide the development of NJ TIM program. The IMOG was established as a multidisciplinary working group of agencies involved in traffic incident response and management. The main objective of IMOG was to enhance the State's TIM program from a policy and operations perspective in order to provide for the safe and efficient movement of traffic in New Jersey.

Since then, additional efforts have been made by individual agencies to address the challenges of effective traffic incident management on a local and regional level. In January 2015, the program had grown and reached a new milestone with the adoption of the first *State of New Jersey Traffic Incident Management Strategic Plan*, along with the creation of a TIM Steering Committee, which to date has met bi-annually. *The State of New Jersey TIM Strategic Plan* identified several organizational, operational, and management gaps pertaining to current TIM activities and provides recommendations and/or items needed to fill these gaps. Similar to TIM, being a coordinated process that involves several partners, the working groups were formed to involve representatives from all potentially affected stakeholders. The diversity was necessary since TIM is a coordinated multidisciplinary process that involves a variety of organizations, each with a specific role and responsibility at an incident scene. The diversity also provides a unique perspective on problem-solving and ensures that the solutions to gaps are addressed from all points of view. Recognizing that solving the task at hand requires bridging institutional, technological, and human barriers, the goals of each working group.

The Statewide TIM Steering Committee meetings provide opportunities to discuss and facilitate program concerns and updates. This latest update to the TIM Strategic Plan seeks to continue building upon existing success while striving to improve response time, communication, coordination, and safety for all responders.

Purpose

The TIM Strategic Plan Purpose as a living, breathing document is to continuously provide a framework for agencies to organize and conduct current and future TIM efforts and to evolve these efforts into a formal long-term sustained program. While the primary focus of the TIM Program is managing traffic incidents, the same coordination and communication lessons are essential to successfully manage large-scale emergencies, such as severe weather, national security threats, and special events (e.g., sporting, entertainment, political, tourist, etc.).



TIM Steering Committee

Over the years, New Jersey has earned its reputation of being a leader in TIM due to the support of individual and partner agencies across the State. The New Jersey Statewide TIM Steering Committee serves as a focal point of strategic initiatives for TIM Program improvements by providing leadership, direction, and support to local and regional TIM activities. The TIM Steering Committee consists of TIM stakeholders representing various agencies within New Jersey, including both the public and private sector. The first meeting of the TIM Steering Committee was held in Hamilton, New Jersey, on April 29, 2014, and was attended by about 35 persons from various responder agencies. The committee continues to meet and share strategies and experiences to improve the TIM program.



Figure 1: New Jersey Statewide TIM Steering Committee Meeting

Program Objectives

Since the TIM Steering Committee is comprised of both public and private TIM stakeholders from multiple disciplines, the goal of the Steering Committee is to collectively work together to provide guidance, research, and training to meet the goals of TIM. The objectives of the committee include:

- promoting safety of responders;
- improving communications among responders;
- promoting efficient use of multiagency resources;
- promoting effective treatment of the injured;
- providing guidance on effective diversions around incidents;
- encouraging post incident reviews;
- developing uniform training of all incident responders;
- developing recommendations for:
 - policy/procedures
 - o public outreach
 - o integrating incident/unified command structure into TIM
- instituting incident scene parking guidelines;
- maintaining a partnership with the media;
- promoting quick clearance by:
 - o fostering prompt and accurate reporting, detection, and verification of incidents;
 - o fostering prompt and accurate notification to all responders; and
 - o promoting the strategies associated with the National Unified Goal for TIM.

"THE NEW JERSEY TRAFFIC INCIDENT MANAGEMENT STRATEGIC PLAN WAS FORMULATED TO OUTLINE THE ESSENTIAL COMPONENTS AND IMPROVEMENTS NEEDED TO DEVELOP AND MAINTAIN A ROBUST TIM PROGRAM."

TIM Process

A. Methodology

To better understand the complexity of TIM, it is best to analyze the six stages of the TIM process as depicted in Figure 2. Please note that these stages overlap, and the actions described below may occur in multiple stages.

Performance				Roadway Clearance Time			
Measures					Incident Cleara	Incident Clearance Time	
Incident occurs	Incident reported	Arrival on scene	On-scene response	All travel lanes open	All responders have left the scene	Traffic conditions return to normal	
10	0 (12 (19	74	B (10	
Detection	_						
	Notification						
	Terminology, Veri						
		Arrival					
		Size-Up, Vehicle	Positioning	1			
			Response Activities				
			Scene Safety, Command Responsit Traffic Management, Special Circu				
				Clearance & Termina			
					Recovery		

Figure 2. Timeline of Stages in the TIM Process³

1. Detection

- Determining that an event has occurred and is brought to the attention of the agency/agencies responsible for maintaining traffic flow and safe operations on the facility. Various methods of detection include:
 - Cell phone calls from motorists.
 - Closed-circuit television (CCTV) images viewed by Traffic Management Center (TMC) operators.
 - Electronic detection (such as video processing, radar, induction loops) with traffic incident detection algorithms and predictive crash analytics.
 - Alerts from data subscription services of congestion.

