

TRAFFIC INCIDENT MANAGEMENT ACTION PLAN

**FOR INCIDENTS IMPACTING TRAFFIC FLOW
ON I-95, ROUTE 1 & OTHER ARTERIAL ROADS IN SOUTHERN YORK
COUNTY/NORTHEASTERN ROCKINGHAM & STRAFFORD COUNTIES**

DEVELOPED BY THE ME-NH TRAFFIC INCIDENT MANAGEMENT GROUP



Updated: AUGUST 4, 2008

**ME-NH Traffic Incident Management Group
List of Participants:**

Maine State Police
New Hampshire State Police
Maine Turnpike Authority
Maine Department of Transportation
New Hampshire Department of Transportation/Turnpike
Maine Emergency Management Agency
York County Emergency Management Agency
York County Sheriff's Office
United States Coast Guard
City of Portsmouth
Town of Kittery
Town of York
Town of Ogunquit
Town of Wells
Town of Eliot
Town of South Berwick

INTRODUCTION

The Traffic Incident Management Group, staffed by the Southern Maine Regional Planning Commission, is a body of traffic incident management stakeholders consisting of law enforcement, fire and rescue, and transportation agencies interested in enhancing traffic incident management on Interstate I-95/Maine Turnpike, Route 1 and other arterial roads in southern York County and northeastern Rockingham County and Strafford County. Incident-related traffic flow issues are an increasingly significant challenge for this bi-state region as witnessed by an increasing number of crashes, natural disasters and other events that have caused traffic circulation issues in the area. Maine DOT's "Strategic Investment Plan for Corridors of Regional and Economic Significance" (SIPCREs) for the area, developed in 2006, calls for a solution to this problem, by possibly securing strategic funding to create a redundant means to travel through or bypass the area as traffic volumes continue to grow. Other planning groups in the area such as the Route One and Route 236 Corridor Committees also see traffic incidents as a major regional transportation problem. As part of those corridor committee Action Plans, SMRPC was asked to convene a group of traffic incident management stakeholders to assess existing incident management practices in the area and work toward improving the process.

What are the types of incidents that the group is examining? The Federal Highway Administration Traffic Incident Management Handbook provides a concise description of traffic incidents below:

"An "incident" is defined as any non-recurring event that causes a reduction of roadway capacity or an abnormal increase in demand. Such events include traffic crashes, disabled vehicles, spilled cargo, highway maintenance and reconstruction projects, and special non-emergency events (e.g., ball games, concerts, or any other event that significantly affects roadway operations). Although the problems most often associated with highway incidents is traveler delay, by far the most serious problem is the risk of secondary crashes. Another related issue is the danger posed by incidents to response personnel serving the public at the scene. Other secondary effects of incidents include:

- Increased response time by police, fire, and emergency medical services
- Lost time and a reduction in productivity
- Increased cost of goods and services
- Increased fuel consumption
- Reduced air quality and other adverse environmental impacts
- Increased vehicle maintenance costs
- Reduced quality of life
- Negative public image of public agencies involved in incident management activities."

The magnitude of these problems can be severe. Incidents critically limit the operational efficiency of the transportation network and put all users of the network at risk. The following plan describes the actions that the group is discussing and implementing to improve management of incidents.

The plan is organized by various stages of incident management activities identified by the Federal Highway Administration's Traffic Incident Management Handbook, as well as an additional item addressing the need for long-term strategic planning for traffic incidents:

- A. Incident Detection: How an incident is brought to the attention of the agency or agencies responsible for maintaining traffic flow and safe operations on the facility.
- B. Incident Verification: How an incident's location and relevant details about an incident are verified.
- C. Motorist Information: How incident-related information is disseminated to affected motorists.
- D. Incident Response and Preparedness: How appropriate personnel and equipment are dispatched, how appropriate communication links and motorist information media are activated, and how multiple agencies are prepared to handle incident.
- E. Site Management: How incident is coordinated and how on-scene resources are managed.
- F. Incident Clearance: How the roadway's capacity is restored to its pre-incident condition.
- G. Long Term Strategic Planning for Incident Management: What strategic capital investments or strategic systems/processes need to be developed to improve incident management in the region over the long term?

