TRAFFIC INCIDENT MANAGEMENT IN THE DALLAS-FORT WORTH AREA

STUDENT MANUAL

“ADVANCING THE PROGRAM” EXECUTIVE OVERVIEW MAY 2022

North Central Texas Council of Governments
Acknowledgments

Prepared in cooperation with the Texas Department of Transportation, the U.S. Department of Transportation, the Federal Highway Administration, and Federal Transit Administration, as well as the Local Curriculum Review Committee.

The contents of this report reflect the views of the authors who are responsible for the opinions, findings, and conclusions presented herein. The contents do not necessarily reflect the views or policies of the Federal Highway Administration, the Federal Transit Administration, or the Texas Department of Transportation.

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PB Farradyne would like to acknowledge the Local Curriculum Review Committee for volunteering their time to share experiences, review information, and attend meetings. In addition, PB Farradyne would like to acknowledge the guidance and support of the North Central Texas Council of Governments staff. They assisted in organizing the committee, hosting meetings, and reviewing course materials.

Major revision completed in March 2005, by North Central Texas Council of Governments Transportation Department and the Local Curriculum Review Committee. Minor revisions to the course materials are made as needed.
Traffic Incident Management Executive
Level Course Announcements

Housekeeping

- Supplemental Material
- Instructor Recruitment Folders
- Course Evaluations
Traffic Incident Management Program
Staff and Instructors

North Central Texas Council of Governments (NCTCOG) Program Staff
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 Project Manager – Camille Fountain
 Project Support – Kevin Kroll
 Administrative Support – Barbara Walsh

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 Transportation – Natalie Bettger, Senior Program Manager, NCTCOG
 Police – Daniel Plumer, Lieutenant, Dallas County Sheriff’s Office (DCSO)
 Fire – Ron Moore, Independent Fire Instructor

First Responder and Manager Course Lead Instructors and Supporting NCTCOG Staff
 Rick Chron – General Manager, United Road Towing Dallas, Inc. (Retired)
 Tim Fornash – Police Officer, Fort Worth Police Department
 John James – Dispatch Operations Manager, Cathey Towing
 John Key – Fire Captain, Irving Fire Department (Retired)
 Ron Moore – Independent Fire Instructor
 Daniel Plumer – Lieutenant, DCSO
 Anthony White – Special Jobs Coordinator (Traffic Operations), TxDOT
 Kareem Williams – Roadside Services Manager, NTTA
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<tr>
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<th>Code</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-Driving 18-Wheeler</td>
<td>SA1</td>
</tr>
<tr>
<td>Self-Driving 18-Wheeler Class 8 Tractor</td>
<td>SA2</td>
</tr>
<tr>
<td>Online Training</td>
<td>SA3</td>
</tr>
</tbody>
</table>
Why Now...Why You

- Need for policy-level support/coordination
- Available TIM funding initiatives
- Crashes in North Central Texas 16-County region in 2021
  - 129,045 total reportable crashes
  - 42,338 injury crashes (including 4,103 serious injury crashes)
  - 882 fatal crashes (959 fatalities)
- Improve responder and motorist safety; response and clearance times
- Reduce incident-related congestion and improve traffic flow and air quality
  - Non-recurring delay (50%)
- Queue formation and secondary crashes
- Adopt incident management resolution
  - Resolution Supporting a Comprehensive, Coordinated, Interagency Approach to Traffic Incident Management
  - [https://www.nctcog.org/nctcg/media/Transportation/DocsMaps/Manage/TDM/TIMModelResolution.docx](https://www.nctcog.org/nctcg/media/Transportation/DocsMaps/Manage/TDM/TIMModelResolution.docx)

NOTES:

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NCTCOG Course Implementation

- Two-Day course for First Responders and Managers
  - NCTCOG TIM course is equivalent with the SHRP2 National TIM Program course
  - Texas Commission on Fire Protection (TCFP) Rule 435.29 - Course equivalent a Requirement for Fire Personnel
  - TCOLE incorporated TIM Training into the Basic Peace Officers Course Curriculum for New Recruit/Cadet Peace Officers, as of April 1, 2020
- Course offered six times per year
- Course offered at both onsite and offsite locations
- Increase efforts to offer at locations throughout the region
- 3,372 students between February 2003 and March 2022
- Students eligible to receive TCOLE Credits, Fire Commission Credits, and Emergency Medical Services Continuing Education Units
- Two-hour executive overview
  - Course Offered Two Times Per Year
  - 1,205 executives between February 2005 and November 2021