³ National Traffic Incident (TIM) Responder Training Program Last Updated: 03-01-2022

- Calls from Police/Service patrols.
- Calls from public works crews.
- Notifications/Observations via Social Media (ex: Facebook, Twitter, Instagram, etc.).
- Crowdsourcing (Waze, Google, Apple Maps, Drivewyze, etc.).

2. Notification

- Confirming that an event has occurred, determining its exact location, and obtaining as many relevant details as possible about the event in order to dispatch the proper initial response. Methods used to verify an incident include:
 - Field units (e.g., police, service patrols) at the event site.
 - CCTV images.
 - Communications with helicopters operated by police, media, or information service providers.
 - Combining information from multiple cellular calls.

3. Arrival

- Dispatching the appropriate personnel and equipment and activating the appropriate communication links and motorist information media as the event is verified. The timely and effective arrival at an incident scene reduces the event's duration, and therefore, the time the roadway operates at a reduced capacity. In addition to on-scene personnel, other arrival activities include:
 - Advanced response vehicles that include a mobile communications platform, GPS, and other features to facilitate efficient response.
 - Personnel and logistics support.
 - Interagency response planning and mutual-aid agreements.
 - Intra- and inter-agency communications.

4. Response Activities

- Scene Management effectively coordinating and managing on-scene resources. Effective scene management increases safety for crash victims, motorists, and responders; coordinates responder activities; and decreases the impacts of an event on the roadway system. Examples of scene management activities include:
 - Accurately assessing events.
 - Properly establishing priorities.
 - Using the Incident Command System (ICS).
 - Notifying and coordinating with appropriate agencies and organizations.
 - Properly placing and staging response vehicles at traffic incident scenes.
 - Identifying the appropriate responder vehicles at the scene and those that are not needed should leave the scene.
- **Traffic Management** applying traffic control measures onsite and in areas affected by an event. Effective traffic management minimizes traffic disruption while maintaining a

safe workplace for responders and reduces the likelihood of secondary crashes. Examples of traffic management activities include:

- Establishing and operating alternate routes.
- Using traffic control devices, such as Variable Message Signs (VMS), Highway Advisory Radio (HAR), and traffic signals.
- Using cones, flares, warning signs, arrow boards, portable VMS, and other traffic control resources.
- Managing queues to actively monitor the end of queue and warning approaching motorists.
- Reducing long-term traffic incident duration.
- **Motorist Information** includes dissemination of event-related information to affected motorists through the use of various methods. Some of these methods include:
 - VMS and/or HAR.
 - Commercial radio and television broadcasts.
 - Traveler information systems (ex. 511).
 - o In-vehicle or personal digital assistant (PDA) information.
 - Information service providers (ISP).
 - Prompt notification to single traffic information warehouse(s) for media and public distribution (at time of incident, rather than long after the resources had been requested).
 - Crowdsourcing platforms (e.g. Waze, Google, HERE).

While other TIM activities are taking place, it is essential to continuously update and disseminate information throughout the duration of an incident. Motorist information is key because it occurs from the beginning to the end of an incident and even beyond the time it takes to clear the incident, i.e. through incident clearance, termination, and recovery phases.

5. Clearance & Termination

- Removing wreckage, debris, or any other elements that disrupt the normal flow of traffic. Improving traffic incident clearance procedures has many positive effects. These positive effects include:
 - Minimizing motorist delay
 - Making effective use of all resources
 - Enhancing the safety of responders and travelers
 - Protecting the roadway and private property from unnecessary damage during the removal process.

6. Recovery

- Evaluating the long-term impact of an incident and identifying recovery actions needed to mitigate those impacts. The goal of recovery is to restore the roadway capacity to its preevent condition and includes certain actions. These actions include:
 - Restoring traffic flow

- o Restoring the roadway to its pre-event capacity quickly and safely
- Assessing damage
- Restoring damaged infrastructure
- Inspecting structural components.

B. Incident Levels

After establishing the stages involved in TIM, it is important to establish defined incident levels to help guide the response to traffic incidents. These levels are intended to simplify and guide consistent responses based on the level of impact to the roadway and the specific needs of the corridor.



Incident levels are defined by the extent and duration of the impact anticipated on the roadway. The purpose of defining levels is to help identify appropriate actions to be taken in response to the anticipated level of impact. The common use of levels also helps responders and those responsible for disseminating information to quickly understand the magnitude of an incident. While an initial assessment may indicate a minor incident that could be cleared in less than 30 minutes, subsequent information, such as a hazardous materials situation or a fatality, may change the initial assessment to a more complex response with more significant impacts to the roadway. The levels should reflect realistic response and clearance times for the area of the incident. Table 1 outlines these incident levels as defined in the 2009 Manual on Uniform Traffic

Control Devices (MUTCD) with Revisions 1 and 2, dated May 2012, which is current as of this publication date.