Note: Dates in parenthesis indicate meeting dates of when a particular action item idea was expressed by the Traffic Incident Management Group.

A. Incident Detection

1. Review existing incident detection practices.

8/4/08 – Completed FHWA Incident Management self-assessment in conjunction with the Maine Statewide Incident Management Group.

8/4/08 – Post-Incident review process was developed by the TIM Group. First Post-Incident meeting was held on 2/19/08 in reference to an incident that occurred on the I-95 bridge in October of 2007. Post-Incident report was developed and distributed to participating agencies and the TIM Group.

9/17/07 - SMRPC is currently developing plans to carry out a post-incident evaluation of an actual incident per Traffic Incident Management Group discussion on 8/10/07.

2. Assess use of Maine Turnpike Authority cameras for incident detection and determine if additional cameras are warranted to assist incident detection.

8/4/08 – NHDOT is working on an agreement to allow certain agencies, such as the Maine State Police, to access the available bridge cameras on I-95 between the two States.

B. Incident Verification

1. Review existing incident verification practices.

8/4/08 – Completed FHWA Incident Management self-assessment in conjunction with the Maine Statewide Incident Management Group.

8/4/08 – Post-Incident review process was developed by the TIM Group. First Post-Incident meeting was held on 2/19/08 in reference to an incident that occurred on the I-95 bridge in October of 2007. Post-Incident report was developed and distributed to participating agencies and the TIM Group.

*8/4/08 – Staff has been working with York County EMA to review the current Web EOC (Emergency Operations Center), complete the training module, and gain access for municipal departments. Web EOC demonstration is planned for the TIM Group meeting on August 22nd.
9/17/07-SMRPC is currently developing plans to carry out a post-incident evaluation of an actual incident per Traffic Incident Management Group discussion on 8/10/07.*

2. Investigate possibility of mile markers on Interstate 95 every 2/10ths of a mile for incident verification purposes and motorist breakdowns (3/30/07).

8/4/08 – Due primarily to cost, this idea has been tabled. NHDOT is continuing to move toward 2/10th markers, and the Maine Turnpike Authority is switching to ever .5 mile.

9/17/07-The Traffic Incident Management Group met on this topic on August 10. Also SMRPC has contacted and had discussion with MaineDOT and the Maine Turnpike Authority on this topic. Initial analysis of other programs shows that installation and maintenance of these signs may be a significant cost. A study on intermediate reference markers by Delaware DOT found that costs for installation would be around \$400/mile (assuming 4 markers in each direction). Annual maintenance cost would be about \$20/mile (assuming a 5% replacement rate)

4/17/07-The I-95 Corridor Coalition is studying Reference Location Signs, and recently completed Phase I of its analysis which was a nationwide survey of sign practices, including design, color, location and frequency, and catalogued the use of Reference location signs (RLS), including intermediate reference location signs (IRLS), enhanced reference location signs (ERLS), and intermediate enhanced reference location signs (IERLS). Phase II will be examining scientific research motorist recognition and feedback on various signs.

C. Motorist Information

1. Explore the feasibility of developing a pilot program in which traffic incident information is communicated through Maine DOT motorist information systems using local computer-aided dispatch technology (CAD). (1/31/07)

8/4/08 – MaineDOT staff have developed a white paper on their proposed CAD system efforts, and have shared that with the TIM Group. MaineDOT has also suggested that municipal departments and/or dispatch could, in the future, be allowed to enter data directly to the SWIMS database or the 511 system. The TIM Group will be pursuing these options in the future.

4/19/07-Several towns and York County have agreed to proceed with the pilot program idea. Maine DOT is currently examining technological issues associated with this task as well as funding mechanisms to initiate the pilot program.

2. Provide information to incident management stakeholders on the benefits of the Maine Statewide Incident Management System (SWIMS) and assist interested parties in setting up an account and password. (12/06/06)

8/4/08 – All TIM agencies have access to the SWIMS database and notification system.