NOTES:
# EndTheStreakTX

## Fatalities: Percent Change (2019-2021)

<table>
<thead>
<tr>
<th>Contributing Factors</th>
<th>2019 Fatalities</th>
<th>2021 Fatalities</th>
<th>Percent Change from 2019 to 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>1216</td>
<td>1534</td>
<td>26%</td>
</tr>
<tr>
<td>Unrestrained</td>
<td>926</td>
<td>1227</td>
<td>33%</td>
</tr>
<tr>
<td>DUI ALL</td>
<td>1282</td>
<td>1354</td>
<td>6%</td>
</tr>
<tr>
<td>Work Zone</td>
<td>171</td>
<td>244</td>
<td>43%</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>662</td>
<td>822</td>
<td>24%</td>
</tr>
<tr>
<td>Bicycle</td>
<td>67</td>
<td>91</td>
<td>36%</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>413</td>
<td>521</td>
<td>26%</td>
</tr>
</tbody>
</table>

Green 0-20%, Blue 21-30%, Red > 30%

NOTES:

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MAY 2022  TRAFFIC INCIDENT MANAGEMENT 3
## Categories of Safety Countermeasures

### #EndTheStreakTX

<table>
<thead>
<tr>
<th>Contributing Factor</th>
<th>Engineering</th>
<th>Enforcement</th>
<th>Education</th>
</tr>
</thead>
<tbody>
<tr>
<td>Speed</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Unrestrained</td>
<td></td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>DUI ALL</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Work Zone</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Pedestrian</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Bicycle</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>Motorcycle</td>
<td>x</td>
<td>x</td>
<td>x</td>
</tr>
</tbody>
</table>

**NOTES:**

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NCTCOG Safety Performance Targets

- Targets applicable to all public roads, regardless of functional classification or ownership
- Targets are based on five-year averages and will be revisited annually
- Two percent reduction achieved by the year 2022
- Regional Safety Position: Even one death on the transportation system is unacceptable.
  - Staff will work with our partners to develop projects, programs, and policies that assist in eliminating serious injuries and fatalities across all modes of travel.

<table>
<thead>
<tr>
<th>Safety Performance Targets</th>
<th>2020 TxDOT Targets</th>
<th>2020 NCTCOG Targets</th>
<th>2021 TxDOT Targets</th>
<th>2021 NCTCOG Targets</th>
<th>2022 TxDOT Targets</th>
<th>2022 NCTCOG Targets</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>No. of Fatalities</strong></td>
<td>4,068</td>
<td>5,893.</td>
<td>3,687*</td>
<td>572.4</td>
<td>3,563*</td>
<td>579.5</td>
</tr>
<tr>
<td><strong>Fatality Rate</strong></td>
<td>1.48</td>
<td>0.803</td>
<td>1.33*</td>
<td>0.762</td>
<td>1.27*</td>
<td>0.755</td>
</tr>
<tr>
<td><strong>No. of Serious Injuries</strong></td>
<td>18,602</td>
<td>3,514.7</td>
<td>17,151</td>
<td>3,375.3</td>
<td>16,677</td>
<td>3,032.9</td>
</tr>
<tr>
<td><strong>Serious Injury Rate</strong></td>
<td>6.56</td>
<td>4.768</td>
<td>6.06</td>
<td>4.485</td>
<td>5.76</td>
<td>3.939</td>
</tr>
<tr>
<td><strong>No. of Non-motorized Fatalities and Serious Injuries</strong></td>
<td>2,477</td>
<td>595.0</td>
<td>2,316.4</td>
<td>592.3</td>
<td>2,367</td>
<td>594.7</td>
</tr>
</tbody>
</table>

*2021 Targets for TxDOT include new 50% reduction by 2035 targets for fatalities and fatality rate only.

NOTES:
Conducted annually by Federal Highway Administration
- Regional and sub-regional evaluations
- Participants include regional incident management personnel

**DFW TIM Overall Performance Score**
- 2021 – 86.1%
- 2020 – 88%
- 2019 – 83.4%

**2021 Assessment areas of concern – (Low Rating)**
- Is the number of secondary crashes being measured and used?
- How is data for the number of Secondary Crashes collected?
- Has the TIM Program established performance targets for a reduction in the number of secondary crashes?
- How does your agency use secondary crash performance data to influence your TIM operations?
- Describe the level of public safety Computer Aided Dispatch (CAD) integration with TMC/TOC software and systems.