Incident Level Descriptions Incident Level Description				
Minor				
	 Incidents with an expected duration of less than 30 minutes with moderate traffic impact or safety risk, such as: minor impacts to the transportation system caused by: disabled vehicles traffic incidents in the travel lane, which may involve minor injuries and are cleared quickly traffic incidents that may involve minor injuries but not blocking traffic weather conditions that are impacting travel speeds (black ice) and/or public safety minor planned events, such as funeral processions, bicycle races/rallies, parades, etc. temporary construction or maintenance lane closure or detour events on major highways or arteries during rush hour 			
Intermediate	 Incidents with an expected duration of 30 minutes to 2 hours with widespread, high traffic impact or safety risk, such as: major impacts to the transportation system caused by: road or lane closure that has a high traffic impact (may require a detour) weather (or threat of) causing disruptions to traffic and/or poor visibility - blizzard, ice, high wind, flooding, landslide, earthquake crash blocking lanes Potential safety hazards requiring notification, such as: bridge hit or structural failure major police or fire department activity threat of terrorism or bomb scare 			
Major	 Incidents with an expected duration of over 2 hours and widespread, severe traffic impact or safety risk, such as: closure of a major highway or bridge facility (excluding construction or maintenance work or typical weather-related closures) crash or event involving numerous injuries or deaths crash involving multiple vehicles (e.g., 20 car pileup) transit strike or transit interruption with widespread disruption significant HazMat spill events such as at a railroad crossing, a bridge collapse, an evacuation, a border crossing, etc., resulting in major media attention 			

Table 1: Incident Level Descriptions

TIM Stakeholders

For TIM to be effective, comprehensive and integrated planning is required from all potentially affected stakeholders. Typical stakeholders include federal, State, and local agencies, as well as the private sector, volunteer, and contract organizations. To effectively manage incidents, reduce roadway impacts, and improve safety, representatives from all agencies and organizations must work together. Cooperation, communication, and coordination among agencies is necessary to define common goals, roles and responsibilities, and strategies for improving the institutional, technical, and operational aspects of TIM.

TIM is a coordinated process that involves a number of public and private sector partners. Examples of stakeholder agencies and their roles during incidents are provided in Table 2.

Traditional Responders	Special/Extreme Circumstance Responders	Incident Information Providers
 Law Enforcement Fire and Rescue Emergency Medical Services (EMS) Towing and Recovery Transportation Agencies 	 Hazardous Materials Contractors Coroners and Medical Examiners Emergency Management Agencies Environmental/Natural Resources/Departments of Health (DOH) Utility Companies 	 Public Safety Communications Traffic Media Traveler Information Services Notification Services Social Media

Table 2: TIM Stakeholders Roles

An important aspect of TIM is that all of these stakeholders work together. The incident response involves a variety of organizations, each with a specific role and responsibility at an incident scene. Outlined in the *New Jersey Traffic Incident Management Safety Guidelines for Emergency Responders*⁴ are the general roles and responsibilities for traditional responders (which may vary based on incident needs). These include but are not limited to the following:

Roles and responsibilities common to all stakeholders

- Protect the incident scene
- Proper scene size-up and immediate identification of needed resources
- Perform first responder duties
- Assume the role of Incident Commander, if appropriate
- Support unified command

⁴

http://www.njtim.org/NJTIM/Repository/FileDownload?fileName=Statewide%20Guidelines%20Ver%203%20Final%2 0with%20OAG%20Cover%20Letter.pdf

- Clear minor incidents
- Follow blood borne pathogens protocol
- Wear appropriate Personal Protective Equipment (PPE), including Safety Vests
- Preserve evidence
- Be visible at all times.

Law Enforcement

Law enforcement agencies include the New Jersey State Police, County Police, Sheriffs, Municipal Police, and other agencies that have officers sworn to enforce laws. On the scene of a traffic incident, the duties of these responders include:

- Secure incident scene
- Establish incident command
- Assist responders in accessing the incident scene
- Establish emergency access routes
- Control arrival and departure of incident responders
- Police perimeter of incident scene and impact area
- Conduct incident investigation
- Establish a Temporary Traffic Control Zone
- Perform traffic control
- Remain at the incident scene until the tow truck or other last responder has left the scene unless the highway agency provides that coverage
- Coordinate the removal of all occupants from the incident scene.

Law enforcement agencies are first responders at traffic incident scenes providing 24-hour emergency response. In many cases, law enforcement is the first to arrive at an incident scene. Upon arrival, the first officer on the scene assesses the situation and calls for additional resources (i.e., fire, EMS, towing and recovery) when necessary.



