# Traffic Incident Management Safety

v.2024.2

STUDENT HANDOUT

#### U.S. Department of Transportation Federal Highway Administration

### Lesson 1: Introduction

#### Lesson Objective 1.1 - Describe the purpose of the Strategic Highway Research Program 2 (SHRP2) National TIM Responder Training Program

The National TIM Responder Training Program was created as part of SHRP2, which was authorized by Congress in 2005 to investigate the underlying causes of highway crashes and congestion in a shortterm program of focused research. The TIM training program was designed to establish the foundation for and to 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

The National TIM Responder Training Program was developed and reviewed by professionals from all responder disciplines and those disciplines are the target audience for the training.

#### Lesson Objective 1.2 - Recognize the dangers encountered by emergency responders working in or near traffic

Responder Struck-By Fatalities:

- According to data from the 2015 Law Enforcement Officers Killed and Assaulted Report, an average of ten officers are killed each year in struck-by incidents.
- A report completed by the National Fire Protection Association in 2014 found that, on average, four firefighters are struck and killed each year.
- It is estimated that between 40 and 60 towing and recovery professionals are struck and killed each year.
- Aside from work zone deaths, transportation and public works professionals, including Safety Service Patrol operators, are also killed at incident scenes, though exact numbers are not readily available.





Examples of Responder Struck-By Crashes

At the core of many responder deaths and injuries are drivers who are inattentive, impaired, or make poor driving decisions. According to the National Safety



- ✓ Drunk,
- Drugged,
- ✓ Drowsy,
- ✓ Distracted, or
- ✓ Just plain...Dangerous

Council, using a mobile phone while driving is equivalent to driving impaired and texting while driving is equivalent to driving blindfolded.

#### **Secondary Crashes** – are those crashes that occur within the incident scene or within the queue or backup, including the opposite direction, resulting from an original incident.

Responders are not the only victims of secondary crashes. Motorists struck in traffic backups are also innocent victims.

### Lesson Objective 1.3 - Define traffic incident management (TIM)

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.

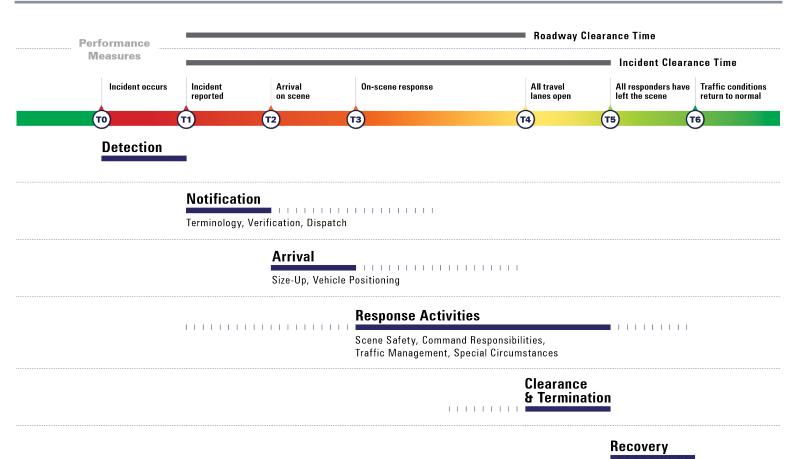
Effective TIM improves the safety of emergency responders, crash victims, and motorists, and reduces the duration and impacts of traffic incidents. TIM concepts apply to all roadways, both urban and rural, where traffic incidents might occur.

The TIM timeline lays out the events and activities that occur from the time when an incident happens to when traffic conditions return to normal. The goal of TIM is to shorten the time duration between T0 and T6, recognizing that incremental improvements during each phase are typically easier to accomplish than drastically re-working any one aspect of TIM.

The top section of the TIM timeline illustrates two standard TIM performance measures:

- Roadway Clearance Time (T1-T4) the time between the first recordable awareness of an incident by a responsible agency and first confirmation that all travel lanes are open.
- Incident Clearance Time (T1-T5) the time between the first recordable awareness and the time at which the last responder has left the scene.

The number of secondary crashes is the third standard TIM performance measure identified by the Federal Highway Administration (FHWA).



#### **TIM Timeline**

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### Lesson 2: TIM Fundamentals and Terminology

#### Lesson Objective 2.1 - Define safe, quick clearance

Safe, quick clearance is the practice of rapidly, safely, and aggressively removing temporary obstructions from the roadway to:

- Enhance the safety of responders and motorists
- Minimize motorist delay through traffic control and opening of lanes
- Restore the roadway to its pre-incident capacity as safely and quickly as possible

Safe, quick clearance and responder safety are NOT mutually exclusive, as a matter of fact, they complement each other. Quick clearance reduces both the exposure of responders to safety hazards and the potential for secondary crashes.

# Lesson Objective 2.2 - List the principal laws that relate to responder safety and safe, quick clearance

Nationally, there are three types of laws that facilitate TIM:

• Move Over Laws – require drivers approaching a scene where emergency responders are present to either change lanes when possible and/or reduce vehicle speed.



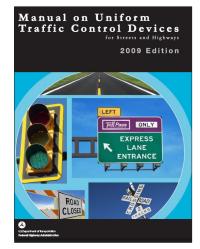
Move Over Law Compliance

- Driver Removal Laws 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.
- Authority Removal Laws provide authority (and immunity from liability in general) for designated public agencies to remove vehicles and/or spilled cargo from the roadway to restore traffic flow.

Not all states have all three laws, and the exact language of the laws varies among the states that do, so it is important to become educated about your state's laws.

#### Lesson Objective 2.3 - Describe how the Manual on Uniform Traffic Control Devices (MUTCD) relates to TIM

The MUTCD is a national standard that is maintained by FHWA. The manual, which is revised periodically, promotes the uniformity of traffic control signs, signals, and markings from state to state. This uniformity improves safety and driver expectancy. Practitioners from transportation and public safety are involved in developing and evaluating the



content of the MUTCD. States may adopt the document as is, add a state supplement, or create a state version, but the content remains mostly uniform.

Part 6 of the MUTCD covers temporary traffic control (TTC) zones, commonly known as highway construction or work zones. A subset of Part 6 is Chapter 6I, which specifically addresses traffic incidents and Traffic Incident Management Areas. The requirements of the MUTCD as they apply to TIM are addressed throughout the National TIM Responder Training.



#### Lesson Objective 2.4 - Recall common response terminology, lane designations, and incident scene terminology

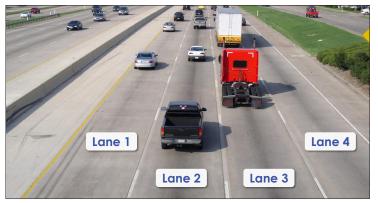
The MUTCD highlights the required use of the Incident Command System (ICS) at traffic incident scenes. In turn, ICS requires the use of uniform terminology and plain English in incident communication so that all responders and responder disciplines easily understand them. The following standardized roadway and incident scene terminology is intended to facilitate incident communications.

**Common Response Terminology using Plain English** – when describing highway lanes, left and right are determined from the perspective of the flow of traffic.



Common Response Terminology using Plain English

**Lane Designation Terminology: Lane Numbering** – as an alternative, a numbering system that assigns numbers 1, 2, 3, etc. from the left to right lane, again from the perspective of the flow of traffic, can be used.



Lane Designation Terminology: Lane Numbering

Note that a special use or managed lane, such as a high-occupancy vehicle (HOV) or express lane, is referred to as such and is not a numbered lane.



Lane Designation Terminology: HOV Lanes

Either plain English or numbering are acceptable, provided area responders train to both.

Also, TIM terminology is not just applicable to urban roads and freeways. The techniques apply to local streets and rural roadways too.

**Upstream/Downstream** – traffic that is entering or approaching the incident scene is considered upstream traffic and traffic that is departing or past the incident is considered downstream traffic.



Upstream/Downstream

**Queue** – a traffic queue (pronounced "Q") is the backup of traffic that results from an incident or blocked lanes. A queue may form in either direction of travel because of rubberneckers.



### Lesson 3: Notification and Scene Size-Up

Lesson Objective 3.1 - Recognize the important role public safety communications centers play in incident response

Telecommunicators working at public safety communications centers are typically the first to be alerted to an incident and are responsible for:

- Providing a basic assessment of the situation
- Dispatching an appropriate response based on their knowledge of available resources



Public Safety Communications Center

As a conduit or connection between responders, agencies, and other resources, the accuracy, timeliness, and overall quality of information received by the communications center has a significant impact on effective TIM.

### Lesson Objective 3.2 - Describe the notification and verification process

**Detection** – is the discovery of an incident and the first step in the TIM process. Incident detection can be a call from the parties involved in the incident, a call from a passing motorist, or by responders who happen upon them.

**Verification** – involves collecting as much information as possible from the individual(s) reporting the incident including the exact location, the make, model, and color of the involved vehicles, and a call back number in case more information is needed. **Notification** – occurs when the communications center dispatches the appropriate response.

Notification and verification often occur concurrently. It is also worth noting that motorists may have traveled past the incident by the time they talk to the communications center, so it is not uncommon for them to give a location that is downstream of the actual incident.

A simple TIM strategy for states that have a Driver Removal Law is to have telecommunicators direct motorists to move vehicles off the roadway if there are no injuries and the vehicles are drivable.

Lesson Objective 3.3 - Recall the typical responsibilities of a Transportation Management Center (TMC)



Regional TMC

TMCs, also referred to as Traffic Operations Centers (TOCs), may be operated at the local, regional, or state level, and they serve as the hub for the collection and dissemination of incident information. TMCs are typically responsible for:

- Monitoring traffic conditions using:
  - » Closed-circuit television (CCTV) cameras
  - » Roadway detectors and congestion maps
  - » Public safety contacts via phone and/or Computer-Aided Dispatch (CAD) links



- Providing real-time traveler information using:
  - » 511 phone systems and websites
  - » Social media platforms, such as Twitter
  - » Changeable message signs (CMS)
  - » Highway advisory radio (HAR)
- Providing traffic and incident information notification to other traffic management/communication centers, public safety partners, and the news media
- Controlling traffic management devices, such as ramp meters and/or traffic signal systems
- Monitoring traffic management devices to ensure they are functioning properly

### Lesson Objective 3.4 - List the key information that should be included in a scene size-up report

Upon first arriving on-scene, an initial or windshield size-up report should be given to the communications center that includes:

- Unit identification
- Exact location of incident
- Number and type of vehicles involved
- Degree of damage
- Number of lanes closed
- Hazards or unique safety concerns
- Establishment of Command

#### Windshield Size-Up Report



Unit one on-scene... location confirmed as Main Street westbound between 2nd and 3rd Ave... Minivan fire, fully involved in the right lane, impacting adjacent sidewalk... Vehicle is leaking fuel... Assuming Main Street command. A more detailed and accurate size-up should be provided within 15 minutes of arrival at the scene. Additional progress reports should be provided at regular intervals or whenever significant changes occur.



The following information should be provided during the detailed size-up report and/or during subsequent progress reports:

- On-scene safety concerns dangerous location, limited visibility, presence of hazardous materials
- Traffic conditions length of traffic queue, traffic control needs, detour/alternate route needs
- Injured persons number and extent of injuries, need for extrication
- Additional resources
  - » Towing and Recovery
  - » Helicopter EMS services
  - » Crash investigation/reconstruction
  - » Medical Examiner/Coroner

Even if additional resources are not needed immediately, the resource request should be made as soon as possible to enable a timely response.

An important component of the detailed size-up report is the incident duration classification. MUTCD Chapter 6I divides traffic incidents into three general incident classes based on the anticipated duration:

- Minor: < 30 minutes
- Intermediate: 30 minutes to 2 hours
- Major: > 2 hours

If the expected duration is bordering between two classifications, it is recommended that the higher (longer) classification be used to ensure that adequate resources are requested and mobilized.

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### Lesson 4: Safe Vehicle Positioning

#### Lesson Objective 4.1 - Differentiate between Move It and Work It incidents

The initial assessment, or windshield size-up, sets the stage for early decisions that need to be made at traffic incidents. One of the first decisions that responders make is whether to Move It or to Work It.

**Move It** – refers to moving vehicles involved in an incident to a safer location before being worked.

**Work It** – refers to a situation where the vehicles involved cannot be moved before being worked.

When possible, moving the incident is preferred since it clears the roadway and reduces responder exposure.

## Lesson Objective 4.2 - State the MUTCD definition of safe-positioned and describe blocking

Positioning emergency vehicles to establish a safe work area is a foundational decision for responders arriving at an incident scene, and a critical element to protecting both emergency responders and motorists. Safepositioned, as defined by the MUTCD, is the positioning of emergency vehicles at an incident in a manner that attempts to:

- Protect the responders performing their duties
- Protect road users traveling through the incident scene
- Minimize, to the extent practical, disruption of the adjacent traffic flow

The first emergency vehicle that arrives at an incident scene is responsible for positioning their vehicle as an initial block.

