State of New Jersey

Traffic Incident Management Strategic Plan

Endorsed by the
New Jersey Statewide TIM Steering Committee

Date: January 2015

Prepared for:

New Jersey Department of Transportation

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ITS Resource Center
New Jersey Institute of Technology

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Acknowledgments

The development of a New Jersey Statewide Traffic Incident Management (TIM) Program and this TIM Strategic Plan are supported by the following agency members of the New Jersey Statewide TIM Steering Committee. Their efforts and continued support is appreciated and will be the basis for a continuing, coordinated, and successful statewide TIM Program.

- Delaware River & Bay Authority (DRBA)
- Delaware River Joint Toll Bridge Commission (DRJTBC)
- Delaware River Port Authority (DRPA)
- Delaware Valley Regional Planning Commission (DVRPC)
- Federal Highway Administration (FHWA)
- Garden State Towing Association (GSTA)
- New Jersey Department of Community Affairs, Division of Fire Safety (NJDCA-DFS)
- New Jersey Department of Environmental Protection (NJDEP)
- New Jersey Department of Health (DOH), Office of Emergency Medical Services (EMS)
- New Jersey Department of Transportation (NJDOT)
- New Jersey Institute of Technology (NJIT)
- New Jersey Motor Truck Association (NJMTA)
- New Jersey Office of the State Medical Examiner (NJOSME)
- New Jersey State Association of Chiefs of Police (NJSACOP)
- New Jersey State First Aid Council (NJSFAC)
- New Jersey State Police (NJSP)
- New Jersey Transit (NJT)
- New Jersey Turnpike Authority (NJTA)
- New Jersey Volunteer Fire Chief's Association
- North Jersey Transportation Planning Authority (NJTPA)
- Palisades Interstate Parkway Police Department (PIPPD)
- Port Authority of New York and New Jersey (PANYNJ)
- South Jersey Transportation Authority (SJTA)
- South Jersey Transportation Planning Organization (SJTPO)
- Transportation Operations Coordinating Committee (TRANSCOM)

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 and 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%). 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 sooner personnel can respond to the incident and clear it from the roadway, thereby allowing traffic lanes to re-open.

Traffic Incident Management (TIM) consists of a planned and coordinated multi-disciplinary process to detect, respond to, and clear traffic incidents so that traffic flow may be restored as safely and quickly as possible. Effective TIM reduces the duration and impacts of traffic incidents and improves the safety of motorists, crash victims, and emergency responders. The goals of TIM include:

- 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);
- 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 this 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. The goal of this TIM strategic planning initiative is to bring those efforts together and formalize coordination among all agencies involved in TIM. This initiative coordinates the resources of a number of different partner agencies and private sector companies to detect, respond to, and clear traffic incidents as quickly as possible to reduce the impacts of incidents on safety and congestion, while protecting the safety of on-scene responders and the traveling public.

Purpose

The purpose of this Strategic Plan is to 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. It should be noted that this Plan was designed for use on limited access highways; nevertheless, this guidance can also be applied to local roads and jurisdictions. 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.).

The New Jersey Statewide TIM Steering Committee supports this Strategic Plan so that TIM stakeholders will have guidelines in place that outline the essential components and improvements needed to move forward in the future and maintain a robust TIM program. The topics of the Plan include:

- TIM Plan Purpose
- Members of the TIM Steering Committees
- TIM Program Objectives
- TIM Process
- Roles and Responsibilities of TIM Stakeholders
- Current TIM initiatives in New Jersey
- Training
- TIM Action Plan

TIM Steering Committee

Over the years, New Jersey has earned its reputation of being a leader in TIM due to supportive individuals and partner agencies across the state. NJDOT is now taking an additional step by leading an effort to formalize a New Jersey Statewide TIM Program. To guide the advancement of the TIM Program, a New Jersey Statewide TIM Steering Committee was formed. The committee consists of TIM stakeholders representing various agencies within New Jersey, including both 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. Moving forward, the Statewide Steering Committee plans to continue meeting on a periodic basis.