Fire and Rescue

Fire and rescue services are provided by the county and municipal fire departments, including volunteer services, and HazMat agencies. Typical roles and responsibilities for fire and rescue personnel include:

- Rescue/extricate victims
- Extinguish fires
- Stabilize and render safe crash-damaged vehicles
- Assess incidents involving a hazardous materials release
- Contain or mitigate a hazardous materials release
- Mitigate minor fluid spills
- Establish and monitor Temporary Medevac Landing Zones.

Like law enforcement agencies, fire and rescue departments also operate as first responders providing 24-hour emergency response. Upon arrival, fire and rescue personnel secure the scene to protect responders and motorists.

Emergency Medical Services (EMS)

The primary responsibilities of EMS are the triage, treatment, and transport of crash victims. Typical roles and responsibilities include:

- Providing medical treatment to those injured at the incident scene
- Determining destination and transportation requirements for injured victims
- Tracking patients during transport to hospitals
- Coordinating evacuation with fire, police, and ambulance or airlift
- Transporting victims for additional medical treatment
- Providing medical monitoring and rehabilitation for emergency responders.

Emergency medical services have evolved as primary care givers to individuals needing medical care in emergencies. Upon arrival, EMS personnel assess injuries, administer triage on-scene as needed, and remove injured parties quickly to medical facilities for additional care.

Towing and Recovery

Towing and recovery service providers are responsible for the safe and efficient removal of wrecked or disabled vehicles, and non-hazardous debris from the incident scene. Typical roles and responsibilities for towing and recovery personnel include:

- Evaluate scene safety with Incident Commander (IC), coordinating recovery plan
- Provide technical assistance/information to other responding stakeholders
- Mitigate minor fluid spills
- Apply absorbents and remove non-hazardous debris/spilled fluids from the roadway, and properly dispose of when directed by IC under the guidelines of State Statue Title 39:4– 56.8

- Perform recovery by re-aligning the vehicle to a tow truck, not tow truck to the vehicle, using snatch blocks or other techniques, when able to do so safely
- Perform recoveries in one lane, if possible, and load the vehicle for transport
- Clean up debris and used absorbents. Do not place debris and absorbents in the vehicle
- Return the roadway to pre-incident condition as close as possible
- Check-out with IC prior to departing the scene
- Coordinate with law enforcement the transport of vehicle occupants involved in the incident to a safe location after the removal of their vehicle(s) from the roadway.

Towing and recovery arrangements generally fall under one of two major types – rotation or contract. In rotation towing, a police department will maintain a list of pre-qualified companies and will rotate the call of those companies. In contract towing, companies are contracted to provide specific services on-call. Towing and recovery companies that respond to highway incidents are essential components of a TIM program.

Transportation Agencies

Transportation agencies are typically responsible for the overall planning and implementation of TIM programs. These agencies are also involved in the development, implementation, and operation of traffic/transportation management centers (TMC) and traffic operations centers (TOC); maintenance of ITS field devices; and the management of Service Patrols. Typical roles and responsibilities for transportation agency personnel include:

- Monitor Traffic Operations
- Perform incident detection and verification
- Establish Temporary Traffic Control Zone
- Implement traffic control strategies and provide supporting resources
- Disseminate motorist information
- Assess and direct incident clearance activities
- Develop and operate alternate routes
- Assess and perform emergency roadwork and infrastructure repair
- Remain at the incident scene until the tow truck or last responder has left the scene, unless law enforcement provides that coverage.

Transportation agencies are secondary responders and are typically called to the incident scene by first responders. TMCs serve as the hub for the collection and dissemination of incident information and play a critical role in incident detection and verification. At the incident scene, transportation agency responders focus on temporary traffic control, expediting scene clearance, and restoring traffic flow.

Current TIM Initiatives in New Jersey

New Jersey has been actively participating and implementing TIM planning efforts that have led to the successful traffic management of various events including Superbowl XLVIII, Superstorm Sandy, Hurricane Irene, and Tropical Storm Ida. Current TIM initiatives that have attributed to this success are discussed below.

A. Move Over Law (New Jersey Statute 39:4-92.2)

It is important to help protect those who protect you, so to support scene safety of responders and motorists involved in an incident, Governor Jon S. Corzine signed into law a traffic safety bill on January 27, 2009. This law requires drivers approaching stationary emergency vehicles, tow trucks and other highway safety vehicles displaying certain flashing lights to **move over** one lane or, if not safe to move over, then to **slow down** below the posted speed limit.



In June of 2021, Commissioner Diane Gutierrez-Scaccetti and New Jersey State Police Superintendent Colonel Patrick Callahan announced the launch of a bumper sticker and poster campaign to raise public awareness of the Move Over Law.



Figure 3. The launch of a bumper sticker and poster campaign (June 2021)

Florescent pink stickers have been commonly placed on the back of vehicles.