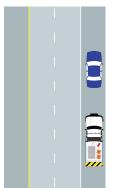
Blocking is the act of positioning a responder vehicle upstream of an incident to obstruct the flow of moving traffic in one or more lanes, and/or the shoulder. Blocking vehicles should be positioned upstream of the incident scene so that:

- There will be sufficient distance for the vehicle to roll-ahead without hitting the incident area should it get struck
- But not so much so that errant vehicles will travel around the blocking vehicle and strike responders

Blocking begins with just those lanes that are involved in the incident, including the shoulder, and can be accomplished with the responder vehicle positioned parallel to travel lanes or angled.

#### **Parallel Blocking**

#### **Angled Blocking**





A block can be to the left, as illustrated in the angled blocking example above, or to the right. Blocking towards available lanes provides a visual cue to approaching traffic. However, a block should provide maximum protection for responders, as is the case when a fire apparatus blocks to the right to protect the pump operator at a vehicle fire. Any responder vehicle can provide a block, but large, heavy vehicles typically provide the best blocks.



Angled Blocking

When positioning a response vehicle, drivers should work on the assumption that the unit may be hit by a vehicle approaching from upstream. Turning a vehicle's wheels so that they are not facing the incident space is a recommended practice referred to as critical wheel angle. Using the critical wheel angle may help divert a responder vehicle, which is struck from the rear, away from downstream responders.



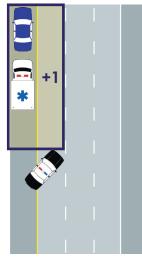
Critical Wheel Angle

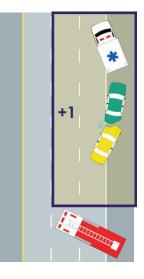
During incident response, it is preferred that law enforcement, fire/rescue, and department of transportation or Safety Service Patrol vehicles position upstream. Similarly, it is preferred that ambulances, tow trucks, and other support units position downstream.

The order of vehicle arrival will not be the same for every incident, which can make it difficult to always achieve the preferred vehicle positioning. Allowing space for later arriving vehicles and/or a willingness to reposition vehicles as needed is important to creating a safe scene.

### Lesson Objective 4.3 - Define Lane +1 blocking and describe the need for it

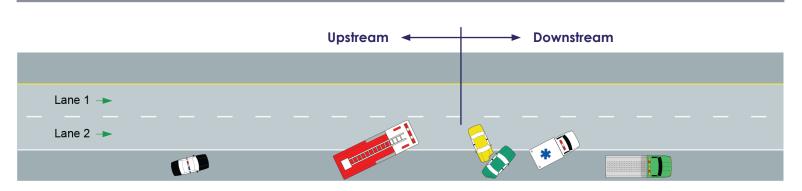
In order to protect responders and motorists at an incident scene, it may be necessary to close additional lanes for a short time. This protocol is referred to as Lane +1 blocking and occurs when responders block the involved lane(s), including the shoulder, plus one additional lane to provide a protected lateral space for safety. Patient treatment and movement, extrication, firefighting, crash investigations, and recovery operations are all examples of situations that may require Lane +1 blocking.





Lane +1 Blocking

Once response activities no longer require the extra space for safety, blocking should be reduced to the involved lanes only. A good rule of thumb is to take only as many lanes as you need for as long as you need them and then give them back as soon as safely possible.



#### **Preferred Vehicle Positioning**

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### Lesson 5: Scene Safety

### Lesson Objective 5.1 - Describe how emergency vehicle markings can improve scene safety

Making responder vehicles more visible improves safety by reducing the chances they will be hit at incident scenes.

**Conspicuity** – refers to the ability of a vehicle to draw attention to its presence, even when other road users are not actively looking for it.

Vehicle markings are passive treatments that complement emergency lighting by using:

- Contrasting colors that make the vehicle stand out
- Fluorescent colors to increase daytime visibility
- Retro-reflective materials to maximize nighttime visibility

National Fire Protection Association (NFPA) 1901 Standard for Automotive Fire Apparatus and 1917 Standard for Automotive Ambulances governs the application of retro-reflective markings on fire apparatus and ambulances respectively. The standards include requirements for retro-reflective markings on the front, rear, and sides of the vehicles, as well as on the inside of any doors.

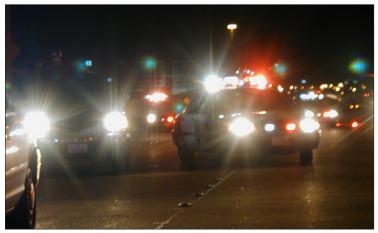


Examples of NFPA Compliant Emergency Vehicle Markings

Unlike fire apparatus and ambulances, there is no standard in the United States for emergency vehicle markings for any other responder disciplines. However, other responder disciplines are increasingly using highvisibility markings, such as chevrons on the rear of their vehicle, to promote conspicuity and enhance safety.

### Lesson Objective 5.2 - Describe recommendations for emergency-vehicle lighting as set forth in the MUTCD

Section 6I.05 of the MUTCD specifically covers the use of emergency-vehicle lighting and recognizes that the use of emergency-vehicle lighting is essential, especially in the initial stages of a traffic incident, for the safety of responders and motorists approaching the incident. However, while an important tool for warning drivers, most emergency-vehicle lighting does little to augment traffic control or guide drivers, therefore more is not always better where emergency-vehicle lighting is concerned. The use of too many lights at an incident scene can be distracting and can create confusion for approaching road users (and other responders), especially at night.



Potentially Distracting Forward-Facing Emergency-Vehicle Lighting

The MUTCD recommends that the use of emergency-vehicle lighting be reduced if good traffic control has been established at a traffic incident scene. When multiple responder vehicles are present, only the rear-most (upstream) vehicles and blocking vehicles should continue the use of emergency (warning) lights after appropriate traffic control is in place. Reducing forward-facing lights is an important part of TIM as it minimizes distractions to motorists approaching from the opposite direction. Additionally, any floodlights or vehicle headlights that are not needed for illumination should be turned off at night.

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### Lesson Objective 5.3 - Describe high-visibility safety apparel requirements for incident responders

MUTCD Section 6D.03 states:

"All workers, including emergency responders, within the right-of-way of a roadway who are exposed either to traffic (vehicles using the highway for purposes of travel) or to work vehicles and construction equipment **SHALL** wear high-visibility safety apparel (HVSA)... "

HVSA worn by incident responders must meet, and be labeled as meeting, the ANSI/ISEA 107-2015 standard. Responders must wear a Type R (Roadway) or Type P (Public Safety), Class 2 or Class 3 vest. Vests labeled with previous ANSI/ISEA standards, including 107-2004, 207-2006, 107-2010, and 207-2011, are still considered compliant until replaced. As revisions are made to the ANSI/ISEA standard, they are made compliant with the MUTCD by memorandum from FHWA.



Type R, Class 2 (left) and Class 3 (right) Work Vests



Type P, Class 2 Vest

Type P is specifically for emergency responders and provides additional options for responders who have competing hazards or require access to special equipment. Type P vests also have a five-point breakaway function available as an additional safety feature.

MUTCD Section 6D.03 specifically addresses the use of HSVA by law enforcement and states that when uniformed law enforcement personnel are used to direct traffic, to investigate crashes, or to handle lane closures, obstructed roadways, and disasters, HVSA shall be worn. The MUTCD does not require the use of HVSA for law enforcement activities such as traffic stops. Firefighters and other responders are exempt from MUTCD HVSA requirements when they are engaged in emergency operations that directly expose them to flame, fire, heat, and/or hazardous materials.

#### Lesson Objective 5.4 - Describe safe practices for working around or avoiding the Zero Buffer

A Zero Buffer occurs when there is limited or no buffer space between on-scene vehicles and any active lane of traffic. Responders who are required to enter a Zero Buffer should do so with great caution and immediately seek a safer place away from moving traffic.



Zero Buffer

All repsonders are encouraged to remain on the non-traffic side of response vehicles as much as possible.

#### **General Safety Considerations**

- $\checkmark$  Always wear your seat belt
- $\checkmark\,$  Never trust approaching traffic in either direction
- $\checkmark$  Never turn your back to approaching traffic
- ✓ Maintain an awareness of:
  - Where you are
  - Where you can go (escape route)
  - Where you can't go (bridges, on-coming traffic, etc.)
- $\checkmark$  Never stand between vehicles
- $\checkmark\,$  Instruct civilians where to stay, out of harm's way

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### Lesson 6: Command Responsibilities

Lesson Objective 6.1 - Describe both the need and the requirements for establishing and participating in the Incident Command System (ICS)

Clearing incidents safely and quickly depends on developing coordinated, multi-agency operations that are supported by integrated communications. Coordination results when all responders from all disciplines are trained and can effectively operate under ICS at highway incidents.

ICS is a standardized, on-scene, all-hazards incident management concept that allows users to adopt an organizational structure for handling an incident without being hindered by jurisdictional boundaries. The goals of ICS are:

- Safety of responders and others
- Achievement of tactical objectives
- Efficient use of resources

In Section 6I.01 of the MUTCD, it is emphasized that the National Incident Management System (NIMS) requires the use of ICS at traffic incident scenes.



Command Staff includes:

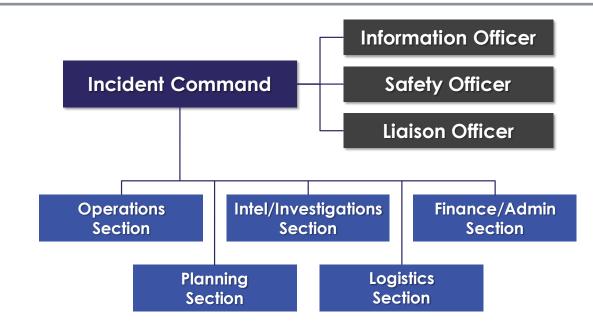
• Safety Officer – responsible for monitoring scene safety and developing preventative safety measures. The Safety Officer has the ability to immediately stop any action that is deemed unsafe or too high a risk. The Incident Commander can over-ride the orders after consultation with the Safety Officer and involved personnel.

Within ICS, the Command function is carried out by

an Incident Commander or Unified Command, and is supported by Command Staff and General Staff. The

• Liaison Officer – responsible for coordinating with representatives from cooperating and assisting agencies and organizations.

The leaders of the individual sections are know as the General Staff and individually as Section Chiefs. For most incidents, all on-scene responders typically fall under the Operations Section.



#### **ICS General and Command Staff**

### Lesson Objective 6.2 - Describe when it is appropriate to implement Unified Command

**Single Command** – when one individual is designated as Incident Commander and has complete responsibility for incident management.

**Unified Command** – a joint management and authority structure in which two or more individuals share the role of Command.

Unified Command typically is fulfilled by a team of individuals already having authority within their discipline or responding agency. Unified Command allows agencies to:

- Work together without affecting authority, responsibility, or accountability
- Manage an incident together by establishing a common set of incident objectives and strategies

Unified Command is most appropriate for major incidents involving multiple agencies.



Unified Command

## Lesson Objective 6.3 - Identify the need for and use of Staging Areas

Large-scale traffic incidents may require an Incident Command Post and/or a staging area.

**Incident Command Post** – the field location at which the primary tactical-level, on-scene incident command functions are performed.

**Staging Area** – the location established where resources can be placed while awaiting a tactical assignment.



Staging Area

Staging areas allow for the organization of personnel and equipment to be readied for immediate use at the incident scene. Staging areas also allow for resources and/or personnel that are ready, but ultimately not needed, to immediately depart and return to service.

#### After-Action Reviews (AARs)

#### PURPOSE

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

#### **TYPICAL FORMAT**

- 1. Review basic incident details
  - » Utilize pictures, maps, and/or video to illustrate incident scene
  - » Consider utilizing tabletop exercise materials to reenact incident
- 2. Roundtable discussion agency perspectives
  - » Discuss issues and/or areas of concern
  - » Identify solutions/enhancements
  - » Avoid finger pointing
- 3. Identify at least one action item per AAR

#### U.S. Department of Transportation Federal Highway Administration

### Lesson 7: Traffic Management

#### Lesson Objective 7.1 - Describe the four main components of a Traffic Incident Management Area

A Traffic Incident Management Area is a type of temporary traffic control zone that is described in MUTCD Part 6. While there are similarities between a highway work zone and a Traffic Incident Management Area, the time available to plan and the availability of resources results in significant differences between the two. Despite differences, the four main components of a Traffic Incident Management Area are the same as any temporary traffic control zone:

- Advance Warning Area established upstream of the incident to alert drivers of the upcoming incident scene. All advance warning devices should also be upstream of any traffic queues so that warning is given to road users before encountering stopped traffic.
- **Transition Area** section of roadway where drivers are redirected out of their normal path. Transition Areas usually involve the strategic use of tapers, which can be set up using cones or flares.
- Activity Area section of the roadway where incident response activities take place and is comprised of the:
  - » Upstream (Longitudinal) Buffer Space separates the Transition Area from the Incident Space and provides a recovery area for errant vehicles.