4/19/07-Several towns and Traffic Incident Management Group members have received username and passwords to participate in SWIMS.

3. Educate stakeholders about Maine Turnpike Authority's investment plan for variable message sign technology. (10/19/06)

8/4/08 – Maine Turnpike Authority has kept the TIM Group informed as to the agency's long range planning process, including any new variable message signs and/or changes.

4. Create pilot public outreach program to greater business community including the chamber of commerce, rotaries, etc, to explain how the traffic incident management process works.

8/4/08 – Staff have met with the Maine Beaches Association, and have also prepared a one-page summary of TIM efforts for inclusion in the York Chamber newsletter. All Chamber directors receive notices of meetings and other material.

9/17/07-SMRPC will be meeting with the Maine Beaches Association, an organization consisting of all coastal chambers of commerce in Southern Maine from Saco/Biddeford and Old Orchard Beach to the Greater York Area to discuss the Traffic Incident Management Planning Effort. Of

note, the Chambers of Commerce are being integrated into a Traffic Incident Management Group's call tree.

5. Investigate opportunities to use public radio as highway advisory for long-term events (3/30/07).

8/4/08 – No activity has occurred on this task to date.

D. Incident Response and Preparedness

1. Develop a bi-state (Maine & New Hampshire), multiple-jurisdiction communications procedure for implementing the incident management routing plan (see F1). (1/31/07, 12/06/06, 10/19/06)
 - i. This should include a call down list system from the central dispatching point.
 - ii. This communications procedure should be comprehensive and should filter down to motorists and the business community in the region.
 - iii. This procedure should examine possibility of developing different levels of response for different degrees of traffic incidents and their impact on the larger transportation system.

8/4/08 – The Call Tree has gone through 2 rounds of testing in June and July, and some minor changes have been made to the structure and protocol. Several meetings have taken place with municipal departments and the three major dispatch centers that cover the region. Reports on the process were provided to stakeholders, and a third test is scheduled.

Development of NH Call Tree portions will need to be developed as a next step.

8/4/08 – Staff assisted in the development and submittal of a Public Safety Interoperability Communications Grant through MEMA. Grant would assist 12 communities and the York County Sheriff's office in programming current radio equipment for the CONOPS channels. Grant would also reimburse departments who send staff to future CONOPS training sessions.

8/4/08 – Staff has been working with York County EMA to review the current Web EOC (Emergency Operations Center), complete the training module, and gain access for municipal departments. Web EOC demonstration is planned for the TIM Group meeting on August 22nd.

9/17/07-The basic framework for the Traffic Incident Management Call List was accepted at the 8/10/07 Traffic Incident Management Meeting. This call down list takes into account section i and ii above. The Group is putting together finishing touches on this document. York County EMA is pulling together contact numbers for all entities involved and New Hampshire is organizing on its own its portion of the call tree list. Extensive training and some testing and verification of the efficiency of the list will be part of this effort.

4/19/07-A subcommittee was formed through the Traffic Incident Management Group to tackle the communications procedure. The first meeting is scheduled for 5/9/07.

3. Determine how interoperability communications equipment in York, ME and Newington, NH will have a role for incident management issues in the area. (1/31/07, 12/06/06)

8/4/08 – The TIM Group decided that the Newington and/or Pease locations would be adequate for any large-scale incident, and that reviving the York location would not be needed at this time.

8/4/08 – It was also decided that the frequency mentioned below is licensed for NH and MaineDOT, and is not meant for first responders. Subsequently, York County EMA has made a frequency available to the Group for use during cross-border incidents.

9/17/07-TheTraffic Incident Management Group made a decision at the 6/1/07 meeting that if needed the York Maintenance Facility could be used, but it should be adequate to move incident command center people across the Piscataqua River even in the case of a bridge being down. The Newington IFO and the Pease Facility were recommended as possible incident command centers. A follow up meeting in one of those facilities was proposed for an upcoming meeting so that the group could better understand the equipment and setup at the NH sites.