Figure 4. Agencies supporting Move Over Law campaign

Annually, the NJDOT with FHWA and state and local first responder agencies promote National Crash Responder Safety Week to remind motorists to Move Over for stopped emergency and work vehicles. PennTIME and NJDOT developed four public service announcements that were played on fifteen radio stations in the Philadelphia/New Jersey/Delaware market along with their social media websites. The poster and the retro-reflective bumper sticker were placed at NJ Turnpike rest areas, QuickChek New Jersey stores and gas stations, NJDOT buildings, bringing awareness of the Move Over Law. The NJDOT is also displaying the message on variable message signs and on social media to spread awareness.





Figure 5. Move Over Law Outreach Campaign

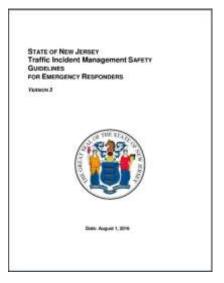
The NJDOT Commissioner Diane Gutierrez-Scaccetti stressed the importance of the Move Over Law and the safety of all first responders (Figure 6) in a short public service announcement video.



Figure 6. NJDOT Commissioner Diane Gutierrez-Scaccetti stressed the importance of the Move Over Law

B. Traffic Incident Management Safety Guidelines for Emergency Responders

The State of New Jersey Highway Incident Traffic Safety Guidelines for Emergency Responders provide uniform operational guidelines to promote safe operations by emergency responders dispatched to incidents on limited access highways in the State of New Jersey. These operational guidelines were formulated based on nationally recognized practices and procedures and input from representatives of the State of New Jersey Highway Incident Traffic Safety Guidelines for Emergency Responders Committee and endorsed by the New Jersey Office of the Attorney General. This document should be used by emergency responders as a guideline for decision making and can be modified as necessary to address existing onsite conditions.



These guidelines identify vehicle positioning, common general safety, and onsite practices for all emergency responders. Additionally, they promote maximum protection and safety for all emergency responders operating at limited access highway incidents. These guidelines also identify the need to provide mobility for the motoring public. They emphasize to emergency responders that the objectives are to get onto the roadway, perform their duties, and get off the roadway as safely, efficiently, and quickly as possible. Achieving these objectives will reduce their high-risk exposure and help to get traffic patterns back to normal. Emergency responders should always operate within a protected environment at any type of incident on or near a roadway, and when exposed to motor vehicle traffic. The goal is for the document to be updated every two years.

C. Service Patrols

Certain New Jersey transportation agencies have an active safety service patrol or emergency service patrol. These service patrols assist motorists whose vehicles have become disabled as a result of a crash, a mechanical failure or other cause and promote safety for emergency responders. Along with assisting disabled vehicles and drivers on our highways, service patrols assist NJSP and other responders by promoting safety and diverting traffic during incidents and creating a safer work zone for emergency responders.

NJDOT Safety Service Patrol (SSP) – SSP vehicles operate on 225 linear miles of interstate and state roadways throughout New Jersey and the patrols concentrate on roadway areas that have demonstrated the greatest need for motorist assists.

<u>SJTA Emergency Service Patrol (ESP)</u> – ESP vehicles patrol along the 44-mile Atlantic City Expressway, stopping whenever they see a vehicle pulled off to the side of the roadway.

D. Partnerships

There are a number of successful partnerships that have been established among responders to support TIM activities in New Jersey. These partnerships include:

Statewide Traffic Management Center (STMC) – STMC became functional in April 2008 and is a 24/7 operations center that is jointly operated and staffed by the NJDOT, NJTA, and the NJSP. The co-location of these agencies allows for a simplified and effective "region-wide" coordination of traffic incidents and emergencies in an interoperable manner. Each agency manages its own roadways from the STMC and are supported by a range of technology that is able to share data and video across agency boundaries allowing for the dissemination of accurate and timely information to motorists.



Figure 7. Statewide Traffic Management Center

<u>Central Dispatch Unit (CDU)</u> – NJDOT CDU is the 24/7 communications serving as the "single point of contact" to handle all emergency calls from police departments and citizens statewide. The CDU staff works alongside the NJSP's and the New Jersey Department of Environmental Protection's (NJDEP) dispatchers. In addition to handling emergency calls, the CDU is responsible for dispatching the Department's Safety Service Patrols (SSP) during SSP hours of operation.

Incident Management Task Force (IMTF) – A task force's purpose is to improve coordinated TIM response and foster agency interaction. Task forces are corridor based, not region wide, and are focused on heavily congested highways and complex interchanges.

• NJ SAFR (Southern Area First Responders) IMTF

- Established in June 2002 in Camden and Gloucester Counties
- o Covers portions of I-76, I-676, I-295, NJ 42 and NJ 55
- TIM guidelines developed in 2005 for the above limited access highways.

