National Traffic Incident Management (TIM) Responder Training Program

Law Enforcement | Fire | EMS | Transportation
Towing & Recovery | Communications
The first Strategic Highway Research Program (1988 to 1993) improved winter highway maintenance practices and revolutionized asphalt pavement design.

The second Strategic Highway Research Program (SHRP 2) was authorized by Congress to address some of the most pressing needs related to the nation’s highway system. Congress authorized SHRP 2 in 2005 to investigate the underlying causes of highway crashes and congestion in a short-term program of focused research.

The National TIM Responder Training Program is the first reliability product being rolled out under SHRP 2.
<table>
<thead>
<tr>
<th>Area</th>
<th>Focus</th>
</tr>
</thead>
<tbody>
<tr>
<td>Safety</td>
<td>Prevent or reduce the severity of highway crashes by understanding driver behavior</td>
</tr>
<tr>
<td>Renewal</td>
<td>Address the aging infrastructure through rapid design and construction methods that cause minimal disruption and produce long-lived facilities</td>
</tr>
<tr>
<td>Reliability</td>
<td>Reduce congestion through incident reduction, management, response, and mitigation</td>
</tr>
<tr>
<td>Capacity</td>
<td>Integrate mobility, economic, environmental, and community needs in the planning and designing of transportation capacity</td>
</tr>
</tbody>
</table>
TIM Defined

• 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 Annual Effects of Congestion

<table>
<thead>
<tr>
<th>City Size</th>
<th>Congestion Stats per City</th>
<th>Congestion Stats per Traveler</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Average Cost ($)</td>
<td>Average Delay (Hours)</td>
</tr>
<tr>
<td>Large</td>
<td>$930,000,000</td>
<td>55,500,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Medium</td>
<td>$313,500,000</td>
<td>18,750,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Small</td>
<td>$88,800,000</td>
<td>5,200,000</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Incident Costs

• **Increases risk of crashes**
  – One of the leading causes of injuries to highway responders
  – In 2010, there were 275 Ohio police officers injured and one fatality during traffic related incidents
  – Secondary crashes are estimated to cause nearly 20% of all highway crashes, or nearly 60,000 crashes in Ohio annually

• **Waste time & money**
  – On average, drivers sit in traffic for more than a week each year
  – In 2010, congestion cost $100 billion annually
  – Cost of congestion to the trucking industry was $23 billion in 2010

• **Wastes fuel**
  – Each driver wastes more than 500 miles worth of fuel annually due to congestion and delay
• Stats

• 1 minute of lane blockage results in 4 minutes of delay

• 4.2 billion hours per year in delays

• Incidents cost the national economy about $300 billion dollars per year
The 3 C’s
Communication, Coordination, Cooperation
• **Communication**
  
  – First responders to notify appropriate personnel *immediately* including Law Enforcement, Fire, EMS, TMC staff, communications staff, FSP and towing and recovery companies
  
  – Establish traffic control plan using OMUCTD and timeline for opening lane closures
  
  – Provide *timely* updates to all personnel
• **Coordination**
  
  – Carry out on-scene tasks *concurrently* and with sense of urgency
  – Follow all principles of Incident Command
  – Implement “Steer It & Clear It” principles
  – Establish after action review for major incidents
• **Cooperation**
  
  – Ensure all personnel follow safety guidelines while on scene
  
  – Reassess scene every **15 minutes** and make unified decisions
  
  – Work as one team, not as separate entities
  
  – Establish post-incident briefing to improve practices
PROPOSED
National Unified Goal for Traffic Incident Management
Working Together for Improved Safety, Clearance and Communications

WHAT IS THE NATIONAL UNIFIED GOAL?

The Traffic Incident Management National Unified Goal is to:
- Promote, develop, and sustain effective Traffic Incident Management programs.
- Enhance responder safety:
- Reduce fatalities and injuries:
- Improve communications.
- Improve operational efficiency:
- Reduce delays and congestion.
- Improve public awareness:
- Increase public confidence.
- Promote partnerships:
- Foster collaboration.

COMMITMENT STATEMENT

The NTIMC is committed to working together to promote, develop, and sustain multidisciplinary Traffic Incident Management (TIM) programs to achieve enhanced responder safety; safe, quick traffic incident clearance; and prompt, reliable, interoperable communications.