4/19/07-An Interop frequency between NHDOT (Dave Chase) and MDOT (Bill Plante) was decided on: 151.985 mhz with a PL tone of 156.7 hz. This frequency is currently up at the York Maintenance facility and will soon be controlled by Augusta headquarters. Both NH and ME will monitor this channel during incidences.

4. Create informative maps showing incident management resources and assets in Maine and New Hampshire to aid incident management stakeholders. Assist incident management stakeholders in obtaining map.

8/4/08 – Several additional meetings with both NH and Maine municipal departments have taken place. One large meeting was also held to compare various maps and recommend changes, which have been completed.

8/4/08 – NH DOT has also hired a consultant to work on detour mapping. SMRPC has been in contact with NH DOT staff and the consultants throughout the process to share information.

8/4/08 – Staff have been in contact with the northeast EMA directors, who would like to conduct an inventory of State's large-scale evacuation plans, and how they may affect neighboring States.

4/19/07-SMRPC created a map showing traffic incident management assets including but not limited to locations of fire, police, ambulance, hospitals, maintenance and other MDOT and MTA facilities, turnpike cameras, turnpike variable message signs, median crossovers, rr stations, roads, etc,. These maps were distributed in January and March 2007 to group members.

5. Explore possibilities of adopting inter-local memorandum of understanding to use frequencies of neighboring communities as back up for alternate communications. (1/31/07)

8/4/08 – Staff has been working with York County EMA to review the current Web EOC (Emergency Operations Center), complete the training module, and gain access for municipal departments. Web EOC demonstration is planned for the TIM Group meeting on August 22nd.

8/4/08- The State Emergency Management Agency (MEMA) has developed the CONOPS process, which provides six frequencies for use by incident commanders. Staff will be working with MEMA and York County EMA to organize training sessions for CONOPS in southern Maine.

8/4/08 - York County EMA has also made a frequency available to the group to utilize during cross-border incidents.

6. Gather list of communications technologies and radio frequencies used in Southern Maine/Northern New Hampshire and share this list with incident management stakeholders. (1/31/07)

4/19/07-Frequency list is available through the Emergency Communications and Interoperability Study completed for the York County Emergency Management Agency in 2005.

7. Increase incident management training of Maine police and first responders either by starting new program in Maine or ensuring there is ongoing Maine participation in New Hampshire program.
 - i. Consider developing train the trainer system.
 - ii. Provide training in Uniform Response Manual currently used by Maine State Police by larger group of incident management personnel (12/06/06, 10/19/06)

8/4/08 – Traffic Control Workshop was organized and took place on 6/17/08. Approximately 30 first responders attended the session.

9/17/07-MaineDOT's Local Roads Center is offering to do a customized workshop for fire and rescue, law enforcement, and/or public works crews on handling traffic incidents. SMRPC is working with MaineDOT to set up this meeting.

8. Develop plan for accessing additional resources and manpower for detouring, dispatching and enforcement as needed for major incidents.
 - i. Consider use of New Hampshire's newly acquired portable variable message signs, which it may be able to share with Maine communities (12/06/06)
 - ii. Consider examining New Hampshire Public Works Mutual Aid program and use of this model for application in Maine (8/10/07).
 - iii. Consider purchasing additional joint-use self-contained trailer for towns in county (like one's currently owned and operated by NH DOT and York Police). (8/10/07)
 - iv. Consider utilizing Southern Maine Regional Planning Commission cooperative purchasing services for traffic incident management equipment.

8/4/08 – Staff met with MaineDOT, NHDOT, and MEMA to discuss the Statewide Mutual Aid program. MEMA has developed a draft program document, which is being reviewed internally and will then be shared with the Maine Municipal Association and the Maine Attorney General's office. MaineDOT has agreed to host the program and maintain the database.

8/4/08 – The TIM Group will be submitting a I-95 Corridor Coalition grant to purchase additional routing equipment, trailers, and message signs.