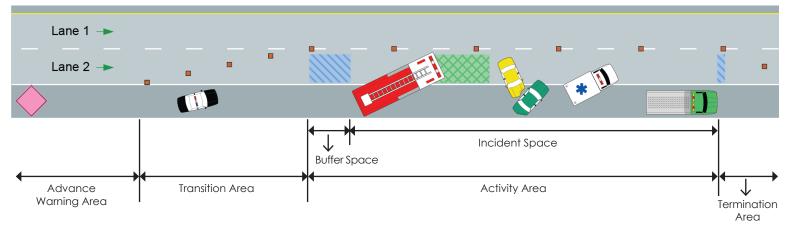
No vehicles should be positioned within the Upstream Buffer Space.

- » Incident Space location where the incident has occurred and emergency responders are working. A blocking vehicle should be positioned at the upstream end of the Incident Space to protect workers from impacts by errant vehicles.
- Termination Area used to notify drivers that the Traffic Incident Management Area is ending and they may resume normal driving. The Termination Area includes the downstream buffer space and taper, which is in place to protect emergency responders working at the end of the Incident Space.

#### Lesson Objective 7.2 - Identify conditions at an incident scene that would require the Advance Warning Area be extended

Wet roads can double the average motorist's stopping distance over that for dry road conditions and poor visibility can lengthen driver reaction time. Therefore, additional or extended advance warning may be necessary during adverse conditions, such as rain, snow, ice, smoke, fog, or darkness.

Additional or earlier advance warning may also be necessary due to limited sight distances created by roadway geometries, such as hills, curves, bridges, or inter-



#### **Traffic Incident Management Area**



sections. A well-positioned responder vehicle, upstream of the incident scene, can serve as advance warning until signs or other traffic control devices are in place.

### Lesson Objective 7.3 - Describe the need for, and how to set up, a taper

Tapers are used in Transition Areas to redirect drivers out of their normal path. Tapers can be set up using cones, flares, reflectors, or other channelizing devices. Channelizing devices used to establish a taper are typically placed no further apart in feet than the speed limit (i.e., in a 35 mph zone the cones would be placed 35 feet apart). However, responders can also use roadway skip lines or 10 walking paces to establish uniform spacing when setting up a taper.

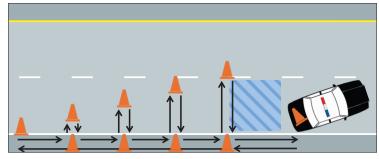


Traffic Cones

#### **Taper Setup Methodology**

- 1. The responder retrieves available cones from the trunk placing one a reasonable distance from the responder vehicle on the edge line, allowing for a buffer
- 2. Walking along the shoulder, facing traffic, a cone is subsequently placed on the edge line at each skip line (alternatively, they can be placed every 10 paces)
- 3. When the last cone has been placed on the edge line, the responder begins walking backwards until the next cone is reached
- 4. The responder takes one lateral step into the travel lane and places the cone, immediately returning to the shoulder facing traffic
- 5. The responder again walks backwards until the next cone is reached and then takes two lateral steps into the travel lane to place the cone, immediately returning to the shoulder
- 6. The steps are repeated until all cones are deployed

Using this methodology while maintaining situational awareness and following personal safety best practices, like never turning your back on traffic, helps minimize the exposure of the responder. One emerging concept to consider, when possible, is to use an upstream responder vehicle to provide a protective block while tapers are being setup or taken down.



Taper Setup

#### Lesson Objective 7.4 - Identify and describe the two types of buffers that may be established at an incident scene

At an incident scene, the two types of buffers that may be established as part of the Traffic Incident Management Area are longitudinal buffer spaces and lateral buffer spaces. The Upstream (Longitudinal) Buffer Space covers the distance between the Transition Area and the Incident Space. By definition, it is a recovery area for errant vehicles, so no responder vehicles should be parked in the Upstream Buffer Space.

In work zone settings, the length of the longitudinal buffer is based on the stopping sight distance of a vehicle traveling at the posted speed limit. However, the Upstream Buffer Space in TIM applications will typically be fairly short due to the limited availability of channelizing devices. When additional resources are available, the buffer should be expanded to better accommodate errant vehicles. The Traffic Incident Management Area may also include a downstream buffer space in the Termination Area.

Lateral buffer space is the area between the Incident Space and the adjacent travel lanes, and can be beneficial because it allows more room for responders to work. The lateral buffer space can be increased through the use of Lane +1 blocking when necessary. When lateral buffer spaces are used it is recommended that the entire lane be closed and that partial lane closures be avoided.

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### Lesson 8: Special Circumstances

#### Lesson Objective 8.1 - Identify the safety concerns related to responding to an incident involving a vehicle fire

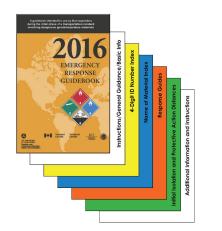
A vehicle fire presents a danger zone that specifically includes the area directly in front of and behind the burning vehicle where projectiles, like pistons, may launch from the vehicle. Non-firefighting responders should remain clear of all sides of a burning vehicle, and remain uphill and upwind of the incident. Additionally, the smoke created by a vehicle fire and the steam created while extinguishing the fire can affect both responder and motorist visibility at the incident scene. It is sometimes necessary to close additional lanes while a fire is burning or being extinguished.



Projectile Dangers at Vehicle Fires

### Lesson Objective 8.2 - Describe how to identify what hazardous material is being transported

Hazardous materials (hazmat) can be identified through labels, markings, or placards. Labels are placed on the actual item or the individual package containing the material. Markings are placed on the boxes that the materials are transported in. Placards are placed on the outside of the trucks (or other vehicles) transporting the material. If available, the vehicle's bill of lading, or shipping papers, can also be referenced to identify the type of material(s) being transported. Placards, which should be placed on each side and each end of the transport vehicle, are color-coded based on the class of hazardous material being transported. The placard, or an orange panel placed below the placard, should include a four-digit number that can be referenced to identify the hazardous material using the Emergency Response Guidebook (ERG). The ERG is an excellent resource for all incident responders and, in addition to the printed version, electronic versions are now available for computers and mobile devices.





Emergency Response Guidebook and App

#### How to Use the ERG

- 1. Identify the material using either the:
  - ID number (4-digit) from the placard, orange panel, shipping document, or package
  - Name of the material from a shipping document or package
- 2. Identify 3-digit guide number
  - ID Number Index (yellow)
  - Name of Material Index (blue)
- 3. Turn to the numbered guide (orange) and read carefully

Agencies should be capable of the following actions when hazardous materials are involved in a traffic incident:

- Identify reportable quantities
- Determine what response is required
- Understand the capabilities of local responders

Individual responders should limit themselves to only working on spills or leaks of a magnitude that are within their capabilities, training, and equipment. Dedicated hazmat teams should be used to deal with those incidents which fall outside of the capabilities of on-scene responders.

# Lesson Objective 8.3 - Recount good practices for responding to an incident involving a vehicle fluid spill

Common small vehicle fluid spills can be mitigated following these steps as long as responders are following their state's related policies and procedures:

- 1. Stop leaking material at the source
- 2. Contain and limit the spill from spreading
- 3. Apply available absorbents
- 4. Remove material from travel lanes
- 5. Gradually restore traffic flow



Spill Response for Vehicle Fluids

It is important to make every effort to stop the spill from reaching any type of waterway, including catch basins, sewers, and/or storm drains. Additionally, many tow companies carry absorbent and other equipment that may assist with spill mitigation. It is recommended that responders maintain an understanding of the capabilities of local tow providers.

#### Lesson Objective 8.4 - Describe the primary goal of a crash investigation and the importance of preserving short-lived evidence

The foundation of traffic crash investigations involves the collection of information that ultimately helps understand when, where, and why crashes occur. Investigations also help to identify who is at fault, enabling vehicle repairs and other compensation. Additonally, crash investigations ensure that individuals who might have committed a crime through their driving actions can be brought to justice.

It is the responsibility of all incident responders to ensure that the incident scene is preserved by refraining from removing, moving, or eradicating physical evidence. Responders should take only those actions needed to complete their own area of responsibility with minimal disturbance of the scene unless authorized or assigned. Remember, all debris should be considered evidence until law enforcement personnel indicates otherwise.

**Short-Lived Evidence** – evidence that will most likely be lost, destroyed, or compromised once the scene has been cleared. Examples of short-lived evidence include tire marks, debris fields, gouges, scrapes, fluid trails, blood, hair, and fibers. Critical shortlived evidence can disappear when walked on by responders, driven over, flushed away with water, or unintentionally swept away with a broom.



Short-Lived Evidence – Tire Print and Hair

To assist with evidence preservation, responders should:

- Document occupant seating location/position, seat belt usage, and air bag deployment
- Note the presence of drugs, open containers, or other suspicious substances or activities
- Remove and turn over ignition keys to the investigator

STUDENT HANDOUT

#### U.S. Department of Transportation Federal Highway Administration

### **Lesson 9: Clearance and Termination**

#### Lesson Objective 9.1 - Describe quick clearance strategies for both minor incidents and incidents that involve tractor trailers and/or spilled cargo

For minor incidents, if an involved vehicle is still functional, having the driver move it out of travel lanes is a simple quick clearance strategy. If the vehicle is not operational or is damaged, a responder vehicle with a push bumper can clear it out of the roadway. When a tow truck is required, the request must be made as soon as possible, even if the vehicle has been relocated to the shoulder.



Quick Clearance – Push, Pull, Drag, or Drive

Typically, when a commercial vehicle has spilled cargo, the trucking company and/or insurance provider must be contacted, and they may request that the cargo be salvaged. However, salvage operations can result in significant clearance and traffic delays. If authority removal legislation is in place, determine if the vehicle and/or spilled cargo can be pushed to the shoulder to open travel lanes more quickly.





Spilled Cargo

#### Safe, Quick Clearance Strategies

- ✓ Working with a sense of urgency to reduce the exposure to risks for both responders and motorists
- ✓ Utilizing Unified Command and incorporating safe, quick clearance into the incident objectives
- ✓ Completing tasks concurrently whenever possible
- Regularly assessing traffic control and on-scene activities to determine if additional lanes can be opened
- ✓ Utilizing all available resources for clearance activities
- ✓ Thinking outside of the box and considering how things could be done differently

#### Lesson Objective 9.2 - List the type of information that needs to be provided to towing and recovery to facilitate their response

During incident response, tow operators play an invaluable role in promoting quick clearance by removing damaged vehicles. Tow operator responsibilities include loading vehicles and departing the scene as quickly as possible, transporting occupants from towed vehicles to a safe location away from the incident, and handling financial negotiations off-site.



Towing and Recovery

Tow operators depend on getting timely, accurate information from those on the scene. The Towing and Recovery Association of America (TRAA) has devel-



oped a Vehicle Identification Guide to assist non-towing responders who are responsible for requesting tow services. The guide lists the information that towing dispatchers need to secure the appropriate towing vehicle, including:

- Year, make, and model of vehicle
- DOT classification
- Location and scene access
- Reason for tow
- Additional vehicle or crash details

The towing industry is supportive of realistic training standards and supports several training programs nationwide. In addition to the TIM training, joint training provides an opportunity for other responders to better understand the capabilities of their towing and recovery partners.



Joint Training

# Lesson Objective 9.3 - Describe the importance of performing response tasks concurrently as it relates to safe, quick clearance

It is important for responders to communicate and coordinate their individual activities on the scene, and to perform them concurrently, not sequentially, whenever possible. Like the analogy of an auto racing pit crew, every team member works simultaneously to accomplish the overall goal of the team. Each discipline can work cooperatively to achieve their respective tasks, in many cases at the same time.

Concurrently completing tasks includes requests for additional resources. Resource requests should be made as soon as possible, even if the resources are not needed immediately, to enable a timely response. For example, even if a crash investigation is required at the scene, the towing and recovery provider should still be notified early so that they can plan their response accordingly.



Concurrent Response Activities

### Lesson Objective 9.4 - Describe the major activities that take place during termination and identify safety related considerations for scene breakdown

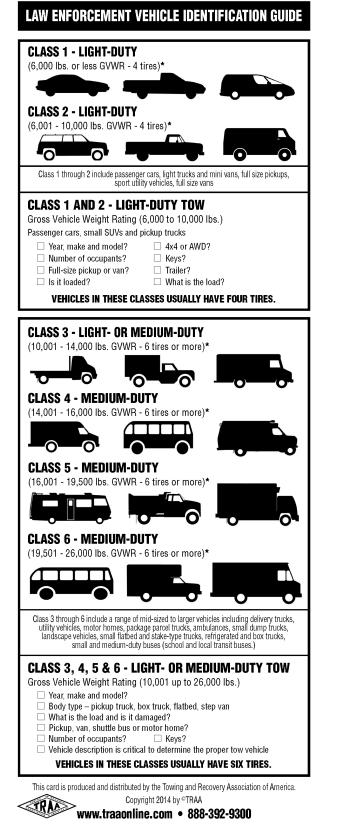
Termination is the final stage of incident response and includes demobilizing and removing all equipment, personnel and response vehicles, and restoring traffic flow to normal.