HOW WILL THE GOAL BE ACHIEVED?

NTIMC will achieve the three major objectives of the National Unified Goal through 10 strategies. Key strategies include:
- Developing and implementing TIM programs and communication systems to clear the way for traffic incident response units.
- Developing and implementing TIM programs to improve responder safety and efficiency.
- Developing and implementing TIM programs to increase public awareness and confidence in traffic incident management.
- Developing and implementing TIM programs to promote partnerships and collaboration.

CROSS-CUTTING STRATEGIES

- Strategy 1: TIM Partnerships and Programs. Traffic Incident Management partners at the national, state, regional, and local levels should work together to promote, develop, and sustain effective Traffic Incident Management Programs.
- Strategy 2: Multidisciplinary Teams and Training. Teams should include Traffic Incident Management responders and other relevant personnel to enhance responder safety.
- Strategy 3: Goals for Performance and Progress. Strategies should be developed to measure the effectiveness of Traffic Incident Management programs.
- Strategy 4: Technology. Technology should be developed and implemented to enhance responder safety and efficiency.
- Strategy 5: Effective TIM Policies. Policies should be developed and implemented to enhance responder safety and efficiency.
- Strategy 6: Awareness and Education. Awareness and education programs should be developed to promote public awareness and understanding of Traffic Incident Management programs.
- Strategy 7: TIM Training. Traffic Incident Management responders should receive training to enhance responder safety.
- Strategy 8: State-of-the-Art Systems. Systems should be developed to enhance responder safety and efficiency.
- Strategy 9: TIM Clearing. Traffic Incident Management responders should develop clear and concise communications to enhance responder safety and efficiency.
- Strategy 10: Partnerships with Industry. Partnerships with industry should be developed to enhance responder safety and efficiency.

OBJECTIVE 1: RESPONSIBLE SAFETY

- Strategy 11: Multidisciplinary Communications. Traffic Incident Management responders should work together to enhance responder safety.
- Strategy 12: Prompt, Reliable Traffic Incident Communications. Traffic Incident Management responders should work together to enhance responder safety.
- Strategy 13: Partnerships with Industry. Partnerships with industry should be developed to enhance responder safety.

OBJECTIVE 2: SAFE, QUICK CLEARANCE

- Strategy 14: Multidisciplinary Communications. Traffic Incident Management responders should work together to enhance responder safety.
- Strategy 15: Prompt, Reliable Traffic Incident Communications. Traffic Incident Management responders should work together to enhance responder safety.

OBJECTIVE 3: PROMPT, RELIABLE INCIDENT COMMUNICATIONS

- Strategy 16: Multidisciplinary Communications. Traffic Incident Management responders should work together to enhance responder safety.
- Strategy 17: Prompt, Reliable Traffic Incident Communications. Traffic Incident Management responders should work together to enhance responder safety.

4H-13
National TIM Responder Training

• Designed to establish the foundation for and promote consistent training of all responders to achieve the three objectives of the TIM National Unified Goal (NUG):
  – Responder Safety
  – Safe, Quick Clearance
  – Prompt, Reliable, Interoperable Communications
National TIM Responder Training Program Implementation Progress
- As of October 6, 2014

47 States Actively Training

114 Total Number of TtT Sessions Conducted

3 New States have a TtT Session Scheduled

64,688 Total Number Trained
National TIM Responder Training Program Implementation Progress
- As of October 6, 2014

59,988  Number of Responders Trained
(Not Including TtT Session Participants)

60.0%  2014 National Goal – 100,000 Trained
Training Status Report

National Traffic Incident Management Responder Training Program
Training Status Report - As of October 6, 2014