Burlington County IMTF

- Established April 2012 in Burlington County
- Focuses on portions of I-295, NJ Turnpike and US 130 in Burlington County,

• Hudson County IMTF – formerly Restore 495 Task Force

- Introduced in August 2017.
- Originally focused on the TIM response and support during the bridge deck replacement on NJ495.
- o Addresses projects/issues that impact mobility within task force jurisdiction.
- Hudson County local municipalities.

Mercer County IMTF

- Established in 2015.
- Initiated by the need for an evacuation plan for the State Capitol Region.

Incident Management Response Team (IMRT) – Incident Management Response Team (IMRT) was established in 1996 as a partnership between the NJSP and NJDOT. IMRT personnel respond to major incidents that have a significant impact on mobility (overturned tractor-trailer, incidents involving hazardous material, etc.). IMRT members at the incident scene provide technical and logistical support for the coordinated multi-agency response efforts. This team also provides Incident Management Training through outreach efforts to authorities in both the public and private sectors.

NJTIM.org Website

The NJTIM.org web portal launched in 2016 serves as a central clearinghouse for responders and TIM activities across the State. The portal supports TIM outreach, responder training (inperson and online) and contains information such as:

- TIM documents (i.e. TIM Strategic Plan, Traffic Incident Safety Guidelines for Emergency Responders, TIM training materials).
- Schedule of past and future training sessions, committee meetings, working group meetings and other relevant events.
- Contact information for local, regional, and statewide committee members.
- Forum for sharing best practices.
- TIM training and capacity building videos to promote TIM and traffic operations concepts and their implementation in New Jersey.
- State repository for documenting training required by federal government programs.
- Diversion routes by county and by roadway.

Understanding that the training process needs to be as simple as possible, the portal functions are continuously enhanced to provide as much automation as possible to various processes such as class management and communication between instructors and class participants by automatically sending class reminders, updates, and training certificates by e-mail. The website allows the first responders to request a class to be hosted at their agency.



Figure 8. NJTIM Trainers and Committee Members

TIM Training

In support of the Federal Highway (FHWA) Strategic Highway Research Program 2 (SHRP2) TIM training efforts, New Jersey has conducted several training and train-the-trainer sessions since 2010. SHRP2's National Traffic Incident Management Responder Training is designed to bring police, fire, DOT, towing, medical, and other incident responders together to engage in interactive, hands-on incident resolution exercises. After assessment by FHWA, the New Jersey Traffic Incident Management Safety Guidelines for Emergency Responders Training Program is equivalent to the National TIM Responder Training Program.



Figure 9. TIM Training Class

New Jersey currently offers a 4-hour instructor-led TIM course to all agencies and periodically eight-hours long train-the-trainer TIM course. The TIM course utilizes the New Jersey Traffic Incident Management Safety Guidelines for Emergency Responders revised in June 2016 as a basis. The goal is to have every responder in the State trained so that all TIM concepts for handling incidents are the same anywhere in the State. To date, 621 personnel have been trained to be trainers and these trainers have trained over 21,000 people.

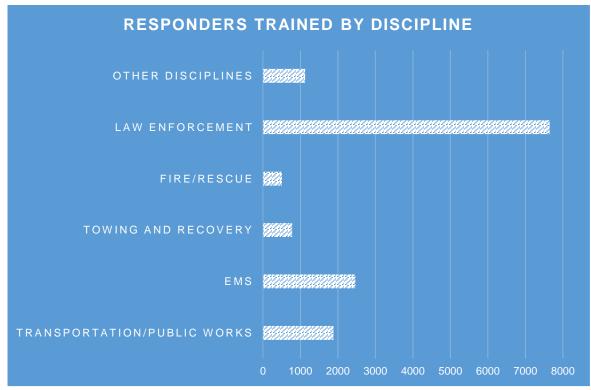


Figure 10. NJ Responders Trained by Discipline

Many agencies throughout New Jersey have made TIM training mandatory:

- New Jersey Forest Fire Personnel
- New Jersey State Police new recruits in the State Police Academy.
- New Jersey Division of Fire Mandatory for all Firefighter 101 training.
- County Police Academies Mandatory for all new recruits in certain counties.
- Towing Companies Those who contract with the New Jersey State Police must have TIM training.
- Port Authority of New York and New Jersey Tunnel Agents, Fire, Towers and EMS personnel.
- NJDOT Maintenance and Safety Service Patrol Personnel.

The TIM training program is seeking to expand and offer TIM training to news reporters and/or camera crews who respond to crash sites. Although not considered first responders, news organizations are very much part of the crash scene and need to understand the goals and purpose of TIM. By having the news media attend TIM training, they will be able to report about the incidents and not become a part of the incident.