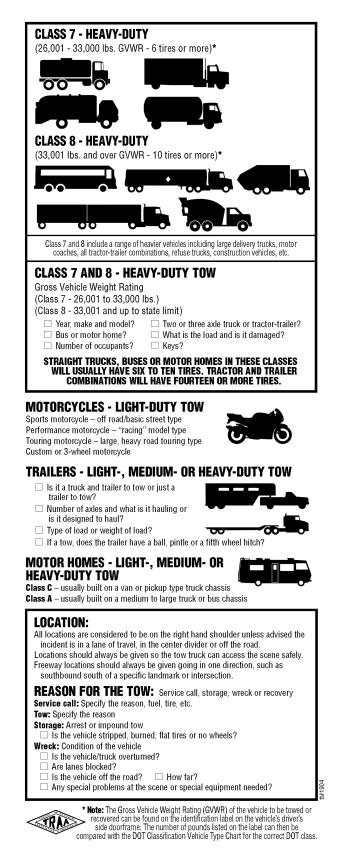
It is recommended that responder vehicles that are no longer required leave the scene as soon as practical to minimize exposure to traffic and distraction to passing motorists. However, it is critical that the remaining responder vehicles reassess the scene and reposition their vehicles as necessary to keep the scene protected, as well as to open travel lanes when it is safe to do so.

During demobilization, it is important to dismantle the scene from the Termination Area backwards to the Advance Warning Area. Responders also need to maintain an awareness of the potential for frustrated motorists that may be particularly aggressive and drive at high speeds.

#### Termination Checklist

- $\checkmark\,$  Protect towers while they finish up
- ✓ Remove temporary traffic control devices
- $\checkmark$  Lift the detour or alternate route
- ✓ Let communications centers and TMC know that lanes are open
- $\checkmark\,$  Make sure all personnel are accounted for
- $\checkmark\,$  Check with Incident Commander prior to leaving





Vehicle Identification Guide provided courtesy of the Towing and Recovery Association of America

# Post-Course Assessment Tool

FHWA invites you to participate in an assessment of the National TIM Responder Training Program. Participation is quite simple and involves the use of an online survey tool to take a pre-test before the class, and after the training is complete, an online post-test and course evaluation. Then, approximately three months after you complete the training, you will have an opportunity to take a survey focused on how the training has impacted your daily work as an incident responder. Note, individuals that were not able to take the pre-test are still strongly encouraged to participate in the remaining surveys, and, please remember, the surveys are intended to assess the training product, not your individual performance.

To participate in the assessment, access the tool at https://timtrainingevalassesstool.com and follow the steps below.

- 1. Register for an Account: Complete the registration form, which includes creating a simple four character password.
- 2. Confirm Account: A confirmation email will be sent to the email address you provided. Activate the account by clicking the link in the confirmation email.
- 3. Log In to the Site: You will be given the option to have the site remember your email and password.
- 4. Select Training Session: A list of training sessions for your state will be auto-populated. If the training session does not already exist in the tool, you can click on 'Add a Training Session' to add it.
- 5. Complete Available Surveys:
  - Pre-Test Can be taken up to the start of the training session.
  - Post-Test and Course Evaluation Available the day of the training.
  - Implementation Survey An email reminder will be distributed three months after the course. Your supervisor will also receive a request to take this survey if their contact information was provided.

# Web-Based Training (WBT) Options

## National Highway Institute (NHI)

NHI provides a free online version of the National TIM Responder Training course. The course has ten modules and takes approximately 4 hours to complete. The modules are narrated and include knowledge check questions. To receive a completion certificate, students are required to score 70% or higher on the 30 question final exam. Students are also prompted to complete a course evaluation prior to being able to print their course certificate.

- 1. Register for an NHI account: https://www.nhi.fhwa.dot.gov/
- 2. Search for course FHWA-NHI-133126 and add it to your cart
- 3. Complete all ten modules
- 4. Pass the final exam
- 5. Complete the course evaluation
- 6. Print/download your course completion certificate

## ResponderSafety.com Learning Network

FHWA worked closely with the Emergency Responder Safety Institute (ERSI) to review the training modules they have available through the Responder Safety Learning Network (RSLN). Ultimately, FHWA and ERSI identified ten modules that cover all 33 lesson objectives of the National TIM Responder Training course. Once an individual completes all ten modules, which are free to take, they are able to download a special certificate that is equivalent to completing the National TIM Responder Training course.

- 1. Register for an RSLN account: https://learning.respondersafety.com
- 2. Click on National TIM Training
- 3. Complete and pass the skills challenges for all ten modules
- 4. Obtain an RSLN certificate for each module
- 5. Obtain a National TIM Certificate for successful completion of all ten modules





Traffic Incident Management In the Dallas-Fort Worth Area Reference Material









North Central Texas Council of Governments

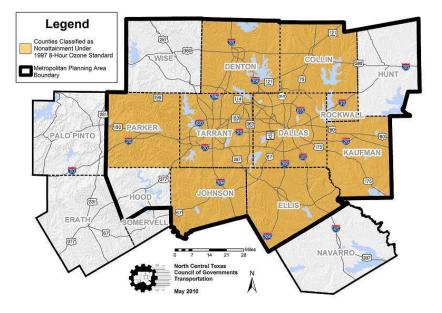




# What Is NCTCOG?



- Metropolitan Planning Organization for the Region
- Serves 16 Counties in North Central Texas



## www.nctcog.org

NOTES:

The North Central Texas Council of Governments (NCTCOG) is a voluntary association of cities, counties, school districts, and special districts, and was established to assist local governments in planning for common needs, cooperating for mutual benefit, and coordinating for sound regional development. NCTCOG's purpose is to strengthen both the individual and collective power of local governments and to help them recognize regional opportunities, eliminate unnecessary duplication, and make joint decisions.

NCTCOG serves a 16-county region of North Central Texas, which is centered around the two urban centers of Dallas and Fort Worth. NCTCOG has over 240 member governments including 16 counties, numerous cities, school districts, and special districts.



## NCTOG Regional Traffic Incident Management Program



- First Responder and Manager's Training
  - Designed for those with daily involvement in responding to traffic incidents on the region's freeways (Police, Fire, Towers, Mobility Assistance Patrols, EMS, etc.)
  - Two-day course
  - Offered at least six times per year
- Executive Level Course
  - Designed for decision and policy makers
  - Provides a high-level overview of information in First Responder Training
  - Two-hour course
  - Offered twice a year
- Crash Reconstruction Technology & Training Workshop
  - Crash Reconstruction training offered as a complement to the TIM Training series
  - Offered twice a year
    - Basic Training
      - One-week course
    - Advanced Training
      - Two-day course

## https://www.nctcog.org/trans/quality/safety/transportation-safety/trafficincident-management/tim-training-program

NOTES:

The goal of the NCTCOG TIM Training Program is to initiate a common, coordinated response to traffic incidents that will build partnerships, enhance safety for emergency personnel, reduce upstream traffic accidents, improve the efficiency of the transportation system, and improve air quality in the Dallas-Fort Worth region





## SITE MANAGEMENT

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1.2	TEXAS MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES SUMMARY	7-9
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TRAFFIC INCIDENT MANAGEMENT



# **REFERENCE MATERIALS**

## CLEARANCE

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TOW EQUIPMENT	

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3.12 TMC CONTACT #S

TRAFFIC INCIDENT MANAGEMENT



# Manual on Uniform Traffic Control Devices

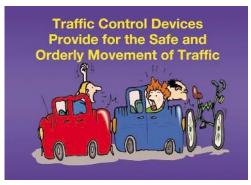
21st Century Operations Using 21st Century Technologies

## Traffic Control Challenges

Traffic control devices communicate important messages that are critical to transportation safety and efficiency. They provide for the orderly movement of all road users on streets, highways, and bike paths throughout our nation. Have you ever considered what it would be like to travel on roads not operated by traffic control devices? Traffic control devices such as signs, signals, and pavement markings not only methodically guide road users to their destinations and decrease potential congestion, but they also reduce the severity and number of roadway crashes.

The Manual on Uniform Traffic Devices (MUTCD) is the national standard for the design, application, and placement of traffic control devices. Its main purpose is to provide uniformity and consistency so road users know what to expect no matter where their travels take them. Uniformity

also helps reduce the cost of traffic control devices through standardization, and it assists with the commercial movement of goods.



New traffic patterns, unique roadway features, driver behavior, vehicle design innovations, and advances in technology all make it necessary to update the MUTCD on a periodic basis. The latest edition of the MUTCD was released in November 2003. The Federal Highway Administration (FHWA) recognizes that comprehensive analysis and careful consideration is required before changes are adopted in the MUTCD.

## What We're Doing

The Millennium Edition of the manual published in December 2000 was the first complete rewrite of the MUTCD since 1988. It was also the first time that an electronic version of the MUTCD was made available on the Internet (http://mutcd.fhwa.dot.gov). Some features of the MUTCD Web site include:

- Recent information on MUTCD changes including Federal Register notices
- MUTCD amendment process
- Peer-to-peer technical assistance program
- Discussion groups on a variety of topics
- MUTCD policy statements
- Standard highway sign design specifications
- Links for purchasing the MUTCD
- Outreach and training presentations

The most recent edition of the MUTCD has a new interim process for approving the use of new traffic control devices that are pending official rulemaking. Interim approval can be considered based on successful research or experimentation results. Once an interim approval is granted to one jurisdiction, other jurisdictions can be granted interim approval by simply submitting a letter of request to FHWA Office of Transportation Operations. A program is also underway that has assembled a consortium of national, State, and local entities to work with FHWA and establish a systematic and timely procedure to select, test, and evaluate novel concepts and applications for traffic control devices.

## Future Directions for Traffic Control Devices

## Urban Application of the MUTCD

There are some concerns that the MUTCD may not adequately address all the unique traffic control needs of the urban areas for constrained conditions on downtown business district streets, alleys, and residential neighborhood streets. Also, since many States are adopting laws to make the MUTCD applicable on private roads and parking lots such as those in shopping malls, FHWA is addressing issues of modifications in the MUTCD to accommodate those conditions.

#### **Older Driver Needs**

The United States is facing an evolution in transportation fueled by the growing population of senior citizen drivers. Those age 65 and older represent an ever-increasing proportion of the overall population—from 1 in 8 (35 million older Americans) in 2002 to 1 in 5 (70 million older Americans) by 2030. Fatalities of older road users are increasing. Today's figures show that older adults represent about 13 percent of the population but account for 16 percent of all traffic deaths. FHWA has a key role to help improve the nation's transportation system so our older population can safely travel and maintain productive and independent lifestyles well into their senior years.

The MUTCD team has developed a Pocket Guide that explains the MUTCD design and application principles that relate to FHWA's *Highway Design Handbook for Older Drivers and Pedestrians* (RD-01-103). The following areas are covered in the Pocket Guide to address older driver needs:

- Increased visibility of traffic control devices
- Improved advance notification of traffic situations and roadway patterns
- Simplified decision making at intersection and interchange approaches

#### Accommodating Persons with Disabilities

In June 2002, the U.S. Access Board released draft guidelines on accessible public right-of-way and made them available for public comment. The guidelines address access to public streets and sidewalks, crosswalks, curb ramps, street furnishings, parking, and other components of public rights-of-way for persons with disabilities. The Access Board plans to publish a notice of proposed rulemaking in 2004. Areas of the MUTCD that could be affected are traffic roundabouts, criteria for accessible pedestrian signals and crosswalks, and accommodating persons with disabilities in construction zones.



## Expanded Application of Changeable Message Signs

Today's information age and technology advances have raised the level of expectation of our road users and created much more savvy drivers. Road users have come to expect realtime information from both the vehicle and the roadway. The use of changeable message signs for traffic control can be tremendously helpful for providing real-time regulatory, warning, and guidance information. A project is underway to develop proposed language in the MUTCD to address the variety of uses for changeable message signs that will be included in a future proposed rulemaking.

In summary, the MUTCD goal for the 21<sup>st</sup> century is to reduce traffic congestion and improve the day-to-day operations of our transportation system through better roadway communications that use traffic control devices and incorporate technology advances. Our approach is customer focused and based on a partnering philosophy that relies on input from organizations and individuals that have knowledge and experience in manufacturing, installing, selecting, and maintaining traffic control devices.



U.S. Department of Transportation Federal Highway Administration

## **REFERENCE 1.2**



#### Texas Manual on Uniform Traffic Control Devices (TMUTCD) - SUMMARY

Home > Government > Enforcement > Signage http://www.txdot.gov/government/enforcement/signage/tmutcd.html

The Texas Transportation Commission approved Revision 1 of the 2011 Texas Manual on Uniform Traffic Control Devices (TMUTCD) at their November meeting. The revised manual became effective on Dec. 6, 2012. The Texas Transportation Commission approved the minute order adopting Revision 2 of the 2011 TMUTCD on Sept. 18, 2014.

The Texas MUTCD governs the placement of signs signals and pavement markings on every public road in Texas and on certain private property. Under state law, each road authority, including TxDOT, is required to follow the provisions of the manual.

The purpose of having a single manual is to ensure that traffic control devices are applied uniformly across the state as well as the nation. This type of uniformity helps improve the overall safety and efficiency of our roadways.

