Traffic Incident Management (TIM) Program
TIM Program operational goals

• Relationship to TSMO Goals
  • Goal: Improve Reliability, Mobility, and Efficiency
    • Objective: Reduce the frequency of congestion or slowed traffic on the freeways and arterials in metro areas throughout Minnesota
    • Objective: Reduce incident response and clearance times in the Twin Cities and Greater Minnesota
  • Goal: Increase Safety
    • Objective: Reduce the frequency of secondary crashes and crashes related to work zones
    • Objective: Reduce responder exposure
TIM Program Strategies from TSMO Plan

• Develop Regional Traffic Incident Management (TIM) Programs
  • Improve collaboration among TIM partners
  • Establish TIM teams
  • Conduct after action reviews
  • Expand safety service patrols
  • Enhance crash reconstruction

• Develop Traffic Incident Management (TIM) Strategies for Work Zones
  • TIM response plans for specific work zones
  • Establish TIM team dedicated to work zone
  • Dedicated safety service patrols
Secondary Issues Created by Operations

• Any changes in Policy, processes, and performance
  
  • “Open Roads” – A statewide policy between MNDOT and State Patrol to make re-opening roads & lanes a priority.
  
  • “Quick Clearance” – A change in state law 169.041, applies to Metro district only, gives MSP & MNDOT additional legal force to clear obstructions promptly.
  
  • Performance Goals:
    • Goal for Metro: Average Incident Clearance Time in 35 Minutes
    • Goal Statewide: Clear incidents from roadway in 90 minutes.
Secondary Issues Created by TIM Operations

- Expected maintenance needs and unforeseen maintenance needs
  - Metro District: 24/7 response with goal of providing initial traffic control within 30 minutes during normal business hours and 60 minutes after normal working hours. Provide heavy equipment to clear incidents.
  - Greater MN Districts: 24/7 response with goal of providing initial traffic control within 60 minutes during normal business hours and 90 minutes after normal working hours.
  - Statewide: Provided equipment, materials, and manpower to clear incidents.
  - Challenges: Postponing regular maintenance duties for incidents
Secondary Issues Created by Operations

• Any changes in Equipment utilization and coordination
Takeaways, Solutions and Lessons Learned

• Successes
  • Initial agreement along with initial training rollout

• Challenges
  • New staff are not familiar with open roads policy
  • Collecting data for performance measures

• Lessons learned
  • Need for continuous training
  • Need for continuous collaboration
Other details

• Extra slides as long as you keep your presentation to 10 minutes
Quick Clearance

MN Statutes sec 169.041, subd 5a

“DOT & MSP may move, remove, or cause to remove obstructions from road if:”

• Within Metro District 8 county area.
• Collision, accident or spilled load that blocks or aggravates an emergency on road
• MNDOT cooperates with Patrol & MSP authorized tow/recovery company.
Quick Clearance cont.

And

• SP makes a “reasonable effort” to contact owner.
• DOT makes a “reasonable effort” to allow owner to arrange to remove by licensed tow service capable of safely moving.
• “…taking into account any time delay and safety issues”
• Tow charges must be “reasonable”
Two Operational Models

- Twin Cities Metro Area
  - MnDOT Responsibilities
    - Traffic Operations
    - Traveler Information
    - Freeway Service Patrol
    - Maintenance Dispatch
  - State Patrol Responsibilities
    - Emergency management and dispatching

- Greater Minnesota
  - State Patrol Responsibilities
    - Traveler Information
    - Maintenance Emergency Notification
    - Emergency management and dispatching
FIRST - Freeway Incident Response Safety Team

- Twin Cities Metro Freeways
- 8-11 Routes
- 250 Miles
- DOT owned vehicles and DOT employees
- B:C Ratio = 15:1
Performance Measures (Measures, data & analytics, & utilization)

Average Clearance Time for Urban Freeway Incidents

<table>
<thead>
<tr>
<th>Calendar Year</th>
<th>Clearance Time (Minutes)</th>
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<tbody>
<tr>
<td>1995</td>
<td>32.4</td>
</tr>
<tr>
<td>1996</td>
<td>33.5</td>
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<tr>
<td>1997</td>
<td>33.7</td>
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<tr>
<td>1998</td>
<td>34.3</td>
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<tr>
<td>1999</td>
<td>34.0</td>
</tr>
<tr>
<td>2000</td>
<td>36.2</td>
</tr>
<tr>
<td>2001</td>
<td>37.3</td>
</tr>
<tr>
<td>2002</td>
<td>38.0</td>
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<tr>
<td>2003</td>
<td>38.8</td>
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<td>2004</td>
<td>37.9</td>
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<td>2007</td>
<td>37.3</td>
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<tr>
<td>2008</td>
<td>37.2</td>
</tr>
<tr>
<td>2009</td>
<td>37.4</td>
</tr>
<tr>
<td>2010</td>
<td>35.4</td>
</tr>
<tr>
<td>2011</td>
<td>33.0</td>
</tr>
<tr>
<td>2012</td>
<td>31.6</td>
</tr>
<tr>
<td>2013</td>
<td>31.9</td>
</tr>
</tbody>
</table>

Target = 35
Systems & Technology

• Computer Aided Dispatch (CAD)
  • Deployed in 2008
  • Improved communications with MSP and RTMC Dispatch
  • Data tracking

• ARMER Radio System
  • Shared 800 mHz radio system
  • Improved communications with MSP and Metro Maintenance
Hard Closure at immediate upstream intersection on-ramp (close) & off-ramp (detour to nearest ramp) (1 unit/lane)

2 High Priority Soft Closure at On-Ramps (1-2 units/location)

3 Lower Priority Soft Closure at On-Ramps (1-2 units/location)

Mainline informed of road closure via DMS.
# Road Closure Plans

**Incident Location:** I-35W SOUTHBOUND between I-94 and 31st St

<table>
<thead>
<tr>
<th>Closure Priority</th>
<th>Description</th>
<th>Location</th>
<th>Number of Units</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Incident Location</strong></td>
<td>SB I-35W between I-94 and 31st St</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>1</strong></td>
<td>Hard Closure</td>
<td>Mainline SB I-35W at Exit to Hiawatha</td>
<td>2 units</td>
</tr>
<tr>
<td></td>
<td></td>
<td>On-ramp from 4th Ave to SB I-35W</td>
<td>2 units</td>
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<tr>
<td></td>
<td></td>
<td>On-ramp from 12th St to SB I-35W</td>
<td>3 units</td>
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<tr>
<td></td>
<td></td>
<td>On-ramp from WB I-94 to SB I-35W</td>
<td>1 unit</td>
</tr>
<tr>
<td><strong>2</strong></td>
<td>Soft Closure</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td><strong>3</strong></td>
<td>Soft Closure</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

**Total Number of Units:** 8 units

**Other Actions:**
- Post Message to DMS at:
  - SB I-35W prior to Washington Ave (V35W05)
  - WB I-94 prior to 20th Ave (V94W09)
  - EB I-94 prior to Penn Ave (V394E12)
  - EB I-94 prior to Louisiana Ave (V394E09)
  - SB I-94 prior to Broadway Ave (V54E06)
Alternate Routes

• Routes
  • I-94 in Districts 3 and 4
  • I-35 in District 6

• Alternate Route Signing

• Detour Route Maps

• Coordination with Locals Agencies