**2022 TIM Self-Assessment – Summer/Fall 2022**

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Response Time – The time between the first dispatch of an incident and the arrival of the first unit to an incident

Incident Clearance Time – The time between the first recordable awareness and the time at which the last responder has left the scene

Roadway Clearance Time – The time between the first recordable awareness of an incident by the responding agency and the time that all lanes are available for traffic flow

Secondary Crash – Incidents beginning with the time of detection of the primary incident where a collision occurs either a) within the incident scene, or b) within the queue, including the opposite direction, resulting from the original incident

Recovery Time – The time between awareness of an incident and restoration of impacted roadway/roadways to “normal” operations

NOTES:

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Agency Program Evaluation

- Set performance standards
- Establish goals and objectives
- Collect data on response and clearance times
  - Secondary crash data collection
- Evaluate the program regularly
  - Performance evaluation
  - Data analysis
- Establish major incident review process

NOTES:
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National Unified Goal

- A unified policy developed by major national organizations representing traffic incident responders, under the leadership of the National Traffic Incident Management Coalition. 
  [http://ntimc.transportation.org/Pages/NationalUnifiedGoal(NUG).aspx](http://ntimc.transportation.org/Pages/NationalUnifiedGoal(NUG).aspx)
- The three main objectives of the National Unified Goal (NUG) are
  - Responder safety
  - Safe, quick clearance
  - Prompt, reliable incident communications

NOTES:
National Incident Management System

- A comprehensive, national approach to incident management that is applicable at all jurisdictional levels and across functional disciplines

- Adopted as the statewide system to be used for emergency prevention, preparedness, response, recovery, and mitigation activities

- National Incident Management System (NIMS) – related courses offered online by Emergency Management Institute

  www.fema.gov/national-incident-management-system

  https://training.fema.gov/

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Clarify operations and procedures, roles, and protocols

- Medical Examiner’s involvement
  - Immediate notification
  - Improved response time
  - Faster road clearance
- First Receiver’s Role - Hospital personnel receiving patients
  - Proper notification to First Receivers when patient may be contaminated by hazardous material
  - Crash diagrams used by surgeons to review injuries

Example of Formal Agreements between varied agencies:

- Mutual Aid
- Quick Clearance and Push-Bumpers
- HAZMAT Clean Up, Towing Contracts
- Response and Clearance Procedures
- Communications Between Agencies
- MOU for Incident Management

NOTES:
On average, each injury crash can require 2 Law Enforcement, 4 Fire/Rescue, 2 Emergency Medical Services, 1 Towing & Recovery, and 9 Responders. Potentially 45 responders “working in or near moving traffic” every hour 24/7/365; 1,080 every day; and 394,200 every year.
Responder vehicles struck annually

In 2021, 13% of officer deaths nationally were traffic related

The likelihood of a secondary crash increases by 2.8% for each minute the primary incident continues to be a hazard
  - One in every five secondary crashes is fatal
  - At 36 minutes, it’s statistically proven (100% probability) that there will be another incident - J. Glover

Detection can occur within two to four minutes
Verification can occur within two to 25 minutes
Actual response times range from two to 60 minutes or more
Actual clearance times vary from one region to another by hours

Resources for Responder Involved Incident Statistics
www.respondersafety.com
www.firefighterclosecalls.com

As incidents happen more frequently, efficient training and performance become more critical issues.
Every day, First Responders are exposed to the grave hazards inherent in emergency response on highways and roadways.

Below is a breakdown of the fatality statistics at the regional, statewide, and national level, by discipline.

Source: [www.respondersafety.com](http://www.respondersafety.com)

### First Responder Struck-By “Fatality” Stats (2020-2021)

<table>
<thead>
<tr>
<th>Discipline</th>
<th>2020 National</th>
<th>2021 National</th>
<th>2020 Statewide</th>
<th>2021 Statewide</th>
<th>2020 NCTCOG Region</th>
<th>2021 NCTCOG Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>Police</td>
<td>17</td>
<td>30</td>
<td>3</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Fire/EMS</td>
<td>4</td>
<td>9</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Towing</td>
<td>21</td>
<td>22</td>
<td>1</td>
<td>3</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Roadside Assistance Patrol</td>
<td>3</td>
<td>2</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total Responder Fatality Struck-bys</td>
<td>45</td>
<td>63</td>
<td>5</td>
<td>4</td>
<td>0</td>
<td>2</td>
</tr>
</tbody>
</table>

“Between January – April 2022, nationwide 21 responders have been struck and killed by vehicles (3 in Texas).”

### NCTCOG Roadside Assistance Patrol Struck-By “Non-Fatality” Stats

<table>
<thead>
<tr>
<th>Roadside Assistance Patrol</th>
<th>Dallas County</th>
<th>LBJ Express</th>
<th>NTE Express</th>
<th>NTTA</th>
<th>Tarrant County</th>
<th>NCTCOG Region</th>
</tr>
</thead>
<tbody>
<tr>
<td>2018</td>
<td>*</td>
<td>1</td>
<td>1</td>
<td>13</td>
<td>3</td>
<td>18</td>
</tr>
<tr>
<td>2019</td>
<td>1</td>
<td>7</td>
<td>4</td>
<td>9</td>
<td>0</td>
<td>21</td>
</tr>
<tr>
<td>2020</td>
<td>*</td>
<td>0</td>
<td>1</td>
<td>15</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>2021</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>*</td>
<td>2</td>
<td>2</td>
</tr>
</tbody>
</table>

Source: The regional roadside assistance data was collected directly from regional mobility assistance patrol providers.