#### 2011 Texas Manual on Uniform Traffic Control Devices (TMUTCD) - Revision 1

Title	Format
Complete 2011 TMUTCD - Revision 1	Å
2011 TMUTCD - Revised Sheets Only (for insertion into existing TMUTCD)	
Title	Format
TMUTCD	۸
List of changes for 2011-Revision 1	Å
2011 TMUTCD - Individual Parts and Chapters	
Title	Format
Cover and Spine (Revised)	X
Introduction and Table of Contents (Revised)	Å



Part 1. General (Revised)
Part 2. Signs (Revised)
Chapter 2A - General (Revised)
Chapter 2B - Regulatory Signs, Barricades and Gates (Revised)
Chapter 2C - Warning Signs, Object Markers (Revised)
Chapter 2D - Guide Signs - Conventional Roads (Revised)
Chapter 2E - Guide Signs - Freeways and Expressways (Revised)
Chapter 2F - Toll Road Signs (Revised)
Chapter 2G - 2H - Preferential and Managed Lane Signs, General Information Signs (Revised)
Chapter 2I - 2N - General Service Signs, Specific Service (LOGO) Signs, Tourist-Oriented Directional Signs, Changeable Message Signs, Recreational and Cultural Interest Area Signs, and Emergency Management Signing (Revised)
Part 3. Markings (Revised)
Part 4. Highway Traffic Signals (Revised)
Part 5. Traffic Control Devices for Low Volume Roads (Revised)
Part 6. Temporary Traffic Control (Revised)
Part 7. Traffic Controls for School Areas (Revised)
Part 8. Traffic Controls for Railroad and Light Rail Transit Grade Crossings [Kevised]
Part 9. Traffic Controls for Bicycle Facilities (Revised)



## **Previous Versions - TMUTCD**

Title	Format
2011	ـــر
2006 - Revision 1	<del>ا</del> ح
2006	ـــــــــــــــــــــــــــــــــــــ
2003	۸.

#### TMUTCD CHAPTER 6I. CONTROL OF TRAFFIC THROUGH TRAFFIC INCIDENT MANAGEMENT AREAS

#### Section 6I.01 General

Support:

- o1 The National Incident Management System (NIMS) requires the use of the Incident Command System (ICS) at traffic incident management scenes.
- 02 A traffic incident is an emergency road user occurrence, a natural disaster, or other unplanned event that affects or impedes the normal flow of traffic.
- <sup>03</sup> A traffic incident management area is an area of a highway where temporary traffic controls are installed, as authorized by a public authority or the official having jurisdiction of the roadway, in response to a road user incident, natural disaster, hazardous material spill, or other unplanned incident. It is a type of TTC zone and extends from the first warning device (such as a sign, light, or cone) to the last TTC device or to a point where vehicles return to the original lane alignment and are clear of the incident.
- 04 Traffic incidents can be divided into three general classes of duration, each of which has unique traffic control characteristics and needs. These classes are:
  - A. Major—expected duration of more than 2 hours,
  - B. Intermediate—expected duration of 30 minutes to 2 hours, and
  - C. Minor-expected duration under 30 minutes.
- <sup>05</sup> The primary functions of TTC at a traffic incident management area are to inform road users of the incident and to provide guidance information on the path to follow through the incident area. Alerting road users and establishing a well-defined path to guide road users through the incident area will serve to protect the incident responders and those involved in working at the incident scene and will aid in moving road users expeditiously past or around the traffic incident, will reduce the likelihood of secondary traffic crashes, and will preclude unnecessary use of the surrounding local road system. Examples include a stalled vehicle blocking a lane, a traffic crash blocking the traveled way, a hazardous material spill along a highway, and natural disasters such as floods and severe storm damage.

Guidance:

- <sup>06</sup> In order to reduce response time for traffic incidents, highway agencies, appropriate public safety agencies (law enforcement, fire and rescue, emergency communications, emergency medical, and other emergency management), and private sector responders (towing and recovery and hazardous materials contractors) should mutually plan for occurrences of traffic incidents along the major and heavily traveled highway and street system.
- or On-scene responder organizations should train their personnel in TTC practices for accomplishing their tasks in and near traffic and in the requirements for traffic incident management contained in this Manual. On-scene responders should take measures to move the incident off the traveled roadway or to provide for appropriate warning. All on-scene responders and news media personnel should constantly be aware of their visibility to oncoming traffic and wear high-visibility apparel **as outlined** in **Section 6D.03**.
- <sup>08</sup> Emergency vehicles should be safe-positioned (see definition in Section 1A.13) such that traffic flow through the incident scene is optimized. All emergency vehicles that subsequently arrive should be positioned in a manner that does not interfere with the established temporary traffic flow.
- 09 *Responders arriving at a traffic incident should estimate the magnitude of the traffic incident, the expected time duration of the traffic incident, and the expected vehicle queue length, and then should set up the appropriate temporary traffic controls for these estimates.*

Option:

10 Warning and guide signs used for TTC traffic incident management situations may have a black legend and border on a fluorescent pink background (see Figure 6I-1).
Support:

Support:

<sup>11</sup> While some traffic incidents might be anticipated and planned for, emergencies and disasters might pose more severe and unpredictable problems. The ability to quickly install proper temporary traffic controls might greatly reduce the effects of an incident, such as secondary crashes or excessive traffic delays. An essential part of fire, rescue, spill clean-up, highway agency, and enforcement activities is the proper control of road users through the traffic incident management area in order to protect responders, victims, and other personnel at the site. These operations might need corroborating legislative authority for the implementation and enforcement of appropriate road user regulations, parking controls, and speed zoning. It is desirable for these statutes to provide sufficient flexibility in the authority for, and implementation of, TTC to respond to the needs of changing conditions found in traffic incident management areas.

Option:

12 For traffic incidents, particularly those of an emergency nature, TTC devices on hand may be used for the initial response as long as they do not themselves create unnecessary additional hazards.

## Section 6I.02 Major Traffic Incidents

Support:

of Major traffic incidents are typically traffic incidents involving hazardous materials, fatal traffic crashes involving numerous vehicles, and other natural or man-made disasters. These traffic incidents typically involve closing all or part of a roadway facility for a period exceeding 2 hours.

Guidance:

02 If the traffic incident is anticipated to last more than 24 hours, applicable procedures and devices set forth in other Chapters of Part 6 should be used.

Support:

- <sup>03</sup> A road closure can be caused by a traffic incident such as a road user crash that blocks the traveled way. Road users are usually diverted through lane shifts or detoured around the traffic incident and back to the original roadway. A combination of traffic engineering and enforcement preparations is needed to determine the detour route, and to install, maintain or operate, and then to remove the necessary traffic control devices when the detour is terminated. Large trucks are a significant concern in such a detour, especially when detouring them from a controlled-access roadway onto local or arterial streets.
- 04 During traffic incidents, large trucks might need to follow a route separate from that of automobiles because of bridge, weight, clearance, or geometric restrictions. Also, vehicles carrying hazardous material might need to follow a different route from other vehicles.
- os Some traffic incidents such as hazardous material spills might require closure of an entire highway. Through road users must have adequate guidance around the traffic incident. Maintaining good public relations is desirable. The cooperation of the news media in publicizing the existence of, and reasons for, traffic incident management areas and their TTC can be of great assistance in keeping road users and the general public well informed.

o6 The establishment, maintenance, and prompt removal of lane diversions can be effectively managed by interagency planning that includes representatives of highway and public safety agencies. Figure 6I-1. Examples of Traffic Incident Management Area Signs IMM4-8a IMM4-10 IM2-1 IM1-1 IMM4-9 IMW3-4 IME5-2a

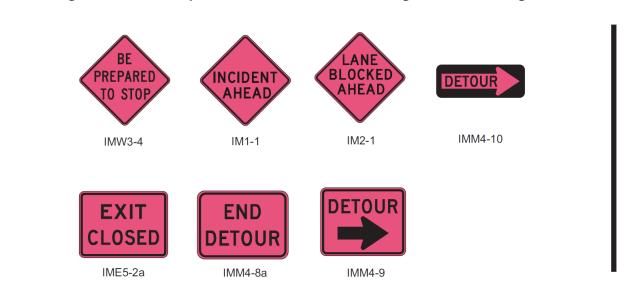


Figure 6I-1. Examples of Traffic Incident Management Area Signs

December 2011

Sect. 6I.01 to 6I.02

#### Guidance:

- or All traffic control devices needed to set up the TTC at a traffic incident should be available so that they can be readily deployed for all major traffic incidents. The TTC should include the proper traffic diversions, tapered lane closures, and upstream warning devices to alert traffic approaching the queue and to encourage early diversion to an appropriate alternative route.
- 08 Attention should be paid to the upstream end of the traffic queue such that warning is given to road users approaching the back of the queue.
- 09 If manual traffic control is needed, it should be provided by qualified flaggers or uniformed law enforcement officers.

Option:

10 If flaggers are used to provide traffic control for an incident management situation, the flaggers may use appropriate traffic control devices that are readily available or that can be brought to the traffic incident scene on short notice.

Guidance:

- 11 When light sticks or flares are used to establish the initial traffic control at incident scenes, channelizing devices (see Section 6F.63) should be installed as soon thereafter as practical. Option:
- 12 The light sticks or flares may remain in place if they are being used to supplement the channelizing devices.

Guidance:

13 The light sticks, flares, and channelizing devices should be removed after the incident is terminated.

#### Section 6I.03 Intermediate Traffic Incidents

Support:

- of Intermediate traffic incidents typically affect travel lanes for a time period of 30 minutes to 2 hours, and usually require traffic control on the scene to divert road users past the blockage. Full roadway closures might be needed for short periods during traffic incident clearance to allow traffic incident responders to accomplish their tasks.
- <sup>02</sup> The establishment, maintenance, and prompt removal of lane diversions can be effectively managed by interagency planning that includes representatives of highway and public safety agencies.

Guidance:

- os All traffic control devices needed to set up the TTC at a traffic incident should be available so that they can be readily deployed for intermediate traffic incidents. The TTC should include the proper traffic diversions, tapered lane closures, and upstream warning devices to alert traffic approaching the queue and to encourage early diversion to an appropriate alternative route.
- 04 Attention should be paid to the upstream end of the traffic queue such that warning is given to road users approaching the back of the queue.
- os If manual traffic control is needed, it should be provided by qualified flaggers or uniformed law enforcement officers.

Option:

<sup>06</sup> If flaggers are used to provide traffic control for an incident management situation, the flaggers may use appropriate traffic control devices that are readily available or that can be brought to the traffic incident scene on short notice.

Guidance:

- or When light sticks or flares are used to establish the initial traffic control at incident scenes, channelizing devices (see Section 6F.63) should be installed as soon thereafter as practical. Option:
- <sup>08</sup> The light sticks or flares may remain in place if they are being used to supplement the channelizing devices.

Guidance:

09 *The light sticks, flares, and channelizing devices should be removed after the incident is terminated.* **Section 6I.04** <u>Minor Traffic Incidents</u>

Support:

- of Minor traffic incidents are typically disabled vehicles and minor crashes that result in lane closures of less than 30 minutes. On-scene responders are typically law enforcement and towing companies, and occasionally highway agency service patrol vehicles.
- o2 Diversion of traffic into other lanes is often not needed or is needed only briefly. It is not generally possible or practical to set up a lane closure with traffic control devices for a minor traffic incident. Traffic control is the responsibility of on-scene responders.

Guidance:

os When a minor traffic incident blocks a travel lane, it should be removed from that lane to the shoulder as quickly as possible.

## Section 6I.05 Use of Emergency-Vehicle Lighting

Support:

- <sup>01</sup> The use of emergency-vehicle lighting (such as high-intensity rotating, flashing, oscillating, or strobe lights) is essential, especially in the initial stages of a traffic incident, for the safety of emergency responders and persons involved in the traffic incident, as well as road users approaching the traffic incident. Emergency-vehicle lighting, however, provides warning only and provides no effective traffic control. The use of too many lights at an incident scene can be distracting and can create confusion for approaching road users, especially at night. Road users approaching the traffic incident from the opposite direction on a divided facility are often distracted by emergency-vehicle lighting and slow their vehicles to look at the traffic incident posing a hazard to themselves and others traveling in their direction.
- <sup>02</sup> The use of emergency-vehicle lighting can be reduced if good traffic control has been established at a traffic incident scene. This is especially true for major traffic incidents that might involve a number of emergency vehicles. If good traffic control is established through placement of advanced warning signs and traffic control devices to divert or detour traffic, then public safety agencies can perform their tasks on scene with minimal emergency-vehicle lighting.

#### Guidance:

- os Public safety agencies should examine their policies on the use of emergency-vehicle lighting, especially after a traffic incident scene is secured, with the intent of reducing the use of this lighting as much as possible while not endangering those at the scene. Special consideration should be given to reducing or extinguishing forward facing emergency-vehicle lighting, especially on divided roadways, to reduce distractions to oncoming road users.
- 04 Because the glare from floodlights or vehicle headlights can impair the nighttime vision of approaching road users, any floodlights or vehicle headlights that are not needed for illumination, or to provide notice to other road users of an incident response vehicle being in an unexpected location, should be turned off at night.