9/17/07-SMRPC developed an inventory list of typical equipment needed for Traffic Incidents which it passed out at the 8/10/07 meeting for participants to fill out. SMRPC has contacted York Police on getting more information on self-contained trailers. SMRPC consulted cooperative purchasing manager on Traffic Incident Management equipment and it was affirmed

that if there is enough interest, it can be pursued. The Traffic Incident Management Group is looking into expanding and enhancing mutual aid for law enforcement, fire and rescue and public works. The group has invited the New Hampshire Public Works Mutual Aid program to describe its recent success using mutual aid for emergencies for its public works crews.

9. Work with other States in the region and/or the I-95 Corridor Coalition for opportunities for advanced notice of long-term incidents. Familiarize stakeholders with the New Hampshire Intelligent Transportation System (ITS) Plan. (10/19/06)

8/4/08 – Consultants have attended two meetings of the ITS/Incident Management Plan and have reported back to the TIM Group. The NHDOT project manager has also been attending TIM meetings and has kept the group informed on progress.

9/17/07-The Traffic Incident Management Group secured a small grant to hire consultants Telvent-Faradyne to work on behalf of the TIM Group as New Hampshire embarks on an ITS deployment plan for I-95 and the Spaulding Turnpike in the Fall of 2007-Spring 2008. Their task will be to ensure the NH plan takes into account Maine's needs and help prepare Maine to make ITS investment decisions in the future.

10. Evaluate current Incident Command System (ICS).

8/4/08 – Completed FHWA Incident Management self-assessment in conjunction with the Maine Statewide Incident Management Group.

8/4/08 – Post-Incident review process was developed by the TIM Group. First Post-Incident meeting was held on 2/19/08 in reference to an incident that occurred on the I-95 bridge in October of 2007. Post-Incident report was developed and distributed to participating agencies and the TIM Group.

E. Site Management

1. Investigate new techniques and technologies to assist officers in reconstructing scenes. (12/06/06)
 - i. Evaluate New Hampshire's recent use of photogrammetry technology.

8/4/08 – There are currently no immediate plans to have the State Police use photogrammetry. The State Police have recently purchased additional total-station equipment.

9/17/07-SMRPC contacted FHWA regarding grant funds for bringing expert on photogrammetry to do a presentation for Maine State Police.

4/19/07-New Hampshire Police was asked to send cost estimates and other information to Maine DOT per meeting on 3/30/07.

2. Perform a self-assessment of the site management process.

8/4/08 – Completed FHWA Incident Management self-assessment in conjunction with the Maine Statewide Incident Management Group.

8/4/08 – The State Police have been meeting with OSHA to review recommendations for the staging of vehicles and equipment at incident scenes. There is some discrepancies which have led to miscommunications during incidents. This should be clarified shortly.

8/4/08 – Traffic Control Workshop was organized and took place on 6/17/08. Approximately 30 first responders attended the session.

9/17/07-SMRPC is currently developing plans to carry out a post-incident evaluation of an actual incident per Traffic Incident Management Group discussion on 8/10/07. With respect to site management practices, MaineDOT's Local Roads Center is offering to do a customized workshop for fire and rescue, law enforcement, and/or public works crews on handling traffic incidents. SMRPC is working with MaineDOT to set up this meeting.

3. Increase recruitment of scene reconstruction officers in order to ensure consistent rapid response to scene reconstruction. (12/06/06)

8/4/08 – Plans at this point are to write a letter to State Legislators during the upcoming session requesting additional training funds and any other costs associated with staff overtime.

F. Traffic Management

1. Establish an incident management routing plan. The plan shall at minimum address seven different scenarios in which one or more of the three bridges connecting Kittery, ME and Portsmouth, NH are closed (I-95 Bridge, Sara Long Bridge & Memorial Bridge).
 - i. In cases where *either* northbound *or* southbound lanes are entirely closed off on Interstate 95, examine possibility of temporarily reconfiguring the available lane for north and southbound traffic.

8/4/08 – All routing plans have been completed and reviewed by the individual municipalities and the TIM Group.