The current member agencies participating in the TIM Steering Committee include:

1. Delaware River & Bay Authority (DRBA)
2. Delaware River Joint Toll Bridge Commission (DRJTBC)
3. Delaware River Port Authority (DRPA)
4. Delaware Valley Regional Planning Commission (DVRPC)
5. Federal Highway Administration (FHWA)
6. Garden State Towing Association (GSTA)
7. New Jersey Department of Community Affairs, Division of Fire Safety (NJDCA-DFS)
8. New Jersey Department of Environmental Protection (NJDEP)
9. New Jersey Department of Health (DOH), Office of Emergency Medical Services (EMS)
10. New Jersey Department of Transportation (NJDOT)
11. New Jersey Institute of Technology (NJIT)
12. New Jersey Motor Truck Association (NJMTA)
13. New Jersey Office of the State Medical Examiner (NJOSME)
14. New Jersey State Association of Chiefs of Police (NJSACOP)
15. New Jersey State First Aid Council (NJSFAC)
16. New Jersey State Police (NJSP)
17. New Jersey Transit (NJT)
18. New Jersey Turnpike Authority (NJTA)
19. New Jersey Volunteer Fire Chief's Association
20. North Jersey Transportation Planning Authority (NJTPA)
21. Palisades Interstate Parkway Police Department (PIPPD)
22. Port Authority of New York and New Jersey (PANYNJ)
23. South Jersey Transportation Authority (SJTA)
24. South Jersey Transportation Planning Organization (SJTPO)
25. Transportation Operations Coordinating Committee (TRANSCOM)

In addition to the Statewide Steering Committee, Regional committees have been formed in the North and South regions of New Jersey. The kick-off meetings for both the North and South Regions were held in July 2014 and both were well attended by stakeholder agencies. These two committees consist of agency representatives with firsthand experience in responding to traffic incidents on a daily basis, and with active involvement in ongoing local and regional TIM coordination efforts. Within each of these regions, there are also several task forces that collaborate on incidents affecting local roadways.

These three levels of committees work in conjunction with each other and all have a very important role in TIM operations within the state. **Figure 1** depicts the different levels of TIM coordination and collaboration committees in New Jersey.

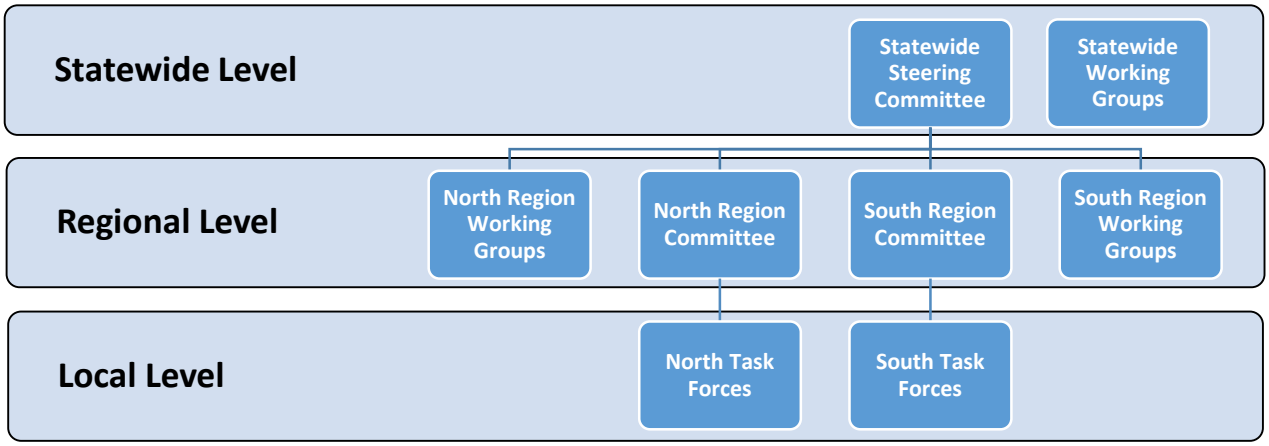


Figure 1: TIM Committee Levels

Objectives

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

- promoting safety of responders;
- improving communications among responders;
- promoting efficient use of multi-agency 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:
    - legislation
    - policy/procedures
    - public outreach
    - integrating incident/unified command structure into TIM
- instituting incident scene parking guidelines;
- maintaining a partnership with the media;
- promoting quick clearance by:
    - fostering prompt and accurate reporting, detection, and verification of incidents;
    - fostering prompt and accurate notification to all responders; and
    - promoting the strategies associated with the National Unified Goal for TIM.