December 2011 Sect. 6I.04 to 6I.05

## EMERGENCY LIGHTING RESEARCH

## HOW EFFECTIVE ARE FLASHING EMERGENCY LIGHTS? STOPPED ON THE ROAD SHOULDER—THE CASE FOR AMBER EMERGENCY WARNING LIGHTS

Presented By: Stephen S. Solomon, O.D.

Presentation Notes: Transportation Research Board, Traffic Incident Management Conference, January 2002

## A: HISTORY

- 1. EMERGENCY VEHICLE LIGHTS
  - SINGLE BEACON
  - MULTIPLE BEACONS
  - MIRROR FLASHERS-ROTATORS.
  - STROBES: SIGNIFICANT HEALTH RISK BY COMPARISON
- 2. AS FLASHING LIGHTS INCREASE NO IMPACT IN ACCIDENT

## REDUCTION

- 3. CALIFORNIA/ ILLINOIS AMBER LIGHT ON ROOF-POLICE
  - TRIAL AND ERROR DECREASE IN DRIVE-BY ACCIDENTS

## **B: DISCUSSION**

1. AS FLASHING LIGHTS INCREASE, REACTION TIMES INCREASE

2. AS FLASHING LIGHTS INCREASE, ABILITY TO DETECT A WARNING LIGHT IS DECREASED

3. STROBES ARE VERY POOR WARNING LIGHTS DUE TO FLASH

DURATION

4. THERE IS A LIMIT TO FLASHING LIGHT POPULATION ON A VEHICLE. PROBLEM IS COMPOUNDED IF MORE THAN ONE VEHICLE PRESENT

5. CURRENT STUDIES SHOW LIGHTS AND SIRENS DO NOT ALWAYS EQUATE TO QUICKER RESPONSE TIMES OR SAFER TRANSIT

## C: VISUAL SCIENCE

1. DRIVING IS THE PRESENTATION OF CENTRAL AND PERIPHERAL STIMULI.

2. THE PERIPHERY DIRECTS A CENTRAL GAZE. STRONG STIMULI IN PERIPHERY DIRECTS GAZE TOWARD IT. DIVIDED ATTENTION TASK.

3. NORMAL REACTION – EASE OF SHIFTING FROM POINT-TO-POINT

4. SHIFTING THE GAZE IS MORE DIFFICULT WITH FATIGUE, ALCOHOL, PRESCRIPTION DRUGS, ILLEGAL DRUGS, AGE, DISEASE, CABIN DISTRACTION

5. WE DRIVE WHERE WE LOOK — CENTRAL VISION

6. EXCESSIVE FLASHING LIGHTS DRAW ATTENTION AND DO NOT ALLOW RELEASE. IF YOU ADVERTISE A CIRCUS, EXPECT PEOPLE TO COME.

7. AMBER COLOR IS LESS ATTENTION RIVETING AND LESS EXCITING

## **D: RECOMMENDATIONS**

1. THE GOAL IS TO TRANSMIT AN EMERGENCY/AVOIDANCE MESSAGE EFFICIENTLY AND QUICKLY AND ALLOW THE DRIVER TO SWITCH ATTENTION BACK TO PASSING THROUGH THE SCENE SAFELY

2. DECREASE THE NUMBER OF FLASHING LIGHTS AT THE SCENE

3. DISPLAY LIGHTS THAT ARE OF LONG DURATION EXPOSURE AND SHORT OFF TIME

4. USE AMBER COLOR ONLY — NO OTHER LIGHTS DISPLAYED

5. LIGHTS SHOULD BE EXPOSED TO ONCOMING TRAFFIC AND SHOULD BE MOUNTED HIGH ON THE CORNERS

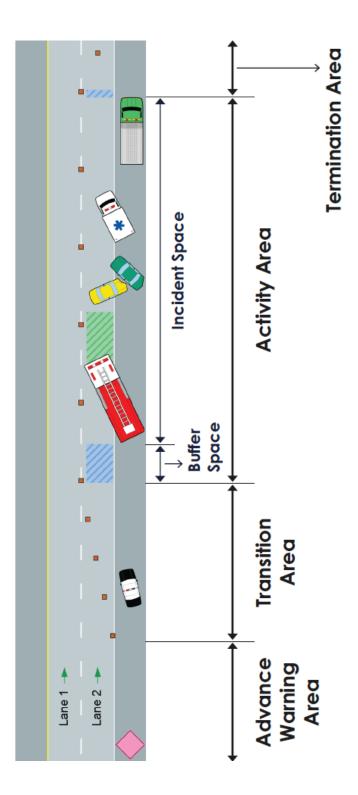
6. AN AMBER DIRECTIONAL ARROW SHOULD BE EXPOSED AS A UNIT, NOT FLASHING IN A PROGRESSION. MOUNTED VERY HIGH ON VEHICLE

7. DURING TRANSIT TO THE SCENE, AMBER LIGHTS SHOULD NOT BE DISPLAYED ALONG WITH OTHER FLASHING LIGHTS -MIXED MESSAGE

8. THE IGNORED ADJUNCT -THE NEW RETRO-REFLECTIVE/ FLUORESCENT LIME -YELLOW TAPE APPLIED AS A VEHICLE OUTLINE -SILHOUETTE INFORMATION

9. THE APPLICATION OF HIGH VISIBILITY PAINT ON RESPONDING VEHICLES -LIME YELLOW IS AN ACCIDENT REDUCTION COLOR OF STATISTICAL SIGNIFICANCE. BOTH TAPE AND PAINT ARE PASSIVE, NON-POWERED APPLICATIONS WITH HIGH ATTENTION GETTING CHARACTERISTICS AND LOW DISTRACTION TO DIVIDED ATTENTION DRIVING

# FIVE AREAS OF A WORK ZONE



# VEHICLE APPROACHED BY AUTHORIZED EMERGENCY VEHICLE, OR "MOVE OVER LAW"

Legislative Act, State of Texas

(www.capitol.state.tx.us)

## **Texas Transportation Code - Section 545.157**

§ 545.157. PASSING AUTHORIZED EMERGENCY VEHICLE. (a) On

approaching a stationary authorized emergency vehicle using visual signals that meet the requirements of Sections 547.305 and 547.702, an operator, unless otherwise directed by a police officer, shall:

- (1) vacate the lane closest to the emergency vehicle when driving on a highway with two traveling in the direction of the emergency vehicle; or
- (2) slow to a speed not to exceed:
  - (A) 20 miles per hour less than the posted speed limit when the posted speed limit is 25 miles per hour or more; or
  - (B) five miles per hour when the posted speed limit is less than 25 miles per hour.
- (b) A violation of this section is:
  - (1) a misdemeanor punishable under Section 542.401;
  - (2) a misdemeanor punishable by a fine of \$500 if the violation results in property damage; or
  - (3) a Class B misdemeanor if the violation results in bodily injury.
- (c) If conduct constituting an offense under this section also constitutes an offense under another section of this code or the Penal Code, the actor may be prosecuted under either section or under both sections.

Added by Acts 2003, 78th Leg., ch. 327, § 2, eff. Sept. 1, 2003 – initially passed

\*\*<u>During the 2011 Legislative session, tow trucks were added to the existing law, which</u> <u>already applied to police, fire, and EMS vehicles stopped on the side of the road with</u> <u>emergency lights activated</u>. Motorists are required to vacate the lane closest to the stopped vehicle (if there is more than one available lane in the same direction of travel) or slow to 20 miles below the speed limit.

\*\*<u>Effective Sept. 1, 2013, drivers must move over or slow down when approaching</u> <u>TxDOT workers and vehicles that are stopped with overhead flashing blue or amber</u> <u>lights.</u>

## **REFERENCE 3.1**

## ABANDONED VEHICLE POLICY Legislative Act, State of Texas (www.capitol.state.tx.us)

## CHAPTER 683 § 683.002. Abandoned Motor Vehicle

- (a) For the purposes of this chapter, a motor vehicle is abandoned if the motor vehicle:
  - (1) is inoperable, is more than five years old, and has been left unattended on public property for more than 48 hours;
  - (2) has remained illegally on public property for more than 48 hours;
  - (3) has remained on private property without the consent of the owner or person in charge of the property for more than 48 hours;
  - (4) has been left unattended on the right-of-way of a designated county, state, or federal highway for more than 48 hours; or
  - (5) has been left unattended for more than 24 hours on the right-of-way of a turnpike project constructed and maintained by the Texas Turnpike Authority or a controlled access highway.

(b) In this section, "controlled access highway" has the meaning assigned by Section 541.302. Acts 1995, 74th Leg., ch. 165, § 1, eff. Sept. 1, 1995.

Amended by Acts 1997, 75th Leg., ch. 165, § 30.157(a), eff. Sept. 1, 1997.

## CLEARANCE OF OBSTRUCTIONS OF ROADWAY Legislative Act, State of Texas (www.capitol.state.tx.us)

A transit authority or law enforcement agency may remove personal property from a roadway or right of way if the property blocks the roadway or endangers public safety. This may be done without the consent of the owner or carrier of the property, and the owner or carrier is liable for the cost of removal. The authority or agency is not liable for any damage caused, unless the removal is carried out recklessly or in a grossly negligent manner.

## CHAPTER 545 § 545.3051. Removal of Personal Property from Roadway or Right-of-Way

(a) In this section:

(1) "Authority" means: A. a metropolitan rapid transit authority operating under Chapter 451; or B. a regional transportation authority operating under Chapter 452.

(2) "Law enforcement agency" means: A. the department; B. the police department of a municipality; C. the sheriff's office of a county; D. a constable's office of a county.

(3) "Personal property" means: A. a vehicle described by Section 545.305; B. spilled cargo; C. a hazardous material as defined by 49 U.S.C. Section 5102 and its subsequent amendments; or D. a hazardous substance as defined by Section 26.263, Water Code.

(b) An authority or a law enforcement agency may remove personal property from a roadway or right-of-way if the authority or law enforcement agency determines that the property blocks the roadway or endangers public safety.

(c) Personal property may be removed under this section without the consent of the owner or carrier of the property.

(d) The owner and any carrier of personal property removed under this section shall reimburse the authority or law enforcement agency for any reasonable cost of removal and disposition of the property.

(e) Notwithstanding any other provision of law, an authority or a law enforcement agency is not liable for:

- 1. any damage to personal property removed from a roadway or right-of-way under this section, unless the removal is carried out recklessly or in a grossly negligent manner; or
- 2. any damage resulting from the failure to exercise the authority granted by this section.

Added by Acts 2003, 78th Leg., ch. 803, § 1, eff. June 20, 2003.

## REFERENCE 3.3 ACCIDENTS INVESTIGATION SITES Legislative Act, State of Texas (www.capitol.state.tx.us)

## CHAPTER 550 § 550.001. Applicability of Chapter

This chapter applies only to:

- (1) a road owned and controlled by a water control and improvement district;
- (2) a private access way or parking area provided for a client or patron by a business, other than a private residential property, or the property of a garage or parking lot for which a charge is made for storing or parking a motor vehicle; and
- (3) a highway or other public place.

Acts 1995, 74th Leg., ch. 165, § 1, eff. Sept. 1, 1995.

# SUBCHAPTER B. DUTIES FOLLOWING ACCIDENT § 550.021. Accident Involving Personal Injury or Death

(a) The operator of a vehicle involved in an accident resulting in injury to or death of a person shall:

(1) immediately stop the vehicle at the scene of the accident or as close to the scene as possible;

(2) immediately return to the scene of the accident if the vehicle is not stopped at the scene of the accident; and

(3) remain at the scene of the accident until the operator complies with the requirements of Section 550.023.

(b) An operator of a vehicle required to stop the vehicle by Subsection (a) shall do so without obstructing traffic more than is necessary.

(c) A person commits an offense if the person does not stop or does not comply with the requirements of this section. An offense under this section:

(1) involving an accident resulting in death of or serious bodily injury, as defined

by Section 1.07, Penal Code, to a person is a felony of the third degree; and

(2) involving an accident resulting in injury to which Subdivision (1) does not apply is punishable by:

(A) imprisonment in the Texas Department of Criminal Justice for not more than five years or confinement in the county jail for not more than one year;

(B) a fine not to exceed \$5,000; or

(C) both the fine and the imprisonment or confinement.

Acts 1995, 74th Leg., ch. 165, Sec. 1, eff. Sept. 1, 1995.

Amended by: Acts 2007, 80th Leg., R.S., Ch. <u>97</u>, Sec. 2, eff. September 1, 2007. **§ 550.022. Accident Involving Damage to Vehicle** 

(a) Except as provided by Subsection (b), the operator of a vehicle involved in an accident resulting only in damage to a vehicle that is driven or attended by a person shall:

 immediately stop the vehicle at the scene of the accident or as close as possible to the scene of the accident without obstructing traffic more than is necessary;

(2) immediately return to the scene of the accident if the vehicle is not stopped at the scene of the accident; and

(3) remain at the scene of the accident until the operator complies with the requirements of Section 550.023.