*Information pending from reporting agency

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https://www.dropbox.com/sh/jg9a1axunqf70ek/AAAk1RUPrxYpp-iQbAYhzYjZa?dl=0&preview=2021_Faces+of+the+Fallen+Struckby+09052021_HD.mp4
Even with less traffic during the pandemic, Texas work zone fatalities increased 33% from 2020 to 2021.

Likewise, in the NCTCOG region, there was also a 50% increase in work zone fatalities from 2020 to 2021.

NOTES:
Chances of Surviving a Struck-by Incident

12% Chance of Severe Injury or Death at 25mph

45% Chance of Severe Injury or Death at 40mph

60% Chance of Severe Injury or Death at 45mph

NOTES:
The agency type breakdown is comprised of the agency attendee types.

As of March 2022 - Total Attendance: 3,372

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More Than Emergency Responders: Identify Stakeholders

- Law Enforcement, Fire, and Rescue
- Emergency Medical Services (EMS)
- Transportation agencies: TxDOT, NTTA
- Towing and recovery, wrecker services
- Public works, city departments
- Coroners and Medical Examiners
- First Receivers (hospital personnel)
- Media and information service providers
- Contract resources
- Hazardous materials experts
- Local, State, and Federal agencies
- Dispatch

NOTES:
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‘D’-Driver Update

- Drunk
- Drugged
- Drowsy
- Distracted
- Dumb
- Driverless (Autonomous Vehicles)

NOTES:

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Texas Manual on Uniform Traffic Control Devices (TMUTCD)
- Incorporated by State Transportation Code §544.01
- Texas standard for all traffic control devices

Traffic incident class durations
- Major – expected duration of more than two hours
- Intermediate – expected duration of 30 minutes to two hours
- Minor – expected duration under 30 minutes

Transition and Equipment Guidelines for a 55 MPH Roadway

<table>
<thead>
<tr>
<th>55 MPH ROADWAY</th>
<th>ONE LANE</th>
<th>TWO LANES</th>
<th>THREE LANES</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LENGTH</td>
<td>CHAN. DEV.</td>
<td>LENGTH</td>
</tr>
<tr>
<td></td>
<td>(FT)</td>
<td>(EA)</td>
<td>(FT)</td>
</tr>
<tr>
<td>ADVANCE WARNING AREA</td>
<td>218</td>
<td>5</td>
<td>436</td>
</tr>
<tr>
<td>TRANSITION AREA</td>
<td>660</td>
<td>13</td>
<td>1320</td>
</tr>
<tr>
<td>ACTIVITY AREA</td>
<td>495</td>
<td>7</td>
<td>495</td>
</tr>
<tr>
<td>TERMINATION AREA</td>
<td>395</td>
<td>10</td>
<td>495</td>
</tr>
<tr>
<td>TOTAL</td>
<td>1768</td>
<td>35</td>
<td>2746</td>
</tr>
</tbody>
</table>

TTC should include the proper traffic diversions, tapered lane closures, and upstream warning devices to alert approaching traffic of the end of a queue.

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MAY 2022   TRAFFIC INCIDENT MANAGEMENT   21
Figure 6C1. Component parts of a temporary traffic control zone

- **Termination Area**: Lets traffic resume normal operations.
- **Activity Area**: Is where work takes place.
- **Advanced Warning Area**: Tells traffic what to expect ahead.
- **Buffer Space (longitudinal)**: Provides protection for traffic and workers.
- **Buffer Space (lateral)**: Provides protection for traffic and workers.
- **Downstream Taper**: Moves traffic out of its normal path.
- **Shoulder Taper**: Traffic space allows traffic to pass through the activity area.
- **Work Space**: Is set aside for workers, equipment, and material storage.
Lane numbering

- A generally accepted lane numbering protocol
- Only counts travel lanes of a roadway
- Lower number for left-most travel lane
- Next lane moving to right is next number
- On-ramps, Off-ramps, and Specialty Lanes such as single lane HOV lanes are not numbered but are referred to by their name (i.e., “Exit 25 off-ramp”, “Northbound HOV lane”, etc.)
Major Stages in Incident Management

NOTES:
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Response Time
T1    T2

Roadway Clearance Time
T3    T4

Incident Clearance Time
T5    T6

Recovery Time
T7    T8

Secondary Crashes
T9    T10

Traffic Incident Management

MAY 2022

TRAFFIC INCIDENT MANAGEMENT 24
Unified Incident Command

- Input from all agencies represented
- Command may rotate as incident matures
- Goal:
  - Coordination
  - Communication
  - Cooperation