"A 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.

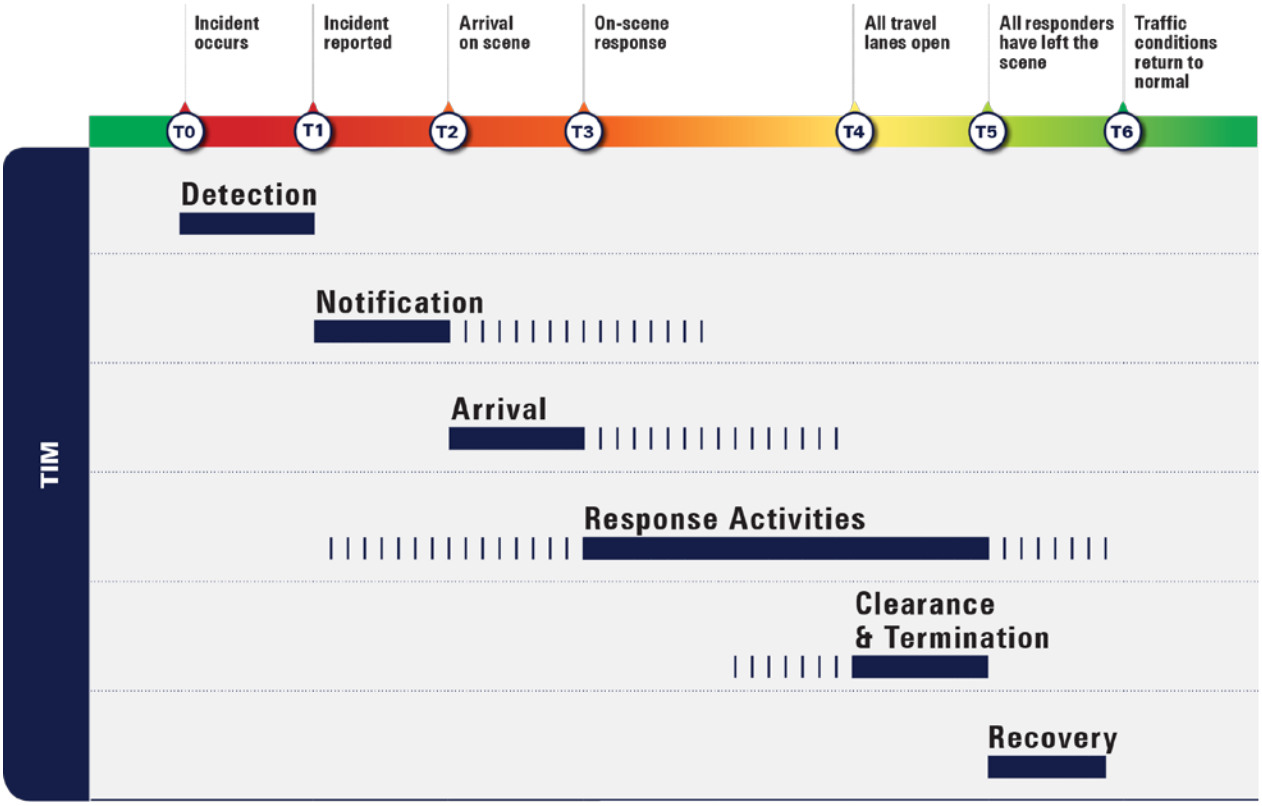


Figure 2: Timeline of Stages in the TIM Process

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 operators
  - Electronic detection (video processing, radar, induction loops) with traffic incident detection algorithms
  - Calls from Police/Service patrols

- Calls from public works crews
- Information from motorist aid telephones and call boxes
- Notifications/Observations via Social Media (ex: Facebook, Twitter, Instagram, etc.).

