Traffic Incident Management and the Role of Transportation/Public Works Agencies

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What Is a “Traffic Incident”?

- Any unplanned event that disrupts the normal flow of traffic
- Duration usually short-term but major incidents longer
- Causes:
  - accidents
  - breakdowns and vehicle fires
  - medical emergencies
  - debris or animals in roadway
  - severe weather
  - infrastructure damage
  - law enforcement activities

Traffic Incident Management

“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.”

APWA Traffic Incident Management Website
Levels of Incidents per MUTCD

- Chapter 6-I, Control of Traffic Through Traffic Incident Management Areas, defines traffic incidents as:
  - minor ----------- up to 30 minutes duration
  - intermediate --- 30 minutes to 2 hours
  - major ------------ 2-24 hours
- Different factors influence these determinations
- Level can change upon a particular discipline’s involvement

![Traffic Incident Management Area Signs](image)

Effects of Traffic Incidents

- High risk for responders
- Secondary crashes affect public
- Delays cost millions of dollars in lost productivity
- Hundreds of thousands of personal injuries, fatalities
- Billions of dollars in vehicle, freight and property losses

![Traffic Incident Scene](image)

Challenges with Traffic Incidents

- Responders have different command structures, SOPs
- Lack of cooperation among disciplines
- Lack of communication between agencies
- Poor coordination of activities and tasks
- Insufficient training in temporary traffic control
- Inadequate TTC devices
- Media and public not well informed

“Effective TIM reduces the duration and impacts of traffic incidents and improves the safety of motorists, crash victims, and responders” (FHWA website)
Working Together for Progress
National Traffic Incident Management Coalition (2004-2013)

- Stakeholders from many disciplines and interests
- Proposed changes to MUTCD; recommended new state laws; promoted better collaboration among disciplines; introduced new concepts and best practices.

Executive Leadership Group (since 2014)

- Major responder discipline associations including AASHTO and APWA
- Work with FHWA to guide new directions, initiatives.

Training Together to Work Together
Free TIM Training conducted by FHWA

- Train-the-Trainer (8-12 hour class)
- Responder course (4-8 hour class)
- Both courses open to all disciplines
- Public Works/Transportation needed
- Available through State offices
- FHWA funding training through APWA, IMSA
- Responder course by web through NHII

TIM Training by Discipline as of 6/29/2015
In-Person TIM Training as of 6/29/2015

<table>
<thead>
<tr>
<th>Discipline</th>
<th>Train-the-Trainer</th>
<th>Responder Training</th>
<th>Total</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Law Enforcement</td>
<td>2,016</td>
<td>38,806</td>
<td>40,822</td>
<td>34.8%</td>
</tr>
<tr>
<td>Fire/Rescue</td>
<td>2,098</td>
<td>39,105</td>
<td>41,203</td>
<td>35.1%</td>
</tr>
<tr>
<td>Towing and Recovery</td>
<td>426</td>
<td>7,576</td>
<td>8,002</td>
<td>6.8%</td>
</tr>
<tr>
<td>EMS</td>
<td>295</td>
<td>4,949</td>
<td>5,244</td>
<td>4.5%</td>
</tr>
<tr>
<td>DOT/Transportation</td>
<td>1,250</td>
<td>15,217</td>
<td>16,467</td>
<td>14.0%</td>
</tr>
<tr>
<td>Other Disciplines</td>
<td>471</td>
<td>5,083</td>
<td>5,554</td>
<td>4.7%</td>
</tr>
<tr>
<td>Total Trained</td>
<td>6,556</td>
<td>110,736</td>
<td>117,292</td>
<td>100.0%</td>
</tr>
<tr>
<td>Number of Sessions</td>
<td>170</td>
<td>4,359</td>
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</tr>
</tbody>
</table>

Public Works/DOT Capabilities
- Trained and equipped for temporary traffic control
- Experienced with various situations and incidents
  - temporary traffic control
  - clearing debris from roadway
  - repairs to damaged infrastructure

Role of Traffic Management Centers
Traffic Incidents
- Crash detection and notification
- remote monitoring
- communications
- determining closures and detours
- adjusting traffic signals
- information to media and public
- IMSA and FHWA collaborating on new course for TMC Operators
More Than Just Responder Training

• Obtain training in NIMS and Incident Command System
  • IS-100pw, Intro to ICS for Public Works,
  • IS-200, ICS for Initial Incident and Single Resource
  • IS-700, Intro to National Incident Management System
  • ICS-300 Intermediate, ICS-400, Advanced Incident Command System
  • IS 15-Special Events Contingency Planning

• Discussions with other responders
  • Describe resources of Public Works / DOTs
  • Explain response capabilities and limitations

• Develop agency plans, policies and procedures
• Ensure adequate, available inventory of TTC devices

TIM Prepares for Other Emergencies

The protocols, policies, procedures and methods for Traffic Incident Management are the basis for better communication, coordination, cooperation and capability in other emergencies and events

PLAN  PREPARE  PERFORM

Public Works and Emergency Management

Emergency Service Sector: Public Works Role

• flood control
• debris clearance and removal
• emergency traffic operations
• repair damage to roads, bridges, tunnels
• assess damage to public structures

Source: FEMA Critical Infrastructure Resource Center
For More Information…

FHWA, Emergency Transportation Operations  fhwa.dot.gov/etotim
For Responder or Train-the-Trainer courses:
James G. Austrich, Responder Training Manager  james.austrich@dot.gov

Publications

- Guide to the Incident Command System for Transportation Professionals
- Traffic Control Concepts for Incident Clearance Primer
- Traffic Incident Management in Construction/ Maintenance Work Zones
- Best Practices in Traffic Incident Management
- 2010 Traffic Incident Management Handbook
- Alternate Route Handbook
- USFA/FEMA Traffic Incident Management Systems

Other TIM Training Sources

Virtual training:
Emergency Responder Safety Institute  respondersafety.com
I-95 Corridor Coalition  i95coalition.org/i95/Training

- National Highway Institute  nhi.fhwa.dot.gov/training/course
  - TIM Responder
  - Managing Travel for Planned Special Events
  - Using the Incident Command System at Highway Incidents
  - Work Zone Traffic Control for Maintenance Operations

- Tim network  http://timnetwork.org

Questions?

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