NOTES:
TIM Protocol

- Agencies should develop standardized procedures for Traffic Incident Management including:
  - Call-taker provides “Move It’ info to caller
  - Law enforcement non-traffic side approach to violator during traffic stop
  - Move It efforts at incident scene
  - Push, Pull, Drag protocols for law enforcement & push bumper vehicles
  - Call for tow agency early in incident (FD and/or PD)
  - < 90-minute clearance goal
  - Incident durations related to MUTCD
    - <30 mins - Minor duration
    - Between 30-120 mins - Moderate duration
    - >120 mins - Major duration
  - Risk assessment of total road closure
  - ‘Rolling Traffic Procedure’
  - HazMat
    - Title 49, fuels for vehicles NOT HazMat’
    - TCEQ notifications
  - Agreements/MOIs with Medical Examiner and/or Justice of the Peace
    - 49.25, Section 8

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MAY 2022
TIM Equipment

- PPE must comply with ANSI 107 Standard
  - ANSI 107-2015 revision created new specifications
- 28” tall traffic cones with reflective bands
  - Required when posted speed limits exceed 45 mph
- STOP/SLOW Paddles
  - Required for traffic control except for law enforcement personnel

NOTES:
• Early multiple agency involvement
• Make use of service patrols
• 24-hour contact lists
• Clearance contracts
• Immediate tow zones
• Have an overall incident management plan in place that includes contractors
• Regional Work Zone Safety Working Group
Incident Management and HazMat Occurrences

- Widespread HazMat routes in North Central Texas region
- To eliminate confusion about HazMat procedures at incident scenes
  - Have response procedures in place
  - Establish “Closure responsibility”
  - Prompt/accurate communication
    - Contact/notify contractor as soon as possible
    - Communicate information on amount of spill
  - TxDOT has established notification procedures
    - Notification procedures are available for TxDOT Dallas and TxDOT Fort Worth Districts
Multiple Agency Training

- Promotes teamwork
- Identifies priorities of each agency
- Reduces misunderstandings
- Decreases on-scene coordination time
- Increases awareness of traffic impacts
- Creates a no-fault, positive environment
- Shortens incident duration

NOTES:

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TIM Laws

Move Over Law – TRC 545.157
- Stationary tow trucks on a highway added to Move-Over Law
  - Senate Bill 510 – updated Texas Move Over Law applies to authorized emergency vehicles, which include: police, fire, emergency medical service, tow trucks, and TxDOT vehicles.
  - House Bill 2048 – now a criminal offense to pass ‘stationary’ toll road emergency service vehicles using visual signals (i.e., lights) on a highway.

Driver Removal - TRC 550.022(b)
- Minor, non-injury crashes, drivers exchange information, and move vehicles from travel lanes.
  - On main lane, ramp, shoulder, median of a freeway
  - Can be safely driven/property damage only
  - Dispatch should encourage motorists to move the vehicles

Authority Removal – TRC 545.3051
- Authority or law enforcement (LE) agency may remove personal property from a roadway or right-of-way if the authority or LE agency determines that the property blocks the roadway or endangers public safety.
- Personal property may be removed without the consent of the owner or carrier of the property.
- Notwithstanding any other provision of law, an authority or LE agency is not liable for:
  - Damage to personal property removed from a roadway or right-of-way, unless the removal is carried out recklessly or in a grossly negligent manner.
  - Damage resulting from the failure to exercise the authority granted.

NOTES:
Other Legislative or Administrative Actions

- House Bill 993 – Closure of Road or Highway by:
  - A Fire Department operated by an Emergency Services District
  - A Volunteer Fire Department
  - A Fire Department of a general-law municipality

- Quick Clearance Law
- Reduced Liability Law
- Heavy Tow Truck Policy Revisions
- Incident Command Measures

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Quick Clearance Policies

- Mandate clearing vehicles off the roadway
- Allow for faster truck clearance
- Reduce investigative time requirements for major incident clearance times
- Open Roads policy
- Use of designated or staged wreckers
- Use of push bumpers
- Removal of Vehicle law – Transportation Code §550.022
- Removal of Personal Property (Hold Harmless policy) – Transportation Code §545.3051
- City of Dallas First on Freeways – Implemented April 2005
- Towing and recovery service provider issues

NOTES:
Tow Trucks/Wreckers

- Classes of Wreckers
  - Light Duty (GVWR 0-10,000)
  - Medium (GVWR 10,001-26,000)
  - Heavy Duty (GVWR 26,001-up)

- Capabilities
  - Not all towers have the same skill set

- TDLR Certification for Incident Management Towers
  - Background check
  - Annual drug test
  - 100 question test
    - Must complete 8-hr course after one year
      (3 hrs classroom; 5 hrs hands-on)
      - 4-hr online Continuing Education course to renew annual license