8/4/08 – Contra-flow lane possibilities have not been well received in Maine or NH in the past. However, the TIM Group strongly supports the idea and believes it should be pursued further. Meetings with MaineDOT and the Maine Turnpike Authority will be taking place in the Fall of 2008 on the issue.

9/17/07-SMRPC has met with Portsmouth, Kittery, York, Wells and has meetings scheduled in late September with Eliot and South Berwick on routing scenarios.

4/19/07-SMRPC developed some initial local routing scenarios with possible locations of traffic officers, barricades, bridge closed and detour signs in conjunction with local police in Kittery and Portsmouth. These maps were distributed to the Traffic Incident Management Group in early April 2007. SMRPC was tasked to help facilitate meeting between Maine and New Hampshire DOT's to discuss contraflow options for I-95.

2. Coordinate traffic management with other existing plans such as the Seabrook Evacuation Plan, the Maine Mall Area Evacuation Plan, the Army Corp of Engineers Hurricane Evacuation Study, the Incident Management Plan for Little

Bay Bridge, and the work of the Maine and New Hampshire I-95 Security Issues Group.

8/4/08 – Staff has incorporated information from existing plans when discussing/developing detour plans with municipal departments. SMRPC continues to monitor the development of routing plans in NH through NHDOT consultants.

4/19/07- SMRPC has acquired each plan and is in the process of studying each report. In addition, one or more members that are involved in the other plans and studies are actively involved in the existing Traffic Incident Management Group.

3. Gather list/inventory of signs, cones and other traffic management resources in the region, with location and contact information, and share this list with traffic incident management stakeholders.

8/4/08 – This effort was incorporated into the development of a Statewide public works mutual aid program. The inventory will need to be collected prior to implementation of the program.

9/17/07- SMRPC developed an inventory list of typical equipment needed for Traffic Incidents which it passed out at the 8/10/07 meeting for participants to fill out.

G. Incident Clearance

1. Review current incident clearance practices.

8/4/08 – Completed FHWA Incident Management self-assessment in conjunction with the Maine Statewide Incident Management Group.

8/4/08 – Post-Incident review process was developed by the TIM Group. First Post-Incident meeting was held on 2/19/08 in reference to an incident that occurred on the I-95 bridge in October of 2007. Post-Incident report was developed and distributed to participating agencies and the TIM Group.

9/17/07-SMRPC is currently developing plans to carry out a post-incident evaluation of an actual incident per Traffic Incident Management Group discussion on 8/10/07.

2. Support legislation that allows police to quickly clear minor accidents and “fender benders.”

8/4/08 – The Maine Statewide Incident Management Group has plans to pursue this item with the State Legislature. The Southern Maine TIM Group will be supporting any efforts to develop legislation.

9/17/07-MaineDOT will be hosting 2 workshops in October of 2007 (one for responders, one for managers/executives) on developing Quick Clearance practices in Maine.

4/19/07-SMRPC sent quick clearance information to Lt. Murdock of the Maine State Police including a National Cooperative Highway Research Program synthesis of national practice and laws, the NH statute, and a model law drafted by the National Committee on Uniform Traffic Devices and Ordinances.

H. Long Term Strategic Planning for Incident Management

1. Support Maine DOT strategic investment in East-West Highway to alleviate traffic on I-95 corridor. (10/09/06)
2. Support Maine DOT strategic investment in Gorham bypass (10/09/06)
3. Assess current locations of Variable Message Signs, and pursue funding for additional signs.
4. Develop and formalize an incident management team to conduct incident management self-assessment, provide a review of incident responses and techniques, and develop performance measures.

8/4/08 – Post-Incident review process was developed by the TIM Group. First Post-Incident meeting was held on 2/19/08 in reference to an incident that occurred on the I-95 bridge in October of 2007. Post-Incident report was developed and distributed to participating agencies and the TIM Group.

9/17/07-SMRPC is currently developing plans to carry out a post-incident evaluation of an actual incident per Traffic Incident Management Group discussion on 8/10/07.