(b) If an accident occurs on a main lane, ramp, shoulder, median, or adjacent area of a freeway in a metropolitan area and each vehicle involved can be normally and safely driven, each operator shall move the operator's vehicle as soon as possible to a designated accident investigation site, if available, a location on the frontage road, the nearest suitable cross street, or other suitable location to complete the requirements of Section 550.023 and minimize interference with freeway traffic.

(c) A person commits an offense if the person does not stop or does not comply with the requirements of Subsection (a). An offense under this subsection is:

(1) a Class C misdemeanor, if the damage to all vehicles is less than\$200; or

(2) a Class B misdemeanor, if the damage to all vehicles is \$200 or more.

(c-1) A person commits an offense if the person does not comply with the requirements of Subsection (b). An offense under this subsection is a Class C misdemeanor.

(d) In this section, a vehicle can be normally and safely driven only if the vehicle:

(1) does not require towing; and

(2) can be operated under its own power and in its usual manner, without additional damage or hazard to the vehicle, other traffic, or the roadway.

Acts 1995, 74th Leg., ch. 165, Sec. 1, eff. Sept. 1, 1995. Amended by:

Acts 2005, 79th Leg., Ch. <u>1066</u>, Sec. 1, eff. September 1, 2005.

## § 550.023. DUTY TO GIVE INFORMATION AND RENDER AID

The operator of a vehicle involved in an accident resulting in the injury or death of a person or damage to a vehicle that is driven or attended by a person shall:

(1) give the operator's name and address, the registration number of the vehicle the operator was driving, and the name of the operator's motor vehicle liability insurer to any person injured or the operator or occupant of or person attending a vehicle involved in the collision;

(2) if requested and available, show the operator's driver's license to a person described by Subdivision (1); and

(3) provide any person injured in the accident reasonable assistance, including transporting or making arrangements for transporting the person to a physician or hospital for medical treatment if it is apparent that treatment is necessary, or if the injured person requests the transportation.

Acts 1995, 74th Leg., ch. 165, Sec. 1, eff. Sept. 1, 1995.

## DEATH INVESTIGATIONS AND REMOVAL OF BODIES Legislative Act, State of Texas www.capitol.state.tx.us

## TEXAS CODES OF CRIMINAL PROCEDURE CHAPTER 49: INQUESTS UPON DEAD BODIES

## SUBCHAPTER B: DUTIES PERFORMED BY MEDICAL EXAMINERS Article 49.25 - Medical Examiners

## Death investigations,

**Sec. 6. (a)** Any medical examiner, or his duly authorized deputy, shall be authorized, and it shall be his duty, to hold inquests with or without a jury within his county, in the following cases:

- 1. When a person shall die within twenty-four hours after admission to a hospital or institution or in prison or in jail;
- 2. When any person is killed; or from any cause dies an unnatural death, except under sentence of the law; or dies in the absence of one or more good witnesses;
- 3. When the body of a person is found, the cause or circumstances of death are unknown, and: (A) the body is identified; or (B) the body is unidentified;
- 4. When the circumstances of the death of any person are such as to lead to suspicion that he came to his death by unlawful means;
- 5. When any person commits suicide, or the circumstances of his death are such as to lead to suspicion that he committed suicide;
- 6. When a person dies without having been attended by a duly licensed and practicing physician, and the local health officer or registrar required to report the cause of death under Section 193.005, Health and Safety Code, does not know the cause of death. When the local health officer or registrar of vital statistics whose duty it is to certify the cause of death does not know the cause of death, he shall so notify the medical examiner of the county in which the death occurred and request an inquest;
- 7. When the person is a child who is younger than six years of age and the death is reported under Chapter 264, Family Code; and
- 8. When a person dies who has been attended immediately preceding his death by a duly licensed and practicing physician or physicians, and such physician or physicians are not certain as to the cause of death and are unable to certify with certainty the cause of death as required by Section 193.004, Health and Safety Code. In case of such uncertainty the attending physician or physicians, or the superintendent or general manager of the hospital or institution in which the deceased shall have died, shall so report to the medical examiner of the county in which the death occurred, and request an inquest.
- (b) The inquests authorized and required by this Article shall be held by the medical examiner of the county in which the death occurred.

(c) In making such investigations and holding such inquests, the medical examiner or an authorized deputy may administer oaths and take affidavits. In the absence of next of kin or legal representatives of the deceased, the medical examiner or authorized deputy shall take charge of the body and all property found with it.

## Organ Transplant Donors; Notice; Inquests

- **Sec. 6a. (a)** When death occurs to an individual designated a prospective organ donor for transplantation by a licensed physician under circumstances requiring the medical examiner of the county in which death occurred, or the medical examiner's authorized deputy, to hold an inquest, the medical examiner, or a member of his staff will be so notified by the administrative head of the facility in which the transplantation is to be performed.
- (b) When notified pursuant to Subsection (a) of this Section, the medical examiner or the medical examiner's deputy shall perform an inquest on the deceased prospective organ donor.

## **Reports of Death**

## Sec. 7.

- (a) Any police officer, superintendent of institution, physician, or private citizen who shall become aware of a death under any of the circumstances set out in Section 6 (a) of this Article, shall immediately report such death to the office of the medical examiner or to the city or county police departments; any such report to a city or county police department shall be immediately transmitted to the office of the medical examiner.
- (b) person investigating a death described by Subdivision 3 (B) of Section 6 (a) shall report the death to the missing children and missing person's information clearinghouse of the Department of Public Safety and the national crime information center not later than the 10th working day after the date the investigation began.

## Removal of Bodies

**Sec. 8.** When any death under circumstances set out in Section 6 shall have occurred, the body shall not be disturbed or removed from the position in which it is found by any person without authorization from the medical examiner or authorized deputy, except for the purpose of preserving such body from loss or destruction or maintaining the flow of traffic on a highway, railroad or airport.

## **REFERENCE 3.5**

## REMOVAL OF UNLAWFULLY STOPPED VEHICLE

Legislative Act, State of Texas

(www.capitol.state.tx.us)

## CHAPTER 500

## § 545.305. Removal of Unlawfully Stopped Vehicle

- (a) A peace officer listed under Article 2.12, Code of Criminal Procedure, or a license and weight inspector of the department <u>may remove or require the</u> <u>operator or a person in charge of a vehicle to move a vehicle from a highway</u> if the vehicle:
  - (1) <u>is unattended on a bridge, viaduct, or causeway or in a tube or tunnel and</u> <u>the vehicle is obstructing traffic;</u>
  - (2) is unlawfully parked and blocking the entrance to a private driveway;
  - (3) has been reported as stolen;
  - (4) is identified as having been stolen in a warrant issued on the filing of a complaint;
  - (5) is unattended and the officer has reasonable grounds to believe that the vehicle has been abandoned for longer than 48 hours;
  - (6) is disabled so that normal operation is impossible or impractical and the owner or person in charge of the vehicle is:
    - (A) incapacitated and unable to provide for the vehicle's removal or custody; or
    - (B) not in the immediate vicinity of the vehicle;
  - (7) is disabled so that normal operation is impossible or impractical and the owner or person in charge of the vehicle does not designate a particular towing or storage company;
  - (8) is operated by a person an officer arrests for an alleged offense and the officer is required by law to take the person into custody; or
  - (9) <u>is, in the opinion of the officer, a hazard, interferes with a normal function</u> of a governmental agency, or because of a catastrophe, emergency, or unusual circumstance is imperiled.
- (b) An officer acting under Subsection (a) may require that the vehicle be taken to:
  - (1) the nearest garage or other place of safety;
  - (2) a garage designated or maintained by the governmental agency that employs the officer; or
  - (3) <u>a position off the paved or main traveled part of the highway.</u>
- (c) A law enforcement agency other than the department that removes an abandoned vehicle in an unincorporated area shall notify the sheriff.
- (d) The owner of a vehicle that is removed or stored under this section is liable for all reasonable towing and storage fees incurred.

Acts 1995, 74th Leg., ch. 165, § 1, eff. Sept. 1, 1995.

## **REFERENCE 3.6**

H.B. No. 993

## AN ACT

relating to the closure of a road or highway by certain firefighters.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Subchapter A, Chapter 546, Transportation Code,

is amended by adding Section 546.007 to read as follows:

Sec. 546.007. CLOSURE OF ROAD OR HIGHWAY BY FIREFIGHTER.

(a) This section applies only to a firefighter who is employed by

or a member of:

(1) a fire department operated by an emergency

services district;

(2) a volunteer fire department; or

(3) a fire department of a general-law municipality.

(b) A firefighter, when performing the firefighter's

official duties, may close one or more lanes of a road or highway to

protect the safety of persons or property.

(c) The closure shall be limited to the affected lane or lanes and one additional lane unless the safety of emergency personnel operating on the road or highway requires more lanes to be closed.

(d) In making a closure under this section, the firefighter shall deploy one or more authorized emergency vehicles with audible and visual signals that meet the requirements of Sections 547.305 and 547.702.

SECTION 2. This Act takes effect September 1, 2011.

## H.B. No. 1413

By: Johnson	S.B. No. 1413	
(In the Senate - Filed March 1, 2023; March 16, 2023, read		
first time and referred to Committee on Transportation;		
April 6, 2023, reported adversely, with favorable Committee		
Substitute by the following vote: Yeas 9, Nays 0; April 6, 2023,		
sent to printer.)		
Click here to see the committee vote		
COMMITTEE SUBSTITUTE FOR S.B. No. <b>1413</b>	By: Eckhardt	

## A BILL TO BE ENTITLED

AN ACT

relating to the authority of a fire department to remove certain personal property from a roadway or right-of-way.

BE IT ENACTED BY THE LEGISLATURE OF THE STATE OF TEXAS:

SECTION 1. Section 545.3051(a), Transportation Code, is

amended by adding Subdivision (1-a) to read as follows:

(1-a) "Fire department" has the meaning assigned by Section 419.021, Government Code.

SECTION 2. Section 545.3051, Transportation Code, is amended by amending Subsections (b), (d), and (e) and adding Subsection (f) to read as follows:

(b) An authority, a fire department, or a law enforcement agency may remove personal property from a roadway or right-of-way if the authority, <u>fire department</u>, or law enforcement agency determines that the property blocks the roadway or endangers public safety.

(d) The owner and any carrier of personal property removed under this section shall reimburse the authority, <u>fire department</u>, or law enforcement agency for any reasonable cost of removal and disposition of the property.

(e) Notwithstanding any other provision of law, an authority, <u>a fire department</u>, or a law enforcement agency is not liable for:

(1) any damage to personal property removed from a roadway or right-of-way under this section, unless the removal is carried out recklessly or in a grossly negligent manner; or

(2) any damage resulting from the failure to exercise the authority granted by this section.(f) The governing body of a political subdivision that has a

(f) The governing body of a political subdivision that has a fire department shall develop and implement a policy concerning the fire department consulting with law enforcement agencies regarding removal of personal property from a roadway or right-of-way.

SECTION 3. This Act takes effect immediately if it receives a vote of two-thirds of all the members elected to each house, as provided by Section 39, Article III, Texas Constitution. If this Act does not receive the vote necessary for immediate effect, this Act takes effect September 1, 2023.

\* \* \* \* \*

## **REFERENCE 3.8**

#### Texas Tow Act HB 2094, 80th Texas Legislature

As proposed by the Texas Towing & Storage Association (TTSA), the 80th Texas Legislature passed HB 2094 by Representative Fred Hill, Representative Jim Jackson & Senator John Carona. Supporters of the Legislation included: TTSA, Greater Dallas Emergency Wrecker Association, Texas Motor Transportation Association, Texas Auto Title & Registration, South West Tow Operations, Goode Towing & Recovery, Safetow, AAA Texas and Arens Services (Texas House Research Organization, SB 1118).

With the passage of HB 2094, Texas now has the most meaningful and innovative towing and storage laws in the United States. Below are the key provisions of the Act:

 Transfers regulation of the towing and vehicle storage industry from the Texas Department of Transportation to the Texas Department of Licensing and Regulation (TDLR), the state's umbrella occupational regulatory agency.

• Creates the Towing and Storage Advisory Board to advise the department on matters relating to the towing and storage of vehicle.

• Requires criminal background checks and drug testing for towing operators and vehicle storage facility employees.

• Provides for three classifications of towing, establishes requirements for each class and requires permit.

o Incident Management Towing Operations Permit - Establishes equipment and liability insurance requirements for incident management towing permits. Provides that permitted incident management tow trucks may be used for all types of towing. o Private Property Towing Operations Permit – Establishes equipment and liability insurance requirements for private property towing permits. Provides that permitted private property tow trucks may be used for private property towing and consent towing but not incident management towing.

o Consent Towing Operations Permit - Establishes equipment and liability insurance requirements for consent towing permits. Provides that permitted consent tow trucks may be used only for consent towing.

• Provides for three classifications of towing operators and requires license:

o Incident Management Towing Operator – Establishes requirements for an incident management towing operator license. Provides that licensed incident management towing operator may conduct all types of towing.

o Private Property Towing Operator - Establishes requirements for a private property towing operator license. Provides that licensed private property towing operator may conduct private property towing and consent towing but not incident management towing.

o Consent Towing Operator – Establishes for a consent towing operator license. Provides that licensed consent towing operators may only conduct consent towing.