- Consent Towers
  - Background check
  - Annual drug test

- Private Towers (Non-Consent)
  - Background check
  - Annual drug test
  - 4-hr online Continuing Education course to renew annual license

- Irving replacement of City’s Tow Contractor

- Tow ‘Quick Clear’ Concepts
  - Houston’s Tow & Go (6-minute response)
  - FL Turnpike
  - GA TRIP
  - Austin IH 35 corridor

NOTES:
Managed Lane Openings

- Current HOV Lanes:
  - US 75
  - IH 635 (east of US 75)
  - IH 35E (Dallas)
  - IH 30 (East)

- Current TEXpress Managed Lanes:
  - IH 35W
  - US 820
  - SH 114
  - SH 183
  - IH 30
  - IH 635 (west of US 75)
  - IH 35E (Denton)
  - IH 30 (West)

NOTES:
Mobility Assistance Patrols

- Provide motorist assistance and traffic control at incidents

- Dallas County Sheriff’s Office Operations; Dispatch # 214-320-4444
  - Dallas County, portions of Collin and Denton Counties
  - Nine designated routes, 31 vehicles, and 60,843 motorists assisted in 2021

- Tarrant County Sheriff’s Office Operations: Dispatch # 817-884-1213
  - Five designated routes, nine vehicles, and 23,206 motorists assisted in 2021

- NTTA Operations; Dispatch # 214-224-2203 or #999
  - Fifteen designated routes, 65 vehicles, and 29,370 motorists assisted in 2021

- Managed Lane Facility Corridors: Dispatch # 972-661-8693 or #777
  - North Tarrant Express: 3,604 motorists assisted in 2020
  - LBJ Infrastructure: 4,023 motorists assisted in 2020

NOTES:
Sharing Transportation Data and Video with Emergency Responders

- Early detection of incident
- Verification of incident
- Appropriate response to incident
- Clearance of incident

Information to Motorists

- 511DFW
- Roadside signs
- Website
- Media

NOTES:
Texas Statewide Examples

- Dallas County Sheriff’s Office
  - Set high clearance standards
  - Clearance time averages < 25 min.
- City of Dallas First on Freeway Pilot Project
  - Wrecker/Police partnership to remove stalled, wrecked or disabled vehicles from the freeway
  - 15 min. response target time
- City of Fort Worth Police Department
  - Wrecker rotation system
- San Antonio Traffic Management Centers
  - Detection and verification within two minutes
- Houston Tow & Go Freeway Traffic Incident Program – Rebranded in 2018
  - Tower/Police partnership removes stalled, wrecked, disabled vehicles

NOTES:
Importance of After-Action Reviews

- **Purpose** – To evaluate the decisions made and actions taken during an incident and to identify both best practices and opportunities for improvement

- **Typical Format**
  - Review basic incident details
  - Roundtable discussion – Agency perspectives
  - Identify at least one action item per after-action review

**NOTES:**

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Issues and Barriers

- “We have always done it this way!”
- “Your priority is not my priority.”
- “Ho-hum, another blocking crash.”
- Hesitation Regarding Liability
- Resistance to Change

NOTES:
Basic and Advanced Training: January 2007 - March 2019

Basic Training - 230 individuals from 72 agencies participated between January 2007 and March 2019

Advanced Training - 133 individuals from 50 agencies participated between October 2008 and March 2019

Final Photogrammetry workshop hosted Spring 2019

Planning to fund other technology based on results of Incident Management Commitment Level Survey

NOTES:
2020 NCTCOG Incident Management Call for Projects

- **Purpose:** To assist partner agencies in purchasing equipment and technology that aid in quick and safe incident clearance and mitigation
- **$1.5M Available:** No Local Match required
  - 66% Eastern Sub-Region = $990,000
  - 34% Western Sub-Region = $510,000
- **Requirement - Completion of Sub-recipient Risk Assessment**
- **TIM Course Attendance - Scoring component in NCTCOG incident-related funding opportunities**