Training Totals

<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>1,486</td>
<td>22,723</td>
<td>24,209</td>
<td>37.4%</td>
</tr>
<tr>
<td>Fire/Rescue</td>
<td>1,360</td>
<td>19,834</td>
<td>21,194</td>
<td>32.8%</td>
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<tr>
<td>Towing and Recovery</td>
<td>322</td>
<td>3,098</td>
<td>3,420</td>
<td>5.3%</td>
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<tr>
<td>EMS</td>
<td>198</td>
<td>2,285</td>
<td>2,483</td>
<td>3.8%</td>
</tr>
<tr>
<td>DOT/Transportation</td>
<td>965</td>
<td>9,161</td>
<td>10,126</td>
<td>15.7%</td>
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<tr>
<td>Other Disciplines</td>
<td>369</td>
<td>2,887</td>
<td>3,256</td>
<td>5.0%</td>
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<tr>
<td><strong>Total Trained</strong></td>
<td><strong>4,700</strong></td>
<td><strong>59,988</strong></td>
<td><strong>64,688</strong></td>
<td><strong>100.0%</strong></td>
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<tr>
<td><strong>Number of Sessions</strong></td>
<td><strong>114</strong></td>
<td><strong>2,428</strong></td>
<td><strong>--</strong></td>
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## Progress Since Last Report

<table>
<thead>
<tr>
<th></th>
<th>Train-the-Trainer</th>
<th>Responder Training</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Totals as of 10/06/14</td>
<td>4,700</td>
<td>59,988</td>
<td>64,688</td>
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<tr>
<td>Totals as of 09/22/14</td>
<td>4,422</td>
<td>57,425</td>
<td>61,847</td>
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<tr>
<td>Difference</td>
<td>278</td>
<td>2,563</td>
<td>2,841</td>
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<tr>
<td>Percent Increase</td>
<td>6%</td>
<td>4%</td>
<td>5%</td>
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</table>

### National Training Goal

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Responders Trained</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>National Goal</strong></td>
<td><strong>12/31/14</strong></td>
<td>100,000</td>
</tr>
<tr>
<td><strong>Target</strong></td>
<td>10/01/14</td>
<td>75,100</td>
</tr>
<tr>
<td><strong>Actual</strong></td>
<td>10/06/14</td>
<td>59,988</td>
</tr>
<tr>
<td><strong>Percent Difference</strong></td>
<td>--</td>
<td>-20.1%</td>
</tr>
<tr>
<td><strong>Actual</strong></td>
<td>10/06/14</td>
<td>59,988</td>
</tr>
<tr>
<td><strong>Percent Difference</strong></td>
<td>--</td>
<td>-20.1%</td>
</tr>
</tbody>
</table>
- Law Enforcement: 37%
- Fire/Rescue: 33%
- EMS: 4%
- Towing and Recovery: 5%
- DOT/Transportation: 16%
- Other Disciplines: 5%
<table>
<thead>
<tr>
<th>Region</th>
<th>Law Enforcement</th>
<th>Fire/EMS</th>
<th>Towing</th>
<th>Transportation</th>
<th>Other Disciplines</th>
<th>Region Total</th>
</tr>
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<tbody>
<tr>
<td>01</td>
<td>111</td>
<td>142</td>
<td>4</td>
<td>222</td>
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<td>498</td>
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<tr>
<td>02</td>
<td>124</td>
<td>398</td>
<td>53</td>
<td>199</td>
<td>20</td>
<td>794</td>
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<tr>
<td>03</td>
<td>327</td>
<td>394</td>
<td>38</td>
<td>152</td>
<td>1</td>
<td>912</td>
</tr>
<tr>
<td>04</td>
<td>488</td>
<td>844</td>
<td>78</td>
<td>264</td>
<td>66</td>
<td>1,740</td>
</tr>
<tr>
<td>05</td>
<td>30</td>
<td>103</td>
<td>124</td>
<td>86</td>
<td>10</td>
<td>353</td>
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<tr>
<td>06</td>
<td>330</td>
<td>145</td>
<td>156</td>
<td>273</td>
<td>408</td>
<td>1,312</td>
</tr>
<tr>
<td>07</td>
<td>126</td>
<td>277</td>
<td>19</td>
<td>264</td>
<td>52</td>
<td>738</td>
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<tr>
<td>08</td>
<td>229</td>
<td>290</td>
<td>4</td>
<td>237</td>
<td>186</td>
<td>946</td>
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<tr>
<td>09</td>
<td>129</td>
<td>206</td>
<td>31</td>
<td>247</td>
<td>4</td>
<td>617</td>
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<tr>
<td>10</td>
<td>71</td>
<td>170</td>
<td>9</td>
<td>224</td>
<td>1</td>
<td>475</td>
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<tr>
<td>11</td>
<td>35</td>
<td>133</td>
<td>77</td>
<td>180</td>
<td>5</td>
<td>430</td>
</tr>
<tr>
<td>12</td>
<td>585</td>
<td>376</td>
<td>37</td>
<td>198</td>
<td>319</td>
<td>1,515</td>
</tr>
<tr>
<td><strong>Discipline Total</strong></td>
<td><strong>2,585</strong></td>
<td><strong>3,478</strong></td>
<td><strong>630</strong></td>
<td><strong>2,546</strong></td>
<td><strong>1,091</strong></td>
<td><strong>10,330</strong></td>
</tr>
</tbody>
</table>