#### Key Dates

o September 1, 2007 – HB 2094 Effective Date

o September 1, 2008 - Towing Operators License Required

Incident Management Towing Operators & Private Property Towing Operators must be certified by Towing & Recovery Association of America or another certification approved by TDLR.

o September 1, 2008 - Vehicle Storage Facility Employees License Required

o After August 31, 2009 – Completion of Professional Development Course Required At first license renewal, Incident Management Towing Operators must have completed professional development course relating to towing that is licensed or certified by the National Safety Council or another course approved by TDLR.

#### OCCUPATIONS CODE TITLE 14. REGULATION OF MOTOR VEHICLES AND TRANSPORTATION SUBTITLE A. REGULATIONS RELATED TO MOTOR VEHICLES CHAPTER 2308. VEHICLE TOWING AND BOOTING SUBCHAPTER A. GENERAL PROVISIONS http://www.statutes.legis.state.tx.us/Docs/OC/htm/OC.2308.htm

Sec. 2308.002. DEFINITIONS. In this chapter:

(1) "Advisory board" means the Towing, Storage, and Booting Advisory Board.

(1-a) "Boot" means a lockable road wheel clamp or similar vehicle immobilization device that is designed to immobilize a parked vehicle and prevent its movement until the device is unlocked or removed.

(1-b) "Booting company" means a person that controls, installs, or directs the installation and removal of one or more boots.

(1-c) "Boot operator" means an individual who installs or removes a boot on or from a vehicle.

(2) "Commission" means the Texas Commission of Licensing and Regulation.

(3) "Consent tow" means any tow of a motor vehicle in which the tow truck is summoned by the owner or operator of the vehicle or by a person who has possession, custody, or control of the vehicle. The term does not include an incident management tow or a private property tow.

(4) "Department" means the Texas Department of Licensing and Regulation.

(5) "Driver's license" has the meaning assigned by Section 521.001, Transportation Code.

(5-a) "Incident management tow" means any tow of a vehicle in which the tow truck is summoned to the scene of a traffic accident or to an incident, including the removal of a vehicle, commercial cargo, and commercial debris from an accident or incident scene.

(6) "Nonconsent tow" means any tow of a motor vehicle that is not a consent tow, including:

- (A) an incident management tow; and
- (B) a private property tow.

(7) "Parking facility" means public or private property used, wholly or partly, for restricted or paid vehicle parking. The term includes:

(A) a restricted space on a portion of an otherwise unrestricted parking facility; and

(B) a commercial parking lot, a parking garage, and a parking area serving or adjacent to a business, church, school, home that charges a fee for parking, apartment complex, property governed by a property owners' association, or government-owned property leased to a private person, including:

(i) a portion of the right-of-way of a public roadway that is leased by a governmental entity to the parking facility owner; and

(ii) the area between the facility's property line abutting a county or municipal public roadway and the center line of the roadway's drainage way or the curb of the roadway, whichever is farther from the facility's property line.

(7-a) "Parking facility authorized agent" means an employee or agent of a parking facility owner with the authority to:

(A) authorize the removal of a vehicle from the parking facility on behalf of the parking facility owner; and

(B) accept service on behalf of the parking facility owner of a notice of hearing requested under this chapter.

(8) "Parking facility owner" means:

(A) an individual, corporation, partnership, limited partnership, limited liability company, association, trust, or other legal entity owning or operating a parking facility;

(B) a property owners' association having control under a dedicatory instrument, as that term is defined in Section <u>202.001</u>, Property Code, over assigned or unassigned parking areas; or

(C) a property owner having an exclusive right under a dedicatory instrument, as that term is defined in Section 202.001, Property Code, to use a parking space.

(8-a) "Private property tow" means any tow of a vehicle authorized by a parking facility owner without the consent of the owner or operator of the vehicle.

(9) "Property owners' association" has the meaning assigned by Section 202.001, Property Code.

(10) "Public roadway" means a public street, alley, road, right-of-way, or other public way, including paved and unpaved portions of the right-of-way.

(11) "Tow truck" means a motor vehicle, including a wrecker, equipped with a mechanical device used to tow, winch, or otherwise move another motor vehicle. The term does not include:

(A) a motor vehicle owned and operated by a governmental entity, including a public school district;

(B) a motor vehicle towing:

(i) a race car;

(ii) a motor vehicle for exhibition; or

(iii) an antique motor vehicle;

(C) a recreational vehicle towing another

vehicle;

(D) a motor vehicle used in combination with a tow bar, tow dolly, or other mechanical device if the vehicle is not operated in the furtherance of a commercial enterprise;

(E) a motor vehicle that is controlled or operated by a farmer or rancher and used for towing a farm vehicle; or

(F) a motor vehicle that:

(i) is owned or operated by an entity the primary business of which is the rental of motor vehicles; and(ii) only tows vehicles rented by the

entity.

(12) "Towing company" means an individual, association, corporation, or other legal entity that controls, operates, or directs the operation of one or more tow trucks

over a public roadway in this state but does not include a political subdivision of the state.

(13) "Unauthorized vehicle" means a vehicle parked, stored, or located on a parking facility without the consent of the parking facility owner.

(14) "Vehicle" means a device in, on, or by which a person or property may be transported on a public roadway. The term includes an operable or inoperable automobile, truck, motorcycle, recreational vehicle, or trailer but does not include a device moved by human power or used exclusively on a stationary rail or track.

(15) "Vehicle owner" means a person:

(A) named as the purchaser or transferee in the certificate of title issued for the vehicle under Chapter 501, Transportation Code;

(B) in whose name the vehicle is registered under Chapter 502, Transportation Code, or a member of the person's immediate family;

(C) who holds the vehicle through a lease agreement;

(D) who is an unrecorded lienholder entitled to possess the vehicle under the terms of a chattel mortgage; or

(E) who is a lienholder holding an affidavit of repossession and entitled to repossess the vehicle.

(16) "Vehicle storage facility" means a vehicle storage facility, as defined by Section <u>2303.002</u>, that is operated by a person who holds a license issued under Chapter 2303 to operate the facility.

Added by Acts 2007, 80th Leg., R.S., Ch. 1046 (H.B. <u>2094</u>), Sec. 1.12, eff. September 1, 2007. Amended by:

Acts 2009, 81st Leg., R.S., Ch. 757 (S.B. <u>702</u>), Sec. 3, eff. September 1, 2009.

Acts 2009, 81st Leg., R.S., Ch. 845 (S.B. <u>2153</u>), Sec. 3, eff. September 1, 2009.

Acts 2009, 81st Leg., R.S., Ch. 1310 (H.B. <u>2571</u>), Sec. 1, eff. September 1, 2009.

Acts 2011, 82nd Leg., R.S., Ch. 353 (H.B. <u>3510</u>), Sec. 4, eff. September 1, 2011.

SUBCHAPTER C. TOW TRUCK PERMIT REQUIREMENTS

Sec. 2308.101. PERMIT REQUIRED. A tow truck may not be used for consent towing or nonconsent towing on a public roadway in this state unless an appropriate permit has been issued for the tow truck under this subchapter. Each tow truck requires a separate permit.

Added by Acts 2007, 80th Leg., R.S., Ch. 1046 (H.B. <u>2094</u>), Sec. 1.12, eff. September 1, 2007.

Sec. 2308.103. REQUIREMENTS FOR INCIDENT MANAGEMENT TOWING PERMIT. (a) An incident management towing permit is required for a tow truck used to perform any nonconsent tow initiated by a peace officer, including a tow authorized under Section 545.3051, Transportation Code.

(b) To be eligible for an incident management towing permit, an applicant must submit evidence that:

(1) the tow truck is equipped to tow light-duty or heavy-duty vehicles according to the manufacturer's towing guidelines;

(2) the applicant has at least \$500,000 of liability insurance for the tow truck; and

(3) the applicant has at least \$50,000 of cargo insurance for the tow truck.

(c) A tow truck permitted under this section may also be used for private property towing and consent towing.

(d) When a tow truck is used for a nonconsent tow initiated by a peace officer under Section <u>545.3051</u>, Transportation Code, the permit holder is an agent of law enforcement and is subject to Section <u>545.3051</u>(e), Transportation Code.

Added by Acts 2007, 80th Leg., R.S., Ch. 1046 (H.B. <u>2094</u>), Sec. 1.12, eff. September 1, 2007.

Sec. 2308.109. DISPLAY OF INFORMATION ON TOW TRUCK. (a) A permit holder shall display on each permitted tow truck:

(1) the permit holder's name;

(2) the permit holder's telephone number;

(3) the city and state where the permit holder is located; and

(4) the permit number for the tow truck.

(b) The information required to be displayed must be:

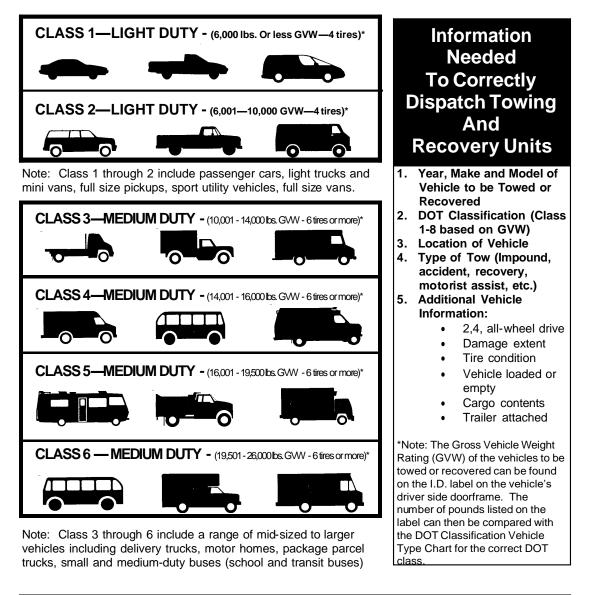
(1) printed in letters and numbers that are at least two inches high and in a color that contrasts with the color of the background surface; and

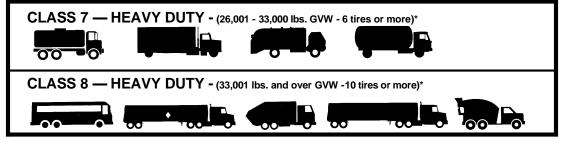
(2) permanently affixed in conspicuous places on both sides of the tow truck.

Added by Acts 2007, 80th Leg., R.S., Ch. 1046 (H.B. <u>2094</u>), Sec. 1.12, eff. September 1, 2007.

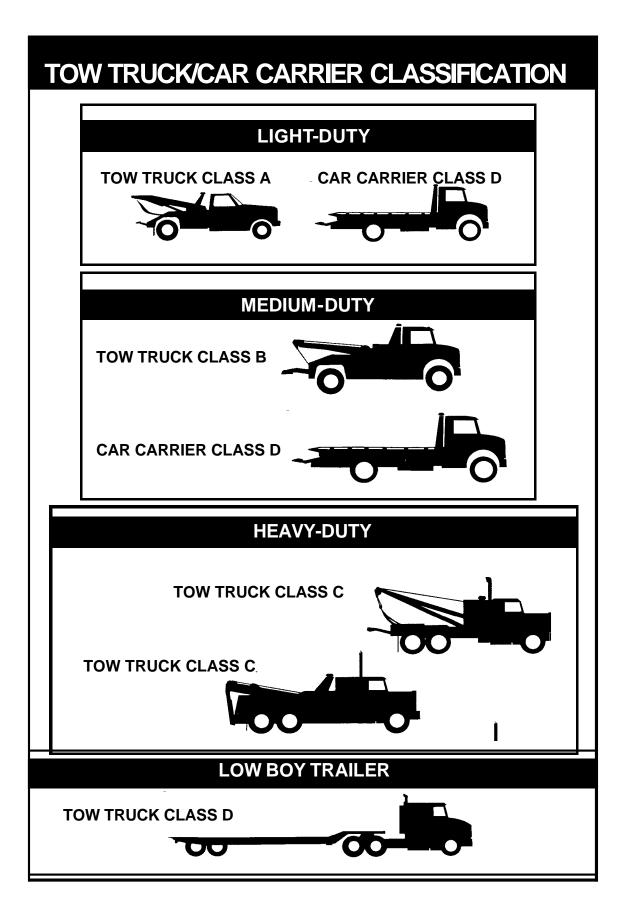
## **REFERENCE 3.10**

## TRAA VEHICLE IDENTIFICATION GUIDE





Note: Class 7 and 8 includes a range of heavier vehicles including large delivery trucks, motor coaches, all tractor-trailer combinations, refuse trucks, construction vehicles, etc.



# **Regional Roadway Contact Numbers**

## **TxDOT Dallas**

## **TxDOT Fort Worth**

NTTA Main		*999
NTTA Safety Operations C	Center	214-224-2203

## Managed Lane Facility Operators (CDA)

LBJ Infrastructure	*789
North Tarrant Express	*789
Main	