2. Notification

- Confirming that an event has occurred, determining its exact location, and obtaining as many relevant details 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 an Incident Command System (ICS) and Unified Command Structure (UCS)
  - Notifying and coordinating with appropriate agencies and organizations
  - Proper placement and staging of response vehicles at traffic incident scenes

- Having the correct 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), ramp meters, 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
  - Telephone information systems (ex. 511)
  - 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).

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 pre-event condition and includes certain actions. These actions include:
  - Restoring traffic flow
  - 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. 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.

Traffic incidents can be divided into three levels of duration/impact. **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.

Table 1: 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: o 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 o 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: o 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: o bridge hit or structural failure o major police or fire department activity o 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: o closure of a major highway or bridge facility (excluding construction or maintenance work or typical weather-related closures) o crash or event involving numerous injuries or deaths (e.g., 20 car pileup) o crash involving multiple vehicles o transit strike or transit interruption with widespread disruption o significant HazMat spill o events such as at a railroad crossing, a bridge collapse, an evacuation, a border crossing, etc., involving major media attention

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 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**.

Table 2: TIM Stakeholders Roles

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

An important aspect of TIM is that all of these agencies work together. Incident response involves a variety of organizations each with a specific role and responsibility at an incident scene. Outlined in the *New Jersey Highway Incident Traffic Safety Guidelines for Emergency Responders*, are the general roles and responsibilities for traditional responders (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 role of Incident Commander, if appropriate
- Support unified command

- 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:

- Establish unified command
- Secure incident scene
- 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 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 scene assesses the situation and calls for additional resources (etc. fire, EMS, and towing and recovery), when necessary.

Fire and Rescue

Fire and rescue services are provided by 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 tow truck, not tow truck to vehicle, using snatch blocks or other techniques, when able to do so safely
- Perform recoveries in one lane, if possible, and load vehicle for transport
- Clean up debris and used absorbents. Do not place debris and absorbents in the vehicle

- Return roadway to as close to pre-incident condition as possible
- Check in 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 Safety Service Patrols (SSP) 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 with incident detection and verification. At the incident scene, transportation agency responders focus on temporary traffic control, expediting scene clearance, and restoring traffic flow.

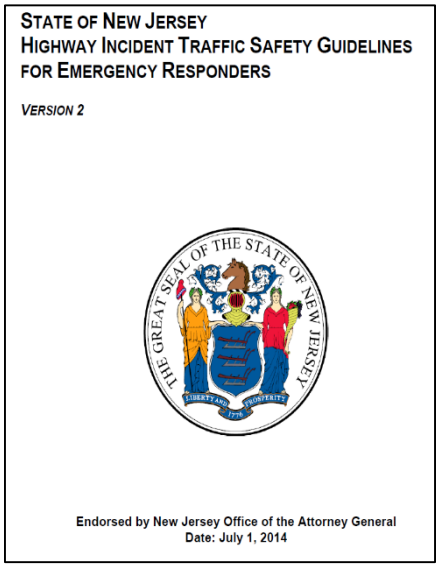
Current TIM Initiatives in New Jersey

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, Hurricane Sandy, and Hurricane Irene. 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.

B. Highway Incident Traffic Safety Guidelines for Emergency Responders


STATE OF NEW JERSEY
HIGHWAY INCIDENT TRAFFIC SAFETY GUIDELINES FOR EMERGENCY RESPONDERS

VERSION 2

Endorsed by New Jersey Office of the Attorney General
Date: July 1, 2014

The State of New Jersey Highway Incident Traffic Safety Guidelines for Emergency Responders was produced on June 1, 2010 and updated on July 1, 2014. The purpose of this document is to 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 quickly, safely, and efficiently 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.

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.

SJTA Emergency Service Patrol (ESP) – 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.

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
  - 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.

Figure 3: Statewide Traffic Management Center

Incident Management Response Team (IMRT) – Incident Management Response Teams (IMRT) were established in 1996 with a partnership between the NJSP and NJDOT, which includes seven troopers and 20 NJDOT members who are specially trained personnel and respond to major incident scenes to expedite coordinated multi-agency response efforts. Diversion plans for major routes are established for all counties. The New Jersey Division of Fire Safety was added as a partner in 2004 and IMRT has now become a national model of TIM coordination and cooperation among agencies.