TIM Outreach

The outreach activities focused on expanding the knowledge of TIM program to first responder agencies across the State. The TIM program mission and goals are presented at Law Enforcement, Fire and EMS training academies and conferences. The outreach is also extended to Board of the New Jersey Joint Insurance Funds (NJ JIFs) who serve municipalities and counties statewide and provide insurance coverage. JIFs have also established Safety Incentive Programs that address a variety of risk management and safety issues, including law enforcement and public works employee safety.

In 2018, the TIM focus area was the education of news reporters and related media personnel. This included initiating the discussion and collaboration with media for them to understand the different roles at the incident scene and to also be safe when providing reports from an incident scene. A TIM training class/exercise was organized at the Camden County College Regional Emergency Training Center, where several members of the media observed the outdoor exercise and interacted with first responders.

Outreach is also extended to the Garden State Municipal Joint Insurance Fund (GSM JIF) and the Public Entity Joint Insurance Fund (PE JIF). The overall TIM training mission, concept and safety benefits were presented to both JIF members. In October of 2019, over 70 members of both entities took the NJ TIM Training at the NIP Group Headquarters in Woodbridge. Attendees were made up of all disciplines of first responders along with administrators and risk managers from municipalities across the State. The training counted towards the Safety Incentive Program requirements for both associations.

The outreach activities of the TIM program had outstanding achievements:

- Since September of 2017 one of the requirements for a professional towing operator to request to be placed on the NJSP Wrecker/Towing List is to attend Traffic Incident Management Training for Emergency Responders within 6 months of hire and show proof of course completion.
- The TIM training became mandatory for all New Jersey State Police recruits in July 2018.
- In 2019, the TIM training was incorporated into the Firefighter 101 Curriculum taught in all New Jersey Fire Academies.
- TIM training is mandatory for all new NJDOT maintenance personnel.
- The impacts of COVID-19 on TIM training activities were significant. Classes were transitioned to be held virtually and the table-top exercises were not utilized.
- Virtual training has been introduced as an alternative to an in-person training.

TIM Action Plan

Through the implementation of the New Jersey TIM Program, and the leadership of the New Jersey Statewide TIM Steering Committee, public and private responders and other stakeholders are able to join together to improve the management of response and clearance of all types of roadway incidents such that:

- Responders, victims, and travelers are never injured or killed at the scene
- Response is safe, rapid, and efficient
- Incident sites are managed effectively
- Incidents are cleared safely, quickly, and efficiently minimizing traffic backups
- Traffic incident communications are prompt, reliable, and coordinated.

Traffic incident responders from all disciplines:

- Follow agreed-upon multidisciplinary procedures
- · Routinely train and exercise together
- Build partnerships to support multidisciplinary, on-scene missions
- Work together to achieve multidisciplinary performance goals.
- Drivers have the information and education necessary to:
 - o Avoid or be forewarned of incident-related delays
 - Slow down and move over when approaching crash scenes
 - Safely move vehicles involved in non-injury crashes out of the roadway.

A. National Unified Goal ("NUG")

The National Unified Goal for Traffic Incident Management is:

- Responder Safety;
- Safe, Quick Clearance; and
- Prompt, Reliable, Interoperable Communications.

The Goal will be achieved through the implementation of actions divided into the four NUG categories of:

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

Key sample actions outlined in **Table 3** include recommended practices for multidisciplinary TIM operations and communications,



NATIONAL UNIFIED GOAL

Working Together for Improved

Safety, Clearance and Communications

The National Unified Goal for Traffic Incident Management is:

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

HOW WILL THE GOAL BE ACHIEVED?

The three major objectives of the National Unified Goal will be achieved through 18 strategies. multidisciplinary TIM training, goals for performance and progress, promotion of beneficial technologies, and partnerships to promote driver awareness.

Crosscutting	Responder Safety	Safe, Quick Clearance	Prompt, Reliable, Interoperable Communications
 TIM Partnerships and Programs Multidisciplinary NIMS and TIM Training Goals for Performance and Progress TIM Technology Effective TIM Policies Awareness and Education Partnerships 	 Recommended Practices for Responder Safety Move Over/Slow Down Laws Driver Training and Awareness 	 10. Multidiscipli nary TIM Procedures 11. Response and Clearance Time Goals 12. 24/7 Availability 	 13. Multidisciplinary Communications Practices and Procedures 14. Prompt, Reliable Responder Notification 15. Interoperable Voice and Data Networks 16. Broadband Emergency Communications Systems 17. Prompt, Reliable Traveler Information Systems 18. Partnerships with News Media and Information Providers

B. Action Plan Matrix

As a result of the input from the TIM stakeholders, the following are recommendations and/or items needed to fulfill these gaps:

- Perform additional outreach so that utility companies are included in TIM efforts.
- Continued funding is needed to support the Service Patrol and maintenance response efforts, maintain TIM equipment, and facilitate public outreach.
- Perform new public outreach campaigns so that motorists are aware of the Move Over Law.