**Total as of 9/30/2014**
Training
That’s potentially 27 responders rolling out to a new injury crash every minute of every hour, 24/7/365
“D” Drivers are killing us…

- Drunk,
- Drugged,
- Drowsy,
- Distracted, or
- Just plain… Dumb
In a typical year, the following number of responders are struck and killed:

- 12 Law Enforcement Officers
- 5 Fire and Rescue Personnel
- 60 Towing and Recovery Professionals
- Several transportation professionals from DOTs, Public Works, and Safety Service Patrol Programs
Responder Struck-By Crashes
• March 9, 1998 at 2:10 p.m. – Raining, wet roadways
• Vehicle on PA Turnpike lost control and slid into a drainage ditch... 911 is called
• Eight firefighters and two EMTs were struck by the 18-wheeler as it slid into the incident scene
  – One firefighter killed
  – Nine other responders seriously injured
Struck-By

Trooper

Conducting a Traffic Stop
Trooper Kyle Deatherage, 32, died after being struck by a semi on I-55 near Litchfield, IL on November 26, 2012

EMT

Setting Out Flares
EMT Esteban Bahena, 24, died after being struck by a vehicle on State Route 163 in Hillcrest, CA on April 1, 2010

Firefighter

Firefighting
A firefighter from Raritan Township was struck by a vehicle and killed in Clinton Township

Tow Truck Operator

Loading a Vehicle
Tow truck operator Blake Gresham, 18, died after being struck by a box truck on I-35 in Kansas City, MO on August 27, 2012

Transportation Worker

Providing Traffic Control
Motorist Assist Operator Clifton J. Scott, 50, died after being struck by a drunk driver on I-70 in Independence, MO on September 21, 2012
"Fatal crash on I-70 underscores backup risks"
– The Columbus Dispatch
• NASCAR: quicker pit stops = the difference between winning and losing
  – 1960: 45 seconds (4-prong lug wrench)
  – 1963: 25 seconds (air/impact wrench)
  – 1990s/Today: 12 seconds

  • Result of training, practice, and technology

Has TIM gotten stuck at “25 seconds”? 
Driver Removal Laws

• Also referred to as:
  – Fender Bender
  – Move It
  – Steer It, Clear It

• Require motorists involved in minor crashes (where there are no serious injuries and the vehicle can be driven) to move their vehicles out of the travel lanes to the shoulder or other safe area
Carl Merckle
Ohio Department of Transportation
Emergency Management Coordinator
614-644-7165
614-917-7545
Carl.Merckle@dot.state.oh.us
Quick CLEAR
"Key to Responder Safety"

I Have A Question
Key# 1

Keys to Successful Quick Clear

Support of Senior Leadership
• Gives Authority to Organizational Level to run the Program
Program Leaders Must be Credible

Steering Committee Chair
Carl Merckle
Emergency Management Coordinator
Ohio Department of Transportation
16 Yrs Transportation & Fire Service

Steering Committee Chair
Firechief Matt Noble
Orange County Fire Dept.
Fire Service

Steering Committee Chair
Staff Lieutenant William Weitz
Ohio Highway State Patrol
24 Yrs Law Enforcement

Steering Committee Chair
Ron Myers
Pine tree towing
Consistent & Regular Guidance
- Set Training Structure to match the audience
  - Keep Program Simple but Flexible
    - Simple Reporting System
  - Power point & Materials user Friendly
    - Ease of Modification
Keys to Successful Quick Clear

Key# 4

Set Goals and Performance Standards
• Quarterly Steering Committee Meetings
• Monthly Webinar with Coordinators and Regional Staff