The New Jersey State Police Incident Management Unit (IMU) serves as a member of IMRT and works with local, county, state, and federal agencies to promote statewide incident management initiatives. The IMU also provides Incident Management Training through outreach efforts to authorities in both the public and private sectors.

E. TIM Website

A New Jersey TIM website is in the early stages of development and is expected to be launched in 2015. This website will be dedicated to TIM and will function as a central clearinghouse for responders across the state and will contain information such as:

- TIM documents (i.e. TIM Strategic Plan , Highway Incident Traffic Safety Guidelines for Emergency Responders, TIM training materials)
- Schedule of past and future training sessions, committee meetings, and other relevant events
- List of all training participants
- Contact information for local, regional, and statewide committee members
- Forum for sharing best practices.

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 Highway Incident Safety Guidelines for Emergency Responders Training Program is equivalent to the National TIM Responder Training Program.

New Jersey's current train-the-trainer TIM course is four hours long and utilizes the New Jersey Highway Incident Traffic Safety Guidelines for Emergency Responders published in June 2010 (and revised in July 2014) as a basis. To date, 180 personnel have been trained to be trainers through the SHRP2 program and these trainers have trained over 2000 people. The goal is to try and get every responder in the state trained so that all TIM concepts for handling incidents should be the same anywhere in the state. Both indoor and outdoor training have been conducted, and currently a one-hour refresher course is being developed for those responders that have already taken the four-hour course to help them retain what they have learned.

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 will be able to join together to improve the management of response and clearance of all types of roadway incidents such that:

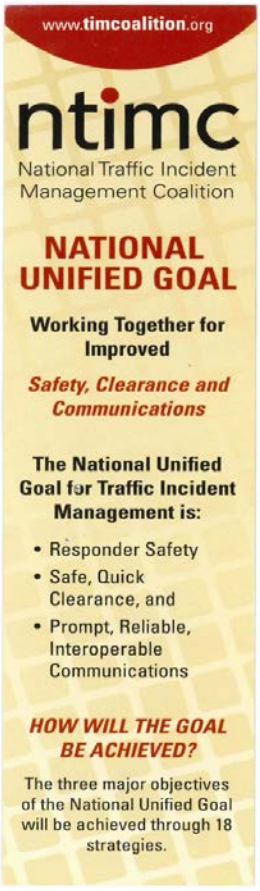
- Responders, victims, and travelers are never injured or killed at the scene
- Response is rapid, safe, and efficient
- Incident sites are managed effectively
- Incidents are cleared safely, quickly, and efficiently minimizing traffic backups
- Traffic incident communications are prompt, reliable, and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

Traffic incident responders from all disciplines:

- Follow agreed-upon multidisciplinary procedures
- Routinely train and exercise together
- Build partnerships to support multi-disciplinary, on-scene missions
- Work together to achieve multidisciplinary performance goals.

Drivers have the information and education necessary to:

- 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

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:

- Crosscutting
- Responder Safety
- Safe, Quick Clearance

- Prompt, Reliable, Interoperable Communications

Key sample actions outlined in **Table 3** include recommended practices for multidisciplinary TIM operations and communications, multidisciplinary TIM training, goals for performance and progress, promotion of beneficial technologies, and partnerships to promote driver awareness.

Table 3 – NUG Strategies

Crosscutting	Responder Safety	Safe, Quick Clearance	Prompt, Reliable, Interoperable Communications
1. TIM Partnerships and Programs 2. Multidisciplinary NIMS and TIM Training 3. Goals for Performance and Progress 4. TIM Technology 5. Effective TIM Policies 6. Awareness and Education Partnerships	7. Recommended Practices for Responder Safety 8. Move Over/Slow Down Laws 9. Driver Training and Awareness	10. Multidisciplinary 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 Statewide TIM kick-off meeting held in April 2014 and the North and South Regional meetings held in July 2014, a number of organizational, operational, and management gaps were identified pertaining to current TIM activities. 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 Safety Service Patrol and maintenance response efforts, maintain TIM equipment, and facilitate public outreach.
- Develop a method to track everyone who has been trained in TIM.
- Establish Standard Operating Procedures (SOP) for towing practices on limited-access highways.
- Perform public outreach so that motorists are aware of the Move Over Law.