**NOTES:**

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<table>
<thead>
<tr>
<th>Agency</th>
<th>Project Type</th>
<th># of Projects Approved</th>
<th>Maximum Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Balch Springs</td>
<td>Dynamic Message Boards, Traffic Control &amp; Scene Management Equipment, Radio Equipment</td>
<td>7</td>
<td>$47,110</td>
</tr>
<tr>
<td>City of Cedar Hill</td>
<td>Dynamic Message Board</td>
<td>1</td>
<td>$26,570</td>
</tr>
<tr>
<td>City of Dallas</td>
<td>Responder Safety Gear, Radio Equipment</td>
<td>2</td>
<td>$108,500</td>
</tr>
<tr>
<td>City of Farmersville</td>
<td>Speed Trailer (Including Traffic Control Equipment)</td>
<td>1</td>
<td>$9,042</td>
</tr>
<tr>
<td>City of Frisco</td>
<td>Incident Dispatching Software</td>
<td>1</td>
<td>$245,000</td>
</tr>
<tr>
<td>City of Irving</td>
<td>Crash Data Recovery Software, Traffic Control &amp; Scene Management Equipment, Responder Safety Gear</td>
<td>7</td>
<td>$103,969</td>
</tr>
<tr>
<td>City of Kaufman</td>
<td>Traffic Control &amp; Scene Management Equipment, Responder Safety Gear</td>
<td>4</td>
<td>$29,245</td>
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<tr>
<td>City of Richardson</td>
<td>Crash Reconstruction Software, Video Equipment</td>
<td>2</td>
<td>$97,380</td>
</tr>
<tr>
<td>City or Terrell</td>
<td>Traffic Control &amp; Scene Management Equipment, Responder Safety Gear, Crash Reconstruction Software</td>
<td>6</td>
<td>$79,829</td>
</tr>
<tr>
<td>Dallas County Sheriff’s Office</td>
<td>Mobility Assistance Patrol Program Software &amp; Equipment</td>
<td>3</td>
<td>$66,540</td>
</tr>
<tr>
<td>Town of Flower Mound</td>
<td>Response Trailer (Including Traffic Control &amp; Scene Management Equipment)</td>
<td>1</td>
<td>$54,250</td>
</tr>
<tr>
<td>Town of Prosper</td>
<td>Responder Safety Gear, Thermal Imaging Cameras</td>
<td>2</td>
<td>$71,705</td>
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<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>30</strong></td>
<td><strong>$939,140</strong></td>
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</table>

**NOTES:**

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MAY 2022  TRAFFIC INCIDENT MANAGEMENT  43
<table>
<thead>
<tr>
<th>Agency</th>
<th>Project Type</th>
<th># of Projects Approved</th>
<th>Maximum Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Colleyville</td>
<td>Radio Equipment</td>
<td>1</td>
<td>$40,000</td>
</tr>
<tr>
<td>City of Fort Worth</td>
<td>Pan Till Zoom Cameras</td>
<td>1</td>
<td>$107,500</td>
</tr>
<tr>
<td>City of Fort Worth Police Department</td>
<td>Tow/Recovery Equipment, Roadside Assistance Equipment, Traffic Control Equipment, Responder Safety Gear</td>
<td>4</td>
<td>$44,979</td>
</tr>
<tr>
<td>City of Keller</td>
<td>Crash Data Recovery Software, Traffic Control Equipment, Responder Safety Gear</td>
<td>7</td>
<td>$56,700</td>
</tr>
<tr>
<td>City of North Richland Hills Fire Department</td>
<td>Emergency Notification Driver Alert Software</td>
<td>1</td>
<td>$27,338</td>
</tr>
<tr>
<td>City of North Richland Hills Police Department</td>
<td>Crash Data Recovery Software</td>
<td>1</td>
<td>$27,285</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$303,802</strong></td>
</tr>
</tbody>
</table>

- As part of a proposed Pilot Project, NCTCOG accepted project requests to purchase equipment used to provide blockage during incident response (e.g., crash barriers, attenuators, etc.).
- *Pilot Project will be funded using Regional Toll Revenue (RTR) funds.*

<table>
<thead>
<tr>
<th>Agency</th>
<th>Project Type</th>
<th># of Projects Approved</th>
<th>Maximum Award</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Grand Prairie</td>
<td>Scorpion Crash Attenuator</td>
<td>2</td>
<td>$65,900</td>
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<tr>
<td>City of Mesquite</td>
<td>Scorpion Crash Attenuator</td>
<td>1</td>
<td>$39,200</td>
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<tr>
<td>Town of Flower Mound</td>
<td>Scorpion Crash Attenuator</td>
<td>1</td>
<td>$26,900</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td></td>
<td></td>
<td><strong>$132,000</strong></td>
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</tbody>
</table>

**NOTES:**

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MAY 2022                             TRAFFIC INCIDENT MANAGEMENT                      44
2021 NCTCOG IM Freeway Blocking Equipment CFP

- Purpose: To assist partner agencies in purchasing freeway blocking equipment to provide protection to First Responders responding to traffic crashes
- $1M available in RTR Funds: 20% Local Match required
  - 66% Eastern Sub-Region = $660,000
  - 34% Western Sub-Region = $340,000
- TIM Course Attendance and TIM Self Assessment participation - Scoring components in NCTCOG incident-related funding opportunities

Eligible Blocking Equipment
- Crash attenuators
- Crash barriers
- Crash cushions