For the continued success of the New Jersey TIM Program, and in response to the above listed recommendations, a series of actions is defined to address identified issues and gaps. The adopted actions are summarized in an Action Plan Matrix and are organized around the four NUG categories. The Action Plan Matrix is provided in the Appendix and is summarized in two tables: Table 4, which identifies the actions that are of a higher priority and should be worked on in the short-term; and Table 5, which includes other actions that are of lesser priority and should be addressed in the long-term.

Based on the strategic direction articulated in the plan, working groups were formed to bring together stakeholders focusing on specific aspects of TIM. The diversity of TIM stakeholders was critical since each stakeholder has a specific role and responsibility at an incident scene. Bringing

the diverse stakeholders together provided the benefit of unique perspectives on problem-solving and ensured that the existing deficiencies and gaps are addressed from all points of view. To ensure and support working group efforts, the progress is presented by working group chairs at the Statewide Steering Committee Meetings, held bi-annually.

Summary

By implementing the actions outlined in the TIM Action Plan of this New Jersey Statewide TIM Strategic Plan, responders are able to improve their abilities to manage all types and severities of incidents. The New Jersey Statewide TIM Steering Committee and Working Groups are dedicated to providing a TIM program support in achieving goals and objectives of TIM. These working groups are also devoted to reaching out to and engaging all stakeholders to coordinate detecting, responding to, and clearing traffic incidents as quickly as possible to reduce the impacts of these incidents on safety and congestion, while also protecting the safety of on-scene responders and the traveling public.

APPENDIX – TIM Plan Matrix

Priority	Action/Product Needed	NUG Strategy	Statewide Chair	Working Group Representatives		
1	Develop regional, interstate, and intrastate plans and task forces to implement comprehensive multidisciplinary TIM programs including response areas, on scene incident management and after-action reviews.	Cross-Cutting	Robert Burd - NJDOT	SFC, Sam Capuccio - NJSP IMU William McDonough - NJTA Dennis Caltagirone, NJDOT		
2	TIM Training	Responder Safety	Robert Pomykala - NJIT	Elizabeth Falcon - NJDOT Dennis Caltagirone - NJDOT Mike Macari - NJDOT Rotating IMU State Trooper SFC Guy Hendrickson - NJSP IMU		
3	Establish and implement standard and efficient use of technology and promote integration of TMC and law enforcement CAD systems.	Cross-Cutting	Sal Cowan – NJDOT Lt. Jared Beatrice - NJSP IMU	Bob Glantzberg - TRANSCOM SFC Sam Cappucio - NJSP IMU Chris Campbell, Lt NJSP Harry Wertz - DEP Dennis Caltagirone - NJDOT		
4	Support implementation of a common interagency communications protocol/process for all incident management personnel.	Prompt, Reliable, Interoperable Communications	TBD	Lt. Jared Beatrice – NJSP IMU SFC Sam Capuccio - NJSP IMU BC Todd Evans - Mt Laurel FD Dennis Caltagirone - NJDOT Jimmy Woods – Hudson County OEM Robert Burd - NJDOT		
5	Review and improve towing practices and procedures for limited access highways.	Safe, Quick Clearance	Angie Haines - Haines Towing	John Glass - GSTA Rick Malanga - GSTA North Lt. Jared Beatrice - NJSP IMU Mike Juliano/ Wayne Patterson/ SSP Supervisors		
6	Provide timely and accurate information to the media and motorists and identify best ways of getting information out to the public (i.e. diversions).	Prompt, Reliable, Interoperable Communications	Jim Barry - NJDOT Bob Glantzberg - TRANSCOM Rich Maxwell	Elizabeth Falcon - NJDOT Bob Pomykala - NJIT Danielle Calcagni - NJDOT		

Table 4 – TIM Plan Matrix (Priority Actions)

	NUG Category	Action/Product Needed		
Α.	Cross-Cutting	1. Identify funding sources for TIM resources among State, county, and local response agencies.		
		2. Incorporate multidisciplinary strategies into agency specific TIM training.		
		3. Promote making TIM training mandatory for each first responder involved agency.		
		4. Inventory each agency's TIM resources and investigate the potential for sharing resources.		
		 Develop performance measures and data collection methods, including those for each stage of an incident. 		
	6. Conduct awareness campaigns and education regarding the public's role in the Move Over Law.			
	7. Promote the use of unified command for traffic incidents.			
B.	Responder	8. Provide joint training of dispatchers and responders across all organizations.		
	Safety	9. Develop and agree upon response and clearance time goals.		
C.	Safe, Quick Clearance	10. Provide timely and correct notification of incidents and identify resource needs to organizations that provide safety and support clearance and recovery efforts		
		11. Develop response goals with coroners/medical examiners and utility companies.		
		12. Provide training from special units (i.e., fatal crash, CVI, DEP, coroner)		

Table 5 – TIM Plan Matrix (Other Actions)