- Encourage legislative support for a Move It or Steer It/Clear It Law. Such a law would require motorists involved in minor crashes (where there are no serious injuries and incident vehicles can be driven) to move these vehicles out of the travel lanes to the shoulder or other safe area.
- Schedule TIM coordination meetings regularly with Statewide and Regional (North and South) TIM committees. These meetings should ideally be held quarterly.

For the continued success of the New Jersey TIM Program, and in response to 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. Champions and working groups have been identified for each short-term action. This Action Plan Matrix can be used as a basis for progress review, tracking and reporting and should be reviewed and updated periodically for optimum effectiveness. In that context, a procedure should be established for updating the status of each action and reporting this status at the TIM committee and working group meetings.

Summary

By implementing the actions outlined in the TIM Action Plan of this New Jersey Statewide TIM Strategic Plan, responders will be able to improve on their abilities to manage all types and severities of incidents. The New Jersey Statewide TIM Steering Committee and Regional TIM Committees are dedicated to providing a TIM program that is in support of the goals and objectives of TIM. These Committees 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

Table 4 – TIM Plan Matrix (Priority Actions)

Priority	Action/Product Needed	NUG Strategy	Statewide Chair	Working Group Participants	Target Date
1	Develop regional, interstate, and intrastate plans and task forces to implement comprehensive multi-disciplinary TIM programs including response areas, on scene incident management and after action reviews.	Cross-Cutting	Sal Cowan – NJDOT	Lt. Tom Falletta – NJSP Will Day – NJDOT Felipe Hernandez – NJDOT Laurie Matkowski – DVRPC William McDonough – NJTA Kelly McVeigh – NJDOT TRANSCOM	Late 2015
2	Establish and implement standard and efficient use of technology and promote integration of TMC and law enforcement CAD systems.	Cross-Cutting	Lt. Tom Falletta – NYSP Sal Cowan – NJDOT	Mary Leigh Barbusin – GSTA Will Day – NJDOT Mike Juliano - NJDOT TRANSCOM	Late 2015
3	Support implementation of a common interagency communications protocol/process for all incident management personnel.	Prompt, Reliable, Interoperable Communications	Chief Michael Coppola – PIPPD	Lt. Tom Falletta – NJSP Dennis Caltagirone – NJDOT OFC Victor Cook – Jersey City Comm. BC Todd Evans – Mt. Laurel Fire Dept.	Late 2015
4	Review and improve towing practices and procedures for limited access highways.	Safe, Quick Clearance	Mary Leigh Barbusin – GSTA	Lt. Tom Falletta – NJSP Paul Aleksandrowski – B & C Towing Michael Corigliano – Corigliano'sTowing Joe Haines – Haines Towing Russell Johnson – Johnson's Towing Al King – Helmrich's Towing Cleve Riehl – Riehl's Towing	Mid 2015
5	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	TRANSCOM	Dennis Caltagirone – NJDOT Chief Michael Coppola – PIPPD Will Day – NJDOT Mike Juliano – NJDOT Kelly McVeigh – NJDOT	Late 2015

Table 5 – TIM Plan Matrix (Other Actions)

NUG Category	Action/Product Needed
A. 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 agency.
	4. Develop a method to track TIM program training participants, including trainers and trainees.
	5. Inventory each agency's TIM resources and investigate the potential for sharing resources.
	6. Develop performance measures and data collection methods, including those for each stage of an incident.
	7. Incorporate diversion route planning (state/county).
B. Responder Safety	8. Conduct awareness campaigns and education regarding the public's role in the Move Over Law.
	9. Promote the use of unified command for traffic incidents.
C. Safe, Quick Clearance	10. Provide joint training of dispatchers and responders across all organizations.
	11. Develop and agree upon response and clearance time goals.
	12. Provide timely and correct notification of incidents and identify resource needs to organizations that provide safety and support clearance and recovery efforts.
	13. Develop response goals with coroners/medical examiners and utility companies.
	14. Provide training from special units (i.e. fatal accident, CVI, DEP, coroner)