Ineligible Activities/Purchases
- Personnel and staffing Charges
- Fire trucks/engines
- Non-attenuator vehicles

Agencies approved for funding

<table>
<thead>
<tr>
<th>City/Agency Name</th>
<th>Total Project Cost</th>
<th>Approved Project Cost (80%)</th>
<th>Equipment Requested</th>
<th>Quantity Requested</th>
<th>Project Score</th>
</tr>
</thead>
<tbody>
<tr>
<td>City of Frisco Fire (East)</td>
<td>$153,580</td>
<td>$122,864</td>
<td>Crash Attenuator Truck</td>
<td>1</td>
<td>94</td>
</tr>
<tr>
<td>City of Coppell Fire (East)</td>
<td>$112,334</td>
<td>$89,867</td>
<td>Highway Safety Attenuator/Arrowboard Combo</td>
<td>1</td>
<td>93</td>
</tr>
<tr>
<td>City of Dallas (Government Affairs) (East)</td>
<td>$375,000</td>
<td>$300,000</td>
<td>Scorpion/Truck Combo</td>
<td>3</td>
<td>92</td>
</tr>
<tr>
<td>City of Terrell Emergency Management (East)</td>
<td>$127,295</td>
<td>$101,836</td>
<td>Truck Mounted Attenuator (all-in-one)</td>
<td>1</td>
<td>88</td>
</tr>
<tr>
<td>City of North Richland Hills Fire (West)</td>
<td>$136,441</td>
<td>$109,153</td>
<td>Truck Mounted Attenuator (all-in-one)</td>
<td>1</td>
<td>87</td>
</tr>
<tr>
<td>City of Lancaster Fire (East)</td>
<td>$112,217</td>
<td>$89,774</td>
<td>Attenuator Truck</td>
<td>1</td>
<td>86</td>
</tr>
<tr>
<td>City of Euless Police (West)</td>
<td>$57,814</td>
<td>$46,251</td>
<td>Truck Mounted Crash Attenuator</td>
<td>1</td>
<td>80</td>
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<tr>
<td>City of Denton Fire (East)</td>
<td>$200,000</td>
<td>$160,000</td>
<td>Public Safety Blocker Unit (Truck/Attenuator)</td>
<td>1</td>
<td>73</td>
</tr>
<tr>
<td>City of Garland Fire (East)</td>
<td>$450,000</td>
<td>$360,000</td>
<td>Scorpion Attenuator</td>
<td>3</td>
<td>71</td>
</tr>
<tr>
<td>City of Grapevine Fire (West)</td>
<td>$40,292</td>
<td>$32,234</td>
<td>Scorpion II Model C</td>
<td>1</td>
<td>71</td>
</tr>
<tr>
<td>Total</td>
<td>$1,764,973</td>
<td>$1,411,979</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Projects recommended for funding - Score '70' or above

NOTES:
Innovative Incident Management Projects in North Central Texas

- Grand Prairie Fire Department Blocking Equipment Funded (2020 IM CFP)

- Dallas County Sheriff’s Office Blocking Equipment Funded (2014 IM CFP)

- Southlake Fire Department
  - Deployable speed bumps

- Irving, Garland, and Dallas Fire Departments
  - Blocker engines

- NTTA
  - Swivel arrowboard

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MAY 2022
Instructor Recruitment Initiative

- Strategy to assist in recruiting and retaining course instructors
- Interested candidates must submit through the NCTCOG Request for Qualifications Process
- Two options
  - Direct payment to the Instructor
  - Agency reimbursement for Instructor’s time
- Agency/Instructor will be given the opportunity to select option
- Train-the-Trainer workshops held as needed

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MAY 2022

TRAFFIC INCIDENT MANAGEMENT
Our Role

- Send Personnel to Training
  - Need instructors for First Responder and Manager’s Course
  - Instructor recruitment initiative
  - Train-the-Trainer workshops
  - Convenient training locations: Onsite/offsite training opportunities

- Understand our customer

- Emphasize Importance of TIM training
  - Increase efforts for cities to adopt agency resolution for TIM
  - Selection criteria in future NCTCOG Safety Funding Initiatives

- Use freeway crash investigation equipment/fund additional tools
  - Previous Photogrammetry Training Course
  - Request for new technology interest

- Review Current Policy (Examples)
  - Tow truck ordinances
  - Quick clearance policy
  - Open roads policy
  - Fund pilot studies
  - Abandoned vehicles

NOTES:
MINI-LESSON: SELF-DRIVING/AUTONOMOUS VEHICLES
Self-Driving 18-Wheeler

3.2 million human-operated trucks on the road today

By 2035, there will be an additional 400,000 AVs.*

Driverless Deliveries for UPS Since 2019

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For Online Training, Please Visit:

www.tusimple.com